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The Campaigns of Alexander the Great

Stephen English

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Submitted for the Degree of PhD
Department of Classics and Ancient History
University of Durham

2009

2 6 JUN 2009

I dedicate this thesis to Elizabeth: thank you.

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This thesis represents the culmination of eleven years of study in Durham University; it has been challenging, stimulating and tremendously rewarding, and it is hard to believe that I have actually finally finished. Far too many people have helped with its production to be named individually, but some are deserving of special praise. Firstly Hans Van Wees for agreeing to be the external examiner on this thesis, and for his encouragement after performing the same role on my MA thesis in 2002, and encouraging me towards continuing studies.

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My greatest thanks are reserved, however, for Professor Peter Rhodes; for over a decade since 1997 Peter has been my lecturer, tutor, supervisor, mentor and for my part at least, friend. His kindness and patience and academic expertise have been limitless and invaluable to me over that time, truly I would not have achieved anywhere near the level of academic success that I have, without him.

Abstract

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Submitted for the Degree of PhD
Department of Classics and Ancient History,
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2009

The purpose of this thesis is an examination of the military career of Alexander the Great. The intention is to reconstruct and examine every campaign of Alexander's brief reign, and to determine what the tactics and strategies were that allowed his unparalleled success; further to determine if there was a development in tactical or strategic thought during his life.

Chapter 1 considers Alexander's first campaign in the Balkans and northern Greece.
Chapter 2 discusses the Battle of the Granicus River, and attempts an entirely new theory.
Chapter 3 is a discussion of the sieges of Miletus and Halicarnassus.
Chapter 4 contains an examination of the campaign of Issus.
Chapter 5 concentrates on the sieges of Tyre and Gaza.
Chapter 6 discusses the battle of Gaugamela.
Chapter 7 concentrates on the campaign on the north-east frontier: Bactria and Sogdiana.
Chapter 8 focuses on the campaign in India, culminating in the battle of the Hydaspes River.
Chapter 9 is an examination of the journey back to Babylon: the final campaign.
Chapter 10 is the conclusion which draws together the arguments which run through the thesis.

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I allow consultation by *bona fide* scholars without delay.

The material in this thesis has not been previously submitted for a degree in this or any other university.

This thesis consists of approximately 99,700 words, and thus conforms to the word limit set out in the Durham University degree regulations.

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Introduction

"Alexander the Great": for more than twenty-three centuries his name has inspired the deeds of men; within a lifespan of only thirty-two years, he conquered the largest and richest empire the western world had ever seen, and in so doing achieved a measure of immortality that few others ever have.

Alexander's real genius was two-fold: firstly the capacity to modify a relatively small parcel of strategies and tactics to meet the needs of every situation, every enemy and every type of terrain that he encountered. Secondly, it was his ability to inspire men to ever greater achievements: his men showed repeatedly that they would do almost anything for their king and only finally said 'no more' when they had reached the very ends of the earth in India.

The life of Alexander is a remarkable nexus of events that is virtually unparalleled in history. Alexander was, perhaps, the finest military mind the world had yet seen; coupled with this was his inheritance from his father of one of the greatest armies of the ancient world. Had Alexander been born in less auspicious circumstances, we can only imagine how very different history would have been. These two factors – genius and circumstance – combined to enable the Macedonians to create, in less than a decade, an empire that spanned the known world. Alexander's achievements are legendary and worthy of study.

Recent years have seen a resurgence of interest in the career and character of Alexander, culminating in the release of the recent Hollywood movie, and it is not difficult to see why: almost every page in his career is filled with great battles and heroic deeds. Alexander possessed a spirit for adventure and conquest, a need to achieve more than anyone had before, that drove him to the ends of the earth, only finally being defeated by his early and untimely death in Babylon.

I count myself as one of those who are utterly fascinated by his career, and undertook this thesis entirely out of personal interest and with the intention of immersing myself in the sources, learning what I could, and hopefully adding some small amount to existing scholarship on the subject.

Modern works on Alexander are not difficult to find; books are being published on the subject at a staggering rate, although they are of vastly differing quality. Books that specifically focus on military history are, however, another matter. The study of fighting is, unfortunately, no longer fashionable; it is somewhat appropriate and satisfying that I complete this work exactly 50 years after Fuller wrote his "generalship". Modern historians have tended to focus more on the wider context of warfare, and on Alexander's character. There is nothing wrong with this approach, but it is the study of strategy and tactics that has always been of particular interest to me. I believe firmly that there is still considerable academic worth in attempting to re-construct Alexander's great battles and sieges with the intention of making a determination of exactly how he managed to conquer most of the known world in little over a decade.

The relative lack of modern works on Alexander's military career is, rather perversely, good for the student of military history; it forces one to rely heavily upon the surviving ancient sources. A considerable amount of tactical and strategic information is contained within the pages of those surviving sources, much of it frequently missed by historians whose primary focus lies elsewhere.

This thesis is intended to be an examination of the whole of Alexander's career: it includes a reconstruction of every set-piece battle and significant siege of his career, and omits those campaigns for which we have no information (usually very minor affairs against hill tribesmen for example). During this thesis, I shall tentatively present a number of new theories and narratives that I hope will solve some of the problems in Alexander scholarship; for example the issue of the divergent source traditions for the battle of the Granicus River.

It is also important to note, however, what this thesis is not: it is not primarily an examination of sources, although source criticism is present where it is needed for the military discussion. It is also not an examination of the army of Alexander; this was done in my MA thesis entitled "The Army of Alexander the Great", and in my forthcoming book of the same title due for publication within a few weeks of the submission of this thesis: I take the results of that examination for granted within this work.

Alexander's career will be examined chronologically, rather than thematically; both approaches were considered in depth, but I believe a chronological approach gives us the best view of any developments within Alexander's strategic thinking, which is, in itself, a fascinating subject for discussion. Several assumptions should be considered when reading this thesis: firstly that all dates are BC unless otherwise stated, secondly that the stade is the Olympic stade equating to 192m; this is a common assumption by modern scholars in the field. Quotations from ancient writers are taken from the modern translations by I. Scott-Kilvert (Plutarch), J. Yardley (Curtius), A. De Sélincourt (Arrian: references to Arrian without further specification are to his *Anabasis*), C. Bradford Welles (Diodorus) and W. Heckel & J. Yardley (Justin). Two final things need to be said, it was my original intention to number the footnotes starting anew for each chapter; a small technical problem unfortunately prevented this. Finally, any errors that remain are mine alone.

Source Analysis

One of the very first issues that any historian, ancient or modern, must address is source analysis. How can we separate later invention from the original contemporary source; how can we overcome the bias in any source; how can we reconstruct events from disparate accounts; and of particular interest to military historians (and indeed this thesis), how can we reconstruct a battle narrative without the benefit of modern communication? It is the intention of this opening chapter to answer these questions and essentially to set out the methodological approach taken in this thesis to the sources and source analysis.[1]

The survival of source material makes any study of ancient history difficult, but there are specific issues regarding the Alexander sources that make the study of this period particularly challenging. At first sight, for the career of Alexander, we are blessed with surviving source material. There are two full-length histories of his reign by Arrian and Curtius,[2] a biography by Plutarch, two books of Justin's epitome of Pompeius Trogus, an entire book of Diodorus and significant sections of Strabo;[3] along with these there are some interesting passages in Polybius. This apparent embarrassment of source material is extremely misleading; however, as they are all of late date, the earliest (Diodorus) being late 1st century BC. Strabo, shortly afterwards, wrote in the late Augustan period, Curtius was probably late 1st century AD,[4] with Plutarch and Arrian writing some time in the second. Pompeius Trogus wrote under Augustus; the date of Justin's epitome is disputed but is either 3rd or 4th century.[5] The issue of the transmission of accurate information is particularly acute, therefore, in the Alexander historians.[6]

Despite there being a great number of works written on Alexander during his life, and shortly afterwards, no contemporary source survives in anything more than fragmentary form. Of the fragments that remain, the most are from a relatively small group of historians, namely: Callisthenes, Aristobulus, Chares, Cleitarchus, Nearchus, Onesicritus, and Ptolemy.[7] All of these primary sources present problems: despite their loss, the fact that they were used to such a degree by those sources who do survive means they cast a long shadow indeed over all later scholarship. We also do not really know the main thrust of these primary sources: some may have concentrated on military matters, on geography,[8] or on the king's character etc; we simply do not know with any certainty. We can, however, reasonably speculate that Ptolemy, for example, would have taken care to give himself a leading role in his work, but even this is speculation given the lack of surviving material. Further to the abundant but limited source material, there are very few

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[1] A still useful discussion of these issues is Whatley, 1964 (written in 1920).
[2] The latter of which contains some significant *lacunae*.
[3] Bosworth, 2003b, 7.
[4] *Cf.* Bosworth, 2004 rejects the identification with the Curtius Rufus of Tacitus *Annals* 11.20-1.
[5] Bosworth, 2003b, 7.
[6] Accurate both in the sense of the provision of an historical narrative, and narratives that were true to the original source. Bosworth, 2003 argues (against McKechnie, 1999) that the ancient historians followed their sources faithfully and did not irresponsibly add material.
[7] Worthington, 2003, 1.
[8] For the importance of knowledge of geography and topography in reconstructing ancient battles see Whatley, 1964, 123-4.

surviving inscriptions; numismatic evidence is sparse,[9] but there are a few references in contemporary orators like Demosthenes.[10]

Of the now lost primary contemporary sources, the first to be written was perhaps Anaximenes' work '*On Alexander*'[11] written during Alexander's life, as was Callisthenes' '*Deeds of Alexander*' which covered the period at least down to late 331 (the latest datable fragments describe Gaugamela) and was only cut short by the author's killing in 327 by Alexander.[12] Alexander's death brought a wealth of material written by senior commanders. Onesicritus and Nearchus wrote soon after the king's death, and Ptolemy wrote before 283 (the date of his own death) but probably fairly close to it.[13] Aristobulus composed his history at some point after the battle of Ipsus in 301; contemporary with Cleitarchus' work which was the most widely read on the subject in the ancient world.[14]

There were also many pamphlets published on Alexander after his death, including a treatise on the deaths of Alexander and Hephaestion by Ephippus and the works of a more formal reporting nature like the *stathmoi* of the Royal surveyors and the *Ephemerides* which was allegedly compiled by Eumenes.[15] These primary sources provided a rich and wide-ranging pool from which the surviving tradition was able to draw. Modern historians have always felt a tremendous temptation to trace their effect upon the extant tradition by using the surviving fragments. The method has been to analyse the surviving fragments and attempt to trace bias and other characteristics whilst simultaneously trying to identify these in the surviving tradition.[16] The approach can be very enlightening when we have some other verifiable evidence that a particular fragmentary historian was used by a secondary source, as is the case with Arrian for example,[17] but when the identification is speculative then it often leaves more questions than answers.

The major problem with this approach to Alexander historiography is that we have very little opportunity to examine a large section of primary source against the secondary tradition. One of the rare instances where we can do this is with Nearchus' account of his voyage from India to Susa which forms the narrative base for the second half of Arrian's *Indica*.[18] To act as a control sample we also have large sections of Strabo where Nearchus was also the primary source. A similar exercise can be conducted with Aristobulus, although less successfully as we do not have as much surviving material

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[9] Dahmen, 2007.
[10] Demosthenes 18.270; Aeschines 3.133, 3.160-164, 3.165; Dinarchus 1.34. *cf.* Worthington, 2003, 6.
[11] The surviving fragments are too sparse to support any conclusion as to its aim or tone (or indeed its quality). Bosworth, 2003b, 14.
[12] Pearson, 1960, 22-49; Badian, 1964, 251-2.
[13] *Cf.* p142 n.255.
[14] Badian, 1965c, 1-8; Bosworth, 2003b, 7.
[15] Bosworth, 1988b, ch.7.
[16] Bosworth, 2003b, 8.
[17] Arrian *preface* 1 where he explicitly names his sources, and his (somewhat naïve) reasons for their selection.
[18] Arrian *Indica* 18-42.

from him to work with.[19] More often than not this approach is very difficult due to the lack of surviving material, and the tangential material often preserved.

Many secondary authors were very selective in citing their sources and only tend to do so either when they are in disagreement or when the validity of what they are quoting is in question and they are seeking to try to remove any blame from themselves for inaccurate information. As a result of this, when sources are named it is usually where they were likely incorrect; material that was sober and informative would simply be copied without citation or comment.[20]

Callisthenes demonstrates the above point very well: we may reasonably expect the first historian of Alexander to have been very widely used by secondary historians, but there are only around twelve citations of his *Deeds of Alexander*. Many of the surviving references are only loosely linked with the narrative that we can assume he would have provided (as the official court historian); the largest group are regarding the mythology of Asia Minor, as reported by Strabo.[21] Of the remainder of the surviving fragmentary material of Callisthenes there are two longer sections, preserved by Polybius, which are crucial, and concern Callisthenes' narrative of the battle of Issus. Polybius uses the first section, citing his source in order to prove (in his eyes at least) the incompetence of Callisthenes as an historian. The two sections primarily deal with troop numbers, and the inaccuracy of the description of the topography of the plain.[22] There are undoubted problems with Callisthenes' account: the eulogistic approach to Alexander is not helpful (and one of the reasons he does not survive).[23] The secondary sources are far from perfect in their approach to the primary material as Polybius demonstrates here. Polybius tends to assume that all of Alexander's infantry were *pezhetairoi* and that they were as rigid and inflexible as the Macedonian phalanx had become in his own day.[24] Despite the failings of Callisthenes (albeit hardly proved by Polybius), Polybius' detailed criticisms have proved the basis for a number of reconstructions of the site of the battle of Issus.[25]

The second of the two major fragments concerns Alexander's visit to Siwah, and is used by Strabo. The sections where Callisthenes is used are highlighted by Strabo[26] to demonstrate that Callisthenes was an arch-flatterer.[27] Strabo was not here attempting to give a full narrative from Callisthenes, merely to use him to provide a flattering view of Alexander (having ravens act as guides to help him find the oasis for example). The implicit criticism of Callisthenes for providing an unashamedly flattering picture[28] of

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[19] Bosworth, 1988b, ch.2.
[20] Bosworth, 2003b, 8.
[21] Bosworth, 2003b, 8.
[22] Polybius 12.17.1-22.7; *cf.* Walbank, 1967, 364*ff.*
[23] Polybius 12.18.2*ff* (on troop numbers); 18.11-12 (on how the difficulties of the terrain enhanced the Macedonian achievement). *Cf.* Bosworth, 2003b, 8-14.
[24] Polybius 12.19.1-4, 21.2-10 (*pezhetairoi* numbers); 20.6-8, 22.4 (rigidity of phalanx). *Cf.* Bosworth, 2003b, 9-14.
[25] Bosworth, 1976, 25-32.
[26] Strabo 17.1.43 (814) = *FGrH* 124 F 14a. *Cf.* Pearson, 1960, 33-6; Bosworth, 1977a, 68-75.
[27] Bosworth, 2003b, 9.
[28] It was noted above that sources are often cited when they say something demonstrably incorrect and the author wishes to distance himself from the comment; this is another example of that tendency.

Alexander is echoed by Plutarch, who also related the story of the ravens, although this time without citation.[29] Strabo's narrative of the Siwah episode culminates in the statement that Alexander was indeed the son of Zeus, a theme no doubt also coming from Callisthenes' work.

This section of Callisthenes was widely cited and used to demonstrate the belief that he was little more than a flatterer of Alexander. Several other fragments also appear to show this theme (unsurprising in a historian who was writing under the watchful eye of the king himself). Plutarch notes Alexander's prayer to Zeus in similar flattering terms.[30]

Polybius'[31] criticisms of Callisthenes show that he preserved some very detailed material that would have been especially useful to the military historian. There is some good detail on troop numbers and movements which, coming as they did from an eye witness, have a high likelihood of being accurate and correct. This potentially useful material is not what we have citations for, however; he is frequently only quoted in the context of the eulogistic and bizarre.[32] Having said this, simply because we do not have a citation in a particular passage does not mean that he was not the ultimate source (an argument that can be applied to any primary source who is cited); absence of evidence is not evidence of absence after all. We should be wary, however, of attributing too much material to Callisthenes, as its attribution is almost always speculative and based upon assumptions. Whilst Callisthenes may not have been the most widely read of the contemporary Alexander historians, he certainly influenced the early tradition.

The source problems are even more acute with Cleitarchus. It appears that Cleitarchus was a very popular historian, especially during the Roman period, and was probably the most popular of the primary historians of Alexander. In total, Jacoby accepts thirty-six fragments as being authentic; unfortunately all of them deal with minor and trivial matters.[33] These fragments are mostly preserved by Aelian and deal with the fauna of India,[34] and by Strabo who criticises Cleitarchus for errors in his geographical and topographical descriptions of Asia,[35] again illustrating that citations are frequently used in order to discredit an historian and remove blame for errors from the secondary source. Of the remaining fragments "Demetrius focuses on his stylistic impropriety (F 14), Curtius Rufus on exaggeration and invention (F 24-5), Cicero on Rhetorical mendacity (F 34). The general impression conveyed by the fragments alone is therefore far from favourable".[36] These fragments, considered in isolation, tend to suggest that Cleitarchus was prone to exaggeration and therefore not a reliable source; if this is correct then it has a significant effect on Alexander scholarship as he was so widely read. We must remember three vital points, however; the first is that, as far as we know, Cleitarchus was not an eye witness to the events he describes and we must, therefore, consider who his

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[29] Plutarch *Alex.* 27.4 = *FGrH* 124 F 14b.
[30] Plutarch *Alex.* 33.1 = *FGrH* 124 F 36. *Cf.* Bosworth, 1977a, 57-60.
[31] Polybius 12.19.1-2, 5-6, 20.1.
[32] Bosworth, 2003b, 9.
[33] Bosworth, 2003b, 10.
[34] *FGrH* 137 F 18-19, 21-2.
[35] *FGrH* 137 F 13, 16.
[36] Bosworth, 2003b, 10.

ultimate source may have been. In all likelihood he had several primary sources himself; probably Callisthenes, Onesicritus and Nearchus were major providers of information for Cleitarchus, as were the large number of Macedonian veterans in Alexandria at the time of his writing. Secondly we do not have enough surviving material to be able to condemn Cleitarchus absolutely: the fragments may well be unrepresentative. The final point follows from that: as noted above, primary sources are only usually cited in order to discredit them and make the secondary author seem more authoritative. This tendency would lead directly to only negative material being preserved and therefore a conclusion based upon this material is dangerous.[37] Following this, however, we can say that there was evidently a fair amount of negative and sensationalist material in Cleitarchus; otherwise later historians would have used a different primary source in order to prove the point they wished to make.

The general impression conveyed by fragmentary material may well be accurate, but it is unlikely to tell the whole story. If, for example, we were to have citations in Athenaeus and Plutarch's *On the Malice of Herodotus*, we would come to the same conclusion about the father of history as some do of Cleitarchus (and Callisthenes); that his history was filled with malice and trivialities and bias. It would certainly be true to say that such things exist within Herodotus, but not that it is the main thrust of His work.[38]

In order to make a proper judgement of Cleitarchus, more data are required. Modern source analysis has convincingly established that large sections of both Diodorus and Curtius are so similar that the only realistic conclusion is that they derived from the same primary source. The same material is also detectable in both Justin and the extant sections of the *Metz Epitome*. A common tradition has long been recognised and the term 'vulgate',[39] albeit unsatisfactory because of its negative assumption, has been applied to this tradition.[40] It would be entirely incorrect to conclude, however, that a historian from the vulgate tradition never used a primary source from outside of that tradition, e.g. Ptolemy or Aristobulus: Plutarch, for example, frequently uses sources that are clearly different from the vulgate and therefore cannot always be considered to be part of that tradition.[41] As Bosworth notes, the term vulgate does not imply a single primary source, but rather suggests a shared tradition.[42]

Having said this, however, that shared tradition probably had a single stronger voice than the rest, namely Cleitarchus. The key passage in indicating this is Curtius 9.8.15, which refers to Cleitarchus as his source for the number of Indians killed during the Sambus campaign:[43]

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[37] For a condemnation of Cleitarchus see Tarn, 1948, 54-5; Hammond, 1983, 25-7.
[38] Bosworth, 2003b, 10.
[39] Bosworth, 2003b, 10.
[40] Hammond, 1983, 2 for a criticism of the term.
[41] Hamilton, 1969, xlix-lii; Hammond, 1983, 170 n.5.
[42] Bosworth, 2003b, 11.
[43] Curtius 9.8.15 = *FGrH* 137 F25.

> According to Cleitarchus, 80,000 Indians were slaughtered in this area and many captives auctioned off as slaves.

The passage of Curtius/Cleitarchus is clearly the source as the equivalent passage of Diodorus:[44]

> Next he ravaged the kingdom of Sambus. He enslaved the population of most of the cities and, after destroying the cities, killed more than eight thousand of the natives. He inflicted a similar disaster upon the tribe of the Brahmins, as they are called; the survivors came supplicating him with branches in their hands, and punishing the most guilty he forgave the rest. King Sambus fled with thirty elephants into the country beyond the Indus and escaped.

The two accounts probably come from the same source, and Curtius tells us explicitly that that source is Cleitarchus (although interestingly again citing his source when the information being given seems unbelievable, 80,000 dead Indians). Whilst this does not prove that the rest of the shared tradition of the vulgate also originates with Cleitarchus, it is a strong indication that at least some of it does. This is supported by what we know of Diodorus, that he generally used a single source for several chapters and only switched sources when he came to the end of his primary source's work.[45] For Diodorus book seventeen, there are no real digressions, no discussion of the history of Persia or the west, and no digressions on geography or natural history. This further indicates that Diodorus was using a single source for book seventeen, as digressions would likely have come from another source, and therefore the idea of Cleitarchus being the primary source for the vulgate is further strengthened.

Arrian's history has generally and rightly been regarded as the finest of the surviving narratives of the career of Alexander the Great.[46] His text is unique in the ancient world in that he specifically gives us information about his use of sources:[47] in his Preface, he identifies both his sources and his reasons for using them as his primary sources. Arrian's reasons for selecting his sources are often considered naïve,[48] and I believe this is a perfectly correct judgment, but we must first examine his reasoning in more depth.

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[44] Diodorus 17.102.5-7.
[45] Bosworth, 2003b, 11.
[46] Rhodes, 2006, 348.
[47] Bosworth, 1980, 16.
[48] Rhodes, 2006, 348. Billows, 2000, 305 even goes to the extent of stating "his choice of Ptolemy and Aristobulus as his main sources, for which he is so often praised, should in fact be a source of criticism: it is very likely that he could have produced a better, more balanced account had he relied on Callisthenes, Hieronymus, and perhaps Duris or Diyllus, reserving the memoirs of Ptolemy and Aristobulus for supplemental usage".

Arrian opens his history by telling us that:[49]

> Wherever Ptolemy and Aristobulus in their histories of Alexander, the son of Philip, have given the same account, I have followed it on the assumption of its accuracy; where their facts differ I have chosen what I feel to be the more probable and interesting.

Bosworth notes that this statement of intent would seem to imply that Ptolemy and Aristobulus were considered to be of equal weight by Arrian; this is demonstrably not the case, however.[50] At 6.2.4 Arrian calls Ptolemy "my principal source"; and for Arrian, therefore, there was evidently a clear hierarchy of quality with regard to his sources: Ptolemy, Aristobulus, and then the rest.[51] Ptolemy is clearly Arrian's main narrative source, and some passages are probably verbatim extracts, such as the narrative of the Danubian campaign.[52] Whilst we can clearly see Ptolemy in the text of Arrian, Aristobulus' contribution is more difficult to assess. Strasburger and Kornemann both attempted a speculative analysis; but the surviving fragments of Aristobulus, coupled with the relative lack of direct citations in Arrian, mean that they were both essentially attempting an analysis of Aristobulus' influence based upon a general opinion of how Aristobulus wrote from insufficient primary material.[53]

Whilst Ptolemy and Aristobulus were Arrian's primary sources, confirmed by repeated citations of their work, Arrian also uses Nearchus extensively from book six onwards: there is also geographical material taken from Eratosthenes. In Arrian's follow-up work to his *Anabasis*, the *Indika*, he is no less coy in citing his sources; in the latter work he explicitly cites Eratosthenes, Megasthenes and Nearchus as his sources.[54] In terms of the quality of sources chosen, Arrian was wise indeed. Ptolemy, Nearchus and Aristobulus were all eye witnesses to the events they described and the first two were leading figures within the command structure of the army.

The quality of the primary source material used by Arrian and others is of fundamental importance to modern historians; the major part of what we have to work with is the literary material that survives from the ancient world, but can it be trusted? Arrian has long been thought of as the most reliable of the surviving sources, as noted above. This is because he used sources that were present at all of the major events that he covers in his work. Even on occasions where Ptolemy, for example, may have been away on expedition, his other sources were probably not. Upon his return, Ptolemy, as a senior commander, would also no doubt have been briefed as to events that occurred during his absence from camp in what were surely regular meetings of the senior staff. We have evidence of such meetings in the numerous councils of war that took place before every

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[49] Arrian 1, preface.
[50] Bosworth, 1980, 16.
[51] For examples of Ptolemy and Aristobulus being considered as better sources, see Arrian 5.7.1; 7.15.6.
[52] Arrian 1.1.4; *cf.* 1.4.6; Bosworth, 1980, 16.
[53] Strasburger, 1934; Kornemann, 1935; *cf.* Pearson, 1960, 195*f*; Bosworth, 1980, 16.
[54] Bosworth, 2003b, 13.

major battle of Alexander's career[55] (with the exception of the Hydaspes), and we can assume that plans were discussed in some detail at these meetings, ensuring that all commanders were kept informed of events on the campaign, even those outside of their immediate sphere of influence. Arrian tells us that before Gaugamela:[56]

> Past the crest of the ridge, just as he was beginning the descent, Alexander had his first sight of the enemy, about four miles away. He gave the order to halt, and sent for his officers – his personal staff, generals, squadron commanders, and officers of the allied and mercenary contingents – to consult upon the plan of action.

We can clearly see from the text of Arrian that even rather minor figures within the command structure were present, *ilarchs* and commanders of the allied and mercenary contingents for example.

This information transfer is of fundamental importance to the surviving material that we have. It means that those secondary sources that used individuals like Ptolemy, Aristobulus and Nearchus who were eye witnesses and present at senior meetings should carry considerable weight with us. I would go as far as to say that our general disposition should be to accept what they say, except where there is an evident aberration, (as with the Persian troop numbers at Gaugamela where Arrian notes 40,000 cavalry and 1,000,000 infantry), or where we can demonstrate that another source provides superior information.

It is difficult, and fundamentally foolish, of an historian to make a *carte blanche* claim that any given historian is always right and another always wrong; but there are some generalisations that we can make, however. With regard to topography we can reasonably assume that those who were present, or who were using a source that was present, are more likely to preserve the most accurate information. My general stance, therefore, is to believe Arrian where there is a discrepancy with the Vulgate and his account is credible. I do not completely reject the latter tradition, however, as there no doubt are times when Arrian is not correct and the Vulgate topography fits better with the surviving narratives.

With regard to troop numbers, Whatley argued that we have three main options:[57]

1. Accept what the sources tell us
2. Argue from military probability
3. Deduce numbers from our knowledge of the command structure of the army

To Whatley's list I believe that we can add a 4th: in certain circumstances we can argue for numbers based upon the known available terrain, i.e. at Issus where the plain is

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[55] For example, Gaugamela: Arrian 3.9.3-4; Curtius 4.13.3-10.
[56] Arrian 3.9.3-4.
[57] Whatley, 1964, 127.

of a specific size. My general approach is to reject option one as the sources frequently give us very different troop numbers (this option would be available for periods where we only have one source). Option two is a strong theme throughout the thesis; both in terms of numbers and tactical reconstructions. At the Granicus, for example, I think the most militarily probable theory, based upon what we know of Alexander's tactics elsewhere, and the fact that we have to completely different accounts, is that both are correct and need to be reconciled into a single coherent theory, as I have tried to do. Option three is possible on occasions, particularly with regard to the *pezhetairoi*. We know there were 1500 men per *taxis*, so if three *taxeis* are mentioned we can reasonably assume that 4500 heavy infantry were present. This argument hardly ever works for the Persian order of battle as we have less general knowledge of the command structure. My own option four is applicable in some instances: for example the only reason we know there were 3000 hypaspists is that their three *taxeis* take up the same frontage as two *taxeis* of *pezhetairoi,* who we know with some certainty comprised 1500 men each.

We can also say that sources who provide a more detailed analysis based upon primary eye witness testimony are also more likely to be accurate and trustworthy than those who are more cursory and rely on poorer quality primary sources. These are arguments essentially for placing a fair degree of trust in Arrian, but all historians, both modern and ancient, are prone to bias; it is inevitable and a fact of human nature. As historians we must be constantly aware of this tendency which frequently manifests itself in literary invention of later writers. An example of this can be seen in the attitudes to Parmenio. Parmenio, along with his son Philotas, was executed on the orders of Alexander; an act whose origins probably lay in Alexander's growing isolation and mistrust of those around him, particularly those who were not his contemporaries.

Parmenio is sometimes presented as the wise old general acting as a foil to the youthful exuberance of Alexander, but more often, particularly by Arrian, as being overly cautious and lacking the same heroic vision as the king. There are five instances in Arrian where Alexander considers (however briefly) and then rejects the advice of Parmenio.[58] The first is a dialogue that occurred at the Granicus: what ensued is only reported in Arrian and Plutarch;[59] a debate between Alexander and Parmenio as to the best course of action. Parmenio apparently advised waiting until the morning; he believed the Persians, who were greatly inferior in infantry,[60] would withdraw and the Macedonians could get across the river unopposed the following morning. He also, apparently, emphasised the difficulties of the terrain. Both sources have Parmenio's advice being rejected out of hand by Alexander.

This is part of a much used, and often discussed, device of (particularly) Arrian to have the overly cautious Parmenio's advice rejected by the bold and heroic Alexander.

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[58] The others being 1.18.6-9 at Miletus; 2.25.2-3 at the Euphrates; 3.10.1-2 at Gaugamela and 3.18.12; at Persepolis.

[59] Arrian 1.13.2; Plutarch, *Alex.* 16.1.

[60] Arrian 1.13.2; emphasising Persian inferiority in infantry, despite claiming they had 20,000 at 1.14.4, more than the Macedonian 12,000 (excluding allies and mercenaries that is). Davis, 1964, 37; sees Parmenio's advice as being perfectly sound.

Diodorus has no such debate, but his account of the battle is as if the advice were acted upon. We must note, as argued below pp. 51-2, that Ptolemy was fighting in roughly the same area as Alexander, the right wing, and so Ptolemy was probably also glorifying his own role in the battle, as well as that of the king, and not simply criticising Parmenio.[61] He may also simply have had less knowledge of events on the left, and have chosen to concentrate on events that he was directly involved in. At the Granicus, Callisthenes was Arrian's source for at least the debate with Parmenio.[62] Callisthenes is known to have been hostile to Parmenio and is probably the source for all five of the dialogues between Alexander and the old general that show him as being overly cautious, set against Alexander's youthful heroism.

Before the siege of Halicarnassus began in earnest, we have another debate between Parmenio and Alexander as to the wisdom of offering a naval battle. This is significantly different from the other such debates:[63] here Alexander is portrayed as the pragmatic and cautious party, in opposition to Parmenio's rash and impetuous suggestion. Lane Fox[64] considered Parmenio's advice, if it was ever in fact offered, as being impossibly foolhardy. It is perhaps unwise to pass judgment on Parmenio at this point as we have no indication as to exactly what plan he proposed, although it would probably have been more sophisticated than simply a battle between all available forces.[65]

At Gaugamela, Parmenio is treated favourably by Diodorus,[66] a fact which presents a number of problems. This treatment decreases the likelihood[67] that he was influenced by the negative sentiment in Callisthenes.[68] Devine[69] argued that the prominent place of the Thessalian cavalry in both Diodorus and Plutarch suggests a commonality of sources; but I think it more likely that, in the absence of specific passages that are obviously from the same source, their prominent role in both was simply a reflection of actual events; that is to say that they in fact did have a significant role in the battle. This commonality of source has been seen as a reflection of the pan-Hellenic nature of Callisthenes; but the prominent role of Parmenio, and not just of the Thessalians, calls this into question. Devine[70] goes on to argue for an as yet unidentified common source, despite Hammond's[71] confidence that the common source is in fact

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[61] Badian, 1977, 274-5, shows that Arrian concentrated on the heroic picture of Alexander, and that his source for this was probably Callisthenes. Indeed he goes further and states (275) that Callisthenes was the only eye witness to the battle, although then immediately contradicts himself at 275, n.16, by saying that Ptolemy was also there but only in a junior capacity; more on this important detail later. Badian also adds that we can get nothing from Arrian's account about any part of the battle not involving Alexander (286).
[62] *Contra* Hammond, 1996, 40 believes that Arrian largely followed Ptolemy and Plutarch largely followed Aristobulus.
[63] Arrian 1.13.2 (Granicus), 2.25.2-3 (Euphrates), 3.10.1-2 (Gaugamela) and 3.18.12 (Persepolis).
[64] Lane Fox, 1973, 132.
[65] Bosworth, 1980, 138.
[66] Devine, 1986, 89.
[67] But does not eliminate it as in Devine, 1986, 89.
[68] Hammond, 1980, 138 cites Cleitarchus as Diodorus' major source here, noting the vivid portrayal of both authors.
[69] Devine, 1986, 89.
[70] Devine, 1986, 90.
[71] Hammond, 1983, 20-27; 51; 173 n.11.

Cleitarchus. The incident of the call for help by Parmenio, just after Alexander began the pursuit of Darius,[72] is also interesting. Again, it shows no malice towards Parmenio at all, but simply presents a picture of the Thessalians in genuine difficulty asking for help. Diodorus, in common with Arrian, simply presents Alexander's response without comment, unlike Plutarch and Curtius who note Alexander's frustration. Interestingly, along with Diodorus' attributing no blame to Parmenio for this incident, he also attributes no blame to Alexander.[73] Diodorus' account is far less useful than Curtius or Arrian, but surely deserves more than to be called "childish and worthless" by Hammond.[74]

Reconstructing the Battle

In order to reconstruct an ancient battle properly we must first analyse the quality of our source material and ask how did ancient writers, even eye witnesses to any given event, know what was happening across the entire battlefield? Firstly, we can reasonably assume that an eye witness participant in a battle would have a reasonable degree of knowledge of what was occurring in his sector of the battle, particularly if he was a commander such as Ptolemy. Whether he would have had great knowledge of the rest of the battlefield is another question entirely. Greece and Persia were areas in the ancient world (and indeed the modern world) where precipitation was sparse, and the ground was generally dusty. One can only imagine the amount of dust that would have been thrown up by tens of thousands of men and horses marching toward, and then ultimately engaging in battle.[75] This dust, over a frontage of sometimes several miles, would have led to considerable confusion on the battlefield and likely would have made it very difficult indeed for a commander to guide the situation as it evolved once battle commenced. The main exception to this was the battle of the Hydaspes, which was fought during the wet season in India when dust would not have been an issue.[76] Coupled with this lack of visibility would have been the overwhelming noise of the clash of arms once battle commenced: it would have been all but impossible for a commander's voice to be heard from any distance.[77] Signals could have been used on occasion, but where visibility was particularly poor, a system of runners would have been employed to pass messages and to ensure that Alexander (and other senior commanders) could keep track of the situation.[78] We have a hint of this at Gaugamela where a runner was sent to Alexander by Parmenio to ask for assistance.

Given these difficulties, coupled of course with no modern communication devices, how could Ptolemy have known what was occurring in other sectors of the battle, and how can we rely on eye witness testimony if it was by necessity of circumstance limited? I believe that information regarding the battle as a whole would have been disseminated in a number of ways. Before the battle was ever fought, probably the night before (or maybe earlier) a council of war would generally have been held (the

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[72] Or perhaps just before the pursuit began.
[73] Devine, 1986, 90.
[74] Hammond, 1980, 138.
[75] Hanson, 2005, 143-4.
[76] The Hydaspes will be discussed in more detail later.
[77] Hanson, 2005, 143-4.
[78] For more discussion, see below p. 20.

probable exception being the Hydaspes).[79] In this council, the battle plan would have been laid out before all of the senior commanders. Details would have been discussed as to what was expected in each sector, the role each unit was expected to perform and what the anticipated Persian response would have been. Alexander would have discussed with his commanders what he expected the Persian dispositions to be and their reactions in terms of reorganisation if they chose a different formation. Discussions would have occurred as to the best tactics for winning the battle, how the Persians were to be lured out of their anticipated defensive dispositions etc. The commanders would also have discussed how they expected the battle to progress, and where they were aiming the breakthrough to occur, essentially planning for how victory was to be achieved. These would have been discussions, not lectures, but we should be in no doubt that Alexander would have been the leading figure. Following this council, the commanders would have reported back to the units under their command what was expected of them. It is likely that many commanders may not have provided their subordinates with a full picture of the coming battle – they didn't need it – just their own sector.

Some of our eye witnesses would have been present at these councils and we can, I think, reasonably assume that their testimony as to what occurred in the opening phases of a battle is reliable: Alexander's movement to his right before Gaugamela for example. The Persian response would also have been visible, as they were stationary when Alexander arrived and would therefore not have been shrouded in dust. It is also true that most of the Persian movements (up to any general assault) at all of the first three set-piece battles would have been visible, and therefore likely to have been accurately recorded, as they were always in a defensive position when Alexander arrived and therefore not cloaked in dust. The difficulty of observation and therefore accurate recording of information only really arises once the main battle was joined.

Once battle was joined, observation was limited. This is the source of the two separate accounts we have of the Granicus; Ptolemy[80] described the battle that he participated in and had little direct knowledge of the dry land battle of Diodorus.[81] We must remember in this regard that Ptolemy was a fairly junior figure at the Granicus and probably not invited to the council of war held before that battle. Ptolemy's commander evidently did not feed back to him anything on the second column that crossed the river at night. Ptolemy was also here no doubt glorifying his own place on the battle by only describing his sector; he probably hoped this would distract the reader from the knowledge that he was a rather junior commander in 334. In later narratives, Ptolemy would have felt no such compulsion as he was of a senior rank and did not have to 'hide' his previously lowly position.

Once the clash of arms had begun it would have been far more difficult for any eye witness to have observed, and therefore later transmitted, accurate information; this would have occurred in a number of ways. It seems to me likely that, following the principle of a council of war before a battle, a similar meeting would have occurred

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[79] Discussed in more detail on pp 14-15.
[80] Arrian 1.13-16.
[81] Diodorus 17.19-21.

afterwards. This would have been to discuss the battle, tactics that had worked, where they would need to be amended for the future, the performance of units and sub-commanders and an analysis of the Persian forces along similar lines. This would have been along similar lines to modern management 'close-out' or 'lessons learned' meetings following a project. We have no direct evidence of such meetings occurring, but I think it likely. We also have no real evidence of many meetings between Alexander and his senior commanders, but again, using the inherent probability argument, it is hard to conceive that such meetings did not happen on a regular basis. These meetings would have been invaluable in the transmission of information regarding what had occurred in each sector to all of the senior commanders, and the likes of Ptolemy would have gained a reasonable amount of their information from such meetings. The fact that his account of the Granicus focuses only upon his own sector, and the remainder of his battle narratives on the whole battlefield, support of this, as he was a minor figure at the Granicus (as noted above) and therefore would not have been present at the post-battle meeting.

During the battle a measure of information would have been transferred to and from commanders to each other and the king by runners. These would have been messengers charged with carrying information across the confused battlefield. This would have included information on what was occurring in neighbouring sectors of the battlefield to the commander in question. This information transfer would have been vital to coordinate attacks against the Persians, and to modify a defensive posture when a Persian attack was larger than expected such as the Persian attack against the Macedonian right flank guard at Gaugamela. It would not have been possible in a council of war to say exactly when or where a breakthrough would have been achieved, merely where it was anticipated. These runners would have carried the news of a breakthrough to all the relevant parties enabling a coherent battle plan to be maintained (and indeed modified as required). These men would have probably been on horseback and were a human equivalent to radios on a modern battlefield.[82] These men are known at Gaugamela when Parmenio sent a, much debated, message to Alexander asking for help. This is one of the few times such men are mentioned, but this is not at all surprising as they were generally background figures only mentioned when they are of vital importance to the narrative, as at Gaugamela.[83]

General Approach

It is not always possible to separate later literary invention from what was recorded as eye witness testimony by the likes of Ptolemy, Aristobulus and Callisthenes, or indeed to always identify bias; but by judiciously studying the material that survives, and closely comparing the various accounts, as I have tried to do in reconstructing Alexander's battle narratives, I believe that it is possible to still reach a core of reliable testimony.

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[82] *Cf.* p. 18.

[83] All of our sources agree that a message was sent: Arrian 3.15.1; Curtius 4.16.2; Diodorus 17.60.7; Plutarch *Alex.* 33.9. *Contra* Rhodes, 2006, 364; see ch.6 on the Gaugamela campaign for full discussion.

It may seem logical that the reconstruction of a battle narrative should come only after the core of factual events has been established; but I do not believe this should always be the case. Some core events can only be established as the battle narrative develops: in this case, the principle of inherent military probability is a powerful one. This concept was first suggested by Burne in his work on the Agincourt campaign, but I think it is relevant and applicably to all periods of history, and is certainly becoming more widely used.[84] Essentially this principle states that when attempting to reconstruct an ancient battle we should try and put ourselves in the position of the commander, albeit briefly, and consider the most likely action. This will be partly based upon the tactics demonstrated in other encounters, and bears great fruit with the career of Alexander as he was such a successful recycler of tactics and strategies. By using this principle we can reasonably speculate that Arrian, for example, may be correct in some elements of his narrative, Curtius etc. in others. This principle should be used as a last resort when other, more academically rigorous methods have failed, as we have two separate and incompatible pictures of events, or with points of fine detail. We should recognise, however, that history is very far from an exact science and we can ultimately do no better than make our best efforts in any ancient reconstruction.

An example of the application of the principle of inherent military probability is during the siege of Gaza, where Plutarch[85] states that a bird became entangled in the cords of a torsion catapult.[86] Curtius'[87] account, on the other hand, has a rather different theme: he claims that the bird landed on the nearest siege tower and that its wings became stuck to the surface, a surface that had been smeared with pitch and sulphur. There is certainly a measure of later literary invention occurring here, as both are good 'tales' and one might expect this kind of story in Plurarch and Curtius. These stories should not be so easily dismissed, however: we do know that Alexander possessed torsion catapults by this time, and that strings of sinew provided the propulsive force; the invention probably lies in the fact that a bird could become entangled within them given what we know of the design of such torsion engines. Even when invention can be identified, therefore, a measure of fact can be gleaned. The more interesting text, however, is that of Curtius. A siege tower being smeared in pitch and sulphur initially makes no sense and one might reasonably assume a mistake or invention and dismiss the account out of hand; this would be wrong however. The question must be asked why a siege tower would be smeared with pitch and sulphur. These chemicals were highly flammable and not at all what we would expect to coat the surface of a siege engine of any kind. Instead of dismissing the account without discussion, however, we should first examine if it could have a basis in fact. There is an historical precedent for the use of these chemicals by the Spartans at Plataea during the siege of that city in 429.[88] The fact that the Spartans also used a circumvallation, just like Alexander at Gaza, suggests that instead of invention or error, Alexander was using the earlier siege as something of a model for the current siege.

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[84] Burne, 1956.
[85] Plutarch *Alex.* 25.4.
[86] Marsden, 1971.
[87] Curtius 4.6.11.
[88] Thucydides 2.77.

Taken together with Thucydides, description of the use of fire at Delium 424/3[89] we can demonstrate, I think, by using the principle of inherent military probability that Alexander was trying to repeat an historically successful tactic, rather than the sources making a mistake or inventing material in order to provide a more lurid account.

I have tried to argue that the first phases of any ancient battle have been reliably recorded and transmitted to us (albeit with some errors and discrepancies); the main problem arises once the 'fog of war' has descended upon the battlefield. This essentially happens when both sides clash and an individual combatant loses his ability to see across the whole battlefield. A core of reliable material can still, I believe, be recovered via the post-battle councils I suggested, as well as through general discussions and gossip of the participants. It is true to say, however, that the narratives of the opening stages of the battle are probably more reliable. This can be supported by the fact that the clash of arms part of a battle is often very briefly described in our sources; frequently the battle narrative jumps from Alexander (usually) being hard pressed and in the thick of the action to breaking decisively through the Persian lines. The lack of detail is generally because the sources had less information to impart. At the Granicus, for example, in one sentence of Arrian Alexander is fighting in the river bed, in almost the next sentence he is on dry land and in the process of winning the battle. The fact that the narratives of these later stages of battle frequently focus on Alexander is because the primary sources were not, by that time in the battle, relying upon their own eyes, but on later accounts that would have contained a certain amount of bias.

We have, in many ways, a far greater difficulty with regard to the Persians; our primary sources obviously did not have access to Darius' councils of war, or to any of the other Persian sources of information (with the exception of Gaugamela where we have a lot of material, probably ultimately gleaned from their battle plans recovered after the Persian defeat). This is one of the reasons why our sources focus on the Macedonians and they could only speculate upon Persian tactics based upon their dispositions and initial movements, both of which could have been easily observed. From Darius' initial attack against the Macedonian right at Gaugamela, for example, we can reasonably judge that his tactic was to prevent the Macedonians gaining the foothills which would obviate his chariots and great superiority in heavy cavalry.

This thesis generally focuses upon battle tactics, rather than the strategy of an entire campaign (the work count limit precluded the detailed study of both). I have not ignored strategy completely, however, but have included a detailed examination of Alexander's campaign strategy when it directly impinges upon his battle tactics. This occurred, for example, at Issus when Alexander's desire to fight an essentially defensive battle and to lure the Persians into the narrow plain had a direct impact on tactics.

This general approach was taken partly because there is far less academic material on Alexander's battle tactics than on questions of strategy and I believe that a full scale academic study is long overdue. On a more personal level, it is also a subject area that I find fascinating. The approach can be considered narrow, but I believe that a study of

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[89] Thucydides 4.100

tactics is of no lesser academic value than one primarily of strategy, and there was (and is) greater scope for originality with my approach given the lack of existing studies.



Figure 1: Map of Northern Greece showing Alexander's route during the Balkan Campaign.



Figure 2: Map of Northern Greece and the Balkans showing the terrain more clearly.

Chapter 1

Campaigns in Europe: 335-4

Alexander's early campaigns in Europe, before he set off upon his war of conquest, offer us some fascinating insights into the evolution of a number of key tactics that were to be developed into what can be considered hallmarks in later campaigns. The early campaigns are only recorded in any depth by Arrian;[90] Strabo and Diodorus offer little that can be added.[91] Arrian's source for this whole section is not difficult to establish; he makes one explicit reference to Ptolemy,[92] and it is likely that he used Ptolemy for the whole campaign. The account of the embassies from the Celts and others in Arrian,[93] also deriving from Ptolemy, is very similar to that in Strabo.[94]

In the spring of 335 Alexander began his Balkan campaign: the death of Philip II had been followed by general unrest on Macedonia's northern border,[95] and it would have been immediately apparent to Alexander that he could not embark on a Persian expedition until his homeland was secure. The initial part of this campaign was against the "Triballi and Illyrians".[96] The Triballians apparently occupied the plain to the south of the Danube, in what was to become the Roman province of Moesia; they probably also extended some way to the east in the direction of the Black Sea.[97] The Illyrians are a little more difficult to locate: those to the north-west of Macedonia did not revolt until the end of the Danubian campaign,[98] nor were they the Autariatae, the peoples to the west of the Triballi, as Alexander apparently was not even aware of their existence until 335.[99] The term is probably used by Arrian in a general sense to refer to those tribes to the north west of Macedonia; thus the rebelling Illyrians were in fact not rebelling at the time Alexander began his campaign, and the terminology and chronology have become confused in Arrian. The Illyrian and Triballian campaign is therefore, with hindsight by Arrian (or indeed Ptolemy), that which Alexander did achieve, but it is not in fact what he initially set out to achieve.

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[90] Arrian 1.1.4-1.9.8, The Illyrian campaign to the fall of Thebes.
[91] Strabo 7.3.8*ff*; Diodorus 17.8.1*ff*. Curtius' account does not survive.
[92] Arrian 1.2.7.
[93] Arrian 1.4.6.
[94] Bosworth, 1980, 51, believes that this whole section is taken directly from Ptolemy and I see no reason to dissent. Papazoglu, 1978, 25, n.39, and Pearson, 1960, 205*f*, also take this line: *contra* Hammond, 1974, 77, who sees both Ptolemy and Aristobulus as Arrian's sources for this section.
[95] Arrian 1.1.4; Diodorus 17.3.5; Ashley, 1998, 166.
[96] Arrian 1.1.4.
[97] Bosworth, 1980, 52; Papazoglu, 1978, 25*ff;* for some general information on the Triballians and their (little known) history.
[98] Arrian 1.1.5.
[99] Arrian, 1.5.3; Bosworth, 1980, 52.

Mt. Haemus

Alexander initially set off for the territory of the free Thracians. It is likely that he set off east from Pella, turning north at Amphipolis and marching past Philippi[100] and Mt. Orbelus on his left.[101] From here it was a ten-day march to the Haemus range.[102] The length of march is one of the numerous indicators that I will note throughout this chapter that show that this was by no means a whirlwind campaign: it is around 115km from Philippi to the Haemus range; ten days is a fairly leisurely pace.[103] Exactly which pass the Thracians were occupying is also in doubt: Bosworth[104] opts for the Trojan pass, noting that it does seem to have been more frequented in antiquity, also that it is closer to Philippopolis, the Shipka pass being some 16km to the east.[105] This assumes of course that Alexander marched through Philippopolis and not through Philippi to its west as I believe. The march from Philippi to the Shipka pass would certainly have been longer than that to the Trojan pass, but the length of march (ten days) could indicate that Alexander did in fact take the longer route and met the Thracians in the Shipka pass.[106]

The incident in the pass was, in reality, an extremely minor affair but is worthy of discussion because of Alexander's response to a unique problem.[107] The Thracians had gathered in the pass with the intention of using their wagons as a defensive palisade, with the secondary idea of sending them crashing down upon the advancing Macedonians.[108] Bloedow[109] points out the problems of Arrian's logic here: if the wagons were to be used defensively, this would be as the Macedonians reached the top of the pass; if, however, they were to be used as projectiles then this would have to occur as the Macedonians were still some distance away, therefore removing the possibility of them being used defensively. Milns[110] tried to solve this problem by suggesting that the defensive formation was to trick the Macedonians into attacking: this is possible but I suspect that Alexander would have attacked even if he knew what was in the mind of the Thracians,

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[100] Apparently this was the less famous of the two cities bearing that name; see Papazoglu, 1978, 29-30.
[101] Ashley, 1998, 167-8, suggests that Alexander headed east from Amphipolis and only turned north after crossing the Nestos River, then heading to Philippopolis. Wilcken, 1932, 67, takes a similar line. This does not allow for passing Mt. Orbelus and Philippi on his left as explicitly stated in Arrian 1.1.5. Bosworth 1980, 54, sees Mt. Orbelus as being much like Mt. Haemus, that is to say referring to an entire range rather than an individual mountain.
[102] Arrian 1.1.5.
[103] Ashley, 1998, 168 notes 20miles (32km) but a glance at Barrington suggests closer to 115km. see p.31 for a possible reason for the leisurely pace.
[104] Bosworth, 1980, 54; see also Ashley, 1998, 168; Bosworth, 1988, 29; Hammond, 1980b, 46.
[105] Ashley, 1998, 168.
[106] Wilcken, 1932, 67; and Hamilton, 1969, 46; support the Shipka pass as the location of the encounter. Bloedow, 1996, 120; notes that the Shipka pass is at a height of 2437m and the Trojan pass at 1051m, perhaps further indicating the Shipka pass is the correct location, being higher and perhaps, therefore, more defensible.
[107] Arrian 1.1.7-1.1.9; the stratagem of the Thracians and Alexander's response to it recur in Polyaenus, 4.3.11. The only real difference between the accounts of Arrian and Polyaenus is that the later makes the wagons heavy laden, probably to make the Thracian plan, and Alexander's response, more impressive. Hammond, 1996, 37, argues that the two accounts have the same source due to their striking similarities.
[108] Arrian 1.1.7.
[109] Bloedow, 1996, 120*f*.
[110] Milns, 1968, 36.

and Arrian does indeed imply exactly that; that Alexander had guessed what the Thracians' intentions were, given his ordered countermeasures to his troops.[111] Hammond[112] argued that they in fact intended to do both, that a defensive palisade had been organised behind the wagons that were to be sent down the slope: it is difficult to imagine, first of all, how the Thracians physically got so many wagons into the pass where space must have been very limited; and, of course, this is not how Arrian describes proceedings.

Arrian leaves us in no doubt that the wagons were used as projectiles, but exactly how is far less clear. He constantly refers to them in the plural:[113] is this intended to mean that several were sent down simultaneously, side by side as it were, or should it be taken to mean one after the other? The presumed narrowness of the pass would tend to preclude the former, and therefore we should accept that several wagons were sent down the slope consecutively. Bloedow raised a further problem:[114] wagons travelling down a rocky slope[115] would not travel in a straight line for very long, even if their steering mechanisms were fixed in place. It would seem that the only way for the wagons to have been used effectively as weapons is if they were in fact manned, to ensure that they actually reached the Macedonians without harmlessly crashing into the walls of the pass; although none of our sources make any mention of drivers in the wagons.

Alexander's countermeasures are, of course, the most interesting part of this encounter. Arrian[116] tells us that he instructed those of his troops who were able to break ranks and allow the carts to pass through,[117] and where space prevented this they were to lie prone and cover their bodies with interlocking shields.[118] It is difficult to imagine how these Macedonian troops could have been lying prone and still have held their shields in an interlocking position. Bosworth suggested that the front rank were prone, with the second rank standing over them with interlocking shields, forming something of a ramp; this is even more difficult to envisage.[119]

The answer could lie in an examination of Macedonian equipment. Since the sarissa required the use of both hands in order to wield it, the infantryman could only carry a small shield suspended from the neck and covering his left shoulder.[120] Asclepiodotus[121] is our only source for the diameter and shape of the shield: he tells us

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[111] Arrian 1.1.7.
[112] Hammond, 1988, 35.
[113] Arrian 1.1.7; 1.1.8; 1.1.9; see also Bloedow, 1996, 121.
[114] Bloedow, 1996, 121.
[115] There would not have been time for the defenders to clear the slope of all debris and foliage.
[116] Arrian 1.1.7-9.
[117] A precursor to the strategy used successfully at Gaugamela to defeat Darius' chariots.
[118] Sekunda, 1984, 27, uses this incident to argue that the Macedonian heavy infantry would have been equipped with a large shield; *contra* English, 2008, 32*ff*.
[119] Bosworth, 1980, 56-7, does in fact admit that "It is hard to see how this manoeuvre could have been carried out as effectively as described".
[120] Asclepiodotus *Tact*. 5; Aelian *Tact*. 12. Griffith, 1981, 161, points out that, although the shields were small, they were very stout. Anderson, 1970, 133, 306, also noted this, quoting Arrian 1.1.9 in support of his argument.
[121] Asclepiodotus *Tact*. 5.

that the Macedonian shield was made of bronze and that it was eight palms in width and not too hollow. There seems little doubt that the Greek palm equated to 7.6cm,[122] so the shield was 61cm in diameter. The diameter of hoplite shields excavated at Olympia ranged from 78.7 to 99.8cm.[123] Markle[124] proposed that the sarissa would not have been the only weapon employed by the heavy infantry; he believed that they did not use it at the Granicus or at Issus, and that infantry that accompanied Alexander on operations that required speed and endurance would also not have carried the sarissa and small shield. He argued that at these times, they would be equipped as regular hoplites, with a spear and hoplite shield.[125] If it is the case that regular hoplite shields were, on occasion,[126] used by the Macedonian heavy infantry, then lying prone on the ground with the large shield covering the head and torso seems plausible, and whilst no fatalities were reported by Arrian, one can only guess at the numbers of broken limbs that would have resulted.[127]

Peuce Island

Once Alexander had crossed the Haemus range he continued in a northerly direction into the lands of the Triballians,[128] arriving at the River Lyginus, three days march from the Danube. The River Lyginus makes this one appearance in history and its location cannot be identified with any certainty,[129] other than to say that it was located south of the Danube and probably fairly close to it, given Alexander's apparently slow march on the campaign to this point. Arrian[130] then tells us that Syrmus, king of the Triballians, had known of Alexander's movements for some time and had evacuated a part of his army, along with the non-combatants, to Peuce Island. The rest of the Triballian army circled in behind Alexander, taking up a position on the River Lyginus, after Alexander had continued to march north. There are several points of interest here:

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[122] Markle, 1977, 326.
[123] Lorimer, 1947, 76, n.3.
[124] Markle, 1978, 483-497.
[125] Markle, 1978, 493.
[126] It should be noted that there is no evidence that Philip or Alexander ever ordered the production of large numbers of hoplite panoplies for the heavy infantry: Manti, 1994, 88. The expense alone would have been prohibitive, especially early in Alexander's reign when we know that gold was scarce. If Markle is correct that the Macedonians were not always equipped with the sarissa then two possibilities present themselves: either thousands of panoplies of armour (shields, spear etc.) were made and transported all across Asia (which I do not believe) or only spears were transported (the logistics of this would have been relatively simple, certainly compared to transporting full panoplies of hoplite equipment. If this is the case then during the set-piece battles where the sarissa was not used the Macedonians would have been equipped in the same way in terms of defensive equipment, and would have carried a hoplite spear. During occasions where hoplite shields were required and the mercenaries and allies were not employed (e.g. here) the shields could have been commandeered and returned after use. Thousands of panoplies would not have been required as not all of the heavy infantry would have been able to operate in such a limited space as in this pass.
[127] If this theory is correct, and I suspect that on occasion the *pezhetairoi* were equipped as regular hoplites, I would add that the sarissa was unlikely to have been used at the Hydaspes either, given the difficult night time river crossing.
[128] Arrian 1.2.1.
[129] Bosworth, 1980, 56; Papazoglu, 1978, 30-31; although Green, 1991, 127 seems more confident identifying it as the River Yantra and Hammond, 1980b, 46 identifies it with the Rositsa.
[130] Arrian 1.2.2.

firstly Syrmus shows an impressive appreciation of the need for military intelligence in an age when it was often very limited.[131] The second is the location of Peuce Island:[132] this has consistently eluded scholars; there was an island of that name in the Danube delta; Strabo mentions it:[133] but there is no evidence, other than the name of the island, that Alexander went anywhere near the Danube delta.[134] Papazoglu identifies two possible solutions:[135]

1. The island that Alexander unsuccessfully attacked is the famous Peuce at the mouth of the Danube.
2. The island is some other island, located some considerable distance to the west and falsely identified with Peuce by one of our sources.

Most scholars have dismissed the idea that Arrian is describing the island at the mouth of the Danube, and I would agree: the implications of a march by Alexander to the mouth of the Danube would surely have warranted a mention in our sources; besides the Peuce Island in the delta would have been within the territory of the Scythian king Ateas, with whom the Triballians had been at war, and sending the non-combatants there would not have been wise.[136] We are left only with the knowledge that the island was some way upstream at an indeterminate location; it cannot be identified with any of the present islands in the Danube due to its changes of course over the last few hundred years.[137]

Upon learning that the Triballians had taken up a position on his lines of supply and communication, Alexander retraced his steps[138] back to the River Lyginus where he had camped the previous evening. Alexander's arrival apparently caught the Triballi unprepared,[139] at which point they made for the protection of a wooded glen close to the river. Alexander deployed his heavy infantry in column, a very curious formation but probably intended not to strike fear into the light-armed Triballi, so as to ensure they would not retreat before they were defeated in battle. If the heavy infantry, probably, 12,000 of them, were arrayed in the usual battle order it is unlikely the Triballians would have met them where they were strongest, on a wide open plain.

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[131] See, for example, Alexander's failure to appreciate the location of Darius before the battle of Issus, or his failure to realise his position had been turned here.
[132] Hammond in Hammond and Walbank, 1988, 35 notes that Peuce Island can be translated as Pine Tree Island. Green, 1991, 127 notes that this was the island where Darius I had built a pontoon bridge in 514-13 to cross the Danube.
[133] Strabo 7.3.15; the passage ultimately derives from Ptolemy: Bosworth, 1980, 57.
[134] Indeed the territory of the Triballi was some distance to the west of the delta: *cf.* Papazoglu, 1978, 31*ff*, for a fuller discussion of the Triballi tribal areas.
[135] Papazoglu, 1978, 32, after first dismissing the possibility that there were two islands of the same name.
[136] Bosworth, 1980, 57.
[137] Ashley, 1998, 168; Bosworth, 1980, 57; Papazoglu, 1978, 32.
[138] The Macedonians showed no signs of distress or panic at their lines of supply and communication being severed, the same in fact as occurred before the battle of Issus.
[139] Arrian 1.2.2.

Deployed in front of Alexander's heavy infantry were the archers and slingers with orders to advance "at the double and discharge their missiles in the hope of drawing the enemy from the shelter of the wood into open ground".[140]

This is the first instance of a strategy that Alexander was to re-apply at every opportunity; Devine calls it a "pawn sacrifice" but incorrectly claims that it was first employed at the Granicus.[141] As usual the strategy worked to draw the enemy on to a battlefield of Alexander's choosing. Once the enemy had been drawn out of the woods Philotas attacked the right wing with the "cavalry from upper Macedonia",[142] with Heraclides and Sopolis deployed to attack the left with the cavalry from Bottiaea and Amphipolis.[143] Alexander was with the heavy infantry in the centre, presumably with the hypaspists but we are not explicitly told this. Arrian tells us that the Triballians were holding their own until the heavy infantry joined the battle, at which time the cavalry also attacked, having settled for "shooting"[144] at the enemy before this, although as Bosworth points out shooting here is likely to refer to a general sense of using the lance from a distance.[145] This is obviously a reference to projectile weapons of some sort, but should not be taken to indicate the Companion Cavalry being equipped as horse archers; this is probably a reference to throwing javelins from horseback. Bosworth[146] dismisses this idea by noting that the Companion Cavalry only carried a single sarissa, and no secondary weapons, as illustrated by Alexander's reaction to having broken his sarissa at the Granicus.[147] It is at least possible that in this encounter Alexander intended the cavalry to harass the enemy until he was in a position to engage himself, at which point the cavalry were to attack as normal. It is unlikely that Alexander would have wanted to win the battle before he had even had a chance to engage the enemy personally. Whatever the truth, the Triballi were quickly routed, 3,000 being killed.[148]

Alexander then marched north, reaching the Danube three days after the battle,[149] arriving at a prearranged rendezvous with part of the fleet. The fleet must have been dispatched from Macedonia at the outset of the campaign and this probably explains why Alexander's pace was so leisurely; he wanted to give his navy time to arrive. He then manned the ships and attempted to force a landing on Peuce Island, where the remaining Triballians and Thracians had taken refuge, but the areas suitable for landing were either too heavily defended or else too steep to disembark troops; the strong current was also a significant factor. After failure to land, Alexander decided to cross the Danube and

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[140] Arrian 1.2.2.
[141] Devine, 1988, 3.
[142] Arrian 1.2.3; Bosworth, 1980, 57, notes that Philotas, later commander of all of the Companion Cavalry, is here only given a portion of them: this limited command recurs in Illyria, (Arrian 1.5.9) and there is no evidence of his promotion before the crossing of the Hellespont, (Diodorus, 17.17.4).
[143] Both men are mentioned at *ilarchs* at Gaugamela (Arrian 3.11.8) but are otherwise fairly obscure, Bosworth, 1980, 58; for Heraclides and Sopolis see Heckel, 1992, 348 and 351 respectively.
[144] Arrian 1.2.6 likely uses the term *akontismos* generally, rather than referring to horse archers.
[145] Bosworth, 1980, 58.
[146] Bosworth, 1980, 59*f.*
[147] Arrian 1.15.6.
[148] Arrian 1.2.7.
[149] Arrian 1.3.3.

campaign against the Getae instead.[150] This defeat by natural barrier, as it were, is extremely unusual; we can only speculate that if this incident had occurred later in Alexander's life he would not have given up so easily.

Getae

On the north bank of the Danube a large force of Getae had gathered, 4,000 cavalry and 10,000 infantry according to Arrian.[151] Alexander ordered tents to be filled with hay and all available water-borne transport to be used to ferry troops over the river during the night.[152] Using this device Alexander ferried 1,500 cavalry and 4,000 infantry across the river. Alexander began by having his heavy infantry use their spears to flatten the grain, thus partially creating the battlefield upon which he wanted to fight. Once on the open plain the infantry took up their usual central location with Alexander and the cavalry on the right.[153] The Getae broke quickly after a rapid cavalry charge timed to coincide with an infantry advance on an extended front. Arrian tells us the Getae were badly shaken by Alexander's crossing of the Danube with such a large force during the night, by his rapid attack, and the "fearful sight of the phalanx advancing upon them in a solid mass".[154]

It is precisely this fearful reaction that Alexander had wanted to avoid in the earlier battle against the Triballians; there he advanced in a narrow column, here on a wide front; the difference of effect is evident. The Getae fled to their city some distance away, but this was quickly sacked. Upon the return to the Danube Alexander received the surrender of Syrmus and the Triballians on Peuce Island.

The timing of the campaign against the Getae is of interest: we know Alexander set off from Amphipolis in early April, the crossing of the Danube and the campaign against the Getae did not occur until around June, and Thebes was not sacked until October.[155] Thus this part of the campaign took around two months; the entire Balkan campaign took only four months. Alexander seemed to be in no hurry at all, unlike many of his later operations.

Upon re-crossing the Danube, Alexander received information that Cleitus, son of Bardylis, was in revolt and had been joined by Glaucias of the Taulantians, and further

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[150] Arrian 1.3.4.
[151] Arrian 1.3.5.
[152] Hay-filled tents being used as makeshift rafts occurs again at the crossing of the Oxus in 329 (Arrian 3.29.4), and has a precedent in Xenophon *Anabasis* 1.5.10. Night-time river crossings were to become relatively commonplace during Alexander's career.
[153] Arrian 1.4.2; notes "spears" not "sarissas", this is another possible example of Alexander's heavy infantry equipped as standard hoplites. It was probably easier to carry a spear on a makeshift raft than it would have been a sarissa.
[154] Arrian 1.4.2.
[155] Hammond, 1974, 80. We know the crossing of the Danube was in June as Arrian 1.4.1, tells us the "grain stood high" and needed to be flattened by the infantry.

that the Autariatae were planning to attack Alexander whilst on the march.[156] Alexander, seeking allies, set off for his long-time friend Langarus of the Agrianes.

Pellium

We know nothing of the meeting with Langarus, other than that the Agrianian king offered to deal with the Autariatae himself;[157] and he must have been successful, as they do not appear again. The campaign against Pellium took around two months: we do not know how all of this time was spent, but a considerable delay with Langarus is likely.[158] Hammond,[159] citing a fragmentary papyrus text, notes an advance expedition commanded by Philotas, sent out by Alexander whilst he was negotiating with Langarus. This expedition is not mentioned in Arrian and is a rare event before 331, after which the nature of the combat made such a strategy necessary. Hammond[160] notes that Alexander would have been eminently familiar with the territory he was about to invade, given his service as a royal page under Philip on his Illyrian campaign. This is doubtful, however, given that Arrian tells us he had not even heard of the Autariatae until 335.[161]

Much of the Macedonian field army was with Alexander at this time. This had left Macedonia's western borders open to ravaging by the Illyrians, which was their traditional tactic.[162] From the territory of the Agrianians Alexander marched most likely via the modern Prilep, intersecting with the Crna (Erigon) River around the city of Topolčani, then followed the river south towards Flórina[163] and the central Lyncestis plain. This was also the route taken by the Roman consul P. Sulpicius Galba in 200.[164]

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[156] Arrian 1.5.1; Bosworth, 1980, 65-6, locates the Paeones north of Macedonia between the Axius and Strymon Rivers, with the Agrianes occupying the north-eastern area on Paeonia. Cleitus probably ruled the Dardani between the modern Drin (the longest river in Albania, highlighted on the left of fig. 3 below) and Crna Rivers (the ancient Thracian Erigon River, meaning Black River, which runs through much of the south and west of modern Macedonia). This area was on (ancient) Macedonia's northern border; Hammond and Walbank, 1988, 40, note that this area is in modern Kosovo; they also note that the Taulantians were located around Tirana. Bosworth, 1980, 66, mistakenly places them around Epidamnus. Hammond, 1974, 78, locates the Autariatae to the north of Albania.

[157] Arrian 1.5.1; he did so with considerable success, 1.5.3.

[158] Although Hammond in Hammond and Walbank, 1988, 39, sees the delay occurring before Alexander set off for Langarus.

[159] Hammond, 1987, 38.

[160] Hammond in Hammond and Walbank, 1988, 41. The only other two instances of secondary missions before 331 were both in 334 when Alexander was at Ephesus. Parmenio was sent with 5,200 troops to accept the surrender of the cities of Magnesia and Tralles, whilst at the same time Alcimachus was dispatched with a similar number to the Aetolian and Ionian cities still loyal to the Persians; Arrian 1.18.1.

[161] Arrian 1.1.4. Bosworth, 1980, 52.

[162] Curtius 3.10.9.

[163] Arrian 1.5.5.

[164] Livy 31.39.3-6. Bosworth, 1980, 68, has Alexander take this route; *contra* Hammond, 1974, 78, n.29, and Hammond in Hammond and Walbank, 1988, 40-1, has Alexander march south-west via Astibus to Stobi, near the confluence of the Axius and Erigon, then via Prilep and the Monastir gap into Lyncus. This route, if taken, was a result of Alexander's mistaken guess that Cleitus and Glaucias were marching south to the plain of Koritsa. Finding this area secure, Alexander then marched north-west to Pellium. The problem is that this has him travelling some distance from the Erigon River. The only information provided by Arrian on Alexander's route (1.5.5), is that he marched "along the River Erigon on his way to Pellium".



Figure 3: Alexander's route to the area of Pellium overlaid upon a modern map of the region.

Upon arriving at Pellium Alexander made camp[165] by the River Eordiacus with the intention of assaulting the city the following morning.[166] Cleitus had taken up a position both inside of the city and on the heights that ringed it to the northeast and south east;[167] not quite with the ability to surround the Macedonians on every side as Arrian suggests.[168] The following morning Alexander advanced towards the town and forced those troops in the hills to withdraw to the city after an extremely brief encounter. Alexander then chose to blockade the city by building a circumvallation around it.[169] This

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[165] Pellium was likely just south of Flórina. Hammond, 1974, 79, locates the camp site around 1km from the city, giving him access to the plain of Poloske for pasturing his horses.
[166] Arrian 1.5.5.
[167] Hammond, 1974, 79.
[168] Arrian 1.5.5.
[169] Arrian 1.5.8.

strongly indicates either that the city was inaccessible for traditional siege equipment, or that he did not have his full siege train with him at this time; although he certainly had some catapults with him a few days later, see below. The following day Glaucias arrived with the Taulantians, apparently a large force,[170] leaving Alexander in a very exposed position. He could not press the attack on the city for fear the Taulantians would attack his flanks, and he could not attack this new much larger force for fear of a sortie from the city. If Alexander knew of the imminent arrival of Glaucias, then to advance upon the city was a significant tactical mistake; if he did not, then Philotas' mission was a singular failure and is an example of the generally poor quality of military intelligence in ancient warfare.[171]

Alexander, now isolated and apparently with supplies running low,[172] dispatched Philotas with some cavalry and the baggage train to forage, probably in the plain of Korce, 8km north-west of Pellium.[173] This was an enormous and foolish risk on the part of Alexander; Glaucias could, if not for a timely intervention by Alexander, have destroyed Alexander's baggage train and many of his best cavalrymen. The fact that the expedition occurred at all shows how very low on supplies the Macedonians were at this point.[174]

Alexander could not simply withdraw from the area: this would have involved crossing any one of a number of narrow passes[175] with the result that the rear of his column would be badly exposed to attack. His solution was to mesmerise the Dardanians and Taulantians with a magnificent display of parade ground drill. The heavy infantry were drawn up with a "depth of 120 files",[176] which would have given a frontage of 100 men.[177] There are two movements described in Arrian:[178] the first involved the use of a spearhead or wedge formation.[179] This involved a march towards the "first hills", presumably those to the north occupied by the Taulantians: This manoeuvre was conducted in absolute silence.[180] Hammond[181] suggested that this not only resulted in a withdrawal of the Taulantians from the northern hills, but encouraged the Dardanians in the southern hills to attack Alexander's flanks. The heavy infantry, *en masse*, then turned

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[170] Arrian 1.5.8.
[171] Kern, 1999, 202, describes Alexander's position between the Dardanians in the city and the Taulantians in the hills as an "embarrassing situation". *Cf.* Pritchett, 1974, 127-33.
[172] Arrian 1.5.10. Hammond, 1974, 80, notes that the campaign took place in late July after the harvest and after the sheep had been moved to highland pastures.
[173] Hammond, 1974, 80; although Bosworth, 1980, 70, believes there is too little known about the topography of the area to form a solid conclusion: in Hammond's defence, his views were formed after a visit to the area.
[174] This is one of the very few instances in Alexander's entire career that we hear of poor control of logistics, as impressive a part of Alexander's generalship as any other.
[175] Hammond, 1974, 81; Hammond in Hammond and Walbank, 1988, 42, believes the pass chosen was the modern Gryke e Ujkut, the ancient Wolf's Pass; *cf.* Ashley, 1998, 42.
[176] Arrian 1.6.1.
[177] Devine, 1983, 213; Hammond, 1974, 82, this assumes 12,000 troops consisting of 9,000 heavy infantry and 3,000 hypaspists, as at the crossing of the Hellespont, see Diodorus 17.17.4.
[178] Arrian 1.6.2-4.
[179] Hammond, 1974, 83; Devine, 1983, 213.
[180] Arrian 1.6.3-4.
[181] Hammond, 1974, 83.

about 180 degrees and raised a battle cry that was enough to rout the Dardanians. Arrian describes the manoeuvre: "to turn now to the right and again to the left the line of interlocking pikes".[182]

Thus, describing the two movements, Bosworth[183] sensibly notes that each infantryman was fenced in by six sarissas from the ranks behind, so they must have first raised their sarissas into a vertical position, then turned and lowered them.

The Macedonians then made for the pass, sending the hypaspists and Companion Cavalry ahead to clear the way.[184] They moved through the pass with the River Eordaicus on their left; once through, the hypaspists and heavy infantry turned to their left and began to ford the river on to safer ground, covered by the Agrianians and archers who were 2,000 strong and commanded by Alexander.[185] Upon seeing Alexander's main forces crossing the river the Taulantians made to attack, but the retreat was covered by archers in mid stream and arrow-throwing catapults.[186] The Macedonians then marched a few miles from the pass, camped, sent out scouting parties and waited for three days. The scouts reported that the Dardanians and Taulantians were so convinced that Alexander had fled their territory that they had not constructed any kind of defences around their camp, and had posted no sentries.[187] Upon hearing this Alexander returned to the River Eordaicus, crossed it during the night with the Agrianians, archers and the *taxeis* of Perdiccas and Coenus,[188] and engaged the Illyrians whilst they were apparently still in their beds,[189] killing and capturing many and routing the rest completely; the city of Pellium fell soon afterwards.[190]

Balkan Campaign: Conclusions

Alexander's Balkan campaign provides us with the first opportunity to examine Alexander's generalship without the safety net of Philip, or even of Parmenio, who was with the advance force in Asia Minor. The campaign is worthy of praise, but was not

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[182] Arrian 1.6.2-4.
[183] Bosworth, 1980, 71.
[184] Arrian 1.6.5; this passage is one of the few that depict the Companion Cavalry as using shields; in all likelihood they did not use them frequently, only when there was an expectation of fighting on foot, see Bosworth, 1980, 72.
[185] Arrian 1.6.6; At the Hellespont (Diodorus 17.17.4) there were only 1,000 total Agrianians and archers, the rest probably temporarily borrowed from Langarus, the Agrianian king, given his proximity.
[186] Arrian 1.6.8. Fuller, 1958, 226, mistakenly records this as "the first recorded use of catapults as field artillery", catapults were in fact first used against Philip II by Onomarchus of Phocis in 354, see Polyaenus 2.38.2.
[187] Arrian 1.6.9; provisions must again have been scarce as he appears to have abandoned his baggage train to the Illyrians.
[188] Although Arrian 1.6.9 uses the singular *taxis* rather than the plural *taxeis* it does seem clear that he is referring to the *taxeis* commanded by Perdiccas and Coenus (*cf.* Bosworth, 1980, 73), not a single body commanded by both as Hammond seems to think: Hammond, 1974, 85.
[189] There is an interesting contrast here between this night attack, and the subsequent slaughter of the enemy in their beds, and Alexander's response to Parmenio at Gaugamela when Parmenio suggested a similar night attack; Alexander responded "I will not demean myself by stealing victory like a thief. Alexander must defeat his enemies openly and honestly". Arrian 3.9.6.
[190] Arrian 1.6.9-11.

without significant mistakes. Burn's assertion that "there is no trace of development in Alexander's generalship; in this twenty-first year of his age he is completely mature"[191] is certainly an exaggeration.

This campaign lasted four months: much of that time was spent travelling in what can only be described a sedate pace from one minor battle to the next. During this first campaign, Alexander shows none of the rapidity of movement that was to become synonymous with Macedonian campaign in later years. He also shows a significant lack of appreciation of the need for military intelligence in allowing the Triballi to circle in behind him before the Peuce Island encounter, but evidently learns from this mistake by dispatching Philotas to gather intelligence before the Pellium campaign, perhaps with limited success. His final mistake was in allowing himself to become trapped in the plain outside Pellium; we can only speculate that in later years he would have left a column to besiege Pellium whilst he set off to defeat the Taulantians on ground of his own choosing, rather than allowing them to link up.

In this campaign we do see the beginnings of a number of strategies that recur repeatedly in Alexander's career: first of all his constant intent of drawing the enemy on to terrain of his choosing, to fight on his terms as far as possible, illustrated by his use of light armed troops to draw the Triballians out of their wooded glen onto a plain: and again with the Getae, flattening the grain fields creating a plain. His inexperience as a siege commander is apparent at Pellium, but even here we see him devising a unique strategy, as with the shield device in the Haemus Mountains, and executing it perfectly to extricate himself from a very difficult situation.

If the intention of this campaign was to pacify Macedonia's northern borders, then it was a spectacular success; the area remained trouble-free throughout his reign. Further to this the treaties imposed by Alexander specified that they were to provide troops for the Persian campaign.[192] These peoples were sometimes assumed to be little more than hostages, but played a significant role on secondary missions and as garrison troops, allowing the Macedonian field army to stay intact.

Any doubts that the siege of Pellium had raised about Alexander's abilities as a siege commander were to be quickly and completely erased by his capture of one of Greece's greatest cities, Thebes.[193]

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[191] Burn, 1947, 55.
[192] There were 7,000 troops from the Balkans at the Hellespont, Diodorus 17.17.4.
[193] Kern, 1999, 202; and indeed his spectacular successes in Asia, prompting Lane Fox, 1973, 137, to note: "it was as a stormer of cities that [Alexander] left his most vigorous impression", conducting as he did more than twenty sieges. Keegan, 1987, 72, lists them as: Thebes (335), Miletus and Halicarnassus (334), Tyre and Gaza (332), six separate sieges in north-eastern Persia (329), The Sogdian Rock and the Rock of Chorienes (328), The Rock of Aornus, Ora and an Aspasian city (327-6), Sangala, Multan and an unnamed Mallian city (326) and three Brahmin cities (325).

Thebes

If the Balkan campaign was conducted at a relatively sedate pace, the march to Thebes was its antithesis; Alexander covered an astonishing 390km in thirteen days,[194] catching the Thebans completely by surprise, and in doing so preventing the possibility of the rebellion spreading beyond the walls of Thebes.[195]

When Alexander arrived he found the Macedonian garrison on the Cadmea under siege from the Thebans.[196] He immediately made camp, giving the Thebans a "period of grace, in case they should repent of their bad decisions and send an embassy to him".[197] Keegan[198] sees this as Alexander giving the "peace party" a chance to prevail, but I think Bosworth[199] is correct in suggesting that the pause was to rest his troops after such a lengthy forced march, and to construct siege engines, since those he had would probably have been left behind. The Thebans were not in a conciliatory mood, however; many of the defenders sallied out against Alexander but were easily repulsed. Alexander now moved his camp to the south side of the city, closer to the Cadmea, yet still did not attack. Arrian tells us that Alexander was still keen to win Theban friendship,[200] but this almost certainly comes from Ptolemy,[201] who made every effort, as we shall see later, to exonerate Alexander from any responsibility for the city's destruction.

Arrian[202] tells us that Perdiccas, commander of a *taxis* of heavy infantry, led an assault upon the city without having first received orders from Alexander. He broke through the Theban lines, followed by Amyntas' *taxis*, but they were partially driven back by the defenders, Perdiccas being wounded and carried from the field during the initial stages of this engagement. It was only upon seeing this danger that Alexander brought up the rest of the army and broke into, and subsequently destroyed, the city.[203] The account of Arrian (which is to say Ptolemy in this case) differs significantly from that of Diodorus,[204] who has Perdiccas acting under orders from Alexander and entering the city through an unguarded postern gate only after Alexander's Theban allies had first assaulted the city.[205]

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[194] Keegan, 1987, 72; Kern, 1999, 203. Ashley, 1998, 176, notes 300 miles (482km) for a march rate of 37kmpd.
[195] Arrian 1.7.4; Alexander apparently feared the rebellion spreading as a real possibility.
[196] Arrian 1.7.10; the Thebans had invested the Cadmea with a double stockade, exactly as he did at Sangala in India in 326.
[197] Arrian 1.7.7. Diodorus 17.9.4, has a similar pause before hostilities began, as does Plutarch, *Alex*. 11.
[198] Keegan, 1987, 73.
[199] Bosworth, 1980, 78.
[200] Arrian 1.7.8-11.
[201] Given that Ptolemy is explicitly named as the source a few lines later at Arrian 1.8.1. Bosworth, 1980, 80, is in no doubt that this whole section is taken from Ptolemy.
[202] Arrian 1.8.1.
[203] Arrian 1.8.3-8.
[204] Diodorus 17.12.3; Polyaenus 4.3.12, is different still, having a concealed force under Antipater enter the city; see Hammond, 1996, 38.
[205] It is hard to believe that the Thebans would have left a gateway unguarded whilst under siege. Hammond, 1996, 38; sees both Diodorus' and Plutarch's source for the Theban campaign as being Cleitarchus, making the account even less likely.

Macedonian losses were significant, 500 dead, but Theban losses far worse, 7,000 dead and 30,000 sold into slavery, bringing Alexander a much needed injection of 440 talents.[206]

The two versions both have the same end result, the destruction of Thebes; but occur along very different lines. Ptolemy was clearly attempting to remove any blame for the city's destruction from Alexander; understandable given the sometimes apologetic nature of his history coupled with the revulsion that it caused in the rest of Greece. His account is not as anti-Perdiccas as some have argued however. Perdiccas and Ptolemy were later rivals and it is all too easy to put the blame upon Perdiccas' shoulders, but Ptolemy states quite clearly that Perdiccas was wounded during the assault on the second palisade and took no further part in the battle; he can, therefore, not be blamed for the atrocities that were committed later.[207] Ptolemy's account is so obviously apologetic, however, that I believe Diodorus to be the more reliable on this occasion. The siege began with Alexander ordering a general assault and Perdiccas only broke through after receiving orders to attack an unguarded postern gate.

Historians have argued for centuries on the question of the destruction of Thebes, and what Alexander hoped to achieve. It can be argued that he desired to cause such fear amongst the southern Greek states that they would not dare to repeat the mistake of Thebes in openly rebelling against Macedonian control. Historians who would argue for this hypothesis would also likely argue that Alexander hoped that with one excessively violent act he would prevent his being delayed in Greece by having to put down many minor rebellions. Alexander was certainly keen to continue the invasion of Persia that his father had tentatively begun in 336. It is true that the destruction of Thebes did cow the Greeks into cooperation for some years, and that the members of the League of Corinth generally ignored the revolt of Agis the Spartan in 331 (Sparta was not part of the League and was therefore outside of Alexander's empire). It would also be true to argue that Alexander seemed desperately short of money during the early part of his reign, and the 440 talents were a very welcome boost to his empty coffers. The mistake usually made when considering the fate of Thebes, I believe, is to assume premeditation. It is a truism in the ancient word that 'to the victor goes the spoils'; after almost every city fell, women would have been brutalised, slaughter and looting would have been endemic and was almost impossible for any commander to stop and it is not surprising that in that environment fires could be started as part of the general looting. The Macedonians were also taking out their frustrations on Thebes after a difficult Balkan campaign, and the failure to loot Pellium, followed by a difficult forced march into central Greece. This would have been magnified by the presence, as noted above, of a number of troops from cities that were traditionally the hated enemy of Thebes, decades of rivalry and repression would have also bubbled to the surface.

Whilst I would argue that the destruction of Thebes was probably accidental and not the result of policy on the part of Alexander, he may not have been altogether

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[206] Diodorus 17.14.4; Green, 1991, 149, equates this to 88 drachmae a head.
[207] Errington, 1969, 237; *cf.* Roisman, 1984, 376-80.

disappointed by the result. He got his psychological impact on the remaining Greek city states, received a much needed cash injection (or perhaps 'fiscal stimulus' as we may say these days) whilst remaining relatively free of direct blame, essentially a win win for the young king. Whilst the Greeks were cowed by the act, they certainly appeared to blame Alexander for the destruction of Thebes; the act, deliberate or otherwise, meant that Alexander would never be truly accepted by the Greeks, particularly the Athenians. He had proved himself to be a barbarian by perpetrating such an act, although I would note again that the Athenians did not join Agis' revolt in 331; the fear of a repeat of the fate of Thebes was still strong even five years after the event.

Errington[208] essentially accused Ptolemy of deliberately altering events to make Perdiccas responsible for the destruction of the city. Perdiccas and Ptolemy were rivals in the period after Alexander's death, Perdiccas invaded Egypt in 320 but was killed by his own sub-commanders soon after.[209] Thus if Ptolemy's history had been written around this time we can imagine a political reason for such an act on the part of Ptolemy. None, however, of the potential dates for Ptolemy's history are this early, which reduces Ptolemy's potential political justification for attacking Perdiccas. Besides this general point, Ptolemy explicitly tells us that Perdiccas was wounded in the initial stages of the combat and was removed from the field, taking no further part at all; any bias in Ptolemy's account is not anti-Perdiccas but is in fact pro-Alexander.[210] Ptolemy has Alexander giving the Thebans every chance to surrender and essentially blames them for their fate. I see no reason, therefore, to dismiss Arrian's account on the grounds of bias against one of the protagonists; Ptolemy could easily be blamed, however, for wishing to shift blame away from Alexander for an event that shocked the whole of the Greek world.

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[208] Errington, 1969, 237.
[209] Roisman, 1984, 380.
[210] Roisman, 1984, 376.

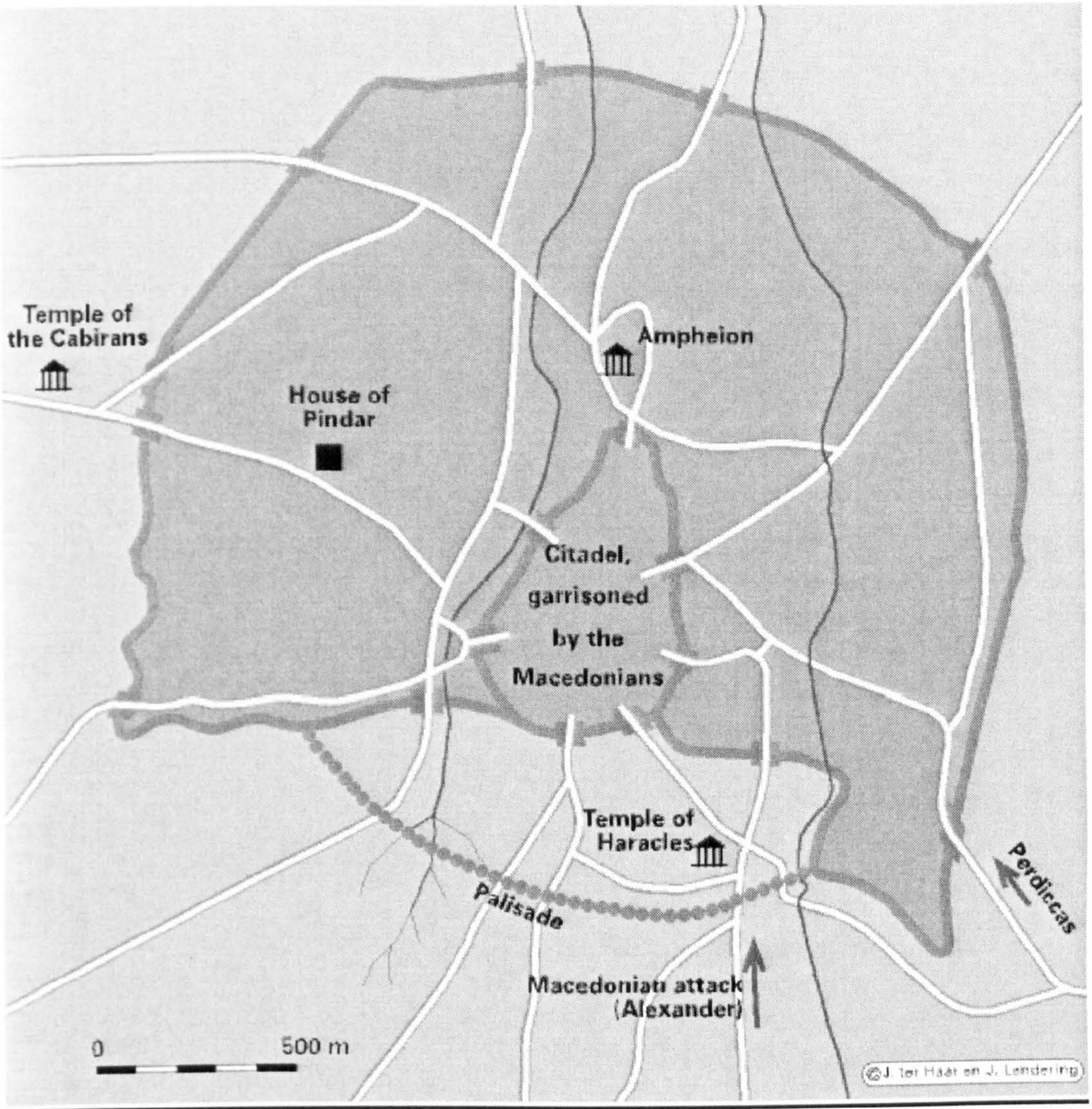


Figure 4: Alexander's final assault on Thebes came from the south, their most vulnerable point.

Chapter 2

The Battle of the Granicus River: 334

The battle of the Granicus River is, as Hammond notes:[211] "the most puzzling of Alexander's battles". The problems themselves are threefold: military, literary and topographical; each of these will be dealt with separately as each must be understood in order to interpret this battle. It would seem logical that an understanding of the terrain should be our starting point, as this forms the backdrop to the tactics of both sides.

Topography

The identification of the Granicus[212] with the river now called the Koçabas Cay seems all but certain:[213] Strabo's[214] statement that it flows between the Aesopus and the Priapus[215] leaves little room for doubt.[216] The exact location of the battlefield is a little more difficult to pinpoint. Arrian is the only source that provides us with any relevant information: he states that the Persians were encamped at Zelea[217] when they received the news of Alexander's crossing into Asia;[218] at that point they advanced to the Granicus and took up a defensive position. Plutarch refers to the location as being the "Gates of Asia".[219] Persian tactics will be discussed further later; suffice it to say that positioning themselves close to their permanent base at Zelea and the main supply port at Cyzicus was a sound if unimaginative strategy.

Our sources are at best vague on the topography of the battlefield itself. Arrian tells us very little, only that river was obviously deep in many places and that "the banks were very high and, in places, almost sheer";[220] he also tells us that the Greek mercenary infantry employed by the Persians, were positioned throughout the whole battle on higher

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[211] Hammond, 1980, 73.

[212] Foss, 1977, 495 points out that the name of the river has been the subject of considerable change in recent times. In the 19th and early 20th centuries the lower course of the river was called the Biga Cay, after the market town and administrative centre of Biga. The upper course of the river, including its many tributaries, all bore different names. Until relatively recent times it was common practice in Turkey to name a river after the most important town that it flowed through and Foss speculates that this may also have been the case in antiquity.

[213] Foss, 1977, 495; Hammond, 1980, 76*ff*; Bosworth 1980, 114.

[214] Strabo 587.

[215] The Aesopus is now the Gonen Cay, Foss, 1977, 495. The Priapus flows past the town of Karabiga, Foss, 1977, 495; *cf.* Foss in Barrington, 2000, 52 A4, who identifies the Priapus with the modern Karabiga.

[216] This assumes that the identifications by Foss of the Aesopus and Priapus are correct; the general location of the Granicus, however, does seem universally accepted.

[217] Foss, 1977, 496, and in Barrington, 2000, 52 B4, identifies Zelea with the modern town of Sari Koy, west of the Aesopus, Hammond, 1980, 76, on the other hand equates it with Gonen; the important fact is that Zelea was perhaps 20-30km east of the Granicus.

[218] Arrian 1.12.8-10

[219] Plutarch *Alex*, 16.1, now known as the Dimetoka gap. Foss in Barrington, 2000, 52 B4, identifies Cyzicus with the modern Belkiz Kale.

[220] Arrian 1.13.4.

ground some way behind the river.[221] Plutarch describes this higher ground as "a ridge"[222] and Diodorus says they were stationed on "the last slope of the hills",[223] implying that although this area was higher than the plain it was hardly precipitous. Hammond believes that the distance between the foothills where the infantry were stationed and the riverbank "cannot have been less than 100m".[224] As will hopefully become clear later in this chapter, it seems likely that the distance was considerably more than that. Bosworth points out[225] that the foothills are more like 1.5-2km east of the river, although Janke[226] reported a series of low undulations beginning 300-400 m from the river, and extending several km to the east.[227]

On his visit to the site of the battle in 1976, Hammond noticed the growth of a considerable amount of vegetation along the banks of the river.[228] It can be reasonably assumed that no such vegetation existed in 334, as the Persian commanders saw Alexander's army clearly. We also know that Alexander's army advanced into and out of the river in something like a continuous line, making the presence of vegetation in any quantity highly unlikely.

The modern river is around 20m wide and the alluvial soil at the top of the river banks in June is sandy to a shallow depth. Further down the riverbank the soil becomes a firm clay, and the riverbed itself is hard clay. The banks are up to 5 or 6m[229] high, and of varying degrees of inclination, sometimes quite steep, although Janke reported gravel beds in places that provide a relatively gentle sloping path down to the river on both banks.[230] Badian notes it as being characteristic of the quality of our sources that these gravel beds are nowhere mentioned in them.[231] Below the confluence with the River Biga, the river channel is up to 40m wide, and would therefore have presented Alexander with a far more difficult crossing if he had chosen that area.

In June, the time of Alexander's crossing, Hammond describes the river as being "very peaceful", hardly the raging torrent described by Plutarch,[232] which "swept men from their feet and surged about them". To his credit, Arrian makes no such claim; he clearly did not picture the river as a major obstacle: the pull of the current is only mentioned in passing[233] with no real implication that it caused trouble. On this occasion

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[221] Arrian 1.14.4.
[222] Plutarch *Alex*, 16.3.
[223] Diodorus 17.19.2.
[224] Hammond, 1980, 76.
[225] Bosworth, 1980, 119.
[226] Janke, 1904, 139-40; Judeich, 1908, 384 n.2, also noted these mounds.
[227] Bosworth, 1980, 120, notes that these undulations rise only around 3m above the level of the plain; although these seem small they are in the right location for the last stand of the mercenaries as we shall see.
[228] The description of the modern river is from Hammond, 1980, 77*f*.
[229] Bosworth, 1980, 117,119, notes vertical clay banks of only 3-4m high: whichever is the more accurate figure both would present very great difficulty to mounted troops crossing the river.
[230] Janke, 1904, 138; Badian, 1977, 281*f*; Bosworth, 1980, 117. These gravel beds are instrumental to understanding Alexander's tactics and the progress of the battle.
[231] Badian, 1977, 281.
[232] Plutarch *Alex*. 16.3.
[233] Arrian 14.7.

Arrian, who is as interested as anyone in the heroic image of Alexander, does not exaggerate the difficulty of the terrain in order to make Alexander's achievements more impressive.

The assumption that a modern river runs along the same course as its ancient equivalent is always dangerous, and in the case of the Granicus there is some academic dispute in this regard. Kiepert,[234] after visiting the region in 1843, proposed that it has indeed changed its course since antiquity; he proposed that the Granicus had flowed into the marshy lake of Ece Gol.[235] This would locate the battlefield some way to the west of the present course of the Koçabas Cay. This theory has been conclusively refuted by Janke,[236] who examined the site and noted a ridge lying between the lake and the river, indicating that the river could never have flowed into the lake. After his examination of the site, Hammond[237] proposed that the ancient river actually ran around 1km to the east of its current location, although this would seem to leave very little distance between the river and the foothills, perhaps too little for all the stages of the battle to have unfolded effectively. Foss[238] argued that the river has not changed its course since antiquity; he points to the remains of a Roman bridge below Biga as an indication of this. To some extent the question is academic: the river could have been located perhaps 0.5km[239] to the east or a little more to the west of its current location without seriously affecting the topography of the site. There would still be a plain to the west of the river and one to the east, with foothills further to the east. The balance of probability would seem to suggest that either the river was a little to the west of its current location or, more likely, its course has not changed since antiquity.[240]

Alexander's Route to the Granicus

We can make a reasonable assessment as to which route Alexander took by examining closely the text of Arrian.[241] Arrian tells us that from Troy Alexander marched to Arisbe,[242] where the army had initially gathered after crossing the Hellespont. However, it is far from clear if the army stayed there during Alexander's sojourn at Troy or if they accompanied him. From Arisbe Alexander moved to Percote, and the following day passed Lampsacus[243] and halted on the river Practius. Percote is known from

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[234] Kiepert, 1887, 263*ff*.
[235] The lake of Ece Gol is nowhere mentioned in ancient sources; Foss, 1977, 500.
[236] Janke, 1904, 137*ff*; Judeich, 1908 385*ff*; Hammond 1980, 78, n.15.
[237] Hammond, 1980, 78.
[238] Foss, 1977, 500, concedes that the river may have changed course in areas closer to the coast but not in the area under consideration.
[239] Any more than this would be difficult to accept.
[240] Badian, 1980, 282, following Foss, 1977, 500, takes this line, that the course has not changed.
[241] Arrian 1.12.6-7; see also Bosworth, 1980, 107-109.
[242] "Arisbe was located 7-8km due east of Abydus in an undulating plain well suited to accommodate a large army", Bosworth, 1980, 107; *cf*. Leaf, 1923, 109
[243] Alexander passed by Lampsacus on his second day's march, apparently not stopping or entering the city. This sheds no light at all on the story from Pausanias 6.18.2-4, that Alexander had decided to destroy Lampsacus for Medism but was persuaded against this course of action by Anaximenes, himself a Lampsacene. Badian, 1966, 63 n.32, suggested that Lampsacus was prepared to resist Alexander; this is

Xenophon[244] to have been a harbour city and was associated with the river Practius in Homer.[245] Bosworth[246] identifies the Practius River with the modern Bergaz Cay, and therefore Percote should be located towards its mouth; being a port; he goes on to identify the modern village of Bergaz as the ancient town of Percote. If he is right, then Percote was located around 10km along the coast from Arisbe. The theory of Janke,[247] that Alexander moved inland from Lampsacus, has been refuted by Bosworth as being based upon an incorrect emendation of the text of Arrian by Freinsheim in 1648.[248] Arrian clearly states that once Alexander passed Lampsacus he halted at the river Practius.[249] This cannot be the case, as we have already shown that the Practius was the river with Percote at its head that Alexander passed the previous day. Of the only two solutions one would be that Alexander passed Percote and marched to Lampsacus, whereupon he turned around and marched back to Percote where he turned inland.[250] The only other option, a far more plausible one at that, is that Arrian mistakenly uses that name Practius when he in fact means another river entirely. If we therefore accept that Arrian made a mistake, as Bosworth does,[251] then we need to locate a river beyond Lampsacus which flows into the Propontis; the only possible option is the river Paesus.

The text of Arrian would therefore suggest that Alexander marched along the coast road until somewhere just after the river Paesus, where he turned inland, crossed the Kemer Cay, and marched on to the plain so that he could arrive at the Granicus in a virtually deployed state. This route has the advantage of being quick and avoiding the rough terrain of the coast around Parion; it also enabled Alexander to approach the Granicus fully prepared for battle

Sources

An understanding of this battle is seriously undermined by our principal sources[252] giving two entirely different and seemingly irreconcilable accounts of events. The main discrepancies can be found within the accounts of Diodorus and Arrian.

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extremely unlikely, however, given that Alexander did not stop to capture the city, and he is highly unlikely to have left an enemy stronghold in his rear so close to an expected encounter with a sizeable Persian army.

[244] Xen. *Hell.* 5.1.25.

[245] Homer, *Iliad*, 2.835.

[246] Bosworth, 1980, 107.

[247] Janke, 1904, 137*ff*. This is the theory that Foss, 1977, 497 followed.

[248] Bosworth, 1980, 108 states that "There is, however, an intractable difficulty. Arrian says explicitly that the river discharges into the Propontis – 'between the Hellespont and the Euxine'. If the emendation (Praktiōi for prosaktiōi) is accepted, we must ccredit Arrian with a glaring error. Freinsheim's emendation should therefore be rejected and with it the theory that Alexander's inland turn from Lampsacus".

[249] Arrian 1.12.6.

[250] This would essentially be the theory of Janke and Foss (noted above) who believe that Alexander moved inland at Lampsacus or Percote/Practius, towards the Granicus.

[251] Bosworth, 1980, 108.

[252] Diodorus 17.19-21; Arrian 1.13-16; Plutarch *Alex.* 16; Justin 11.6.8-13.



Figure 5: Alexander's route to the Granicus.

Diodorus' Account and its Major Problems

Diodorus' account begins with Alexander learning of the concentration of Persian forces; "he advanced rapidly and encamped opposite the enemy, so that the Granicus flowed between them". At this time the Persians were "resting on high ground",[253] and made no attempt to occupy the bank itself, their tactic being to fall upon the Macedonians just after they crossed the river.[254] This would have the significant benefit of the Persians maintaining their greatest advantage, that of a cavalry charge that would have been negated if they were stationed on the edge of the bank itself. Badian[255] points out that Judeich[256] deserves credit for recognising, almost 100 years ago, that commanders who are coming from a 200 year tradition of using cavalry as their principal arm should not be accused of ignorance by modern historians when it comes to matters of their use. Both Badian and Judeich agree with Diodorus that it is eminently sensible for the Persian cavalry to have been held back somewhat from the riverbank.

It is at this point that the real difficulties begin with Diodorus: at dawn Alexander "boldly brought his army across the river and deployed in good order before they could stop him".[257] This raises at least two problems, first that the battle took place at dawn[258] and second, it would have taken several hours to cross even a very minor river and deploy perhaps 17,000 troops;[259] it is inconceivable that the Persians would make no move to stop the Macedonians. It was, after all (according to Diodorus), their plan to drive the Macedonians back into the river, as will be demonstrated later; if this was their intended tactic then they likely would allow some Macedonian cavalry across before they launched their counter-attack, but surely not the entire army.

The Persians began their counter moves by deploying their "mass of horsemen all along the front of the Macedonians".[260] This would have led to a novel, and perhaps unique arrangement of forces; two lines of cavalry opposing each other with the infantry stationed behind. Although generally this would make little tactical sense, here it is reasonable as Alexander crossed the Granicus first with his cavalry, and the Persians wished to oppose the Macedonian cavalry with their own.[261]

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[253] Diodorus 17.19.1-2; with the infantry presumably behind them.
[254] For a discussion of Persian tactics see pp. 34-5.
[255] Badian, 1977, 284; this argument, that the Persians were set back from the river, runs contrary to Hammond, 1980, 81 n.22, and Harl, 1997, 309, who argue that the Persians' being lined up along the river bank was entirely sensible, given their tactics, see later. Badian also points out, to his credit, although to the significant detriment to his argument at this point, that a Persian cavalry line set up to defend a river crossing would not have been unique, they did so at the battle of the Centrites river; Badian, 1977, 277 n.24; Xenophon. *Anab.* 4.3.
[256] Judeich, 1908, 372-97.
[257] Diodorus 17.19.3.
[258] As compared to the evening in Arrian's account: see later.
[259] Perhaps 9,000 heavy infantry, 3,000 hypaspists, 4,000 cavalry and 1,000 Agrianians and archers. This would be the primarily Macedonian core of the army.
[260] Diodorus 17.19.4.
[261] And no doubt wanted the glory of killing Alexander to fall to one of their own, rather than to one Greek mercenary infantry.

Diodorus then gives us the Persian order of battle.[262] Memnon of Rhodes and Arsamenes (=Arsames), satrap of Cilicia,[263] held the Persian left wing, each commanding his own cavalry.[264] Next to them was Arsites, the satrap of Hellespontine Phrygia, commanding the Paphlagonian cavalry. Then came Spithrobates (=Spithridates), satrap of Lydia and Ionia,[265] at the head of the Hyrcanian cavalry. Rheomithres held the Persian right wing and was in command of 1,000 Medes, 2,000 Bactrians and 2,000 other unspecified cavalry.[266] We are also told that the centre of the Persian line was occupied by "other national contingents" who were "numerous and picked for their valour".[267] In total there were 10,000 Persian cavalry and around 100,000 infantry, although these, of course, were withheld from the main battle.[268]

The battle was then joined and seems to have proceeded in a highly stylized manner with the Thessalians and Parmenio defending on the left, whilst Alexander pressed the attack on the right with the Companion Cavalry. This is exactly the same as the descriptions of the other set-piece battles that Alexander fought and is, to say the least, suspicious. In Diodorus' account the climactic moment of the battle came when Spithrobates gathered around himself a "large body"[269] of Persians and charged into the Macedonian lines towards Alexander, who turned to meet the new threat.

What follows is virtually an Homeric-style description of single combat between, initially, Alexander and Spithrobates. Spithrobates threw his javelin with such force that it pierced Alexander's shield and lodged in his breastplate. The javelin was then apparently shaken loose as it "dangled" from his arm; this requires some discussion. If the javelin was dangling from Alexander's breastplate[270] then it must have passed completely through his shield. For this to have happened it must have been thrown with more force than seems possible for any individual to achieve, let alone one mounted on horseback where it would have been impossible to plant one's feet or pivot the body in order to achieve the maximum velocity; further to this, it is far from clear if Macedonian cavalry carried shields at all.[271] The passage that follows is highly rhetorical and clearly

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[262] Which Arrian fails to do.
[263] Diodorus 17.19.5, calls this man Arsamenes; he is called Arsames in Curtius 3.4.3, and Arrian 2.4.5.
[264] This is extremely puzzling for two reasons: firstly Memnon of Rhodes is usually thought of as being the commander of the Greek mercenary infantry, yet here he is in the Persian front line commanding a contingent of cavalry. Secondly the cavalry are described as "his own cavalry"; this could imply that the cavalry in question were Greek mercenaries, which the Persians were not supposed to have.
[265] Diodorus tells us that Spithridates was satrap of Ionia only: Arrian 1.12.8, tells us he was satrap of both Lydia and Ionia.
[266] Arrian adds the names of Petines and Niphates, which Diodorus omits.
[267] Both quotes are from Diodorus 17.19.5; he fails to tell us which province these contingents were from, how numerous they were or who their commanders were.
[268] Justin 11.6.11, gives the Persian total strength at 600,000, whilst Arrian 1.14.4, lists 20,000 cavalry and 20,000 infantry. I will argue later in this chapter that Arrian's figures are more realistic, although still probably too high: it is sufficient to note at this point that Diodorus gives a surprisingly low estimate for the strength of the Persian cavalry.
[269] Diodorus 17.20.1; apparently this large body was only 40 strong.
[270] The javelin apparently did not pierce the skin and caused no injury to Alexander.
[271] The Alexander mosaic from the House of the Faun in Pompeii clearly shows Alexander without a shield. Interpretation of this mosaic is controversial; it has been thought to represent the battle of Issus but may in fact be Gaugamela. Polybius 6.25, clearly states that Greek (by Polybius' time synonymous with

designed to add to Alexander's heroism, "ranks in both armies cried out at the superlative display of prowess".[272]

It is in this passage that we see Alexander killing Spithrobates and his brother Rhosaces, splitting Alexander's helmet and then having his arm severed by Cleitus as he prepared to deliver the *coup de grace*. 17.21.1-3 is then even more rhetorical than the previous passage; Alexander is presented as almost single-handedly defeating the cream of the Persian cavalry, killing Atizyes, Pharnaces and Mithrobuzanes in the process.[273] After the loss of many of their commanders, the Persian cavalry then seem to have fled leaving the "foot soldiers to engage one another". Persian casualties are given as more than 10,000 infantry and not less than 2,000 cavalry with 20,000 prisoners taken.[274] Diodorus also tells us that Alexander won the palm for bravery and was regarded as the chief author of the victory; more significantly the Thessalians were also honoured after having "won a great reputation for valour because of the skilful handling of their squadrons and their unmatched fighting quality". [275] This last point is most significant as will become apparent in the final section of this chapter.

Arrian's Account and its Major Problems

Alexander approached the Granicus in "battle order",[276] his infantry massed into two groups[277] with cavalry protecting both wings and a very large reconnaissance party totalling around 1,400 troops scouting the Persian positions.[278] The scouts reported to Alexander that the Persians had taken up a position on the far bank of the river,[279] whereupon Alexander made preparations for an immediate attack. At this point we have

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Macedonian in such matters) cavalry did use shields, and that the Romans adopted Greek practice in this matter. Arrian 1.6.5; 4.23.2, on the other hand states that Macedonian cavalry only used shields when they expected to fight on foot.

[272] Diodorus 17.20.5.

[273] Diodorus also has Atizyes falling at Issus. Arrian 1.16.3 has a much longer list of Persian noble casualties.

[274] Diodorus 17.21.5-6; Plutarch *Alex.* 16.7 (following Aristobulus; Bosworth 1980 124), gives Persian losses at 2,500 cavalry and 20,000 infantry; Arrian 1.16.2, gives only 1,000 cavalry whilst almost all of the infantry were killed.

[275] Diodorus 17.21.4.

[276] Arrian 1.13.2.

[277] No further information is given about these two groups of infantry, but it would be reasonable to conclude that they consisted of one group containing the Macedonian heavy infantry and hypaspists, and the other consisting of all of the mercenary and allied infantry. These two groups would have been roughly the same size and it is probably that the allied troops were stationed behind the Macedonians forming something of a reserve phalanx, as they do not appear in any accounts of the battle and therefore were almost certainly not stationed along side the Macedonians.

[278] Arrian tells us of two scouting parties, both of which were of significant size. At 1.12.7, the first was commanded by Amyntas son of Arrabaeus (more on him later) and consisted of an *ile* of Companion Cavalry commanded by Socrates, and 4 *ilae* if light cavalry. The second (1.13.2) was commanded by Hegelochus; this scouting party consisted of all of the lancers (*prodromoi*, numbering 900; see Diodorus 17.17.4) and 500 light troops. Amyntas' scouting party must have rejoined the main body of the army just before this time. Bosworth, 1980, 114, seems to suggest that there was in fact only one scouting party but that Aristobulus had it commanded by Hegelochus and Ptolemy by Amyntas, Arrian interpreting them as two separate scouting parties.

[279] Interestingly not some distance back from the riverbank, but along the riverbank.

Arrian presenting us with the first of five dialogues where Alexander is seen rejecting the advice of Parmenio.[280] Parmenio's advice essentially was to avoid an immediate frontal attack, but instead to wait until dawn. He argues that the Persians being so inferior in infantry would not dare to remain at the river's edge throughout the night but would withdraw, which would enable the Macedonians to cross unopposed the following morning.[281] Parmenio is also made to argue that the river was obviously deep and the banks steep and almost sheer in places making a crossing extremely difficult.[282] Alexander dismissively rejects Parmenio's proffered advice.

This is a most intriguing passage: not only is it the first of a series of occasions where Parmenio is presented as the over-cautious older general whose advice is rejected by the young dynamic and heroic Alexander, it is also advice that is unreported but essentially accepted in Diodorus' account. Alexander does attack the following morning and does get across the river before the Persians can form up to oppose him (see above). Bosworth believes that there can only be two explanations:[283]

1. Diodorus is wrong; this is certainly the prevailing view amongst historians.[284] Badian even goes so far as to say that "Diodorus cannot be followed at all";[285] this seems to be to be far too extreme a position.
2. Arrian is wrong; this view also has its adherents, although fewer in number.[286]

A third possibility exists in my opinion, that both traditions contain part of the story, and thus it is unwise to reject either completely; more on this later.

After rejecting Parmenio's advice Alexander proceeds to deploy his troops and Arrian gives us the Macedonian order of battle,[287] first from the extreme right to the

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[280] Arrian 1.13.2; the others being 1.18.6-9 at Miletus; 2.25.2-3 at the Euphrates; 3.10.1-2 at Gaugamela and 3.18.12; at Persepolis.

[281] Essentially Parmenio was proposing exactly what Diodorus tells us actually occurred.

[282] Arrian 1.13.2; Plutarch *Alex.* 16.3, also reports this discussion, but more briefly; also including Parmenio raising the issue of the lateness of the day as a reason for postponing the attack, a theme not in Arrian's account. Brunt, 1963, 27 n.3, argues that both Plutarch and Arrian drew upon Aristobulus but excerpted him slightly differently; Bosworth, 1980, 115, suggests that if they drew upon different sources it is most likely that Arrian used Aristobulus.

[283] Bosworth, 1980, 115.

[284] For example: Judeich, 1908, 394-5 n.1; Davis, 1964, 40-2; Badian, 1977, 272-4; Hammond, 1980, 80-89; Bosworth, 1988, 41; Ashley, 1998, 187-202; Heckel, 2002, 36; Strauss, 2003, 153-4.

[285] Badian, 1977, 272-4.

[286] For example: Lehmann, 1911, 243 and Lane Fox, 1973, 121-2. Green, 1991, 489-512, has a rather different interpretation; he at first believed that Alexander fought Arrian's battle across the river and lost, and followed this by fighting Diodorus' battle and gained victory. This is an extremely clever theory, and, although I do not agree with it, my own reconstruction of the battle was inspired by it. I note, however, that in the preface to the 1991 edition of his book (updating the 1974 work), Green rejects the theory, stating that "new studies have convinced me that I was flat wrong". Whilst I think the theory was incorrect, I have adapted it into what I believe to be a very plausible reconstruction of

[287] Arrian 1.14.1; From left to right it is first the Thessalians (Calas), the allied cavalry (Philip) and the Thracian cavalry (Agathon), Parmenio having also been sent to the left wing (Arrian 1.14.1). Then came the heavy infantry *taxis* of Craterus, Meleager, Philip, Amyntas, Coenus and Perdicas. The hypaspists (Nicanor) were to the right of these and on the extreme right of the formation came the Companions

centre, then from the extreme left to the centre. The Persians are depicted as positioning their cavalry, undoubtedly their strength, along the bank "on a very broad front". Harl assumes that they were drawn up 8 deep, based upon Polybius' assumptions of the Persian dispositions at Issus the following year. This would result in 20,000 cavalry occupying a 4.5km frontage,[288] with the infantry being drawn up "in the rear".[289] This positioning of the Persian cavalry along the banks of the river is one of the greatest problems with Arrian's account of the battle: it is sometimes resolved, as in Badian,[290] by suggesting that they were in fact stationed a few hundred metres back from the river banks. That they were stationed "on the bank parallel to the river" is stated quite explicitly by Arrian; any attempt to move them on to the plain, according to Hammond, "runs counter to the texts".[291] Harl, however, explains this unusual alignment by noting that the Persian cavalry at this time were in fact light cavalry, suited for using javelins and sabres, not at all heavily armed, and thus not suited for a charge against the Macedonian Companion Cavalry.[292] It is also worth noting that, given the Persian intention to use missile weapons against the Macedonians, coupled with the inevitability that the Macedonian cavalry charge would be broken by the river and the steep eastern banks, there was in fact little danger to the Persian cavalry; their defensive position was quite strong.

The initial attack was on the extreme right of the Macedonian formation: Alexander ordered Amyntas into the river with the Paeonians, advanced scouts (Paeonians and *Prodromoi*) and one *taxis* of infantry, we are not told which. Preceding this attack, however, was Ptolemy, son of Philip, with Socrates' *ile*.[293] The command structure here is difficult to understand; Bosworth[294] is of the view that the *ile* of Socrates is detached from the overall command of Amyntas and is in fact under Ptolemy, a man who is otherwise unknown. This would mean that Ptolemy was a temporary commander deputising for Socrates, but Socrates himself is mentioned just a few lines later.[295] Bosworth goes on to suggest that this Ptolemy, just like Amyntas, may have been a senior commander attached to no specific unit but able to take up any command that was necessary, but the small size of the command would suggest that its commander would not be a senior individual.[296] Berve identifies this Ptolemy with the bodyguard who was later to die at Halicarnassus whilst commanding a force of hypaspists and light

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(Philotas), the Paeonians, *Prodromoi* and Socrates' *ile* of cavalry. The archers and Agrianians were also on the right in an ill-defined position. See Ashley, 1998, 194, for a useful depiction of the dispositions of both armies. No mention is made in Arrian of the allied infantry or mercenaries.

[288] Harl 1997, 310 including n.21. Hammond, 1980, 83-4, suggests the Macedonian front occupied 2.5 km's, 1.5km for the infantry with each wing taking up 500m. This assumes that he infantry were 8 men deep, as they were at Issus (Polybius 12.19.6; 21.8).

[289] Arrian 1.14.4.

[290] Badian, 1977, 283*f*; see also Judeich, 1908, 389, who was first to suggest this.

[291] Arrian 1.14.4, for the Persian cavalry dispositions; *cf.* Hammond, 1980, 81, for the counter argument to Badian, 1977, 283*f*.

[292] Harl, 1997, 309; he further comments (309 n.20) that they were re-equipped as heavy cavalry before the battle of Gaugamela. See also Diodorus 17.52.1; and Curtius 4.9.3-4.

[293] Arrian 1.14.6. The figure of Ptolemy here will be key to my theory in the final part of this chapter.

[294] Bosworth, 1980, 120.

[295] Arrian 1.15.1.

[296] Bosworth, 1980, 120.

infantry.[297] If we take Berve's lead and assume that this Ptolemy was not the otherwise unknown son of Philip, but was in fact Ptolemy, son of Lagus[298] (unlike Berve's suggestion)[299], then we could be some small way towards understanding this battle. A fuller explanation is given in my tentative new theory presented at the end of this chapter.

The infantry *taxis* mentioned above is also unusual. Berve[300] and Badian[301] both identified it with a *chiliarchy* of hypaspists, but it is widely known that the term *taxis* is elastic and was often used to describe any infantry unit, even light infantry.[302] With this in mind, and noting the proximity of the archers and Agrianians, it is likely that one of these two groups was the *taxis* in question; both of which were eminently more suited to this type of action than the heavy infantry. Harl assumed this unit of infantry to be the heavy infantry *taxis* stationed immediately to the left of the hypaspists, that of Perdiccas. This makes little sense, however, as it would mean the troops stationed on the extreme right were advancing whilst the hypaspists, who were better suited for this kind of action, remained stationary; and Perdiccas' unit, to the left of the hypaspists, was attacking upstream to the right, across the path of any potential assault by the hypaspists. This would have the effect of removing Alexander's best infantry from the battle.[303]

It would seem from Arrian[304] that almost immediately after the Amyntas/Socrates attack was launched, Alexander himself charged into the river. Arrian also tells us that Alexander kept his line oblique to the pull of the current to prevent a flank attack and to ensure as solid a front as possible as they emerged from the water. The banks were steep in places,[305] and only easily climbed where the gravel beds descend to the river on either side. It is unlikely that any two of these gravel beds faced each other so a diagonal crossing was forced upon Alexander. The text reads as though the army filtered over the river in something of a continuous line, moving towards the right. But the Greek seems to translate as "in the direction the stream drew them", which is to say downstream, to the left.[306]

What ensued was vicious hand-to-hand combat in which the Macedonian troops seem to have suffered badly from a "continuous volley of missiles from the Persians" and also from the disadvantages of the terrain. The lead troops were forced back towards the riverbed and into Alexander and the Companion Cavalry still struggling to get up one of

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[297] Berve, 1926, 1.22.4-7
[298] The historian, and Arrian's primary source.
[299] To clarify, Berve believed that this Ptolemy was not the son of Philip; I have gone further by positively suggesting that he was in fact the famous historian, Ptolemy son of Lagus: *contra* Heckel, 2005, 234 has this as a Ptolemy other than the famous historian.
[300] Berve, 1926, 2.336.
[301] Badian, 1977, 289.
[302] For example at Arrian 6.8.7.
[303] Harl, 1997, 317-8: an interesting visual depiction of this can be seen on Harl's maps 320-321.
[304] Arrian 1.14.7.
[305] Hammond, 1980, 77, states that the banks are now 5-6m high, and the channel 20m wide (although on p.80 he contradicts this by stating that in 1976 the channel was 40m), the actual river nearer 4-5m wide.
[306] Bosworth, 1980, 121. Hammond, 1980, 75, argues for a movement upstream and to the right, but a few lines later on p.75 and again on p.84 he does seem to accept the movement was downstream and to the left. A leftward movement does seem the more acceptable.

the gravel slopes; this should have caused massive confusion amongst the Macedonians, but almost instantly Arrian transfers his battle narrative from the riverbanks to dry land using the phrase "a moment later he was in the thick of it, charging at the head of his men straight for the spot where the Persian commanders stood". [307] This is, to say the least, difficult to accept. Equally strange is Arrian's assertion that "things soon turned in favour of Alexander's men" largely due to their experience and their superior weapons.

As the Macedonians were gaining the upper hand, Mithridates[308] gathered together a group of Persians and charged at Alexander. As in Diodorus, Rhoesaces sliced off part of Alexander's helmet; however, in Arrian, Rhoesaces is killed by Alexander and it is Spithridates who lost his arm to Cleitus as he raised it for a critical blow against the king. This part of the battle is so confused in our sources that we shall never be able to get at the true sequence of events, or even the Persian nobles involved.[309]

Almost as soon as this encounter was over, the Persians broke, first in the centre[310] and then on both wings. Persian cavalry losses were limited to 1,000 as Alexander turned his attention to the mercenaries. In a most unsavoury incident Alexander had them surrounded and massacred.[311] The annihilation of the mercenaries is not mentioned in Diodorus. Plutarch,[312] on the other hand, in an entirely more plausible passage has them suing for peace and being angrily rejected by Alexander before a very bloody battle ensues in which the Macedonians sustain their heaviest casualties.[313]

Plutarch's account[314] of the battle is very similar to that of Arrian, and is clearly derived from the same source. This source is usually assumed to be a combination of Aristobulus and Ptolemy, although I shall argue later for Ptolemy being the main source for this tradition. The main difference from Arrian's account is that Plutarch seriously exaggerates the difficulties of the terrain faced by Alexander; saying for example that the Macedonians were "swept off their feet" by the fast flowing river. Badian describes Plutarch's account as "rhetorically inflated and has no other independent value".[315] Similarly little can be taken from Justin,[316] and Curtius' account of the battle is lost.

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[307] Arrian 1.15.3.
[308] Arrian 1.15.7: only Arrian describes Mithridates' role in the battle.
[309] Bosworth, 1980, 123.
[310] This is odd as the attack was clearly launched on the Macedonian right wing.
[311] Arrian 1.16.2.
[312] Plutarch *Alex.* 16.13-14.
[313] Arrian lastly gives a more substantial list of Persian dead than does Diodorus; it includes: - Niphates, Petines, Spithridates (Satrap of Lydia), Mithrubazanes (satrap of Cappadocia), Mithridates (son-in-law of Darius), Arbupales (son of Darius and grandson of Artaxerxes II), Pharnuces (brother of Darius' wife and otherwise unknown) and Omares (commander of the Greek mercenaries). Arsites escaped to Phrygia where he killed himself, apparently feeling responsible for the defeat.
[314] Plutarch *Alex.* 16.
[315] Badian, 1977, 271, n.2.
[316] Justin 6.10-12.

The Battle

In this final section I aim to examine and discuss three main issues: why the battle was fought at the Granicus; what strategies were employed by both sides; and finally to present a tentative new theory of the battle.

We should begin with a discussion of the Persian strategy. Arrian[317] tells us that the Persian army was encamped at Zelea when they received news of Alexander's crossing into Asia. A debate apparently ensued as to what their best course of action would be. Memnon[318] advocated a policy of avoiding battle, of withdrawal before the advancing Macedonians and destroying all of the crops and towns in his path, whilst at the same time using their superior fleet to carry the war into Greece. Arsites argued vehemently against this strategy, refusing to allow any homes within his satrapy to be burned; in this "the other commanders supported him".[319] A scorched earth policy would not have been unthinkable for the Persians; they had done it before and would so again.[320] Most historians have seen this rejection of Memnon's strategy as being the product of "command by a committee"[321] and have seen this as the Persians' biggest weakness. Badian, I think rightly, argued that it was Arsites that was in sole command of the Persian forces, the battle was being fought within his satrapy; it was he who rejected Memnon's strategy and it was he who, after the defeat, committed suicide for fear that he would be blamed for the defeat.[322]

Many historians seem to see Memnon's strategy as being sound, and rejected for essentially unsound non-military reasons. This, I believe, is also the wrong view: if Memnon's strategy had been implemented and much of Arsites' satrapy had been burned, Alexander would have felt no overwhelming compulsion to follow the Persian army through this devastated territory; he felt no such obligation to follow the Persians after Issus. He could have easily turned south and encouraged a general Ionian revolt against Persian rule. The Ionian cities had a long history of revolting from Persian rule and, as Davis points out,[323] they would have felt a natural sympathy with other Greeks.

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[317] Arrian 1.12.8; Bosworth, 1980, 111-2, gives brief biographies of some of the major Persian commanders.

[318] Memnon was Greek but had been related to the Persian noble Artabazus, by marriage, since before 362; after Artabazus revolted from Artaxerxes in 359/8 he spent some time in exile at Philip's court and was thus well placed to offer advice on the Macedonians: Bosworth, 1980, 112-3. Harl, 1997, 306, believes that Memnon was a rival to Arsites and not a spokesman for the Greeks; this is probably how he saw himself, but it is doubtful if the Persians saw him in those terms.

[319] Arrian 1.12.9-10; Harl, 1997, 306, suggested that the Persians perhaps did not fully trust Memnon, despite his Persian noble connections; Ashley, 1998, 190, comments that it may not have escaped the attention of the Persians that Memnon's estates near Abydos had been left untouched by Alexander.

[320] Bosworth, 1980, 113, the Persians had employed such a strategy against Agesilaus half a century before, Davis, 1964, 35; *contra* Schachermeyr, 1973, 141-2, who sees the Persian Empire as a feudal system and has the Persian commanders reject Memnon's plan because it was simply unthinkable.

[321] Devine, 1988, 7; Harl, 1997, 306.

[322] Badian, 1977, 283; Bosworth, 1980, 113, notes that Arsites' son, Mithropastes, was exiled to the Persian Gulf after the battle (Nearchus, *FGrH* 133 F 27-8) and therefore Darius perhaps did blame Arsites for the defeat.

[323] Davis, 1964, 36.

We should also note that, although Memnon had experience of the Macedonians, both from his time in exile at the court of Philip, and from his two years of relatively successful campaigning against the expeditionary force, the Persian nobles lacked this experience. To them Alexander was not yet the semi-divine world conqueror that he was to become; he was in fact no more than a beardless youth. Retreat, even if it were tactically sound, would have seemed like cowardice to Darius, whom the Persian commanders undoubtedly did know and probably feared despite him being relatively new to the throne himself.[324]

The Persian commanders would also have felt that their great superiority in cavalry would have given them a significant tactical advantage, in terms of manoeuvrability, over the Macedonians. Arsites, therefore, had good reasons for not wishing to withdraw, but he also had positive reasons for wishing to engage the Macedonians and to drive them from Asia Minor.

Once the decision to fight had been made, only the location remained. It is usually accepted that the Persians chose the location well.[325] As has already been noted the eastern bank of the Granicus was steeper than the western, around 4-5m in places, and, although the river was not deep, it was sufficient to break up and seriously disrupt a cavalry charge.[326] Also, given that the Persian cavalry were lightly armed and equipped, they would have been at a greater tactical disadvantage if they had faced the Macedonian heavy cavalry on flat terrain; they were better suited to throwing their javelins and to using their greater mobility against the Macedonians as they struggled to emerge from the river. Devine is being a little unkind when he describes the Persian strategy as "basically sound though unimaginative".[327]

The Persians arrived at the battle site and occupied the eastern bank at an unknown time, but before Alexander arrived: the only real chronology that we have is that the battle was fought in May.[328] What ensued upon Alexander's arrival is only reported in Arrian and Plutarch,[329] a debate between Alexander and Parmenio as to the best course of action. Parmenio apparently advised waiting until the morning. Both sources have Parmenio's advice being rejected out of hand by Alexander. Diodorus[330] on the other hand has no such debate, but the account of the battle is as if the advice were

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[324] Davis, 1964, 36.
[325] Hammond, 1980b, 68; Devine, 1988, 7; Davis, 1964, 36.
[326] Plutarch *Alex.* 16.2.
[327] Devine, 1988, 7.
[328] Plutarch *Alex.* 16.1, has the battle fought in the month of Daesius (May-June); Badian, 1977, 280, claims early May; Janke, 1904, 140, established a hundred years ago that the river was shallow and easily fordable at that time of year, Foss' 1977 observations agree.
[329] Badian, 1977, 281, suggests the possible presence of vegetation along the river bank that would have obscured the Macedonians' view of the Persian dispositions: Harl, 1997, 310; sensibly points out, however, that any vegetation would have been cut down by the Persians within a day to build camp and provide fuel for their camp fires. See also above. Arrian 1.13.2; Plutarch, *Alex.* 16.1.
[330] Diodorus 17.17.19, it is interesting to note that one of the few historians who use the Diodorus version of the battle, Lane Fox, 1973, 121, actually denies the debate occurred, even though this version is essentially based upon the advice being acted upon

acted upon. I believe that such a debate probably did occur, but either way the battle itself did not take place until the following morning. The Arrian version clearly comes out of a desire to reflect as much glory as possible upon his subject; we should not forget a point that I shall return to later, that Ptolemy was fighting in roughly the same area as Alexander, the right wing, and so Ptolemy was probably also glorifying his own role in the battle, as well as that of the king.[331]

It is at this point that I seriously diverge from most modern accounts of the battle. During the night, I propose that the army was divided in two; Parmenio was detached from the main body of the army, marched downstream a few kilometres, forded the river, which as noted was only 4-5m wide and not deep, and by the morning was in a position to fight a land battle such as that described by Diodorus.[332] Devine describes this possibility as being "no great hardship", but he rejects the idea of a secondary column on wholly unsatisfactory grounds; claiming that Alexander wanted to destroy the Persian cavalry and such a manoeuvre would have resulted in a Persian withdrawal.[333] I do not see a withdrawal as a realistic option for the Persian nobility; as noted earlier, they were (in the eyes of Darius) faced by nothing more than a beardless youth; withdrawal would have looked like cowardice.

It is difficult to determine exactly which units Parmenio would have taken with him: we can certainly speculate with reasonable certainty that the Thessalian cavalry[334] were under his command; Diodorus[335] tells us that they won "a great reputation for valour" during the fighting and the Arrian version of the battle simply does not allow for this.[336] It is likely that along with the Thessalians were the Greek allied cavalry under Philip, and the Odrysian cavalry under Agathon.[337] These additional units totalled 900 men,[338] and thus Parmenio commanded 2,700 cavalry. The main problem lies in the question of infantry; the *taxeis* of Meleager and Philip were also under Parmenio's overall command.[339] Alexander and Parmenio would have been aware from the scouting reports the previous evening, and from the evidence of their own eyes, what the Persian dispositions were; and Parmenio would have had a good idea as to the Persian strength in Greek mercenaries, given that this was his third campaigning season in Asia Minor. Although their numbers were small, around 5,000, cavalry traditionally do not fare well

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[331] Badian, 1977, 274-5, shows that Arrian concentrated on the heroic picture of Alexander, and that his source for this was probably Callisthenes. Indeed he goes further and states (275) that Callisthenes was the only eye witness to the battle, although then immediately contradicts himself at 275, n.16, by saying that Ptolemy was also there but only in a junior capacity; more on this important detail later. Badian also adds that we can get nothing from Arrian's account about any part of the battle not involving Alexander (286).

[332] This would be something similar, only far less arduous, to what occurred at the Hydaspes in 327.

[333] Devine, 1988, 8.

[334] 1,800 strong and commanded by Calas, Arrian 1.14.3, confirmed by Diodorus at the crossing of the Hellespont 17.17.4; *cf.* Heckel, 1992, 355-7, who notes that Calas had been with the expeditionary force since 336 (Diodorus 17.7.10; *cf.* Polyaenus 5.44.5).

[335] Diodorus 17.21.4.

[336] The Thessalians, and indeed seemingly everyone outside of the immediate vicinity of Alexander, were ignored.

[337] Arrian 1.14.3; *cf.* Heckel, 1992, 358-61.

[338] Diodorus 17.17.4; Bosworth, 1980, 119.

[339] Arrian 1.14.3; Devine, 1988, 5-6.

in a direct charge against heavy infantry; some infantry support on the side of the Macedonians is, therefore, likely. We are told by Plutarch that at some point "the Macedonian phalanx crossed the river and the infantry of both sides joined the battle".[340] This could be a garbled account of the *taxeis* of Meleager and Philip engaging the Greek mercenary infantry. Parmenio's force therefore probably consisted of 2,700 cavalry and 3,000 infantry.

Physically getting such a small force across a relatively minor river would have been no great achievement, certainly not when compared to the later, and very similar, crossing in force of the Hydaspes.[341] The Persian response upon learning of the Macedonian manoeuvre was, in fact, to do very little; their cavalry remained in place to oppose Alexander's crossing; the Greek mercenaries also seem not to have responded, other than probably wheeling to face Parmenio, they did not surrender their advantageous position on high ground behind the Persian front lines. This lack of movement on the part of the Greek mercenaries is one of the things Alexander would have been trying to achieve, to fix them in place so they could not interfere with what he always expected to be the decisive point of the battle, his attack across the river with the Companion Cavalry.

Some time early in the morning Alexander began his first encounter with the Persians in a very limited way. The first wave consisted only of Socrates' *ile*, seemingly under the command of Ptolemy, followed by Amyntas who appears to have been in overall charge of this assault, commanding his *prodromoi* and Paeonian cavalry and one unspecified *taxis* of infantry.[342] I have already noted above that this infantry *taxis* is interesting: Berve and Badian[343] believed it was a unit of hypaspists and Harl[344] believed it was Perdiccas' *taxis* of heavy infantry, but this is unlikely; given the elasticity of the term, it was more probably the Agrianians or perhaps the archers (or both) who were actually stationed on the right in front of Alexander's cavalry that formed part of the initial attack.[345]

That this initial attack occurred is not in doubt,[346] but why did it involve so few troops? The answer is simply that it was never intended to force a crossing of the river; the idea was to feign an attack, encourage the Persians to expend their javelins, and then retreat in seeming disarray, virtually forcing the Persians to charge into the river bed after the fleeing Macedonians,[347] thus relinquishing their valuable defensive position. It is at first glance a little surprising that a cavalry unit as valuable as Socrates' *ile* was sacrificed in this manner, but Alexander had to persuade the Persians that a full-scale assault was under way, involving himself and the Companion Cavalry.[348] If an *ile* of Companions had not been used the Persians might not have taken the bait.

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[340] Plutarch *Alex.* 16.4.
[341] Arrian 5.10.1*ff.*
[342] Arrian 1.14.6; Bosworth, 1980, 120.
[343] Berve, 1926, 2.336; Badian, 1977, 289.
[344] Harl, 1997, 306.
[345] This is, sensibly, the line taken by Bosworth, 1980, 120.
[346] Unless you reject completely Arrian's version as Lane Fox, 1973, 122, does.
[347] See Hanson, 1989, 180-84, for the victors' desire and instinct to pursue the vanquished.
[348] Devine, 1988, 13.

After the initial assault had begun, but before its retreat, Alexander and the remaining *ile* of Companions entered the riverbed. Alexander's movements in the riverbed are a cause of considerable confusion. He moved his troops obliquely, that is to say to left or right rather than straight across; this would essentially have been accepting another piece of Parmenio's advice, that Alexander ran the risk of exiting the stream in column if he did not cross obliquely. This oblique movement was partly designed to extend the Macedonian frontage so that as many troops as possible could emerge simultaneously at the appropriate time from the 100m wide gravel beds reported by Foss.[349] The direction of the movement, however, is the problem, as noted earlier.[350] Arrian's text[351] does clearly state that the movement was "in the direction the stream drew them",[352] and thus was indeed downstream and to the left.

As the advance force was retreating in seeming disarray, with the Persians sensing victory and in pursuit, Alexander with his usual consummate timing attacked the disordered Persians from their left; this is why the text of Arrian with the downstream movement seems more reliable than Polyaenus' movement away from the battle. Bosworth[353] sees Arrian as being unreliable at this point, he sees a retreating advance force causing "immense confusion" in the river bed, but we should remember that Alexander entered the river probably a few hundred metres upstream of where the Socrates attack took place, so Socrates' retreat was not into Alexander's advance; Alexander was moving downstream towards Socrates and not following on behind him. This attack by Alexander is, as I hope to demonstrate throughout this thesis, one of Alexander's hallmark strategies, attacking an enemy from more than one direction; he does this during virtually every successful battle and siege throughout his career.

The battle in the riverbed was brief and vicious, with the combat quickly being transferred to the bank. Harl[354] is probably right in that this phase of the battle the defeat of the Persian cavalry came quickly; he estimates no more than twenty minutes of fighting. Whilst we can never of course be sure of the exact timescale, a short battle is the most likely. The Persians would probably have fled quickly after seeing several of their leading commanders slain in quick succession.[355]

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[349] Foss, 1977, 485*ff*; Polybius, 12.18.4, estimate that each cavalry trooper required 0.91m in close formation, Badian, 1977, 282, n.39, calculates that a 100m gravel slope could accommodate 100 cavalry troops.

[350] Polyaenus *Strat.* 4.3.16. Hammond, 1980, 75, translates Arrian 1.14.7 as "continually extending his formation at an angle where the stream was pulling", but agrees with Polyaenus that this was upstream and to the right: this makes little sense; anything in the stream that was being pulled by the current would surely have been pulled downstream and to the left. Hammond does concede at 1980, 76, that the purpose of this manoeuvre escapes him; this is no doubt because he misunderstands the manoeuvre itself.

[351] Arrian 1.14.7.

[352] Bosworth, 1980, 122; Devine, 1988, 13, also believes that the movement was to the left, claiming Arrian is more reliable than Polyaenus on this point.

[353] Bosworth, 1980, 122.

[354] Harl, 1997, 305; Badian, 1977, 290, adds that all of the Persian missiles would have been expended against Socrates' attack, thus making Alexander's task a little easier.

[355] I have discussed the details of this part of the battle in the section on Arrian above; nothing more needs saying at this point.

After the Persian cavalry broke, Plutarch[356] tells us of an engagement between the Macedonian heavy infantry and some native Persian infantry, which did not last long. These Persians are something of a mystery; they are not mentioned in Diodorus' Persian order of battle.[357] Badian argued that some native infantry are to be expected and that they played the role of a tactical reserve[358] stationed behind the cavalry, showing shrewd planning and a sound strategy from the Persians.[359] The main problem is that the text of Arrian[360] does seem to imply quite clearly that the light infantry were Greek, fighting on the side of Alexander and intermingled with his cavalry.[361] Badian's point about expecting some Persian infantry is reasonable, but not conclusive. Simply because we expect something does not make it so.

Persian cavalry casualties were low, around 1,000 in Arrian, 2,000 in Diodorus or 2,500 in Plutarch.[362] Persian casualties were low because Alexander now turned his attention to the Greek mercenaries who had been fighting against Parmenio's Thessalians and two heavy infantry *taxeis*. The extra troops' joining the battle was decisive; the Greeks were surrounded and annihilated.[363] Plutarch[364] tells us of a lengthy battle against the mercenaries, and in this could be preserving a hint of the earlier battle against Parmenio that Alexander joined after the defeat of the cavalry.

To sum up, I envisage Parmenio and the troops under his command being detached during the night, marching upstream a few miles and crossing so that at dawn the following day he was in a position to attack the Greek mercenaries, or whoever the Persians sent to oppose him, thus fighting the Diodorus 'dry land' battle. Alexander attacked across the river and routed the Persian cavalry, thus fighting the Arrian river crossing; the fight against the mercenaries lasted the longer and was still being ongoing when Alexander had routed the Persian cavalry; he thus did not pursue them but turned his attention to the mercenaries, destroying them at a heavy cost to his Macedonians. The idea of Alexander using a flanking strategy at every opportunity is again demonstrated here on a grand scale.

Why Two Accounts?

We should end this chapter by discussing why each of our sources only gave a part of the whole, starting with Arrian. Badian[365] suggests that Callisthenes may have

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[356] Plutarch *Alex.* 16.12; Hamilton, 1969, 41 argued that the Persians had no native infantry at all.
[357] Diodorus 17.19.4.
[358] Badian, 1977, 185, n.36; n.46, argued this is also what occurred at Centrites in 401.
[359] Badian, 1977, 292.
[360] Arrian 1.16.1.
[361] Bosworth, 1980, 124; Devine also sees them as *Hamippoi,* light infantry who fought alongside cavalry.
[362] Arrian 1.16.2; Diodorus 17.21.6; Plutarch *Alex.* 16.15 (following Aristobulus).
[363] Arrian 1.16.2; Devine, 1988, 9, argues that the Greek mercenaries must have been few in number, probably no more than 5,000, as the Macedonians would not have been capable of surrounding any more than this.
[364] Plutarch *Alex.* 16.13-14; Bosworth, 1980, 124-5.
[365] Badian, 1977, 275.

been the only source to have produced an eyewitness account,[366] and we can be reasonably sure that Callisthenes was Arrian's source for at least the debate with Parmenio.[367] Callisthenes is known to have been hostile to Parmenio and is probably the source of the five dialogues between Alexander and the old general that show him as being overly cautious against Alexander's youthful heroism. We also know that Arrian used Aristobulus, and Bosworth says that he was used frequently between 1.12.8 and 1.14.4.[368] Arrian, of course, also used Ptolemy: key to Ptolemy's account of the battle is his location, if I am correct that the Ptolemy son of Philip mentioned by Arrian[369] is a mistake,[370] either by Arrian of one of his many sources, and this was in fact Ptolemy son of Lagus, then his location precludes him from having any great knowledge of any part of the battlefield other than the area where he fought.[371] Badian[372] seems to dismiss the importance of Ptolemy's account of the Granicus given that he was only a junior officer at the time, but it is precisely this "junior capacity" (along with his location) that led to Arrian's account that ignored the part of the battle in which he was not a participant, i.e. that fought on dry land by the Thessalians. He would also not have access to any meetings that would have taken place between Alexander and the senior commanders that would have given him any knowledge of events. Further to this, by emphasising the assault across the river he is glorifying not only Alexander's part in the battle, but his own as well.[373]

We know so far, then, that Arrian used Callisthenes, Aristobulus and Ptolemy. We also know that Polyaenus'[374] account clearly did not have the same source as did that of Diodorus, given the manoeuvre in the riverbed; Hammond believes that Polyaenus' source is "almost certainly Cleitarchus".[375] Hammond has,[376] however, also stated that Diodorus' source is most likely to be Cleitarchus, and both statements cannot be true. If Polyaenus' source was Cleitarchus, then the question of who Diodorus' source was for this part of his narrative is probably insoluble: Pearson notes that there are over twenty distinct names of contemporary sources on Alexander listed by Jacoby,[377] and we do not have enough information to narrow it down. I think it likely that Diodorus' source was in

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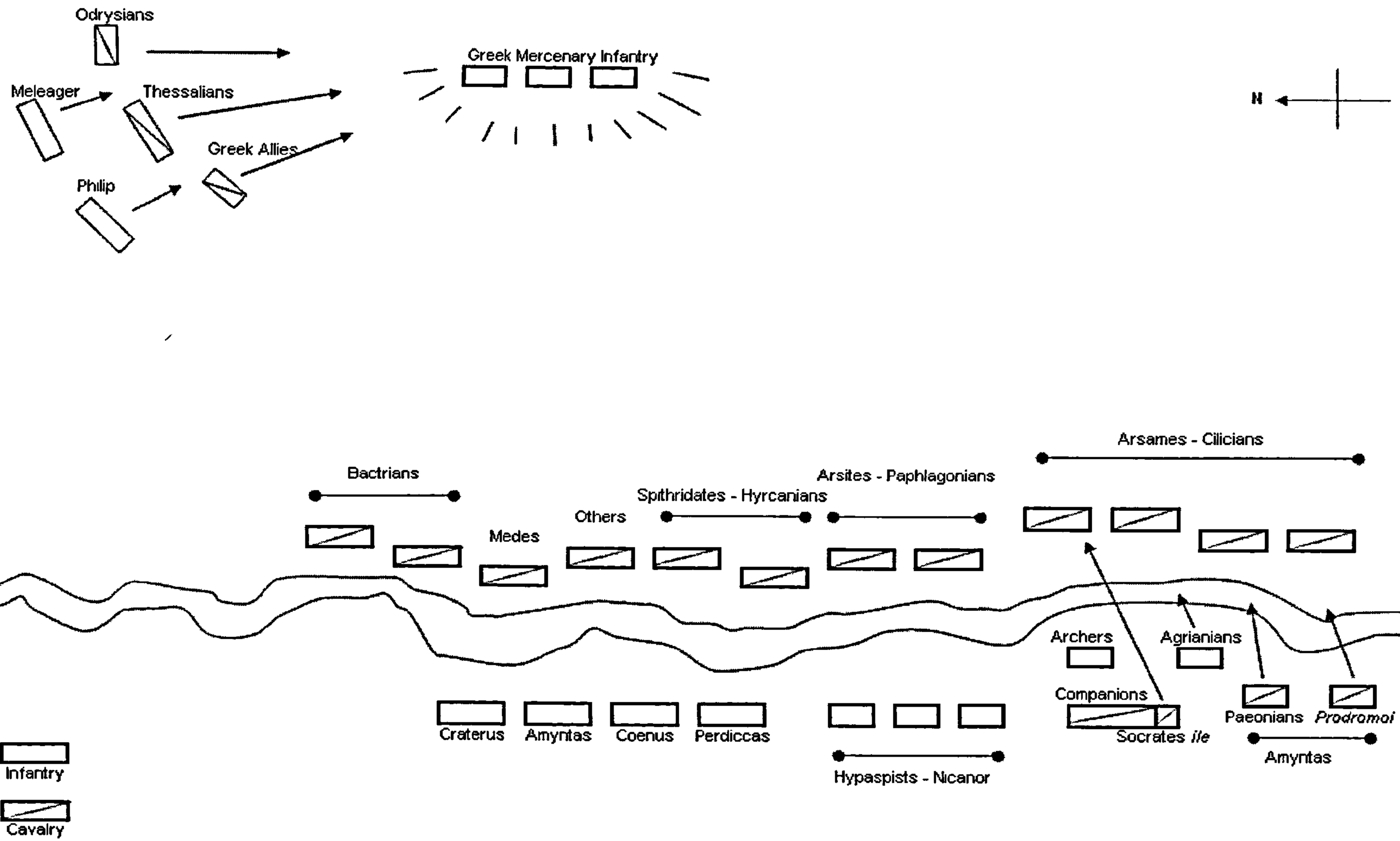
[366] Although he confusingly concedes, 1977, 275 n.16, that Ptolemy was also present.
[367] *Contra* Hammond, 1996, 40, believes that Arrian largely followed Ptolemy and Plutarch largely followed Aristobulus.
[368] Bosworth, 1980, 115. *Cf.* pp. 16-17 above.
[369] Arrian 1.14.6.
[370] There are a number of mistakes preserved within Arrian's account of the Macedonian order of battle. Socrates is omitted as commander of his own *ile*, only to appear in exactly that capacity a few lines later at 1.15.1. Philip the *taxiarch* is mentioned twice, as is Craterus. And given that there is also a second Philip, commander of the allied Greek cavalry (1.14.3), it is not beyond the realms of possibility that Arrian may have made another mistake by making this Ptolemy son of Philip.
[371] Even if the Ptolemy in question was not the historian, it is still likely that he was stationed with the Companion Cavalry on the right and would still have had little or no knowledge of the rest of the battle.
[372] Badian, 1977, 275, n.16.
[373] Pearson, 1960, 204 notes that Ptolemy did like to emphasize his own involvement in events and further (200) that he actually leaves events out that he did not participate in and thus had no knowledge of; he does not describe the bridge over the Indus for example.
[374] Hammond, 1996, 39.
[375] Diodorus 17.19.3*ff.* Hammond, 1996, 16*f*, 23*f*, 26.
[376] Hammond, 1983, 20*ff.*
[377] Pearson, 1960, 22.

fact Cleitarchus and that Polyaenus was perhaps using Ptolemy or Aristobulus, either of whom would have resulted in a similar narrative to that of Arrian. The fact that Cleitarchus was living in Alexandria under the rule of Ptolemy does not preclude him from having written an account that was less flattering of Ptolemy than he would have liked, especially if Pearson[378] is right that Cleitarchus published after Ptolemy's death.

In summary then, Arrian's river crossing was to be found in Ptolemy, Aristobulus and Callisthenes, as well as Polyaenus,[379] Diodorus' account of a dry land battle was found probably only in Cleitarchus.

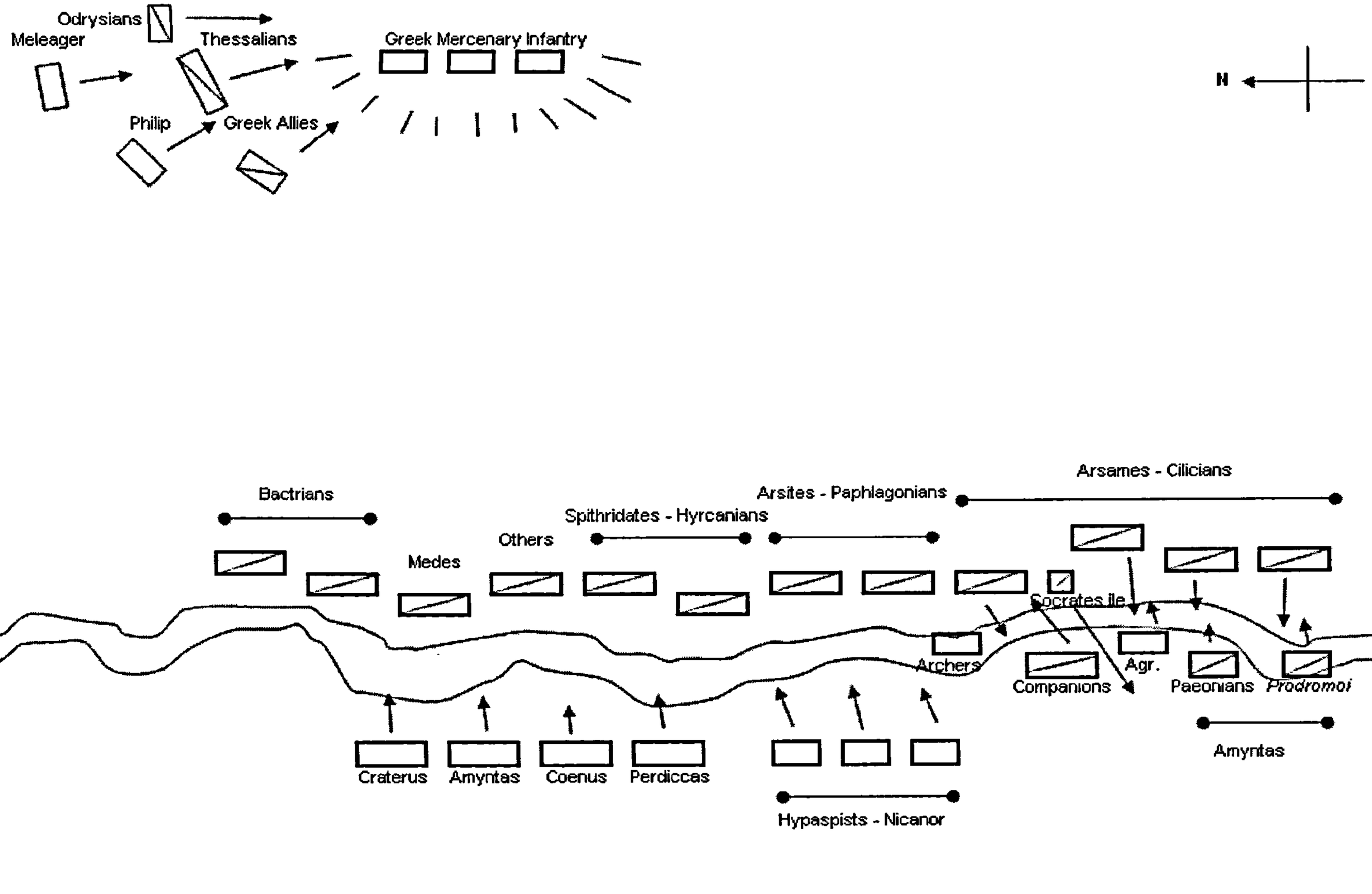
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[378] Pearson, 1960, 231*f* for a summary of the evidence supporting this.
[379] As well, no doubt, as a number of the other twenty contemporary sources noted above (and of course Plutarch).



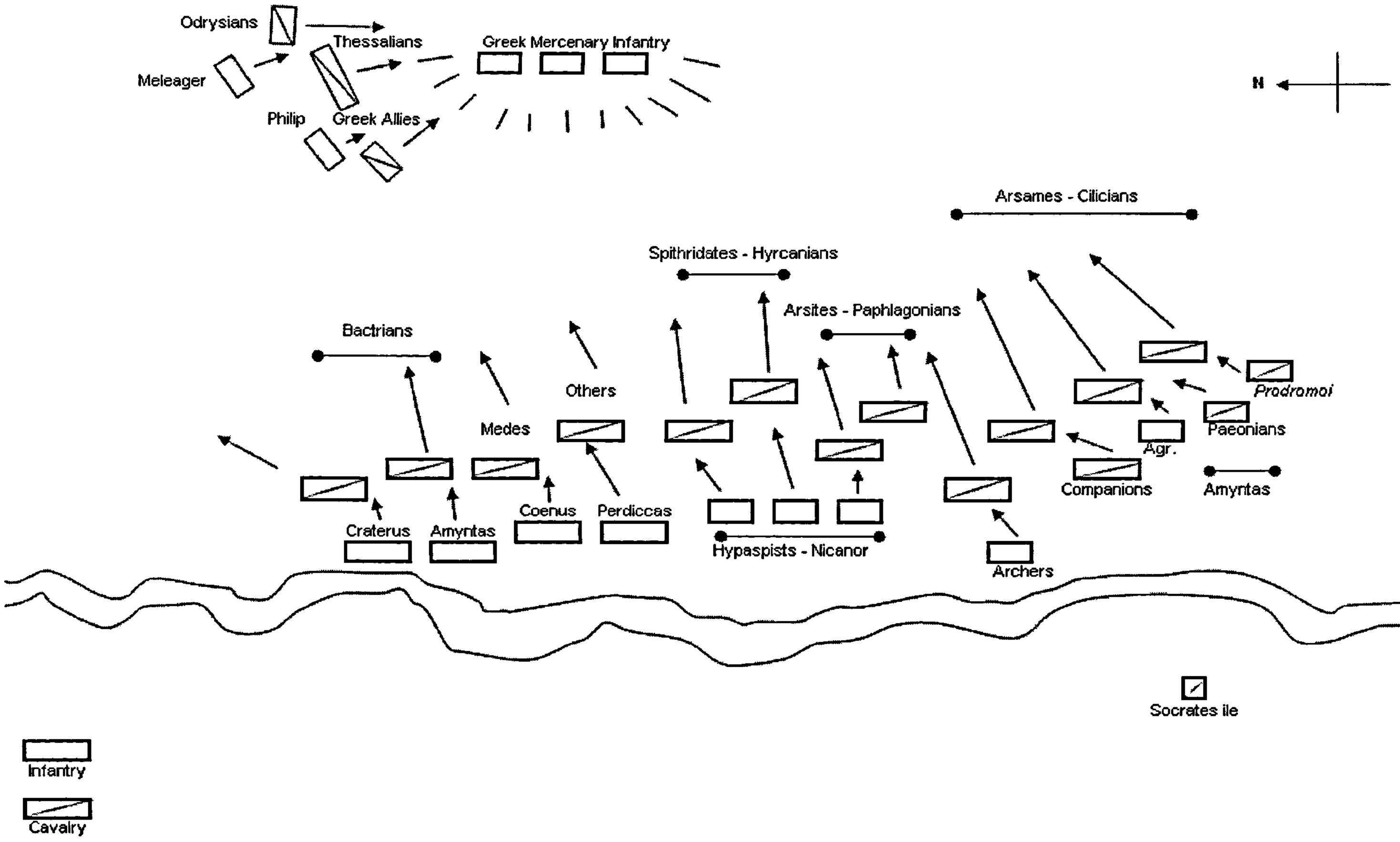
Granicus Phase 1 - Alexander's Opening Gambit

Figure 6: The Battle of the Granicus River Phase 1 – Alexander attacks across the river with Socrates' *ile* whilst Parmenio advances upon the Greek mercenaries.



Granicus Phase 2 - Alexander Attacks Accross the River After Socrates Retreat

Figure 7: The Battle of the Granicus River Phase 2 – The Cilicians are drawn into the river, Socrates retreats and a general assault begins.



Granicus Phase 3 - Alexander Attacks Arsames' Cilicians in the flank, and the Persian's route shortly afterwards

Figure 8: The Battle of the Granicus River Phase 3 – The Persians are routed.

Chapter 3

Miletus and Halicarnassus: 334

Miletus

The location of Miletus presented Alexander with a significant logistical problem: it was a coastal city and also located on a peninsula jutting into the Latmian gulf.[380] Arrian implies that the city was essentially divided into two separate areas, an inner and outer city. It would seem that the inner city was protected by a wall, but over time Miletus had outgrown this area and had spilled over the wall; the area of the outer city was abandoned without a fight by the Milesians, implying that it was relatively indefensible.[381] The Persian commander, Hegesistratus, was supported by a Persian fleet numbering 400 warships;[382] his initial offer of submission was withdrawn upon sighting the fleet off Halicarnassus. However large the Persian fleet was, they arrived too late, and as a result had to take up a position off Mt. Mycale. Nicanor, commander of Alexander's Greek fleet of 160 ships,[383] had arrived three days before the Persians and anchored his vessels off the Milesian coast at the island of Lade; in the process transporting "the Thracians and about 4,000 other mercenaries to the island".[384]

At this time Alexander had only a small part of his army with him, no more than around 10,000, consisting of the "remainder of the infantry, the archers, the Agrianians, the Thracian horse, the *agema* of the Companions and three others in addition".[385] We know of two expeditions sent out at Ephesus, one commanded by Parmenio and the other by Alcimachus, totalling around 10,000 men;[386] this leaves the hypaspists, 2,000 heavy infantry, four of the eight *ilai* of Companion Cavalry, the *prodromoi* and the Illyrian allies and mercenaries unaccounted for, perhaps 15-20,000 troops in all. It would seem that Alexander had a number of other expeditionary columns active at this time, of which we know nothing, unless Arrian's figures are defective.[387]

Before the siege began in earnest we have a debate between Parmenio and Alexander as to the wisdom of offering a naval battle. This is significantly different from the other such debates:[388] here Alexander is portrayed as the pragmatic party in opposition to Parmenio's rash and impetuous suggestion. Lane Fox[389] considered Parmenio's advice, if it was ever in fact offered, as being impossibly foolhardy. It is

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[380] Bosworth, 1980, 136. Today the ruins of Miletus lie some 10km from the sea, this is due to the mouth of the Maeander River has silted up over the centuries.
[381] Arrian 1.18.3.
[382] As against Alexander's 160, Arrian 1.18.5.
[383] Hammond, 1992, 39.
[384] Arrian 1.18.7.
[385] Arrian 1.18.3
[386] Arrian 1.18.1.
[387] Bosworth, 1980, 136.
[388] Arrian 1.13.2 (Granicus), 2.25.2-3 (Euphrates), 3.10.1-2 (Gaugamela) and 3.18.12 (Persepolis).
[389] Lane Fox, 1973, 132.

perhaps unwise to pass judgment on Parmenio at this point as we have no indication as to exactly what plan he proposed, although it would probably have been more sophisticated than a simply battle between all available forces.[390] Alexander's fleet was outnumbered 400/220[391] but it is probable that he rejected the idea, not out of fear of Persian numerical superiority[392] but because he had no experience of naval warfare; a defeat would have been disastrous in Greece,[393] and his fleet's present position at Lade meant the capture of Miletus would be much easier than if the Persians could be re-supplied by sea.



Figure 9: Miletus and the island of Lade, instrumental in Alexander's blockade of the city.

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[390] Bosworth, 1980, 138.
[391] Hammond, 1992, 39, points out that Alexander possessed two fleets, 160 ships provided by the League of Corinth, (the "Greek fleet") commanded by Nicanor, and a Macedonian fleet of 60 ships commanded by Amphoterus (Arrian 3.2.6).
[392] Arrian 1.18.7.
[393] Arrian 1.18.6.

The proposal of Glaucippus to make Miletus a free city was rejected by Alexander:[394] he could do no other; his objective was to remove the Persian fleet as a threat, and leaving a port for it to use would have been unacceptable. Diodorus[395] tells us of a period of combat before the siege engines were brought up, during which the besieged easily defended themselves; although there is no hint of this in Arrian, it is quite possible that the siege train was late in arriving or took time to assemble.

By land Alexander supervised the use of the siege engines, and in a very short time had knocked down part of the walls, at which point a joint assault was made by land and sea and the city was captured relatively easily.[396] Arrian gives a very truncated picture of the siege, concentrating on the final day or so and ignoring the earlier unsuccessful attacks mentioned by Diodorus. The strategy employed by Alexander of attacking the enemy from more than one direction simultaneously was used again here and will be repeated constantly throughout his career.

The capture of Miletus should have made it clear to Alexander that the possession of a relatively powerful fleet, even one half the size of that of the Persians, could have a major impact even if he was not willing to offer a naval battle, making Alexander's subsequent decision to disband it all the more puzzling. Arrian gives us five reasons:[397]

1. Lack of money[398]
2. The Persian navy was far superior to his own.
3. Alexander was unwilling to risk any losses, in ships or men, in a naval engagement.
4. Alexander believed that he no longer needed a fleet as he was now "master of the continent"
5. He intended to defeat the Persian navy on land by depriving it of its ports.

Lack of money is the reason most commonly accepted by modern historians as the major factor in Alexander's decision; it is also one of only two reasons cited by Diodorus.[399] This conclusion is flawed for two reasons, though. Firstly the fleet was supplied by the member states of the League of Corinth; it is therefore reasonable to assume that the cost of their upkeep would also fall on these states and not on Alexander. The fleet would, effectively, have cost him almost nothing to maintain, although we should bear in mind that if the allies were bearing the cost then they might have become restive if forced to serve for longer than they expected (tying into the disloyalty issue below). Secondly, Alexander should not have been short of funds at this point. Just a few months later at Gordium, during the winter of 334/3, Alexander invested 500 talents on

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[394] Arrian 1.19.1.
[395] Diodorus 17.22.2.
[396] Arrian 1.19.2-4.
[397] Arrian 1.20.1. The following section relies heavily on Bosworth, 1980, 141*ff.*
[398] See Serrati, 2007, 463-4, for a general discussion on the state of the Macedonian treasury at the time of Alexander's accession.
[399] Diodorus 17.22.5, the other being that he believed his troops would fight all the harder if deprived of any means of escape.

raising a new fleet and 600 talents were allotted to pay for the upkeep of garrisons on the Greek mainland.[400] There seems no reason why Alexander's financial position should have improved so drastically in just a few short months.

Arrian is correct to say that the Persian fleet was superior to Alexander's, both in numbers and quality. This is not a reason to demobilise the fleet, however, as this would leave the islands and the mainland defenceless. Miletus had also shown Alexander that a fleet was tactically useful, even if he did not offer a naval battle to the Persians. This lack of quality and numbers would be more of an argument for increasing investment in the fleet, rather than ridding himself of it.

Points two and three are certainly linked, Alexander was unwilling to offer a naval battle because of the potential ramifications. If he had chosen a naval battle, his strategy would almost certainly have involved a heavy reliance on marines, most likely the hypaspists, and he could not risk their loss as they were a vital component of the land campaign. Any defeat could also have caused political unrest back in Greece too.

The suggestion by Arrian that Alexander did not need a fleet, as he already controlled the whole continent, is extraordinary and demonstrably untrue. Even if we take Arrian to be referring to Asia Minor, rather than the whole of Asia, then it still was nowhere near true. Besides, as Bosworth points out,[401] there was now nothing stopping the Persians from attacking Alexander's forces in the rear, which in fact they did at Tenedos.[402] This was a tactic that should have been employed far more effectively than it ever was by the Persians.

This strategy of defeating the Persian navy on land is famous, and on the surface, fairly sound. In the ancient world, warships could not carry any great quantity of supplies and so had to dock at a friendly port every night to re-supply with food and fresh water. It is also true that this strategy ultimately worked; the Persian fleet did collapse as Alexander captured key cities on the Phoenician coast, but the strategy had at least two serious flaws. The first was that a competent commander, as Memnon surely was, had a free hand to act as he wished in the Aegean, to overrun all of the islands and carry the fight to the mainland, where several states would more than likely have revolted given the opportunity. Secondly it does not take any account of the fact that a significant portion of the Persian fleet was from Cyprus, which would theoretically have been unaffected by Alexander's strategy; although these ships would still have needed mainland ports in order to operate, they would still be loyal to the Persians and able to harass Alexander's supply lines. Alexander essentially relied upon luck to overcome these two problems, which was uncharacteristic. His planning was usually far more meticulous than this and his strategies were well thought out; which leads me to conclude that his decision here was not a purely tactical or strategic one, but something else.

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[400] Curtius 3.1.19-20.
[401] Bosworth, 1980, 142.
[402] Arrian 2.2.3.

If the decision to disband the fleet was not taken on military grounds, nor was it forced upon him by lack of funds or any of the other reasons Arrian gives, why did he make this decision? I suspect that the truth lies in something that Arrian comes close to mentioning. He points out that any loss in battle could lead to disaffection and potential rebellion at home, bringing up the question of loyalty. The allied troops with the army were loyal to Alexander, although this could have been because of a fear of reprisals at home if they were not. It could also have been because of the presence of thousands of heavily armed, battle-hardened Macedonians. The fleet, of course, would very quickly have been far away from the location of the king or the army, Alexander's personality and influence would have had far less of an impact on them and the opportunity for disloyalty would have been exponentially greater and far easier to act upon. They would also have had a motive for disloyalty if they were serving at their own expense. The fact that he retained the twenty Athenian vessels[403] is an indication that he wanted to try to retain some specifically Athenian hostages,[404] but 160 total vessels was too great a risk.

We should also note here, as earlier, that Alexander in fact possessed two fleets, that of the League of Corinth which was now disbanded, and that from Macedonia numbering 60 ships.[405] Hammond[406] notes that there is no possibility of Alexander having dismissed all of his fleet as he needed to maintain control of the Hellespont to maintain his own lines of supply and communication with Macedonia, but also to keep open the corn-route from the Black Sea which was essential to the Greek states and especially Athens.[407]

Halicarnassus

In accordance with his new policy of defeating the Persian navy on land, Alexander now set off for Halicarnassus; Memnon and the survivors from the Granicus, as well as Ephialtes the Athenian, had gathered there to oppose the Macedonian advance. Together with this, the Persian fleet was anchored in the harbour,[408] ensuring that it would be a simple matter to re-supply the city. The city itself was exceptionally strong, possessing three citadels; the original acropolis to the north-west, Salmacis to the south-west and the Island of Zephyria to the south.[409] The circuit of the walls followed the natural topography and incorporated a salient in the north-eastern corner;[410] outside the walls was a moat, 30 cubits wide and 15 deep.[411] Aeneas Tacticus tells us the primary purpose of such a moat was to prevent mining operations.[412]

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[403] Diodorus 17.22.5.
[404] Green, 1991, 157, notes that all Alexander ever got from Athens were these 20 vessels along with 200 cavalry; these 20 vessels and their crew, then, were important hostages against the good behaviour of Athens.
[405] *Cf.* p.66, fn.391.
[406] Hammond, 1992, 38, n.31.
[407] Atkinson, 1980, 92, notes a few ships mentioned by Curtius 3.1.19 at the Hellespont.
[408] Arrian 1.20.2-3; Diodours 17.23.4*ff.*
[409] Arrian 1.20.3; Strabo 14.2.17; *cf.* Bosworth, 1980, 143-4.
[410] Bosworth, 1980, 144.
[411] Arrian 1.20.8. Ashley, 1998, 206; equates this to 14m wide and 7m deep, it position is illustrated in fig. 10 p. 70.
[412] Aeneas Tacticus 37.1-3; Bosworth, 1980, 145.

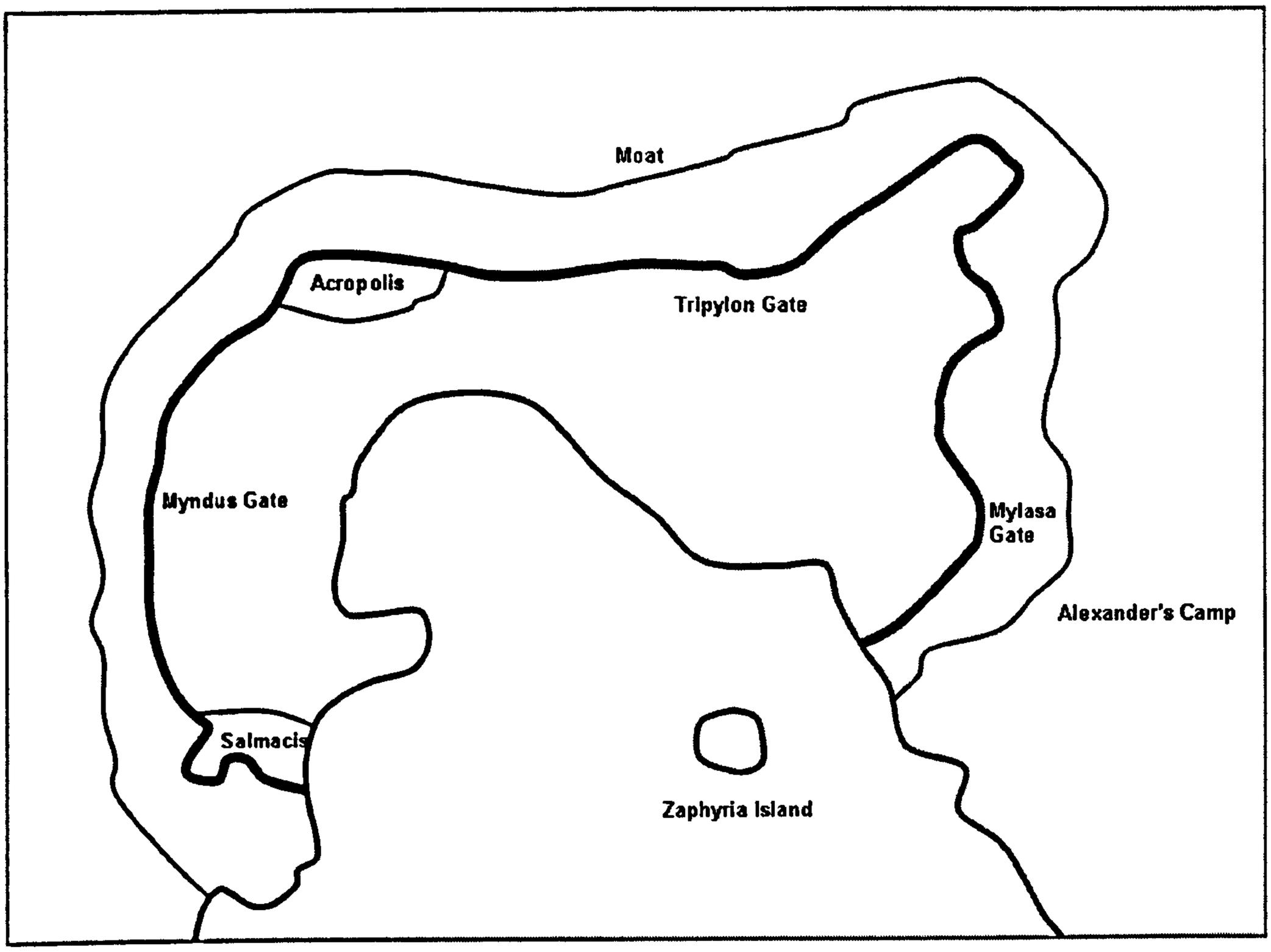


Figure 10: Diagram of Halicarnassus illustrating the defensive moat and Alexander's camp.

Once Alexander arrived at the city he made camp around half a mile to the east near a bay that could be used by supply ships bringing in food, water and the siege train;[413] although this would not have occurred frequently given the presence of the Persian fleet. An initial reconnaissance mission towards the city was met with a sortie by the defenders, and a barrage of missile fire from artillery pieces stationed along the walls and towers.[414] Given his current lack of a siege train, which he had left behind at Miletus, he moved to the west of Halicarnassus to assault the city of Myndus, believing that its capture would make the siege of Halicarnassus easier.[415] Alexander was also under the impression that the city would be given over to him by traitors within; this did not occur, leaving him exposed between Halicarnassus and Myndus, without a siege train, but with significant number of troops.[416] Without any artillery pieces Alexander's only choice was to attempt to undermine the walls, the first time in his career he had attempted such a

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[413] Kern, 1999, 204.
[414] Arrian 1.20.4; not mentioned in Diodorus.
[415] Arrian 1.20.5*f*. Bosworth, 1980, 144, notes Myndus was at least 16km west of Halicarnassus and its capture could not have seriously helped the Macedonians.
[416] Arrian 1.20.5, states Alexander had with him the Companion Cavalry, three *taxeis* of heavy infantry and the Agrianians and archers. This suggests that at least one of the secondary columns sent out at Ephesus had returned.

tactic; it was partially successful, bringing down one tower,[417] but reinforcements brought from Halicarnassus by sea ended the brief encounter[418] with Alexander returning to Halicarnassus to find his siege train had eluded the Persian navy and arrived by sea.[419]

The siege now began in earnest with the Macedonians attempting to fill in the moat, with the aid of mobile sheds constructed specially,[420] to facilitate the approach of the siege towers and rams to the walls.[421] Two towers and a section of the walls collapsed[422] and the defenders responded by launching an unsuccessful night sortie to burn the siege towers.[423] Perhaps the following night, two drunken solders from Perdiccas' *taxis* made some kind of approach to the city, and were killed by missile fire from the defenders, some of whom began shooting at the rest of the encamped Macedonians. Perdiccas ordered more troops to join the fray, as did Memnon, and considerable confusion ensued. Arrian tells us that Alexander could have broken into the city at this point but sounded the withdrawal.[424] The Diodorus[425] version of events is considerably briefer, and whilst Arrian represents it as an almost total success with the city coming close to falling, Diodorus has it as an unqualified defeat.[426]

The following day the defenders made another sortie, burning the mantlets[427] and one of the siege towers before being driven back to the city, when Alexander brought up reinforcements. A few days later, as Alexander brought his engines up to assault the inner curtain wall that had been constructed after the collapse of the outer wall, Memnon organised yet another sally, this time in two parts. Firstly some defenders[428] attacked towards the siege engines and those manning them. As Memnon apparently planned, this drew in more of the Macedonians, at which point he made his second attack from the Tripylon gate[429] and fell upon the flank of the Macedonians. The attacks were supported by a 45m tower constructed by Memnon and filled with archers, javelin-throwers and artillery pieces. Considerable damage was done to the siege equipment but eventually the Macedonians got the upper hand, the city again came close to falling but again Alexander failed to press the attack.[430] Arrian presents this sortie by the defenders as being something of a failure: the Macedonians drove them back easily and doused the fires they set, quickly.[431] Diodorus' version is rather different: the Macedonians had much the worse of the fighting and the day was only saved by some of Philip's veterans joining the

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[417] Arrian 1.20.6-7.
[418] Arrian 1.20.7. The Myndus episode is not mentioned in Diodorus; the early part of the siege in Diodorus is represented as a continuous series of unsuccessful assaults on the walls.
[419] Green, 1991, 196; Kern, 1999, 206.
[420] Diodorus 17.24.4. These were the so called mantlets mentioned below.
[421] Marsden, 1969, 101. Arrian 1.20.8; Diodorus 17.24.5.
[422] Diodorus, 17.24.5; Arrian 1.21.4.
[423] Diodorus, 17.24.5; Arrian 1.20.9-10.
[424] Arrian 1.21.4.
[425] Diodorus 17.25.5-6.
[426] Bosworth, 1980, 145.
[427] The defensive screens mentioned above, *cf.* Polybius 9.41.3.
[428] Diodorus 17.26.1-27.4 has the first led by Ephialtes the Athenian.
[429] Arrian 1.22.1-4.
[430] Arrian 1.22.7.
[431] Arrian 1.22.1-2.

battle and killing Ephialtes in the process.[432] These tactics employed by Memnon are very reminiscent of Alexander's tactics throughout his career; drawing an enemy onto ground of his choosing and then launching a flanking attack.

After this sortie Memnon decided to abandon the main part of the city and concentrate his forces in the two citadels that were still in Persian hands.[433] Alexander then left Ptolemy,[434] along with 200 cavalry and 3,000 mercenaries, to complete the capture of the remainder of the city whilst he headed to Gordium.[435]

Conclusion

There are two separate accounts of Halicarnassus, those of Diodorus and Arrian. Diodorus certainly presents this campaign as the least impressive of Alexander's career, although Arrian is less negative. Even in Arrian, however, Halicarnassus is far from an overwhelming success; still we find the undisciplined soldiers of Perdiccas' *taxis* and still we find Alexander being taken by surprise by Ephialtes' sortie, as well as the lack of protection for his siege engines and towers. Innovation throughout the whole siege was typically a reaction to the actions of Memnon and Ephialtes in both traditions.[436] Whilst it is true that he was, to a point, successful, he only captured part of the city and did not deprive the Persian navy of its base; that was ultimately left to Ptolemy. In contrast to Alexander's shortcomings, Memnon and Ephialtes showed themselves to be commanders of the highest order. Memnon successfully sealed breaches in the walls where they occurred, he constructed a huge tower from which to shower the attackers with missiles and he conducted a series of sorties that always had Alexander on the back foot whilst Ephialtes led the first sortie with distinction. With hindsight Alexander was certainly successful in the capture of Halicarnassus, and it did not take too long, for which he should be congratulated; we can also say that he learned tough lessons from his mistakes here that he was to put into practice during later sieges (i.e. Tyre and Gaza). We can also say that Alexander was certainly lucky Memnon died when he did.

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[432] Diodorus 17.26.5-7.
[433] Arrian 1.23.1; although Diodorus 17.25.5, has most of the defenders evacuating to Cos.
[434] This was not the famous son of Lagus, the historian; but another rather more obscure individual.
[435] Arrian 1.23.6.
[436] Ashley, 1998, 210.

Chapter 4

The Campaign of Issus: 333

Introduction

It is the intention of this thesis to discuss, where appropriate, questions of strategy as well as tactics. The campaign of Issus presents us with an excellent opportunity to examine the strategies employed by both participants in the lead up to the battle. In order to fully appreciate these strategies, however, we must first discuss the topography of the region.



Figure 11: Alexander's early campaigns.

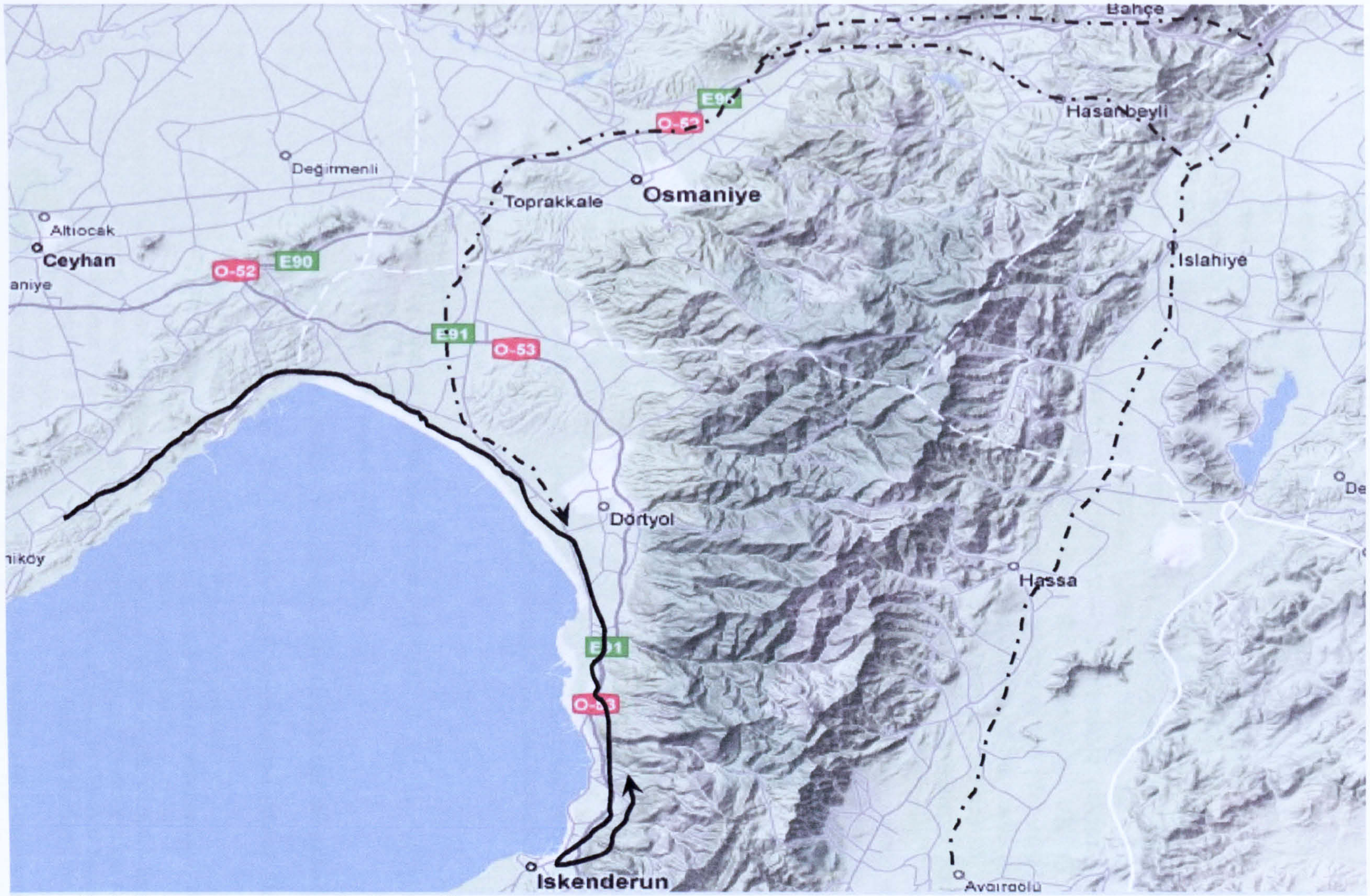


Figure 12: Initial movements up to the Battle of Issus.

General Topography of Cilicia[437]

Cilicia is encircled on three sides by mountain ranges, and on the fourth is the sea, making access to the central plain difficult if opposed. To the north and west is the Taurus range which forms the boundary with Cappadocia, Lycaonia and Pamphylia. There are four significant passes through the Taurus and northern Amanus mountains. West of Issus lies the Kara Kapu pass, and to the north the Kalekoy pass through the Taurus Mountains. North-east of the Kalekoy pass lies the Hasanbayli pass and just to the north of this is the Bahce pass over the Amanus Mountains. To the east of the central plain lies the Amanus range, which forms an almost impenetrable barrier, given the scarcity of passes. At the southern end of the plain are the "other gates" which Parmenio was sent to occupy (see below). These "other gates" consist of the Merkes Su, a pass between the mountains and the sea through which runs a river of the same name. The Pillar of Jonah lies immediately to the south of this and the Beilan pass lies 16km south-east of Iskanderun,[438] and leads over the high central areas of the Amanus mountains leading away from the coast.[439] The plain of Cilicia was "proverbially fertile"[440] and was a major contributor to the Achaemenid treasury. The fertility of the plain, along with the proximity to the sea, meant that Alexander would not have to worry about his supply lines for a little while.[441]

Initial Movements - Alexander

After an advance of 50 stadia in a single day,[442] Alexander conducted a daring night march which forced passage through the so called "Cilician Gates",[443] probably the modern Kalekoy pass.[444] Alexander then entered Cilicia,[445] which was to become his base of operations for the next several months. After forcing the pass, Alexander arrived at Tarsus before Arsames, the Persian commander of the region. Apparently Alexander had feared that Arsames would institute a scorched earth policy such as had been advocated by Memnon before the Granicus.[446] After failing to secure Tarsus, however, Arsames

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[437] Much of the topographical information is taken from Devine, 1985a, 26.
[438] A little to the east of the Pillar of Jonah.
[439] For an interesting modern account of the region see Stark, 1958, 3-13.
[440] Bosworth, 1988, 55.
[441] This assumes that some ships were maintained by Alexander when he disbanded the majority of his fleet, as argued in ch.2 above (p. 65-69).
[442] Curtius 3.4.1-2, from the camp of Cyrus, where Alexander had paused, to the Cilician Gates was apparently 50 stadia.
[443] Arrian 2.4.3-4: the defenders evidently fled as soon as the advance was detected.
[444] Although Murison, 1972, 402, argues for a pass known as the Kulek-Bogazi, almost certainly the same pass, leading from Cappadocia to Cilicia and being the direct route from Ancyra.
[445] Probably around the end of May, assuming no earlier delay at Gordium or Ancyra. We know he reunited the army at Gordium around the end of April and it would seem that the journey from Gordium to Tarsus would not take more than a month. Given that the battle occurred at the end of October/ beginning of November, this leaves five months that Alexander spent in Cilicia; again, as in the Balkans, this was no lightning campaign. *Cf.* Murison, 1972, 404.
[446] Arrian 2.4.5; Curtius 3.4.3. Arsames had been one of the Persian commanders at the Granicus: *cf.* Green 1991, 221.

appears to have withdrawn from the region entirely, with little or no damage being caused.[447]

Whilst at Tarsus Alexander fell seriously ill: the result of a swim in the freezing waters of the Cyndus River.[448] The illness apparently incapacitated him for several weeks, and was only cured after Philip the Acarnanian[449] administered a drastic purge, despite a letter of warning from Parmenio that Philip had been bribed to poison Alexander. The historicity of the letter has been questioned by Berve[450] on the grounds that, according to Arrian's narrative, Parmenio was still in camp at the time. Bosworth[451] suggests, probably correctly, that Parmenio had already been sent south to occupy the passes out of Cilicia (see below). In fact, the army had probably been divided as it passed through the Cilician Gates, Alexander taking a small contingent to Tarsus with Parmenio taking most of the rest south. There would have been little opportunity after the forcing of the pass to have organised such a division, especially if Alexander's illness was as serious as seems to be indicated in our sources.[452] The exact chronology of Parmenio's mission is difficult, but important in understanding the overall strategy of the campaign. Diodorus[453] tells us that he was sent out as news was received that Darius was only a few days away. This simply cannot be true, as it would seem that Parmenio spent several weeks, perhaps a month,[454] in Cilicia before returning to Castabalum to report to Alexander.

Once Alexander had recovered his health, after an unspecified delay, he marched south-west to Anchialus and Soli, where he levied a fine of 200 silver talents upon the inhabitants for their loyalty to Persia. Whilst at Soli Alexander took three *taxeis* of heavy infantry, the Agrianians and archers, and conducted a seven-day campaign against hill tribesmen in the so called "Rough Cilicia" region:[455] Alexander at this point was evidently not worried about the location of Darius. Upon his return to Soli,[456] he further

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[447] Withdrawn - although Arrian used the term "fled" rather pejoratively 2.4.6. Arrian 2.4.6; Curtius 3.4.14, states that the Persian defenders were in the process of burning the city as Alexander's light armed troops arrived, the fires being quickly extinguished.

[448] Plutarch *Alex.* 19.2-9; Diodorus 17.31.4-6; Curtius 3.5.1-6; Justin 9.8.3-9; Arrian 2.4.7-11.

[449] Bosworth, 1988, 55. Arrian 2.4.8, makes it clear that Philip was a Companion and had a military as well as a medical background *cf.* Bosworth, 1980, 191. Curtius 3.6.1 adds that he had been a boyhood friend of Alexander.

[450] Berve, 1926, 2. 388.

[451] Bosworth, 1980, 191.

[452] An indication of the seriousness of the illness can perhaps be taken from the flight of Harpalus. Intrigues between the leading generals would have been rife at this time and it is entirely possible that Harpalus fled in fear for his life in the event of Alexander's death, The fact that Harpalus lived in the Megarid for nearly a year apparently without fear of extradition, and the fact that he was welcomed back by Alexander without punishment indicates that he probably committed no crime. *Contra,* Badian, 1960, 245-6, who believed that Alexander relieved Harpalus in order to divide the administration of the treasury between two people, much as he did with command of the Companion Cavalry after the death of Philotas, although this was in a later period, after Alexander had become somewhat paranoid and feared one person having that much power again. Lane Fox, 1973, 164 with 519; 411 with 542, proposed that Harpalus was on a "secret mission" to watch the political situation in Greece. *Cf.* Green, 1991, 222

[453] Diodorus 17.32.2.

[454] Curtius 3.7.5-7; Arrian 2.6.1.

[455] Arrian 2.5.5-6.

[456] Where he heard of the fall of the final two citadels of Halicarnassus., Arrian 2.5.7.

divided the army:[457] Philotas, with the cavalry, was sent on to the river Pyramus, through the Aleian plain;[458] Alexander himself marched to Magarsus with the hypaspists and the *agema* of Companions. Magarsus submitted without incident;[459] Alexander then marched north-east to Mallus. It was while Alexander was encamped at Mallus that he received news that Darius was two days march away at Sochi.[460] Before we discuss the immediate and future strategy of the two armies we must solidify the timeline and discuss the general topography of the region.

We know that Parmenio was sent south, before Alexander occupied Tarsus, to capture the Issus plain and the passes leading out of Cilicia to the south, specifically the Pillar of Jonah and the Beilan Pass:[461] but we must now establish the timeline for Darius' arrival at Sochi and his occupation of the aforementioned southern passes. This is no easy task given that none of our sources actually synchronise Alexander's movements with those of Darius. We know from Curtius that the Persian contingents from the furthest parts of the empire were not summoned because of Darius' great haste. No source gives a date for Darius' march from Babylon, but Curtius[462] mentions that Darius only decided to fight in person once news was received of Memnon's death. We know that Memnon died whilst besieging Mytilene;[463] this is likely to have been mid summer 333,[464] and we should allow until the end of July for news to reach Darius at Babylon.[465] Darius had to cover around 966km[466] from Babylon to Sochi. We have no data on the Persian rate of march, but we do know that Alexander's whole army marched from Babylon to Susa[467] at a rate of 19.8kmpd.[468] If Darius marched at the same rate this would mean covering 966km in 49 days. Darius' army was, however, rather larger and vastly more encumbered than Alexander's;[469] thus if we should assume a slower march rate of, say, 15kmpd Darius' army would cover the ground to Sochi in 64 days, or approximately two months.[470] If Darius marched out immediately upon hearing of the death of Memnon, therefore, he would have arrived at Sochi at approximately the end of September.

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[457] Much of which was with Parmenio in the region of Issus at this time.
[458] Arrian 2.5.8.
[459] Interestingly Mallus was not fined, unlike Soli, no doubt because it was in a strategically far more sensitive area.
[460] Arrian 2.6.1.
[461] Lonsdale, 2007, 80-1, argues that Alexander's dominant strategic concern was to prevent the Persians from using their fleet to land troops in the rear of his army: this is surely not the case as the Persians were inland, rather than on the coast, and this tactic was not a major part of Persian warfare. The theory is, I believe, the result of applying modern tactical thinking to the ancient world, an unsound practice.
[462] Curtius 3.2.1-9.
[463] Arrian 2.1.3; although Diodorus 17.29.4 places his death after the capture of Mytilene.
[464] Bosworth, 1988, 53.
[465] A reasonably short period of time, but plausible, given that news could be carried by sea to the Phoenician coast, and then quickly by land to Babylon.
[466] Murison, 1972, 406.
[467] Similar terrain than from Babylon to Sochi.
[468] Arrian 3.16.7, for Alexander's march rates table see Engels, 1978, 153. kmpd = km per day.
[469] Darius had with him part of the royal treasury, his own family, his harem as well as many thousands of camp followers; Curtius 3.3.8-28.
[470] Two months is also the time calculated by Devine, 1985a, 27.

Using the end of September as the time of Darius' arrival at Sochi we can continue the process begun earlier and further establish the Macedonian timeline. We know that the battle occurred on the sixth day after Alexander received news that Darius was at Sochi.[471] Beloch[472] argued that Alexander's campaign in south-west Cilicia lasted around one month, from the time he left Tarsus, until he heard of Darius' presence at Sochi. This, however, leaves four months unaccounted for on the part of the Macedonians. Murison[473] proposed two possible solutions to this problem: either that Alexander's illness was far more serious than we know, and his recovery period was in fact a period of several months; or that Alexander paused at Gordium for longer than we had previously believed, no doubt being worried about the progress of Persian operations in the Aegean. The reality is probably some combination of the two, at this stage Alexander seems not to have been in a hurry.

Location of Key Sites

It is important and interesting to note that the locations of a number of key locations mentioned so frequently in the sources are far from certain. The exact locations of Issus and Myriandrus are uncertain, and the location of Sochi is entirely unknown. We can make certain assumptions, however. Issus was probably very near the head of the gulf, it is also probably quite close to the river across which the battle was fought:[474] in both Curtius and Arrian[475] it is the first place reached by Darius after crossing the Kalekoy Pass and arriving on Alexander's lines of communication. It can be reasonably assumed, therefore, that Issus lies directly south of the pass, on the coast. It is also probably quite close to the Pinarus River, given the name of the ensuing battle.[476] The most useful piece of source evidence for the location of Issus comes from Xenophon;[477] he states that the distance between Issus and the "Gates between Cilicia and Syria" is five parasangs. With one parasang as 30 stades, this gives a total of 150 stades or 26.15km.[478] Barrington's location of Issus seems reasonable.[479]

The locations of Myriandrus and Sochi are more problematic. Myriandrus can be assumed to be on the coast, as Alexander dispatched a ship from there upon hearing of Darius in his rear.[480] Barrington's location is again reasonable.[481] An approximate location of Sochi first involves an identification of the pass known as the "Syrian Gates". We already know that Parmenio was sent south with half of the army to capture and

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[471] Calculated from Arrian 2.6.1-2, 2.7.1-2, 2.8.1*ff*. Day one Alexander at Mallus hears Darius is at Sochi. Day two Alexander set out. Day three Alexander passed "the gates" and arrived at Myriandrus. Day four bad weather. Day five news Darius behind Alexander. Day six the battle was fought. *cf.* Murison, 1972 404. More detail will follow on the later movements of the two armies.
[472] Beloch, 1923, 3.2.326.
[473] Murison, 1972, 405.
[474] The main possibilities for the river are only 11km apart.
[475] Curtius 3.8.13-14. Arrian 2.7.1.
[476] Assuming the battle was fought across the Pinarus River. Murison, 1972, 406.
[477] Xen. *Anab.* 1.4.3-4.
[478] Murison, 1972, 406, equates 150 stades to 16.25 miles.
[479] Barrington, 67, C3. Map is by P.L.Gatier and T.Sinclair.
[480] Arrian 2.7.2.
[481] Barrington, 67, C3. Map is by P.L.Gatier and T.Sinclair.

guard the "other gates which divide the land of the Cilician from that of the Assyrians".[482] There are two passes to the south of the Issus plain that fit this general description, referred to by modern scholars as the Pillar of Jonah and the Beilan Pass.[483] The Pillar of Jonah is a narrow coastal defile about 9.66km south of Iskanderon.[484] The Beilan Pass leads across the Amanus Mountains and away from the coast (today this pass carries the main road between Iskanderon, Antioch and Aleppo); the Beilan pass is around 14.5km south-east of Iskanderon. Arrian's narrative is extremely vague about these passes, and we can conclude that he in fact knew of only one of them. He states at 2.6.1 that Darius was encamped at Sochi, two days march from the Syrian Gates; at 2.6.2 he tells us that Alexander passed the "gates" and made camp at Myriandrus.[485] As the Beilan pass is south-east of the presumed approximate location of Myriandrus then the pass referred to in Arrian must be the Pillar of Jonah.

The strategic decisions of both sides were greatly affected, not only by the passes to the south of Issus, but by those to the north-east as well. When Darius took the decision to move north and circle in behind Alexander, he had to cross the Amanus Mountains somewhere. The modern road and rail network in the region probably gives us some important pointers as to where these passes were. There are a large number of narrow "sheep tracks"[486] over the Amanus range, but only two passes large enough to take an army through in relatively short time and in good order; these are the Hasanbeyli Pass and the Bahce Pass.[487] The Hasanbeyli Pass, the more southerly of the two, carries the modern road over the mountains, whilst the Bahce Pass carries the Baghdad railway.[488] Both of these passes are at a height of around 1,200m;[489] we do not know which pass Darius used, and it could easily have been either one (or likely both to get such a large force across the mountains quickly). To reach the plain of Issus, Darius must have also moved through a smaller pass, the Kalekoy Pass, to cross the eastern spur of the Misis Dag and the western spur of the Gavur Dag ranges. This is a relatively minor range of mountains by the standards of the region, but significant enough to have diverted the modern road and rail links from Adana and Ceyhan to Iskanderon, through the Kalekoy Pass. Most modern authorities associate the Kalekoy pass with the Amanid Gates,[490] largely because of a reference in Curtius.[491] I am more convinced, however, by Atkinson's assertion that the pass in question was the Toprakkale Pass, as the Amanid Gates would surely lead over the Amanus range as Murison notes.[492]

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[482] Arrian 2.5.1.
[483] Pillar of Jonah - Barrington, 67, C3. The Pass is today called the Kilikiai Pass. Beilan Pass - Barrington, 67, C4. The Pass is today called the Syriai Pass.
[484] Murison, 1972, 407, quotes 6 miles. Barrington, 67, C3. Iskanderon probably equates to the ancient town of Alexandria ad Issum.
[485] Whose precise location is not known, but, as concluded earlier, it appears to have been on the coast given Alexander dispatching of a ship.
[486] Murison, 1972, 408.
[487] Detail of the minor tracks across the Amanus range can be found in Janke, 1904, 34-6.
[488] Janke, 1904, 34-6, for a full description of the passes themselves.
[489] C.4000ft.
[490] Curtius 3.8.18; Polybius 12.17.2 and Arrian 2.7.1 all state that Darius approached Issus via the Amanid Gates.
[491] Curtius 3.8.13.
[492] Atkinson, 1980, 196. Murison, 1972, 408.

Some key distance data are also critical; the most important being those from Mallus to Myriandrus, which Alexander covered in a reported two days;[493] and from Sochi to Issus, and then to the Pinarus River; a distance that Darius covered in an unspecified length of time. The distance between Mallus and Myriandrus is impossible to know with any degree of certainty, given that the precise location of both is uncertain. The general location of both can be approximated from the ancient evidence and a distance of around 120km seems reasonable.[494] Alexander was, therefore, clearly moving with considerable alacrity when he covered this distance in 48 hours.[495] Sochi to Issus, the route travelled by Darius, would also be around 120km; two passes[496] would also have to be crossed *en route*, however. Given that Darius had sent his baggage train south to Damascus, only the most mobile elements of the army remained; but given the passes that needed to be traversed, we can perhaps assume 72 hours or so for this distance. The Pinarus River is only around 8km from Issus, so this last stage of the journey would not have taken the Persians long at all.

Initial Movements – Darius

When Darius arrived at Sochi, he was in an ideal position to take advantage of his superior numbers. This was a battle site of his own choosing, consisting of wide open, level ground; a position that would have allowed him to encircle the much smaller Macedonian army.[497] Why would Darius abandon such an ideal position in order to fight a battle in a narrow, hilly plain enclosed on all sides by natural barriers? The sources are almost unanimous in their assertion that Darius grew impatient at Alexander's refusal to come to him,[498] delays that were in fact due to Alexander's illness and his campaign in south-west Cilicia. The delays caused Darius to conclude that Alexander would not come to meet him; Curtius even has Darius describe Alexander as a coward,[499] and advance despite the best advice of Amyntas, his Greek mercenary commander. Arrian tells us that the worst counsel prevailed, telling Darius what he wanted to hear.[500] Curtius gives us a rather different version of events at the Persian court at this time. He describes a debate not with Amyntas as in Arrian, but with Thymondas, son of Mentor.[501] The subject of the debate, according to Curtius, was whether or not to divide the army; a theme that appears in neither Arrian nor Plutarch. Curtius and Diodorus[502] both describe an earlier debate in

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[493] Arrian 2.6.2.
[494] Murison, 1972, 409.
[495] This figure has been much debated (and often rejected!), particularly among German scholars at around the turn of the last century: *cf.* Bauer, 1899, 123. Dittberner, 1908, 79, argued for three days whilst Domaszewski, 1925, 60-61, and Judeich, 1929, 360 n.2, both proposed four days. Arrian's figure could well be correct, however, given the parallel example of Messena's corps in 1797, cited in Fuller, 1958, 156, n.1.
[496] The Hasanbeyli and the Beilan passes, both around 1,200m.
[497] Although that, in itself, would not have guaranteed victory, given that this is what occurred at Gaugamela and Darius was still defeated.
[498] Arrian, 2.6.3-7; Plutarch *Alex.* 20.1-2; Diodorus 17.32.3.
[499] Curtius 3.8.10-11; *cf.* Plutarch *Alex.* 19.1; Diodorus 17.32.3.
[500] Arrian 2.6.3.
[501] Curtius 3.3.1.
[502] Curtius 3.2.10-19. Diodorus 17.30.2-3.

Babylon, in which the Athenian mercenary, Charidemus, advocated such a division of forces, and was executed for his overzealousness. Bosworth[503] argues that the debate on a division of forces is better placed in Babylon, not at Sochi, and Curtius airing the debate with Thymondas as the leading protagonist is anachronistic. This argument does not work terribly well geographically. If the army was to have been divided at Babylon, the two elements would have had to travel virtually the same 966km route to arrive in the region: a division of forces, if such a thing was to happen, would have been far more logically undertaken at Sochi where one half could head south-west, the other north, to trap Alexander in a pincer in Cilicia.[504]

Several modern authorities have defended Darius' strategy of advancing into Cilicia. Fuller, following Tarn, for example, states that Darius' assumption that Alexander would not leave Cilicia was entirely reasonable "because the Taurus range would make a nearly impregnable eastern frontier for the Macedonian empire".[505]

It could never have been Alexander's intention to end his campaign in Cilicia, however, as this would have left a "front" of over 1,500km with an enemy that had not been defeated in battle, and who could bring almost limitless reserves against him, given enough time. Tarn argued that Darius "had waited some time, and had concluded that Alexander, of whose illness he was ignorant, meant to halt in Cilicia".[506] Tarn's theory should be rejected on the grounds that it would have been foolish for Alexander to have halted in Cilicia, for the above reason, and a grave mistake for Darius to have assumed that he would. Fuller followed Tarn's argument without critical analysis.[507] Wilcken[508] follows Curtius' general theme that Alexander was afraid of Darius; and that this was the cause of his delay in Cilicia. He also suggests that it was Alexander's perceived fear of Darius' that led the latter to move into Cilicia in order to seek him out.

The key factor in Darius' decision to advance into Cilicia was, perhaps, knowledge of Alexander's illness. Plutarch tells us that Darius had no knowledge of it, and Tarn accepted that.[509] Curtius tells us that he did know, but his timing is impossible as he then goes on to tell us that news of the illness made him march to the Euphrates as swiftly as his heavily burdened army would allow. This must be a mistake of Curtius, Alexander could not have fallen ill as early as this, i.e. several weeks before Darius even reached Sochi.[510] McQueen and Atkinson think Curtius simply invented Darius' knowledge; but Darius' move into Cilicia suggests that Darius did know, though not as early as Curtius claims (although I can not say why Plutarch thought otherwise).[511]

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[503] Bosworth, 1980, 202.
[504] Atkinson, 1980, 116*f*, seems to accept the Thymondas debate, but argues his role in the ensuing battle was probably less than Curtius implies.
[505] Fuller, 1958, 98.
[506] Tarn, 1948, 1.24.
[507] Fuller, 1958, 98.
[508] Wilcken, 1932, 100.
[509] Plutarch *Alex.* 19.1-2. Tarn, 1948, 1.24.
[510] Curtius 3.7.1. *Cf.* Murison, 1972, 410.
[511] McQueen, 1967, 29. Atkinson, 1980, 170.

Darius was in a strong position at Sochi, a position that was suited to his superiority in numbers and especially in cavalry so why would he suddenly abandon it to enter Cilicia? The very fact that he did this (it was partly down to logistics too) I believe suggests that Curtius is correct and that Darius knew of Alexander's illness and was attempting to gain a major tactical advantage by advancing while the Macedonians were effectively leaderless. If Alexander's illness turned out to be fatal, then Darius would encounter a leaderless enemy, which could easily be driven from Persian territory. By the time he reached Issus, he would have learned that Alexander had recovered, so he tried to make the best of his mistake and selected the most suitable place in Cilicia to fight a set piece battle. Thus Darius' decision to march into Cilicia was sound, only failing because the news of Alexander's illness was out of date by the time it reached him. On this interpretation, Curtius is right to hold that Darius knew of Alexander's illness, but is wrong regarding the timing.

This argument is, I believe, supported by the fact that, whilst at Sochi, Darius sent his baggage train 320km south to Damascus.[512] This is beyond doubt given that it is in all of our sources;[513] the decision was no doubt taken to make the Persian host more mobile, so that it could cross the northern passes quickly and come to terms with the Macedonians whilst they were disadvantaged by Alexander's illness or death.

Final Stages of the Prelude to Battle

The whole question of the actions of both sides in the days leading up to the battle, rests largely upon whether Darius knew of Alexander's illness. His delay at Sochi potentially suggests that he did not have early knowledge, but once he found out he chose to move. Much of the best analysis of the days leading up to the battle has been conducted in German, towards the beginning of the last century. It is necessary at this point to examine the work of three key scholars, Beloch, Miltner and Judeich.[514]

Beloch argued that, until the time he arrived at Mallus, Alexander knew nothing at all of Darius' movements. If he did know, then he would not have undertaken his campaign in south-west Cilicia. He goes on to argue that at the same time as Alexander arrived at Mallus, Darius arrived at Sochi.[515] He further notes that Alexander must have travelled to Myriandrus with only his cavalry, given that he covered the ground in only 48 hours.[516] Beloch then seizes upon a single line in Curtius[517] that has Alexander wait for the enemy in the mountain passes as proof that Alexander used the storm simply as an excuse not to advance to Sochi, claiming that he had no intention of moving out of Cilicia. He then goes on to postulate that the only reason Darius advanced was that Alexander "had not done him the favour of descending on to the plain". He also believes that Darius remained at Sochi for some considerable length of time. Since Alexander

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[512] C.200 miles.
[513] Diodorus 17.32.3; Curtius 3.8.12; Plutarch *Alex.* 20.6; Arrian 2.11.9-10.
[514] As summarised in Murison, 1972, 411*ff.*
[515] Beloch, 1923, vol.2, 362.
[516] Arrian 2.6.2.
[517] Curtius 3.7.8-10.

marched from Mallus immediately upon hearing of Darius' arrival at Sochi, he must have arrived at Myriandrus while Darius was still at Sochi, the latter's advance coming a little later. On this reading, Darius was not close behind Alexander at Issus and the report that the two armies missed each other in the night is "absurd."[518]

Beloch also argues that Darius arrived at Sochi in late August, and the battle was fought in late September; meaning that the two armies faced each other across the Beilan pass for around one month before the battle. After this stalemate, according to Beloch, Darius divided his army, taking the more mobile elements north, across the Amanid gates with the intention of forcing a battle. He cites Aeschines' speech *Against Ctesiphon* in support: Aeschines states:[519]

> when Darius came down to the coast with all his
> forces and Alexander was penned up in Cilicia
> lacking all resources, as you yourself said, and was,
> according to your account, on the point of being
> trampled underfoot by the Persian cavalry.

Beloch argues that there must have been a stalemate of the kind he envisions, lasting some time, in order for such an account to have gained widespread acceptance only three years after the battle.[520]

Murison describes Beloch's theory as "perversely ingenious";[521] its main problem is that it rests on one key, yet entirely unsupported, piece of evidence; namely that Alexander arrived at Mallus at the same time[522] as Darius arrived at Sochi. Beloch's theory can be rejected after a close examination of Curtius: Alexander made the decision to wait in the narrows[523] of the mountains whilst at Issus; and he did not move south towards the Pillar of Jonah until the same night Darius came to the Amanid gates.

The Aeschines passage could also easily be interpreted differently, if we see it as representing the general position at that instant; i.e. Alexander had been at Tarsus for some time, and Darius had delayed at Sochi. Demosthenes, whose hostility to Alexander is well known, could have used these simple facts to argue for Alexander being penned up in Cilicia: the point about the Persian cavalry is also one that Demosthenes would be likely to have made.

Neither Curtius nor Aeschines support Beloch; his theory also falls down upon examination of a passage of Callisthenes, preserved in Polybius. Callisthenes states that:[524]

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[518] Beloch, 1923, vol.2, 364 (both quotes)
[519] Aeschines *Against Ctesiphon*, 164. The speech was delivered in 330, only three years after the battle. In this section of the speech the orator is addressing Demosthenes.
[520] Beloch, 1923, vol.2, 365.
[521] Murison, 1972, 413.
[522] Or at least with a very small time lag either way.
[523] Curtius 3.7.8-10. Curtius is the only source to have Alexander making this decision.
[524] Polybius 12.17.2-3

> Alexander had already made his way through the narrows and the so called 'Gates of Cilicia',[525] while Darius, making use of the passage through the so called 'Amanid Gates', had come down into Cilicia with his army. Learning from the natives that Alexander was heading in the direction of Syria, he followed, and as he drew near to the narrows camped by the River Pinarus.

In the words of Callisthenes, Darius and Alexander could not have faced each other across the Beilan pass for a month prior to battle. Beloch's theory, whilst interesting, is not supported by the sources.

Franz Miltner[526] uses Alexander's well-known strategy of conquering the Persian fleet by land,[527] along with Alexander's fears of events in the Aegean that made him hasten to the coasts of Cilicia and Syria/Phoenicia, as the basis for his theory. Miltner believes, simply, that it was the sea ports of the eastern Mediterranean that were Alexander's prime targets in late 333, not Darius. With this goal in mind, Alexander is thought to have moved along the coast of the Gulf of Issus to Myriandrus, which Miltner sees as being 16km *south* of the Beilan Pass.[528] Miltner believes that Alexander had no intention of moving to meet Darius; if he had, then it would have been easier to move across one of the northern passes and advance to Sochi from the north,[529] rather than travel through Cilicia. The northern passes, then, were left deliberately unguarded by Alexander as a means of enticing Darius into Cilicia. Once Parmenio sent news to Alexander that Darius was moving north,[530] Alexander hastened south from Mallus, past Issus, to avoid the army being cut in half. In support of his theory that Darius was not Alexander's target, he lays considerable stress upon the wording of Arrian.[531] He interprets the text of Arrian at this point to say "as *though* in the direction of Darius"; but this interpretation is heavily criticised by Bosworth and Hamilton,[532] who claim that Arrian never uses "*ὡς ἐπί*" to indicate a feint.

Murison[533] dismisses Miltner on three counts: firstly there is no evidence at all of a coastal route from central Cilicia to south of the Beilan Pass;[534] the only evidence we have in the sources for a route south across this range is the Beilan Pass and the Pillar of Jonah. Secondly, he claims Miltner is overly subtle in his interpretation of the language

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[525] This must be a reference to the Pillar of Jonah.
[526] Miltner, 1933, 69-78.
[527] Arrian 1.19.3.
[528] Miltner, 1933, 71-3.
[529] This, of course, assumes that Alexander was aware of the northern passes, which is far from certain.
[530] Parmenio was stationed at the Beilan pass at this time, not far from the Persian position at Sochi.
[531] Arrian 2.6.2.
[532] Bosworth, 1980, 201. Hamilton, 1956, 26*ff*.
[533] Murison, 1972, 416-17.
[534] This is far from a fatal flaw: a trip inland and across the Beilan Pass would not have taken too much longer, and certainly would not have delayed Alexander sufficiently for Darius to move from Sochi to catch him as he crossed through the pass.

of Arrian, which really does not support his theory. Finally, Murison claims that Miltner's theory falls down on its inherent improbability: that Alexander would choose to avoid a battle that he knew he would have to fight at some point; and that the only result of this manoeuvre would be to place the Persians directly across his lines of communication and supply. Despite Murison's dismissal, Miltner's theory has some merit; namely that he has Alexander essentially attempting to draw Darius onto ground of his choosing, as Alexander so often does. With some modifications, I believe Miltner's theory can be used to understand the actions of both sides in the lead up to the battle.

Judeich suggested that in the spring of 333 Alexander left Gordium and travelled eastwards, along the Royal Road that led from Sardes to Susa. Alexander's sudden change of direction, towards Cilicia, was due to intelligence he received that Darius was approaching Cilicia from a more southerly route.[535] Darius, on the other hand, upon arriving at Sochi took pains to conceal his position and straddled the approaches to all of the Amanus crossing points with small detachments. Darius' aim was that he would gain exact intelligence of Alexander's position and movements so that he could strike at the exact time and place to give him the greatest chance of victory.[536] Judeich's analysis forgets two key points: firstly that Alexander's intelligence system[537] was, by modern standards, poor; thus it is unlikely that he would have had such advanced knowledge of Darius' movements. Secondly Alexander's stated strategy of defeating the Persian fleet on land[538] meant a move into Cilicia, and then south, was essential. This inevitable move south by Alexander was evidently anticipated by Darius, given his move to Sochi; for he ordered the Greek mercenaries that had formerly been under the command of Memnon to land at Tripolis in Phoenicia.[539] Sochi was an excellent position for Darius to occupy as it allowed easy access to Phoenicia, if Alexander chose to move south, and similarly easy routes to the north if he chose to strike inland.

Judeich's theory continues with Alexander dividing his army at Tarsus and sending Parmenio south[540] to dislodge the Persians from the Beilan Pass and the Pillar of Jonah, and to occupy them in anticipation of Alexander's move south. This would have given Darius a clear indication of the future direction of Alexander's army, given that Darius' troops occupying the northern pass were apparently left unmolested. The Persian plan, according to Judeich, had been to fall upon the Macedonians as they emerged from whichever pass they took to cross the Amanus Mountains. A new plan was then formulated whereby the Macedonians would be allowed to cross the Amanus range whilst the Persians cut off their lines of supply and communication by moving through the northern passes. Darius would then be able to follow Alexander south, forcing him on to the plain of Sochi where his superior numbers could be most effectively used.[541] Wilcken and Hamilton[542] both follow this element of Darius' strategy, as interpreted by

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[535] Judeich, 1929, 355-361.
[536] Judeich, 1929, 357, this is not supported by the sources, but would have been tactically very sensible.
[537] Marsden, 1964, 2.
[538] Arrian 1.19.3.
[539] Arrian 2.2.1-13.2-3; *cf.* Curtius 3.8.1.
[540] Curtius 3.7.7.
[541] Judeich, 1929, 358.
[542] Wilcken, 1932, 101; Hamilton, 1969 on Plutarch *Alex* 20.5.

Judeich. Thus Darius moved across the northern passes and paused at the pass of Kalekoy to allow Alexander to move south before following;[543] arriving at Issus not long after Alexander had left. Alexander was fortuitously delayed by a storm whilst at Myriandrus; however, this allowed intelligence of Darius' movements to reach him in time to turn around and face the Persians on ground advantageous to him.[544]

This theory is, like many others, very interesting in places; particularly the evident concentration on the reconnaissance capabilities of the two armies, an area which we must understand if we are fully to appreciate the movements of both sides. It seems likely that Alexander had no direct knowledge of the location of Darius until Parmenio's leading elements made contact with him, as they occupied the southern passes. We know that Alexander sent Parmenio south, with around half of the army, while he was at Tarsus;[545] before he moved south west towards Soli. Beloch[546] calculated that it was around one month from Alexander's leaving Tarsus to his arrival at Mallus, where he received news of Darius' location. Judeich believed that Parmenio's advance was rapid, taking no more than four or five days to reach the southern passes, where he sat and waited for new orders.[547] Dittberner reminds us that, given the size of Parmenio's force, it is highly unlikely that reconnaissance and the occupation of the passes were his only objectives.[548] He was almost certainly charged with securing the area for the Macedonians, which would have required some delays. Murison is no doubt right in assuming that Parmenio's advance through Cilicia was slow and cautious, given his ignorance of the location of the Persians initially, and his presumed secondary objectives of securing central Cilicia. This slow progress of Parmenio and his forces is implied by Arrian, and Bosworth[549] points out that Arrian's claim that Darius' baggage train reached Damascus before the battle implies considerable delay between Darius' reaching Sochi and the battle itself; thus there was no need for Parmenio to hurry.[550]

We can presume, then, that Alexander was reasonably well informed of Darius' movements from Parmenio; but what of Darius' intelligence? The inhabitants of the region of Cilicia were not Greek, and thus had no particular reason to welcome Alexander. Both Diodorus and Curtius[551] tell us that the locals were not enthusiastic about Alexander's presence and were loyal to the Great King. Arrian[552] also takes this

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[543] Murison, 1972, 418-19.
[544] A strategy that this thesis will aim to demonstrate was a recurring theme on the part of Alexander.
[545] Arrian 2.5.1.
[546] Beloch, 1923, vol.3, 362, this seems a reasonable enough figure given the time Alexander spent at Soli.
[547] Judeich, 1929, 358, n.2.
[548] Dittberner, 1908, 75-76.
[549] Arrian 2.6.1; Bosworth, 1980, 200.
[550] Judeich, 1929, 356, sees the Persians as deliberately 'leaking' information about the position of Darius to the Macedonian advanced guard after the Persians had set off north. This seems to be to apply a modern 'disinformation' technique to the ancient world and I do not believe it justified; it is certainly not supported by the sources.
[551] Diodorus 17.32.4; Curtius 3.8.24.
[552] Arrian 2.5.5.

line, telling us that Alexander fined the inhabitants of Soli[553] 200 silver talents because of their continued inclination towards the Persian cause. Persian supporters in Soli could easily have travelled by boat to the Orontes River to report Alexander's activities to Darius. Coastal towns no doubt had a significant fishing fleet;[554] we know that Alexander had no difficulty in finding a ship at Myriandrus to verify Darius' position behind him.[555]

From Darius' point of view at Sochi, he would have known that Alexander was conducting a campaign with part of his force in 'Rough' Cilicia. He would also have learned from the guards he had posted at the southern passes that Parmenio had moved south to occupy those passes, also with a considerable force. From the guards he probably posted at the northern passes,[556] he would have received no information about troop movements on the part of the Macedonians. These three key pieces of information would have led Darius to conclude that Alexander's forces were divided roughly in two; and that, if he acted quickly, he had an opportunity to drive a wedge between them.[557] It is entirely likely, therefore, that Darius intended to cut the Macedonian army in half and deal with the two separate elements individually.[558] If this strategy of Darius is correct, the only way it had a chance of success is if he marched with the utmost speed. The theory is supported by two pieces of evidence: first that Darius dispatched his baggage train south to Damascus; this would have been the part of the army that would most encumber him and prevent a lightning march. Secondly, Plutarch[559] tells us of Darius making a night march, the march in which the two armies passed each other during the hours of darkness.[560]

Bosworth[561] points out two other motivations for Darius' movements: the first, that Darius was a "military hero in his own right", and thus would not be prepared to wait too long for a numerically inferior opponent. This is a reasonable enough theory, but if Darius was a reasonably talented commander then he would have realised that his best chance of success was on a wide open plain, such as he chose initially, and then chose again at Gaugamela. Bosworth's second point is perhaps more important: Darius may have been running short of supplies. The grand army had been in the field for some months, crossing land that was not overly fertile; Alexander, on the other hand, could

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[553] Soli had been founded by Rhodians around 700, and as a result Bosworth calls the city Greek. By the fourth century, however, the city was thoroughly Persian, being a major population centre and the minting centre for the satrapal coinage of Pharnabazus, Tiribazus and Mazaeus: Bosworth, 1980, 195.
[554] Murison, 1972, 420.
[555] Arrian 3.7.3.
[556] That Darius posted guards at the northern passes is supposition, but reasonable supposition.
[557] Murison, 1972, 420.
[558] Murison, 1972, 419-23; *contra* Bosworth, 1980, 200-1, who argues that there is no evidence that the Macedonian army was divided. But this cannot be the case, as we explicitly know that Parmenio was sent to occupy the southern passes with around half the army, and Alexander was campaigning in 'Rough Cilicia' with the other half.
[559] Plutarch *Alex*, 20.3.
[560] The story of the two armies missing each other narrowly during the night is very dubious; as noted in fn. 565 the armies were separated by 48km and a mountain range. The idea of the Persians making a night march need not be automatically rejected.
[561] Bosworth, 1988, 59.

easily be supplied from the sea.[562] Darius therefore took this opportunity to bring an end to the perceived stalemate.[563]

Once Darius' decision had been made, he had to move with extreme haste. It was imperative, if the plan was to succeed, that he reach the plain of Issus via the Kalekoy Pass before Alexander reached it via the Kara Kapu Pass: this need for haste is precisely why Plutarch[564] has Darius making a night march.[565]

Plutarch[566] gives us a piece of information which tends to be ignored, but perhaps supports the theory of Darius attempting to catch Alexander unawares; he states "During the night they missed one another and both turned back".[567] We have already noted that both armies conducted a night march, and we will see Alexander turning his army around; but apparently Darius also tried to turn back. Plutarch goes on to say "Darius was no less eager to extricate his forces from the mountain passes and regain his former camping ground in the plain".[568]

These passages from Plutarch would tend to support the theory that Darius intended to drive a wedge between the two elements of Alexander's army;[569] realising that he had been too slow, however, he wished to recover his former position at Sochi, but was unable as Alexander brought him to battle rapidly from that point. Darius' innovative strategy had failed, perhaps only by a few hours.

Darius took out his frustration at failing to split the Macedonians in two, upon the Macedonian field hospital at Issus, mutilating those whom Alexander had left behind.[570] Realising that he could not safely retreat to Sochi by retracing his steps, lest he be surprised by the Macedonians whilst unprepared for battle, and also that Alexander lay to his south, thus restricting his movement in that direction, Darius set about finding the most suitable place to conduct a battle. He would have also realised at this point that, despite the failure of his strategy, he still lay in a very good position, across the lines of supply and communication of the Macedonians. With this in mind, the day after the

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[562] However, Bosworth fails to note that Alexander had supposedly disbanded most of his fleet (Arrian 20.1), making the kind of supply he envisions difficult. As argued above, however, Alexander may have disbanded only a small fraction of his fleet in 334. Alexander's being supplied by sea also assumes that his supply ships did not encounter resistance from the Persian navy, most of which was engaged on the coast of Asia Minor and the Aegean Islands, rather than supporting the Persian land operations, as may have been expected

[563] Curtius 3.8, adds that Darius intended all along to give battle in Cilicia; this can only be true if he intended to offer two separate battles, one with each half of the Macedonian army.

[564] Plutarch *Alex.* 20.3.

[565] Hamilton, 1969, 51, notes that Plutarch perhaps envisaged the two armies marching close by each other and missing each other during the night; the routes of the two armies, however, lay some 48km apart and were separated by the Amanus Mountains. It is no surprise at all, therefore, that neither knew of the other's movements.

[566] Plutarch *Alex.* 20.3.

[567] My italics added for emphasis.

[568] Plutarch *Alex.* 20.4.

[569] Noting Bosworth's objection that there is no evidence in the sources of the army being divided in two; Bosworth, 1980, 200-1.

[570] Arrian 2.7.1.

massacre, Darius moved south from Issus and made preparations on the banks of the Pinarus River. Upon hearing Darius was at Issus, Alexander dispatched a part of the Companions and a ship from Myriandrus to verify the report; that done he simply turned his army around and made for the river: this is a fine example of the discipline of the Macedonian army.[571]

Before going on to discuss the battle itself, there is one final element of the preliminary movements of the protagonists that we must examine: why did Alexander move south of the pillar of Jonah? why did he not remain in the plain of Issus to await Darius? In the sources we have, as we did at the Granicus, two entirely different accounts of Alexander's strategy. Arrian presents the campaign as purely offensive. Curtius, on the other hand, has Alexander adopting a defensive posture, essentially on the advice of Parmenio, just prior to the battle.[572] On this reading, we have two mutually incompatible accounts, but this is only if the account of Arrian is misinterpreted. Arrian presents Alexander as moving to Myriandrus, at which point he would move to engage Darius at Sochi. Curtius, likewise, has Alexander move south of the Pillar of Jonah, out of the plain of Issus and into the much smaller area[573] enclosed by mountains and passes on all sides: specifically the Pillar of Jonah to the north and the Beilan Pass to the east.

Arrian tells us:[574]

> He (Alexander) at once called a meeting of his staff and told them this important news (that Darius was still at Sochi). They urged unanimously an immediate advance. Alexander thanked them and dismissed the meeting, and on the following day moved forward with the evident intention of attack. Two days later he took up a position at Myriandrus, and during the night there was a storm of such violent wind and rain that he was compelled to remain where he was, with no chance of breaking camp.

There are several problems: firstly, if Alexander intended to move against Darius at Sochi, why would he continue south-west to Myriandrus after passing the Pillar of Jonah? why not travel south-east to the Beilan pass? The storm that caused the delay is also puzzling; there is no hint of a storm in any of the other sources, and no hint in Arrian that the storm delayed the progress of the Persians, who had to cover in excess of 130km[575] from Sochi to Issus via the northern passes in a very short period of time. Beloch[576] was the first to suggest that the storm was an apologetic fiction[577] used by Arrian to delay Alexander and allow Darius to appear behind him, essentially covering up the fact that Alexander was conducting a defensive campaign, as presented in Curtius.

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[571] Arrian 2.7.2.
[572] Devine, 1985, 25.
[573] The plain of Myriandrus.
[574] Arrian 2.6.2.
[575] Bosworth, 1980, 201.
[576] Beloch, 1923, vol. 2. 263.
[577] Supported by Bosworth, 1980, 201.

Alexander in fact had no intention of being drawn into a battle on Darius' terms. As in almost all of his campaigns, the battle was to be fought on ground of Alexander's choosing. Alexander, therefore, moved towards Myriandrus because it was far more defensible than the Issus plain; it was far smaller, and Myriandrus was closer to the key passes to the east and west than Issus was to the passes to the north and south. A camp at Myriandrus, therefore, could easily defend the plain.

Plain of Issus

Correctly identifying the location of the Pinarus River is important but not critical to our understanding the battle. The rivers in that region appear similar enough that whichever one is correct, the battle would have occurred along more or less the same lines; an attempt must still be made, however, at a correct identification.[578] Polybius,[579] whilst criticising the account of Callisthenes, gives us the most detailed description of the battlefield. Callisthenes tells us that the plain of the battlefield was fourteen stades from the coast to the foothills of the Amanus Mountains, and that the river flowed at right angles to both.[580] Callisthenes also tells us that the river was difficult to cross, possessing precipitous banks along the whole of its length. Bosworth notes that elsewhere in his text Polybius[581] tells us that Alexander was 100 stades from Darius when he learned of the latter's presence in the plain. Devine further noted Callisthenes' statement that Alexander made an approach march of 40 stades in extended order.[582] Curtius[583] adds the information that on the approach march to the battle, Alexander reoccupied the coastal ravines known as the Cilician Gates, usually referred to here as the Pillar of Jonah. Diodorus also gives us an approach march of 30 stades, and unhelpfully adds that Alexander pursued Darius for 200 stades after the battle.[584] Historians have drawn three conclusions from these data as to the identification of the Pinarus River. One of the earliest concerted attempts to identify the river was by Delbrück;[585] he associated the river with the modern Payas. The Payas runs about 20km north of Iskanderun;[586] it also fulfils the criteria of possessing steep banks, and the plain upon which it sits is narrow, approximately 4km wide.[587] The Payas hypothesis was, however, strongly attacked by Janke in his meticulous study.[588] Janke carefully estimated the distances between the key rivers in the plain, and his proposed (and probably incorrect) site for Myriandrus, which he locates close to the modern Iskanderon.[589] Janke attacked the Payas theory on two

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[578] Although the attempt is always ultimately futile, given the frequent changes in the courses of the rivers in that region over the centuries.
[579] Polybius 12.17.4-5.
[580] Which is to say it flowed down from the foothills and directly towards the sea.
[581] Bosworth, 1980, 203. Polybius 12.19.4.
[582] Devine, 1985b, 42. Polybius 12.20.1.
[583] Curtius 3.8.23.
[584] Diodorus 17.37.1-2.
[585] Delbrück, 1920, 185; Translated into English by Renfrew, 1975, 191-209, all future references to Delbrück's work will be to this translation of the text.
[586] Bosworth, 1980, 203.
[587] Corresponding approximately with Callisthenes' stated width of 14 stades.
[588] Janke, 1910, 137*ff*.
[589] Janke's location of Myriandrus is probably incorrect because, as noted by Devine, 1985b, 42, Xenophon (*Anabasis* 1.4.6) locates Myriandrus five parasangs (*c*.150 Stades) south of the Cilician Gates.

main grounds, the first that there is no room for the 40 stade approach march made by Alexander and described in Callisthenes;[590] 40 stades south of the Payas would place Alexander still well within the coastal defiles of the Cilician Gates, an area that he had cleared by the time the march began.

Janke's second objection was that at no point along the banks of the Payas does the topography allow for the cavalry charge mentioned in Arrian.[591] In suggesting a site himself, Janke[592] chooses to ignore the distance values given in the sources in favour of what would seem to be an almost entirely topographically based theory; his suggested river is the Deli Cay, 11km north of the Payas.[593] This river does indeed fit many of the topographical criteria; it is suitable for Arrian's cavalry charge and the banks are generally not steep and easily negotiable by infantry.[594] The ground south of the river would also allow the 40 stade[595] approach march. This cannot be the river, however, as it is 31km north of Iskanderon which itself is no doubt situated well to the north of the ancient Myriandrus, if Xenophon is in any way reliable.[596] The Deli Cay, moreover, does not correspond to Callisthenes' description of the river; its banks are far too smooth. A certain positive identification can never be reached, but we should make one final note; none of our sources describe the Pinarus as the largest river in the Issus plain and therefore other, lesser streams need to be considered. Bosworth,[597] following Kromayer, notes the Kuru Cay, 3km north of the Payas, fits the description of having precipitous banks in places, but also being suitable for a cavalry charge in others. Stark,[598] independently of Kromeyer, arrived at the same conclusion after travelling through the region; but any conclusion based on modern topography is flawed, as noted above, given the shifting positions of the rivers in question.

The Battle of Issus

Once Darius had advanced to the plain of Issus, taking up a position at the Pinarus River, Arrian presents us with a picture of Alexander being shocked and not believing in his scouting reports. When the reality of these reports had been established, Alexander made a speech, as he frequently did, to exhort the troops before advancing.[599] The historicity of the speech, as with all of the other pre-battle speeches, has been much discussed.[600] Tarn believed them to be entirely fictitious, but Bosworth[601] notes enough similarities between the various versions of the speech to suggest a common source,

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[590] Polybius 12.20.1.
[591] Arrian 2.10.3; 2.10.5.
[592] Janke, 1910, 155-162.
[593] Bosworth, 1980, 203; Devine, 1985b, 42, calls it the Deli Tchai.
[594] Stark, 1958, 6.
[595] Roughly 7.4km.
[596] Devine, 1985b, 43.
[597] Bosworth, 1980, 204.
[598] Stark, 1958, 6.
[599] Arrian 2.7.3-9.
[600] Such as that before the siege of Tyre, Arrian 2.17.1. For a general discussion of the feasibility of formal speeches to a whole body of troops prior to battle see Hansen, 1993, 161-180 (against); Pritchett 1994, 27-109 (for); Clark, 1995, 375-6 (for); Erhardt, 1995, 120-1 (for).
[601] Tarn, 1948, 2.286. Bosworth, 1980, 204.

probably Ptolemy.[602] Despite the likelihood of a common, original source, it seems highly unlikely that Alexander would have presented the Persians, at this time, as cowards,[603] and why Ptolemy should wish to portray them as such seems equally puzzling. We may conclude that although the speech came from Ptolemy, it probably did not come ultimately from the mouth of Alexander.

Once Alexander had addressed the troops he began the movement towards the Persians. The advance occurred in three stages: initially an advance force of cavalry and archers was sent to secure the coastal defiles, the route by which Alexander would have to return to the Pinarus, while the rest of the army was instructed to eat a meal and rest in preparation for the coming battle.[604] The second stage occurred after nightfall: Alexander and the remaining elements of the army moved to occupy the "narrow gateway",[605] presumably the Pillar of Jonah. The passage was secured around midnight, and the men were allowed to rest for the remainder of the night. The third stage of the advance began at the third trumpet call,[606] just before dawn, the following morning; the whole army marched in column along the coast road. As the army advanced out of the foothills, and as space began to open up, the frontage was gradually extended as heavy infantry were brought up, one *taxis* at a time until the Macedonian right was touching the foothills to the east and the left of the line was touching the sea coast.[607] It is evident from Polybius'[608] description that Alexander placed his heavy infantry at the head of the column with the cavalry and other infantry units further back. This may be seen as something of a departure from the normal order of march with lighter, more mobile troops at the front. We hear no mention of the hypaspists or Agrianians during this stage of the advance, through broken ground, indicating that Alexander may have expected to be attacked while on the march; he was far from certain that Darius would actually wait for him at the Pinarus, and so he had to prepare for that eventuality. As the heavy infantry entered the plain, the infantry was able to deploy in battle array, at first thirty two ranks deep, thinning to sixteen and finally eight ranks.[609]

Macedonian Order of Battle

Devine[610] notes that Alexander's primary tactical problem was how to effect a central penetration of the Persian line without being outflanked; a problem that was central to every one of Alexander's set piece battles, particularly given that he was consistently greatly outnumbered. The solution on the left flank was made easier by the

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[602] Arrian 2.7.3-9; Curtius 3.10.3-10; Justin 11.9.3-4. In the speech, Arrian places more emphasis upon the coming battle and its significance, whereas Curtius emphasises former achievements up to and including the battle of the Granicus River.
[603] Arrian 2.7.4; *cf.* Curtius 3.10.6 & 9.
[604] Arrian 2.8.1, while Alexander himself climbed a nearby high ridge and made sacrifice to the local deities, Curtius, 3.8.22.
[605] Arrian 2.8.1-2.
[606] Curtius 3.8.23.
[607] Arrian 2.8.2.
[608] Polybius 12.19.5-6: the account comes from Callisthenes and is the fullest description of the advance; cf. Arrian 2.8.2.
[609] Polybius 12.19.5-6; *cf.* Arrian 11.8.2; Curtius 3.9.12.
[610] Devine, 1985b, 49.

presence of the sea: Parmenio, initially with only the Allied Greek cavalry, was given strict orders to maintain a link between the sea and the Macedonian centre.[611] The heavy infantry was, as always, deployed in the centre according to a strictly adhered-to code of honour. The greatest position of honour, on the right of the heavy infantry, was occupied as always by the hypaspists, under Nicanor; Parmenio's son. Following these from right to left were the *taxeis* of Coenus, Perdiccas, Meleager, Ptolemy,[612] Amyntas, and Craterus on the left, next to Parmenio's cavalry.[613] At the initial stage of disposition, the Thessalian cavalry, the Companion Cavalry, the Paeonians and the *prodromoi* were all deployed to the right of the hypaspists, along with Alexander himself; indicating that Alexander planned a massive cavalry strike from that area towards the Persian centre: a strategy that was not at all original, but the size of the force was. Positioning so much of the cavalry force, some 4,500 men,[614] to the right, left Parmenio dangerously undermanned on the extreme left, commanding as he did only around 600 cavalry;[615] a problem that Alexander would realise and rectify later. To the extreme right of the army were positioned the Agrianians and archers, along with some unspecified cavalry unit as a precaution to protect the right flank from the few Persian troops that had been stationed in the foothills.

The strength of the Macedonian army at Issus was very similar indeed to that at the Granicus; there were, however, two new missile units, the Thessalian javelin men and the Cretan archers. The Greek allied troops and the Greek mercenaries are not mentioned during the battle, and were perhaps used as a second line, much as will be seen at Gaugamela, or, more likely, were left to guard the Pillar of Jonah and other key strategic points in the region. Alexander's front line strength at Issus was around 5,100 cavalry and 14,000 infantry.[616]

Certain conclusions can be drawn from Alexander's initial dispositions: that he intended a defensive action on his left seems clear; Parmenio was not given enough troops to do anything else. That the main thrust of the attack was to come in the form of the cavalry on the right seems equally clear. The heavy infantry were stationed in the centre as usual, but we can not speculate upon their orders simply from their positioning; they could be intended to be offensive or defensive, only time would indicate their true purpose. The initial dispositions, then, were very similar to every one of Alexander's set piece battles; there appeared little innovation at this point.

Persian Order of Battle

By the time Alexander arrived on the battlefield, Darius had already deployed his troops. His dispositions strongly indicate that he had a well developed tactical position.

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[611] Arrian 2.8.4.
[612] Son of Seleucus rather than the historian, Ptolemy son of Lagus.
[613] Curtius 3.9.7-8; Arian 2.8.4.
[614] Diodorus 17.17.4, establishes the approximate numbers as follows: Companions, 1,800, Thessalians, 1,800, Prodromoi and Paeonians c.750. There had been reinforcements of 300 companions and 200 Thessalians since 334 but these would mainly have replaced losses.
[615] Diodorus 17.17.4; Arrian 2.8.9; 2.9.2; Curtius 3.9.8.
[616] Ashley, 1998, 225.

Darius evidently had studied Alexander's dispositions at the Granicus, and expected Alexander to deploy in much the same way. To counter the central strength of the Macedonian heavy infantry, he deployed his Greek mercenary troops in the centre,[617] under the command of Thymondas whom Darius had recalled from the Aegean to take this command.[618] The Greek mercenaries were stationed along a stretch of banks between 500m and 1.6km from the coast.[619] In this area the banks were steep enough to remove the possibility of attack from cavalry.[620] Deploying Greek mercenary troops in this area was tactically very sound indeed - the steep banks would make an assault by cavalry impossible, and would severely disrupt the Macedonian heavy infantry. Adding to the defensive strength he created several abatis, essentially temporary defensive palisades,[621] at the most vulnerable points. Arrian and Curtius, following Callisthenes,[622] both give the strength of the Greek mercenary force at 30,000, but given their location this must be a serious overestimate. They were stationed opposite the hypaspists and *pezhetairoi*, which themselves numbered 12,000, and as they did not seriously overlap the Macedonians we can assume that, if their depth was the same as their opponents', their numbers would have been similar.[623]

There is considerable disagreement in the sources regarding the Persian order of battle, particularly with regard to the infantry. Arrian shows little interest in the minutiae of the Persian line-up, apart from the front line, and those troops that Darius posted in the foothills to the extreme left of his line. With the exception of these troops Arrian makes specific reference only to the Greek mercenary infantry and to the Cardaces,[624] whom he describes as hoplites, clearly believing them to be heavy infantry. Arrian states clearly that the Cardaces were stationed to either side of the Greek mercenaries and numbered 60,000.[625] Callisthenes,[626] however, tells us equally clearly that the Persians drew up their cavalry next to the sea with the Greek mercenaries next to them, a group of peltasts to their left stretching all the way to the Amanus Mountains. Given the limitations of space in the plain, and the large mass of cavalry by the seashore, it seems highly unlikely that Arrian could be correct that the Cardaces were posted to either side of the Greek mercenaries. The Cardaces, in all likelihood, should be identified with the peltasts of Callisthenes. These peltasts were stationed along the mid section of the Pinarus River, between 1.6km and 3.5km from the coast. This section of the river was virtually impassable even for light infantry: their main function was to screen the left of the Greek mercenaries and defend against small scale crossings by the Macedonians. Light infantry

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[617] Arrian 2.8.6.
[618] Curtius 3.8.1.
[619] Devine, 1985b, 47.
[620] Arrian 2.10.1; 2.10.5. The description comes ultimately from Callisthenes, who described the banks as "precipitous and inaccessible": Polybius 12.17.5.
[621] Arrian 2.10.1.
[622] Arrian, 2.8.6. Curtius 3.9.2. Polybius 12.18.2.
[623] Although we must note that there is no indication in any of the sources as to what their depth actually was; it could be that they were 16 or 20 deep which would put their numbers at 24,000-30,000.
[624] Arrian 2.8.6; *cf.* Polybius 12.17.7.
[625] Arrian 2.8.6.
[626] Polybius 12.17.7.

could also be used to move rapidly up or downstream to oppose a breakthrough by the Macedonians.[627]

If we are right in associating the Cardaces[628] with the peltasts of Callisthenes, then Arrian is clearly wrong in calling them hoplites; they are also not an attempt by the Persians to develop a native force that could oppose Greek hoplites.[629] Arrian no doubt simply made the error of assuming that in ancient warfare the centre of the line was invariably occupied by the heaviest infantry that were available. If Arrian was assuming this then it is understandable that he therefore believed the Cardaces to be hoplites, when in reality they were light-armed peltasts. Having said this we must remember that the Macedonian *pezhetairoi* and hypaspists were essentially peltasts themselves, possessing very little defensive armour and only a small shield. Given that they are almost always referred to as a phalanx, and thus regarded as being heavy infantry, we should not be too quick to label the Cardaces. Expressions like heavy infantry, light infantry, peltasts and skirmishers invite conclusions about their abilities and likely deployment which are not always valid.

The Persian order of battle, then, seems to have been as follows:[630] the extreme right was the heavy cavalry commanded by Nabarzanes,[631] screened by a group of slingers and archers. Next to these were the Greek mercenary infantry in their prepared defensive position and commanded by Thymondas. Then came the Cardaces, perhaps 20,000 strong or slightly more given their frontage, commanded by Aristomedes, a Thessalian mercenary commander. Beyond these were stationed the Hyrcanian and Median cavalry along with a group of unspecified Persian cavalry and a detachment of javelin men and slingers deployed in front of them. Behind the Persian front line was a reserve force of infantry for which Curtius gives the probably inflated figure of 40,000,[632] and Darius himself along with his 3,000-strong cavalry guard. It is likely that Curtius is correct in the location of Darius behind the front line, despite Arrian's[633] seeming to place him in the centre of the front line; Persian monarchs did not typically fight at the front. Arrian[634] is cautious about giving the total number of Persian troops at 600,000, reporting it as hearsay, although Plutarch[635] gives the same figure. Diodorus and Justin report 400,000 infantry and 100,000 cavalry, whilst Curtius gives the lowest estimate, 250,000

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[627] Devine, 1985b, 47.

[628] See Bosworth, 1980, 208, for a description of Cardaces in the sources outside of the career of Alexander.

[629] Ashley, 1998, 225. It is a possibility that the Persians were in fact attempting to develop a force similar to the Macedonian heavy infantry and this has been consistently misunderstood as an attempt to match a standard Greek Phalanx. The Persians had, after all, had the opportunity to witness the dominance of Macedonian infantry over those of the city states during Philip's rise to pre-eminence in Greece.

[630] Curtius 3.9.1-6.

[631] Curtius 3.11.5.

[632] Curtius 3.9.5.

[633] Arrian 2.8.11.

[634] Arrian 2.8.8.

[635] Plutarch *Alex.* 18.6

infantry and 62,000 cavalry.[636] All of these estimates may be too high but it is likely that Alexander was, as usual, heavily outnumbered.[637]

Curtius explicitly lays out Darius' tactics for the battle: he at first intended to occupy the foothills with a force in excess of 20,000, intending to make an encircling movement "both in the front and in the rear".[638] On the seaward flank he apparently planned a similar operation: Darius, therefore, planned a double encirclement that would press Alexander from every direction. The strategy was sound if the topography allowed for it, as it had for the Persians at Cunaxa, and would at Gaugamela. At Issus, however, the plain was narrow and Alexander's flanks were protected by the sea to the west and the Amanus Mountains to the east. Alexander had lured Darius to the Issus plain for this very reason.

Darius was no fool and realised that the plain was unsuitable for the double envelopment that he had planned, and his modified tactics demonstrate this. Devine[639] notes that there were several changes to this preferred plan, firstly the strong defensive position along the river bank already discussed. The second change was far more complex and involved two phases: in the first, the advance guard of the Persian army, consisting of cavalry,[640] archers and some light infantry,[641] were to harass the Macedonian column on the seaward side, as it advanced onto the plain. This sound stratagem was disrupted by Alexander deploying his heavy infantry in deep order to cover his deployment.[642] The second phase was to threaten an attack against Alexander's right flank, essentially to feign the envelopment strategy that had initially been planned. Once this had been accomplished they were to retire to the foothills and await the passing of the Macedonian flank, and this would present the opportunity for a version of the encirclement manoeuvre. The cavalry were quickly withdrawn by Darius once he saw that they would be ineffective in disrupting the Macedonians. Bosworth[643] doubts, probably correctly, the numbers of cavalry involved: 20,000 would be an extremely unwieldy force with which to conduct harassment operations, and would seriously disrupt the Persian defensive line as it withdrew across the Pinarus.

The dominant topographical feature of the battlefield was the River Pinarus; for the purposes of examination it can be divided into a number of sections each with very different characteristics.[644] The first section had a stony river bed and shallow banks, perhaps 1-2m high; easily fordable by cavalry. The next section of river was narrow, 4-

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[636] Diodorus 17.31.2. Justin 9.9.1. Curtius 3.2.4-9.
[637] Bosworth, 1980, 209.
[638] Curtius 3.8.27-28.
[639] Devine, 1985b, 48.
[640] 20,000 in number; Curtius 3.8.28.
[641] Curtius, 3.8.27-28; *cf.* Arrian 2.8.5: although Arrian does not mention the archers, there is no reason to doubt their presence.
[642] Devine, 1985b, 49.
[643] Bosworth, 1980, 208.
[644] These descriptions of the three sections of the Pinarus River are based upon information preserved in the sources, and not on an identification of the ancient river with any of the modern rivers in the region, which has been argued is difficult.

15m; its banks were steep and impassable to cavalry except at two narrow fords.[645] The banks in the third section were steep, from 2-4m, effectively prohibiting both infantry and cavalry action. The final section of the river, leading into the foothills, was wide with precipitous banks, a minimum of 3m high rising to 10m in places, the only crossing point being a ford perhaps 3.5km from the sea.[646]

Darius evidently attempted to open the battle by sending a unit of cavalry across the ford on his left wing. It quickly became apparent to him, however, that the narrowness of that ford and the steepness of the banks along that section of the river would seriously hamper any encounter in that area. Ashley[647] has argued that this movement of cavalry was a response to Alexander attempting to lure the Persians across the river: this would tend to fit with the general strategy of always fighting on terrain of his choosing, and of sacrificing a small unit to draw the enemy out of a defensive position; but the fact that the troops were withdrawn by Darius suggests that their movement was proactive rather than reactive on the part of Darius, that he was attempting to open the battle himself rather than reacting to Alexander's lure. Arrian[648] tells us that these troops were quickly withdrawn without an engagement and the bulk of the Persian cavalry strength was transferred to the Persian right. What remained on Darius' left was a relatively small force of cavalry and some light infantry in the foothills who were instructed to attack Alexander's flanks as they attempted to pass the ford. Darius evidently believed that an attack in strength across the upper section of the Pinarus would be difficult to execute but far easier to defend against.

Once it had become apparent to Alexander that the main thrust of the Persian offensive would come against his own left flank, he ordered the Thessalian cavalry to reinforce the left, taking care to conceal their movement behind the infantry.[649] Bosworth notes that Arrian does not give us any information regarding exactly how Alexander managed, or even proposed, to hide the movement of 1,800 cavalry from one flank to the other.[650] He also notes, however, that at the time of the transfer the plain was only just wide enough for some cavalry to occupy ground at the side of the heavy infantry.[651] This cavalry was almost certainly the Companions, and thus the Thessalians were not at the front line at this time. Coupling this with the fact that the infantry would have held their sarissa upright so far from the enemy, and considering the amount of dust thrown up by the movement of tens of thousands of men and horses, it is not difficult to see how such a transfer could have been concealed. We should note the possibility that Alexander had always intended to employ the Thessalians on the left, as he did in every major engagement, and that the fact that the transfer had not occurred before this point is simply an indication of the lack of space in the plain; they would have had to wait until the infantry was sufficiently far advanced on to the plain to allow them to move from the

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[645] Delbrück 1920, 204; Ashley, 1998, 223.
[646] Distance from sea - Devine, 1985b, 49. Topographical data taken from Arrian 2.10.1; Delbrück 1920, 206; Hackett, 1989, 113; Ashley 1998, 222-3.
[647] Ashley 1998, 223.
[648] Arrian 2.9.2.
[649] Arrian 2.9.1.
[650] Bosworth, 1980, 210.
[651] Arrian 2.8.9.

pass, to the left. The counter to this argument, of course, is the fact that both Arrian and Curtius[652] specifically tell us that the Thessalians and Macedonians were posted to the right initially, with only the Peloponnesians on the left.

This enforced[653] movement of the Thessalians prompted Alexander to re-examine the tactical situation on his right flank. On his right, next to the Companions, he now posted the *prodromoi* under Protomachus, the Paeonian cavalry commanded by Ariston and Antiochus' Macedonian archers. To the extreme right Alexander deployed Attalus and his Agrianians and an unspecified unit of cavalry, along with one of archers. It can reasonably be assumed that this unit of cavalry were the Odrysians who are not mentioned in any account of the battle, but are presumably present. This final group on the right wing was drawn up at an angle[654] to the front line and essentially formed the prototype of the flank guards that were so crucial to Alexander's success at Gaugamela.[655] Arrian also tells us that Alexander intended to divide his right wing into two prongs, the first to attack across the river and the flank guard to attack into the foothills. We will see many times during this study that Alexander frequently and deliberately allowed the army to lose its cohesion by separating off sections if it served his tactical purpose; as, for example, at the Granicus and the Hydaspes.

The tactical situation on the left was similar, although far less complex, than on the right. The Thracian javelin-men under Sitalces and the Cretan archers were stationed to the left of the heavy infantry, forming a flank guard and a link with the Greek allied cavalry.[656] This force was entirely inadequate to the task of resisting the charge of the massed Persian *cataphracti* that opposed them.[657]

While the transfer of the Thessalians was occurring, Alexander completed his tactical dispositions by placing the Greek mercenary infantry in their usual position behind the Macedonian heavy infantry as a reserve,[658] as he was to do again at Gaugamela.[659] The contingent supplied by the League of Corinth is not mentioned as taking any role in the battle; but this should not surprise us greatly as Arrian's list of Alexander's dispositions is not comprehensive. He omits, for example, the Odrysian cavalry and Balacrus' javelin-men as well.[660] We can reasonably assume that at least

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[652] Arrian 2.9.1; Curtius 3.9.8.
[653] Assuming, of course, that it was the product of the changing Persian dispositions.
[654] Arrian 2.9.2-3.
[655] Devine, 1985b, 50.
[656] Arrian 2.8.9.
[657] Curtius 3.11.15; and Arrian 2.11.4, both tell us that both horse and rider in the Persian heavy cavalry were covered with plate armour, thus losing considerable mobility. The finest of the Persian heavy cavalry were the Saca horsemen, who played a significant role at Gaugamela (Arrian 3.13.4). The Bactrian and Sogdianian cavalry were not present at Issus (Arrian 3.8.3; Curtius 3.2.9) and the *cataphracti* mentioned at Issus were probably Parthian. There were definitely Hyrcanian cavalry present at Issus (Curtius 3.2.6, 9-5) and it is reasonable to assume the Parthians would also be present given that they seem to have formed a single satrapy (Berve, 1926, 264-5). Curtius 3.9.8-9; Arrian 2.9.1; 2.9.3.
[658] Devine, 1985b, 50. Griffith, 1935, 32, notes that at Gaugamela their line was not continuous; the same may well have been the case here.
[659] Arrian 3.12.1; 3.14.6.
[660] Bosworth, 1980, 210.

some of the 7,000 infantry supplied by the League of Corinth formed a second line along with the Greek mercenary infantry,[661] but their lack of direct involvement in the battle led to them being omitted by our sources.

As Arrian puts it: "Alexander observed a certain weakness on his right",[662] partly because the Persian line was strong and partly because it extended far beyond the Macedonian line into the mountains.[663] Alexander countered this first by moving two *ilai* of Companion Cavalry[664] from closer to the centre to add depth to the *prodromoi* and Paeonians already there, and by adding depth rather than extending the line, their movements would have been partially concealed from the Persians.[665] Callisthenes tells us that Alexander had deliberately avoided deploying into the foothills so as to avoid the Persian skirmishers there, until he was ready.[666] Alexander's final dispositions were to transfer the Macedonian archers from the right of the heavy infantry, the Agrianians and some Greek mercenaries from the reserve line, at the extreme right, into the mountains.[667] This resulted, according to Arrian, in Alexander's line actually outflanking the Persian left.[668] The only remaining troops stationed in the foothills were two *ilai* of cavalry;[669] Curtius seems to imply that they were the same units that were detached from the centre to the right,[670] mentioned above: but it is highly unlikely that Alexander would use such a large number of his elite heavy cavalry on a mission better suited to light cavalry. Devine, probably correctly, suggests that this may have been an attempt by Curtius to simplify Alexander's complex dispositions.[671]

From the Persian perspective, Darius' plan to outflank Alexander by deploying troops in the foothills was entirely sensible, but failed completely due to Alexander's ability to react to the fluid situation on the battlefield. Having said this, the tactical situation on the opposite wing was developing well for Darius. The sources differ widely on the detail of the engagement in this sector; in Arrian the engagement is of little importance, an adjunct to the fighting in the centre and on Alexander's right. Arrian clearly states that "The Persian cavalry facing Alexander's Thessalians refused, once the battle had developed, to remain inactive on the further side of the stream, but charged across in a furious onslaught on the Thessalian squadrons".[672] The fighting was undoubtedly fierce and the Persians did not give way until they saw Darius in flight in the

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[661] Again, as was the case at Gaugamela; Arrian 3.12.4.
[662] Arrian 2.9.3.
[663] Arrian 2.8.7.
[664] The *ilai* in question are those from Anthemus commanded by Peroedas and the so called Leugaean squadron under Pantordanus, son of Cleander; Arrian 2.9.3. Bosworth, 1980, 211, notes that Anthemus was the name of a city, a district and a river, probably in the valley of the Vasilikoitkos River on the shores of the Thermaic gulf immediately south of Thessolonica (Hammond, 1976, 190-1); members of this *ile* had probably received their estates from Philip II.
[665] Bosworth, 1980, 211.
[666] Polybius 12.21.5.
[667] Arrian 2.9.2; *cf.* Bosworth, 1980, 211.
[668] Arrian 2.9.3.
[669] Curtius 3.9.10-11; 3.11.2; Arrian 2.9.4.
[670] Curtius 3.11.2.Atkinson, 1980, 226; Hammond, 1981, 104.
[671] Devine, 1985b, 51.
[672] Arrian 2.11.2-3.

centre; only then were they routed, suffering the most significant losses of the battle whilst being pursued by Parmenio.[673] Arrian's reduction of the significance of the role of the Thessalians and Parmenio in the battle is part of a long series of instances noted in previous chapters of attempts by Ptolemy to reduce the significance of Parmenio whilst glorifying Alexander's role in the battle.

Curtius' account is somewhat different: in this account the battle actually began on the Macedonian left wing.[674] Curtius tells us explicitly that the Persians attacked along the shoreline against the Peloponnesian and Greek allied cavalry before the Thessalians arrived; indeed their dispatch by Alexander seems to have come as a reaction to this opening Persian move.[675] We can also gather from Curtius' narrative that the Peloponnesians and allied Greeks may have inadvertently begun the battle by straying into Persian missile range: "they had now come within javelin-range when the Persian cavalry made a furious charge on the left wing of their enemy".[676]

Curtius goes on to say that:[677]

> When the Macedonian saw this he ordered two *ilai* to maintain a position on the ridge while he promptly transferred the rest to the heart of the danger. Then he withdrew the Thessalian cavalry from the fighting line, telling their commander to pass unobtrusively behind the Macedonian rear and join Parmenio.

Perhaps Curtius used a source biased towards Parmenio, whilst Arrian's demonstrated an anti-Parmenio stance.[678]

Arrian[679] ascribes the confidence in the Persian heavy cavalry to Darius, and it may be that Darius was confident enough before the battle to send a communication to Demosthenes in Athens[680] almost guaranteeing victory. Curtius' emphasis seems to be that Darius preferred a cavalry battle not necessarily because of great confidence in this arm, but because he did not believe his infantry could win victory in the centre.[681]

Curtius' brief account gives us valuable insight into Alexander's tactical thinking.[682] Alexander's initial dispositions may, at first sight, suggest that he believed

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[673] Devine, 1985b, 51, Callisthenes also seems to place the opening of the battle on the Macedonian left: Polybius 12.18.11.
[674] Curtius 3.11.1; *cf.* Diodorus 33.2-3; Devine, 1985b, 51.
[675] Atkinson, 198, 225.
[676] Curtius 3.11.1.
[677] Curtius 3.11.2-4.
[678] Atkinson, 198, 225.
[679] Arrian 2.6.5.
[680] Aeschines 3.164, Demosthenes evidently flourished some letters, possibly communications from Darius; *cf.* Atkinson, 1980, 226.
[681] Curtius 3.11.1.
[682] Devine, 1985b, 51.

that he was going to be fighting a cavalry battle on both flanks; as he approached the Pinarus River, Alexander evidently came to the conclusion that the foothills were entirely unsuitable for a cavalry battle. Darius had evidently already arrived at the same conclusion and transferred the bulk of his cavalry to the coastal strip. Alexander countered the Persian move by transferring the Thessalians to the left flank; the fact that he gave instruction for them to hide their movement behind the infantry line suggests that he intended to surprise the Persians on that wing. This is a typical, and reasonable, interpretation of the situation as put forward by Devine; it does not, however, go quite far enough in my view. Alexander had spent a considerable amount of time in this region prior to the battle and would have known the terrain well; it seems unlikely that he would have made such a tactical blunder as not to realise initially that the foothills were unsuitable for a cavalry action, and if we accept this point then what was Alexander doing? It seems likely that in accordance with Alexander's usual tactical plan, he intended to lure the Persians into attacking where it was most advantageous to Alexander. Regarding Alexander's deployment, Darius took this to be a mistake on the part of Alexander and reorganised his troops to make a massive, and he hoped decisive, blow against Alexander's left. This is, I believe, exactly what Alexander wanted: Devine[683] is right in so far as Alexander ordered the Thessalians to conceal their movement behind the heavy infantry[684] line in order to make a surprise flanking counter-attack against the Persian cavalry. This could also explain the view suggested above that the Peloponnesian and Allied Greek cavalry strayed too close to the Persians intentionally in order to provoke an attack, even though they were massively outnumbered. Alexander simply outmanoeuvred Darius into fighting a battle on Alexander's terms.

Devine has argued that the absence of the Allied Greek cavalry from the narratives of the battle implies that their stand against the Persians was "unmemorable",[685] and that they must have been attacked before they could form up. It is more likely, as argued above; that their failure was simply part of Alexander's tactical plan, and the surviving narratives omitting them is more to do with not wishing to glorify troops that did not form a core part of the army; instead concentrating on the role of the Thessalians and Parmenio on this flank. The sources do not credit Alexander with great genius in laying the trap here for a number of possible reasons. They may not have understood the nuances of the plan, actually believing it to be a mistake. If they did, then it was a mistake by untrained Greek Allies, and Alexander could hardly be blamed for that. They also have him reacting brilliantly to the situation and saving the day, thereby demonstrating the tactical and speed of reaction that was one of his greatest strengths as a commander. Whatever the reality of what occurred on the left flank, mistake or superb tactics, the Persians had enough discipline to maintain their formation and ride over one *ile* of Thessalians.[686] The superior mobility of the Thessalians carried the victory,

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[683] Devine, 1985b, 51.
[684] Hammond, 1981, 103, notes the availability of "dead ground" behind the heavy infantry that would have aided in the concealment.
[685] Devine, 1985b, 52.
[686] Curtius 3.11.14.

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however: maintaining their usual rhomboidal formations they were able to drive Nabarzanes' *cataphracti* back across the Pinarus.[687]

The tactic of using a relatively weak body of cavalry as bait to draw a stronger force of enemy cavalry on to unfavourable ground and into a position where they could be exposed to a flanking attack by other, stronger Macedonian units, is a regular feature of Alexander's battles.[688] At the Granicus in the previous year, Alexander sacrificed his advanced cavalry guard in order to throw the Persian cavalry guarding the ford into confusion.[689] At Gaugamela two years later, Alexander ordered the mercenary cavalry under Menidas to attack the vastly stronger Bactrian and Scythian cavalry commanded by Bessus, who were, at the time, moving around his right flank with the evident objective of attacking Alexander's rear. Menidas' cavalry were driven back and suffered heavy losses, but the attack was enough to cause confusion among Bessus' troops, which Alexander exploited by then committing his Paeonians, *Prodromoi* and a large body of mercenary infantry.[690] At Issus, the stratagem was relatively simple, but a tried and tested one. The allied Greek cavalry did not need to be particularly convincing, perhaps making a slight feint; but the Persian *cataphracti* were eager to attack a seemingly weak enemy. The result of Persian overconfidence was that they exposed their flanks to 1,800 well trained Thessalians, falling neatly into Alexander's trap. This was a seemingly simple tactic, but one that was devastatingly effective, and one which Alexander perfected: "both Issus and Gaugamela saw it progressively developed and ingeniously adapted to specific circumstances and topographical conditions".[691] This is essentially the same tactic repeated a number of times, but it is far more complex than that. This tactic was used in different situations on different terrain and against different enemies each time. On every occasion Alexander needed to disguise his tactical plan by developing new means of deploying his troops in order to draw the Persians into his trap. The fact that it was gradually developed for every situation is the true adaptability. It is this kind of adaptability, the ability to fight in all conditions and all terrains, which marks Alexander out as a military genius.

In contrast to the complexity on the left, the battle on the right was far less innovative.[692] Arrian gives us a view of a spectacular cavalry charge, using the metaphor of the line surging forward like a wave to fall upon the enemy.[693] This metaphor is clearly modelled on Xenophon's famous description of the Greek charge at Cunaxa,[694] and is entirely incorrect.[695] There was simply no room for the battle to be conducted as Arrian described; it seems far more likely that the Persian left was driven back from the ford by

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[687] Curtius 3.11.15; tells us that the Persians horses and riders were weighed down by "rows of armour plating". Arrian Tact. 16.3; Aelian Tact. 18.2
[688] Devine, 1985b, 52.
[689] Arrian 1.15.3; *cf.* Badian, 1977, 289-290. *cf.* 57-8, 255.
[690] Arrian 3.13.3; *cf.* Devine, 1975, 383-384.
[691] Devine, 1985b, 52.
[692] But at the same time, it did not need to be.
[693] Arrian 2.10.3; 2.10.5.
[694] Xenophon *Anab.* 1.8.18.
[695] Bosworth, 1980, 213.

a combination of the cavalry and light infantry units on Alexander's right, namely the *Prodromoi*, the Paeonians, the Macedonian archers and the Agrianians.[696]

Hammond is surely incorrect in having Alexander lead the hypaspists in this initial push over the river against nothing more than Persian archers;[697] he argued that because there were only two small fords over the river on the Macedonian right it follows that the hypaspists would cross in line. He further argues that had the Companion Cavalry led the attack they would have been funnelled into two narrow areas and would have suffered heavy casualties. Hammond's case originates with his knowledge of the topographical[698] difficulties of the area; he attempts to rationalise the charge in Arrian[699] and justify his position by arguing that "the expression '*dromōi*'...is generally used of an infantry charge".[700] A brief examination of the text of Arrian[701] does not support this theory: besides 2.10.3, Arrian used '*dromōi*' 15 times in his military narratives;[702] three of these refer exclusively to cavalry,[703] three to combined units of cavalry and infantry,[704] two are indeterminate[705] and only seven[706] definitely refer exclusively to infantry.[707] It seems, then, that we cannot use '*dromo*' to state specifically that infantry made the initial attack; the hypaspists were probably closer to the coast, occupying their typical position between the heavy infantry in the centre and the troops on the right.

The theory that cavalry cannot attack across a river simply does not fit with the evidence we have, nor was it the case at the Granicus. It seems likely that the *Prodromoi* and Paeonians attacked first because they were a little less encumbered by armour and thus more mobile; and it is highly likely that they would have been supported by light infantry like the Agrianians in their initial assault,[708] the Companions being spared for an attack on open ground once the river crossing had been achieved. Ashley, following Hammond's lead, is further incorrect in having the Cardaces stationed directly behind the archers with the evident confusion of the former retreating into and through the latter.[709]

Once the light cavalry, supported by the Agrianians and archers, had forced the crossing, they held the enemy at bay while the Companions forded the river, *ile* by *ile*,

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[696] Devine, 1985b, 52.
[697] Hammond, 1981, 104.
[698] Although this, of course, is made far from easy by the changes in the courses in rivers in the Issus plain, and by our lack of specific knowledge as to which of the current rivers can be equated with the Pinarus.
[699] Arrian 2.10.3; 2.10.5.
[700] Hammond, 1981, 104.
[701] Devine, 1985b, 52, n.80.
[702] Only 12 of those in the *Anabasis*.
[703] Arrian 3.15.1; 3.21.9; 6.6.6.
[704] Arrian 2.4.6; 3.14.2; 3.18.6.
[705] Arrian 4.16.1; 4.16.3.
[706] Arrian 1.6.7; 4.26.3; 5.16.1; 5.24.2; *Indica* 24.6; 24.7; *Ect.* 29.
[707] Diodorus uses '*dromōi*' three times exclusively of infantry (4.52.4; 14.23.1; 15.55.3) and once indeterminately (18.34.1). Shrimpton, 1980, 34, n.16, notes that Herodotus 9.59.1 and Thucydides 1.63.1 use '*dromōi*' to describe the movement of soldiers wading through water.
[708] Again, as at the Granicus River; *cf.* 57-9.
[709] Ashley, 1998, 227.

and once on the far bank formed up into their wedge formations.[710] Once in formation, the Companions took over from the light cavalry, charging at the remaining cavalry on the Persian left, the Hyrcanians and Medes, in the face of defensive fire from the nearby Persian archers.[711] Darius had weakened his left in order to deliver what he hoped would be a hammer blow against the supposedly weak Macedonian left, but this decision proved fatal. The Persian left quickly melted away under the onslaught of the fresh Companion Cavalry.[712] Once this breakthrough had been achieved, Alexander wheeled the Companions to their left to fall upon the Persian centre, where Darius was stationed. This flanking attack, such a hallmark of Alexander, was perfectly timed to coincide with the attack of the hypaspists under Nicanor, and the two *taxeis* of the heavy infantry on the right.[713] With the hypaspists and *pezhetairoi* attacking the Persian centre, and Alexander's cavalry attacking on the right, there seems to have been a gap in the Macedonian line between the two; evidently Alexander did not expect the Cardaces to attack over the river, as they were stationed along a section with high precipitous banks. The separation of Alexander's army into essentially two arms, the left and centre on the one hand, and Alexander's attack on the extreme right, is highly reminiscent of my interpretation of the battle of the Granicus River, and indeed of the Hydaspes. The shock of the Macedonian heavy infantry attack across the river, combined with a flanking attack by Alexander and the Companion Cavalry, was simply too much for the Persian centre to handle. They quickly began to retreat, following the lead of Darius himself.[714]

Bosworth notes Arrian's narrative as being "remarkably laconic"[715] in this phase of his account, and notes that the troops Alexander attacked on his right were those stationed to the extreme left of the Persian formation, virtually in the mountains.[716] Plutarch confirms the general position of Alexander's attack on the right and that the battle was rapid on that flank.[717]

Curtius[718] places great emphasis upon Alexander's desire for *opimum decus*,[719] in this case the death or capture of Darius. In spite of the overly dramatic feel to this statement, it may very well have been Alexander's main aim; killing Darius would effectively have ended the war and prevented the necessity for a Gaugamela.[720] With this plan in mind, Alexander would likely have expected to find Darius in the centre of the Persian line,[721] but because of the steep banks along that stretch of the Pinarus, a direct frontal assault was impossible. Once a successful crossing had been achieved on the right,

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[710] Devine, 1983, 201-202.
[711] Arrian 2.10.3.
[712] Arrian 2.10.4; 2.11.4.
[713] Those of Coenus and Perdiccas.
[714] Curtius 3.11.7-8; 3.11.11; Diodorus 17.33.5; 17.34.2-7; Arrian 2.11.4.
[715] Bosworth, 1980, 213.
[716] Arrian 2.10.4; *cf.* 2.8.7.
[717] Plutarch, *Alex.* 20.8.
[718] Curtius 3.11.7.
[719] A variant of the usual *opima spolia*, the arms taken in battle from a defeated enemy (as at Curtius 7.4.40).
[720] Cyrus the Younger made a similar attempt upon his brothers Artaxerxes at Cunaxa in 401; Xenophon *Anabasis* 1.8.26-7.
[721] Arrian 2.7.8-9.

however, Alexander wheeled towards the Persian centre. This movement, coupled with the heavy infantry attack in the centre, essentially created a two-pronged penetration. In order to protect himself from the possibility of a counter-attack, Alexander created a second flank guard; the *prodromoi*, Paeonians, two *ilai* of Companions, the Macedonian archers, the Agrianians and some Greek mercenary infantry. The need for this flank guard was limited as the Persian extreme left had melted away; it would only have been used if that flank had had the discipline to reform, but it evidently did not.

The engagement in the centre of the line between the *pezhetairoi* and the Greek mercenary infantry of Darius was almost completely ignored by Curtius,[722] who chose to concentrate on Alexander's action on the right, no doubt reflecting a bias in his source. Arrian, who gives some details, does not present an exhaustive or a particularly clear narrative. Arrian does tell us that the fighting was vigorous and brutal; he explains this by means of the river banks that were steep in many places, and because of the *pezhetairoi's* movement towards their own right.[723] It is clear that the heavy infantry were not making a basic frontal assault but that an intricate tactical plan was being played out. Commensurate with the desire for the *pezhetairoi* to coordinate their attack with Alexander, they needed to move *en echelon*, with the two right-hand *taxeis*[724] leading the way, along with the hypaspists.

Once the right-hand two *pezhetairoi taxeis* crossed the river, they turned to their left to make a flanking attack against the Greek mercenary infantry, an attack timed to coincide with the full attack of the remaining four *pezhetairoi taxeis* across the river.[725] The hypaspists, on the other hand, seem to have continued advancing towards Darius and his bodyguards; this attack coinciding with Alexander's flanking attack from the extreme right. Arrian makes little or no mention of the Cardaces during the battle; this is not altogether surprising when we consider that the fighting simply passed them by. There seem to have been no Macedonian troops immediately opposing them: given that the banks were precipitous, they could have done little to prevent Alexander's cavalry charge on their left flank by the Companions. They also evidently did not react fast enough to the crossing of the hypaspists, who essentially ignored them and made straight for Darius.

The final element of the fighting that we must consider is the action surrounding Darius himself. Arrian portrays Darius fleeing the field almost at the outset of the battle, but Bosworth notes the possibility of a heroic stand by Darius' bodyguard as potentially being suppressed by Arrian or his sources.[726] The two traditions probably should not be conflated as is attempted by Tarn.[727] Arrian is, indeed, the only source to present this picture; the vulgate tradition speaks of vicious fighting around Darius and notes that he only fled when his horses began to panic and capture appeared imminent.[728] The vulgate account appears to be the one accepted by history; and the Alexander mosaic from the

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[722] Curtius 3.11.4-5.
[723] Arrian 2.11.4-5.
[724] Those of Coenus and Perdiccas.
[725] Arrian 2.11.1.
[726] Arrian 2.11.4; Bosworth, 1980, 214.
[727] Tarn, 1948, 1.27.
[728] Diodorus 17.34.2-7; Curtius 3.11.7-12; Justin 11.9.9.

house of the Faun at Pompeii depicts either this stage of the fighting here, or the equivalent stage from the battle of Gaugamela.[729] If Arrian is to be accepted, then the entirety of the vulgate tradition must be dismissed on this point. If Arrian's account is correct, it likely originates with the court history; Callisthenes seems unlikely to have produced an account where Darius is seen as being almost as heroic as Alexander, despite his initial assertion that the two kings wished to meet on the field of battle.[730] One final circumstantial piece of evidence for the last stand of Darius is that if he had fled immediately his officers are unlikely to have continued to fight bravely;[731] flight would also have made raising another army at Gaugamela almost impossible if he had shown himself to be a coward.[732] We can assume, therefore, that the vulgate tradition is correct in that the fighting surrounding Darius was fierce, and Darius' withdrawal occurred only when there was no alternative.

Connected with the flight of Darius is a theme that yet again echoes Gaugamela, the request for assistance,[733] this time by the Macedonian centre.[734] Arrian tells us that Alexander immediately turned back once news reached him that the heavy infantry were in trouble, and did not resume the pursuit of Darius until the whole of the Persian army was routed.[735] Curtius' account is very similar, clearly deriving from the same source; Alexander only pursued Darius once the Persian right wing was in full retreat.[736] Devine[737] speculates that it is far more likely that Alexander initially pursued Darius from the field for the four or five stades that Plutarch[738] credits Darius with being able to cover in a matter of minutes. The pursuit this far is reasonable enough within the bounds of battlefield manoeuvres, but it is unlikely that Alexander pursued Darius immediately for the 200 stades that Diodorus credits him with.[739] The only evidence for this is the (quite reasonably) presumed desire of Alexander to kill or capture Darius.

Casualties

Diodorus, Curtius and Arrian all give the same Persian casualty figures: 100,000 infantry and 10,000 cavalry.[740] Plutarch gives a round 110,000 total for the whole army and, Justin differs from both in his 61,000 infantry and 10,000 cavalry along with 40,000

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[729] Bosworth, 1980, 215.
[730] Polybius 12.22.2.
[731] Murison, 1972, 422.
[732] Marsden, 1964, 5-6.
[733] Arrian 3.15.3; Curtius 4.15.6-8; 4.16.2-3; 4.16.19; Plutarch *Alex.* 32.3-4; 33.6.
[734] Arrian 2.11.7; at Gaugamela the request (if it existed at all) was from Parmenio.
[735] Arrian 2.11.7.
[736] Curtius 3.11.16.
[737] Devine, 1985b, 54; he speculates that Alexander turning back to help the beleaguered *pezhetairoi* was simply an apologetic device to remove any blame from Alexander for showing little or no interest in the well being of the heavy infantry.
[738] Four or five stades equals 0.74km and 0.925km; this is the head start that Darius apparently had over Alexander (Plutarch *Alex.* 20.10; Bosworth, 1980, 216 notes that this distance is very small, suggesting that Darius did not flee at the onset of the battle. Plutarch *Alex.* 20.10.
[739] 18.5km. Diodorus 17.37.2
[740] Diodorus 17.36.6; Curtius 3.11.27; Arrian 2.11.8.

taken prisoner.[741] The only source to dissent slightly from these massive numbers is the Oxyrhynchus Historian, who gives a total of 50,000 Persian infantry casualties and 3,000 cavalry, along with an unspecified number of mercenaries.[742] If we assume this unspecified number to have been of the order of 10,000 then we have almost the same totals as in Justin.[743] Persian losses for the battle are massively inflated by our sources and we can never know the true figure; the best we can say, however, is that Persian losses would have been significant. This would have been partly due to the vicious nature of the fighting that comes through in our sources, and partly because of the pursuit of the fleeing enemy, albeit a limited pursuit.

Macedonian losses are a little more believable, if probably underestimated. The most frequently cited figure for cavalry losses is 150, in Diodorus, Curtius and Justin.[744] For infantry Diodorus gives 300, Curtius only 32, although that figure has been emended, with general acceptance, by Hedicke to 302, and Justin 130.[745] Arrian[746] gives the lowest number at 120, although this is a figure only mentioned in passing and refers only to casualties among the *pezhetairoi* in their skirmish with the Greek mercenary infantry.[747] The Oxyrhynchus Historian[748] gives the highest figure at 1,000, although this may include the wounded, which Curtius puts at 504,[749] and Hedicke emends to 4,500.[750] Bosworth notes that both Persian and Macedonian losses are propaganda figures and inherently untrustworthy.

<u>Conclusion</u>

Darius' plan for the battle was sound; he evidently planned for a strong defence in the centre, aided by the abatis that he set up along the less steep sections of the river. It is clear that his tactics were not purely defensive, however, given his positioning of troops in the foothills with the intention of outflanking Alexander's right. His final plan, to attack Alexander in strength along the coast, shows Darius adapting to what he saw as the tactical situation of the battlefield: he believed that an opportunity had presented itself to deliver a decisive blow against that wing; the fact that this failed was more to do with Alexander's supreme planning, foresight, adaptability, and my proposal that this was Alexander's brilliantly laid trap, than any deficiency on the part of Darius.

For Alexander, we can see in the Battle of Issus his supreme strategic and tactical ability. Firstly drawing the Persians into terrain that was best suited to his army, as he so often does; and secondly in the execution of the battle itself. At Issus we see a series of

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[741] Plutarch *Alex.* 20.10; Justin 11.9.10.
[742] Oxyrhynchus Historian *FGrH* 148 F 44, col. 4.
[743] Bosworth, 1980, 216-7.
[744] Diodorus 17.36.6; Curtius 3.11.27; Justin 11.9.10.
[745] Hedicke cited in Bosworth, 1980, 217. For the 302 emendation, along with 4,500 wounded see Atkinson, 1980, 243. Diodorus 17.36.6; Curtius 3.11.27; Justin 11.9.10.
[746] Arrian 2.11.7 gives no overall figure for Macedonian casualties.
[747] Atkinson, 1980, 243.
[748] Oxyrhynchus Historian FGrH 148 F 44, col. 4.
[749] Curtius 3.11.27.
[750] Cited in Bosworth, 1980, 217.

brilliant flanking manoeuvres; the cavalry on the left luring the Persians forward only to be outflanked by the Thessalians moving from the right to execute a brilliantly planned trap. We also see Alexander forcing a crossing on the extreme right of the formation and then wheeling left to flank the Persian guard defending Darius. Next we see the hypaspists and the right-hand two *pezhetairoi taxeis* moving to their right to force a crossing of the river, then the *pezhetairoi* swinging left to flank the Greek mercenary infantry, at the same time as they were being attacked from the front by the rest of the heavy infantry. Finally we have the hypaspists, once across the river, swinging to the right to attack Darius in the opposing flank to Alexander.

This battle is a large-scale demonstration of some of the strategic and tactical skills that Alexander demonstrates throughout his career. Drawing the enemy onto ground favourable to him, attacking the enemy on two flanks simultaneously and the brilliant use of every element of a combined arms force.[751]

[751] Lonsdale, 2004, 108.

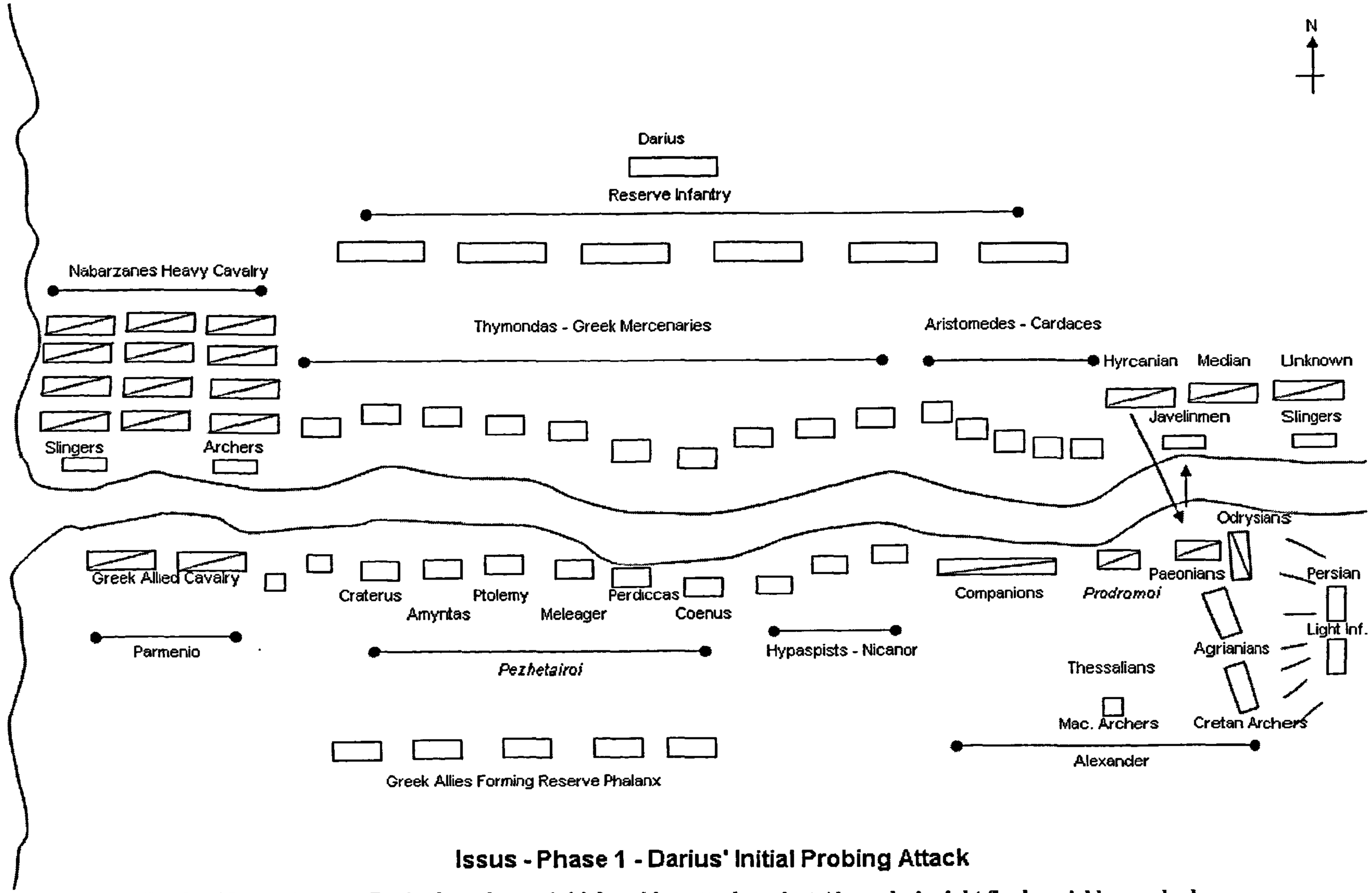


Figure 13: The Battle of Issus Phase 1 – Darius launches an initial probing attack against Alexander's right flank, quickly repulsed.

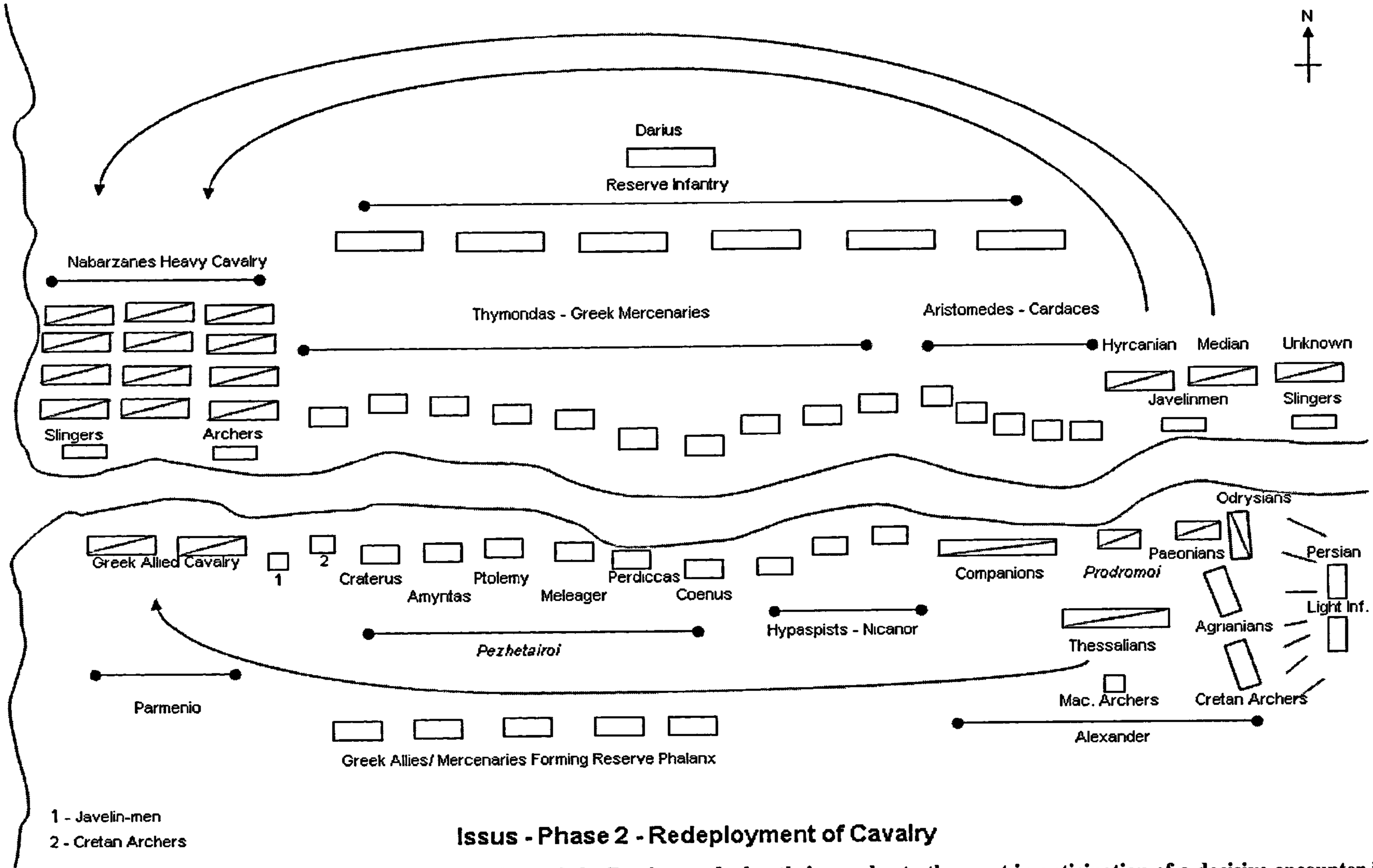
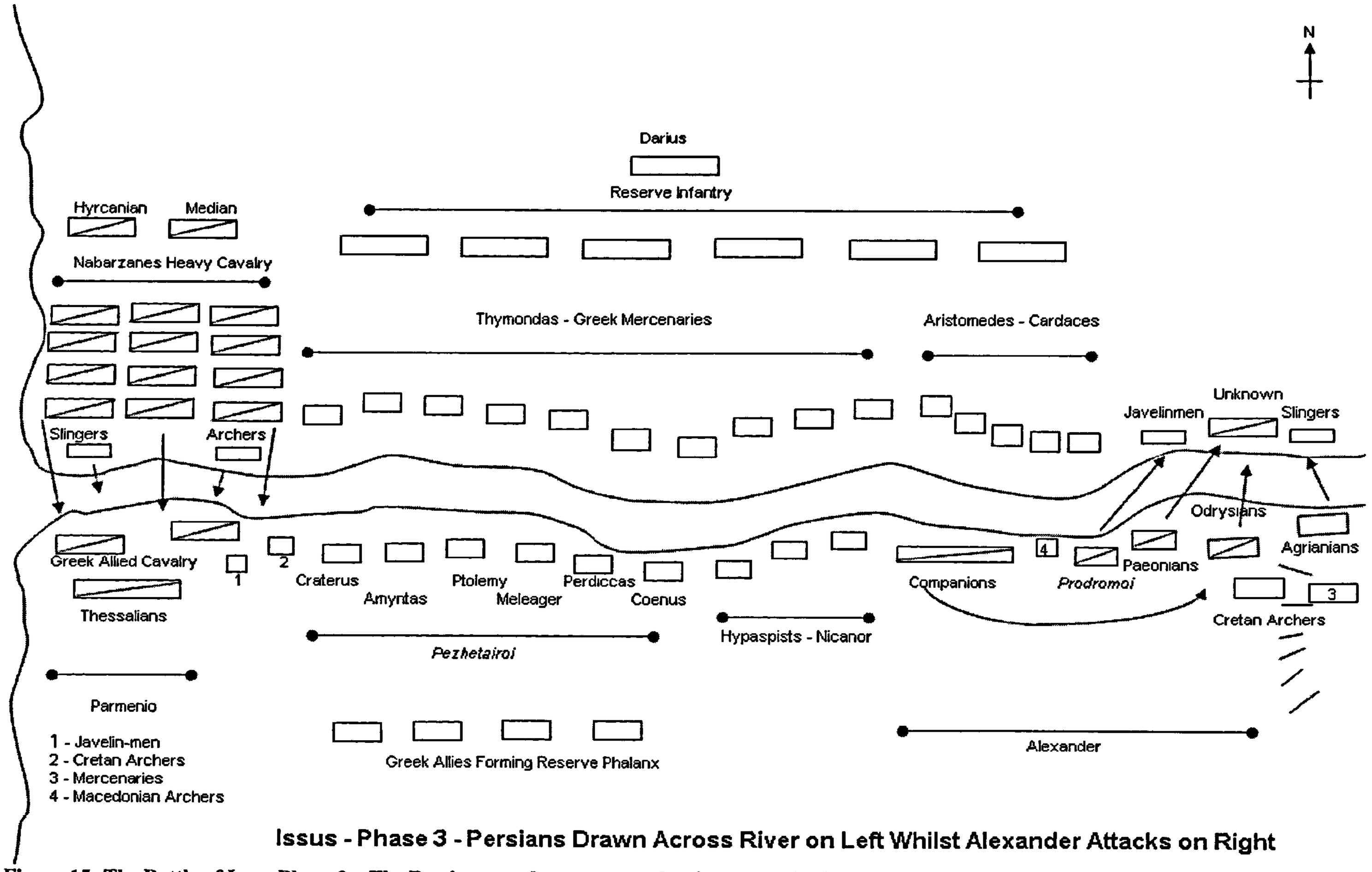


Figure 14: The Battle of Issus Phase 2 – Both Alexander and the Persians redeploy their cavalry to the coast in anticipation of a decisive encounter in that sector.



Issus - Phase 3 - Persians Drawn Across River on Left Whilst Alexander Attacks on Right

Figure 15: The Battle of Issus Phase 3 – The Persians are drawn across the river on their right whilst Alexander launches his own offensive against their left.

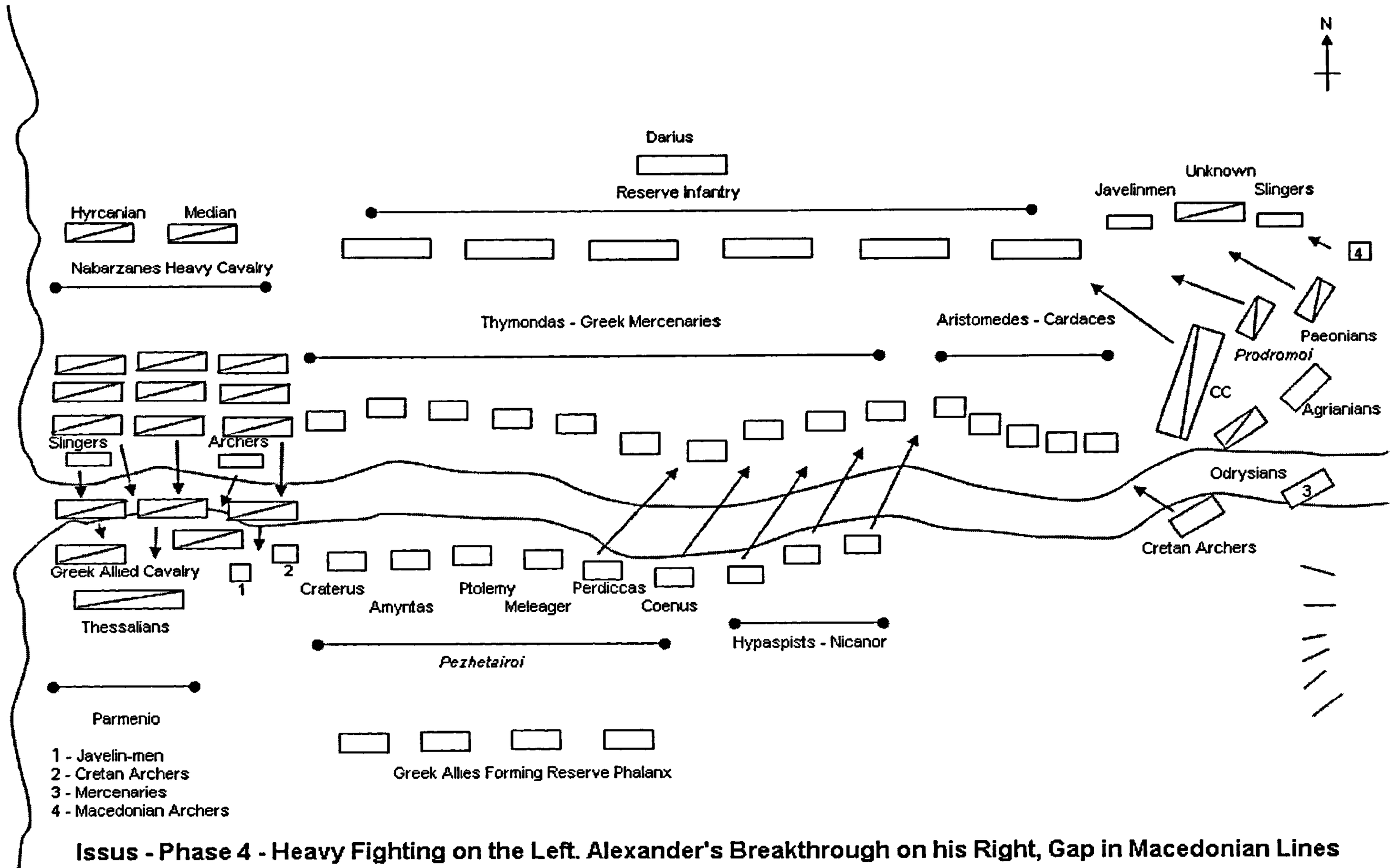


Figure 16: Alexander quickly breaks through the weak Persian left whilst Parmenio holds on the Macedonian left.

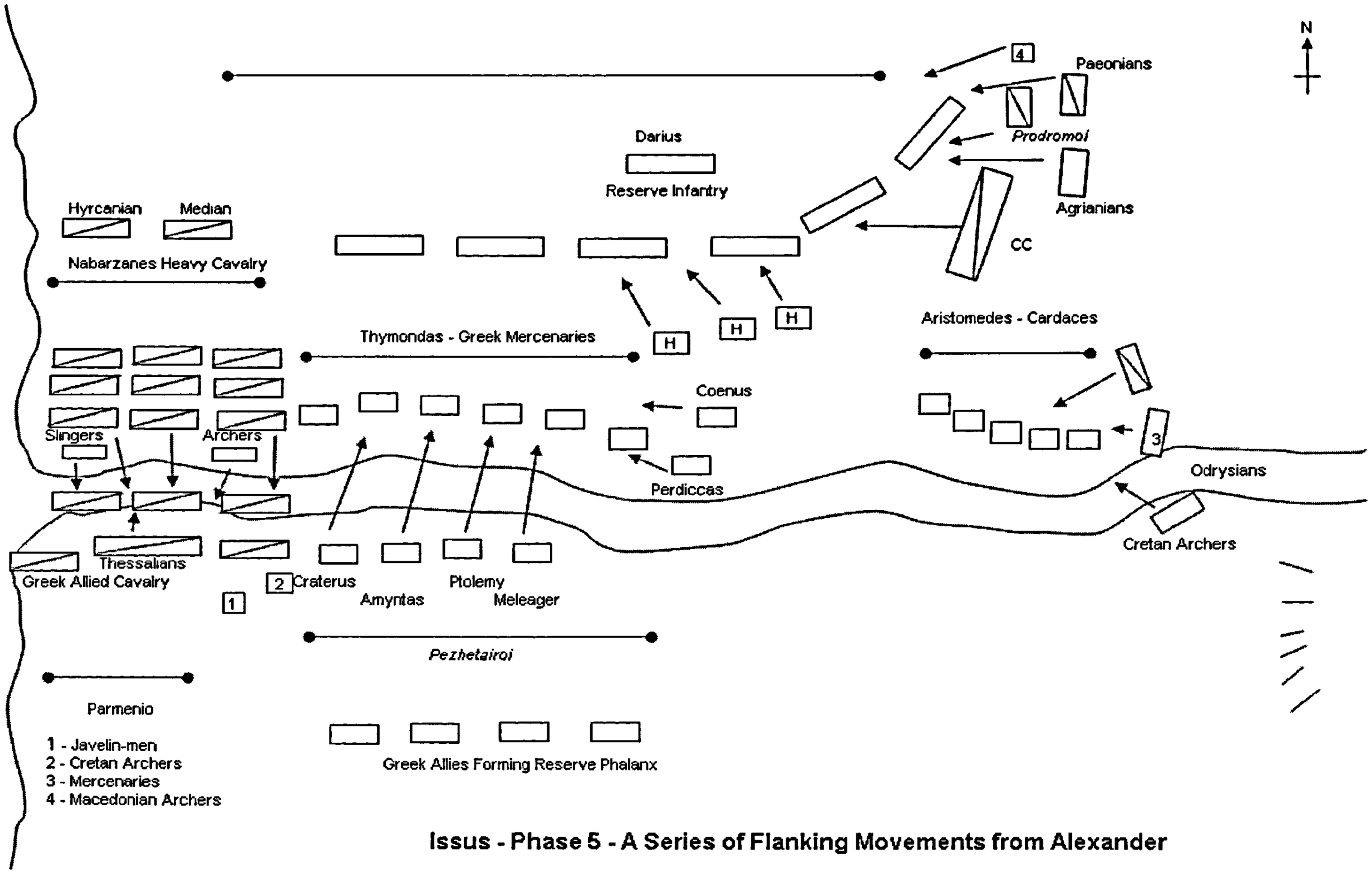
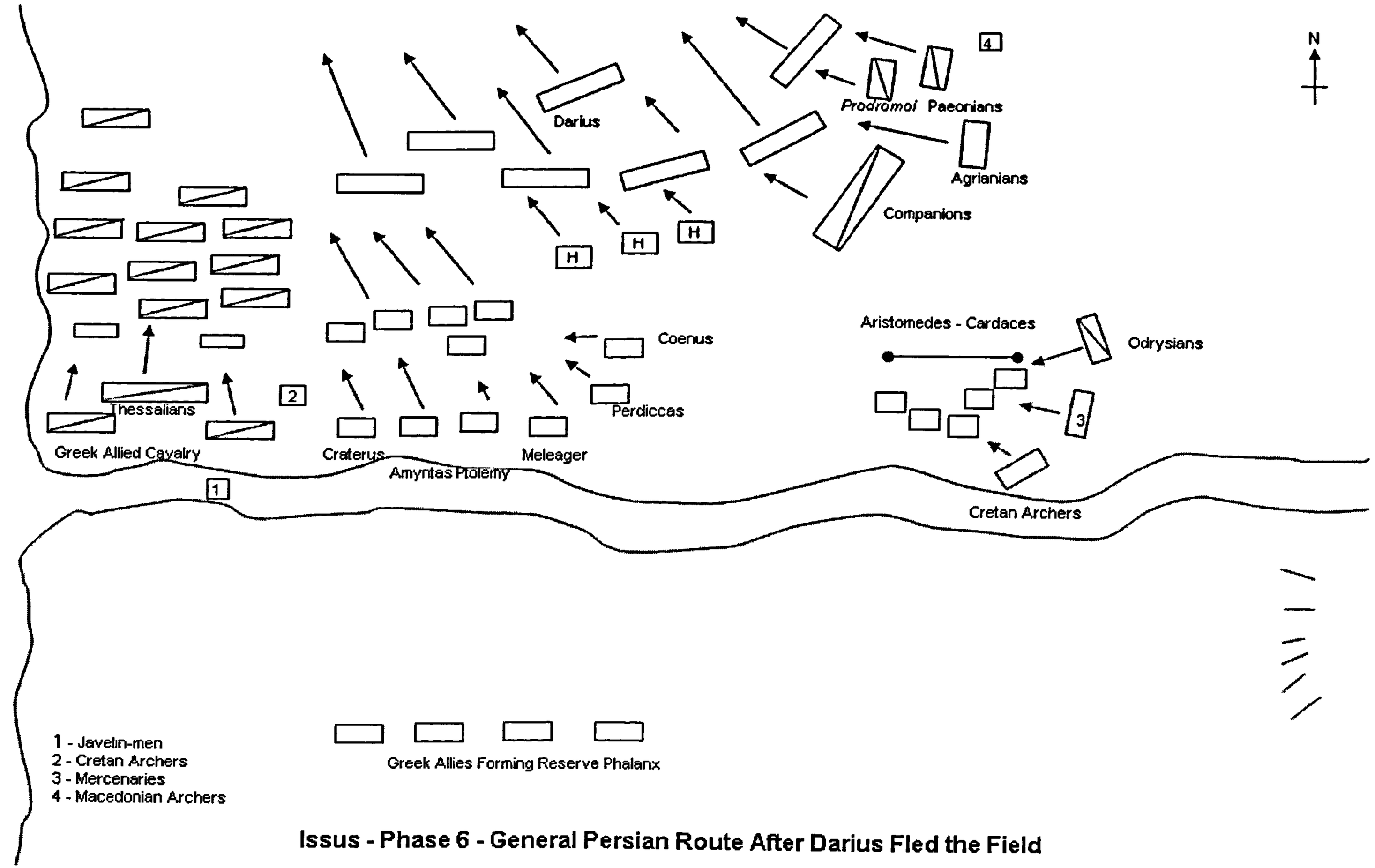


Figure 17: Alexander starts to roll up the Persians from their left in a series of brilliant flanking attacks. Heavy fighting continues on the Macedonian left.



Issus - Phase 6 - General Persian Route After Darius Fled the Field

Figure 18: General Persian rout begins, Alexander is victorious.

Chapter 5

Tyre & Gaza: 332

Introduction

The escape of Darius after his defeat at Issus presented Alexander with a major strategic decision: pursue Darius into the Persian heartlands; or continue south, as he had been doing, along the coast. To pursue Darius would be to leave the major Persian strongholds of Phoenicia and Egypt unconquered, as well as leaving the still active Persian fleet with bases from which potentially to take the battle to Greece, as had been Memnon's strategy the previous year.[752] The decision appears not to have been a difficult one for Alexander. He immediately set off south along the Phoenician coast towards Tyre, and ultimately Egypt. We also have to realise that for a man raised in the Greek world it would have been natural to wish to complete the conquest of the Mediterranean basin before moving further into the Persian heartlands.

Tyre[753]

Most of the coastal cities in Alexander's path, such as Byblos and Sidon, surrendered without a struggle.[754] On the way to Tyre, however, Alexander was met by a delegation of representatives offering peaceful terms. Curtius presents the Tyrians as more willing to accept alliance with Alexander than subjugation, which is supported by later events.[755] Alexander thanked them for their offer and informed them of his intention to make sacrifice in the temple of Heracles within the city.[756] The Tyrians refused to permit any Persian or Macedonian[757] entry to the city, and offered Alexander the opportunity to use the temple in Old Tyre,[758] on the mainland. Alexander's anger at this refusal is reported by both Arrian and Curtius,[759] with the latter reporting it as more as an irrational tantrum.[760] It is possible that Alexander anticipated the Tyrian response, or at the very least used it to his advantage as a pretext, if one were needed, to storm the city. Curtius[761] is by far the most plausible source in describing the Tyrian reliance upon their

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[752] With hindsight, we can probably say that this latter point was highly unlikely; it may not have appeared that way to Alexander.

[753] For the siege of Tyre see Arrian 2.16.1-24; Plutarch *Alex.* 24-5; Diodorus 17.40.2-46.6; Justin 11.10.10-14, *cf.* Polyaenus 4.3.3-4; 4.13.1.

[754] Arrian 2.15.6.

[755] Curtius 4.2.2.

[756] Bosworth 1980, 235, notes that the temple was legendary: according to Herodotus (2.44) it dated back 2,300 years and we know of improvements that were made during the reign of Hiram I c.950 (Menander, *FGrH* 783 F1). Herodotus (2.44.3) also mentions a second temple of Heracles in Tyre: this is almost certainly the temple in Old Tyre mentioned above. Arrian 2.15.7.

[757] Arrian 2.16.7.

[758] Curtius 4.2.4.

[759] Arrian 2.16.6; Curtius 4.2.5.

[760] Stating that "Alexander lost his temper, which he also failed to control on other occasions", Curtius 4.2.5.

[761] Curtius 4.2.6-15.

defensive fortifications[762] as their primary motive for resisting Alexander. Diodorus[763] on the other hand saw it as part of a grand strategy on the part of the Persians to resist Alexander: this seems unlikely.[764]

The island city of Tyre was, from the strategic standpoint, superbly sited. The island was separated from the mainland by a strait four stades wide.[765] Curtius also tells us that it was particularly exposed to south-westerly winds, a fact that will be extremely important during the siege.[766] Curtius states that it was the wind that was the greatest obstacle to the construction of the mole.[767] The strait was relatively shallow, until a couple of hundred metres from the fortress; at that point the sea bed fell away quite dramatically and the water was three fathoms deep at that point.[768] Tyrian confidence was further boosted by a delegation from Carthage who promised help against the Macedonians.[769] Curtius goes on to describe quite formidable Tyrian defences: catapults lining the walls, harpagones[770] constructed to use against Alexander's siege engines, along with "ravens"[771] and other devices.

Curtius[772] tells us that Alexander tried to avoid a protracted siege by offering terms, but the envoys were killed, leaving little option for the Macedonians.[773] Immediately after the murder of the envoys, Alexander gathered his troops together in Old Tyre and gave a speech.[774] Curtius tells us that it was to overcome the reluctance of the troops to attack the island fortress, but the contents are not at all similar to those presented by Arrian. Tarn[775] believed that the contents of the speech in Arrian are broadly authentic, but the contents are oddly out of place. The main thrust of the speech is regarding the impending assault upon Babylon and the need to occupy Egypt; themes that would be far more relevant after the victory at Issus than before Tyre.[776] The fact of a

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[762] Romane, 1987, 80.
[763] Diodorus 17.40.2*ff*.
[764] Atkinson, 1980, 295; *cf*. Marsden, 1964, 7, in discussing Gaugamela; and Green, 1974, 247.
[765] Curtius 4.2.7; Something like 750m.
[766] As does Arrian 2.20.10; Diodorus also refers to a north-west gale 42.5 and we also know of north-easterly gales, Atkinson 1980, 296. In short, the island was very exposed!
[767] Curtius 4.2.8.
[768] Arrian 2.18.3; Curtius 4.2.9.
[769] Carthage being a foundation of Tyre; Curtius 4.2.11.
[770] Harpagones were grappling irons, invented by Pericles according to Pliny. (*NH* 7.56.209; *cf*. Diodorus 13.50.5) They are known to have been used by Alcibiades (Polyaenus 1.40.9; *cf*. Diodorus 13.50.5), and Livy 30.10.16 describes their use by the Carthaginian navy: They were therefore something new to Alexander, but certainly not new to Greek warfare.
[771] Corvus (Greek korax) or ravens (perhaps crows) are not the complex grappling hook and boarding bridge made famous by Duilius in the first Punic War, and described by Polyaenus 1.22.4*ff*; Curtius 4.3.26 is imagining a simple grappling hook of the type used at Mycale in 36; Appian *B.C.* 5.106. Atkinson, 1980, 297.
[772] Curtius 4.2.15.
[773] It should be noted that none of the other sources mention this incident, Arrian 2.24.3 has a story of some Macedonian sailors being intercepted and thrown from the walls into the sea; this story of the envoys could represent a corruption of that story (or *vice versa*): Atkinson, 1980, 298.
[774] Arrian 2.17.1; Curtius 4.2.17*f*.
[775] Tarn, 1948.2, 286*f*.
[776] Bosworth, 1980, 238.

speech occurring before Tyre is highly likely, given that it appears in various forms in our two main sources, but the specific contents are certainly not recoverable. Arrian makes two further curious statements before the siege proper begins; the first that "Alexander had no difficulty in persuading his officers that the attempt upon Tyre must be made";[777] the second that "in spite of all the difficulties...Alexander's decision to attack...was accepted".[778] Perhaps this is a rare insight into the command structure of the army: are we to infer, for example, that there was ever a doubt surrounding the decision and the support that Alexander received from his commanders? It is difficult to see what Arrian is trying to achieve at this point.

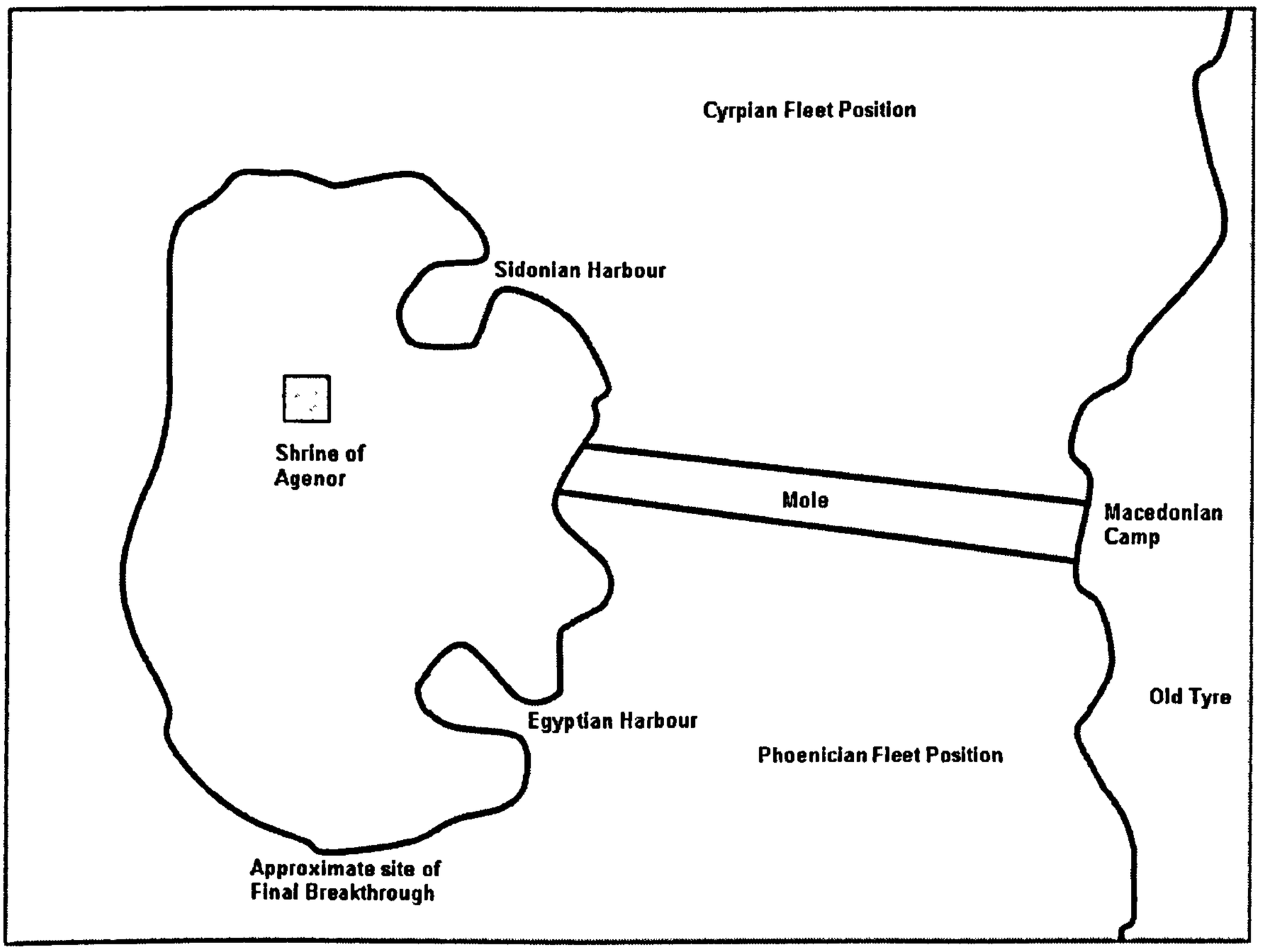


Figure 19: Sketch of the Siege of Tyre

Siege - 1st Phase

The siege of Tyre can be divided into two operational phases; the first which culminated in the destruction of the mole by means of the fire ship, and the second that resulted in the fall of the city.

The defences of Tyre were legendary, and it would no doubt have been known to Alexander that the city had withstood a siege lasting thirteen years by the Babylonian

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[777] Arrian 2.18.1.
[778] Arrian 2.18.3.

King Nebuchadnezzar in the sixth century.[779] To a man like Alexander, however, this would have acted as a spur and not a deterrent. Following the speech to the troops, and the senior commanders apparently agreeing to besiege the citadel, Alexander was faced with the obvious problem of how to undertake such a task. Given that Alexander possessed no significant fleet,[780] certainly not one that would be comparable to that of Tyre, he was left with little alternative to the most direct method: to construct a mole from the mainland to the island, thus connecting it to the land and allowing his troops to attack the city directly.[781] One imagines Philip would have either agreed to the Tyrian terms or used some subterfuge to capture the city; Alexander was not Philip.



Figure 20: The Island fortress of Tyre: no longer an island, because of Alexander's mole.

Construction began on the mole almost immediately;[782] Arrian tells us that there was an abundant supply of stone and timber for the construction of the mole; what is left unsaid, however, is that this was due to Alexander's total demolition of Old Tyre.[783] The initial stages of construction occurred without interference from Tyre, but the time and effort were prodigious; the first phase of the siege probably lasted several months.[784]

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[779] May, Stadler and Votan, 1984, 34; Fuller, 1958, 101; Ashley, 1998, 239.
[780] None that was present at least; Curtius 4.1.36, mentions that Alexander, shortly before Tyre, summoned his fleet from Greece to the Hellespont where it defeated Aristomenes and a Persian fleet.
[781] The idea of a mole could have come from Dionysius I's use of the same device in his siege of Motya in 397, Diodorus 14.48.3,51; *cf.* Bosworth, 1980, 240.
[782] Polyaenus 4.3.3. Claiming that Alexander took a basket and started work on the mole himself, a symbolic act much like throwing the spear into the ground at the crossing into Asia and claiming it "land won by the spear". This act is also reminiscent of the commencement of modern building projects.
[783] Arrian 2.18.3; Curtius 4.2.18; *cf.* Bosworth, 1980, 240.
[784] Arrian 2.18.3. The siege as a whole lasting nine months; roughly January to September.



Figure 21: Tyre

As the mole approached deeper water, closer to the fortress, the Tyrians evidently became worried. Once within range of projectile weapons fired from the city, the construction teams came under constant attack, both from the walls and from seaborne raids at various points along the mole.[785] To counter these raids, the Macedonians constructed two siege towers on the mole; they were intended to be higher than the city walls, so that missiles could be rained down upon the defenders,[786] thus preventing them from attacking the construction workers. Anticipating an incendiary attack, and learning from the mistake at Halicarnassus, he had the towers covered with skins and hides to protect them.[787] Curtius several times mentions another key factor: the mole was unstable.[788] One suspects that this was due partly due to insufficient foundations, especially once the huge towers were built, but partly because of the prevailing winds and associated waves. Curtius also mentions a storm that caused considerable damage to the mole, none of which is found in Arrian.[789]

If, as noted earlier, the idea of a mole originated with the siege of Motya,[790] then the idea of protecting the workers with siege engines would no doubt have come from the same precedent. The surprising thing is that it did not occur to Alexander to protect the mole and the workers in some way before suffering casualties. This reactive nature of Alexander's strategy is confirmed by both Arrian and Curtius who make it clear that the towers were there for the defence of the mole;[791] they were not the towers that were used

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[785] Arrian 2.18.3.
[786] Artillery pieces were placed in the towers, Arrian 3.18.3.
[787] Arrian 2.18.3.
[788] Curtius 4.2.8; 3.6-7; Diodorus 17.42.5.
[789] Curtius 4.3.6-7. Curious, as this would have made the task of capturing Tyre more difficult and thus success all the more Herculean.
[790] Diodorus 14.2.23.
[791] Bosworth, 1980, 240.

to assault the walls later in the siege, as described by Diodorus.[792] If Alexander had taken the time to protect the workers properly, this would have slowed the progress of the mole; what we see is a mistake on the part of Alexander, one caused by his impatience and carelessness, as the siege was already several months old and he had not engaged the enemy yet: this impatience led to an overall delay which is exactly what he was trying to avoid.

During the first stage of the siege, the Tyrians showed themselves to be more flexible and proactive than the Macedonians – the fire ship is another example. The Tyrians filled a transport vessel with brushwood[793] and other flammable materials, set up twin masts in its bows, from each of which were suspended cauldrons of pitch. The vessel was heavily ballasted aft,[794] which meant the front of the vessel was out of the water, allowing it to run aground on the mole more easily.[795] The vessel was evidently a horse transport of no ordinary Greek style;[796] Curtius stresses its enormous size and thus the amount of flammable material that it could contain.[797]

The fire ship was then towed, stern first, towards the mole.[798] As the transport vessel approached the mole, some crewmen in the ship set the kindling ablaze and leapt overboard to be rescued by the trireme tug-boats. Once the transport vessel made the mole, the towers quickly caught fire and were completely destroyed. The marines on the triremes landed at various points along the mole and burned the siege equipment that had escaped the range of the fire ship. This single ingenious counter attack, along with a violent storm, set the siege back months.

After the incident, Alexander gave orders to his engineers[799] that the mole be widened and rebuilt,[800] allowing space for more towers, and further siege engines were to be constructed. Palisades were also set up along the sides of the mole to protect from naval assault. After leaving specific instructions, Alexander left Tyre for an expedition to Sidon.[801] It seems that it was only now that Alexander realised that without a fleet he had little hope of capturing the city.[802] As has been argued throughout this work, it was

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[792] Diodorus 17.42.7; although this is assumed by Fuller, 1958, 210.
[793] Increasing the depth of the vessel, and thus the amount it could carry, by heightening the sides.
[794] With rocks and sand, Curtius 4.3.2.
[795] Arrian 2.19.1.
[796] Athenian horse transports of the day were essentially triremes with the lower levels of oars removed; this was something far larger: Morrison & Williams, 1968, 248*f*; *cf.* Bosworth, 1980, 240.
[797] Curtius 4.3.2.
[798] Bosworth, 1980, 241, for a discussion of the language of the text. Towing the vessel from the stern would have been more challenging given the aft weight, but far from impossible. *Cf.* Arrian 2.19.3.
[799] Arrian only twice makes reference to the famous siege engineers, here and at 2.21.1. None of our extant sources mention any of them by name, but we can probably assume that the Thessalian Diades was among them; once famously described as "*the man who took Tyre with Alexander*" Bosworth, 1980, 241. Charias was probably among them too, the pupil of Polyeidus, Philip's engineer at Perinthus and Byzantium. Charias was no doubt responsible for the stone-throwing catapults used against Halicarnassus, Tyre and later Gaza: Diodorus 42.7; *cf.* Arrian 2.21.7; Marsden, 1971, 102*f*.
[800] Arrian 2.19.6.
[801] Arrian 2.20.1-5.
[802] Ashley, 1998, 242.

Alexander's hallmark strategy to attack in multiple directions simultaneously: this is how he ultimately managed to capture the city. Not to follow that strategy until this point seems incredible, and a very significant mistake. The lack of a fleet made during the initial stages of the siege made the tactic impossible, of course, and it is probably an example of Alexander's arrogance that he attempted to capture the city essentially by brute force. The failure to defend the mole properly is also a mistake, his impatience to blame there; he evidently believed that taking the time to build abatis along the edges of the mole and to properly protect the towers would have slowed progress that was already proceeding too slowly for Alexander's liking. It is sobering, however, that this failure resulted in far greater delays than if he had taken proper precautions initially.

Curtius presents us with a picture of a depressed Alexander, a man undecided whether to continue with the siege, or to abandon it;[803] his decision to stay only coming with the arrival of the Cyprian fleet. This is almost certainly another instance of Curtius misunderstanding his sources. It is likely that Alexander considered leaving, but not that he considered abandoning the siege. The history of his career tells us that he could never admit that he had been beaten, and thus Tyre had to fall. I see little reason to doubt, however, that Alexander himself considered leaving the siege, perhaps with Perdiccas in charge, and continuing the advance towards Egypt. Alexander was a man of action and sitting for several months while the mole was constructed without being able to engage the enemy at all would have been unbelievably frustrating for him. We do have an example of a similar action, the siege of Halicarnassus; here Alexander left before the final fall of the city to continue the campaign, leaving some troops behind to complete the capture. There may well have been discussions along these lines which Curtius confused.

The Persian fleet had now effectively disbanded, given that most of their home ports were now in Alexander's hands. The fleets of many of those cities now joined Alexander at Sidon; Gierostratus, King of Aradus, and Enylus, King of Byblus, both arrived after leaving the fleet of Autophradates.[804] On a single day eighty Phoenician triremes arrived at Sidon, along with nine from Rhodes, three from Soli and Mallus, ten from Lycia and a fifty-oared vessel from Macedonia. Shortly after this the Kings of Cyprus arrived with 120 warships, Alexander accepted all regardless of previous allegiance.[805] Arrian's total number of vessels is 224, a figure roughly in agreement with Plutarch's 200. Curtius states that Alexander used 190 in the final assault against Tyre.[806]

Whilst the fleet was being organised, Alexander took some cavalry, the hypaspists, Agrianians and archers in an expedition into the Lebanese Mountains.[807] As always, these are the troops that Alexander used for these sorts of expeditions, where lightning fast movement and flexibility of arms are required. For ten days he conducted operations; the reasons are two-fold: partly to establish a supply of timber for the siege works, (massive amounts were no doubt being consumed by the mole and the siege

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[803] Curtius 4.3.11.
[804] Arrian 2.20.2.
[805] Arrian 2.20.1-3; Romane, 1987, 82.
[806] Plutarch *Alex.* 24.5; Curtius 4.3.11.
[807] Arrian 2.20.4.

engines, as well as in cooking fires), and partly to relieve his own frustrations and those of his men after being unable to engage the Tyrians properly.[808] It is important to note that Curtius[809] places the expedition against the "Arabs" before the assault by the fire ship. This seems an obvious device to remove any blame from Alexander by having him away on expedition in the Lebanese Mountains at the time.[810] Once Alexander returned to Sidon, he found Cleander waiting with 4,000 much-needed Greek mercenary reinforcements from the Peloponnese.[811]

Siege - 2nd Phase

With his new fleet properly equipped, Alexander embarked as many of his foot soldiers as he could into triremes. Arrian[812] tells us that this was because he assumed that the anticipated naval engagement would involve close-order fighting rather than traditional naval tactics. This statement of Arrian is extremely informative of Alexander's strategic thinking. We know from his reluctance at Halicarnassus that Alexander was astute enough to realise that he had little knowledge or experience of naval warfare; therefore he refused a skirmish in that instance. Here we have Alexander with superiority of numbers (or at least near equality), yet he still assumes that the action will essentially be a land battle fought at sea; he fails to improvise and adapt to this environment - the only instance in his career of this kind of lack of adaptability and an unwillingness to embrace a new theatre of warfare.

It seems that the Tyrians were prepared to offer a naval engagement as long as they were numerically superior, but, once the size of Alexander's newly acquired fleet became apparent, they retreated within their harbours and blocked the entrances.[813] This Tyrian tactic is interesting: despite almost certainly possessing superior naval tactics, they again chose the defensive security of their city; or perhaps they understood Alexander's temperament and understood that again refusing an engagement would cause him tremendous frustration. Despite the Tyrian refusal, some of Alexander's vessels rammed three of the ships of Tyre's fleet that were blocking the northern harbour,[814] sinking them. That the harbour mouth was narrow can be shown by the fact that Alexander sank only three vessels. The Tyrians probably moored their blockading ships in place and the three that were sunk were probably the outermost line of defenders.[815]

The harbour was too narrow to launch a general assault,[816] however, and Alexander's navy had to withdraw for the day. The following morning, Alexander gave orders that the city be blockaded; the Cyprian contingent was stationed outside the

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[808] Morrison, 2001, 41.
[809] Curtius 4.2.24-3.7 uses the term "Arab" probably incorrectly.
[810] Rutz, 1965, 376*f.*
[811] Cleander had been sent back to Greece probably in the spring of 333 (Arrian 1.24.2), spending almost a year recruiting. Arrian 2.20.4-5.
[812] Arrian 2.20.6.
[813] Arrian 2.20.6.
[814] Curtius 4.3.12; Arrian 2.20.6
[815] Bosworth, 1980, 245.
[816] Arrian 2.20.6.

northern harbour, the Phoenician navy outside the southern.[817] Further to this the mole had reached the walls. Alexander was now in a position in which he could press from all sides: from this point it was only a matter of time for the defenders.

There is a variation on the tradition, however, preserved in the text of Diodorus.[818] In this alternative tradition, the Tyrians were in the process of launching an assault upon the mole when Alexander appeared with the newly acquired fleet and tried to cut off their retreat, whilst making an attempt on the Sidonian[819] harbour at the same time. The key elements of the episode also appear in Polyaenus.[820] The only common factor in the Diodorus and Arrian/Curtius traditions is the sinking of the three Tyrian ships defending the harbour mouth.[821] Even this, however, is problematic; Diodorus places the sinking of the three ships much later in the siege, when the naval blockade had been in force for some time.[822] Either there is a gap in the narrative of Arrian, or else the vulgate tradition has fabricated additional details, or conflated known details in a way common throughout Diodorus' text.[823]

It is certain that the texts of Arrian and Curtius omit much of the detail of the siege. There is certainly not enough narrative to fill the eight months that we know it took Alexander to capture Tyre.[824] One obvious and significant omission is the construction of the mole; it seems to disappear from Arrian and Curtius for quite some time. One minute it is being destroyed by the fire ship, the next it has been doubled in size and is at the very walls of Tyre itself. Diodorus provides a little vital tactical information, that after early mistakes Alexander was protecting the construction workers with a heavy screen of naval vessels.[825] Bosworth suggests that Ptolemy may have only included the most interesting elements of the siege, which is entirely plausible;[826] but it is also possible that Ptolemy may not have been present for parts of the siege. Junior officers would likely have been sent, from time to time, on scouting or foraging missions. The lack of Ptolemy's name in the histories at this point makes it impossible to know.[827]

Once the construction workers[828] on the mole had been relieved of the constant threat of attack by the Tyrian navy, work progressed quickly and very soon the mole was up to the very walls of the fortress. Once Alexander had his fleet, and the mole had reached the walls (or at least was very close), he was able to attack the city at all points

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[817] Curtius 4.3.13; Arrian 2.20.6.
[818] Diodorus 17.42.1-5.
[819] The northern of Tyre's harbours. Strabo: 14.2.23, claims that it was a closed harbour: this is unlikely in Alexander's day, but the harbour was narrow, Arrian 2.21.8.
[820] Polyaenus 4.3.4.
[821] Bosworth, 1980, 245.
[822] Diodorus 17.42.5-7.
[823] Bosworth, 1980, 245. Brunt, 1962, 148.
[824] Bosworth, 1980, 245.
[825] Arrian 2.21.3. Diodorus 17.42.5.
[826] Bosworth, 1980, 245.
[827] Heckel, 1992, 222-228.
[828] Alexander had gathered together a very large body of workmen from Cyprus and Phoenicia: Arrian 2.21.7.

with artillery and battering rams. This reference in Curtius, supported by Arrian,[829] to all points around Tyre being attacked by artillery and rams is key; it demonstrates that Alexander had equipped some of his triremes with stone-throwing catapults as well as rams, an ingenious strategy. Diodorus tells us that the catapults were used directly against the walls, and Marsden[830] believes that this is the first time in history that stone-throwing catapults were used in such a way, although it is likely that this happened at Halicarnassus,[831] and probably even Miletus shortly before that. While the catapults would have been placed on individual ships, the rams were a different story. Diodorus[832] tells us that triremes were lashed together and siege towers built on them, thus allowing the rams to attack higher up the walls where they would be weaker. Curtius supports this claim, stating that pairs of quadriremes were tied together at the prows, forming a delta shape with the central section being boarded over acting as a platform for troops.[833] Arrian mentions both types of vessel; the ones carrying artillery or rams, and the troop transports.[834] They were clearly intended to be used as a combined arms force, one providing covering fire for the other as the walls were stormed.[835] Alexander was using the kind of land-based tactics that had proved so successful, the integrated use of a variety of troop types, and adapting it to a new environment; something that he did time and again during his career.

In order that the walls could be stormed, the troop carriers were equipped with scaling ladders, which Arrian calls *gephura*, and Diodorus calls *epibatra*.[836] The two words are synonymous as is proved by Arrian's description of the siege of Massaga, where he clearly used both to describe the same scaling ladders.[837] The scaling ladders that Alexander's engineers created seem to be a forerunner of the *sambycae* which were later used by Marcellus in a siege of Syracuse and again by Mithradates against Rhodes.[838] These later ladders were larger and raised by a pulley system mounted on the top of the mast.[839] Alexander's, on the other hand, seem to have been raised by means of a specially constructed wooden turret; the principle was essentially the same, however, ship-borne scaling ladders that could be raised to the height of the walls.[840]

The defenders were equally ingenious: they erected wooden towers to rain missiles down upon the attackers, seemingly at all points around the circuit of the city. Fire arrows were used against the Phoenician ships so that their crews were afraid to approach within range.[841] Diodorus describes revolving wheels, something akin to

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[829] Curtius 4.3.13; Arrian 2.21.7.
[830] Diodorus 17.45.2; Marsden, 1969, 101,103.
[831] Marsden argues that they were used as anti-personnel devices at Halicarnassus, not against the walls.
[832] Diodorus 17.43.3.
[833] Curtius 4.3.14*ff*. Atkinson, 1980, 304, points out the lack of manoeuvrability of ships lashed together in such a way.
[834] Arrian 2.23.3.
[835] Bosworth, 1980, 247.
[836] Arrian 2.21.2; Diodorus 17.45.5-6; 46.2.
[837] Arrian 4.26.6, 27.1.
[838] Bosworth, 1980, 247.
[839] Polybius 8.4.2*ff*; Appian, Mithridates, 26.103, 27.105; *cf*. Landels, 1966, 69-77.
[840] Diodorus 17.45.2. Bosworth, 1980, 247.
[841] Arrian 2.21.3.

windmills[842] that were used to deflect projectiles thrown by catapults.[843] Curtius tells us of barbed grappling irons and shields piled with red hot sand that were then dropped on besiegers who could have no defence against such an attack. Tarn[844] dismisses these Tyrian inventions, as well as others in Arrian's text, as being little more than a copy from a Hellenistic textbook on siege warfare, ignoring the fact that both Arrian and Curtius agree on the detail of such devices.

It is no doubt a serious exaggeration on the part of Arrian, or more likely Ptolemy,[845] to put the height of the city walls opposite the mole at 45m, although some have accepted it without question.[846] If the walls had been this height, there would have been no need for the defenders to build additional wooden towers on the ramparts in order to be higher than Alexander's siege towers.[847] The only references to the dimensions of the walls made by either Curtius or Diodorus[848] are to the secondary wall that the Tyrians built as insurance against the first failing; this was ten cubits thick and five cubits behind the outer wall.

There is a second incident during the siege of Tyre where Alexander perhaps shows himself to be unwilling or incapable of adapting to naval warfare. In order for the Phoenician navy to engage the fortifications properly, the water had to be cleared of rocks.[849] Alexander set his ships to clearing away these rocks, but the Tyrians equipped a number of ships in such a way that, if they sailed close to the anchored Phoenician vessels,[850] they would cut the mooring ropes. Alexander's first response is telling: he fitted out a number of vessels and used them as a defensive screen against the Tyrian ships. This is exactly the tactic that he used to protect the workers on the mole, essentially a solid barrier. It was only after the Tyrians used divers to cut the ropes that Alexander started using chains.[851] In this incident, as with earlier ones on the mole, we see Alexander reacting to actions of the defenders. This is certainly not the proactive innovator that we would expect. What we may have here is something we see elsewhere: when Alexander is confronted with an entirely new situation for the first time, the outcome is usually less successful than in subsequent encounters in similar circumstances. We can see, for example, the struggles initially in the Balkans, at Halicarnassus and the island of Tyre juxtaposed with the later stunning successes at the

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[842] One can only imagine the devastation in the city that must have been caused by the constant need for building material for new defensive works as well as repair work.
[843] Diodorus 17.43.1-2.
[844] Curtius 4.3.24-5. Grapnels were common enough in ancient warfare (for example, Alcibiades' use of such a device against Mindarus' ships; Diodorus 13.50.5, Polyaenus 1.40.9). The closest parallel to the Tyrian device, as noted by Atkinson, is the *harpax* supposedly invented by Agrippa in 36 B.C; (Appian *B.C.* 5.118; *cf.* Casson, 1971, 122). The Tyrian invention seems a precursor of this, but it is hard to see how they would have been deployed from walls that were 45m high (Arrian 2.21.4; likely to be an exaggeration), Atkinson, 1980, 308. Tarn, 1948, 2.120-1.
[845] Arrian should not escape criticism, however, for not realising the exaggeration.
[846] Fuller, 1958, 210.
[847] Bosworth, 1980, 247. The towers were apparently 45m high.
[848] Curtius 4.3.13; Diodorus 17.43.3.
[849] Apparently thrown into the sea to prevent vessels from drawing too close.
[850] They had to be anchored as they tried to winch the blocks on board, also using ropes.
[851] Arrian 2.21.4.

Granicus, Gaza and the eastern sieges. Alexander shows himself to be a commander who does not instantly make the correct decisions when faced with a situation he has never seen, but quickly learns and adapts.

At this point the defenders were becoming desperate and were prepared to gamble on a final naval sortie. They had noticed that the Cyprian fleet, which was guarding the northern harbour, withdrew at midday, every day, to cook their meal ashore.[852] At some unspecified point, the Tyrians had rigged a screen across the whole of the mouth of the Sidonian Harbour; behind this, unobserved, they manned three quinqueremes, three quadriremes and seven triremes with hand-picked men.[853] The Tyrians waited for Alexander, who was stationed with the Phoenician fleet that was guarding the Egyptian harbour,[854] to withdraw at noon as usual before the sortie began. The Tyrian vessels sailed from the Sidonian harbour and engaged the Cyprian fleet. What they encountered were ships that were either empty or had mere skeleton crews. Three Cyprian ships were sunk immediately and many others were driven onto the beach and disabled.[855] One of the ships that were sunk was the flagship of King Pnytagoras of Cyprus. By pure chance,[856] Alexander had not taken his usual afternoon nap, but had returned to the Phoenician fleet almost immediately. Upon hearing of the sortie, he ordered the Egyptian harbour to be sealed lest another attack be launched from there, and sailed with the remainder of the Phoenician fleet to the relief of the Cyprian. Most of the attacking Tyrian vessels were either captured or sunk as they failed to make the safety of the harbour before being engaged by Alexander, although the loss of life was small as the sailors simply swam to safety.[857]

The stratagem employed by the Tyrians of attacking at mid-day when the enemy was breaking for lunch was virtually as old as Greek warfare.[858] Their hope was to emulate the success of Lysander against the Athenians at Aegospotami in 405 when the Spartans captured almost the entire 160 trireme Athenian fleet. Success on anything like this level would have dealt a very serious blow to Alexander's ability to attack the city at all points,[859] and would have relieved the blockade.[860]

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[852] Cooking a meal on board ship would have been all but impossible in conditions that probably would have been even more cramped than usual with the siege engines and extra troops that they were carrying. Ashley, 1998, 243,458.

[853] Arrian 2.21.6-8. The size of the fleet, or lack thereof, suggests that the Tyrians either did not have many vessels left at their disposal, or that they were running short of qualified men to sail in them.

[854] The Egyptian harbour being the southern of the two ports of Tyre.

[855] Arrian 2.21.8-9.

[856] We need not assume that this was any more than chance, such as some kind of advance intelligence; if it had been then the Cyprian fleet would surely not have been left so vulnerable.

[857] Arrian 2.22.1*f*.

[858] Examples include Herodotus 6.78; Thucydides 7.39*f*; Xenophon, *Hellenica* 2.1.24*ff*.

[859] Ashley, 1998, 243.

[860] Resources must have been running seriously low in Tyre, particularly food and fresh water.

With the mole at the very walls of Tyre,[861] and all hope of protection from their fleet gone, the defenders were in a desperate situation.[862] The walls on the landward side of the city were, apparently, far too strong to be breached by the siege engines positioned there.[863] The walls to the north of the city proved to be equally strong, but the walls to the south were weaker. A considerable length of wall shook after a prolonged assault and finally collapsed.[864] Arrian tells us that Alexander, almost immediately, made a rather tentative and probing attack that was easily repulsed.[865] The impression we get from both Curtius and especially Diodorus is of something more serious. The failure of this attempt, according to Curtius,[866] led Alexander for a second time to consider abandoning the siege altogether and heading for Egypt, but again Alexander could not abandon the siege; his career again tells us that he was a man who evidently could not tolerate failure, his own or that in others, and he resolved to continue the siege. However, Atkinson[867] has argued, quite correctly, that this section of Curtius owes more to romance than history; Curtius also tells us of a sea creature that rose from the waters and came to rest upon the mole.

The breach in the wall was probably not large, and almost certainly not down to the foundations as implied by Diodorus.[868] More than likely a section of the ramparts gave way, as described by Arrian; but this was important as it meant the attackers did not have to fear red-hot sand, and the other defensive countermeasures, as they made their final assault. Arrian gives us a picture of Alexander probing the city at all points, the defenders being "caught in a ring of fire".[869] This was partly to try to force an entry and partly to draw defenders away from the section he wished to concentrate upon.[870] The Tyrian resistance was both impressive and desperate; they threw back the Macedonians at the breach, and resisted Alexander's attempt to force both the Sidonian and Egyptian harbours.[871]

After the repulse at the breach, there was a lull in the fighting. Diodorus[872] tells us that Alexander made an offer to accept the surrender of Tyre. The offer, if real, was not popular amongst the Macedonian high command; only Amyntas son of Adromenes

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[861] Tarn, 1948, 2.120-1, believed erroneously that the mole never reached the city walls. It is clear from Arrian 2.22.6 that it did. He also did not believe that wooden towers could be mounted on ships, and seems to imply perhaps not even on the mole when he argues that they can only be used on land: Curtius 4,26.1 and 4.27.1, shows us that they were mounted on ships; *cf.* Bosworth, 1980, 251, for arguments against Tarn's position.
[862] Romane, 1987, 84-85.
[863] Arrian 2.22.6-7; Curtius 4.3.13-18; Diodorus 17.43.3-44.5.
[864] Diodorus 17.43.3-5.
[865] Arrian 2.22.6.
[866] Curtius 4.4.1.
[867] Atkinson, 1980, 308. That Alexander seriously considered abandoning the siege at this point must be dismissed, although it is entirely possible, as noted earlier, that he considered leaving a small contingent to complete the capture of the city, as he had done at Halicarnassus. *Cf.* above, p.120.
[868] Diodorus 17.43.4 states that the wall was thrown down to the length of a *plethron*.
[869] Arrian 2.22.7.
[870] As noted many times, attacking from various points at once was Alexander's favoured stratagem.
[871] Romane, 1987, 85.
[872] Diodorus 17.45.7.

supported it.[873] The Tyrians were given two days to surrender; on the third the final assault began.[874] A delay is also attested in Arrian, although he attributes it to bad weather; and in Curtius,[875] where the chronology of the final stages is confused. The final assault began with an artillery barrage which was a precursor those that were to become so common during World War II offensives.[876] After the naval barrage, which we can assume was conducted around the whole circumference of the city, a *taxis* of hypaspists under Admetus attacked the breach.[877] Admetus was killed by a spear before gaining the walls,[878] but Alexander, who was also present, pressed forward and soon the southern sector of the city walls was in Macedonian hands. It is clear from our sources that the troops were well drilled and commanded: they did not simply pour into the city as might have been expected, but remained in the vicinity of the walls to ensure the breach was held as more troops were brought forward.[879]

There was now a general collapse of the Tyrian defences; the Phoenician fleet successfully forced an entry into the Egyptian harbour and made short work of the enemy fleet stationed there; the Cyprian fleet had similar success to the north.[880] Most of the Tyrian soldiers that remained alive withdrew to the shrine of Agenor, the father of Cadmus, who was the legendary founder of Tyre and Sidon,[881] with the intention of making a last stand; they were not disappointed. Arrian tells us the slaughter was terrible, the Macedonians were allowed to vent their fury at such a brutal siege upon the survivors.[882] Some 8,000 Tyrians were killed and the remaining 30,000 were sold into slavery, as was the usual practice.[883]

Conclusion

The capture of Tyre is usually regarded as Alexander's finest achievement, or at any rate, one of his finest of his career. This is not without some justification; Tyre was a seemingly impregnable island fortress that was heavily defended and commanded by an extremely talented king Azemilcus. When we closely examine the events of the siege,

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[873] It is a considerable exaggeration to call this Amyntas a member of the high command: he is otherwise unattested (and absent from Heckel, 1992) and perhaps thought it a potentially good career move to support the king.
[874] Romane, 1987, 85.
[875] Arrian 2.23.1; Curtius 4.4.10. He places the delay after the final naval sortie, but he places this after the failed assault on the breach in the wall.
[876] And a key ingredient of Blitzkrieg: Guderian, 1937; *cf.* Messenger, 1976, 127*ff.*
[877] Arrian 2.23.2 uses the term *taxis*; given that a *taxis* of the hypaspists was 1,000 men, and that 1,000 men simply could not fit in the small number of vessels discussed, it is clearly the wrong term. Milns, 1971, 189. Admetus was probably the commander of the agema of the hypaspists, Heckel, 1992, 253; Tarn, 1948, 2.151; *contra*, Bosworth, 1980, 251, believed him to be merely a *chiliarch* of the hypaspists; *cf.* Arrian 2.23.1.
[878] Arrian 2.24.3.
[879] Bosworth, 1980, 253.
[880] Arrian 2.24.4.
[881] Curtius 4.2.15.
[882] Arrian 2.24.4.
[883] Arrian 2.24.5; Diodorus 17.46.4, gives the number of captives at 13,000 and claims 2,000 were crucified. Curtius 4.4.15 adds 15,000 were smuggled to out to Sidon; highly unlikely but these figures also total 30,000.

however, we see that many of Alexander's great innovations were in fact enforced reactions to Tyrian inventiveness. We see Alexander making a series of key errors, such as pushing work on the mole at the expense of defending it properly, which led to its destruction and a major delay, as well as not anticipating a noon sortie against his fleet. We also see Alexander's lack of creativity as an admiral, using essentially land based tactics for his fleet. This said, however, Alexander certainly showed himself very capable of adapting to new situations and new defensive measures with increasingly elaborate ideas of his own. That Alexander captured Tyre is beyond doubt and we should recognise that fact; the victory was due as much to persistence and the quality of his troops as it was to innovation. We should also note, as a final point, that king Azemilcus was one of the most able commanders he ever faced, and should be given the honour that he deserves.

Gaza - Introduction

Tyre was no doubt one of Alexander's greatest military achievements, albeit not a series of unremitting innovations as some may wish to suggest. In terms of strategy, Gaza was at least as interesting; although always understandably overshadowed by Tyre, and not examined in anything like the detail it deserves.[884]

Sources

The siege of Gaza lasted two months, and contained some extremely interesting insights into Alexander's ability as a siege commander. It seems to have been treated, in all of our sources, as something of an interlude between the great siege of Tyre and the events in Egypt; because of this much information has inevitably been lost.

The siege of Gaza is mentioned in all of our surviving sources,[885] as is to be expected of a two-month siege. Only two, however, give any significant details: Arrian and Curtius.[886] Arrian's account lacks depth; it tends to focus on personalities[887] rather than technical details, and although it does provide us with a reasonable chronology of events, the account is brief and much must have been missed;[888] that is to say nothing of the evident errors that will be discussed more fully later.[889] Curtius' account, on the other hand, is shorter but contains a greater amount of technical information. On this occasion, Curtius' source is evidently the superior one.[890] Hammond has argued that Curtius' source for the Gaza campaign was Cleitarchus, and I see little reason to disagree with this, although, as Rutz noted,[891] Curtius' narrative shows enough similarities with Arrian and Diodorus for us to conclude that Cleitarchus was not Curtius' only source. Much of

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[884] Diodorus, for example, commits only a couple of lines to the whole two-month siege.
[885] Arrian 2.26; Curtius 4.2-6; Plutarch, *Alex.* 25; Strabo 16.2; Polybius 16.229.5-6; Diodorus 17.18; Josephus, *Ant.* 8.3-4.
[886] Arrian 2.26; Curtius 4.5-6
[887] Romane, 1988, 22.
[888] Although it is still the longest of the surviving narratives.
[889] Bosworth, 1980, 257-260.
[890] Atkinson, 1980, 315-319.
[891] Hammond, 1983, 126. Rutz cited in Atkinson, 1980, 315.

the technical detail in Curtius' narrative[892] must have been provided by a technically proficient eye witness.

Aftermath of Tyre

After the successful capture of Tyre, Alexander continued his journey down the Phoenician coast intent upon completing the grand strategy he set out at Halicarnassus of defeating the Persian navy on land by depriving it of its ports.[893] This was, as has often been noted,[894] a momentous decision. It meant, initially at least, that every port between Miletus and Egypt had to be captured.[895] By late 332 the strategy had been largely obviated by events: the formerly powerful Persian navy was essentially now in the hands of Alexander. There was, effectively, no longer any risk of the Persians carrying the war into Greece,[896] so why did Alexander not pursue Darius at this point and leave Egypt to its own devices? There are a number of possible explanations: firstly it does not seem to be in Alexander's character[897] to leave a potentially powerful adversary unchallenged. The second reason may be Alexander's desire to conquer the whole of the Persian Empire, of which Egypt was certainly part, albeit a reluctant and recalcitrant part.[898] Alexander also, undoubtedly, wished to visit the shrine at Siwah, one of the most famous in the ancient world; Arrian presents his *pothos* as occurring suddenly at Thebes,[899] but it is not improbable that Alexander felt this urge once he was presented with the possibility of capturing Egypt after Tyre. A final, and not to be underestimated, reason for Alexander's conquest was the need for food. Throughout the ancient world, Egypt was something of a bread basket for most of the Mediterranean region, from fifth century Athens to the Roman Empire. Alexander had a flair for logistics,[900] as is evident from the lack of difficulties he had: he seldom ran low of food or water, and this was partly because he took care of these essentials whenever he had an opportunity, as now.

Gaza was the principal frontier fortress of the Persian Empire in that region.[901] For years it had stood guarding the Persian heartlands from aggression from an often recalcitrant Egypt,[902] and now it stood directly in Alexander's path. Gaza simply had to

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[892] Such as with the mining operations.
[893] Arrian 1.20.1.
[894] Bosworth, 1980, 141-2; Green, 1974, 191.
[895] Green, 1974, 192.
[896] Realistically there had been little chance of this after the death of Memnon.
[897] It is, of course, highly dubious to make judgements about Alexander's character, but in this instance it seems valid based upon the fact that throughout his career he never seems to be able to resist this kind of challenge for long.
[898] Cambyses first conquered Egypt in 525, and from around the middle of the fifth century (the time Herodotus was writing) Persia was extremely unpopular there. In 404 Egypt successfully revolted from Persian rule, until a brutal re-conquest by Artaxerxes III Ochus in 341. Romane, 1988, 21; *cf.* Cook, 1983, 49.
[899] For details on the visit to Siwah see Arrian 3.3.1*ff*; Diodorus 17.49-51; Curtius 4.7.5-30; Plutarch, *Alex.* 26-27 and Strabo 17.1.43. For the fame of Siwah see Curnow, 2004, 33*f*. For Alexander's *pothos* see Arrian 3.3.1.
[900] Engels, 1978, particularly 54-70; 113-131; 144-158.
[901] Romane, 1988, 23.
[902] Cook, 1983, 49.

be captured; although Alexander probably had contact with what we would now call the Egyptian resistance, he could not be certain of the welcome he would receive. If the Egyptians proved hostile, Darius could easily trap him between Egypt and Palestine using Gaza as a forward base.

The defenders of Gaza were numerically relatively weak and commanded by an otherwise unattested Persian. The precise name and position of the garrison commander is the subject of some dispute:[903] the text of Curtius reads Betis, more or less the same as the Batis of Arrian; Josephus, on the other hand, records two forms of the name, something like Babemesis.[904] Arrian attests Batis as a eunuch; Curtius[905] describes him in neutral terms as simply city commander, and stresses his great loyalty to Darius.[906] Only Josephus terms him specifically garrison commander.[907] As Bosworth notes, Batis was either specifically assigned as garrison commander by Darius, or he was a local chieftain who assumed the position as Alexander approached. In either case he could well have been a eunuch: Hermias of Atarneus was a eunuch and ruled in the Troad[908] and Bagoas commanded one third of the Persian army during the invasion of Egypt in 343.[909] Whatever the name and specific designation of the commander, his troops are worthy of note: Arrian describes the defenders as "Arab mercenaries".[910] Arab mercenaries are nowhere else attested, although at the battle of Raphia Antiochus III raised a force of 10,000 Arab warriors from the Gaza region.[911] Arrian also tells us that they had been preparing for a lengthy siege by stockpiling supplies.[912] We also know they were well trained and highly motivated.[913]

Gaza – Siege

Gaza was situated 20 stades[914] from the Mediterranean coast and was a city of significant size. Arrian tells us that the city was well-sited on a tell and surrounded by a crenellated wall.[915] No other source, however, ever gives the impression that Gaza was at all elevated above the surrounding terrain. The modern city is located on a low hill 18-30m high and around 3km in circumference,[916] but this should not be used to support Arrian's assertion, as the current mound could simply be the result of material deposited

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[903] Bosworth, 1980, 257-258; Atkinson, 1980, 334-336; Romane, 1988, 23.
[904] Curtius 4.6.7. Arrian 2.25.4. Josephus, *AJ.* 11.320. Bosworth, 1980, 257; Tarn, 1948. 2.265-270.
[905] Arrian 2.25.4. Curtius 4.6.7.
[906] Bosworth, 1980, 257.
[907] Josephus *AJ.* 11.320.
[908] Bosworth, 1980, 258.
[909] Diodorus 16.47.4; *cf.* 16.50.8.
[910] Arrian 2.25.4.
[911] Polybius 5.79.8, 82.12; *cf.* Bosworth, 1980, 258.
[912] Arrian 2.25.4.
[913] Curtius 4.6.7.
[914] Arrian 2.26.1; *contra* Strabo 16.2.30.759, stating 7 stades. 20 stades being 3.3km, 7 stades 1.2km; the difference could be a change in the coastline: Atkinson, 1980, 337.
[915] Arrian 2.26.1.
[916] Bosworth, 1980, 258. If Arrian's description is correct, to the outside observer the fortifications must have looked something akin to a medieval Mott and Bailey Castle.

over the centuries. Arrian's use of a tell seems to be a deliberate attempt to exaggerate the difficulty, and thus the glory, of the siege.

It seems likely that Alexander had scouted the city before he arrived as he immediately made camp opposite the weakest point of the fortifications[917] and set about rebuilding the smaller arrow throwing siege equipment that he had brought over land from Tyre.[918] Behind his lines, Alexander also began to dig a number of mine shafts, intending to undermine and collapse the walls. The geology of the area particularly lent itself to this form of siege technique. The ground was soft sand with no large rock outcroppings that would impede the progress of a tunnelling operation.[919]

Once Alexander had made camp, he ordered the construction of a turf wall around the city.[920] At the same time as this was being constructed, his engineers were rebuilding the siege engines that the army had carried from Tyre. The engineers themselves evidently advised Alexander to wait until the bulk of the siege equipment (the towers and larger siege artillery) was brought by sea from Tyre, but Alexander ordered them to press on with the siege. The defensive levee, we are told, was of a size that would allow the catapults and various other siege machines to be at the same level as the city walls.[921] If this is the case then it is strong evidence that the city was not, itself, on a mound. It is also a good instance of Arrian actually contradicting himself seriously. Arrian also tells us that the levee was all of equal height, so that the siege machines could easily be moved from one point to another, but that it was highest opposite the southern city wall, the area perceived to be the weakest.[922] When the defensive wall reached the correct height, the siege towers and battering rams were brought up for an assault on the city walls.

In this initial stage of the siege, Arrian presents the most significant problem faced by the besiegers as the difficulty of getting the siege engines to the level of the top of the walls.[923] Curtius has an entirely different and more plausible emphasis, that the main effort was put into the mining operations; indeed, the mining operations are only mentioned in passing by Arrian.[924] Curtius tells us that Alexander only tried to use his siege engines as a diversionary tactic, and that the assault only failed because the wheels

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[917] Romane, 1988, 23.
[918] Arrian 2.26.2.
[919] Curtius 4.6.8; Arrian 2.26.2.
[920] Arrian 2.26.2. This turf wall (or circumvallation) was not the first of its kind in Greek history, but became far more widely used during the Roman Republic and later. There remains a question, however: if Gaza was located in a desert and surrounded by sand, where did Alexander get enough turf to construct a circumvallation? The answer could be that the area was more fertile in the fourth century, and thus there was more turf than there is at present. It seems unlikely that the immediate area was more fertile, given that the events of the siege strongly imply that the area was indeed very sandy. It seems likely either that the turf came from some distance or that Arrian simply made a mistake in using the wrong terminology (i.e. the wall was not made of turf).
[921] Arrian 2.26.2.
[922] Arrian 2.26.3.
[923] Bosworth, 1980, 258.
[924] Curtius 4.6.8-9. Arrian 2.27.4.

of the siege engines became bogged down in the soft sand.[925] There is no hint of this in Arrian, for whom the main difficulty was the height of the mound and the strength of the walls.[926] Every effort is made by Arrian to present the fortifications as impregnable and thus magnify the difficulty of the siege.

There are many problems with the accounts of the early part of the siege. Curtius must be incorrect in stating that the assault on the walls was a diversionary tactic; this theory would certainly fit well with Alexander's general plan, which I have argued for throughout this thesis, of attacking at various points at once. There would, however, have been no need for a diversion at this time: the point was to collapse the walls, and the more defenders that were in that area when the walls did collapse, the better for Alexander. The attack must have been a serious attempt by Alexander to carry the siege and prevent the work required on the mining operations. The fact that Alexander did not wait for the bulk of his siege engines is either an indication of impatience or a sign that the walls were not as strong as Arrian would have us believe.

The second main problem with these accounts is the circumvallation itself. We are essentially asked to believe that siege towers and battering rams were pulled up to the top of the circumvallation and then down the other side,[927] and that this was seriously seen by Alexander as a viable way to attack the fortifications. Ashley,[928] following Bosworth, has argued that the Macedonian mound was only against one wall, the southern, already noted as the weakest section. Bosworth's argument essentially comes from Curtius, who makes no reference to a mound during the early part of the siege.[929] Whilst it is possible that the mound was only against one wall, it would be contrary to Alexander's strategy at almost every military encounter of his career, that of attacking from multiple directions simultaneously. It would also have been supremely dangerous, as the tunnel would have collapsed the mound as well as the wall. There would have been no way to collapse only a small section of the tunnel. The only possible support for the argument might be to suggest that the mound was built to protect the mining operation from the prying eyes of the defenders, and potentially to attract more of them to that stretch of the wall, so that when it did collapse more of them would be killed.

It is far more plausible that the circumvallation was actually built with gaps to allow the siege engines to be dragged along level ground. If this was the case, it also explains how the entire city was surrounded with a mound as high as the city walls in what could only have been a couple of weeks. It seems more plausible that a number, perhaps a large number, of individual mounds were built upon which the catapults were stationed.

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[925] Curtius 4.6.9, adding that the men were exhausted by moving the towers forward and then backwards after the initial assault failed.
[926] Bosworth, 1980, 258.
[927] This must be the case unless we accept Arrian's version that the city itself was on a mound; if so then the circumvallation could have stretched to the walls themselves.
[928] Ashley, 1998, 249, fn.177. Ashley also accepts Arrian's version of the city being situated on a mound; Bosworth, 1980, 258.
[929] Bosworth, 1980, 258.

For the purposes of this thesis, a full discussion of the incident of the crow and the clod of earth is unnecessary, save to say that Plutarch states that:[930]

> A bird flying overhead let fall a clod of earth which struck him (Alexander) on the shoulder. The bird then perched upon one of the siege engines and immediately became entangled in the network of sinews which were used to tighten up the ropes.

Curtius'[931] account is the more interesting, however. He states that the bird landed on the nearest siege tower and that its wings became stuck on the surface, a surface that had been smeared with pitch and sulphur. The question is why would a siege tower be smeared with pitch and sulphur? These chemicals were used in the ancient world as incendiaries,[932] not as flame retardants that we might expect to cover the visible side of a siege tower. This exact combination of chemicals is what the Spartans had used against the Plataeans during the siege of that city in 429. This very siege may have formed part of the model for Alexander's attack on Gaza as the Spartans also made use of mounds of earth, and built a circumvallation, just as Alexander was doing.[933] Along with the siege of Plataea, the Peloponnesian War perhaps also provides an explanation for the pitch and sulphur on Alexander's siege towers. Thucydides provides this climactic description of the fall of the Athenian-held-fortification at Delium in 424/3:[934]

> The Boeotians took the fort by an engine of the following description. They sawed in two and scooped out a great beam from end to end and fitted it together again like a pipe. They hung by chains a cauldron at one extremity, with which communicated an iron tube projecting from the beam, and this they brought up on carts to the part of the wall composed of vines and timber and inserted huge bellows into their end of the beam and blew with them. The blast passing closely confined into the cauldron, filled with lighted coals, sulphur and pitch made a great blaze and set fire to the wall and made it impossible for the defenders to remain at their posts. They abandoned their positions and fled; and so the fortifications were captured.

Alexander could well have been about to attempt a similar tactic (although by a different medium, a burning tower rather than essentially a flame thrower), and obviate the mines before they were complete. There is no other conceivable explanation for preparing his siege towers to burn at the slightest encouragement. In this act, Alexander shows himself happy to learn the lessons of history.

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[930] Plutarch *Alex.* 25.4.
[931] Curtius 4.6.11.
[932] http://www.globalsecurity.org/military/systems/munitions/incendiary-history.htm.
[933] Thucydides 2.77.
[934] Thucydides 4.100

Despite the incident involving the raven, Alexander ordered the siege engines forward. The sand was far too soft, however, and the engines quickly became bogged down in the loose and shifting ground. With the Macedonians under constant missile bombardment from the defenders, Alexander ordered a retreat.[935] As the Macedonians were struggling to execute the order, and extricate their siege equipment from such an impossible situation, Batis ordered a sortie from the city. This is the picture presented by Curtius at least; Arrian[936] presents a slightly different version. In Arrian, Alexander is found holding back from the initial assault and only joins the battle as Batis counter-attacks. This tactic fits precisely with what we consistently see from Alexander: drawing the enemy onto ground of his choosing. At Halicarnassus Alexander was taken by surprise by Memnon's sortie, but at Gaza he was banking on Batis making the same gambit.

After what Curtius describes as something of an assassination attempt on the part of one of the Arab mercenaries,[937] Alexander organised the hypaspists and attached the Arabs who had sortied from the town. During this assault, Alexander was struck by a bolt from a catapult stationed upon the walls. The bolt penetrated his shield and cuirass and struck him in the shoulder. The wound was grievous, and Alexander was carried from the field. The defenders evidently believed that they had slain the Macedonian king, and celebrated a great victory.[938]

Alexander's wound was serious, and he seems to have taken several weeks to recover as we now have something of a pause in the siege. Further preparations were undertaken for the final stages: the mounds were strengthened and raised, the engineers began work on the mines in earnest and the bulk of the artillery arrived by sea from Tyre. Curtius[939] suggests that Alexander was adopting a new strategy at this point, but it seems more reasonable to suggest that he was building upon the strategy that he had already decided upon. Arrian's figure of a mound of c.76m is surely an exaggeration; the modern mound that Gaza is situated upon is only c.30m. Fuller[940] assumed a relatively low breastwork around most of the city, with the high mound being only against the southern section; he is supported by Bosworth,[941] but perhaps Fuller is underestimating the dimensions a little: 30-40,000 men working for several weeks could raise a very significant circumvallation indeed. Curtius[942] tells us specifically that the Macedonian siege towers overlooked the city walls and were able to bombard the interior of the city; but as I argued earlier, it seems unlikely that the siege machines would have been pulled

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[935] Curtius 4.6.9-10. It is important to note that Curtius places this aborted assault before the incident with the raven.
[936] Arrian 2.27.1; *cf.* Bosworth, 1980, 259.
[937] Curtius, 4.6.15-16. Atkinson, 1980, 339, argues that the Arabs were probably Nabataeans and that Gaza may have been a dependency of the Kedarite Sheikhs.
[938] Curtius 4.6.
[939] Arrian 2.27.3; Curtius 4.6.21.
[940] Fuller, 1958, 217.
[941] Bosworth, 1980, 259.
[942] Curtius 4.6.22.

on to the top of the circumvallation, but rather into the gaps that I assume were located at various points around the circuit.

Once Alexander had recovered from his wound, and once the mines and machines were in place, the final stage of the siege began. The wooden supports in the mines were set ablaze, the catapults began their volleys and the rams were moved up against the walls.[943] In relatively short order the mines collapsed, bringing several stretches of the walls down with them. Arrian tells us that once sections of the walls had collapsed;[944] the Macedonians, with the aid of suppressing fire[945] from the missile weapons, quickly gained control of sections of the walls. The fighting was evidently fierce and the Arab mercenaries acquitted themselves admirably. We hear of three assaults[946] by the Macedonians being repelled by the defenders. The fourth was too much, however; it was during this final assault that Alexander brought the main body of the heavy infantry into the battle and victory was assured. Curtius[947] reports a second wound suffered by Alexander, this time to his leg, although evidently not as serious as the earlier shoulder injury. During the final assault, Arrian[948] notes that the officers were competing to see who would be first to lead his men into the city. Neoptolemus was evidently first, although hotly pursued by most of the remaining *taxeis*. The city was ultimately razed to the ground and the women and children sold into slavery.[949] This evidently raised considerable sums: Alexander soon after sent his former tutor 500 talents of frankincense and 100 talents of myrrh.[950]

The story found in Curtius,[951] although interestingly not Arrian, of Batis being dragged behind Alexander's chariot whilst still alive, around the circuit of the city is an intriguing one. The Homeric story presents Achilles dragging Hector's *corpse* behind his chariot, but here Batis is still alive. Green[952] sees little difficulty with the discrepancy, stating that there was also, along with the Homeric tradition, a tradition of Hector still being alive during the incident at Troy. Lane Fox[953] defends the historicity of the story by claiming that this was a Thessalian punishment, but the sources present no evidence to support this assertion. The most we can say is that such an act would have appealed to Alexander's sense of kinship with Achilles. The absence of this story from our other sources is puzzling, except to say that incidents that a flattering source may have considered unworthy of Alexander could easily have been omitted.

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[943] It is this kind of movement that strongly argues against a continuous circuit: pulling heavy rams across soft and shifting sand would have been difficult enough without the added obstacle of the circumvallation.
[944] Arrian 2.27.4. Curtius 4.6.23, states that, once the walls fell, this was effectively the end of the siege.
[945] Which is to say the artillery pieces were acting to prevent defenders from getting onto the walls to defend the city and allowing time for the attackers to form a breach before they would stop firing.
[946] Arrian 2.27.4.
[947] Curtius 4.6.24.
[948] Arrian 2.27.4-5.
[949] Arrian 2.27.7.
[950] Romane, 1988, 25.
[951] Curtius 4.6.29.
[952] Green, 1974, 541 n.58, citing Sophocles *Ajax* 1029-1031 & Euripides *Andromache* 339; *cf.* Atkinson, 1980, 342.
[953] Lane Fox, 1973, 193.

We may imagine that the mad dash that was the end of the siege is uncharacteristic of the Macedonians. During the final stages, however, when booty was there for the taking and the Macedonians were about to fall upon the civilian population, with all that that entailed, it was probably all but impossible for Alexander to maintain any kind of discipline. There would also have been a significant element of competition between senior commanders as to who broke into the city first. Perhaps the real surprise is that some cities were left standing after being taken by force by the Macedonians.

Conclusion

The siege of Gaza presents us with a situation virtually unique in Alexander's career, a city built on sand rather than hard rock.[954] This topography allowed Alexander to perform sapping operations that we see nowhere else, operations that ultimately were a fundamental part of the fall of the city. As at Tyre a few months earlier, Alexander was presented with a situation that required a novel solution, and he was not found wanting. Along with this new tactic, we see old tactics employed to great effect. As noted several times, Alexander's key tactic is to attack from multiple locations at once. At Gaza he achieves this by employing the circumvallation with artillery pieces at various points, along with the use of rams and siege towers, along with the final ingenious element of the mining operations. Gaza, like Tyre before it, shows Alexander to be someone highly capable of creating innovative strategies when the need arises,[955] or the situation allows for it.

[954] Some later sieges in India and on the return journey to Babylon were also undertaken on soft ground.
[955] Although at Tyre his innovations tended to be reactions to Tyrian inventiveness.

Chapter 6

Gaugamela: 331

Introduction

After the battle of Issus, Alexander took the key strategic decision not to chase Darius into the Persian heartlands, but instead to continue his policy of defeating the Persian navy at sea by continuing south along the coast towards Tyre. Once Egypt had been 'liberated' he was finally now in a position to return his attentions to the Great King and force a conclusion once and for all. Gaugamela presents us with just as many difficulties in reconstruction and interpretation as do the other set-piece battles; as with them, the main problems arise from significant differences in the surviving source material. Before attempting a reconstruction of the battle, and an understanding of Alexander's strategy, we must first discuss some of the difficulties with these sources.

Sources: Diodorus

Diodorus does not give us a continuous narrative of the battle,[956] but instead concentrates on set pieces: The Persian scythed chariots, the capture of the Macedonian baggage train,[957] and the duel between Alexander and Darius. The only part of the battle that is narrated is the action involving the Thessalians towards the very end.[958] Diodorus' account has a tendency to be rather more graphic than that of Arrian: the Persian scythed chariots slicing off arms and severing heads, for instance. In Plutarch,[959] Alexander only views Darius from a distance; but in Diodorus, Alexander gets close enough to throw a spear at the Great King which kills the driver of his chariot. The very account of Darius' flight shows colour that is lacking in other sources; occurring as it does in a cloud of dust, and behind the Macedonian front line.[960]

Parmenio is treated favourably by Diodorus, a fact which presents a number of problems. This treatment decreases the likelihood[961] that he was influenced by the negative sentiment in Callisthenes.[962] Devine[963] argued that the prominent place of the Thessalian cavalry in both Diodorus and Plutarch suggests a commonality of sources; but I think it more likely that, in the absence of specific passages that are obviously from the same source, their prominent role in both was simply a reflection of actual events; that is

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[956] Devine, 1986, 89.
[957] Diodorus 17.59.2-8.
[958] Diodorus 17.60.1-8.
[959] Plutarch *Alex.* 33.5.
[960] Diodorus 17.61.1. One wonders how such an escape could have been successfully executed, however.
[961] But does not eliminate it as in Devine, 1986, 89.
[962] Hammond, 1980, 138, cites Cleitarchus as Diodorus' major source here, noting the vivid portrayal of both authors.
[963] Devine, 1986, 89.

to say that they in fact did have a significant role in the battle. It has been argued[964] that this commonality of source is a reflection of the pan-Hellenic nature of Callisthenes; but the prominent role of Parmenio, and not just of the Thessalians, calls this into question. Devine[965] goes on to argue for an as yet unidentified common source, despite Hammond's[966] confidence that the common source is in fact Cleitarchus.

The incident of the call for help by Parmenio, just after he began the pursuit of Darius,[967] is also interesting. Again, it shows no malice towards Parmenio at all, but simply presents a picture of the Thessalians in genuine difficulty asking for help. Diodorus, in common with Arrian, simply presents Alexander's response without comment, unlike Plutarch and Curtius who note Alexander's frustration. Interestingly, along with Diodorus' attributing no blame to Parmenio for this incident, he also attributes no blame to Alexander.[968] Diodorus' account is far less useful than Curtius or Arrian, but surely deserves more than to be called "childish and worthless" as in Hammond.[969]

Polyaenus

Polyaenus is our least important surviving source, although he still offers some interesting information. He again offers no continuous narrative of the battle, but at two points recounts key anecdotes.[970] The first is a recounting of the Persian attack on the Macedonian baggage train, as well as Alexander's reply to Parmenio's plea for assistance.[971] Polyaenus' version follows the tradition that denigrated Parmenio, and thus probably finds its source in Callisthenes. This is not something that Polyaenus places great emphasis upon, however; rather he uses the episode to highlight the dictum that he who would protect his baggage risks jeopardising the bulk of the army. The second anecdote of note regards the Persian caltrops[972] that were prepared on the battlefield before the Macedonians arrived. Polyaenus claims Alexander's movement to the right before the battle was to avoid these devices. The Persian reaction, moving their line to the left to maintain the integrity of their flank, resulted in the line breaking. This break was brilliantly exploited by Alexander; the incident is accurately described and shows significant similarities with the relevant section in Arrian.[973]

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[964] Schachermeyr, 1973, 269; Kaerst, 1927, 394 n.1, 165 n.1 and 338 n.1; *cf.* Atkinson, 1980, 243-244 and 454-455, for a discussion.
[965] Devine, 1986, 90.
[966] Hammond, 1983, 20-27; 51; 173 n.11.
[967] Or perhaps just before the pursuit began.
[968] Devine, 1986, 90.
[969] Hammond, 1980, 138.
[970] Devine, 1986, 89.
[971] Polyaenus *Strat.* 4.3.6.
[972] Polyaenus *Strat.* 4.3.17; Essentially holes dug into the ground so that charging cavalry would step in the holes and break their legs, a form of ancient land mines.
[973] Arrian 3.13.1.

Curtius

Curtius' account of Gaugamela is by far the most problematic of the surviving sources: the account lacks internal cohesion[974] and many modern authorities have taken Tarn's lead in dismissing the account as being an "impossible confusion" of information, adding that Curtius "contradicts himself far too often for it to be worth notice". Tarn does, however, concede that there is content within the account of Curtius that can be used and that "without him certain things in Arrian would hardly be intelligible".[975] Tarn's general approach to Curtius is much as mine has been to all of our sources throughout this work, and seems entirely sensible.

Curtius' objective with his account of Gaugamela is to highlight the activities of the principal characters, Alexander, Darius and Parmenio, whom he accuses of gross dereliction of duty.[976] There are also parts played by Sisigambis, Mazaeus, Artes, Aristander etc.[977] Due to this aim, the narrative is episodic and highly disorganised, as when he confuses the distinction between the Macedonian front and rear lines.[978] As noted above, however, the account is vital for some of the information it provides, as will be discussed in more detail later.

Elsewhere in his work, Curtius cites three sources: Cleitarchus, Timagenes and Ptolemy.[979] Neither Cleitarchus nor Timagenes are likely to have been the primary source for a battle narrative,[980] and an examination of commonalities with Arrian, who is undoubtedly based upon Ptolemy, shows that he also was not Curtius' main source, although there are enough commonalities to suggest that he did indeed have access to Ptolemy's account. Curtius' attitude towards Parmenio provides us with some clues as to his main source; in places he follows a tradition that is favourable towards Parmenio,[981] whilst being hostile towards Menidas, who was heavily implicated in Parmenio's murder;[982] although there is undoubted criticism of Parmenio also.[983] Curtius' picture of Alexander himself is also rather different from that which would have been found in Callisthenes. Alexander is depicted as gnashing his teeth in frustration and rage at the escape of Darius,[984] but Curtius perhaps goes too far in describing Alexander as indecisive and prone to panic.[985] This presentation of Alexander tallies nicely with the often positive picture presented of Parmenio, as noted above. Curtius links his occasionally negative picture of Alexander with an improbable description of the

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[974] Devine, 1986, 91.
[975] Tarn, 1948, 2.182.
[976] Curtius 4.16.2-3.
[977] Devine, 1986, 91.
[978] Curtius 4.15.9; 4.15.12; 4.15.13; 4.15.14; 4.15.28.
[979] Curtius 9.5.21.
[980] Devine, 1986, 91.
[981] Atkinson, 1980, 439-440, 454.
[982] Curtius 4.15.18-22. *cf.* 4.12.4; 4.15.12. *cf.* Atkinson, 1980, 61; 400-401; 413; 440-441.
[983] I.e. His appeal for help at the end of the battle, 4.16.2-3.
[984] Curtius 4.16.3; *cf.* Devine, 1986, 91.
[985] Curtius 4.12.21; 4.13.1-3.

Macedonian army as also being prone to panic.[986] The over-generalised statement that he puts in the mouth of Parmenio, that "soldiers, he said, were more prone to groundless and irrational fears than to those having some justification" is unlikely to be true of any successful veteran army; nor does it seem likely that a commander would have such a low opinion of his own core troops. Devine notes that here, Curtius, like Tacitus, is misapplying rhetorical clichés about the instability of the mob.[987]

Curtius' contribution to our understanding of the battle of Issus is considerable; it is unfortunate that his narrative of Gaugamela does not match that precedent. Having said this, however, he does provide a number of key pieces of evidence that we do not find anywhere else. He tells us categorically that Mazaeus[988] was commander of the Persian right flank, and Bessus of the left.[989] The respective orders of battle are also worthy of note; his representation of the Macedonians is confused by several key misunderstandings,[990] whereas his picture of the Persians[991] gives us vital information. Curtius' picture does differ from that of Aristobulus,[992] but is extremely detailed,[993] and provides us with the only evidence we have for the strength of some of the key elements of the Persian army; as well as information on its command structure. Curtius also gives us information that helps us to locate the Persian positions, and therefore the site of the battlefield, by noting Darius' advance of eighty stades from the Lycus to the Boumelus[994] and his final march of ten stades to the battlefield.[995] Whilst I have argued that Curtius' general narrative of Gaugamela is seriously flawed, I have also noted that there are a number of key areas where we can believe him at the expense of Arrian: this seems on the surface contradictory. For most of this battle, the reconstruction has to come from the narrative of Arrian, but with specific regard to the orders of battle of each side, Curtius gives us far greater detail than does Arrian. The amount of detail suggests that he heavily relied upon a very detailed source (perhaps one that had access to the captured Persian battle plans, if they existed).[996] Further to this, his account of the dispositions looks credible and their data were not negatively affected by whatever dubious sources he used to reconstruct the rest of his narrative of Gaugamela.

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[986] Curtius 4.12.14; 4.15.2; 4.15.9.
[987] Devine, 1986, 91. Atkinson, 1980, 390.
[988] Curtius 4.16.1; 4.16.4.
[989] Curtius 4.15.2.
[990] For example, two *taxeis* of *pezhetairoi* (Craterus and Meleager) are omitted from the Macedonian order of battle (4.13.26-31). An incorrect distinction is made between the phalanx and a *taxis* of the *pezhetairoi* (4.13.28). Craterus is a cavalry commander rather than a *taxiarch* (4.13.29) as in Arrian, the Agrianians become cavalry troops (nowhere else attested and I assume an error, 4.15.21-22), and finally, the rear line of infantry begin the battle facing away from the enemy (3.13.31); Devine, 1986, 91.
[991] Curtius 4.12.6-7.
[992] Arrian 3.11.3-7.
[993] Curtius 4.12.6-7 for example, a picture of the Persian left wing.
[994] Curtius 4.9.9-10.
[995] Curtius 4.12.13. Devine, 1986, 92.
[996] See above p.20.

Arrian

For the campaign of Gaugamela, Arrian certainly is our best surviving source. The narrative he provides is the most detailed and cohesive, and he provides tactical information that is coherent, and not simply intended to aid the narrative flow. Despite this general point, some caveats must be noted; Tarn's attitude is typical: "Arrian's account is not always clear as to detail or as to the exact sequence of events. He is following Ptolemy's account but he may not always have understood it".[997] Tarn's initial point is perfectly valid – the modern historian can always find inconsistencies with ancient sources if he looks hard enough – but the latter unfair. Arrian was a perfectly able commander in his own right; there is no reason to assume[998] that he would be easily confused by military terminology or tactics; the only difficulty, therefore, would come if Ptolemy's account was itself incoherent. More recently, however, there has been a trend to place Arrian's narrative under greater scrutiny. Badian and Bosworth[999] have led the way in noting that the problems of Arrian's sources are extremely complex. Bosworth notes that Arrian is prone to "all of the errors one would expect in a secondary author: omissions of essential material, misunderstandings of technical expositions, inaccurate reading of sources, and uneasy conflations of variant versions". Bosworth also notes, however, that the main problem is the quality of Ptolemy and Aristobulus, Arrian's primary sources. One can only see to the truth of the matter by a critical analysis of these sources with the vulgate tradition as preserved in Curtius and others.[1000]

When using Arrian, it is normally assumed that his use of Ptolemy, who was himself a leading military figure in Alexander's army, makes his account the most reliable. We know that Ptolemy was indeed present at both Issus[1001] and the Hydaspes,[1002] and it is assumed that he was also an eyewitness to Gaugamela, but this assumption needs to be challenged. It seems that it is impossible to prove that Ptolemy was actually present at Gaugamela at all: comparison between the accounts of Gaugamela and the Hydaspes reveals considerable differences with regard to the use of terminology, and the level of detail provided. Ptolemy's presence at the latter battle, the level of detail provided, and Arrian's frequent citation of Ptolemy there, all make it clear that he was Arrian's primary source for the Hydaspes.[1003] This could well not be the case at Gaugamela, and although this is speculation and essentially an argument from absence (i.e. we have no direct proof that he was at Gaugamela), I think it is a reasonable one based upon the differences in terminology from a battle where we can reasonable assume Ptolemy's presence based upon Arrian's citations. The differences in terminology etc. in all likelihood lead us to the

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[997] Tarn, 1948, 2.182.
[998] As is often the case.
[999] Badian, 1958, 148-50; Bosworth, 1976, 1-33.
[1000] Bosworth, 1976, 8-9.
[1001] Arrian 2.11.8.
[1002] Arrian 5.13.1; At the Granicus, Ptolemy was a relatively minor figure within the army and therefore Arrian's account presents other difficulties.
[1003] Devine, 1986, 93.

conclusion that the account of Callisthenes was probably Arrian's main source for Gaugamela.[1004]

In reproducing or adapting large sections of Callisthenes' official account, Ptolemy could easily excise Callisthenes'[1005] many misrepresentations that would have been included at the approval of Alexander himself. At the time of Ptolemy's writing,[1006] both Alexander and Parmenio were long dead, so he would have had little reason simply to reproduce Callisthenes blindly, especially where he had knowledge to the contrary. We should finally note that Ptolemy would have been unwilling, even after Alexander's death, to impugn his military reputation; the figure of Alexander loomed large over the successors for many years after 323.

Prelude to Battle

Alexander arrived in Egypt, remained briefly as he secured the administrative issues of the area, and then headed back towards Tyre during the harvest,[1007] so that he could ensure continuity of supply for the coming campaign. Alexander set off from Memphis some time in April 331 and marched along a pre-prepared path across bridges that had been erected across the Nile.[1008] Alexander quickly crossed the Sinai and headed back towards Tyre; we know almost nothing of the journey except that he conducted a campaign in Samara, where his governor had been executed in an uprising.[1009] From there he headed directly for Tyre. Alexander's second delay at Tyre was in a similar vein to his delay in Egypt:[1010] he was securing the administration of the city and region in order to ensure supplies were successfully moved by ship from the newly founded Alexandria (or some other more established nearby port) to Tyre, from which they would be forwarded as required. There was a second reason for Alexander to delay the coming battle: the previous winter Alexander had sent for reinforcements from the Balkans. During his stay in Egypt these reinforcements, 15,000 strong,[1011] had set out from Macedonia and they were in Asia Minor at the time Alexander set out from Tyre; why then did Alexander not delay long enough for this considerable body of men to reach him? The answer is perhaps twofold: Lane Fox speculated that Alexander had received a message from Darius, not of

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[1004] We can only speculate that Ptolemy probably had not returned from a scouting mission. Alexander's advance to Gaugamela was slow, as discussed below, and numerous scouting and foraging parties would have been in the field at any given time.
[1005] Bosworth, 1976, 29-33; *cf.* Devine, 1986, 93.
[1006] At the end of the 19th century, Wilcken, 1894, 119 (1932 reprint used, same page) argued that Ptolemy was writing towards the end of his life (perhaps around 288 to 283/2), Tarn, 1948, 2.19, 2.43 followed this, as did Kornemann, 1935, 30-39; as well as others. More recently, Errington, 1969, 233-242, Pearson, 1960, 193, Badian, 1976, 35-36 and Bosworth, 1976, 1-33, Devine, 1986, 93*f* have all argued that Ptolemy's work belongs to his early period in Egypt, when he had more reason to enhance his own reputation at the expense of the likes of Perdiccas, Leonnatus, Polyperchon and Antigonus. Hammond, 1983, 37-38 has recently attempted to reassert the older view, suggesting a publishing date of around 285-283. I tend to follow Hammond in this and believe that the work was written towards the end of his life.
[1007] Engels, 1978, 27, 64.
[1008] Bosworth, 1988, 74; Arrian 3.6.1.
[1009] Bosworth, 1988, 233.
[1010] Engels, 1978, 64.
[1011] Lane Fox, 1973, 226.

peace, but of his readiness for battle, thus goading Alexander into action; the second is related to this, Alexander's renowned impatience. He had already delayed the decisive battle with Darius for over a year and he was no doubt desperate to force a conclusion: this rashness in Alexander's character could so often have proved fatal; but here, as in the rest of his career, luck was to be on his side.[1012]

The campaign of Gaugamela can be considered to begin in early summer; although not earlier than July 10th, when Alexander reached Thapsacus.[1013] Some time earlier, Alexander had sent Hephaestion with a team of engineers to construct two wooden bridges, in separate locations, across the Euphrates. Lane Fox speculated that this was mid-July, but it must have been at least a month earlier, as Arrian clearly states that the bridges were almost complete when Alexander reached Thapsacus.[1014] Hephaestion had failed to complete the two bridges, despite having sufficient time to do so, because the far bank was guarded by Mazaeus and 3,000 Persian cavalry.[1015] Upon Alexander's arrival, Mazaeus withdrew and the crossings were quickly completed. Curtius and Diodorus[1016] support Arrian's claim that Mazaeus was charged with preventing the Macedonian crossing of the Euphrates, but also mention orders to prevent Alexander's crossing of the Tigris. Bosworth suggested that Mazaeus was essentially performing reconnaissance at the Euphrates and was charged with reporting Alexander's movements back to Darius, and later given the order to prevent the Tigris crossing.[1017]

In a key passage, Arrian then tells us what Alexander did after crossing the Euphrates: "He then proceeded up country, with the river Euphrates and the Armenian mountains on his left, through the land called Mesopotamia".[1018] Alexander could not have travelled very far north, and he certainly did not reach the Armenian mountains; it was perhaps only a day or two of travel before heading directly east towards the Tigris and the ultimate site of battle; at this point Engels has Alexander following the military highway.[1019] Why head north at all, rather than south-east towards the wealthy centres of Babylon and Susa? It is entirely possible that Mazaeus had initiated a scorched earth policy[1020] in that region, as reported by Curtius,[1021] to force Alexander in a northerly direction: this whole issue hinges, however, on the location of Darius' army at this time.

Most modern authors have tended to ignore this vital question, but it needs to be addressed. Diodorus and Curtius both tell us that Darius marshalled and trained his new

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[1012] It is, of course, dangerous to make character judgements on Alexander, but I believe that we can draw certain conclusions in this regard based upon his actions during his career, and those actions do appear to suggest that he was impatient and occasionally rash.
[1013] Arrian 3.7.1 tells us that this was during the month of Hecatombaeon, during the Athenian archonship of Aristophanes. Dinsmoor (1931, 359, 429 table xiv) fixes this to between July 10th and August 9th; *cf.* Bosworth, 1980, 284, Marsden, 1964, 11.
[1014] Lane Fox, 1973, 226; Arrian 3.7.1; bridges were complete save for the final sections; Arrian 3.7.1.
[1015] Arrian 3.7.1; Curtius 4.9.7*f*, 14*f*; Diodorus 17.55.1*f*.
[1016] Curtius 4.9.7*f*; Diodorus 17.55.1*f*.
[1017] Bosworth, 1980, 286. *Cf.* Marsden, 1974, 15*f*.
[1018] Arrian 3.7.3.
[1019] Engels, 1978, 69.
[1020] Bosworth, 1980, 286: This had been the case in 401, Xenophon, *Anabasis* 1.6.1.
[1021] Curtius 4.9.8.

army in Babylon, but there is little evidence that he remained in Babylon at the time of Alexander's crossing of the Euphrates. Curtius tells us that the Persians began to marshal when Alexander was in Egypt,[1022] and we know his march north-east was slow, with a lengthy stop in Tyre; the Persians, therefore, had plenty of time to train and equip their new army before Alexander reached the Euphrates.

Why did the Persians move north? There can be little doubt that a major objective of Alexander would be the wealthy administrative centres of Babylon and Susa, together with their wealthy hinterlands, so why abandon them? Many commentators have made much, rightly so, of the wide open plains of northern Mesopotamia, and of how they were particularly suited to the Persians. Seldom has it been noted,[1023] however, that the plains north of Babylon were at least equally suitable for the Persians. Staying in Babylon would have meant that the Persian levies would not have to undertake a lengthy march north, and would have stayed on their lines of supply. Darius no doubt envisioned a replay of Cyrus' march, and a second Cunaxa,[1024] with similarly positive results. Curtius is probably correct in suggesting a scorched earth policy: this would again re-enact the Cunaxa style campaign[1025] as well as explaining the size of Mazaeus' contingent.[1026] This detachment was too large to be scouting and too small to oppose a Macedonian crossing successfully. Darius' decision to re-introduce scythed chariots to the Persian order of battle is another indication that Cunaxa was heavily on his mind.

The Persian strategy is, therefore, relatively easy to follow: They would muster and train north of Babylon, destroy fodder to the north of this area and await Alexander's arrival. Darius would reasonably have expected Alexander to march directly towards him at Babylon, rather than in the opposite direction, seemingly avoiding a confrontation. If Alexander was to have operated in the manner Darius expected, the Macedonians would have arrived in poor shape having undertaken a lengthy march, with the Persians fresh and ready to do battle. The Persian strategy is remarkably reminiscent of the strategy of Saladin at Hattin in 1187,[1027] one of the bloodiest battles of the crusades, and a disaster for the crusaders, as it surely would have been for Alexander. The Persian strategy is sound, as noted by Green;[1028] it was simply that Alexander had other ideas.

Arrian gives us a very clear indication of Alexander's strategic plans, stating that: "Alexander did not march by the direct road to Babylon".[1029] This statement of Arrian strongly implies that Babylon was the ultimate objective, otherwise he would have made some statement to the effect that Alexander was moving north to engage Darius because

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[1022] Curtius 4.9.2*f*.
[1023] Marsden, 1974, 12.
[1024] A second Cunaxa in style. The fact that Cunaxa was close to Babylon and the Persians moved north for the final battle demonstrated that Darius did not expect an exact repeat, more a campaign that would use similar tactics.
[1025] Xenophon *Anabasis* 1.6.1.
[1026] Marsden, 1974, 12.
[1027] Kedar, 2002.
[1028] Green, 1974, 283.
[1029] Arrian 3.7.3.

he was in the Gaugamela region, or that Alexander was drawing him in that direction.[1030] The very mention of Babylon tells us that Alexander was fully aware of the strategic situation whilst at Thapsacus.

Another reason for Alexander heading north is perhaps an historical precedent noted earlier. There is only one direct indication in the whole of the surviving source material that Alexander was aware of Xenophon's *Anabasis*,[1031] although we can reasonably assume that he did, and would therefore be aware of the fate of that expedition at Cunaxa. We know from his use of captured native guides elsewhere that Alexander would have attempted to gain some local knowledge of the terrain between the bridges over the Euphrates and Babylon. He would have quickly determined that the plain was of varying widths, but was always a relatively narrow strip of fertile land between two deserts to east and west. He would also have been aware of the scorched earth policy executed by Mazaeus, and therefore a move north was the best strategic option. As always, Alexander attempted to lure the enemy into terrain of his choosing; even when that, at first sight, favoured the enemy.[1032] In this decision, Alexander shows rather more restraint than some would suggest him capable of: we must also note, however, a similar decision after Issus not to force an immediate battle that would have perhaps been unfavourable to Alexander.

Alexander's strategy of drawing the Persians towards him was based upon more than simply hope; Alexander's experience with the Persians to this point in his career had demonstrated that they were extremely unwilling to allow the Macedonians to occupy more Persian land than was absolutely necessary.[1033] Now that Darius had a large standing army once again, Alexander would have judged this strategy to continue. Alexander expected Darius to march out of Babylon and engage him.

Alexander's decision brought some immediate benefits to the Macedonians. They would not only be fighting on terrain of their choosing, in an area with greater access to vital supplies, but forcing Darius to pursue effectively ended the training that was underway of the new Persian army. The army had been recently gathered and would have consisted largely of conscripts; a lengthy training period was vital, yet impossible on the long march north.

Alexander crossed the 2,400 stades, or 460km,[1034] between Thapsacus and the crossing point on the Tigris[1035] relatively slowly. Assuming Alexander set out around the

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[1030] Marsden, 1974, 13.
[1031] Alexander's speech before Issus, Arrian 2.7.3-9; *cf.* Bosworth, 1980, 204. We can also assume, although there is no positive evidence, that Alexander was aware of the use of rafts to cross a river in Xenophon, *Anabasis* 1.5.10.
[1032] For topography of Gaugamela see 147-8.
[1033] Marsden, 1974, 14.
[1034] Strabo 2.1.38. Engels, 1974, 68*ff*; Marsden, 1974, 22, claims 527km for the same journey. Engels, 1987, 70 n.86 believes that all of Marsden's distance figures are too high, although why this is the case he does not argue.
[1035] That likely being the Abu Dhahir (see below p.147 n.1042); Marsden, 1974, 22 argues for the Abu Wajnam.

end of July, this would give him around 54 days to cross this distance; a rate of march of only 8.2kmpd. Alexander frequently achieved rates of in excess of 24kmpd for the whole army[1036] through enemy terrain; why so slow now? Darius, conversely, would have set out around one week after Alexander, allowing for the time it would take for Mazaeus to report Alexander's unexpected change of direction. The Persians had to march around 595km in perhaps 47 days; a rate of 12.66kmpd.[1037] The Persians would have found it harder than the Macedonians to keep up this rate of march, their army being less well trained and considerably larger and more encumbered. Nevertheless, this is an entirely plausible rate of march. We can reasonably speculate that Alexander's slow march rate was because he did not want to tire his army before the coming battle. His advanced scouts would have informed him that the Persians were waiting at Gaugamela, and Alexander was evidently prepared to let them wait until he was ready.

Once Darius realised that his dreams of recreating Cunaxa had failed, he dispatched Mazaeus once again to reconnoitre all potential crossing points on the Tigris. The intention cannot have been to oppose Alexander's crossing,[1038] simply to report on his location. On the journey to the Tigris Alexander captured several men from the Persian army; Arrian calls them men "who had gone off on reconnaissance",[1039] Lane Fox surely exaggerates in calling them spies.[1040] These prisoners told Alexander of Darius' location at Arbela; upon receiving the news Alexander hastened towards the Tigris.[1041] Alexander reached the Tigris on September 18th and crossed by the most obvious route, the ford at Abu Dhahir.[1042] The crossing was unopposed, yet still difficult due to the current, and a number of men died. The water was fast flowing and chest deep; Diodorus records:[1043]

> The force of the current swept away many who were crossing and deprived them of their footing, and as the water struck their shields, it bore many off their course and brought them into extreme danger.

Alexander's defence against the current was to have his men lock arms; this would ensure a certain amount of stability against the force of the current. It also probably meant that the shield would be slung over the back, and thus be less likely to catch the water and act as a sort of parachute than if it were carried by hand. Cavalry were also probably deployed as a screen slightly upstream to break up the current.

[1036] Engels, 1974, 153.
[1037] Marsden, 1974, 22; Bosworth, 1980, 285 notes that Alexander's rate of march seems excessively slow for an army that was, according to both Arrian (3.7.5) and Curtius (4.9.13), in a hurry.
[1038] As the force was around 6,000 strong according to Curtius 4.9.12.
[1039] Arrian 3.7.3.
[1040] Lane Fox, 1974, 228.
[1041] Arrian 3.7.3.
[1042] This was the location of the crossing of the Persian Royal Road over the Tigris: Lane Fox, 1974, 228. For alternative possible routes from Thapsacus to Arbela see Green, 1974, 284.
[1043] Diodorus 17.55.4.

After the arduous crossing of the Tigris, Alexander allowed his troops to rest for a while. During this time there was an almost total eclipse of the moon; Alexander then offered sacrifice to the Sun, Moon and Earth showing a high degree of understanding of this astronomical phenomenon. The eclipse reached its peak at 21.12 hrs on September 20th 331.[1044] Plutarch notes that it occurred at the same time as the start of the Eleusinian mysteries in the month of Boedromion, also noting that eleven nights after the eclipse was the eve of battle.[1045] In his *Camillus*, Plutarch gives a date for Gaugamela as 15th Boedromion,[1046] which was indeed the beginning of the Eleusinian mysteries. Plutarch's dating is internally consistent and provides a synchronous point, 15 Boedromion equates to 20th September; the battle, therefore, took place on 1st October 331.[1047]

Topography of the Battlefield

Only Arrian and Curtius provide us with any useful topographical details of the battlefield; the main feature being its flatness, save for the nearby mound of Tell Gomel, and the presence of two rivers. Arrian tells us that Darius pitched camp on the river Boumelus,[1048] noting that estimated of the distance from Arbela was 600 stades.[1049] Later he notes varying estimates of the distance, ranging from 500-600 stades.[1050] The second river, the Lycus, was located behind Darius' lines and only crossed by Alexander while in pursuit of Darius after the battle.[1051] The Lycus is now known as the Great Zab, and is around 32km directly east of the battlefield.[1052] Curtius[1053] is a little more precise in his information regarding the two rivers; he tells us that Darius left his baggage train at Arbela, bridged the Lycus River, and advanced the 80 stades to the eventual battlefield. Curtius' figure of 80 stades is an underestimate as it is about half the actual distance travelled.[1054]

The location of Gaugamela seems almost certain. Ever since the nineteenth century it has been known that the mound of Tell Gomel etymologically preserves the name of Gaugamela; the mound itself, however, proved difficult to locate accurately.[1055] Schachermeyr established that Tell Gomel lies to the north of the Jabal Maqlub, in the plain of Nauqur. Modern estimates of the distance between Arbela and Gaugamela vary between 80 and 95km, around 420-495 stades.[1056]

[1044] Arrian 3.7.6. Bosworth, 1980, 287.
[1045] Plutarch *Alex.* 31.8. Bosworth, 1980, 287.
[1046] Plutarch, *Camillus*, 19.5.
[1047] 20th September see Dinsmoor, 1931, 359. 429; 1st October see Bosworth, 1980, 287.
[1048] The modern Boumodus.
[1049] Arrian 3.8.7.
[1050] Arrian 6.11.6, *cf.* Bosworth, 1980, 293.
[1051] Devine, 1986, 94.
[1052] Bosworth, 1980, 312.
[1053] Curtius 4.9.9-10.
[1054] Curtius 4.9.9; c.15.3km. Bosworth, 1980, 312.
[1055] For etymology see Devine, 1986, 94. Stein, for example, identified it with a mound to the south of Manqube; *cf.* Stein, 1942, 155-164.
[1056] Schachermeyr, 1973, 270.

Both Arrian and Curtius[1057] mention a range of hills in front of the Persian position. Arrian notes that Alexander crested these hills the night before the battle, and sighted the enemy some 60 stades away. These hills are almost certainly the Jebel Maqlub range.[1058] In order to take up his position, Darius would have had to turn off the Royal Road before reaching Manqube, and march a significant distance to the north. This movement matched Curtius' march of 80 stades, as well as allowing for the advance of 10 stades in order of battle.[1059]

Of the topography of the battlefield itself, there is little that can be said. The Persians had taken up position in a vast featureless plain; they had evidently taken some time before Alexander's arrival to level the area artificially to allow for deployment of their cavalry and scythed chariots.[1060] The only topographical feature of note was a stretch of ground that remained untouched by the Persians,[1061] evidently a range of hills. Darius either did not have time for, or felt they were too far to his left to feature in the battle.[1062] As always, however, Alexander chose not to fight on his enemies' chosen ground, but upon his own, and his movement towards these foothills on his right enabled this.[1063]

Macedonian Order of Battle

The battle of Gaugamela was a new challenge to Alexander: he faced Darius on terrain that had been specially prepared to optimise the use of the enemy's cavalry and scythed chariots. The most obvious tactical issue faced by Alexander as a result of the terrain was the discrepancy in troop numbers,[1064] and the inherent advantages that afforded Darius. The discrepancy was so great that a double envelopment was a real possibility against the Macedonians. According to Arrian,[1065] Alexander left his camp under cover of night, leaving behind the baggage train and intending to force a battle at dawn. The baggage train reappeared during the battle, however; and we must conclude that some baggage, probably replacement weapons, food and water, were brought up to the battlefield and left within easy reach of the infantry.[1066] The problems do not end there, however. No other source mentions a night march, and if Curtius is to be believed that the camp was pitched when Darius was still 150 stades away,[1067] then a prolonged night march was remarkably foolish on the part of Alexander.[1068] The night march would have been over unknown ground using guides that were Persian and marching towards a

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[1057] Arrian 3.9.2-3; Curtius 4.12.18*f*.
[1058] Bosworth, 1980, 294.
[1059] Curtius 4.9.9-10; Devine, 1986, 95.
[1060] Arrian 3.8.7; Curtius 4.9.10.
[1061] Arrian 3.13.2.
[1062] Devine, 1986, 96.
[1063] See below p. 160-1
[1064] See below p. 156-7.
[1065] Arrian 3.9.1.
[1066] Arian 3.12.5; 3.14.5. Bosworth, 1980, 294.
[1067] Curtius 4.10.15. 150 stades = 28.8km.
[1068] Strasburger, 1952, 468*f*. Suggests a shorter Macedonian stade than the Olymic stade of 192m; but does not seem to address the issue fully: I see little evidence to support the existence of a Macedonian stade, although it should be recognised that many states did indeed have their own stade.

numerically superior enemy. Arrian himself, later, even presents the march as being by day.[1069] The problems surrounding the night march come within the context of the location of the Macedonian base camp. Arrian mentions two camps, the fortified base camp and the temporary camp close to the battlefield.[1070] Curtius confuses the situation, however, by noting three camps: the four-day rest camp, the temporary camp below the hill occupied by Mazaeus[1071] and the fortified camp on the hill that was soon vacated by Mazaeus.[1072] The commonality in the sources is that the final camp was on the hill overlooking Gaugamela; but in Arrian it was temporary, in Curtius, fortified.[1073] The final difficulty comes during the battle itself: for Curtius the camp is the planned target of a large force commanded by Mazaeus; for Arrian[1074] it is ransacked as the result of an unforeseen breakthrough of Alexander's lines: the reality is unknowable.

As both armies began to move towards each other,[1075] they each took up formation; this occurred before each commander saw the other, and must have been based partly upon scouting reports and an estimation of what the enemy intended to do.[1076] This topographical and numerical disadvantage forced Alexander to innovate. As Devine notes,[1077] Alexander had no natural obstacles upon which to rest his flanks as at Issus, so he adopted a formation that may be called a tactical square. The Macedonian front was drawn up along its usual lines, but at either side were placed flank guards; these were drawn back at an angle from the main line,[1078] and behind this was a reserve line.

The accounts of the order of battle of the Macedonian army at Gaugamela are by far the most detailed that we possess. The surviving sources provide us with a picture that disagrees significantly in only one respect: who led Amyntas' *taxis* of heavy infantry? This is hardly a major difficulty in analysing the battle.[1079] Arrian begins his detailed dispositions on the right of the main line where the Companion Cavalry were stationed, the *agema* of which was commanded by Cleitus. Towards the centre were the Companion Cavalry *ilai* of Glaucias, Ariston, Sopolis, Heracleides, Demetrius, Meleager and Hegelochus.[1080] After the cavalry came the heavy infantry, as always led by the hypaspists, commanded by Nicanor;[1081] following these three *taxeis* were the Companion Cavalry commanded by Philotas, who took general control of the right side of the line,

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[1069] Arrian 3.9.1; Bosworth, 1980, 294.
[1070] 30 stades (5.76km) from the Persian line, 3.9.3; *cf.* Bosworth, 1980, 294.
[1071] Curtius 4.10.15,17*ff.*
[1072] Curtius 4.12.19, 24.
[1073] And the location for captured Persian prisoners, 4.13.35; 4.12.2-3.
[1074] Curtius 4.15.5*ff*; Arrian 3.14.5-6; *cf.* Bosworth, 1980, 294.
[1075] After a four-day pause, perhaps caused by rumours of hidden traps in the plain set by Darius for Alexander's cavalry, Marsden, 1964, 42.
[1076] Marsden, 1964, 42, claims that the formations were based upon previous experience: this can hardly be the case as neither had fought on this terrain before in these circumstances.
[1077] Devine, 1986, 96.
[1078] Devine, 1982, 62-63.
[1079] Arrian 11.8-12.5; Curtius 4.13.26-32; Diodorus 17.57.1-5.
[1080] Arrian 3.12.2.
[1081] It is interesting to note that Arrian describes these as shock troops, not as being primarily defensive as is usually assumed of the so called heavy infantry; *cf.* English, 2009, 1-27 for an argument that the Macedonian *pezhetairoi* were in fact light infantry.

but his location is unspecified, presumably somewhere in the centre of the line. The *pezhetairoi taxeis* were commanded by Coenus, Perdiccas, Meleager, Polyperchon, Philippus[1082] and Craterus.[1083] Arrian adds the curious point that Craterus "commanded all the infantry in that sector".[1084] Given that he was describing the dispositions in the centre of the line, he can only be referring to that sector, and thus Craterus must have had overall command of the *pezhetairoi*. If this is the case, it is the only instance in the sources of the *pezhetairoi* having an overall commander; if this were the case, it is curious that he would be positioned at the extreme left of the six *taxeis*, however. Completing the extreme left of the front line were the allied cavalry under Erigyius and the Thessalian cavalry under Philip;[1085] although the overall commander of the left, including the Thessalians was, as always, Parmenio.

Behind the front line was a reserve line of infantry. Curtius is the only source that gives any detail of its composition; Diodorus does not even mention its existence whilst detailing the Macedonian dispositions.[1086] Curtius tells us it comprised the Illyrians and mercenary infantry, along with the Thracian light-armed. This must have been the general composition as these are the only troops that are not stationed elsewhere during the battle. Curtius' belief that the rearguard began the battle facing away from the Persians is surely a misunderstanding.[1087] Arrian, more reasonably, claims that they initially faced the enemy; with both claiming that they had the tactical flexibility to change their frontage by 180° to face in the opposite direction.[1088] The basic fact of a reserve line that could face away from the Persian starting position in order to form an enclosed square is key, however.

The positioning of the flank guards was fundamental to Alexander's strategy. Arrian tells us that on the left flank:[1089]

> one half of the Agrianians, commanded by Attalus and in touch with the Royal Squadron on the right wing, were, together with the Macedonian archers under Brison, thrown forward at an oblique angle,

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[1082] Arrian 3.11.9 names Simmias at this point in the line (brother of Amyntas), but he is the only source to do so. Curtius 4.13.28 and Diodorus 17.57.3 name Philippus son of Balacrus; the error is likely to be Arrian's. Bosworth, 1976, 125 assumes the error originates with Aristobulus and Arrian simply passed the error along. Who actually commanded Amyntas' *taxis* in his absence is difficult to say. Berve, 2.27.354 (no.704); 2.27.384 (778) names Simmias without any justification or discussion, but Philippus was the commander according to the vulgate as noted above; it seems that only Ptolemy names Simmias. Both, however, are obscure to say the least: Philippus is never mentioned again and Simmias only reappears during the plot of Philotas. In reality we simply do not know the answer, and for our purposes here it makes little difference. *Cf.* Bosworth, 1980, 301.
[1083] Devine, 1986, 113.
[1084] Arrian 3.12.1.
[1085] Arrian 3.12.1.
[1086] Diodorus 17.57.3-4.
[1087] Curtius 4.13.31-32.
[1088] Arrian 3.12.1.
[1089] Arrian 3.12.2.

in case it should suddenly prove necessary to
extend or close up the front line of infantry.

In order to maintain a frontage facing the enemy, but still protecting the flanks of the army without exposing its own, the flank guards were likely at an angle of 45^0 to the main line.[1090] Marsden's picture of the flank guards being at an angle, but also of the main line being drawn back *en echelon*, is implausible.[1091] This would result in neither the flank guard nor the main line actually facing the enemy; there seems no reason for Alexander to have done this. The most plausible and simple solution is that the main line did indeed face the Persians directly and the flank guards were at an angle.[1092] This would maintain the ability to extend the main line if necessary by the flank guards moving parallel to the front, or closing the tactical square by them pivoting backwards slightly. If Marsden had been correct there would be no possibility of extending the front if required and a large measure of tactical flexibility would be lost for no tangible alternative advantage. Tarn[1093] argued that the tactical square was already closed at the outset of the battle; that the flank guards were already at 90^0 to the main line; this can be rejected on similar grounds. Judeich[1094] argued the opposite of Tarn: that the flank guards were stationed to extend the front and were facing the enemy.[1095] The only interpretation of the sources that makes sense is that the flank guards were at an angle to the main line, with the flexibility of closing the formation or extending it. Curtius'[1096] description of the formation as "roughly rectangular" does not detract from the angled flank guard theory; but it has been over-used in support in the above-discussed modern theories.[1097]

The flank guards were undoubtedly powerful, and not simply afterthoughts to the strategy. They were arranged as follows: on the left were stationed the Thracian javelin men (under Sitalces), Cretan archers, Achaean mercenary infantry, Allied Greek cavalry (Coeranus), Odrysian cavalry (Agathon) and the mercenary cavalry (Andromachus). The right-hand flank guard was at least as strong,[1098] consisting of: the Agrianians (Attalus), the Macedonian archers (Menidas), the 'old' mercenary infantry (Cleander), the *Prodromoi* (Aretes) and the Paeonian cavalry (Ariston).

On the extremes of the line were stationed the best of the cavalry units, as was usual. To the left were the Thessalians, commanded by Philip, as well as a body of allied Greek cavalry under Erigyius; Parmenio, of course, held overall command on the left. To

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[1090] Devine, 1986, 96; Marsden, 1964, 48*f*; Bosworth, 1980, 302.
[1091] Marsden, 1964, 48.
[1092] Bosworth, 1980, 302; Devine, 1086, 96.
[1093] Tarn, 1948, 1.48, 2.184.
[1094] Judeich, 1922, 7.
[1095] For further objections to Tarn and Judeich see Griffith, 1947, 77.
[1096] Curtius 4.3.31-2.
[1097] See also Burn, 1952, 85*ff*; Fuller, 1958, 167-9.
[1098] In fact it is probably fair to argue that the right-hand side flank guard was rather stronger than that on the left.

the right were stationed the Companion Cavalry commanded by Philotas; Alexander was also stationed with the Companions.[1099]

According to Arrian the Macedonian army as a whole consisted of around 7,000 cavalry and 40,000 infantry.[1100] Arrian does not give us any indication of his source for this figure, but it is generally thought to be from Ptolemy or Aristobulus and probably originating with Callisthenes' account.[1101] If this is the case, and if the figures are correct, and there is no reason to doubt them, then the cavalry had increased in number significantly since 334 when the highest figure for their numbers was that of Anaximenes at 5,500.[1102] Given that both the Companion Cavalry and the Thessalians appear to have had a relatively static number of troops, around 1,800 each,[1103] the increase must have come from somewhere else. Their source must be the allied Greek states, as there is no mention at this time of Persian cavalry units being incorporated into the army. The other possibility, of course, is that the numbers were simply inflated by our surviving sources, but whilst we know that this could happen (the size of Alexander's army at Gaugamela for example); we should not simply assume the sources were lying or mistaken every time a small discrepancy is noted.

Persian Order of Battle

Arrian goes to great lengths to tell us that, after the battle, certain Persian documents written by Darius himself which detailed the Persian order of battle fell into Greek hands:[1104] he also adds that this information came to him through Aristobulus. The information contained in Arrian's Persian order of battle is usually considered to be authentic,[1105] with some justification. Of all of Alexander's set-piece battles, Gaugamela is the only one where we have such detailed dispositions, including nationalities of each contingent.[1106] This detail is not universally accepted, however. Schwartz[1107] believed that Aristobulus' order of battle was a fabrication created to justify such a detailed report.[1108] Bosworth notes that it is striking that the Persian order of battle, as presented by Arrian, is not standard throughout the sources. Although the dispositions are similar in broad outline, Curtius gives a description that is significantly different in certain details.[1109] The Cossaeei, Gortuae and Phrygian contingents only appear in Curtius, for example. There are differences in the locations of certain contingents too: Curtius places the Susian cavalry further to the left than does Arrian/Aristobulus whilst the Cadusii are

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[1099] The Companion Cavalry were subdivided into eight *ilai*, these being commanded by Glaucias, Ariston, Sopolis, Heracleides, Demetrius, Meleager and Hegelochus with the so called royal *ile* commanded by 'Black' Cleitus. Devine, 1986, 98.
[1100] Arrian 3.12.5.
[1101] Berve, 1926, 1.178; Tarn, 1948, 2.159; Marsden, 1964, 24, 27; Bosworth, 1980, 303; Devine, 1986, 99.
[1102] Plutarch *Alex.* 15.1; *FGrH* 72 F 29; *cf.* Arrian 1.11.3. *cf.* Bosworth, 1980, 303-4.
[1103] As they were in 334 at the crossing of the Hellespont; Diodorus 17.17.4.
[1104] Arrian 3.11.3.
[1105] Pearson, 1960, 162; Marsden, 1964, 44, n.1; Bosworth, 1980, 297; Schachermeyr, 1973, 269.
[1106] Compare, for example, to descriptions of Darius' army at Issus (Arrian 2.8.5-8; Curtius 3.9.1-5).
[1107] Schwartz, 1893, 2.913.
[1108] Fabricated by Aristobulus rather than by Arrian, passing the blame to Aristobulus.
[1109] Bosworth, 1980, 297; Curtius 4.12.6-13.

placed on the right instead of to the left of centre.[1110] Bosworth attributes some of the discrepancies to Curtius' notorious lack of care in transmitting lists.[1111] A more significant error, however, could come from difficulties in translation. Any captured Persian documents, especially ones written by Darius' royal scribes, would have been in Aramaic; translating these into Greek may have proven problematic and could easily account for differences in positions of troops etc. for two main reasons. The meaning of the Aramaic could well have been unclear to the Greeks and after a period of time a number of different translations may have been in circulation leading to potential discrepancies (although I would count this as possible rather than likely). Another possibility is that Aristobulus was the only contemporary source to use the captured documents, but this seems very unlikely indeed. Such documents, and I think we can assume they existed, were likely to have been captured at Arbela after the battle;[1112] Alexander failed to capture Darius there but he did find "all of his valuables", which included three or four thousand talents and a large wardrobe of Persian attire.[1113]

As always in the ancient world, numbers for each side in battles are inflated; either for propaganda or through errors in transmission etc: Gaugamela is no exception, as we will see later. Despite the difficulties caused by the lack of accuracy of expression, as well as errors, we can still establish the relative positions of many of the key Persian units, as well as approximate strengths. The Persian left wing was held by a large force of Bactrian cavalry, perhaps 8,000 strong;[1114] these were under the leadership of Bessus, the satrap of Bactria. Arrian mentions them as stationed on the left, and as being only 1,000 strong: this is probably an error of Arrian; he may be referring to a smaller flank guard detachment.[1115] It is Curtius who gives their strength. Curtius, however, goes on to confuse matters by stating that they were next to the chariots.[1116] It is clear from Arrian that the chariots were stationed in front of the Bactrians and not to the side of them.[1117] Stationed alongside the Bactrians were detachments of Dahae and Arachosian cavalry; numbering 1,000 and 2,000 respectively.[1118] The Dahae were the most populous of the Saca peoples and almost certainly provided more than 1,000 troops total; the rest were probably on the other flank along with some stationed in the centre with Darius. Curtius also positions the Massagetae alongside the Bactrians, but fails to give troop numbers.[1119]

Along from the Dahae were a unit of mixed cavalry and light infantry: perhaps Darius was learning from Alexander at Issus, where he stationed infantry with cavalry on his extreme right there; a group that quickly forced a crossing of the Pinarus. Along with

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[1110] Curtius 4.12.12; Arrian 11.3; Bosworth, 1980, 297.
[1111] Bosworth, 1980, 297. His errors regarding the Macedonian heavy infantry, for example, at 4.13.28-9.
[1112] Arrian 3.15.5.
[1113] Diodorus 17.64.3; Curtius 5.1.10.
[1114] Devine, 1986, 100; Arrian 3.11.3 puts the figure at only 1,000 Bactrians.
[1115] Arrian 3.11.3; *cf.* 3.11.6.
[1116] Curtius 4.12.6.
[1117] Atkinson, 1980, 402.
[1118] Devine, 1986, 101. Curtius 4.12.6. provides the numbers here, although the strength of the Arachosian cavalry has to be inferred from the text; *cf.* Atkinson, 1980, 403; Bosworth, 1980, 297-198.
[1119] Curtius 4.12.6. Bosworth, 1980, 298.

this mixed unit were the Susian and Cadusian[1120] cavalry, each 2,000 strong. Completing the Persian left were, in front of the rest of the wing, 2,000 Scythians and 1,000 Bactrian cavalry along with 100 scythed chariots.[1121] Chariots were something of a return to a more ancient form of warfare; but Darius believed that they would give him a tactical advantage by breaking up the Macedonian lines. Darius should be commended, despite his failure, for attempting an innovative tactic,[1122] rather than simply relying on weight of numbers to win the day.

The right wing consisted of units from lowland Syria[1123] and Mesopotamia as well as the Medes. Slightly closer to the centre were the Parthians and Sacae as well as the Tapurian and Hyrcanian contingents; lastly the Albanians and Sacesinians:[1124] this is how Arrian describes the Persian right, without numerical values attached to each contingent. The units from Coele Syria and Mesopotamia were apparently brigaded together under the command of Mazaeus:[1125] they were presumably cavalry,[1126] although this is not explicitly stated; it can be inferred from their role and position. The Medes were commanded by their satrap Atropates,[1127] and again we can safely assume they were cavalry. The Parthians and Sacae were mounted archers, an idea Alexander had never yet adopted, although he was to do so to great effect in Bactria and beyond.[1128] The Tapurian and Hyrcanians were both cavalry units, and units of some reputation, particularly the Hyrcanians. The mention of Albanians[1129] is puzzling, and only appears in Arrian; it is perhaps a mis-translation or mis-understanding on the part of Arrian, but we can only speculate. In front of this wing were also stationed an advance guard of Armenian and Cappadocian cavalry, along with 50 scythed chariots.[1130] No source gives numbers for the Persian right, but it is highly likely to have been the same as or very similar to the left; i.e. around, or perhaps slightly in excess of, 7,000.

The Persian centre was under the direct command of the Great King. Stationed with Darius were the Royal kinsmen; these were an elite group of cavalry, probably 1,000

[1120] Arrian 3.11.3; Diodorus 17.59.5 gives the Cadusian strength; *cf.* Curtius 4.12.6, who inexplicably places the Cadusians on the Persian right, certainly a mistake.
[1121] Arrian 3.11.6 and Curtius 4.12.6, Both give 1,000 Bactrians at this point. Marsden, 1964, 35-6 and Atkinson, 1980, 404, identify these Bactrians with the Maagetae of Curtius 4.12.7. (Devine, 1986, 101); this may well be the case.
[1122] With the already-noted caveat that this was not new, more recycling of an old tactic; it was still new in the war with Alexander.
[1123] More frequently referred to as Coele Syria.
[1124] Arrian 3.11.4.
[1125] Arrian 3.8.6.
[1126] Bosworth, 1980, 292-3.
[1127] Arrian 3.8.4; Curtius 4.12.9. *Cf.* Berve, 1926, 2.180.
[1128] Arrian 3.11.4. Curtius 4.12.11, misplaces the Parthians on the Persian left. The Sacae were commanded by Mauaces (Arrian 3.8.3). The Parthians, Hyrcanians and Tapurians were brigaded together, before the battle at least, and commanded by Phrataphernes (Arrian 3.8.4). During the battle they acted in concert with the Sacae, no doubt because they were also horse archers; *cf.* Atkinson, 1980, 25, 409; Bosworth, 1980, 290; Devine, 1986, 102-3.
[1129] Arrian 3.11.4.
[1130] Arrian 3.11.7; Devine, 1986, 103.

strong.[1131] They were of the highest Persian nobility, demonstrated by their exclusive right to kiss the king.[1132] Along with the cream of Persian nobility were the elite Persian infantry unit, the *melophoroi*; these were handpicked from the 10,000 Immortals, and distinguished by displaying golden apples on their spear butts.[1133] This is exactly the opposite of the Macedonian infantrymen whose sarissa had a large spear butt; this was partly to balance the weight and partly to allow it to be dug into the ground to brace against a charge by the enemy. With this inability to brace the spear against an enemy charge, the Persian *melophoroi* were ill equipped to resist a cavalry charge by an enemy.[1134] This is the main feature of the dispositions in that sector that prompted Devine to state that "the arrangement of the centre was more ceremonial than tactically functional".[1135] The Greek mercenary infantry, the strongest of the Persian front line infantry, but numbering only around 2,000 by this time,[1136] were stationed to either side of the elite Persian units.[1137] The Greek mercenaries were positioned directly opposite the Macedonian heavy infantry, and were probably the only infantry at Darius' disposal capable of opposing them; their lack of numbers was a critical problem, however. The remainder of the Persian centre consisted of Indians, "stateless" Carians[1138] and Mardian archers.[1139] Forming a sort of second line,[1140] immediately behind these units were the Uxians, Babylonians, "troops of the Persian Gulf" and the Sitacenians.[1141]

The reported numbers for the total strength of the Persian host vary wildly: Arrian gives 1,000,000 infantry, 40,000 cavalry, 200 scythed chariots and 15 elephants. Curtius gives 200,000 infantry and 45,000 cavalry; 1,000,000 is the total presented in Plutarch, and 800,000 infantry and 200,000 cavalry in Diodorus; Justin tells us of 400,000 infantry and 100,000 cavalry.[1142] The first thing to note is that the 200 scythed chariots in Arrian

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[1131] For Royal kinsmen see Arrian 3.11.5; Diodorus 17.59.2. For the size of the contingent see Diodorus 17.59.2. Curtius 3.3.14, claims that they were 15,000 strong. Bosworth, 1980, 298, notes that this is probably a mistake for the whole of the Persian national cavalry strength.

[1132] Diodorus 17.20.2; Xenophon *Cyropedia.* 1.4.27; Arrian 7.11.1,6.

[1133] Arrian 3.11.5; Bosworth, 1980, 299.

[1134] The organisation of these elite units into *chiliarchies* was later copied by Alexander. Bosworth, 1971, 131*f.*

[1135] Devine, 1986, 101.

[1136] Because of successive losses in earlier campaigns, Darius did not find it easy to replenish the numbers. Lane Fox, 1973, 229 believes 4,000.

[1137] Arrian 3.11.5; Curtius 4.12.10.

[1138] They had been forcibly removed from Caria and resettled in central Asia.

[1139] Arrian 3.11.5. *cf.* Curtius 4.12.7, 4.12.9, who misplaces the Mardians, Indians and Persian Gulf infantry on the Persian left wing. At this point there appears to be only one contingent of Indians, although earlier Arrian distinguishes two. The first from the region bordering Bactria, commanded by Bessus, (Arrian 3.8.3.) and having brought 15 elephants (Arrian 3.8.6.). The second were Indian hill tribesmen commanded by Barsaentes (Arrian 3.8.4.). It is likely that both were amalgamated into one unit some time during the preparations for the battle. Devine, 1986, 102.

[1140] Arrian 3.11.5 uses the term *epitetagmenoi*: it is intended in the normal sense of posted behind as described. He goes on to use the term *eis bathos*: this is very rare in the pages of the *Anabasis*, occurring only four times in a tactical context (Devine, 1986, 102). Elsewhere it is used to describe Alexander's phalanx depth against the Triballians (Arrian 1.2.4); it evidently does not just mean stationed behind, but also refers to the significant depth of the formation. The second-line infantry were poor troops and, if Curtius 4.12.6 is to be believed, largely useless as front-line troops.

[1141] Arrian 3.11.5.

[1142] Arrian 3.8.6; Curtius 4.12.13; Plutarch *Alex.* 31.1; Diodorus 17.53.3; Justin 11.12.5.

are perfectly plausible given the time Darius had to prepare and the resources at his disposal.[1143] We can also say with some certainty that the elephants were not present at Gaugamela; they are mentioned in the Persian order of battle, but do not appear to have actually taken any part in the battle itself. Alexander, therefore, did not encounter elephants in battle until the Hydaspes. Apart from the chariots, most of our sources provide wildly exaggerated estimates, as was typical in the ancient world. The most plausible figures, however, are those provided by Curtius: 200,000 infantry and 45,000 cavalry are not unreasonable numbers; given that this was to be Darius' last stand and that he had had around two years to prepare, summoning contingents from what remained of his empire. Devine,[1144] in attempting a slight defence of Arrian, proposes the believable hypothesis that Arrian's 40,000 cavalry may have been a paper strength, although it was never actually achieved. This in itself is plausible enough, but it is a number unfortunately juxtaposed against the 1,000,000 infantry, which has to be pure fantasy.

The Battle of Gaugamela

The Macedonian tactics for the battle are complex and only discernible with hindsight; a simple examination of Macedonian dispositions does not reveal Alexander's thinking; the Persian tactics are simpler to understand, however. The Persian order of battle at Gaugamela was specifically designed to counteract the tactics that Alexander had employed at Issus;[1145] there, Alexander had delivered the fatal blow with his right wing, and fought a defensive action on his left. Also, in the earlier set-piece battles Alexander had launched a small-scale initial attack to open the battle.[1146]

Stationed on the Persian left wing was an imposing force of cavalry, the forward units of which were Scythians and Bactrians, perhaps 3,000 strong. The intention of these units seems to have been to absorb Alexander's initial attack that was expected in that sector, if Issus was to be repeated by the Macedonians. This would also have the secondary effect of allowing the troops in the centre to deal with Alexander's heavy infantry without fear of being outflanked. Marsden notes that of the 200 scythed chariots available to Darius, fully half were stationed opposite the Macedonian right wing and only 50 opposite in the centre, where we have such vivid descriptions of how the heavy infantry moved aside to make channels for them to advance through.[1147] Historically scythed chariots had not had great success against Greek heavy infantry; Darius evidently felt that they might have a more positive impact against cavalry.

The Persian tactic was evidently for the advance units of Scythians and Bactrians to absorb Alexander's initial attack on the right whilst Mazaeus would renew the battle with Parmenio and the Thessalians on the left that had been left unresolved at Issus. Darius knew that heavy infantry alone would not conquer the Persian Empire, even if

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[1143] Devine, 1986, 102.
[1144] Devine, 1986, 102.
[1145] And indeed at the Granicus before that.
[1146] Marsden, 1964, 42.
[1147] Marsden, 1964, 44.

they were intact after the battle; he also knew that his own infantry were not of the same calibre as the Macedonian.[1148] With this in mind, the Persians adopted a novel strategy: to rely almost exclusively on cavalry for victory. Persian success depended in part upon this new tactic coming as a surprise to Alexander; this was all but impossible to achieve given the possibility of Alexander viewing the Persian order of battle from a hill 5km away from the Persians' chosen ground. There was little Darius could do about this disadvantage; and he probably reasoned that being on a wide open plain[1149] where his cavalry could theoretically have almost total freedom of movement would be sufficient.

In order to regain the tactical initiative, Alexander conducted a reconnaissance operation with the light infantry and Companion Cavalry to "examine minutely the whole terrain where battle would be fought".[1150] Darius did not attempt to counteract this operation, perhaps because he was set in position upon the battlefield and did not wish to be drawn out by Alexander, perhaps also his army was not sufficiently trained or disciplined to be able to launch an unplanned counter-attack at such short notice.[1151] After his inspection of the Persian positions and the battlefield, Alexander returned to his camp and ordered his men to stand down for the night. Darius on the other hand instructed his men to stand at arms all through the night,[1152] lest the Macedonians launch a night attack.[1153] Bosworth notes that, for Persian armies, this was standard practice; given that Darius could not retire to a safe location, it was probably accepted military practice to stand at arms through the night and not an original mistake of Darius.[1154] Ordering his men to stand down in this manner so close to the enemy seems like a tremendous risk on the part of Alexander; he was gambling that the Persians would not be interested in a pre-emptive night attack. As so often in his career his gamble paid off: although we do not hear of fatigue in the battle, it undoubtedly played a part in the Persian defeat.

Although the Greeks were stood down that night, Alexander did not rest. Curtius tells us that he was up late into the night studying and calculating Persian strength and Persian dispositions in order to determine his tactical plan for the coming battle.[1155]

Alexander's inspection tour the day before the battle would have made him acutely aware that the Persians were very strong in cavalry on their left, his typical initial target. They had perhaps 19,000 cavalry in this sector with Alexander being able to muster probably only 3,500 at most.[1156] It is highly likely that he toyed with the idea of transferring his main attack to the centre or his left, as Curtius suggests, but ultimately

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[1148] Marsden, 1964, 44; Arrian 2.11.2.
[1149] Which was also specially levelled to provide the greatest possible advantage.
[1150] Arrian 3.9.5.
[1151] And still maintain control of the army.
[1152] Arrian 3.11.1-2.
[1153] A night attack which we hear Parmenio advocating (Arrian 3.10.1), is probably a later invention, as is frequently the case with how our sources treat Parmenio.
[1154] Bosworth, 1980, 297. Xenophon *Anabasis* 3.4.34-5, records that in 401 the Persian army never made camp whilst within 60 stades of the Greeks.
[1155] Curtius 4.13.16; *cf.* Diodorus 17.56.1; Plutarch *Alex.* 32.2. Diodorus 17.56.1; Plutarch *Alex.* 32.1 and Curtius 4.13.17-25, all also record Alexander oversleeping on the morning of the battle as a result of his studies.
[1156] Marsden, 1964, 46.

rejected the plan.[1157] After all the deliberations Alexander appears to have decided upon the same basic strategy that he had used at the Granicus and Issus: to draw the Persians out onto ground of his choosing and then, at the optimal moment, launch his counter-attack. This would involve, as before, essentially the sacrifice of some troops in order to achieve the desired result, but Alexander had no qualms about that.

Marsden notes that on the day of the battle Alexander drew up his line in a remarkably similar manner to his dispositions at Issus two years previously;[1158] there were a couple of key differences, however. The creation of powerful flank guards at either end of the line was an innovation, one that would help protect against an outflanking action by a massively larger enemy. The flank guard on the right is of particular interest; it was designed to perform two tasks. The first was to draw out as much of Bessus' cavalry as it could and to hold them in battle for as long as possible. Secondly they were to protect the Companion Cavalry until the opportune moment came for the counter-attack.[1159] The left flank was set up in a similar manner but with no real intention of a Thessalian counter-attack on a grand sale. The left flank guard was to fight a holding action as always.

Before marching to battle Alexander addressed the officers, with instructions that the address be passed on to the men:[1160]

> Let him but remind them each for himself to preserve discipline in the hour of danger – to advance, when called upon to do so, in utter silence; to watch the time for a hearty cheer, and, when the moment came, to roar out their battle-cry and put the fear of God into the enemy's hearts. All must obey orders promptly and pass them on without hesitation to their men; and, finally, every one of them must remember that upon the conduct of each depended the fate of all: if each man attended to his duty, success was assured; if one man neglected it, the whole army would be in peril.

We can infer from this speech that Alexander had a general tactic; but by reminding the commanders, and thus the men, to watch out for changes in orders that should be executed rapidly; it seems that Alexander expected to make changes during the battle.

The following morning, September 30th, Alexander led the Macedonian host to the battlefield. Initially the Macedonians left a considerable overlap to their left flank, so much so that the Companion Cavalry were opposite the Persian centre;[1161] this can have

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[1157] Curtius 4.13.16.
[1158] Marsden, 1964, 47.
[1159] Marsden, 1964, 50.
[1160] Arrian 3.9.5*ff*. I think it is beyond doubt that pre-battle speeches were made, but what would have been remembered of them by Ptolemy etc. is questionable, as is Arrian's interpretation of that. What we likely have, therefore, is the gist of what was said rather than a verbatim transcript.
[1161] Arrian 3.13.1*ff*.

been no accident as Alexander had spent a considerable amount of time the previous day examining the Persian positions that evidently had not moved overnight. What this deployment appears to have been was the first stage in attempting to lure the Persians out of their set positions: Persian discipline held, however, and they did not move. Alexander's second attempt to force the Persians' hand was a now famous movement to his right.[1162] Arrian tells us that this was countered by a similar move from the Persians: evidently they did not wish to use the tactical advantage offered by the initial overlap, but nor were they prepared to lose it. We could infer from the text of Arrian[1163] that there was no change in the relative positions of the two armies, but this would be a mistake. Even though both were moving in the same direction, it would have taken the Persians some time to see Alexander's movement, analyse it, and pass orders to individual units to move in a similar fashion; thus Alexander would have considerably reduced the overlap by the time the Persians reacted. This must have been the case given that later in the battle Mazaeus easily encircled the Thessalians on Alexander's left, indicating that they had moved a considerable distance relative to the Persian lines.[1164]

Whilst it seems certain that Darius attempted to maintain some kind of overlap on the Macedonian right we must ask why? The frontage of his army was such that wherever the Macedonians set up he would have a massive overlap on one side or the other, or both; why did he wish to maintain the initial starting position? Darius would no doubt have expected Alexander to launch his main attack from the Macedonian right where he was stationed with the Companion Cavalry; this is what had happened at Issus and would have been a reasonable supposition. If Darius did indeed assume this, then he would have wanted to maintain as massive a numerical superiority in that sector as possible to counter the expected assault. After both armies had been moving in the same direction for a time, towards a group of foothills, and away from the ground that had been specially prepared by the Persians, Darius evidently ordered a stop. We do not know this directly, nor with certainty, but when Darius launched his general advance, beginning with the chariots, we can assume that the army would have been stationary first. After the Persians had stopped marching, Alexander continued to the right, thus[1165] gaining ground both at the start of his movement, before the Persians could react, and at the end, as the Persians launched their assault.

[1162] Arrian's use of the term "*hos epi*" at 3.13.1, is problematic, especially in a tactical context. Arrian also uses the term at the Hydaspes (5.16.3), which Tarn (1948, 2.194-197) translates as a feint, a movement "*as if* towards the enemy". Given that Arrian uses the term so frequently during his narrative (Hamilton, 1952, 27, n.12, claims about 90 examples: Devine, 1986, 104, n104, states 130 in the *Anabasis*), this interpretation would mean we would have to alter entirely our interpretations of Alexander's battles that use Arrian as a source; every tactical movement he made would become a feint. It is more reasonable to accept Hamilton, 1956, 26-31, in arguing that Arrian uses "*hos epi*" and "*epi*" interchangeably and both can be translated as towards or against. I think it is reasonable to assume that this was an actual movement of troops towards Alexander's right, and not a feint in that direction.

[1163] Arrian 3.13.1; *cf.* Marsden, 1964, 52.

[1164] Arrian 3.14.6.

[1165] Arrian 3.14.1.

Before this general Persian assault began, however, Darius ordered his advance guard on the left[1166] to circle around to the side of the Macedonian right wing and stop their lateral march toward the foothills. Darius was evidently afraid that, if Alexander continued his movement towards the foothills and away from the prepared ground, his scythed chariots and advantage in cavalry could be nullified.[1167] The first round of tactical sparring was won by Alexander: he had enticed the Persians out of their prepared positions. As soon as Alexander saw the Persians make a move he ordered Menidas and the mercenary cavalry,[1168] only a few hundred strong, to counter-attack the 3,000 enemy cavalry. Alexander did not expect these few troops to rout the Persians: they were a pawn sacrifice in exactly the same manner as at the Granicus and Issus; they were intended to draw the enemy forward and force them to commit themselves,[1169] placing them in a position where he could counter-attack with larger numbers and greater quality troops. As expected, Menidas was quickly driven and fled the field of battle, it is likely that his men did not fight with particular vigour, but they did perform their function.[1170]

At this point the text of Arrian becomes difficult to interpret.[1171] He seems to imply that there were three stages to the cavalry battle on the right: Menidas' failed counter-attack, the reinforcement by the Paeonians, and finally Aretes' attack with the *prodromoi*.[1172] The more likely interpretation of the text is that there were two stages: after the repulse of Menidas, Alexander ordered a charge by the *prodromoi* of Aretes and Ariston's Paeonians, supported by the veteran mercenary infantry of Cleander.[1173] This second counter-attack by the Macedonians met with far greater success, largely because it employed greater numbers of higher quality troops. As this was becoming apparent to Darius, Bessus, his left wing commander, ordered the remainder of the Bactrian and Saca Scythian cavalry, perhaps some 8,000 strong,[1174] to engage the enemy. The fighting was hard and the Macedonians suffered heavy losses against the armoured Saca horsemen.[1175] At this point in the battle, around 11,000 Persian cavalry were being held back, perhaps with great difficulty, by 1,100 Macedonian light cavalry and 6,700 mercenary infantry.[1176] Despite the discrepancy in defensive armour, however, the Macedonian

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[1166] This advance guard consisted of the 1,000 Bactrian cavalry and the 2,000 Scythian Massagetae; Curtius 4.12.6-7; *cf.* Devine, 1986, 103.
[1167] Devine, 1986, 103.
[1168] Arrian 3.13.2; *cf.* Hamilton, 1955, 217-8.
[1169] Marsden, 1964, 53.
[1170] This could have been an intended retreat, of course, in order to preserve their numbers for future battles and to further draw the Persians forward in greater disorder.
[1171] Arrian 3.13.3.
[1172] Bosworth, 1980, 305.
[1173] Devine, 1986, 103; *cf.* Bosworth, 1980, 305.
[1174] Curtius 4.12.6.
[1175] Arrian 3.13.4; *cf.* Curtius 4.9.3. These Saca cavalry, which both Arrian and Curtius describe as wearing chain mail on both the horse and rider, originated in the region south of the Aral Sea some time during the 6th century. This practice seems to have originated with them (Rubin, 1955, 264ff; *cf.* Eadie, 1967, 161-3), although the Assyrians also developed such cavalry independently. Initially these cavalry seem to have specialised in either lance or bow, but by the 4th century they were proficient with both. Alexander was evidently so impressed by these horsemen that by 327 (Arrian 5.12.2) he incorporated them into his army. They later formed the basis of the Seleucid cataphracts (Livy 35.48.3; 37.42.1; Polybius 30.25.9.); Bosworth, 1980, 306.
[1176] Marsden, 1964, 54.

cavalry held their own against superior numbers. Arrian tells us of repeated cavalry charges by Bessus, indicating that the battle on the Macedonian right was lengthy and perhaps that the Persian defeat was more to do with demoralisation after Darius fled than a military defeat. Devine[1177] also notes the possibility of treason by Bessus; it seems unlikely in the heat of battle that an enemy commander could negotiate a treaty and if it had been organised before the battle, then why fight at all, why not simply change sides? The treason story originates in Curtius,[1178] and it is no doubt true to say Bessus was ambitious, as Curtius does, but it is a long way from ambition to outright treason.

The battle on the right culminated in a final charge by the Macedonians. Tarn made the error of assuming that these Macedonians were the Companion Cavalry,[1179] believing them to be the only ethnically Macedonian units in that area at the time. He also erroneously believed that the Persians broke through the flank guards in order to reach the Companions. Arrian here is not using Macedonian in the ethnically specific sense, but as a generalisation for troops within the Macedonian order of battle.[1180] The troops that ultimately held and then repulsed Bessus were the mercenaries, *prodromoi* and Paeonians as described above.

At some point which remains unclear, some of Mazaeus' cavalry on the Persian right broke through the Macedonian lines: Arrian[1181] describes breaking through the centre, whilst Curtius has 1,000 cavalry being ordered to ride around Alexander's extreme left to "plunder the enemy's baggage".[1182] Curtius here has a request sent to Alexander with news of this action and a request for orders: this is not a request for assistance as is assumed by Devine, but an alteration to the plan to which Parmenio felt himself unable to adjust. Alexander's response was to ignore the raid, as if they were to "win this battle we shall not only recover our own baggage but also capture the enemy's".[1183]

Arrian's text is also problematic: a breakthrough in the centre (and at the very end of the battle) presents a number of difficulties; any breakthrough that reached the baggage train would have to pass through the second, reserve phalanx; this does not seem to have occurred in Arrian. Indeed, the reserve phalanx only learned about the breakthrough when the baggage train was being looted. Alexander's baggage was also some distance to the rear, some 6km.[1184] A second problem is that Arrian has the Indians and Persian cavalry fleeing in defeat, but the camp was no longer in a direct line behind the Macedonians because of Alexander's rightward movement before the battle.[1185] These fleeing cavalry, then, are supposed to have regained their composure, despite the battle being over and Darius already in flight, in order to attack the guarded Macedonian camp.

[1177] Arrian 3.13.4. Devine, 1986, 103.
[1178] Curtius 4.6.4.
[1179] Tarn, 1948, 2.185-186.
[1180] Burn, 1952, 87, n.6. *cf.* Griffith, 1947, 80-81.
[1181] Arrian 3.14.5.
[1182] Curtius 4.15.5.
[1183] Devine, 1986, 109, n.127. Curtius 4.15.5.
[1184] 30 stades.
[1185] Burn, 1952, 89.

We can only conclude that Arrian is wrong in the timing of the breakthrough: it was not at the end of the battle but earlier, as in Curtius, and also in the direction of the Indian and Persian cavalry. The camp was 6km away and thus not an easy or tempting target for any cavalry units that did manage to break through; we can therefore only conclude direct orders for the camp to be assaulted, again as in Curtius: the intention no doubt being an attempt to recover Darius' family.[1186]

This initial fighting was a significant tactical victory for Alexander: the cavalry of Bessus had been charged with defeating Alexander's right flank, and yet that had failed to break through even the flank guard. This essentially gave the Companion Cavalry free rein to attack the Persians without having to fight a way through the heavily armed Scythian cavalry. Alexander's tactic, oft repeated, of luring the enemy onto ground, and into a position, of his choosing had again proved a success.

At the same time as this cavalry action was being fought, Darius launched a second assault directed at the Macedonian right; one hundred scythed chariots were sent against the Companion Cavalry.[1187] The intention is obvious, to cripple the horses and render Alexander's finest units useless. The assault was evidently an attempt at a two-pronged attack by Darius, the cavalry circling to attack from the flank and the chariots from the front.[1188] This assault proved equally ineffective; the chariots were routed by Balacrus' javelin-men and the remaining half of the Agrianians that had been stationed in front of the Companion Cavalry to act as a screen.[1189] At the same time as this chariot assault was launched against the Companions, two smaller assaults, each by 50 chariots, were made against the heavy infantry in the centre and Parmenio on the left. Curtius confuses the assault on the centre with that on the Macedonian right, but nevertheless gives us a valuable insight into the battle. Curtius describes the following:[1190]

> Some were killed by the spears that projected well beyond the chariot-poles and others dismembered by the scythes set on either side. It was no gradual withdrawal that the Macedonians made but a disordered flight, breaking their ranks.

The following is Curtius' description of the chariot assault on the "front line". This is evidently the skirmishing troops as he later describes:[1191]

[1186] Burn, 1952, 88-90; *cf.* Bosworth, 1980, 308.
[1187] Arrian 3.13.5-6.
[1188] Bosworth, 1980, 306, was the first to realise the evident point that the two attacks came simultaneously; *cf.* Curtius 4.15.14, Diodorus 17.58.2.
[1189] Tarn, 1948, 2.149*ff*, argued that some of the hypaspists were also involved. Arrian does seem to imply that some of that corps were stationed behind the front line, but it seems unlikely given their lack of numbers, only 3,000, that they would not all have been used in the front line where they could do the most damage. Bosworth, 1980, 307, notes that these troops were perhaps the small private contingent of the king's bodyguard, and not the more famous units of heavy infantry.
[1190] Curtius 4.15.4.
[1191] Curtius 4.15.14-15.

> After causing havoc in Alexander's front lines, the chariots had now charged the phalanx, and the Macedonians received the charge with a firm resolve, permitting them to penetrate to the middle of the column. Their formation resembled a rampart; after creating an unbroken line of spears, they stabbed the flanks of horses from both sides as they charged recklessly ahead.

The commonly held view, and the more likely explanation, is that the infantry simply moved out of the way of the chariots; to have moved far enough to stab the horses in each of their sides with a sarissa some 5.5m long would have meant creating a series of perhaps 15m gaps in the line: this seems unlikely in the heat of battle. It is much more plausible to assume a smaller gap without the heavy infantry being able to use their sarissa. Either way, the Macedonians evidently had more difficulty with the chariots than Arrian has led us to believe.

The use of scythed chariots by Darius against the Companion Cavalry could have been disastrous for Alexander, but the ease with which they were dealt with demonstrates Alexander's close attention to detail: Alexander must have taken note the previous day of the location of the chariots, noting fully half of the total number stationed on the Persian left, and immediately formulating a plan as to how to counter their use. Given that, even in the centre where they had some limited and evidently short-term impact,[1192] this action also clearly demonstrates that the chariot's day as a key unit on the battlefield was over.[1193]

It seems from the text of Arrian that Alexander had not yet ordered his centre to advance: "as Alexander moved forward the Persians sent their scythed chariots against him".[1194] This seems to imply a movement by Alexander and the Companion Cavalry, not the infantry as is surmised by Devine.[1195] Marsden notes Darius' confidence at this point, claiming that from his perspective the Macedonian right was contained[1196] and that he had a good overlap on probably both sides making a flanking manoeuvre very possible. I would add that from Alexander's perspective, the battle was also going very well indeed. He had managed to entice the Persian cavalry on his right into attacking, sacrificing only a small band of non-Macedonian cavalry in the process. He had also managed to contain this charge without using his elite Companion Cavalry; and he had successfully dealt with the potentially dangerous scythed chariots, with no casualties at all.

Riding high, as Darius evidently felt he was, he ordered a general advance. This would not only have consisted of the infantry in the centre: Mazaeus also advanced upon Parmenio and the Thessalians, and Bessus no doubt used ever more cavalry against

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[1192] Short-term because we know that the heavy infantry recovered enough to form part of the wedge that attacked the Persians, and to assault the Persian centre.
[1193] Chariots had been equally ineffective at the battle of Cunaxa (Xenophon *Anab.* 1.8.19-20).
[1194] Arrian 3.13.1.
[1195] Devine, 1986, 104.
[1196] Marsden, 1964, 54. From Darius' vantage point it would have appeared as though the Companion Cavalry were engaged as well as the flank guard.

Alexander's right.[1197] Once the general Persian advance had started, Alexander immediately ordered Aretes to attack the 2,000 cavalry that were moving forward to support Bessus.[1198] This had the effect of taking even more of the Persian cavalry out of the battle by tying them up against the flank guard now supported by Aretes. Once these extra Persian cavalry had been committed, and neutralised by Aretes, Darius had around 5,000 cavalry remaining that were not yet engaged. Alexander had, therefore, by the quite brilliant plan of luring the Persians out of their initial position, reduced the odds against the Companions from around 5:1 to a much more palatable 5:2;[1199] whilst also preventing the encirclement of his right flank by using essentially only the flank guards.

Bessus' initial orders had been to halt the Macedonian lateral movement, which he had done. In order to achieve this, however, he had to attack the Macedonians not from the front, but from the side. This had necessitated Bessus breaking rank with the Persian centre, thus allowing a gap to form in the Persian line. The general movements that had occurred to this point in the battle had led to Alexander's army, in all likelihood, being at an oblique angle to the Persians with the left refused and the right advanced. Alexander now seized the opportunity and wheeled his Companions. He made a series of wedge formations,[1200] and charged straight for the gap.[1201] The right wing of Alexander's charge was covered by the Agrianians and archers, again at an oblique angle, who were fresh from dealing with the Persian scythed chariots. Also present were the hypaspists and the *pezhetairoi* from Polyperchon and those to his right.[1202]

Curtius[1203] tells us that the Persian line on the left was thinner than the rest of the Persian front, because of the detachment of Bessus' cavalry. They were perhaps still in the process of reorganising themselves to attempt to maintain some kind of link with Bessus as Alexander struck. Alexander's charge evidently left him deep within Persian ranks, and he was surrounded by the enemy. Alexander's charge had separated him from his supporting infantry units, and he was only saved when the Agrianians caught up to his position.[1204] The situation in Alexander's sector was now extremely confused; the Companion Cavalry were under attack on all sides, having charged the Persian left centre. Those Persians that were behind Alexander were now also being attacked from behind by

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[1197] Arrian 3.14.1.
[1198] 2,000 cavalry consisted of 1,000 Dahae and 1,000 Arachotians; Arrian 3.14.1.
[1199] Marsden, 1964, 55.
[1200] This delta-shaped wedge formation had been borrowed from the Scythians by Philip II; Asclep. *Tact.* 7.2-3; 7.6-7; Arrian *Tact.* 16.1; 16.6-8; 17.3; Aelian *Tact.* 18.1; 18.4; 19.5; 40.2-4; 40.6; *cf.* Devine, 1986, 107.
[1201] Arrian 3.14.2.
[1202] Only those *taxeis* of Polyperchon and Craterus did not charge towards the gap, or more accurately charge at an oblique angle towards the Persian centre and the gap that had developed with the left. Marsden, 1964, 57 appears incorrect in writing "forming all forces not yet engaged into a gigantic wedge". Not all of the *pezhetairoi* were involved in charging towards the gap; the left-hand two *taxeis* appear not to have been involved. This view is supported by Arrian 3.14.2; "with all of the heavy infantry in this sector of the line", that is to say not all of the heavy infantry.
[1203] Curtius 4.15.20.
[1204] Curtius 4.15.21 mistakenly (twice) calls these Agrianians cavalrymen: they can only have been the famous light infantry units as we have no positive evidence at all of them being employed as mounted troops.

the Agrianians and other light infantry units; meanwhile Bessus' cavalry were still fully engaged, except for those that had broken loose to attack the Macedonian baggage train.

We are given next to no details of the fighting in the centre involving the *pezhetairoi*, but we can draw a number of conclusions. We do know that this engagement occurred after Alexander's entry into the battle; and we get the impression from the sources that it did not take the Companion Cavalry too long to break through on the right and engage Darius directly in his flank. The *pezhetairoi*, therefore, were not engaged for long. This would have been Alexander's intention; the Macedonian heavy infantry were nothing like a traditional hoplite phalanx in that they were not heavily encumbered by body armour. The Macedonian *pezhetairoi* relied heavily upon their sarissa as a first strike weapon; they expected to roll over the enemy like a modern tank. Any gap that opened in the line was a serious blow as it meant the enemy could engage a relatively undefended soldier. Alexander's heavy infantry were not a defensive unit; they were a strike weapon in exactly the same way as the Companions. The basis of Alexander's tactics was always for himself and the Companions to break through on the right, and wheel against the enemy centre, at about the same time as the *pezhetairoi* hit them from the front. The combined strike force of both was irresistible. If for any reason the flanking attack of the Companions was delayed then the heavy infantry would begin to struggle after the initial shock.

Arrian's[1205] narrative passes from Alexander being hard pressed on the right to Darius' rout in a matter of only a couple of lines. Bosworth notes that the description of the cavalry battle bears significant similarities to that at the Granicus and is almost formulaic in feel:[1206] the brief mention of the bristling sarissas of the heavy infantry adding irresistible weight is perhaps modelled on Homer.[1207] Arrian has Darius turning tail at almost the first sign of difficulty, claiming that he was "the first to turn and flee."[1208] The vulgate tradition,[1209] however, has an epic, almost Homeric-style, duel of hand-to-hand combat which resulted in Darius' driver being killed. Only at this point does the Great King flee the battlefield. Plutarch gives the most reasonable and reasoned account of Darius' flight,[1210] claiming that he only fled when the situation was desperate and the battle lost, mobility also being hampered by the infantry in the centre who were already in flight.[1211] Plutarch should here be accepted at the expense of the other traditions for several reasons. Darius was a significant military figure in his own right and had proved himself an able commander before the war with Macedon; bearing this in mind it seems unlikely that he would flee at the first sign of battle. The Vulgate tradition is obviously far too Homeric and formulaic to be trusted as fact; only Plutarch has a

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[1205] Arrian 3.14.3.
[1206] Bosworth, 1980, 306. Arrian 1.16.1.
[1207] Homer, *Iliad*, 4.282; *cf.* 6.61-2. There was something of a tradition making such a link; *cf.* Diodorus 16.3.2; Polybius 18.29.6; Curtius 3.2.13; *cf.* Bosworth, 1980, 306.
[1208] Arrian 3.14.3.
[1209] Diodorus 17.60.2-4; Curtius 4.15.24-33; Justin 9.14.3.
[1210] Many have seen Darius' flight as an act of cowardice; Marsden, 1964, 58, however, is more reasonable in seeing it more as an act of political expediency: the battle was lost, why stay longer and risk death?
[1211] Bosworth, 1980, 308.

seemingly reasoned picture of a battle that was hard fought with the defeated monarch fleeing the field once the battle was lost.

In this sector, Bessus was evidently also in flight, as described by Arrian: "The outflanking party on the Macedonian right was also broken up by the powerful assault of Aretes' men".[1212] Given the strength of Bessus' forces, it seems unlikely that the Macedonian flank guards would have routed them so easily; it is more likely that they would only have fled when they saw Darius doing the same. Griffith's[1213] view that Bessus must have been assaulted by a more formidable force than just the flank guards has merit, but is unsupported by the evidence. The second force could only have been the Companion Cavalry wheeling right as they passed the gap in the Persian line, rather than left to attack Darius. It is inconceivable that Alexander, when faced with the choice of attacking the flanking troops or attacking the Great King, would have steered away from Darius. We can further argue that Alexander's whole tactic was to attack the Persian centre from two directions simultaneously, and with the heavy infantry either engaged, or about to engage the Persian centre, he could not afford a delay in mopping up the Persian left, if the battle was to be won. There is also no hint of his proposed attack against Bessus in Arrian. It is reasonable to assume, therefore, that the battle on the Macedonian right was hard fought and only won when Bessus saw Darius in flight and thus decided that there was no reason to continue.

The general Persian rout on the right and in the centre is described graphically by Curtius:[1214]

> The Macedonians wandered around like people in the dark, converging only when they recognised a voice or heard a signal. But they could hear the sound of reins time and time again lashing the chariot horses, the only trace they had of the fleeing king.

Ancient battles would often have been fought in such circumstances, with little visibility or opportunity for communication. The geographical areas in which Alexander fought, largely in extremely dry regions of Persia, would have meant that this was a ubiquitous problem. Many of the areas where Alexander fought campaigns were bone dry for large parts of the year, and any activity on the ground, such as marching or the movement of horses, would have thrown up considerable amounts of dust into the atmosphere. This dust would have had the effect of massively reducing visibility to the point where directing a battle for anyone would have been almost impossible. Alexander would have had to rely upon his commanders knowing their responsibilities under the tactical plan and executing their orders precisely. Communication would have been facilitated by cavalry messengers carrying messages from one sector of the battlefield to

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[1212] Arrian 14.3-4.
[1213] Griffith, 1947, 82*ff*; Fuller, 1958, 177*f*; Marsden, 1964, 58*f*.
[1214] Curtius 4.15.32-33.

another: this is demonstrated by the plea for help from Parmenio towards the end of the battle of Gaugamela, assuming it occurred.[1215]

The Hydaspes River is perhaps Alexander's only major battle where this problem would not have been encountered, given the monsoon rain and the resulting mud at the time of the battle. Given these conditions of limited visibility and communication, it is easy to see how panic could spread quickly in such circumstances. Generals relied heavily upon competent sub-commanders and the discipline of their troops for victory.

Much like the battle in the centre, we know little about the detail of the action on the Macedonian left. We do know that the fighting was harsh, as everywhere else on the battlefield, with little quarter given by either side. Curtius tells us that "the fortunes of the battle were very different for both sides" from those on the right or in the centre.[1216]

Mazaeus, the Persian commander in that sector, conducted a vigorous and violent charge against Parmenio with all of the cavalry at his disposal. Mazaeus was attempting to encircle Alexander's left wing utilising his numerical superiority, leaving Parmenio in a desperate position when he sent a plea for help, to Alexander.[1217]

All of our sources agree that a plea for help was sent,[1218] and that it occurred at this juncture in the battle, but the method of delivery, and Alexander's response, is far from clear. Arrian tells us that Alexander turned back from his pursuit, decided that the Persians were in retreat and proceeded to resume his pursuit of Darius.[1219] This, as has often been noted, is unrealistic: if Alexander was in full pursuit of the Great King it is difficult to conceive how an exhausted Thessalian cavalryman could have caught up with him in order to deliver the message. Griffith argued that Alexander did not pursue Darius immediately but stayed to help out his right wing, whilst Marsden[1220] assumes some kind of prearranged signal. Griffith cannot be right as this theory does not have Alexander pursuing Darius as is claimed in every source, and Marsden is unlikely to be correct because it is unlikely that such a signal would have been successful given all of the dust and general confusion on the battlefield illustrated by the Curtius passage above.[1221]

Plutarch tells us of Alexander's pursuit and his annoyance upon receiving the message from Parmenio; he also notes Alexander's decision to hide the truth of their abandonment of the pursuit from the men, blaming the failing light.[1222] Curtius tells a

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[1215] See above pp. 18, 20.
[1216] Curtius 4.16.1.
[1217] Curtius 4.16.1-2.
[1218] Arrian 3.15.1; Curtius 4.16.2; Diodorus 17.60.7; Plutarch *Alex.* 33.9. This section relies heavily upon Bosworth, 1980, 309*ff.*
[1219] Arrian 3.15.1.
[1220] Griffith, 1947, 87-8. Marsden, 1964, 61-2.
[1221] Curtius 4.15.32-33; see also the introduction above.
[1222] Plutarch *Alex.* 33.9-11. The failing light is also an indication that the battle lasted for quite some time: no doubt the preliminaries took up a considerable part of the day with the battle commencing early afternoon. We also know that the battle started late because of Alexander being late to rise on this occasion. The descriptions of the battle that we have do not allow for a battle lasting all day.

similar story of the message only reaching Alexander when he was some way from the battlefield; again Alexander halts his pursuit in order to return.[1223] He also tells us that Alexander had reached the river Lycus before he turned back, after protests from his men to press the pursuit; Curtius also mentions failing light. Curtius adds that he turned back because he *believed* that Parmenio was in trouble; this sits well with Diodorus'[1224] claim that the message was never delivered presumably because Alexander was some distance away, and with my own interpretation of a message only being delivered once Alexander was returning to the battlefield.

Many have found Diodorus'[1225] account of the message not having been delivered convincing, especially since Arrian's version presents a number of significant problems. Arrian's account clearly implies two pursuits, the second of which lasted until nightfall: there is a hint of two separate pursuit incidents in Curtius; but this is not explicitly stated as Bosworth has argued.[1226] All of our sources at least hint at two pursuits of Darius, the first aborted in order to provide assistance to Parmenio, the second a more concerted effort.

I would argue that the most plausible version of the story is for Alexander to have immediately pursued the fleeing Darius, but to have called off the chase as the hour became late.[1227] As he was returning to the battlefield[1228] the messenger from Parmenio reached him, but by the time he returned the battle was long over, Mazaeus having fled with the rest of the Persian army. The following day, a second concerted pursuit of Darius began, no doubt better organised and with a greater number of troops. Thus Parmenio's message was delivered, but some time after it was sent; in the intervening period Parmenio managed to hold, and ultimately win the battle on the on the left. There were,

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[1223] Curtius 4.16.3.

[1224] Curtius 4.16.16-19: Although how he could have come to *believe* this without any actual evidence in the form of a message is not explained. The only real possibility is that Alexander knew how outnumbered Parmenio was and speculated that he could only hold out for a short period, and thus Alexander perhaps believed that he had a narrow window of opportunity to pursue Darius before Parmenio's situation became critical. Diodorus 17.60.7-8.

[1225] Griffith, 1947, 88; Hamilton, 1980, 89; Bosworth, 1980, 310.

[1226] Bosworth, 1980, 310 notes that Curtius has Alexander turn back "for the first time" at nightfall, the Latin does not in fact say this. Curtius 4.16.18-19 actually states "Alexander instantibus suis ne impune abeuntem hostem intermitteret sequi, hebetia esse tela et manus fatigates tantoque cursu corpora exhausta et praeceps in noctem diei tempus causatus est, re vera de laevo cornu, quod adhuc in acie stare credebat, sollicitus, reverti ad ferendam opem suis statuit." Alexander does turn back, but there is no explicit mention of "for the first time".

[1227] Note that I am assuming an error in Arrian as to the timing of the ending of the first pursuit; Alexander being forced to turn back to help an imperilled Parmenio fits well with the anti-Parmenio strand that occurs in Arrian. Presenting Parmenio as less than competent (in failing to initially secure his own area of the field); the argument becomes even more effective if Alexander was given little chance of catching Darius (i.e. having to turn back before nightfall), no blame could be assigned to him for failing if he had to break off the pursuit so quickly.

[1228] And presumably after a brief but bloody battle with a band of retreating Persian cavalry: Arian 3.15.2; Curtius 4.16.20.

therefore, two pursuits of the Great King, one on the day of battle that failed to capture him, the second the following day.[1229]

Casualties

It is usually the case, as it is at Gaugamela, that the vulgate tradition gives higher casualty figures than does Arrian. Arrian tells us that there were "at most" 100 dead on the Macedonian side; that this figure cannot be true hardly needs to be said. Diodorus gives a figure of 500 dead and very many wounded, with Curtius claiming less than 300 losses.[1230] Arrian even gives us solid grounds for rejecting his estimate; he tells us that sixty Companions fell in the final exchange, on Alexander's return from the pursuit.[1231] He also tells us that over 1,000 Macedonian horses died in battle or of fatigue during the pursuit.[1232] Alexander must have suffered considerably more than only forty losses in the vicious fighting on both the left and right;[1233] Arrian even tells us that Alexander suffered greater losses than the Bactrians. The highest, and we must assume most reasonable figure, is from the Oxyrhynchus historian who states 1,200 Macedonian dead.[1234]

As far as Persian losses are concerned we see the same story as in every battle, massively inflated casualty figures: for Arrian, 300,000; for Diodorus, 90,000; Curtius, 40,000 and the Oxyrhynchus historian, 53,000.[1235] These figures are as unbelievable as those of the Macedonians, and are similar in order of magnitude to Issus. Devine's[1236] guestimate of "a few thousand" seems plausible enough for the battle; but the Persians would have sustained their greatest losses in flight.

Conclusion

Gaugamela shows Alexander's tactical brilliance; he encountered a vastly superior army on a wide open plain that had been specially levelled in order to take advantage of the Great King's numerical superiority. Alexander shows himself not to be the rash gambler so often described, but a cool and level-headed tactician. He assessed

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[1229] *Contra* Rhodes, 2006, 364, who argues that no message was sent at all from Parmenio to Alexander. He argues that in the confusion of a mêlée of 200,000 or more men, along with the dust that that would have generated, there was no way that a message could possibly have reached Alexander. I do not disagree with this point, in general terms; but it assumes that the message would have been sent during the height of the battle, when Alexander was preparing to pursue Darius, or during that pursuit. I have tried to argue that the message would only have reached Alexander a little later than this, when he had already given up the pursuit and was returning towards the battlefield. Given that only a few cavalry accompanied Alexander on the pursuit of Darius, these would not have generated much dust, and Alexander would have been perfectly visible on his return journey, as most of the fighting (and thus the dust it generated) was over by that time.
[1230] Arrian 3.15.6; Diodorus 17.61.3; Curtius 4.16.26: Bosworth, 1980, 312, also quoting this same passage of Curtius, mistakenly claims 330 dead.
[1231] Arrian 3.15.2.
[1232] Arrian 3.15.6.
[1233] Boworth, 1980, 312.
[1234] Arrian 3.13.2-4. *Oxyrhynchus Papyri* 1798.
[1235] Arrian 3.15.6; Diodorus 17.61.3; Curtius 4.16.26; *Oxyrhynchus Papyri* 1798.
[1236] Devine, 1986, 108.

the battlefield and studied the enemy positions the day before the battle, and developed a tactic specific to the situation, albeit with some key hallmarks.

His initial assessment of the Persian position clearly showed that it would be difficult, if not impossible, for him to implement his preferred pincer movement against the enemy centre. The Persian left was simply too big and too strong for him to force his way through it and wheel on the centre to coincide with his infantry attack. His solution was brilliant, to set up his army too far to the left deliberately, to allow the Persians a massive overlap on his right. Once he was set up in this position he began moving to the right, towards a group of foothills, knowing that Darius must act to stop him. In any attempt to stop Alexander's movement, Darius would have to use a significant proportion of his left flank cavalry. Anticipating that this would have to occur, Alexander created two powerful flank guards, as well as a second line in case of encirclement, that would be charged with engaging the enemy and essentially taking them out of the battle. Once the Persian left wing cavalry were removed from the Persian order of battle, Alexander was free to execute his preferred strategy with devastating results; the combined infantry and cavalry attack of the Persian centre ended the battle quickly.

One clarification does need to be made: Alexander's sacrifice of Menidas' mercenary cavalry. Devine views it as "irresponsible" to throw a small unit of cavalry against a vastly superior one;[1237] but this is to miss the point of what Alexander was trying to achieve. The purpose of sending Menidas' cavalry forward was to entice the enemy out of their formation and into an engagement that would see the cavalry on Darius' left effectively removed from the battle, and free the Companions to penetrate through the gap that was formed. Some may condemn Alexander for wilfully sacrificing a unit of his troops in this way, but there was a clear aim. Alexander had done exactly the same at the Granicus and Issus, and this kind of pawn sacrifice[1238] can be considered one of Alexander's hallmarks.

Darius' generalship is often unappreciated: his own strategy was perfectly sound; he attempted to encircle the Macedonians in order to attack them in several directions at once. This was a perfectly reasonable strategy, but needed time to be effective, time that Alexander's charge at the head of the Companion Cavalry did not allow. His use of chariots was a reasonable gamble, and could have been devastating, but in reality did little. The great failing on the part of the Persians was not in generalship, but in allowing a gap to develop between the centre and the left; the Persians did not possess enough quality infantry to maintain a cohesive link. This is a role that would have been played by the hypaspists of Alexander, but the Persians possessed only 3,000 quality infantry, the Greek mercenaries left over from Issus.

[1237] Devine, 1986, 108.
[1238] To use Devine's words regarding the same type of action at the Granicus.

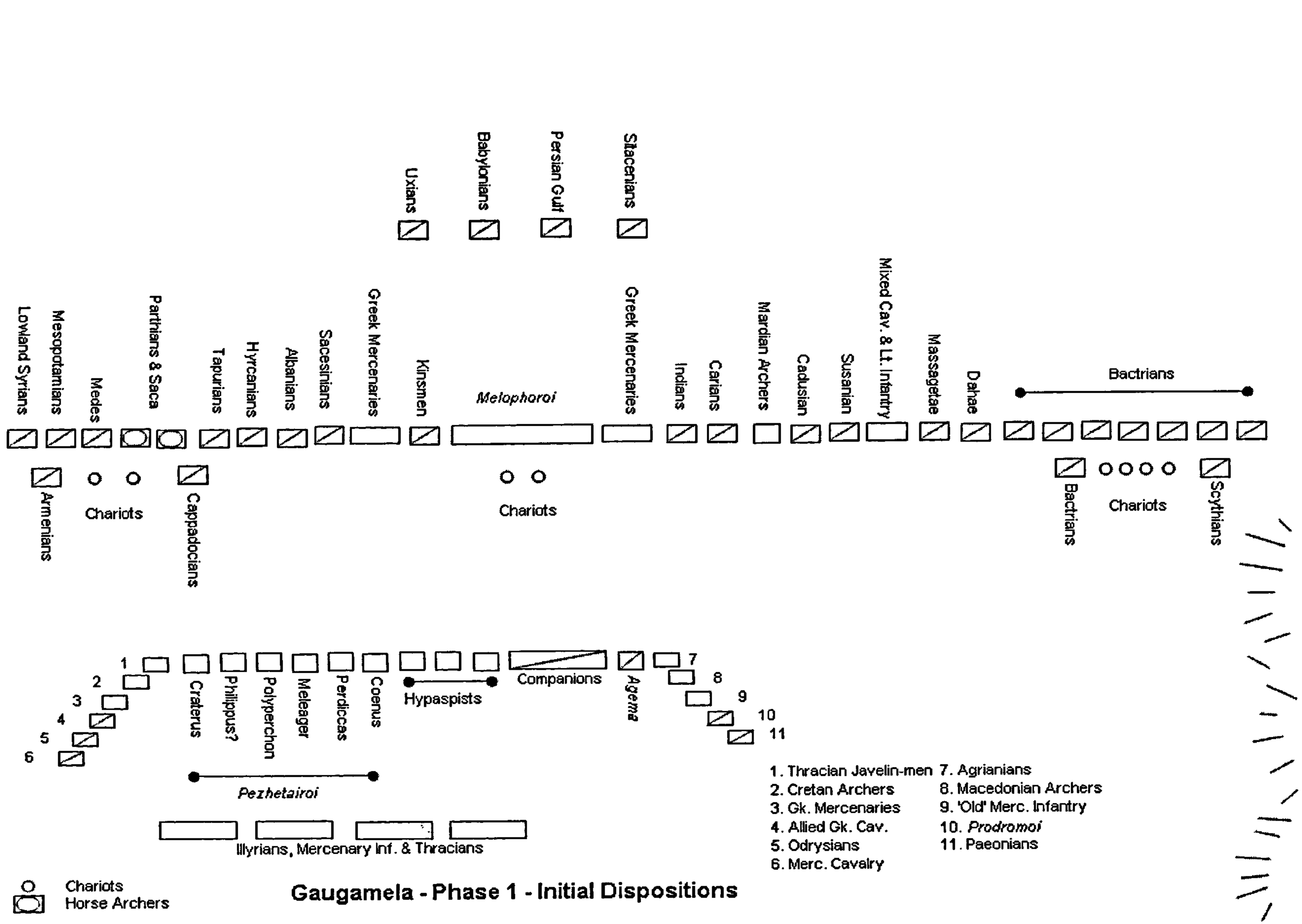


Figure 22: The Battle of Gaugamela Phase 1 – Alexander arrives on the field and positions himself to the extreme left causing a deliberate overlap for the Persians on his right flank.

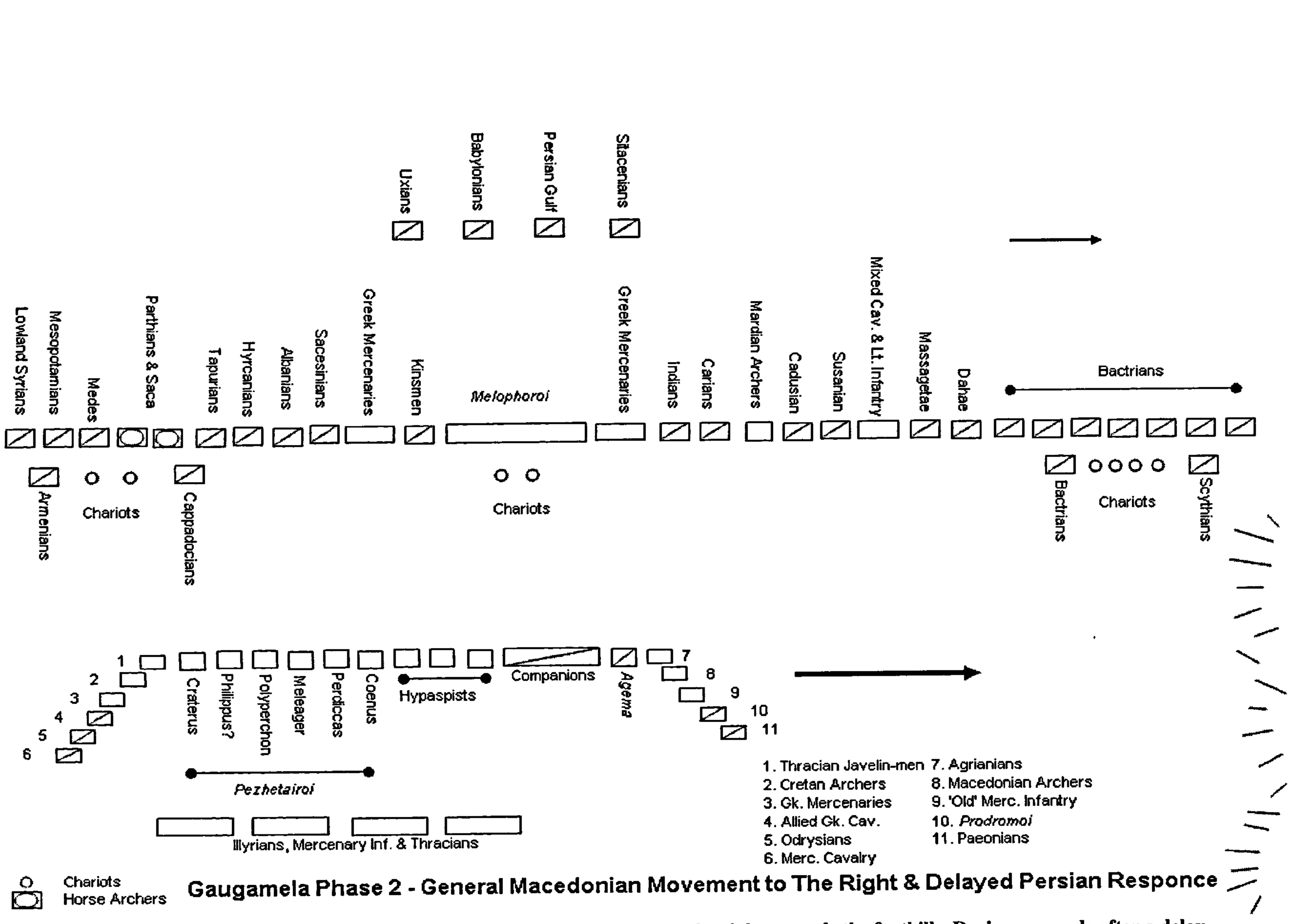


Figure 23: The Battle of Gaugamela Phase 2 – Alexander begins his movement to the right towards the foothills, Darius responds after a delay.

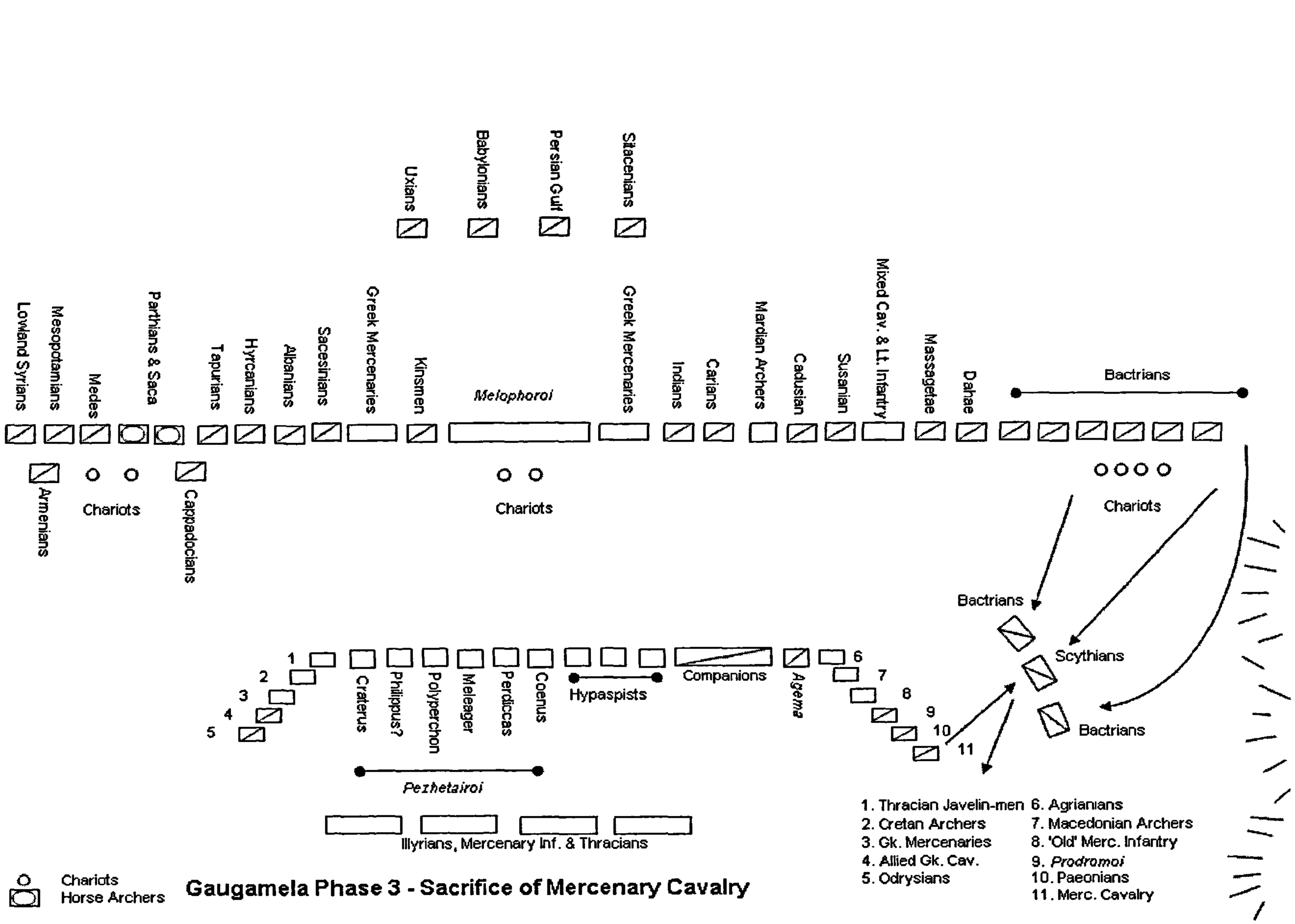


Figure 24: The Battle of Gaugamela Phase 3 – Alexander's 'pawn sacrifice' to draw the Persian cavalry into attacking.

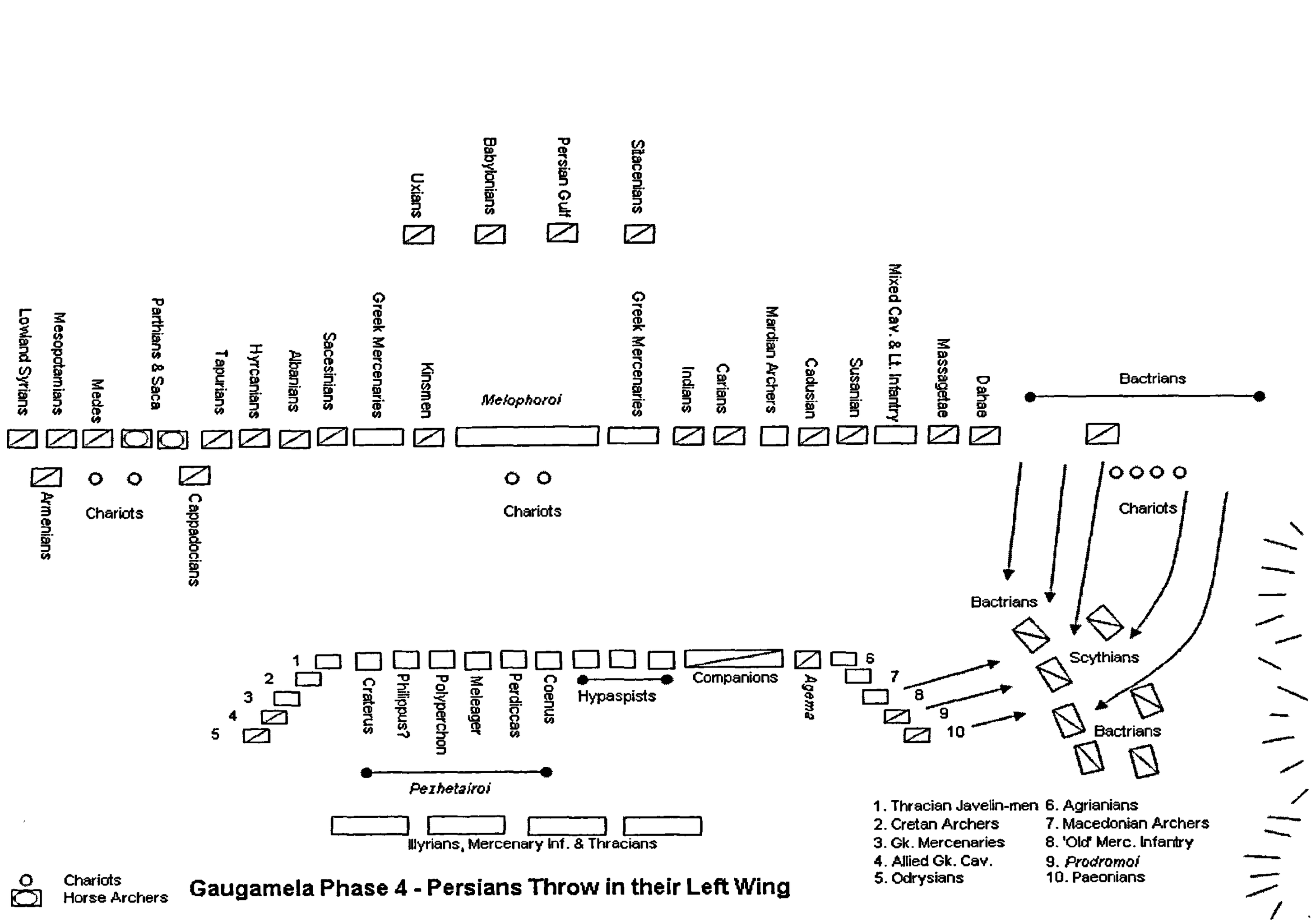


Figure 25: The Battle of Gaugamela Phase 4 – The whole of the Persian left wing is drawn into the battle against Alexander's right flank guard.

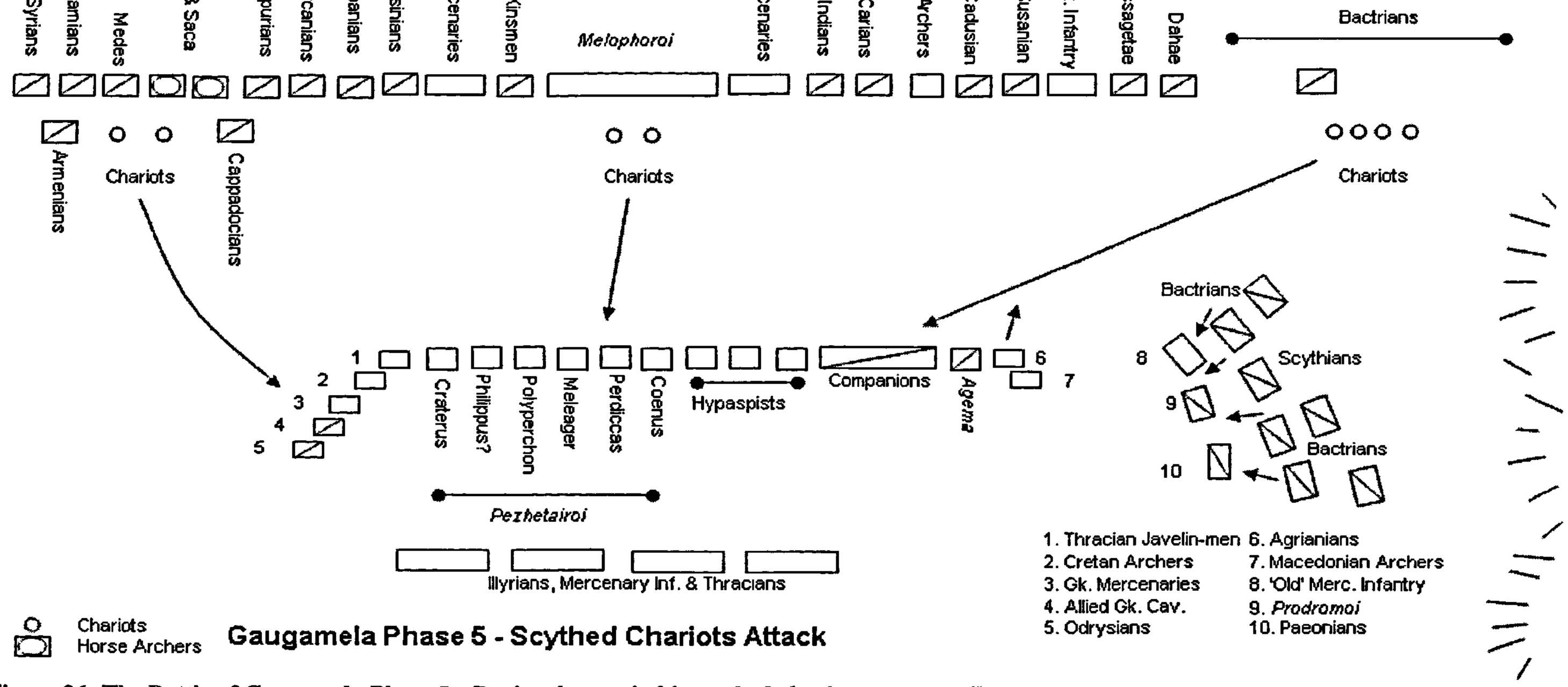


Figure 26: The Battle of Gaugamela Phase 5 – Darius thrown in his scythed chariots, to no avail.

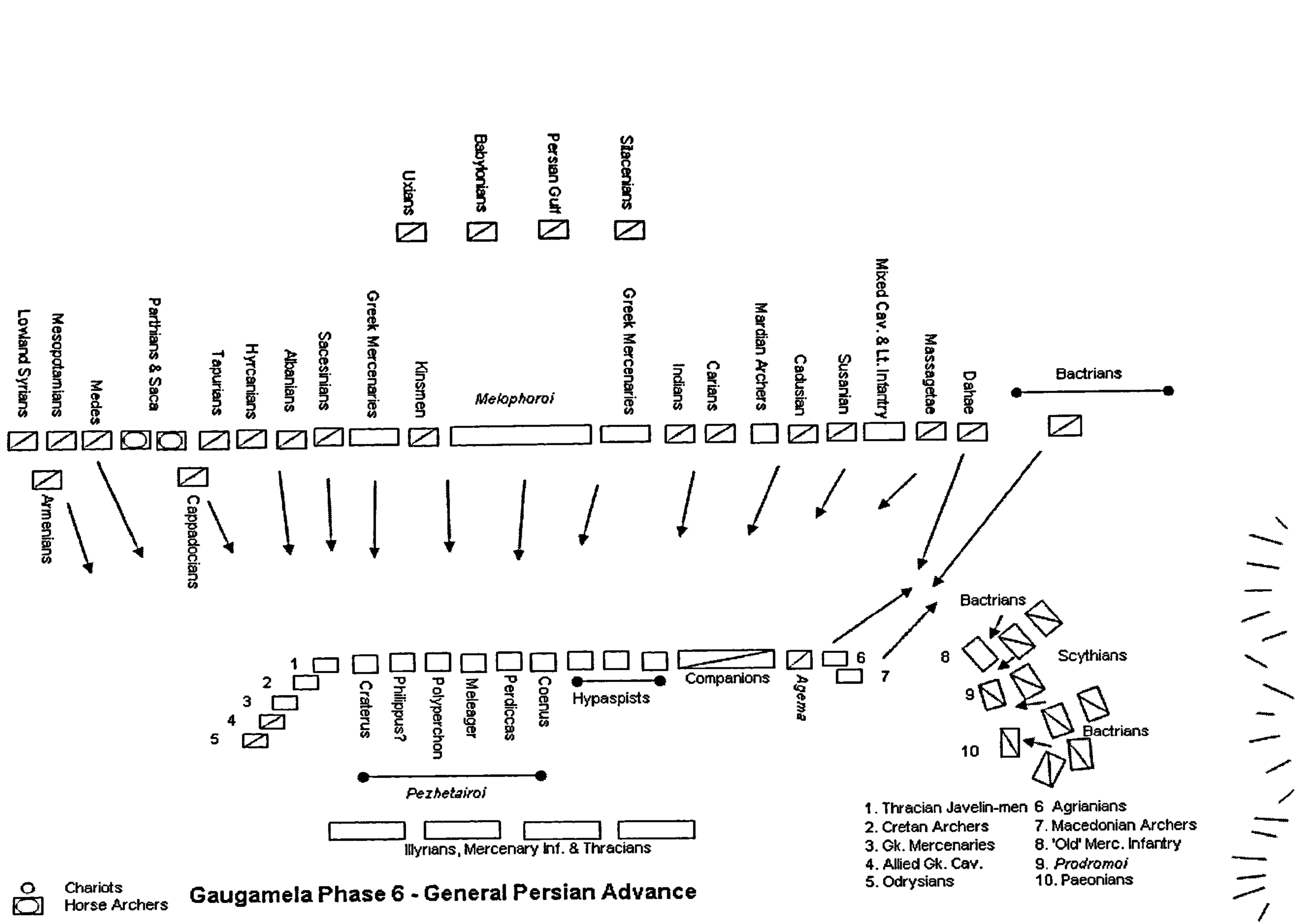


Figure 27: The Battle of Gaugamela Phase 6 – Darius issues orders for a general assault to begin, the Persians advance from all remaining sectors.

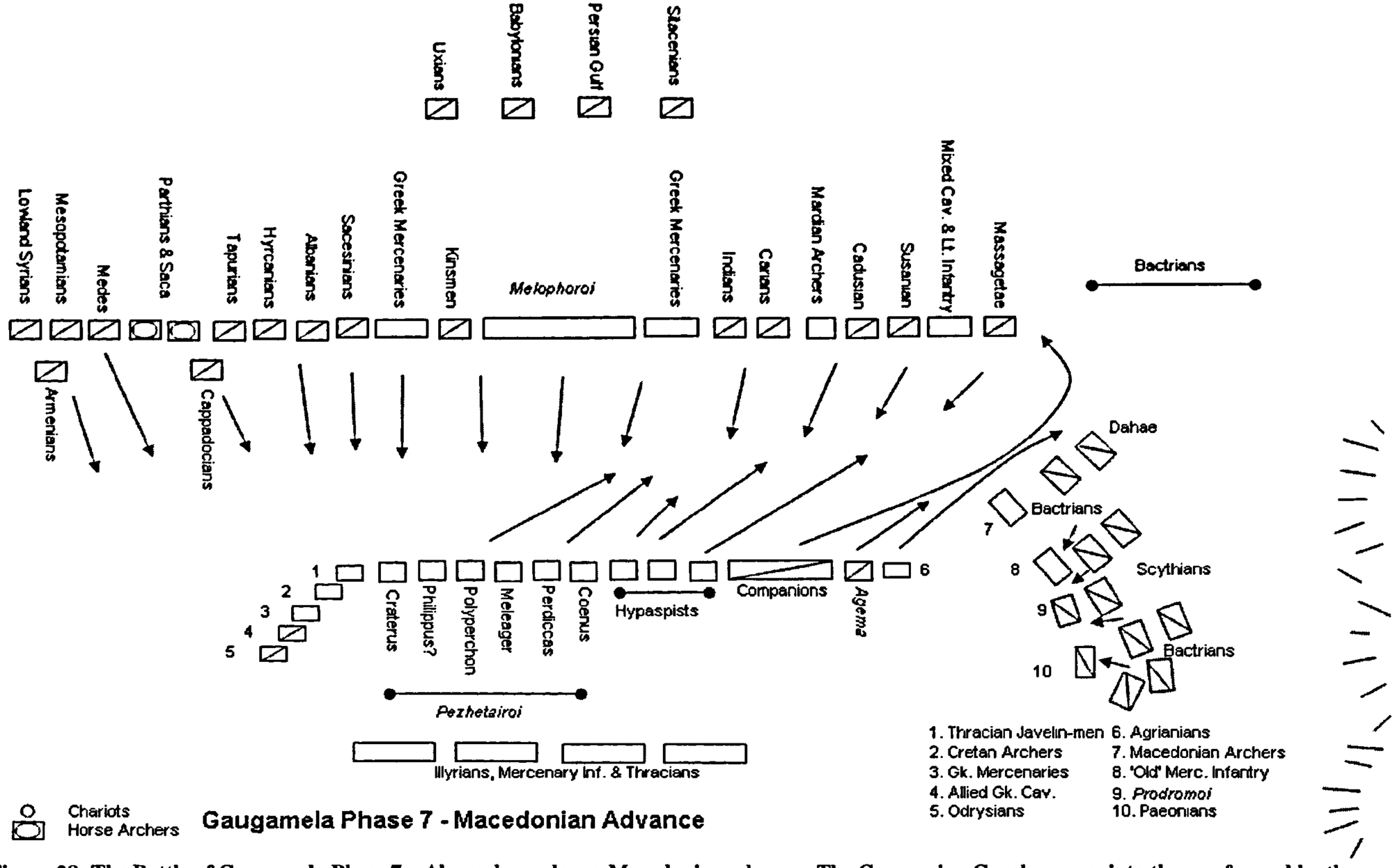


Figure 28: The Battle of Gaugamela Phase 7 – Alexander orders a Macedonian advance. The Companion Cavalry move into the gap formed by the Persian left attacking the flank guard.

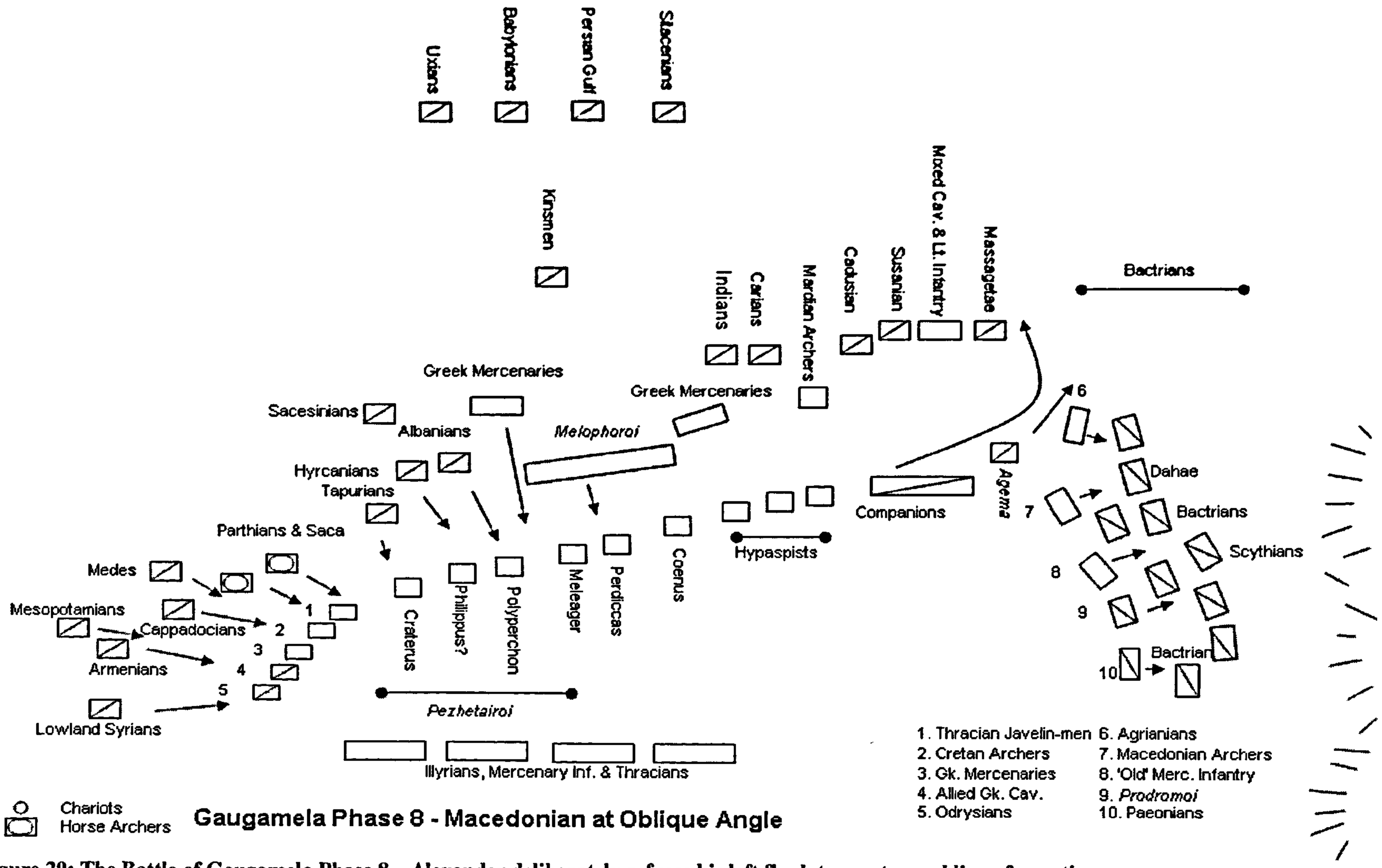


Figure 29: The Battle of Gaugamela Phase 8 – Alexander deliberately refuses his left flank to create an oblique formation.

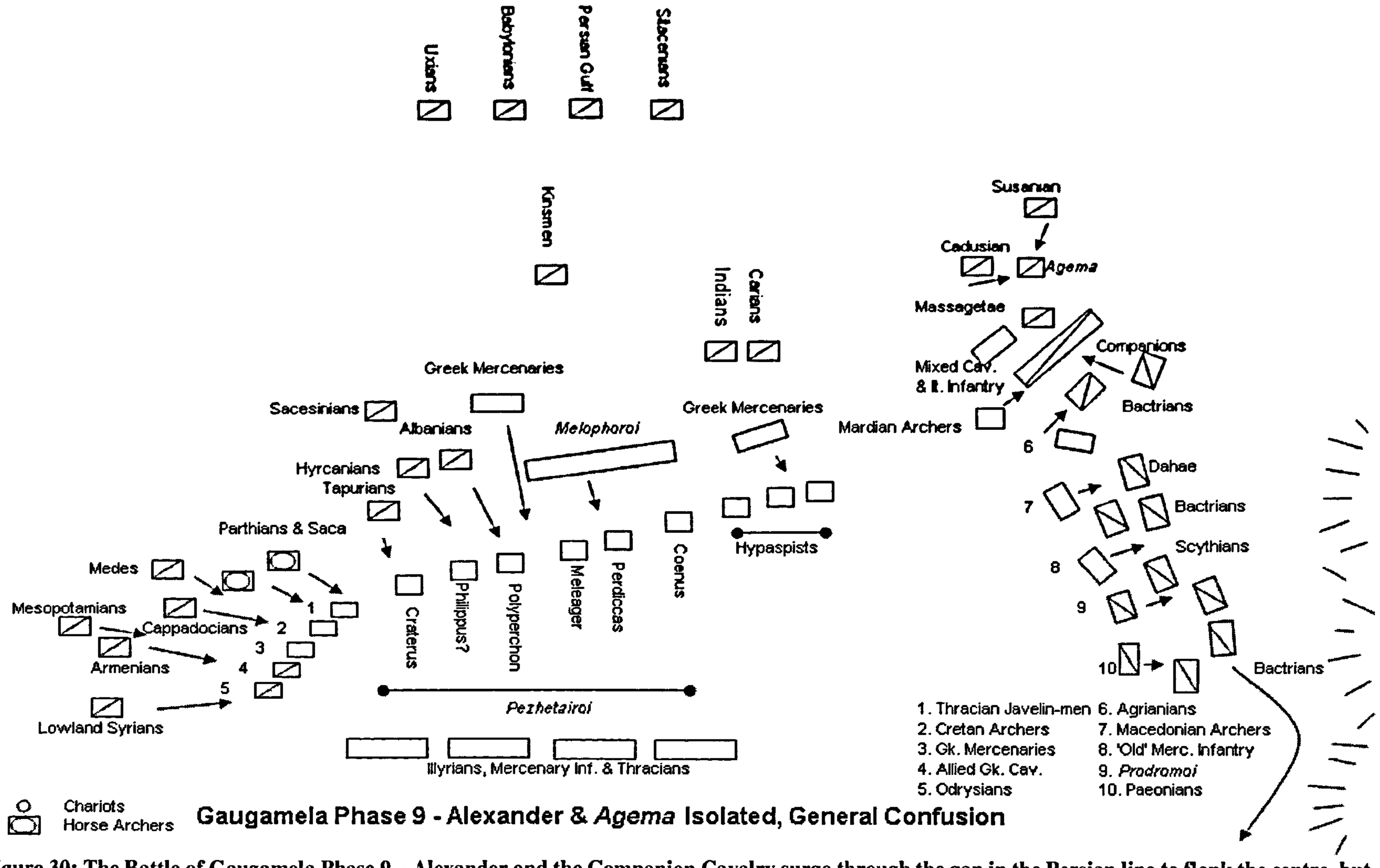


Figure 30: The Battle of Gaugamela Phase 9 – Alexander and the Companion Cavalry surge through the gap in the Persian line to flank the centre, but become surrounded by Persian cavalry.

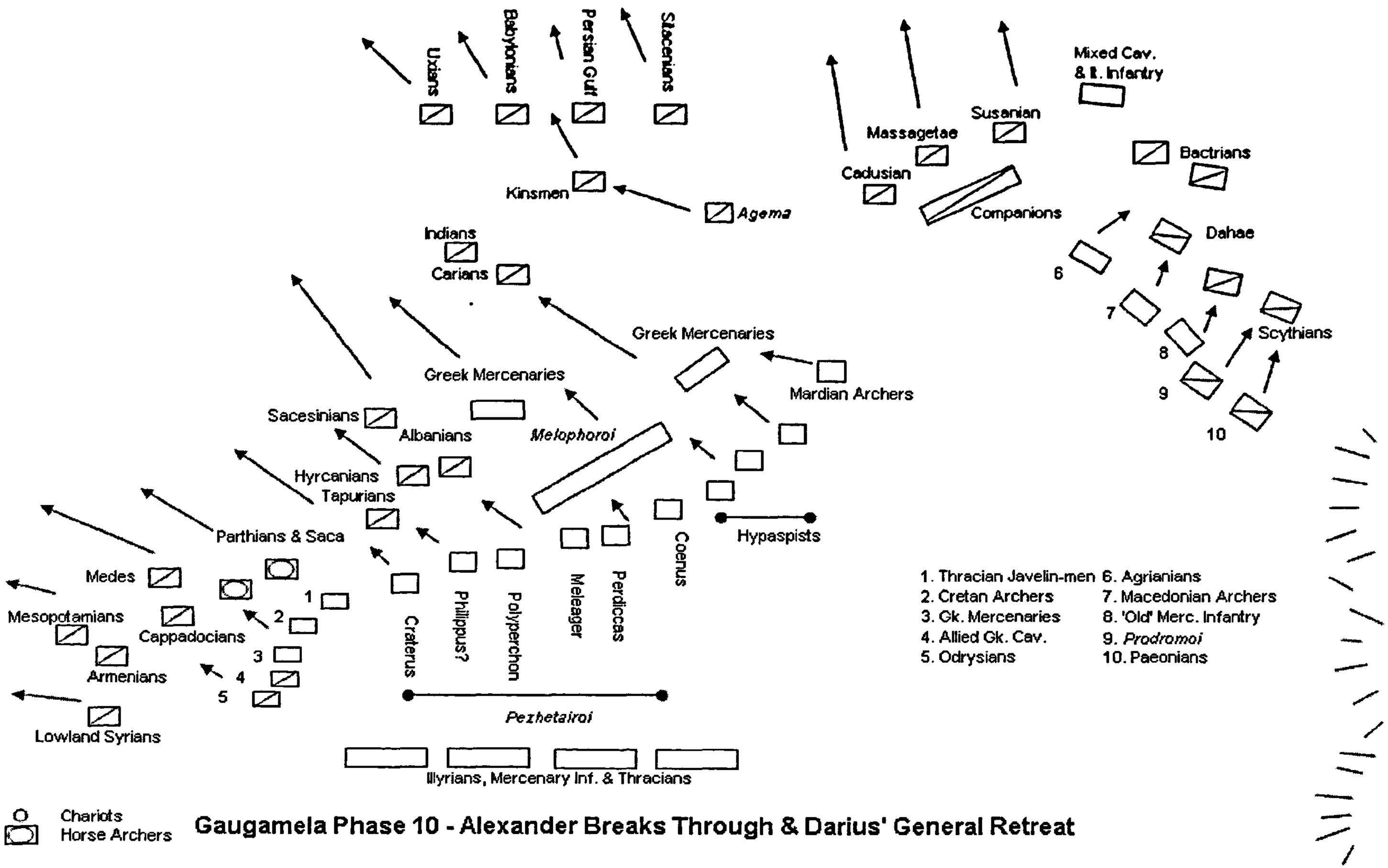


Figure 31: The Battle of Gaugamela Phase 10 – Alexander and the agema break through the Persian cavalry and head for Darius, who retreats from the field. General Persian route begins, although there is still heavy fighting on Alexander's left for a period of time.

Chapter 7

The North-East Frontier: 328-7

The set-piece battles, as well as the great sieges of Alexander's career, have been examined thoroughly; this was intentional as they represent the main narratives that we have for any study of Alexander's military career. This chapter, however, is rather less detailed: this is entirely deliberate. The sources for this chapter of Alexander's career give us a reasonable narrative of what Alexander was doing in Bactria and Sogdiana, but they are frequently lacking in military detail, and there are few major episodes to study. This chapter, therefore, is intended to pick out those salient points that are particularly relevant to this study, details that can illustrate Alexander's tactical and strategic thinking.



Figure 32: Alexander's campaign in the east of the former Persian Empire.

Victory at Gaugamela also brought the defeat of the Persian Empire. The elimination of the Persians as a military threat left the great cities of Susa, Persepolis, Ecbatana and Pasargadae undefended. These Achaemenid royal cities also housed the accumulated wealth of 230 years of Persian rule;[1239] riches beyond the imaginings of

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[1239] Heckel, 2008, 80.

even the most avaricious Greek. "Immediately after the battle"[1240] Alexander moved south towards Babylonia. In order to complete the capture of the Persian treasuries as quickly as possible, he also sent ahead Philoxenus to Susa, in order to accept its surrender:[1241] Babylon also surrendered without a struggle,[1242] as did Susa. It seems that the Macedonian host travelled the 365km from Babylon to Susa in 20 days, and this included a lengthy stop in Sittacene.[1243] We do not know how long the delay was, but a rate of march of between 20 and 25km per day is impressive when we consider it is through essentially unknown enemy terrain. Once Susa had been secured, Alexander would never again find finances a problem.

Alexander did not delay for long in Susa, as the great prize of Persepolis lay only 600km away.[1244] In order to claim that prize, Alexander first had to cross the mountainous terrain occupied by the semi-independent Uxians.[1245] The winter was already well advanced[1246] as the Macedonians set off from Susa, but delay was unthinkable for Alexander. Four days after leaving Susa Alexander crossed the Dez and the Pasitigris, via pontoon bridges,[1247] and entered the territory of the Uxii. The terrain was considerably different from that which he had recently crossed, being mountainous[1248] with many sheer cliffs and only a few narrow passes in the north, tailing off into plains further to the south.

The sources are confused about the operations in this region, but it seems clear that there were two separate actions, the first of which was against the lowland Uxii. The Uxii had blockaded a narrow pass and demanded the same tax payment that they had received from Darius when he traversed these lands.[1249] Medates, the Uxii commander, evidently did not know of Alexander's reputation, that he would never buy his way out of a situation when violence would work just as effectively: Alexander's preferred option also had the effect of making a statement to the Uxii and anyone else who would choose to resist. The day before the encounter, Alexander detached a secondary, fast moving column, led by Craterus, consisting of some 12,000 troops.[1250] This column was sent on a forced night march through another mountain pass. Alexander was evidently employing local guides as he did frequently when in unknown lands, in order to take the enemy in the flank – as we have seen many times, his preferred strategy whenever possible. At the

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[1240] Arrian 3.16.1; Bosworth translates it thus, rather than the usual "immediately from the battle": Bosworth, 1980, 313. We can assume that he first observed the correct religious rituals and buried the dead; Bosworth, 1988, 85.
[1241] Arrian 3.16.4.
[1242] Mazaeus fled the field of Gaugamela and headed straight to Babylon, where he surrendered the city to Alexander upon his arrival. Mazaeus was then installed as governor; this was the same man who had commanded the Persian right wing at Gaugamela only days before; Arrian 3.16.3*f*.
[1243] Bosworth, 1988, 88. Arrian 3.16.7. Diodorus 17.65.2, notes "a number of days"; *cf.* Curtius 5.2.2.
[1244] Hammond, 1980, 166.
[1245] Ashley, 1998, 271.
[1246] Winter of 331.
[1247] Strabo 729; Diodorus 17.67.1; Curtius 5.3.1.
[1248] The Zagros Mountains.
[1249] Strabo 728; Arrian 3.17.1.
[1250] Some 3,000 hypaspists, 1,000 Agrianians, 1,000 Archers, 1,000 Thracins and fully four *taxeis* of heavy infantry; Curtius 5.3.3.

start of the next day, Alexander attacked a number of accessible Uxii villages, killing and looting as he went, before falling upon the defended position in the pass.[1251] Once Craterus had taken up his position on the heights covering the Uxii's suspected line of retreat, Alexander launched a lightning fast frontal assault. The untrained Uxii were so frightened that they abandoned their positions without a shot being fired. The Uxii suffered losses, however, as they fled to what they thought was the safety of the mountains, but was in fact, straight to the waiting Craterus.

[1251] Ashley, 1998, 271.

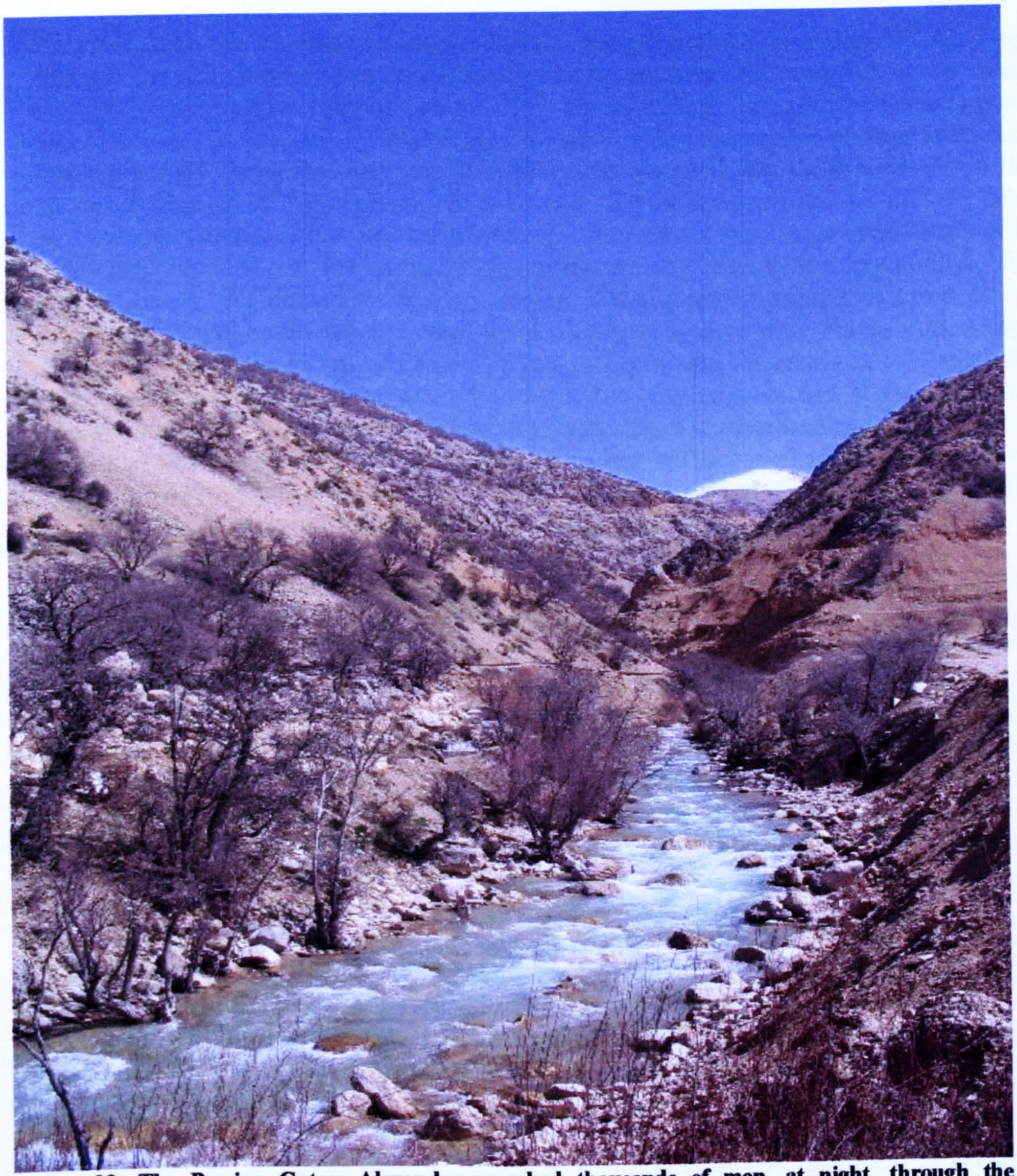


Figure 33: The Persian Gates: Alexander marched thousands of men, at night, through the mountains to turn the Persian fortification.

Persian Gates

After a brief delay sacking Uxii villages,[1252] Alexander divided his forces. The mercenary and allied troops, together with the baggage train, were left under the command of Parmenio to travel towards Persepolis via what Arrian describes as the "carriage road".[1253] This is almost certainly the route identified by Stein as that which

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[1252] Arrian 3.17.6 notes "such were the 'dues' paid by Alexander to the Uxians".
[1253] Arrian 3.18.1.

branches south-east leading to Kazarun and the modern highway to Shiraz.[1254] Although this was the main route to Persepolis, it was not the quickest; Alexander chose the direct but lesser used route over the mountains. As is almost always the case when dealing with a column not commanded by Alexander, we have little information of any difficulties encountered by Parmenio. The path Parmenio was assigned was the main route in the Achaemenid period:[1255] it is simply not believable that the Persian Gates would have been so carefully defended, but the main highway into Persis was unguarded. Bosworth, following the lead of Polyaenus,[1256] suggests a very convincing possibility. The commander of the defending Persian troops at the gates is usually assumed to be Ariobarzanes; Polyaenus, on the other hand, claims it to have been Phrasaortes, a man Alexander later made satrap of Persis.[1257] The theory is that Polyaenus is conflating the two commanders into only one action, when in fact Ariobarzanes was at the Gates and Phrasaortes was blockading the road to the south. The fact that he was later rewarded with a satrapy suggests he surrendered to Parmenio without difficulty. Parmenio here would be showing himself more like a Philip than an Alexander, relying on diplomacy rather than military action; both produced the same result in the end, however.

Either way, Ariobarzanes had prepared his position well: he had built a wall[1258] across the narrow pass and had men stationed on the heights to either side. Alexander advanced upon the gates slowly and with extreme caution,[1259] evidently aware of the dangers and expecting an attack of some kind. Alexander's first response upon seeing the wall shows an uncharacteristic lack of style, thought or preparation: almost immediately he launched a frontal assault. It could be that he attempted the same strategy as had worked against the Uxii previously, to terrify them into retreat without the need for battle. Alexander was not facing Uxii villagers, however, but Persian infantry. Whilst the Persians did not possess first-class infantrymen, they certainly had greater discipline than the Uxii, and held their ground. The frontal assault was an unmitigated disaster: missiles rained down upon the attackers from the heights to either side, as well as from those defending the wall. The Macedonians quickly fell back in disorder, leaving behind their dead in the pass.[1260] One can only imagine the fury that Alexander must have felt at this humiliation. Even within this fury Alexander was evidently rational enough, or was sufficiently open to good counsel, to realise that a further frontal assault would not fare any better. After interrogating some prisoners, or perhaps questioning his local guides,[1261] a secondary path was revealed. He was also told that this narrow pass was difficult to traverse, so he instructed Craterus to remain behind with his own *taxis* and that of Meleager, along with some archers and cavalry.[1262] Craterus was instructed to launch a

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[1254] Stein, 1940, 18*ff*. Bosworth, 1980, 324.
[1255] Hansman, 1972, 117-119.
[1256] Bosworth, 1980, 324; Polyaenus 4.3.27.
[1257] Arrian 3.18.11.
[1258] Arrian 3.18.2-3.
[1259] Diodorus 17.68.1; Curtius 5.3.17; Arrian 3.18.2, all tell us that it took him five days to travel the 30 km to the fortified position.
[1260] Diodorus 17.68.2-3; Curtius 5.3.17-23; Arrian 3.18.3.
[1261] Arrian 3.18.4; Diodorus 17.68.5; Curtius 5.4.4-14; Plutarch *Alex.* 37.1; Polyaenus 4.3.27, all claim a bilingual Lycian herdsman revealed the secondary pass.
[1262] Arrian 3.18.4.

further frontal assault only when they were sure that Alexander was behind the Persians. Arrian claims the remainder of the troops travelled with Alexander through the pass.

Alexander waited for the cover of darkness, and then set off for the alternative pass.[1263] After a night march of around 20km, Alexander took the decision to divide his forces further.[1264] Alexander took with him one *taxis* of heavy infantry, the Agrianians and archers along with the Royal *ile* of Companions and one double squadron of cavalry.[1265] With these troops Alexander turned and moved towards the pass. What the remaining troops were instructed to do is unclear, as there are two distinct traditions. Curtius tells us that this second column was ordered to advance slowly towards the enemy, and presumably act as a third prong to the impending action.[1266] Arrian's view that the remaining troops, led by Amyntas, Philotas and Coenus[1267] were ordered to bridge the Araxes River that would need to be crossed in order to gain access to central Persia,[1268] is in many ways far more plausible. The idea of a three-pronged attack is attractive, but if the pass and the terrain were as difficult as we are led to believe, then I think it is more plausible that Alexander realised that he had taken too many troops with him through the pass. His intention, therefore, was to reduce the numbers that would be involved in the final assault to only his elite troops. Whatever the purpose of Amyntas' detachment, it is certain that Alexander led the assault in person.[1269]

The action probably occurred over two consecutive nights,[1270] with Alexander showing considerable caution in avoiding the Persian scouting parties that were no doubt at work in the area. Once he was ready, he came down upon the defenders from the north-east destroying two forward fortifications and falling upon the wall.[1271] The attack was signalled by the use of a *salpinx*[1272] that told Craterus to attack down the gorge. The Persians were caught totally by surprise by the two-pronged attack; there were few places to run or hide for the Persians, although Ariobarzanes and a group of horsemen and infantry did manage an escape. Ariobarzanes fled to Persepolis where he was refused entry; he died in an engagement with the advancing Macedonians shortly afterwards.[1273]

Heckel[1274] notes the quite startling similarities between the Persian Gates and the battle of Thermopylae some 150 years previously. No doubt much was made of this incident by the propagandists, especially as Persepolis would shortly be in flames, as Athens had been soon after Thermopylae.

[1263] Arrian 3.18.6.
[1264] Curtius 5.4.20; Arrian 3.18.6.
[1265] Arrian 3.18.6.
[1266] Curtius 5.4.20; Bosworth, 1988, 91.
[1267] Curtius 5.4.20; adds the name Polyperchon.
[1268] Bosworth, 1980, 327; Strabo 729; Curtius 5.5.2-4; Diodorus 17.69.2. Arrian 3.18.6.
[1269] Arrian 3.18.6.
[1270] Curtius 5.4.17, 22-3.
[1271] Bosworth, 1988, 91.
[1272] A trumpet-like instrument.
[1273] Curtius 5.4.33.
[1274] Heckel, 2008, 82.

Alexander once again shows a genius for rapid and silent movements of large bodies of men in order to maintain the element of surprise. We also see Alexander, once again, using the two-pronged approach of attacking the enemy in multiple directions simultaneously. This has to be balanced, however, against Alexander's serious lack of judgement at the initial assault; to sacrifice men so needlessly when his usual flanking strategy was so readily available (once the pass had been identified) is puzzling. We can only assume that he felt the defenders would retreat immediately upon seeing his advance, as the Uxians had done.

After fleeing Gaugamela, Darius made for Ecbatana with the intention of raising a new army. He had managed to keep together some of the remnants of his defeated army, perhaps 3,000 cavalry and 30,000 infantry.[1275] Given that Alexander had already defeated these same troops at least once,[1276] there was little likelihood that this force could have gained victory, but Darius was making every effort to regain control of his former Empire.

Alexander set off from Persepolis in May 330, probably before news reached him of the victory in Greece of Antipater over the Spartan-led revolt of Agis,[1277] determined to force a conclusion with Darius. Darius had evidently failed to build the kind of army he expected, so upon hearing news of Alexander's march from Persepolis, he set out east towards the Caspian gates and the eastern satrapies with the hope of further rebuilding his army from the still loyal provinces.[1278]

After an eleven-day forced march, Alexander met a Persian noble, Bisthanes, who told him that Darius had already left Ecbatana some five days previously.[1279] Alexander immediately divided his forces in the usual manner, keeping the elite, fast-moving troops with him, and set off in pursuit; this time he was not to be denied. Alexander had only a slight delay in Ecbatana, where he disbanded the Thessalian cavalry, as well as the other allied contingents. He also detached Parmenio and the remaining troops, along with the baggage train, from his flying column and left orders that they were to occupy Ecbatana.[1280] After ten more days Alexander passed the Caspian gates without incident and continued east. Alexander's chase was relentless, but he ultimately would be robbed of his prize by a Bessus-led internal *coup*; there was little Alexander could do, but Darius was dead.[1281] Before setting off for the mountains of what would become the north-east

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[1275] Curtius 5.8.3; cf. Diodorus 17.73.2 quote 3,300 cavalry, 4,000 Greek mercenaries and 26,000 Persians. Arrian 3.19.5; notes only 3,000 cavalry and 6,000 infantry: these numbers of Arrian are oddly low given that Darius had had six months in Media to recruit new troops; conscript infantry would be the easiest to come by.

[1276] Some, especially the remaining Greek mercenaries, would have fought at Issus too.

[1277] Bosworth, 1988, 94. The chronology of the Agis revolt is problematic: for the most recent examination see Badian in Worthington, 1994, ch.13.

[1278] Curtius 5.8.1*ff*; Arrian 3.19.1-2.

[1279] Bosworth, 1988, 94. Arrian 3.19.5 actually notes a march of "within twelve days".

[1280] Arrian 3.19.7. Bosworth, 1988, 94-5, believes that Alexander did not in fact visit Ecbatana at all.

[1281] Bosworth 1988, 95*ff*; for more detail that is beyond the scope of this thesis.

frontier, Alexander spent some time reorganising his army and dealing with internal difficulties of his own.[1282]



Figure 34: The Dasht-e-Kavir Desert, where Darius died.

Bactria

After securing Hyrcania,[1283] in a campaign we know little or nothing about, Alexander marched on Bactria. Ancient Bactria[1284] was very far removed, topographically, from the Greek world.[1285] The soaring mountains of the Hindu Kush and the Pamirs ranges[1286] surrounded Bactria on three sides; the west to north-west is bordered by the deserts of Turkestan through which runs the Oxus River[1287] on its way to the Aral Sea.[1288] This was terrain entirely alien to Alexander: no longer would he be facing large armies in massive set piece battles. From this time forward, at least until he reached India, he would be facing an entirely new form of warfare: that of guerrilla action. Alexander would now face small-scale ambushes and rapid strikes against his forces; he faced enemies who knew they could not defeat him in battle, and so he devised an alternative means of fighting using the very land of Bactria to its fullest advantage.

[1282] The Philotas affair.
[1283] A small region between Ecbatana and Bactria.
[1284] Roughly modern Afghanistan.
[1285] When the term "Bactria" was used by ancient (and indeed modern) authors, it is almost always taken to be the area covered by both Bactria and Sogdiana: Holt, 1989, 11.
[1286] With peaks as high as 25,000 feet.
[1287] The modern Amu Darya.
[1288] Holt, 1989, 12. The dispute surrounding the course of the Oxus River in antiquity had been thought to have been resolved (Tarn, 1938, 488-493), but has been reopened by Hamilton, 1971, 106-111; and Bosworth, 1980, 373-374.

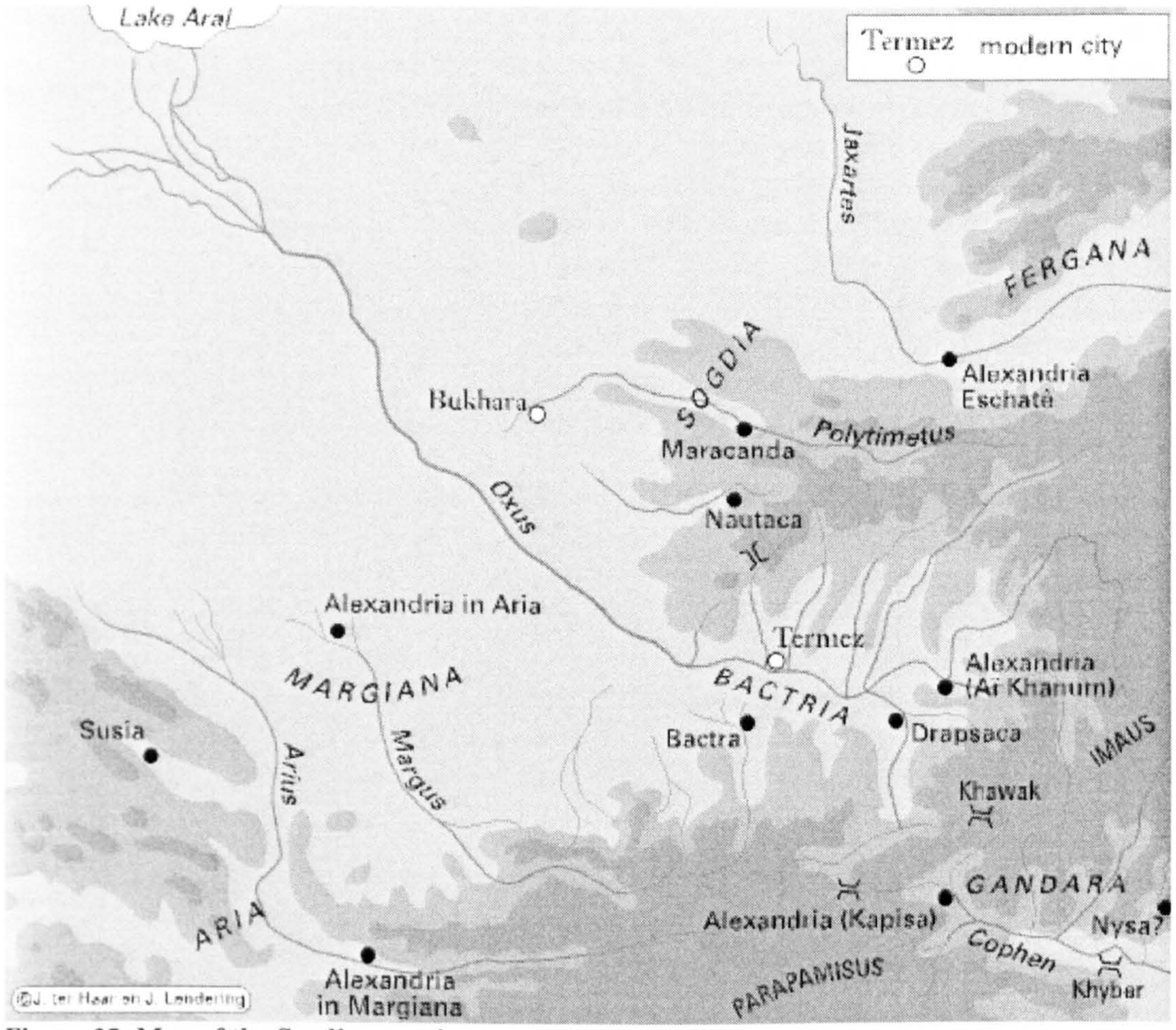


Figure 35: Map of the Sogdiana region.

As Alexander set off from Zadracarta, on his march towards Bactria, news arrived of a revolt in Areia.[1289] Satibarzanes, the native whom Alexander had appointed satrap of the region, had risen up and murdered the Macedonian military commander, Anaxippus, and the forty mounted javelin men that had been left in the capital, Artacoana.[1290] Satibarzanes evidently planned to link up with Bessus; some Bactrians were already with him, in order to form a more coherent resistance to the Macedonian conquerors. As can be expected, Alexander's response was rapid and decisive.

As was usually the case, Alexander divided the army in smaller,[1291] more mobile units capable of a more rapid response. He took with him the usual suspects[1292] and

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[1289] Arrian 3.25.1*ff*.
[1290] Diodorus 17.78.1; Arrian 3.25.5. The location of Artacoana (which Diodorus 17.78.1; calls Chortacana) is, as yet, unresolved.
[1291] Curtius 6.6.21.
[1292] Arrian 3.25.6; notes the Companion Cavalry, the mounted javelin men, the archers, Agrianians, and two *taxeis* of *pezhetairoi*; namely Amyntas and Coenus.

reached Artacoana, a march of some 120km, in only two days.[1293] The remaining troops were left under the command of Craterus. At this point the sources diverge: Arrian has Satibarzanes taken so completely by surprise that he fled almost immediately, with many of his troops deserting; he also has Alexander completing the recapture of Artacoana himself, and Craterus rejoining the army later on the road to Zarangia.[1294] The vulgate tradition has Alexander first laying siege to Artacoana, and then pursuing Satibarzanes once he fled; with Craterus being left to complete the capture of the city,[1295] an honour that he actually leaves for Alexander upon his return from the chase, and after a siege of some thirty days.[1296] Neither source provides us with enough data to determine which is the more accurate, but the core is much the same; a revolt that was quickly suppressed, a division of forces, a lightning march and the flight of Satibarzanes.

Satibarzanes evidently attempted a second revolt[1297] in Areia: he entered the province with 2,000 cavalry given to him by Bessus and persuaded the natives to rise up once more.[1298] Alexander evidently did not feel this revolt significant; Craterus was dispatched with 600 cavalry and 6,000 Greek infantry to suppress it.[1299] Satibarzanes became cornered and fought fiercely, but he was killed in action and his men fled. His death ended the revolt in Areia; there was no longer a figurehead around which to gather. There were also evidently few men willing to revolt, as none actually seemed to join Satibarzanes; The revolt was, therefore, perhaps not as serious some later revolts would prove to be.

Bactria and Sogdiana

Alexander's campaign in Bactria is far more complex than is generally supposed; it is frequently stated that this stage of the campaign represents a watershed in the style of combat that Alexander would face, and the army was reorganised to adapt to that change. There were no major cities to capture, and the population lived in small isolated villages, or were nomadic.[1300] The military capacity of the region was enormous; Curtius notes a potential of 30,000 cavalry, although no significant infantry were available.[1301]

In the same way as he had with Darius, Alexander needed to settle matters with Bessus. In late March 329 he crossed the Parapamisadae region, centred on the Kabul Valley forming the crossroads between Bactria, India and Arachosia.[1302] Supplies were short and snow still blocked the mountain passes; Alexander was forced to wait until

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[1293] Arrian 3.25.6; Bosworth, 1980, 357; rightly suggests a march rate of 60 km per day is suspiciously high given that two *taxeis* of heavy infantry were present. *Cf.* Engels, 1978, 154*ff.* for details on why large armies always have a slower rate of march then smaller ones.
[1294] Arrian 3.25.6; He also calls the country Drangiana.
[1295] Curtius 6.6.25.
[1296] Curtius 6.6.25-32; Diodorus 17.78.3.
[1297] After the Philotas affair.
[1298] Arrian 3.28.2; Diodorus 17.78.2-4.
[1299] Curtius 7.3.2; it is unusual for Alexander to include so few Macedonians, perhaps none (the ethnicity of the 600 cavalry is unknown), in this kind of mission.
[1300] Ashley, 1998, 289.
[1301] Curtius 7.4.30. The parallels to pre-Philip Macedonia are obvious.
[1302] Bosworth, 1988, 105.

spring. He provisioned the army from the villages of Parapamisadae[1303] and founded a new Alexandria near Begram[1304] to guard the mountain passes of Shibar and Khawak, and protect against incursions from Bactria once the army had moved on.

Bessus' defence of Bactria initially was the scorched-earth policy that the Persian nobility was so opposed to before the Granicus. There was little else Bessus could do, as he had failed to unite the Bactrian nobility under his banner, and he commanded only seven or eight thousand cavalry.[1305] With the scorched-earth policy under way, Bessus, and those few who were loyal, moved north of the Oxus River.[1306] Alexander occupied the central Bactrian region without bloodshed, and after appointing Artabazus as satrap he pursued Bessus across the 75km of parched desert that led to the Oxus.[1307]

In a rare propaganda coup that his father would have been proud of, Alexander announced that his quarrel was with Bessus alone, and that any deserters would be rewarded.[1308] Dataphernes, Catanes and Spitamenes decided to make peace with the conqueror and arrested Bessus, presenting him to Alexander soon after, thus ending the short-lived revolt. Alexander here showed himself a keen strategist: he realised that the region would be all but impossible to conquer by force of arms, as so many armies have come to realise over the centuries. Here, Alexander takes his lead from his father and overcomes an extremely dangerous situation without the need for bloodshed.

Initially Bactria did not resist Alexander's passing. There appears to have been no stomach for resistance, and little support for Bessus' grab for power; this can be demonstrated in the lack of troops that he had available to him as noted above. As Alexander marched through Bactria, one by one prominent nobles and warlords made their peace with him. These nobles, including Dataphernes, Catanes and Spitamenes, were rewarded and allowed to return to their kingdoms or satrapies.[1309] The Bactrian cavalry that had briefly served Bessus had returned to their native towns and villages without further resistance.[1310] Holt notes that "the only scars upon the land had been made by the torches of Bessus, not Alexander".[1311]

The only sign of the passing of a great army was the very few old and infirm that had been left behind as garrisons, particularly at Bactra.[1312] Only one native had died during the campaign, Bessus himself;[1313] for the Bactrians, once Alexander had passed through, their lives would return to normal; there was simply a new king on the throne.

[1303] Curtius 7.3.18; *cf.* Hamilton, 1969, 98-99; Bosworth, 1988, 105; Engels, 1978, 93-5.
[1304] Likely the Alexandia at Ai Khanum, see fig. 34 above.
[1305] Arrian 3.28.8 claims 7,000; Curtius 7.4.20 claims 8,000.
[1306] The modern Amu Darya.
[1307] The desert crossing was extremely difficult and many died, especially with the uncontrolled drinking by the parched soldiers from the Oxus River once it was reached.
[1308] Diodorus 17.83.7-8; Curtius 7.4.18-19.
[1309] These were the nobles who had arrested Bessus; Curtius 7.5.21.
[1310] Arrian 3.28.10; Curtius 7.4.20.
[1311] Holt, 1989, 52.
[1312] Bactra was the capital of the satrapy of Bactria.
[1313] For the possibility of a massacre of the Branchidae, see Bigwood, 1978, 36-9; Pearson, 1960, 240; Parke, 1985, 62*ff*; Bosworth, 1988, 108;

This goodwill would very soon evaporate and Alexander would be forced to fight a long and bloody campaign to suppress the region, exactly what his diplomatic skills in capturing Bessus had been designed to avoid, and we must ask why.

Alexander had passed peacefully through Bactria and Sogdiana to reach the Jaxartes River without incident; indeed we know that Alexander received a supply of horses from the natives as he passed through Maracanda.[1314] Seemingly out of nowhere, at the Jaxartes, a band of Macedonian foragers was massacred by a native force.[1315] Alexander's entirely predictable massive counter-offensive only succeeded in intensifying the resistance.[1316] Macedonian garrisons all along the Jaxartes were slaughtered and resistance spread throughout Sogdiana.[1317] Almost in an instant, Sogdiana was in flames and Alexander was embroiled in two years of fierce and relentless fighting, perhaps the hardest and most prolonged of his career.

As with Cyrus before him,[1318] we must ask why Alexander only met with such massive resistance once he reached the frontier zone of Sogdiana and Scythia. Arrian is usually thought to supply the answer: either the locals were becoming increasingly fearful of Alexander, or it was because the nobles feared the general summons of all the local leaders to a meeting in Bactra.[1319] Arrian cannot be correct, however; there is no reason why the natives should suddenly become fearful of Alexander, and Arrian[1320] makes it clear that the summons only occurred after the revolt had begun: it seems Alexander was intending to ask the Bactrian nobles like Spitamenes to help crush the revolt, a revolt they ultimately joined. If we reject Arrian's assertions regarding the origins of the war, we have Alexander only performing one major undertaking whilst in Sogdiana, the foundation of Alexandria-Eschate:[1321] but why would this simple act, one repeated by Alexander throughout the Empire, provoke such a reaction?

Holt notes that it was almost immediately after the site for the new Alexandria had been chosen, and planning begun, that the immediate area rose up in revolt.[1322] It was only against fierce opposition that Alexander's engineers were able to build the walls up to a defensible height.[1323] Alexander responded with a lightning campaign, re-capturing all seven of the towns that had revolted in only two days.[1324] The inhabitants, being held responsible for the revolt, were either killed or enslaved.

[1314] Arrian 3.30.6; Curtius 7.6.10.
[1315] Curtius 7.6.1-9 surely overestimates the native force at 20,000; Arrian 3.30.10 likewise at 30,000.
[1316] Curtius 7.6.3-9; Arrian 3.30.11.
[1317] Curtius 7.6.14-15; Arrian 4.2.1: only small numbers of Bactrians were drawn into the war. Bosworth, 1981, 17, notes that Bactria also rose up against Alexander; *contra*, Holt, 1989, 52*ff*.
[1318] Holt, 1989, 54.
[1319] Arrian 4.1.4-5. Hammond, 1980b, 190; Holt, 1989, 54.
[1320] Arrian 4.1.5; states that the revolt was "already in progress" at the time of the summons.
[1321] Arrian 4.1.3-4, 4.4.1; Curtius 7.6.13, 7.6.25-27; Holt, 1986, 315-323.
[1322] Holt, 1989, 54.
[1323] Arrian 4.4.1.
[1324] Arrian 4.3.2-4; Curtius 7.6.16-23.

The Sogdian revolt, I believe,[1325] was a direct result of the foundation of Alexandria-Eschate; the reaction of the natives, local nobility such as Spitamenes, and the Scythians who had recently joined the fight, can only be explained by what the city represented to the region. This new city was the first to have been built by Alexander in Bactria or Sogdiana.[1326] Previously to this only a few old and disabled Greeks or Macedonians were settled in the region, and it appeared to the locals that the new king would soon leave the area to return to how things had been under the Great Kings. The creation of a large fortress-like foundation[1327] with a seemingly entirely military objective was a clear statement to the local population that their existing way of life was under threat.[1328]

Alexander's clear intent was to militarise the Jaxartes region, and prevent the Scythians from crossing that river.[1329] Scythians had a long history of interaction, both military cooperation and trade, with the peoples of the Persian Empire, and it was Alexander's stated intention to break these bonds. Ultimately Alexander wished to prevent a military alliance between Sogdians, Bactrians and Scythians against his rule at some point in the future; instead he instantly created just that. Alexander responded to the revolt with systematic destruction, but this only succeeded in exacerbating the problem as the natives could see more plainly that their way of life was being destroyed.[1330]

328 BC

At the beginning of 328 Alexander marched east from Bactra against the remaining rebels eastward along the Oxus River, crossing into Sogdiana after marching through Bactria.[1331] As was becoming usual practice, Alexander also divided the army, this time into five mobile columns in order to cover the greatest possible amount of terrain simultaneously: these were commanded by Ptolemy, Hephaestion, Perdiccas, and by Coenus and Artabazus jointly; the final column was led by the king himself.[1332] Arrian does not give details,[1333] but does tell us that the first four columns reduced many fortified positions in Sogdiana. This appears to have been a devastating campaign; Alexander used a scorched-earth policy of his own across the whole of the Zeravshan valley.[1334] This strategy demonstrates Alexander's belief that the new circumstances required a new approach..

[1325] Following Holt, 1989, 52*ff*.
[1326] The Alexandria mentioned above, p.190, was not strictly speaking in Bactria, although the border was ill-defined. That city was also in reality little more than a fortified camp, rather different in scale from Alexandria-Eschate: *cf*. Holt, 2005, 31.
[1327] The city had a circuit of 60 stades (Curtius 7.6.25); Maracanda was 70 stades by comparison (Curtius 7.6.10).
[1328] Cyrus' city foundation had provoked a similar response from the native population: Pliny *NH* 6.18 (49); Holt, 1989, 56.
[1329] Curtius 7.6.12 has Alexander warning the Scythians not to cross the Jaxartes without his explicit permission.
[1330] Holt, 1989, 60.
[1331] Bosworth, 1981, 29.
[1332] Arrian 4.16.3.
[1333] Bosworth, 1981, 29*ff*.
[1334] Ashley, 1989, 292.

The lack of security in the whole of the Bactria/Sogdiana region is clearly demonstrated by an ambush of Spitamenes. He drove a herd of cattle into a plain and waited in a wooded area to ambush the Greeks that he expected to pass by. The ploy worked brilliantly and the Greeks, led by Attines, were slaughtered to a man; Spitamenes withdrew after a successful counter-attack by a small leaderless group of Companion Cavalry[1335] and Greek mercenaries, who were in turn defeated by a detachment of Scythians as they travelled back to Zariaspa.

Alexander's strategy of militarising the Sogdian frontier continued with the construction of a series of garrison settlements in modern Tadzhikistan. Alexander continued moving east towards the Hissar Range[1336] occupying strongholds as he went.[1337] The most significant was the Sogdian Rock, or the Rock of Ariamazes, which probably was attacked in the summer of 328.[1338] The rock was reported to be some 5,760m high and 30km in circumference. The fortress boasted sheer cliffs on all sides, and was seemingly impregnable. The Rock was heavily defended; a total of 30,000 natives are reported to have taken refuge within its walls.[1339] Coupled with these natural advantages, the fortress had enough supplies to last for a two-year siege.[1340] In order to capture the citadel, Alexander decided upon deception, something rare in his career. A frontal assault was impossible so Alexander offered the massive reward of twelve talents[1341] to the first man to climb the nearly sheer cliffs that overlooked the natural amphitheatre of the fortress. More than 300 men attempted the night climb, with instructions that once dawn broke they were to make as much noise as possible. Both Arrian and Curtius[1342] confirm that 32 men died during the arduous climb. There is some debate on the time it took for the climb: Arrian states a single night, whilst Curtius has two nights and one day.[1343] Curtius surely exaggerates the height of the mountain, but, if the men had to accomplish a substantial climb up a mountain they had not climbed before, his two nights and a day is more credible than Arrian's single night. Either way,

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[1335] They were evidently the sick and infirm that Alexander had left behind.
[1336] The range of mountains that separated east and west Sogdiana.
[1337] Bosworth, 1981, 36.
[1338] Arrian 4.18.4-19, does not actually name it as such, but calls it "the rock in Sogdiana"; he also dated this episode it in the spring of 327 (Arrian places far more in the year 327 and leaves almost nothing to occur in 328; the vulgate tradition is more reasonable and does not leave such lacunae. *Cf.* Bosworth, 1981, 17-39); it is more commonly known as the Sogdian Rock, from Arrian 4.18.2. The chronology that I find most convincing and coherent is that of the vulgate tradition (Curtius 7.11.1*ff*; *Metz Epitome* 15*ff*). Arrian's account is difficult and fragmented; he places far too much in the year of 327 and almost nothing in 328. One of the principal aberrations is the dating of the two great sieges, this one first, which he dates to the spring of 327 (Arrian 4.18.4*ff*). This chronology is argued for in great detail by Bosworth, 1981, 36; *contra* Tarn, 1948, 1.72-6. For dating the siege see: Bosworth, 1981, 36; Bosworth, 1988, 113; *contra* Ashley, 1998, 301, who places the siege in the spring of 327, following Arrian.
[1339] Curtius 7.11.1*ff*.
[1340] Ashley, 1998, 301.
[1341] Curtius 7.11.28; Arrian 4.19.4-5.
[1342] Arrian 4.19.1-2; Curtius 7.11.19.
[1343] Bosworth, 1995, 129, supports Arrian's view, stating that Curtius 7.11.14-15 is highly rhetorical at this point: this is true, but a climb to a height of nearly 6,000m in a single night strains credulity. Even if Curtius was grossly exaggerating the height of the mountain, a climb of even 3000m would have been difficult under the circumstances in a single day.

when dawn broke, the defenders saw above them what they could only assume were flying men, and their morale disappeared. The Rock surrendered to Alexander without further loss of life.[1344] In the capture of this mountain-top fortress, Alexander once again showed himself capable of analysing a seemingly impossible situation and formulating a winning strategy. We also see an example of Alexander taking a calculated risk, that the defenders would surrender, rather than attack the mountaineers whom they outnumbered 100:1, and he was again proved correct.

In late summer, Alexander drew together all of the various flying columns that he had deployed throughout Sogdiania, converging on Maracanda. Alexander accepted the surrender, or at least the offers of allegiance, from the Saca tribes.[1345] It appears that they were suitably impressed with Alexander's campaign of 328 to think it prudent to come to terms.[1346] Even whilst in the midst of the most bloody campaign of his career, Alexander was evidently planning ahead; he declined an invitation from the Chorasmian king to campaign towards the Black Sea,[1347] stating that his sights were firmly on India as his next objective.[1348]

An excellent illustration of a possible deficiency in Alexander's army is given by the slaughter of Pharnuches' men at the hands of Spitamenes and his 600 Scythian mounted archers. They evidently engaged the Greek infantry, but not by a direct frontal assault, but by riding around them at a distance firing arrows at the Greeks. Being only infantry, the Greeks had no capability to respond, and were slaughtered. Usually this would not have been a usable tactic if the Greek force had possessed cavalry, and this is an excellent illustration of the need for mounted troops to protect infantry in ancient warfare. This defeat was so potentially devastating for morale that the few survivors that made it back to the main army were told, under penalty of death, to remain silent on the disaster.

Resistance crumbled in late 328. Spitamenes did launch a daring raid upon Maracanda soon after the successful slaughter of Pharnuches' men,[1349] but was quickly driven off into the desert by a column commanded Alexander himself; the pursuit had to be broken off as the desert was reached, for lack of supplies. Spitamenes' rebellion was ultimately defeated after a loss to a column commanded by Coenus; he managed to withdraw but was betrayed by his Massagetic allies who made peace with Alexander. His former allies arrested and beheaded him, while the other rebel commander, Dataphernes, was handed over to Alexander in chains.[1350]

After a lengthy delay in Maracanda, which included the murder of Cleitus, autumn was suddenly upon the Macedonians.[1351] One final campaign was to be

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[1344] Curtius 7.11.28; *Metz Epitome* 18; Arrian 4.19.4-5, *cf.* 4.16.3.
[1345] Bosworth, 1988, 113.
[1346] Curtius 7.1.7-9; *contra* Arrian 4.15.1-6, who places these diplomatic missions in Bactra in early 328.
[1347] Alexander having been told that Amazons inhabited this region.
[1348] Bosworth, 1988, 113.
[1349] Curtius 7.6.
[1350] Arrian 4.17.4-7; Curtius 7.3.1-16; *Metz Epitome* 20-3; *cf.* Berve, 1926, 2.718; Bosworth, 1988, 116.
[1351] Plutarch *Alex.* 51.8; Curtius 8.1.48-51. Bosworth, 1981, 36.

conducted before the onset of winter, however. From Maracanda, Alexander moved south to eliminate a group of Bactrian rebels who were based in the city of Xenippa, the location of which is unknown.[1352] No details are known about the campaign, other than its successful nature. After this, Alexander moved to what would become his winter quarters in Nautaca, probably located between Maracanda and the Oxus River.[1353] Nautaca was the last refuge of the rebels commanded by Sisimithres:[1354] these Alexander forced into submission too as the last military action of 328. Sisimithres was situated in another seemingly impregnable citadel, which was again well supplied with food and water in order to withstand a lengthy siege. Access to the fortress was blocked by a deep ravine that contained a torrent of water that came from the plateau above. Arrian has the ravine encircle the rock, but this cannot be so. It was essentially a river; Arrian's seems to be a stock description, or else he is confusing two sources.[1355] As usual Alexander did not allow nature to stand against him and, taking his cue from the siege of Tyre, he set about building a causeway across the chasm. The causeway was a marvellous feat of engineering that is usually underappreciated by modern historians: it consisted of a series of interlocking stakes that were cantilevered over the narrowest point of the gorge.[1356] As at Aornus,[1357] Alexander supervised the work personally, and split his men into two shifts, day and night. Progress was slower than at Aornus, where the men constructed a stade-long stretch in a single day; access was more limited here.[1358]

The construction of the causeway is a matter of considerable difficulty. Some modern historians[1359] have assumed Arrian refers to pegs being driven into the side of the ravine so as to create a framework for a bridge, the river flowing underneath. Bosworth doubts that such a construction could have been wide enough to span the ravine at all.[1360] It does seem more likely that there were in fact stakes driven into the bed of the river upon which the bridge would have been constructed. On the top of the bridge would have been a wicker flooring that would support earth and wood that would form the walkway across the ravine.[1361] Alexander also showed himself capable of learning difficult lessons from previous sieges: hides were placed at the leading edge of the construction to protect the builders and engineers from projectile weapons fired by the defenders.[1362] The defenders did not have the same will to resist as did the Tyrians, and at this display of

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[1352] Bosworth, 1981, 36.

[1353] Arrian 4.18.1; Curtius 8.2.19; reads Nauta; *Metz Epitome* 19; reads Nautace. For location see Arrian 3.28.9.

[1354] Arrian 4.21.2, calls the rebel leader Chorienes, sometimes taken to be a corruption of Sisimithres (Holt, 1989, 66), but the two do seem to be clearly different personages. For a full discussion, Bosworth, 1995, 135. Curtius 8.2.19-33; Strabo 517; Arrian 4.21.1-9 (sets the siege later in 327 and names Chorienes as ruler, a man who is named elsewhere by the vulgate tradition (*Metz Epitome* 29; Curtius 8.4.21)). *Cf.* Bosworth, 1981, 30-32.

[1355] Arrian 4.21.2.

[1356] Arrian 4.21.4-5; Curtius 8.2.23-4; *cf.* Bosworth, 1988, 117; Bosworth, 1995, 136-7.

[1357] Arrian 4.29.7. For Aornus see below pp. 201-3.

[1358] Arrian 4.30.1; Bosworth, 1995, 136*f.*

[1359] Lane Fox, 1973, 316; Hammond, 1980b, 199.

[1360] Bosworth, 1995, 137.

[1361] Arrian 4.21.5; Curtius 8.2.24.

[1362] Specifically Tyre, where Alexander only adopted defensive measures like this after suffering losses to ship-borne missile weapons. For hides as protection see Arrian 4.21.6.

siegecraft they surrendered before a final assault could be begun against the defences proper. The Rock's vast stores of provisions were enough to winter the Macedonian army.

This represented the end of the rebellion in Bactria and Sogdiana;[1363] most of the local nobility had come to terms with Alexander, willingly or otherwise, and the native population had been terrorised into subjugation. Amyntas was left as satrap of the region with a massive force of 10,000 infantry and 3,500 cavalry, an army to rival that left in Macedonian with Antipater.

327[1364]

Whilst in winter quarters in Nautaca, Alexander undertook what was to become a significant new military policy. Alexander was evidently concerned by these provinces, and their potential for causing further trouble, but he was so impressed by the quality of the troops that they had supplied to both Darius and the rebellion that he began a recruiting programme. 30,000 youths were conscripted into the army and their training began in order to turn them into Macedonian-style heavy infantry: they were to be trained in Macedonian tactics and weapons;[1365] significant numbers of native cavalry were also enlisted. This recruitment drive had the dual effect of strengthening the Macedonian field army for the coming Indian campaign, whilst also removing significant numbers of troops, potentially rebellious troops, from Sogdiana and Bactria. This is a policy that has a precedent in Alexander's career of his actions in the Balkans, where thousands of Thracians, Odrysians, Triballians etc. were conscripted for exactly the same reasons.[1366]

Early in the spring of 327, expecting the major campaigning in Sogdiana to be over, Alexander marched out after a two-month winter break. Impatience, lack of intelligence, or freak weather served to make this an extremely bad decision, however.[1367] The army suffered badly from a series of lightning storms that were accompanied by a drop in temperature and a snowstorm. Disaster was only averted when a supply caravan arrived from the former enemy, Sisimithres.[1368] After some minor operations, the army marched south to Bactra. Here, Craterus was left with three *taxeis* of *pezhetairoi* to deal with the remaining insurgents,[1369] few though they were. After a further delay in Bactra to make preparations, the army marched towards India.

[1363] But not the end of the fighting. This would drag on into 327; see below.
[1364] See above p.195 n.1338.
[1365] Arrian 7.6.1; Plutarch *Alex.* 71.1; Diodorus 17.108.1-3; Curtius 7.5.1.
[1366] Diodorus 17.17.4.
[1367] Curtius 7.4.1.
[1368] Now reinstated as commander of the Rock of Ariamazes or the Sogdian Rock depending on the nomenclature of the source.
[1369] Success was quick and absolute: Arrian 4.22.1-2; Curtius 7.5.2; *Metz Epitome* 23.

Chapter 8

India: 327-5

By the spring of 327 Alexander had quashed the rebellion in Sogdiana and Bactria and was ready to march on India. It is evident that Alexander had been contemplating this expedition for some time, at least since summer the previous year, and almost certainly long before that.[1370] The army that marched with Alexander was around 50,000 strong, hardly more than had fought at Gaugamela. The size of the Macedonian contingent was also reduced; there had been no documented reinforcements from Macedonia for almost four years. There had been a large influx from Greece, but they were left behind to ensure that there were no further difficulties in Sogdiana and Bactria.[1371] The organisation of the army had also changed to make it more mobile and able to respond to changing circumstances: the *pezhetairoi* had all but abandoned the sarissa; its use is not recorded again in the sources. The *prodromoi* had been merged with the Companion Cavalry, probably a sign of seriously reduced numbers; Orientals also started to be introduced into the Companions' ranks. A new officer class had also emerged in Sogdiana, partly by design[1372] and partly enforced due to the removal of men like Parmenio, Philotas and Cleitus. The new officer cadre consisted of Alexander's childhood friends, men he believed he could trust intimately: the likes of Hephaestion, Ptolemy and Perdiccas.[1373]

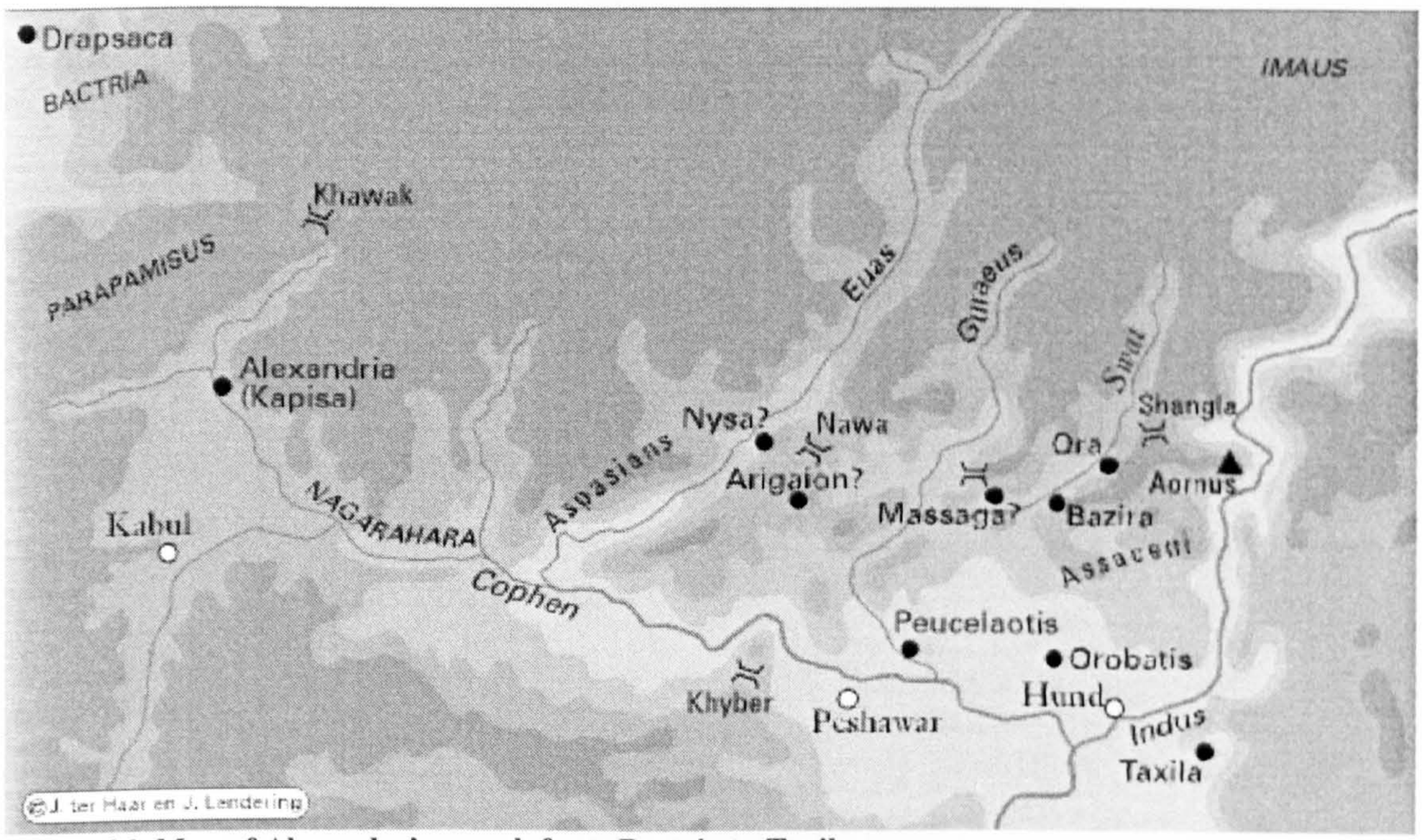


Figure 36: Map of Alexander's march from Bactria to Taxila.

[1370] Arrian 4.15.6.

[1371] Lane Fox, 1973, 334.

[1372] Alexander had probably wanted to get rid of Parmenio's family influence almost since the day he became king (Green, 1991, 111*ff*); this view ultimately comes from Badian, 1963.

[1373] Lane Fox, 1973, 334.

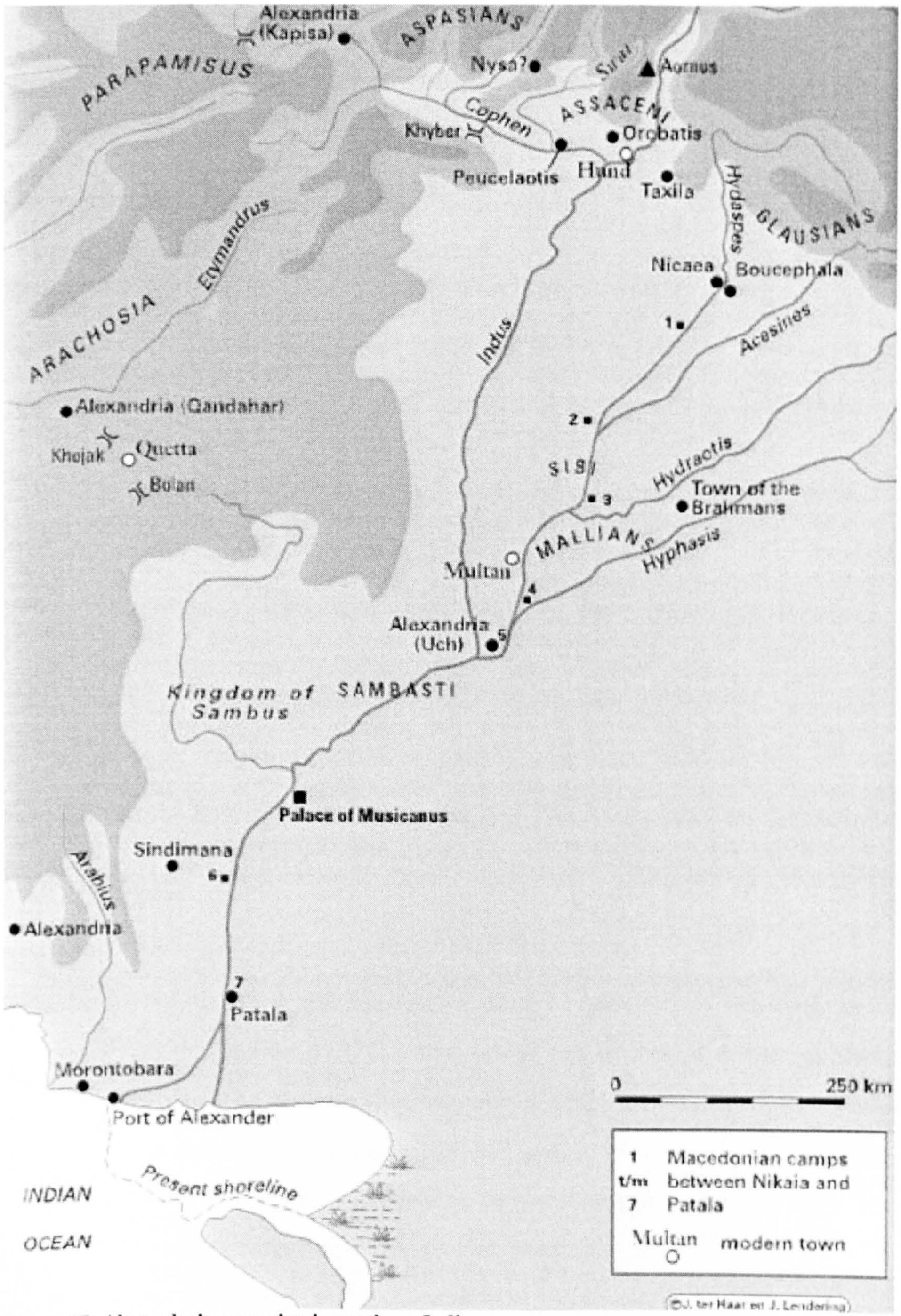


Figure 37: Alexander's campaign in southern India.

Alexander's justifications for the invasion of India[1374] are not difficult to find; although he demonstrably never needed a justification or an excuse. He had already received representations from Indian rulers who wished to use Alexander as a means of expanding their own territory, or of crushing their enemies.[1375] Alexander's army had also picked up a number of Indian refugees like Sisicottus,[1376] such men had every reason to encourage Alexander to invade, although no encouragement was needed.[1377]

Alexander's main justification would not have been manipulation by Indian rebels, or representations from anyone; it is most likely that Alexander wished to complete the conquest of the Achaemenid Empire. It is a much debated question how much control the Persians actually exercised over India: Gandhara[1378] and the lands of the Indus had been nominally under Persian control since the reign of Darius I. It was Herodotus[1379] that tells us that Darius I extended the Persian Empire as far as the Indus, but the Persian presence by 327 was minimal at best:[1380] Persian rule probably extended no further than the Kabul Valley which bordered the satrapies of Bajaur and Swat to the south.[1381]

Ten days march south from Bactra took the army back across the Hindu Kush mountains and into Parapamisadae; from there they advanced down the Cophen River valley towards the plains of the Indus and the satrapy of Bajaur.[1382] After crossing the Hindu Kush, the invasion force was divided into two columns as had become the general policy.[1383] The first column was commanded by Hephaestion and Perdiccas, and consisted of three *taxeis* of heavy infantry, half the Companion Cavalry and all of the mercenary cavalry, a total of around 6-7,000 men.[1384] This column was instructed to secure the main road to India, no simple task. The remainder of the army, commanded by Alexander, marched into the mountainous terrain north of the Kabul River into the regions of Bajaur and Swat, continuing his brutal campaign from Sogdiana.[1385] At first glance this campaign looks punitive, but it was vital in order to protect his lines of supply and communication down the Kabul River valley. Bosworth notes that Alexander, in his guise as the newly appointed Great King, saw these natives as his subjects and any resistance to his rule was met with bloody repression.[1386] The campaign was started by

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[1374] Heckel, 2008, 112, argues that it is wrong to speak of a Macedonian conquest of India, believing that many were brought on board through diplomacy, "restoring the authority of the empire over the eastern satrapies and establishing a buffer zone".
[1375] Diodorus 17.86.4; Curtius 8.12.5, for representations from the ruler of Taxila who approached Alexander while he was still in Sogdiana.
[1376] Arrian 4.30.4, Sisicottus had initially aided Bessus but had gone over to Alexander's side in Sogdiana.
[1377] Bosworth, 1988, 113.
[1378] Stein, 1926, for a description of the topography of the region.
[1379] Herodotus 4.44.
[1380] Illustrated by the lack of Indian involvement at the Battle of Gaugamela; *cf.* Arrian 3.8.3.
[1381] Ashley, 1998, 306.
[1382] Cophen River valley = Kabul River Valley. Bosworth, 1988, 119.
[1383] Bosworth, 1995, 149, notes that the actual location of the division of forces is not known.
[1384] The three *taxeis* were those of Gorgias, Cleitus the White and Meleager; Arrian 4.22.7.
[1385] Heckel, 2008, 116.
[1386] Bosworth, 1988, 121.

the occupants of a local town[1387] who had retired to a mountain stronghold and made ready to resist Alexander. In the initial assault Alexander was slightly wounded by an arrow to the shoulder; this, coupled with Alexander's desire to make an example of them, led directly to a massacre of the defenders.[1388] There is little doubt that this act was a deliberate policy,[1389] to terrify the native population into submission; Curtius tells us that even before the city fell, Alexander had instructed the troops to take no prisoners.[1390] The sack had an immediate impact in that the neighbouring city of Andaca surrendered without incident.[1391]

Alexander's column was further divided; Craterus was left to continue suppressing the native populations while Alexander moved on into the Kunar Valley to the east.[1392] By this time Alexander's reputation for brutality was preceding him; in every town he encountered the inhabitants fled into the mountains before he arrived, and frequently burned their homes. As a furtherance of his policy of militarising the region, Alexander founded another city in a strategically important location;[1393] this is a direct copy of the policy conducted in Sogdiana that had both caused the revolt, and helped to suppress it.

After almost two years of mountain campaigns against enemies conducting guerrilla warfare, Alexander had become adept in dealing with these tactics. The Aspasians of the Bajaur region offered little more than an inconvenience to the Macedonians; the Assacenians[1394] of Swat were a different matter, however. The king of the Assaceni in the Lower Swat valley, named Assacanus,[1395] commanded a substantial force of some 30,000 infantry and 2,000 cavalry,[1396] which was further strengthened by mercenaries, perhaps 7,000 strong.[1397] Despite this large force, it was not sufficient to meet Alexander in open battle, and Assacanus was astute enough to realise this, retiring to a number of local strongholds, the most important of which was Massaga located in the region of the Katgala pass.[1398]

Massaga was another formidable natural defensive position, bordered by a fast flowing river with sheer banks to the west preventing any approach, and by steep cliffs to the south. Curtius describes the fortress location as:[1399]

[1387] Anonymous in all of the sources.
[1388] Arrian 4.23.4-5; Curtius 8.10.6.
[1389] Hammond, 1983, 148.
[1390] Curtius 8.10.5.
[1391] Bosworth, 1995, 158, notes that the city is nowhere else named, and cannot be identified. It is the same town as the "fortified town" mentioned in the *Metz Epitome* 35.
[1392] Arrian 4.24.1.
[1393] Arrian 4.24.7; *cf.* Bosworth, 1988, 121.
[1394] Assaceni in Arrian 4.25.6; 5.20.7; but also named Assacani at 4.30.5; Strabo 15.1.17(698); Bosworth, 1995, 167.
[1395] Arrian 4.27.4, 30.5; Curtius 8.20.22.
[1396] Arrian 4.25.5.
[1397] Arrian 4.26.1; Curtius 8.10.23, puts the Massaga garrison at 38,000 infantry; Ashley, 1998, 462; Bosworth, 1988, 122.
[1398] Caroe, 1962, 51-3; Eggermont, 1970, 66.
[1399] Curtius 8.10.24.

A barricade of beetling crags, at the foot of which
lie caves and chasms hollowed to a great depth
over a long period of time. Where these terminate
a ditch of massive proportions forms a barrier.

The city itself was protected by massive walls over seven kilometres long, their lower sections made of stone, the upper of unbaked brick bounded by pebbles.[1400] These mud brick walls were further reinforced by a wooden superstructure.[1401]

Despite initially retiring to the defences of the city, Assacanus marched out with his mercenary infantry to engage the Macedonians. Arrian implies that finances were short for Assacanus and the need to pay the Indian mercenaries for the duration of their service was a factor in the decision.[1402] Another factor was probably Alexander's relatively small advance force: Assacanus probably felt, depending on his level of reconnaissance information, that he could destroy this and the war was over; or possibly that if he destroyed half of the army now, the rest would be easily picked off whenever it finally arrived.[1403] Ever the great recycler of successful strategies, Alexander saw the mercenaries advance from the fortification and realised that the battle was to be fought close to the city, so that the Indians could easily retire to the city when they were defeated,[1404] surviving to fight another day. Alexander, therefore, withdrew to some nearby high ground in order to draw the enemy towards him and increase the distance they would have to retreat after the engagement.[1405] This is a classic tactic of Alexander: we see on countless occasions the Macedonian king making some kind of pre-emptive movement to draw the enemy onto terrain of his choosing, rather than fighting on the enemy's terms. Seeing the Macedonians seemingly in retreat, the Indians advanced into the trap. At the appropriate moment, the advance force of Macedonians turned around to face the enemy and engage them. The Indians were apparently charging up the hill in considerable disorder; they were quite simply no match for the disciplined ranks of the Macedonian heavy infantry. Arrian tells us that this display of discipline left the Indians badly shaken, the following engagement was brief and the Indians fled almost immediately; 200 of them left dead on the battlefield.[1406]

As Alexander surveyed the fortifications after the skirmish he was wounded in the leg by an arrow.[1407] The wound must have been relatively minor, however, as it did not stop Alexander taking an active role in the siege preparations. The king's strategy was typical: he was confronted with a fortress that was inaccessible, and well sited for natural

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[1400] Curtius 8.10.25, notes walls 35 stades long.
[1401] Arrian 4.26.4; Curtius 8.10.27; *Metz Epitome* 40.
[1402] Arrian 4.26.1-2.
[1403] Bosworth, 1995, 170.
[1404] Whilst we can never really know what is in the mind of a man who died twenty three centuries ago, I think in this case we can say with some degree of certainty that Alexander never contemplated defeat here (or probably elsewhere).
[1405] Arrian 4.26.2.
[1406] Arrian 4.26.3, this part of the siege is only found in Arrian.
[1407] Curtius 8.10.27-28; *Metz Epitome* 40; Arrian 4 26.4, has Alexander wounded in the ankle.

defence. In front of Alexander was what appears to have been a moat of some kind; in another repetition of earlier sieges, Alexander had his men set about dismantling the buildings he came across outside of the fortifications, and started filling in the moat.[1408] The similarities with the siege of Tyre and the mountain sieges in Sogdiana the previous year are striking. Arrian has siege towers appear from nowhere on the second day of the siege, whereas Curtius presents a more reasonable picture of a nine-day delay as the moat was filled in, and the towers were constructed from scratch.[1409] Bosworth believes that this delay was time enough for Craterus to bring up the siege train, but I doubt that towers would have been transported over the Hindu Kush Mountains; they were more likely constructed from scratch as required. The speed of some of Alexander's movements would have left them far behind if nothing else.

As a breach in the walls had been achieved, the siege towers were brought forward and threw a bridge over the breach. "Over this he led his Guards, the unit which, by the same tactic, had helped him to the capture of Tyre."[1410] At this point even Arrian recognises Alexander using the same tactics, even using the same units to achieve them. The construction of the tower's bridge was flawed, coupled with the hypaspists being too keen to get across, and this caused it to collapse with many lost lives. The following day the same tactic was repeated with another tower, this time with far more success. At the death of their commander the Indian mercenaries sued for peace and joined Alexander's army. The mercenaries planned treachery, however, and the following night Alexander had them surrounded and massacred.[1411] After the defection of the Indians, Arrian says the city was undefended and fell with ease; there is no mention of the thousands of other native troops noted earlier in his narrative.

The Rock of Aornus

After the fall of Massaga, the army was again divided into a number of flying columns; Coenus was sent to Bazira whilst Attalus, Alcetas and Demetrius advanced upon Ora.[1412] Attalus was instructed to blockade the town pending Alexander's arrival. This is a curious instruction and suggests either Attalus' force was very small and not capable of carrying the siege, or Alexander wanted the glory of the capture himself. Of the two blockaded cities, Alexander first made for Ora,[1413] which fell at the first assault. On hearing this news, the citizens of Bazira abandoned their town in the middle of the night and made for the defensive position called the Rock of Aornus.[1414]

[1408] Curtius 8.10.31*f*; Arrian 4.26.4.
[1409] Bosworth, 1995, 171; Curtius 8.10.31*f*; Arrian 4.26.4.
[1410] Arrian 4.27.6, the Guards in question were the hypaspists.
[1411] Arrian 4.27.3, claims that they intended to slip away in the night and return home, not wishing to take up arms against fellow Indians. Diodorus 17.84, attributes gross treachery to Alexander, however, claiming the mercenaries were attacked and slaughtered without provocation of justification. *Cf.* Plutarch *Alex.* 59.3-4.
[1412] Arrian 4 27.5.
[1413] Identified as Ude-gram by Stein, 1929, 43, 59*ff*.
[1414] Arrian 4.28.1. The Rock of Aornus was first identified as Pir-sar by Stein, 1929, 128*ff*. This identification has recently come under question; Tucci, 1977, 52-5; Eggermont, 1984 and (tentatively) Badian, 1987, 117, n.1, all argue for Mt. Ilam instead of Pir-sar. For a reaffirmation of Pir-sar as the rightful location of the Rock of Aornus, see Bosworth, 1995, 179-80.

> Pir-sar is but one of a series of narrow spurs which...range stretching east from above Upal throws out to the south before it drops rapidly and flattens out fanlike towards the low plateau of Maira, washed at its foot by the Indus. Of those spurs Pir-sar preserves its height for the longest distance, and owing to the uniform level and the very fertile soil of its summit, affords most scope both for cultivation and grazing. The practically level portion of the top extends at an average elevation of about 7,100 feet for over a mile and a half. At its upper end this flat portion is bordered for some distance by gentle slopes equally suited for such use...Pir-sar forms a dominating position over-looking all the other spurs.[1415]

Stein's description is very similar to Arrian's who gives a height of 8,000 feet and describes the Rock in similar terms,[1416] also noting the abundant natural water springs on the plateau. What Stein does not say is that the summit has a circumference of some forty kilometres.[1417]

The fortress was not only well situated and well defended, but it was provisioned enough to withstand a two-year siege. Alexander could easily have blockaded the fortress with a small force and moved the main army on towards India, but it was not in his nature; he never refused a seemingly impossible challenge (or at least, a very difficult one). Whilst preparing for a lengthy siege, Alexander was approached by a native guide who offered to show him a location that would overlook the Rock fortress, a ridge called Bar-sar.[1418] Ptolemy was sent, at night, to occupy this position with a detachment of hand-picked troops, including the Agrianians, archers and some hypaspists. The following morning Alexander made a frontal assault, but was repulsed by the Indians in part due to the difficulty of the terrain. An Indian attack on Ptolemy's position was also repulsed. The following day Alexander fought his way through to Ptolemy who was essentially cut off once the Indians realised his location, and a further joint assault was also repulsed by the defenders. A straight frontal assault was evidently difficult and costly in manpower,[1419] so he ordered every man to cut 100 stakes with the intention of building a bridge across the ravine from Bar-sar to Pir-sar.[1420] This was a tried and tested tactic of Alexander: if a natural obstacle stood in the way, remove it. We see many examples of this: first at Tyre, and then on several occasions in Bactria, Sogdiana and now India. By the third day the bridge was complete; and by the fourth, Pir-sar had fallen.[1421] The rapididity of the construction of the bridge is yet another testimony, if one were needed, of the quality of Alexander's engineers. They were constantly called upon

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[1415] Stein, 1929, 128-9.
[1416] Arrian 4.28.1.
[1417] Arrian 4.28.1; Diodorus 85.3; Curtius 8.11.6 both say a circuit of 100 stadia and height of 16.
[1418] Ashley, 1998, 313.
[1419] And Alexander was lacking in Macedonians by this time.
[1420] Ashley, 1998, 313.
[1421] Ashley, 1998, 313.

to make the impossible a reality, and in remarkably short periods of time. The bridges that were constructed in Sogdiana and here at Aornus only took a few days; modern engineers would find it difficult to match these feats, even though they were temporary structures.



Figure 38: Photograph of the Aornus Rock.

At Aornus Alexander put the lives of his irreplaceable men at risk on a whim: he could easily have isolated the Rock at little cost in manpower and moved on, but ego, or perhaps pride, would not allow this. The local story of Heracles' failure to capture the

Rock was all the incentive he would have needed: much as with the Gordian Knot in Asia Minor, or the later crossing of the Gedrosian Desert in emulation of Queen Sisigambis, Alexander simply did not possess the will to resist a seemingly impossible challenge.

After the fall of Aornus, Alexander marched to Ecbolima where he received a report that the brother of Oxyartes, Erices, had blockaded a narrow pass on the road towards India with a force of some 20,000 men and 15 elephants.[1422] Curtius tells us that advancing quickly, with apparently only the slingers and archers, he dislodged the defenders from the pass and scattered them.[1423] This is an example of Curtius' exaggeration, or simply a mistake. Alexander commanded no more than 2,000 archers and slingers; and it seems unlikely, to say the least, that these missile troops, with no back up of infantry or cavalry, could have carried a pass commanded a force ten times its size. After crossing the Indus River, Alexander entered Taxila. Almost immediately he was met by king Taxiles who brought Alexander some much-needed supplies. Alexander's next stop was the Hydaspes River.[1424]

Hydaspes River

In many ways the battle of the Hydaspes is the most interesting of all of Alexander's set-piece battles, although certainly not the most famous. Alexander was faced with an entirely new weapon of war, the elephant, and as Hamilton notes, his ability to adapt and overcome this new tactical problem demonstrates his genius just as well as the manoeuvres that ensured victory.[1425] Despite being a fascinating battle, it is probably the most difficult to reconstruct given the difficulties of the surviving sources:[1426] these must be examined first before Alexander's tactics can be established with any certainty.

Sources

Almost all modern historians rightly accept Arrian's account of the Hydaspes as the fullest, most reliable and most tactically coherent.[1427] Arrian suffers, as always, from the usual problem of the inadequacy of information in *his* sources. Arrian cites only two of his sources by name: Aristobulus[1428] and Ptolemy;[1429] the others are cited collectively.[1430] It is likely that most of Arrian's narrative is derived from Ptolemy, largely because he appears to have an important role in the battle and he was always wont to emphasise his own achievements, especially if it was at the expense of his later rivals.

[1422] Curtius 8.12.1; *cf.* Diodorus 17.82.2, who calls the man Aphrices.
[1423] Curtius 8.12.2.
[1424] Ashley, 1995, 317.
[1425] Hamilton, 1956, 26.
[1426] Devine, 1987, 91.
[1427] For example: Bosworth, 1995, 262*ff*; Lane Fox, 1973, 351*ff*; Devine, 1987, 94-6; Hamilton, 1956, 26. There are still tactical flaws, however.
[1428] Arrian 5.14.3.
[1429] Arrian 5.14.5-6; 5.15.1.
[1430] Arrian 5.14.4, and then only once: Bosworth, 1995, 289, believes the un-named source is a much later writer using the nucleus of Aristobulus in order to produce a "rhetorical fiction".

Despite being in the boat alongside Alexander as he crossed the Hydaspes River, Ptolemy does not present a good overall tactically coherent narrative,[1431] but he does include the orders to sub-commanders when they occur.[1432] If it is the case that Ptolemy did not have an overall picture of the tactics for the battle before it occurred, then Alexander could not have held a council of war, like that before Gaugamela,[1433] as Ptolemy would surely have been invited by 326. Ptolemy's coherence would also have suffered from Alexander's necessity to change the tactics of the battle continually, to adjust to weather, terrain and Porus' elephants. The overall strategy would have been well thought out before, but flexible in its execution. Holding a council of war at Gaugamela, and not at the Hydaspes River, is probably a sign of Alexander's increasingly insular nature closer to the end of his life. It does not display a lack of trust in his sub-commanders, however, as he relied heavily upon them performing their duties with alacrity in order to gain victory here as elsewhere.[1434]

Curtius' account is replete with rhetoric and anecdotal material, as is frequently the case. Curtius does, however, present us with valuable topographical information: such as the width of the Hydaspes River, the islands in the river,[1435] the island upon which Alexander mistakenly landed, the slippery ground,[1436] and the plain where the final battle occurred.[1437] Curtius' manpower figures are slightly higher than our other sources, but not excessively so, and his number of elephants is actually the least at eighty-five.[1438] As Devine notes,[1439] Curtius tends to pay little attention to tactical movements, and more to individual *aristeiai*, and is therefore of lesser use in a tactical study.

Plutarch's account is based almost entirely on "Alexander's letters";[1440] although other sources are cited: these include Onesicritus[1441] and Sotion,[1442] as well as "most writers"[1443] when he clearly does not wish to divulge his source specifically. The authenticity of the letter has been much debated;[1444] the most we can say is that the letter

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[1431] Devine, 1987, 94.
[1432] Orders such as those to Craterus 5.11.4, Meleager, Attalus and Gorgias 5.12.1, the *pezhetairoi* 5.14.1, Tauron 5.14.1, Coenus 5.16.3, Seleucus, Antigenes and Tauron 5.16.3.
[1433] Arrian 3.9.3-4; Curtius 4.13.3-10.
[1434] Strasburger, 1934, 34,48,55, argued that Alexander held regular and routine meetings with his senior commanders to discuss strategy and policy, but that Ptolemy suppressed any record of these meetings; and only sought to publicise those meetings, such as the council of war before Gaugamela, where Alexander simply sought to distribute information on tactics for the coming battle. This has been convincingly disputed by Atkinson, 1980, 180, who argued that "Alexander called into consultation whom he wanted when he chose". Devine, 1987, 94-5.
[1435] Curtius 8.13.13-17.
[1436] Curtius 8.14.4,19.
[1437] Curtius 8.14.7-8.
[1438] Curtius 8.13.6; 30,000 infantry and 300 six-man chariots.
[1439] Devine, 1987, 94.
[1440] Plutarch *Alex.* 60.1; 60.11.
[1441] Twice, Plutarch *Alex.* 60.6-7; 61.1.
[1442] Plutarch *Alex.* 60.3, whose source in turn was Potamon of Mytilene (Devine, 1987, 94).
[1443] Plutarch *Alex.* 60.12-13; 61.1.
[1444] Delbrück, 1975, 224-5; Tarn, 1948, 2.196-7 (argues it is a forgery, although he also notes that "the earlier part of the letter...has been carefully done from good sources and would pass muster"); Devine, 1987, 92; Hamilton, 1956, 26, n.3 ("no decisive evidence regarding its authenticity"); and 1961, 9-20

is probably not genuine, but that it is certainly based upon good primary sources; it is consistent with the picture we have in Arrian from Ptolemy and Aristobulus. In general terms, Plutarch does not often use tactical terminology,[1445] nor is he terribly interested in strategy and tactics; the Hydaspes is no exception. With this drawback, he is of little use to us here.

Diodorus is similar to the rest of the vulgate tradition in that his narrative is rhetorical in nature and contains, in this case, little of tactical interest. As in Plutarch, terminology, when used, is vague and lacking in full detail; for example, Porus divided his cavalry by posting a body on each flank and that he divided his elephants equally along the length of the front line.[1446] The motif of the castle wall is repeated throughout the vulgate tradition.[1447] Diodorus' descriptions of Alexander's dispositions are even less tactically useful: "he viewed those of the enemy and arranged his own forces accordingly".[1448] Diodorus also fails to recognise that there were several phases of the battle involving some intricate manoeuvres from Alexander.[1449] Hammond has argued, convincingly, for Diodorus' source for the Hydaspes being Cleitarchus on the grounds of the sensationalism in the narrative coupled with his lack of interest in topography or tactical manoeuvres of any kind.[1450] The remainder of the surviving sources are useful only in very limited areas and on minor points.

Topography

Frontinus tells us that Alexander made his night crossing of the Hydaspes upstream of his main camp opposite Porus.[1451] Arrian tells us that the crossing point was 150 stades from the camp, around 29 km, where there was a headland projecting into the river from the western bank.[1452] This headland was extensively wooded, as was the island in the centre of the river; these factors together led Alexander to determine that, given the amount of cover, this was an ideal crossing point.[1453] The descriptions of the headland are supported by Curtius who noted the vital information that there was a large depression[1454] on the west bank, again aiding in the concealment of a significant body of men.[1455] Where our sources diverge, however, is in the descriptions of the island that Alexander first

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("good claims...to be considered genuine"); Pearson, 1960, 172-3,198 ("almost certainly a forgery...written by someone who knows both Ptolemy and Aristobulus"); Hammond, 1980b, 211-212 ("not genuine but...constructed from an account of Aristobulus").

[1445] Frequently uses slightly vague terms like "ride ahead of" and "engage"; *cf.* Plutarch *Alex.* 60.7-10: for more examples. Devine, 1987, 92-3.

[1446] Diodorus 17.87.4.

[1447] The elephants representing towers with the infantry acting as the curtain wall between them.

[1448] Diodorus 17.87.5.

[1449] Devine, 1987, 91.

[1450] Hammond, 1983, 16-7, 38, 51.

[1451] Frontinus *Strat.* 1.4.9. Curtius 8.13.23, also implies this but does not say it directly.

[1452] Arrian 5.11.1-2.

[1453] Devine, 1987, 96, I will suggest later that the landing on the island was entirely accidental and an extremely dangerous mistake.

[1454] *Fossa praealta.*

[1455] Curtius 8.13.17.

landed upon. Arrian[1456] calls it a large island, probably following Ptolemy; Aristobulus[1457] and the author of 'Alexander's letters'[1458] present it as being a rather small island. We must note, of course, that there appear to have been two islands in the Hydaspes River at the crossing point. The first was evidently larger, and closer to the western shore, than the second; which was in turn obscured from view by the first.[1459] It may be possible that each source had part of the truth; Ptolemy could simply be describing the first, larger, island, with Aristobulus paying more attention to the second. If this is correct, then Arrian simply failed to realise that there were two islands, and there was not a disagreement among his sources regarding the size of a single island.



Figure 39: Photograph of the River Jhelum (Hydaspes).

There is also disagreement as to whether Alexander realised that he was landing on an island, or mistakenly landed on it during the crossing, thinking he was landing on the far bank. Plutarch and Curtius[1460] lead us to believe that he did know it was an island and that the landing, therefore, was intentional. Arrian is a little more candid about the

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[1456] Arrian 5.13.2. In fact Arrian says both islands were of significant dimensions (the one that was seen and that which was unseen, presumably behind the first); Bosworth, 1995, 281.
[1457] *Apud* Arrian 5.14.3.
[1458] *Apud* Plutarch *Alex.* 60.3-4.
[1459] Bosworth, 1995, 281-2. That the second island was obscured must have meant it was of smaller dimension.
[1460] Plutarch *Alex.* 60.3-7; Curtius 8.13.17-27; Devine, 1987, 96; Delbrück, 1975, 224-5 n.2, suggests this was a deliberate falsehood in order to cover up a serious mistake by Alexander. This is an entirely plausible hypothesis as I can see no way that Alexander could have failed to realise it was an island, see later.

incident, claiming, from Ptolemy, that the landing on the island was indeed a mistake.[1461] Despite the mistake, there was a ford beyond the island to the mainland which could be crossed waist deep by the men;[1462] the total width of the Hydaspes was four stades, most of which was to the west of the island.[1463]

Devine notes two further details of relevance: according to Pliny, the distance from Taxila to the Hydaspes River was 120 Roman miles.[1464] Strabo adds that Alexander's march to the river was mostly in a southerly direction.[1465] Stein used this detail to locate the battlefield close to Malakwal on the Jhelum River, roughly opposite the modern city of Haranpur.[1466] Stein's route from Taxila to the Hydaspes is consistent with Pliny's distance and Strabo's general direction of march. Stein went on to suggest that Alexander camped at Haranpur and from there marched upstream to Jalalpur, a distance of some 28km.[1467] At Jalalpur there was a well defined headland as described in the sources, now known as the Mangal Dev, which itself rises over 335m. To the east of Jalalpur is the Kandar Kas nullah,[1468] which flows into the Halkiwani nullah, the northern branch of the Jhelum River. This nullah then skirts around the island of Adana,[1469] the largest in that section of the river,[1470] and one which Stein identified with the large island of Ptolemy.[1471]

The reconstruction that follows is that of Stein, and places Alexander's base camp at Haranpur. It is largely accepted by modern scholars,[1472] often with little comment on the alternative; but a second theory also exists. Smith has Alexander marching from Taxila to the Hydaspes via the fastest route, that which followed the Grand Trunk Road.[1473] If this route is accepted, then the base camp for Alexander's army would have been the town of Jhelum, the point of crossing located upstream in the vicinity of Fort Mangala, where the river makes a virtual right hand bend.[1474] This is superficially attractive, but there are a number of discrepancies with the sources. The distance from Taxila to Jhelum is considerably less than the 120 Roman miles reported by Pliny;[1475] it is

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[1461] Arrian 5.13.2.
[1462] Arrian 5.13.3; Plutarch *Alex.* 60.7.
[1463] Approx. 768m. Curtius 8.13.8.
[1464] Devine, 1987, 96. Pliny NH 6.21.62; equates to approx. 177km.
[1465] Strabo 15.1.32.
[1466] Stein, 1932, 31-46. Devine, 1987, 96.
[1467] Stein, 1937, 1-36.
[1468] Nullah being the Hindi word for a stream or watercourse. Stein, 1932, 31-46, identifies this with the *fossa praealta* of Curtius, but this is difficult to reconcile given that a nullah is a stream and the *fossa praealta* was a depression on shore.
[1469] Devine, 1987, 96.
[1470] Stein, 1932, 31-46; 1937, 1-36, cites the dimensions of the island as being 9.6km long (6 miles) and 2.4km at its widest point (1.5 miles), as well as noting that it was still heavily wooded.
[1471] Arrian 5.13.2. This detailed description of the river is that presented in the sources. The likelihood that the river has changed course means it is difficult to identify modern features and accurately site the battle. The main text does assume Stein's identification based upon modern topography is correct, if he is wrong then we are not in a position to suggest an alternative.
[1472] Fuller, 1958, 184-5; Lane Fox, 1973, 353-5; Green, 1974, 389-90.
[1473] Smith, 1914, 78-85. Bosworth, 1995, 267.
[1474] Bosworth, 1995, 267.
[1475] Pliny NH 6.21.62.

in fact closer to 80.[1476] The terrain to the east of the river at that point is broken and not suited to the kind of cavalry battle that was fought. The final point is that if Porus was encamped close to the modern Fort Mangala, then it is inconceivable that Alexander's fleet could have been rebuilt on the river without drawing the attention of the Indians. These objections all assume, of course, that the river occupies roughly the same course now as it did twenty three centuries ago, something that is far from certain, although Stein believed vehemently that it does.[1477]

The best we can say is that the accepted location for Alexander's camp is probably true, although unproven. We can also say with a high degree of certainty that Alexander marched via the main route from Taxila to the Hydaspes; this was the only route that would have allowed him to transport his fleet easily across land. As Bosworth notes, this route must have followed something like the course of the Grand Trunk Road, as this avoids any major hills.[1478]

Prelude to the Battle

Diodorus tells us that Alexander was 400 stades[1479] from Porus when he learned of the latter's location;[1480] almost immediately upon hearing that the Indian king was positioned along the banks of the Hydaspes, Alexander hastened to the river to force a decisive engagement. Upon arriving at the Hydaspes, Alexander was, at first glance, faced with a similar problem to that he encountered at both the Granicus and Issus: an opponent established in a strong defensive formation along the banks of a river. The most significant difference being the river itself: the Granicus was relatively shallow and fordable, as was the river at Issus;[1481] the Hydaspes was deep and fast-flowing as well as being in spate with the beginning of the monsoon rains. The size and situation of the Hydaspes, coupled with Porus' defence on the far bank, presented Alexander with one of the most difficult positions of his career. Alexander was further disadvantaged by his complete lack of knowledge of the terrain or of the upcoming monsoon season.

Alexander must have been employing native guides, as was usual, who provided him with information about the terrain that he was marching into. This can be demonstrated by Arrian's statement that he had his fleet on the Indus dismantled, "the smaller vessels cut in half, the thirty-oared galleys into three",[1482] and transported by cart to the Hydaspes and reassembled. He must, therefore, have had a certain amount of advance warning about the topography of the area, but his knowledge could not have matched that of the native king.

Porus' strategy was to prevent a crossing of the river by the Macedonians; something rather different from what Alexander had encountered at the Granicus or Issus.

[1476] Bosworth, 1995, 267.
[1477] For Stein's argument, see: Bosworth, 1995, 268.
[1478] Bosworth, 1995, 268.
[1479] Almost 77km.
[1480] Diodorus 17.87.3;
[1481] Although both had steep banks in places.
[1482] Arrian 5.9.1.

There the Persians intended to use the river to their advantage in battle by forcing the Macedonians to cross it and thus fight at a disadvantage: they in the river, the Persians on the banks. At the Hydaspes, however, that was not possible. If Porus was to defeat Alexander and remove the threat from his kingdom, why attempt this attrition strategy? A commander more confident in his troops might have withdrawn a little way from the river, enticed some of the enemy across and then attacked whilst they were in confusion and before they could get the whole army across. The strategy of Porus betrays a lack of confidence in his ability to defeat Alexander in open battle; whilst barring a crossing, the best Porus could hope for was that the Macedonians would run into difficulties of supply and turn their attention elsewhere. This would essentially be victory by the absence of defeat.[1483] This appears to have been Porus' main intention, but coupled with this strategy was Porus' need to delay the Macedonians and await the anticipated arrival of Abisares, king of Kashmir, who had apparently offered assistance.[1484] We cannot know how Porus' strategy would have changed once the two armies had merged, but I doubt he would have made an offensive move, as he would be in the same position as Alexander was, unable to cross unopposed. Porus would simply have been in a far better position to defend all vulnerable parts of the eastern banks of the river.

Alexander, of course, needed to enable a crossing of the river in order to force a decisive battle with the Indian monarch. The river was too wide and fast-flowing simply to use the fleet or any of the rafts that were also constructed;[1485] too few of the Macedonians would be able to get across if they were opposed. Alexander, therefore, needed a stratagem that would allow him to safely cross the river unopposed; to achieve this, he used a quite brilliant misdirection strategy.

Alexander quickly determined that he needed a crossing point that was unopposed;[1486] after conducting a thorough reconnaissance of the river banks both upstream and downstream, Alexander found what appeared to be a perfect crossing point some 30km upstream from his base camp near a 90 degree bend in the river, close to the island of Adana.[1487] The bend in the river, coupled with the dense woodland on the banks and islands, would act as excellent cover for his troops as well as the ships that would transport them across. Alexander knew that Porus was watching his operations keenly, and was matching his movements to prevent an unopposed crossing, so Alexander ordered large detachments of the army to march both upstream and downstream, mostly at night, making a lot of noise to be sure the Indians would follow suit. This strategy appears brief in the sources, but in order for Porus to become lulled into a false sense of security by the numerous movements, it must have taken place over several days and nights at least. These continuous movements led Porus to alter his defensive strategy somewhat; instead of continuing to shadow every move of the Macedonians, he posted a

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[1483] Not too dissimilar to Pericles' strategy at the beginning of the Peloponnesian War, the refusal to fight the Spartan on their terms.
[1484] Diodorus 17.87.2, calls this king Embisarus, but also refers to him as Sasibisares at 17.90.4. This king is also known as Abisares in Arrian (5.22.2) and Curtius (8.13.1; 14.1) and I have taken that to be his name.
[1485] Arrian 5.9.2-3.
[1486] Lonsdale, 2007, 86-7.
[1487] Around 19 miles; Arrian 5.11.1. Heckel, 2008, 116, notes 17 miles (27km).

screen of lookouts along the river at potential crossing points whilst maintaining some reduced facility to follow Alexander's scouts.[1488]

Alexander's strategy had effectively worked; Porus was no longer shadowing *every* movement. Alexander began preparations for the crossing with some key dispositions. Macedonian pickets were stationed along the banks of the river at evenly spaced distances, so that each could see those stationed both upstream and downstream of themselves. These pickets would have been crucial for communication with the complex movements that were to follow.[1489] To continue the misdirection strategy, the pickets were ordered to keep their watch fires lit at night, and to make enough noise that the Indians could hear them; this again, apparently, lasted for several days.[1490]

Alexander also needed a way to force Porus to keep most of his army in camp while he was effecting the crossing; he did this simply by leaving Craterus and a relatively small force[1491] in the base camp to act as a pinning force.

Type	Number	Total
His own Hipparchy	500	
Arachotian Cavalry	2,500[1492]	
Parapanisadae Cavalry		3,000 Cavalry
Two *Pezhetairoi Taxeis*[1493]	3,000	
Indian Troops	5,000	8,000 Infantry

Craterus was instructed to force a crossing once the main battle was joined. He would, therefore, also be required to perform a flanking attack upon the Indians, assuming he was able to ferry enough troops across the Hydaspes in time.[1494]

Craterus was given very detailed and specific instructions that have survived in Arrian, although in reality, Craterus was held at bay until the Indians were in flight and the battle was over. Craterus' instructions, according to Arrian, were:

> Craterus was ordered not to cross until Porus and his forces had set off against them (the troops commanded by Alexander), or until he learned that Porus was in flight and he himself (Alexander) was victorious. If, however, Porus should take part of his army and lead it against me (Alexander), while leaving another part, together with the elephants, back at his camp, you (Craterus) are to stay where

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[1488] Arrian 5.9.1; Curtius 8.13.5.
[1489] Devine, 1987, 97.
[1490] Arrian 5.11.2.
[1491] His own hipparchy of Companion Cavalry, the Arachosian and Parapamisadian cavalry, two *taxeis* of a*sthetairoi/pezhetairoi* (Alcestas (formerly Perdiccas') *taxis* and Polyperchon) and the 5,000 Indian infantry of Taxiles. (Perhaps 3,000 cavalry and 8,000 infantry in total, see table).
[1492] This figure is assumed, based upon the size of the Bactrian/Scythian contingents.
[1493] Arrian 5.12.1; those of Alcetas and Polyperchon.
[1494] Devine, 1987, 97. Fuler, 1958, 187; Tarn, 1948, 2.192-193.

you are. If, on the other hand, Porus leads all his elephants against me (Alexander), though leaving behind a part of the army at the camp, you (Craterus) are to cross promptly. For it is only the elephants, he said, which are dangerous to disembarking horses, the rest of the army being no problem.[1495]

The flanking force was arranged in two separate divisions. The first, commanded by Alexander, was to travel the furthest upstream and also be first across the river. This force was relatively small by necessity, but certainly contained some of the elite troops of the army: the *agema* of the Companion Cavalry, four hipparchies of Companions,[1496] the Bactrian, Sogdian and Scythian cavalry, a detachment of Dahae horse archers, the hypaspists and two *taxeis* of *pezhetairoi/asthetairoi* and, of course, the Agrianians, archers and javelin men.[1497] Arrian gives the total of 5,000 cavalry and 6,000 infantry, but the real total should be a little higher:

Type	Number	Total
Agema	300	
Four Hipparchies	2,000[1498]	
Bactrian Cavalry	2,000	
Sogdian Cavalry		
Scythian Cavalry		
Dahae Horse Archers	1,000[1499]	5,300 Cavalry
Two *Pezhetairoi Taxeis*	3,000	
Hypaspists	3,000	
Agrianians	1,000	
Archers	1,000	
Javelin men	1,000	9,000 Infantry[1500]

The secondary turning force was also sent upstream, but not as far as Alexander; this force consisted of two *taxeis* of *pezhetairoi*,[1501] supported by the mercenary cavalry and infantry. The strength of this detachment is never given, but it would have consisted of 3,000 Macedonian *pezhetairoi*: Fuller's total of 500 cavalry and 5,000 infantry is reasonable enough.[1502]

[1495] Arrian 5.18.1.
[1496] Those of Hephaestion, Perdiccas, Coenus and Demetrius.
[1497] Arrian 5.12.2; 5.13.4; 5.16.3.
[1498] On Hammond's (1998, 418; 1980c, 455*ff*; 1980b, 191*f*) interpretation of the total strength of Companions at this time of 4,000 (1,800 in 334 Diodorus 17.17.14) divided into eight hipparchies. *Cf.* Griffith, 1963, 71, n.13; Devine, 1987, 98. Fuller, 1958, 187, states 4,000 Companions with Alexander, but this simply cannot be the case as there were eight hipparchies in total, only four with the flanking force.
[1499] Arrian 5.16.4. The Dahae horse archers are the only unit that Arrian actually gives a strength for.
[1500] Devine, 1987, 98, assumes 5,300 cavalry and 10,000 infantry; the difference is simply 1,000 in the archers detachment.
[1501] Arrian 5.12.1, seems to imply three *taxeis* of *pezhetairoi* ordered to cross independently, but makes no further mention of them.
[1502] Fuller, 1958, 187.

Type	Number	Total
Greek Mercenary Cavalry	500	500 Cavalry
Three *Pezhetairoi Taxeis*[1503]	4,500	
Greek Mercenary Infantry	Unknown	5,000? Infantry

These figures present us with a significant problem: the total is simply too small. This would give the army a total strength of only around 22,000 infantry and 8,800 cavalry, inconceivable at this stage of the campaign, especially after recent reinforcements of Bactrians, Scythians etc. into the army. The discrepancy seems to be in allied and mercenary troops; the Macedonians do all seem to be accounted for. We have no positive information as to the location of the missing troops, but I believe that we can posit two solutions: firstly, some troops were probably still campaigning in the region between Taxila and the Hydaspes; Alexander had marched through this area rapidly upon hearing news of Porus' location, and the region was probably not fully subjugated. The second is a tactical consideration: Alexander's tactic at the Hydaspes was deception, and Porus was no fool. In order to properly "sell" the deception, Alexander would have had to employ rather more than two forces.[1504] One can imagine other detachments of minor troops, mercenaries etc. could have been sent both upstream and downstream with no intention of crossing, simply to confuse the Indians and hopefully divide their forces further by having to shadow these non front-line-troops. This would be similar to the use of such troops in all of the other set piece battles; they were assigned important tasks that did not involve actual fighting, but were critical to victory; i.e. to act as a second line etc.

The Crossing

Along with all of the misdirection and deception strategies being employed by Alexander to effect an unopposed crossing, he was lucky that the night when he chose to conduct the operation was alive with thunder and lightning, as well as torrential rain. The round trip for Alexander's flanking force was of the order of 58km.[1505] considering the conditions and distance involved; we must seriously rethink the timeframe for the crossing. 29km was often a full day's march by the main army, and that was during the day.[1506] This figure should be increased: the full host and baggage train was not present, but that is surely more than negated by the weather, the muddy ground and unknown terrain involved. A 29km night march in the conditions described in the sources would be challenging; a long night march coupled with a difficult river crossing for 9,000 infantry and 5,300 cavalry stretches credulity, especially when we consider an equally long march to Porus' camp and two battles also to be fought. With this in mind I would propose that Alexander marched to the crossing point and waited in the forests and gullies of the area; hence their prominence in Arrian's descriptions, and their importance to Alexander in the selection of the crossing point. If Alexander set out at dusk, and that would have occurred even earlier than normal, given the thunderstorms and torrential rain described in Arrian,

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[1503] Meleager, Attalus and Gorgias.
[1504] His and Meleager's.
[1505] Or 36 miles; the crossing point was approximately 18 miles upstream.
[1506] Engels, 1978, 153-4.

then he could have reached the crossing point perhaps at midnight or at the latest in the early hours of the morning.[1507] Once there, he rested his troops until just before dawn.[1508]

Just before dawn, when it was still dark and the sky obscured by heavy clouds, the rain stopped and the wind died down a little from the violent gales of the previous night.[1509] It would have taken some considerable length of time to embark the army, get to the island, disembark and then find the ford and cross it safely in order to reach far shore. A number of trips would have been required given the limited numbers of transport vessels and inflatable straw rafts available.[1510] With regard to the island landing, I suspect that Arrian is correct in that it was unintentional;[1511] Alexander would have been aware of the existence of the islands somewhere in the river at that point, and would have had some idea of their extent having read the scouting reports that may have been provided for him, but he would have intended to avoid them during the crossing and get straight from one bank to the other. It is easy to see, however, that during the total darkness of the night, coupled with the generally poor conditions of a river in spate, Alexander crossed a few hundred metres further upstream than he intended and landed on the island instead of the intended mainland. From the perspective of the historian, this is an understandable error and one that can be easily explained, but one that could have been disastrous had a ford from the island to the far bank not been found.[1512] If they had been stranded on the island and had to re-embark before achieving the shore, Porus surely would have discovered the attempt and moved troops to oppose it. We should also remember that in all likelihood only the first batch of troops would have landed on the island; others would have realised the mistake and crossed at the originally intended point.

Initial Engagement

Alexander's crossing was witnessed by some of Porus' scouts who were too few in number to oppose the crossing. No doubt obeying orders, these men quickly rode back to Porus' camp to report the news; Bosworth[1513] reasonably estimates that the Indian king would have known about the crossing within two hours of its commencement. This gap, coupled with the time it would take to muster a detachment of troops, and the time it would take to advance to the crossing point, would have been more than enough time for Alexander's advance force to cross the river safely. If Arrian's account is correct, then it is clear that Porus immediately knew this was a crossing by Alexander's forces, and not the expected reinforcements of Abisares that the vulgate claims.[1514] What Porus still did not know, of course, was the size of the crossing force; it could quite easily have been a

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[1507] I would suggest a little earlier than 03.00 hrs suggested by Ashley, 1998, 319.
[1508] Arrian 5.12.3-4; Curtius 14.23-4; Plutarch *Alex.* 60.3-4.
[1509] Another example of the many times in Alexander's career when luck played a significant part.
[1510] Arrian 5.9.2-3; there do seem to have been large numbers of these, but they were of limited value in transporting large bodies quickly and safely.
[1511] Arrian 5.13.2. *Cf.* above p.208.
[1512] Arrian 5.13.2, gives us an intriguing description of the crossing: "It was no easy task, as the water in the deepest part was up to the men's armpits and the horses' necks". This is a good indication, and few are ever really given, of the small size of warhorses in the ancient world. *Cf.* Sidnell, 2006.
[1513] Bosworth, 1995, 281.
[1514] Curtius 8.14.1; Diodorus 17.87.2.

diversion to move him away from camp and allow the bulk of the Macedonian army to cross unopposed. With this possibility in mind Porus first dispatched a rapid cavalry force to engage Alexander.

Arrian tells us that Alexander was prepared for an immediate engagement, and set up his forces accordingly.[1515] The Sacan horse archers were deployed in a defensive screen ahead of the main force of infantry[1516] alongside the Saca cavalry, to their right, were the *agema* of Companion Cavalry.[1517] Arrian's text at this point is seriously defective:[1518] there is no mention at all of the left wing of cavalry, or of the Bactrians and the two hipparchies of Companions that we also know crossed. It is likely that the Bactrians were stationed on the left to play the role of the Thessalians, with the Companions stationed alongside the *agema* on the right, but we have no positive proof of this. The order of battle of the infantry is equally confused by Arrian: there is no mention of the two *pezhetairoi taxeis* that crossed with Alexander.[1519] It is likely that these units were the last to cross the river,[1520] and may not have made the shore by the time the army set off south, thus have been omitted, but carelessly without a proper explanation. Some modern commentators[1521] have assumed, without discussion, that the cavalry were set up *alongside* the infantry; but Arrian's text is quite specific that the cavalry were in front of the infantry. Schachermeyr[1522] recognised the problem in Arrian, and proposed that the Macedonian cavalry only advanced once Alexander knew that the force commanded by Porus' son was small,[1523] leaving the infantry behind.[1524] This again does not coincide with the text of Arrian who has Alexander set up in this order immediately after landing. The battle order is no doubt in part connected with the cavalry crossing first, the infantry following later, as there were limited boats/rafts available. Once the cavalry had crossed, Alexander probably felt that delay was unacceptable, and so he set off in the direction of Porus, and instructed the infantry to follow once safely across the river.[1525] This is not as foolish as it may at first appear, as there were three *taxeis* of *pezhetairoi* who were waiting to cross and link up with Alexander closer to Porus' camp; therefore he would not be without infantry for long.

[1515] Arrian 5.13.2.
[1516] Probably following some way behind.
[1517] Bosworth, 1988, 128.
[1518] Bosworth, 1995, 283.
[1519] Arrian 5.12.2.
[1520] Bosworth, 1995, 283.
[1521] Devine, 1987, 99-100; Fuller, 1958, 191.
[1522] Schachermeyr, 1973, 425, n.518.
[1523] I have assumed throughout that Arrian 5.14.3 is correct in asserting that the Indian commander was Porus' son; Curtius 8.14.2 claims him to have been Porus' brother, named Hages, frequently emended to Spitaces. It seems certain that the force was commanded by one of Porus' relatives, but several died in this engagement and the main encounter that there is confusion in the sources as to which of them led the advance force: Bosworth, 1995, 289.
[1524] Bosworth, 1995, 285.
[1525] Arrian 5.13.2.

On the initial engagement, there are two major difficulties: the size of the Indian force, and the location of the skirmish. Arrian tells us that Aristobulus has the battle occur at the crossing point, or at least very close to it.[1526]

> According to Aristobulus, Porus' son arrived on the scene with sixty chariots before Alexander effected his second crossing – from the island, that is; and in view of the fact that the crossing was no easy matter even without opposition, he might have prevented it altogether if his Indians had left their chariots and attacked on foot Alexander's leading troops as they were trying to get on shore. But in point of fact he merely drove past, and permitted Alexander to cross without molestation.

This account of Aristobulus clearly cannot be correct. It seems inconceivable that Porus could have reacted so quickly to the news of the crossing to enable a force, even a small and rapid one, to reach the crossing point before Alexander had crossed. To allow his forces sufficient time to gain the shore safely was precisely why Alexander had chosen a crossing point 150 stades from the main camp.[1527] It is also inconceivable that, if Porus' son had arrived in time to engage the Macedonians as they crossed, he would have given up such a prime tactical advantage and allowed them to gain solid ground before offering battle. We know Porus was an honourable man, but this would be suicide from his son. Whilst the exact location of the skirmish is unknown, it is clear that it was not at the crossing point, but some where between there and Porus' main camp.

The size of the Indian force also presents difficulties: Aristobulus notes only 60 chariots, and suggested that these could have been extremely dangerous to Alexander had they dismounted and fought on foot at the crossing point.[1528] Alexander's letter, reported in Plutarch,[1529] gives 1,000 cavalry and 60 chariots; Ptolemy has 2,000 cavalry and 120[1530] chariots whilst Curtius gives the largest force at 4,000 cavalry and 100 chariots.[1531] Given the fact that this was a rapid reaction force of Indians, Ptolemy's figure seems plausible enough and is supported by the ease with which Alexander's 5,000 cavalry defeated them. The chariots presented no difficulties at all to the Macedonians: the heavy rain had left the terrain in a very boggy condition[1532] that reduced the effectiveness of the chariots to virtually zero,[1533] and the Indian cavalry were simply outclassed by the Macedonians and Saca horse archers.

[1526] Arrian 5.14.3*f.*
[1527] Hamilton, 1956, 27.
[1528] Arrian 5.14.3.
[1529] Plutarch *Alex.* 60.8.
[1530] Arrian 5.14.4; It is Arrian's figures that Lonsdale, 2007, 88, chooses to believe.
[1531] Curtius 8.14.2.
[1532] Arrian 5.15.2.
[1533] If they had managed to get there at all, given the conditions.

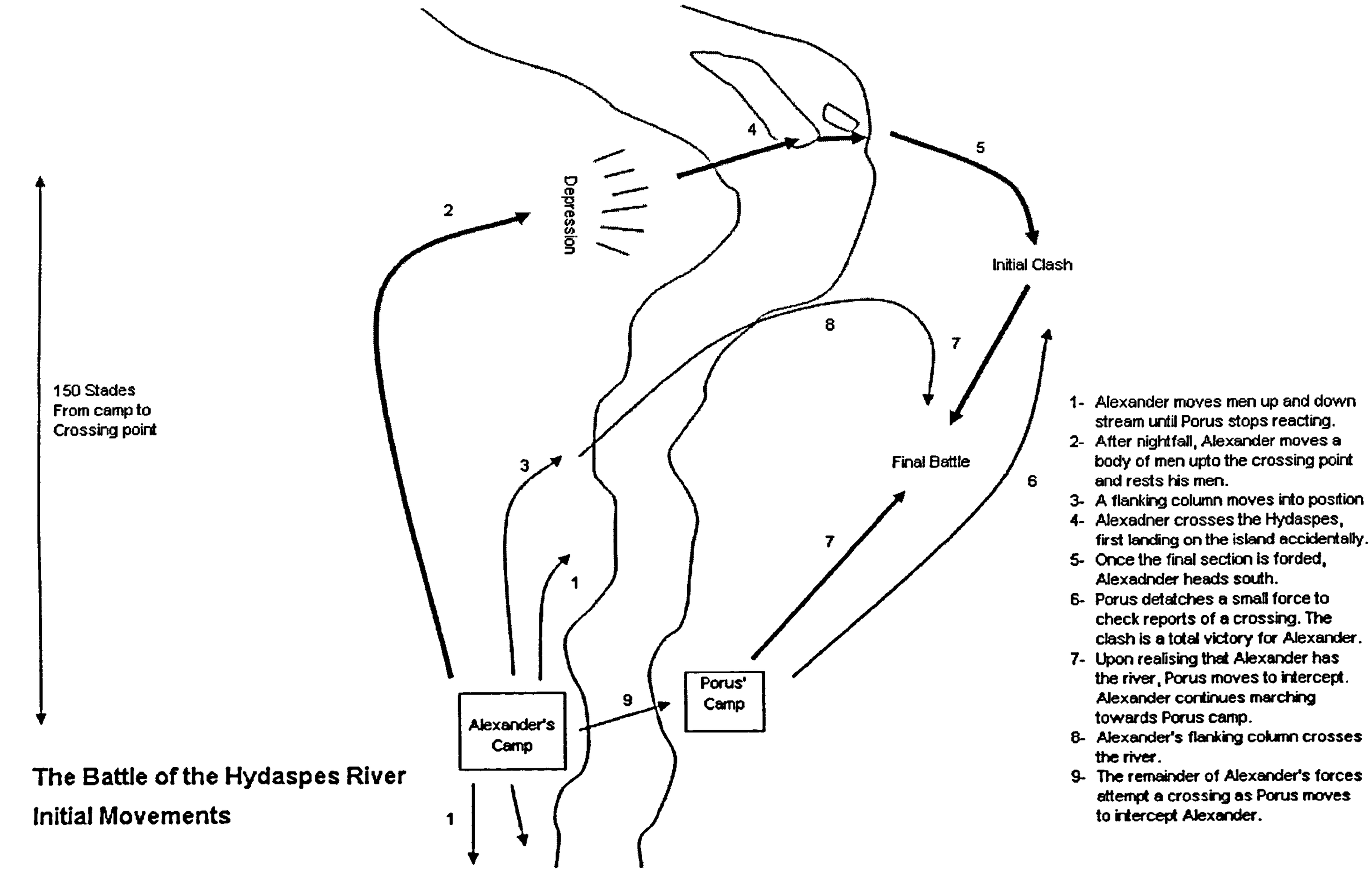


Figure 40: The Battle of the Hydaspes River – Initial Movements.

Devine[1534] is almost certainly correct to note that the Indian force was never intended to defeat Alexander, simply to prevent a crossing, or, failing that, to harry the Macedonians and report back on the size of the attacking force. That they were forced into battle and quickly routed speaks volumes as to the rapidity of movement of the Macedonian and allied cavalry unity. Along with the defeat, Porus' son was killed in the skirmish; the survivors fled back to Porus with the news that Alexander was present in person and that he had successfully crossed the Hydaspes in force.

The Battle of the Hydaspes River

The survivors of the initial encounter reported to Porus that Alexander was marching towards him. This news must have dismayed Porus: his strategy had failed, both to keep Alexander from crossing and, if an engagement was required, to delay it until Abisares' reinforcements had arrived. Porus now had no choice but to risk a battle; he left some elephants and a small contingent of troops at the main camp site to prevent Craterus from crossing,[1535] and marched northwards towards the rapidly advancing Macedonians.[1536]

Conscious of the mud, Porus moved north until he came upon a relatively dry, sandy area, on a stretch of level ground,[1537] he halted and made final preparations for the coming battle. His order of battle is described in detail by Arrian:[1538] Porus believed, with considerable justification, that his elephants were his greatest weapon; accordingly these were drawn up along the length of the front line.[1539] Both the numbers of elephants, and their spacing, are much debated in the sources.

Arrian claims that Porus commanded 200 elephants, and that they were spaced at around 30m.[1540] If this were the case it would make the line extend to a length of 6km,[1541] far too large for the proposed numbers of Indian infantry. Diodorus and Curtius[1542] give us more realistic numbers of elephants: 130 and 85 respectively. They do not supply the spacing between them, but if we accept Arrian's figure, then their battle lines would be 3.9km and 2.55km respectively, both of which still seem excessive. Polyaenus' statement was that the elephants were stationed 15m apart:[1543] whilst we still can not know how many elephants Porus had at his disposal, if we take the median figure of 130 then the battle line would extend 1.95km.[1544] If we assume that the tactical manuals[1545] are correct

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[1534] Devine, 1987, 100.
[1535] Arrian 5.15.3, it seems that he was making final preparations for an attempt.
[1536] Plutarch *Alex.* 60.9; Arrian 5.15.4.
[1537] Hamilton, 1956, 27.
[1538] Arrian 5.15.5-7; and in slightly lesser detail by Diodorus 17.87.4-5; Curtius 8.14.9-13; and Polyaenus *Strat.* 4.3.22.
[1539] Arrian 5.15.5.
[1540] Arrian 5.15.4. Elephant spacing in the Greek was 1 plethron, equivalent to 100 feet.
[1541] Devine, 1987, 101, claims 4 miles, equivalent to 6.5km.
[1542] Diodorus 17.87.2; Curtius 8.13.6.
[1543] Polyaenus *Strat.* 4.3.22 notes 50 feet.
[1544] Devine, 1987, 101, believes that the lowest value of Curtius (85 elephants) should be used, giving a line of 1.25km.
[1545] Asclep. *Tact.* 4.1; Aelian *Tact.* 11.2; state 3 feet.

in that an infantryman needed around 0.9m[1546] in compact formation then that would mean 2,130[1547] men spread across the front of the Indian line.[1548] If the Indian troops were drawn up 14 men deep then we have a total force of Indian infantry of 29,820. We also know that the infantry extended beyond the elephants on either wing so the actual figure would be slightly higher; but it is almost exactly the figure provided by both Arrian and Curtius of 30,000.[1549] It is also the median figure for the size of the Indian infantry contingent from Diodorus' 50,000 and Plutarch's 20,000.[1550]

Can we assume that the Indian infantry were occupying 0.9m space? [1551] The 0.9m spacing in tight formation is an argument that comes from the size of the hoplite shields excavated at, amongst other places, Olympia; these shields ranged in size from 78.7cm to 100cm. Given that the individual soldier would have occupied rather less space than a shield of this diameter, the size of the shield is the critical factor in an estimation of the space occupied by a trooper.[1552] Less than 0.9m would have meant overlapping shields and an inability to use the spear properly, wider than this would have meant gaps opening up between the shield wall, and therefore this could hardly be described as a close formation.[1553] This argument does assume that the Indians were using shields of roughly the same size as those of a Greek hoplite, but even if the shield was smaller the men could not physically stand very much closer so a 0.9m frontage seems the most reasonable.

Whilst some members of the front line of Indian infantry were positioned between the elephants, the depth of the line would have meant that many extended behind them. We also know that the infantry were flanked on either side by cavalry wings in a typical ancient formation, and it is possible that Porus had enough chariots left over from the initial encounter, i.e. ones that were not sent with his son, to provide an advance screen in front of each wing of cavalry.[1554] Porus himself was in the front line sat atop the largest and most intelligent of the elephants at the extreme left of the elephant line.[1555] This can possibly be taken to be an indication that even in the near east and beyond, the tendency of hoplite armies[1556] to move to the right as they advanced was thoroughly ingrained as

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[1546] Polybius 12.20-2 notes, referring to Roman Legionaries, each individual needed 1.83m (6ft) per man in loose formation: but in tight formation used for battle then 0.9m (3ft) was more usual. If 1.83m were required, then the battle line of the Indians would have extended a quite ridiculous 8km (5 miles); Hamilton, 1956, 27, notes this as unlikely.

[1547] 1950 (total front of line)/0.915 (space occupied by an individual) = 2,130 (men across the front line).

[1548] Devine, 1987, 101, arrives at a figure of 1,400 after a similar exercise.

[1549] Arrian 5.15.4; Curtius 8.13.6.

[1550] Diodorus 17.87.2; Plutarch *Alex.* 62.2.

[1551] Lorimer, 1947, 76 n.3.

[1552] Van Wees, 2004, 168-9, fig. 16 for a visual representation of hoplites in a formation occupying 0.9m spacing, which he does not accept as being used. At 185-6 he argues that hoplites would have occupied 1.82m spacing in close formation, and that "close formation" refers to a formation that had a significant gap between shields, "The classical hoplite phalanx can therefore hardly have operated with intervals of much less than six feet (1.8m)".

[1553] *Contra*, Van Wees, 2004, 185-6 who argues classical hoplites fought with a relatively low density formation and occupied gaps of 1.8m.

[1554] Devine, 1987, 101.

[1555] Polyaenus *Strat.* 4.3.22.

[1556] Or at least heavily armoured bodies of infantry if the term hoplite should not apply.

Porus stationed his best elephant in that area; although this was probably more to do with Porus' anticipation of Alexander launching his assault from his right. Whilst elephants would not react in the same way as infantrymen, Porus still elected to place his best troops on the left perhaps unconsciously, or perhaps to be closest to Alexander who was positioned on the Macedonian extreme right as was usual.

The sources are again at odds regarding the size of the cavalry forces on the Indian wings: Arrian has 4,000, Diodorus 3,000 and Plutarch 2,000,[1557] although he also mentions that 1,000 cavalry were included in the advance force that was defeated by Alexander; 2,000 cavalry on either wing seems plausible. There are two things that we can say with some certainty:

1. Porus was outnumbered in cavalry, even if Arrian's figure is correct. Alexander's cavalry strength probably stood at 5,300.
2. The Macedonian front was overlapped by the Indian line as at Gaugamela. 6,000 infantry occupied a frontage of around 700m if they were deployed eight ranks[1558] deep and in a compact formation.[1559] Bosworth[1560] uses these figures to argue that Porus had only 50 elephants and considerably fewer infantrymen, thus the lines would be the same length. I believe it is unsound, however, to argue as to the size of the Indian force from the frontage of the Macedonian army. The result would be that the Indians had something similar to Alexander's 6,000 infantry, vastly fewer than even the smallest of the ancient estimates.

The final element of Porus' force were the chariots, each capable of carrying an impressive six man crew. Diodorus has them at "more than a thousand",[1561] whilst both Arrian and Curtius claim 300.[1562] Devine[1563] is probably correct in assuming that the 300 may have been the total contingent at the start of the campaign, and therefore included the 60 already lost in the initial engagement. A remaining force of around 240 is probably as close to the truth as we can get.[1564]

Alexander reached the battlefield far in advance of his infantry, but due to the fundamentally defensive nature of the Indian formation[1565] he was able to halt his advance and await the arrival of his infantry with little fear of interference from Porus.[1566] We can reasonably conclude that the delay was quite a lengthy one; a march of perhaps 15-25km[1567] would normally have taken the infantry the best part of a day:[1568] when we

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[1557] Arrian 5.15.4; Diodorus 17.87.2; Plutarch *Alex.* 62.2.
[1558] Devine, 1987, 101.
[1559] A front of 750 men each occupying 0.9m (3 ft): *cf.* p219 n.15.
[1560] Bosworth, 1995, 292.
[1561] Diodorus 17.87.2.
[1562] Arrian 5.15.4; Curtius 8.13.6.
[1563] Devine, 1987, 101.
[1564] Hamilton, 1956, 27, claims that 300 were still available to Porus during the main battle; whereas Heckel, 2008, 116*ff* omits them entirely from his account of the battle.
[1565] More on this later.
[1566] Arrian 5.16.1.
[1567] Around 10-15 miles from the crossing point to the battle site.
[1568] Engels, 1978, 153-6.

factor in the night march of an equivalent length and the crossing, the infantry must have been exhausted by the time they arrived. Arrian tells us that "Alexander had no intention of making the fresh enemy troops a present of his own breathless and exhausted men".[1569]

Once they did arrive, there was a further delay by Alexander, entirely sensibly, to allow them to rest before the final exertion of the battle. To facilitate the rest that was required by the infantry, and to confuse the enemy, Alexander ordered his cavalry to manoeuvre continually along the front of the line; this was partially intended to prevent the Indians from observing Alexander's final dispositions, and partly to hide the resting infantry from Porus.[1570]

It could be argued that Porus missed a golden opportunity to catch the Macedonians unprepared for battle, without being organised correctly and with the infantry exhausted from their long march; but I think this underestimates Porus. He evidently realised that a defensive posture was his best chance of victory whilst attempting to prevent Alexander's crossing, partly because his lack of numbers, partly due to a probable lack of quality in infantry and finally to the fact that he was awaiting reinforcements that he knew were on the way. The fact that the Macedonians chose to rest, and thus delay the battle, increased the chance that the army of Abisares would arrive to attack the Macedonians in the rear prior to, or during, the battle.[1571] There is a further point, however: Porus' infantry almost certainly were not of the same quality as the Macedonians, and they may not have had the ability to advance in an unbroken line for any great distance. If he had attempted to advance on the unprepared Macedonians, any gaps that opened could easily have been exploited by even tired *pezhetairoi*; gaps of this kind were precisely what Porus had to avoid if he was to have any chance of victory. He would also know that his cavalry were fewer in number than their Macedonian equivalents. The real strength of the Indian army, and their main chance of victory, lay in their elephants. Devine is therefore not necessarily correct in calling the Indian strategy supine:[1572] Porus had simply recognised his own strengths and weaknesses, and was deploying his troops accordingly.

None of the sources give a chronology for the time of the battle, but it can only have been late afternoon by the time the infantry arrived and were sufficiently rested for the battle to commence. This time interval, coupled with their lack of desire or ability to take the initiative, allowed the Indians to complete their final dispositions. It also allowed Alexander the opportunity to study the enemy, as he had done at Gaugamela, and make tactical adjustments accordingly.

Alexander easily deduced the Indian strategy: the elephants were placed at regular intervals with the infantry packed in close order between and behind them[1573] and the

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[1569] Arrian 5.16.1.
[1570] The armies were easily within sight of each other.
[1571] This was essentially exactly like the Athenian delay at Marathon to give the Spartans as much time as possible to arrive; in both battles, of course, the expected reinforcements never arrived.
[1572] Devine, 1987, 101.
[1573] Arrian 5.16.2.

cavalry protecting each wing. It would have been evident to Alexander that Porus' basic tactic was to rely heavily upon his elephants; therefore he would have expected the infantry and elephants to advance in a straight line, somewhat slowly, with the cavalry protecting the flanks. Alexander would have expected no tactical variations from this plan, as it would have led to the flanks of the infantry being compromised, or to gaps opening in the line. Porus' strategy was very rigid, but it suited the army at his disposal perfectly. With Porus' strategy evident, Alexander's response was first to eliminate the Indian cavalry to enable the flanking attack that he so preferred. By separating the cavalry from the elephants, who would have been incapable of adjusting their momentum to help without utterly destroying the formation, he would give himself the best chance of victory, and he would also be enacting his favoured strategy of attacking from two directions at once, from the front with the infantry and the sides with the cavalry, after the Indians were disposed of, of course.

Alexander opened the battle with an attack on the Indian left, coupled with the most discussed order in the entire battle - the order given to Coenus. The understanding of this is fundamental to the entire battle, and it therefore must be discussed in detail. There are three surviving versions of the order to Coenus. Arrian tells us:[1574]

> Coenus was sent over to the Indian right with Demetrius' hipparchy and his own, his orders being that when the enemy moved their cavalry across to their left to counter the massed formations of the Macedonian mounted squadrons, he should hang on to their rear.

Curtius presents the actual words of Alexander, a later invention in all likelihood. Alexander turned to Coenus and said:[1575]

> Together with Ptolemy, Perdiccas and Hephaestion I am going to attack the enemy left wing. When you see me in the thick of the fight, set our right wing in motion and attack the enemy while they are in confusion. Antigenes, Leonnatus, Tauron, you three will attack the centre and put pressure on their front.

Plutarch presents the shortest version:[1576]

> Alexander, remembering the threat of the enemy's elephants and their superior numbers, attacked their left wing and ordered Coenus to charge against the right.

[1574] Arrian 5.16.3.
[1575] Curtius 8.14.15.
[1576] Plutarch *Alex.* 60.10.

The first part of Arrian's statement has been interpreted in three ways, all of which I believe are incorrect. Tarn proposed, and then rejected, the idea that Coenus was sent to Alexander's right on the basis of references to Porus' left previously.[1577] Coenus was, therefore, already stationed on Alexander's right wing. The second interpretation, which is accepted by Tarn, was that Coenus was sent to Alexander's right, as a feint.[1578] The third is that Coenus was sent against the Indian right in order to attack it.[1579] The second comes closest to the truth as I hope to demonstrate.

Bosworth divided the complexities of the order into two separate areas: Coenus' command, and the tactical picture as a whole; it seems sensible to follow this lead.[1580] Firstly, Coenus' command: Curtius, along with Arrian,[1581] presents a picture of Coenus in command of the Macedonian left wing. We know with some certainty that he was formerly in command of an infantry *taxis*, and that he was separated from it and given the command of a hipparchy for this battle. There appears to be no other reference to his being in command of a hipparchy, yet here it is described as "his own" in exactly the same way as established commands like those of Craterus and Perdiccas.[1582] We also know that the infantry *taxis* that he had formerly commanded continued to bear his name, and continued to be commanded by him after the battle.[1583] The most confusing element of all is that the hipparchy appears from nowhere; it is not present in Arrian's detailed order of battle.[1584]

Berve[1585] suggested the possibility that Coenus in fact held both commands simultaneously; the greatest argument against this hypothesis is that it would be unique in the entirety of Alexander's career. There are many instances of individuals being promoted from one command to another, but the name attached to their former command always changes; Cleitus is known as a *taxiarch* before the Hydaspes,[1586] and as a hipparch afterwards, but there is no evidence at all that his infantry command continued to be his after the Hydaspes.[1587]

Hammond[1588] proposed that there was an exchange of commands, Craterus being given the command of the hipparchy of Cleitus, and that Coenus commanded the hipparchy of Perdiccas. This seems unnecessarily complicated and unlikely; it relies upon there being two individuals named Cleitus and only four hipparchies present during the battle.[1589]

[1577] Tarn, 1948, 2.196, n.1.
[1578] Tarn, 1948, 2.196, n.1, originally suggested by Bauer in 1898.
[1579] Devine, 1986, 103.
[1580] Bosworth, 1995, 294-5.
[1581] Curtius 8.14.15; Arrian 5.16.3.
[1582] Arrian 5.11.4; 5.22.6.
[1583] Arrian 5.21.1.
[1584] Bosworth, 1995, 294.
[1585] Berve, 1926, 1.109-10.
[1586] Arrian 5.12.2.
[1587] Arrian 5.22.6; 6.6.4; Bosworth, 1995, 294.
[1588] Hammond, 1980b, 299, n.142; Hammond, 1980c, 466.
[1589] Bosworth, 1995, 294.

Tarn[1590] argued that Coenus was promoted to the command of his hipparchy at Taxila, but that the *pezhetairoi taxis* that was formerly his continued to bear his name, even though he ceased to be its commander. There is one example of this occurring in Alexander's career following the death of Hephaestion;[1591] but this is almost certainly a special case given his intimate position with Alexander. The continuation of the use of Hephaestion's name is an honorary measure for a royal favourite, and thus not a parallel for this situation at all. It is also inconceivable that Alexander was lacking in individuals with sufficient ability to take on the role of *taxiarch*, and any individual who did would have had his name attached to it.[1592]

The most plausible theory, and one that deserves greater examination than it was originally given, was proposed by Anspach more than one hundred years ago.[1593] He suggested, briefly, that the hipparchy that carried his name did not consist of Macedonian Companion Cavalry at all, but comprised the Bactrian and Sogdian cavalry that are mentioned by Arrian at 5.12.2; these troops do not appear in the battle narrative a few pages later. The large body of cavalry on the right commanded directly by Alexander appears to have comprised the *agema*, the two hipparchies of Hephaestion and Perdiccas, and the Dahae horse archers.[1594] The only cavalry troops omitted are the hipparchy of Demetrius and the Bactrian and Sogdian cavalry;[1595] it is further reasonable not to invent cavalry troops that we have no positive evidence for, in the shape of another hipparchy. It is certain that Coenus held a cavalry command at the Hydaspes, and the only troops that do not have a commander are these Bactrian and Sogdian allied cavalry. We can also go further than this and suggest why Coenus was given command of these troops and not another individual, perhaps someone with more experience of cavalry operations. In the winter of 328/7, Coenus commanded a successful and final campaign in northern Sogdiana against Spitamenes. Shortly before the final battle of that campaign, Spitamenes recruited a large body of Bactrian and Sogdian cavalry; these evidently fought well in what Arrian describes as a "vigorous engagement",[1596] Spitamenes losing some 800 men and the Macedonians 25. Coenus apparently made a sufficient impact upon the Bactrians and Sogdians as, while Spitamenes was attempting to make his escape, they deserted to Coenus' command. These cavalry troops were presumably the ones that, shortly after this, accompanied Alexander into India.[1597] The fact that Coenus had a pre-existing relationship with these troops, whose loyalty could easily be questioned, is, I would argue, the main reason that Coenus was given their command during the battle. Bosworth uses the fact of Coenus' pre-existing relationship with the Bactrian and Sogdian cavalry to argue that Ptolemy probably would have emphasised this connection, noting that he

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[1590] Tarn, 1948, 2.146.
[1591] Arrian 7.14.10.
[1592] Bosworth, 1995, 294.
[1593] Anspach, 1903, 54.
[1594] Bosworth, 1995, 295.
[1595] There were probably eight hipparchies in India, but only four are attested at the battle, a clear indication in my view that Alexander had launched many more operations on the far side of the Hydaspes to mask his crossing than we have evidence for.
[1596] Arrian 4.17.3.
[1597] Arrian 5.11.3

had with him the unit of Demetrius and the horsemen whom he had led in Sogdiana.[1598] On this hypothesis, Coenus was temporarily detached from his own command, that of an infantry *taxis*, to take control of potentially difficult and dangerous troops, men whose loyalty was not absolutely certain, during the battle.

The tactical picture regarding the orders issued to Coenus has been much discussed; many historians[1599] have adopted an approach that is far too analytical and source-critical, resulting in self-imposed difficulties.[1600] Arrian's text is relatively simple to follow and is coherent with other sources.

Coenus' initial position in the line is clear from the text of Arrian. The infantry had arrived and were rested after a long march. These were then drawn up in the centre as usual, facing the opposing infantry and elephants, but with explicit orders not to engage the enemy.[1601] The initial assault was to be conducted by Alexander and the Companion Cavalry stationed to the right of the infantry, against the Indian left flank: again this was almost always Alexander's opening gambit. Both Tarn and Hamilton[1602] agree that this means there is no doubt that Coenus attacked against the Indian right, as we know he attacked the opposite flank to Alexander. Bosworth believes that the same picture is presented by both Plutarch and Curtius,[1603] who state that he (Coenus) was ordered to attack the right; this would have to mean the Indian right, but this is not specified in the sources. A statement that Coenus was ordered to attack the right could refer to an attack on the Macedonian right, but if so, this is explicable as we shall see. If this were the case, then Coenus is essentially playing the role of Parmenio, although in a more aggressive fashion than the old general was usually ordered to do. Bosworth believes that there was nothing "surreptitious or secretive"[1604] in Coenus' role,[1605] but I believe he is mistaken. Green and Fuller both argued for some kind of feint move, interpreting ὡς ἐπί to mean exactly that. Hamilton and others[1606] have noted that Arrian frequently uses ὡς ἐπί and ἐπί interchangeably and are simply variants of each other.[1607]

Although we seemingly cannot use Arrian's language to argue conclusively for anything untoward in Coenus' orders, perhaps it can be used as supporting evidence. It seems that Arrian does use ὡς ἐπί on occasion to refer to a feint, but that it does not exclusively mean that.[1608] We also know that Coenus was ordered to hold off his attack until the cavalry on the Indian right wing had moved to reinforce the Indian left that would be under attack from Alexander. Once they began to move, he was to pursue them

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[1598] Bosworth, 1995, 295.
[1599] Devine, 1986, 102-5; Hamilton, 1956, 27*ff.*
[1600] Bosworth, 1995, 295.
[1601] Arrian 5.16.4.
[1602] Tarn, 1948, 2.196, n.1; Hamilton, 1956, 27.
[1603] Bosworth, 1995, 295. Plutarch *Alex.* 60.11; Curtius 8.14.15.
[1604] Bosworth, 1995, 295.
[1605] Fuller, 1958, 197; Green, 1974, 397.
[1606] Hamilton, 1956, 27-8; Tarn, 1948, 2.196; Devine, 1987, 110-11; *contra* Bauer, 1899, 105-128. *Cf.* above p. 84.
[1607] Devine, 1987, 110-11, for statistics on how frequently this is the case.
[1608] See above p.228 fn.1162.

behind the Indian lines and attack them in the rear as they arrived to support Porus' left wing. We must ask the simple question, why would the Indian right wing move, or be ordered to move, in support of the Indian left it they were standing opposite a significant body of enemy cavalry? This would quite simply be courting disaster by inviting the flanking attack that Alexander so coveted. The answer is simply that they would not, so something else must have occurred. I believe that Coenus was initially stationed with Alexander on the Macedonian right, but was ordered to circle around the right flank of the Indian army once the Indian cavalry had begun to move. Arrian's use of *ὡς ἐπί* could refer to this; whilst it was not specifically a feint attack as he did not engage the enemy, he was simply being kept away from the area of the line that he was assigned to attack until the most opportune moment. As far as the Indians were concerned, all of Alexander's cavalry were concentrated against their left and thus reinforcing this sector with cavalry from the right that were not engaged was a sensible strategy; it is unfortunate for Porus that this was exactly what Alexander's strategy required.

Hamilton and Tarn both discussed, at length, the movement of the Indian cavalry;[1609] Tarn[1610] speculated that the Indian move was an offensive one, that Porus had seen an opportunity to defeat Alexander himself at a time when he only commanded two hipparchies and the *agema*. This hypothesis would presuppose a terrible risk if we assume that Coenus was already on the Macedonian left, or moving towards it, as noted above. Hamilton's[1611] suggestion is far more sensible: the presence of a large body of Macedonian cavalry on the Indian left forced Porus to reinforce that sector; the move was thus fundamentally defensive and caused not by a perceived weakness, but as a counter to Alexander's superiority in numbers. If we look at the battle from Porus' point of view for a moment, and apply the flanking tactics that Alexander was so fond of, Porus was presented with a golden opportunity to attack the Macedonian heavy infantry in the flank or rear; something that Alexander would certainly have done while expecting his outnumbered cavalry[1612] to hold their position long enough for the battle to be won. As noted, however, Porus' strategy was fundamentally defensive, and thus the cavalry moved to reinforce the Indian left. Even after the detachment of Coenus, Alexander would have perhaps 3,000 cavalry and the Indians 2,000;[1613] hardly an overwhelming disadvantage for the Indians, and yet still they chose to reinforce this sector. I would count this as Porus' biggest mistake in the entire battle; failing to take the opportunity for a flanking attack, and choosing a defensive posture automatically. Porus was essentially putting total faith in the ability of his elephants to defeat the Macedonian centre, a battle that had not yet even been joined.

In defence of Porus' movement of cavalry to reinforce his left wing, Devine makes the curious argument that Porus believed his infantry to be "immune from attack by the Macedonian cavalry, thanks to the presence of the elephants, and would not need a

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[1609] Hamilton, 1956, 29; Tarn, 1948, 2.196.
[1610] Tarn, 1948, 2.196.
[1611] Hamilton, 1956, 29.
[1612] This would normally have been the Thessalians led by Parmenio.
[1613] Assuming that Arrian's figure of 4,000 is accepted and they were divided evenly between both flanks; Devine, 1987, 104, assumes Porus may have only had 1,500 cavalry on each flank, taking into account losses suffered by his son in the initial skirmish.

cavalry flank-guard on either wing."[1614] This argument is simply untenable; it assumes that Alexander would have been foolish enough to attack the Indian centre from the front, in direct opposition to the elephants. This is something we know Alexander contemplated and rejected, realising the danger posed to his cavalry by the elephants. Even if Alexander were to attack the Indian centre from the front, the cavalry flank guards would not have been effective anyway. A flank guard of cavalry is designed to prevent the side of an infantry body from attack, and also to prevent any potential encircling manoeuvre that would have the infantry attacked in the rear. If Alexander were to attack the infantry in the flank or rear, then the elephants were not in a position to prevent this, being stationed as they were at regular intervals across the front. Devine calls the Indian transfer of cavalry "common sense";[1615] I would suggest it was a serious tactical error that failed to take advantage of the potential for a flanking attack against the Macedonian centre.

Wilcken argued that the transfer came as a response to Alexander's charge, but Arrian's[1616] text states quite clearly that it was before troops had engaged in hand to hand combat, but after Alexander's mounted archers had engaged the Indians.[1617] If this is the case, then it is further evidence that Coenus was with Alexander on the Macedonian right until relatively late, just before the initial charge, in fact.[1618]

We must also consider the location of the movement of Coenus' cavalry, and of the Indian detachment. Was it between the lines or behind them? Devine[1619] notes that most modern commentators assume that the cavalry passed between the lines, i.e. in front of the elephants. This is an area where more recent scholarship has changed its view, and most now assume that the Indians moved behind their own lines to reinforce their left wing.[1620] Veith is one of the few scholars who actually argued that the cavalry moved in front of the elephants, rather than simply assuming it; but his arguments were comprehensively refuted by Hamilton,[1621] and I think it is now beyond doubt that the Indians moved behind their own lines.[1622] If we are assuming, as I have done, that Coenus' cavalry units started out on the Macedonian right along with Alexander,[1623] then we must also ask the question of their movements. The sources clearly give us the impression that stealth was required of Coenus, and thus a movement behind the Greek line would seem sensible. We must also note that a movement in front of the Greek lines would mean them coming closer to the elephants that they would have been desperate to avoid; although they would not have actually engaged them. It was the noise of the elephants trumpeting that would frighten the Macedonian horses, and this was to be

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[1614] Devine, 1987, 104.
[1615] Devine, 1987, 104.
[1616] Wilken, 1932, 182. Arrian 5.16.3.
[1617] Hamilton, 1956, 29.
[1618] *Contra* Heckel, 2008, 115*ff*, has Coenus on the Macedonian left from the start.
[1619] Devine, 1987, 104.
[1620] Heckel, 2008, 115*ff;* Bosworth, 1995, 296; *cf.* earlier works, for example, Dodge, 1890, 2.558, and Smith, 1914, 69-73.
[1621] Veith, 1908, 137. Hamilton, 1956, 29.
[1622] *Cf.* Bosworth, 1988, 129.
[1623] *Cf.* Devine, 1987, 104*ff*; *contra*, Heckel, 2008, 115*ff*.

avoided at all costs, hence Alexander's orders for the flank attack in the first place. "The overriding factor is that untrained horses will not approach elephants...Certainly Coenus could not have passed in front of them":[1624] Hamilton is here referring to Coenus' pursuit of the Indians, rather than of his cavalry transferring from one side to the other, but the principle of the argument is the same.

There is a possibility that the orders to Coenus that we have preserved in the sources are not the full extent of the orders given to him. Bosworth[1625] has noted that Coenus was only given orders based upon the eventuality of the Indian right moving to reinforce its left; no mention was given of what he was to do if that move did not occur. Griffith[1626] brings up the point that Arrian may have missed out the first part of the order, that which would deal with this situation. If Arrian's text is defective it is more likely to be Ptolemy who is at fault, given that Arrian did preserve the orders to Craterus in great detail only a few pages previously. Bosworth[1627] notes that if the Indian move did not take place, then Coenus would have to deal with any attack from the Indian right himself, or more likely simply hold his position. This would have been much as Parmenio had to do for many years in every set-piece battle Alexander fought before the Hydaspes; on this interpretation, Coenus did not need orders specifically.

Bosworth is starting from the presumption that Coenus opened the battle stationed on Alexander's left; if I am correct that he was initially stationed on the right, which made the Indian movement of troops far more likely, and thus the order would come into play, then we have a slightly different tactical situation. The brevity of the orders to Coenus would make sense; if the Indians moved, then he was to circle round the Macedonian left and follow the Indian cavalry, eventually implementing a flanking attack. If the Indians did not move, then he would simply stay with the right and overwhelm the Indian cavalry on their left quickly and easily, following this up with the flanking attack from that direction, and the concomitant encirclement of the Indian infantry. If this second eventuality came to pass, then Alexander would have been implementing the strategy that had brought him victory in every set piece battle of his career; a victory that would be primarily won by himself and the Companion Cavalry. With this in mind it is more than possible that this was Alexander's strategy; he prepared for both possibilities, of the Indian cavalry moving, or of it staying put: both would result in a flanking attack and encirclement of the Indian centre. Both would also limit the amount of time that his heavy infantry would have to engage the Indian elephants.

The orders to Coenus are followed immediately by the orders given to the infantry commanders, and these are equally problematic. Arrian[1628] mentions three individuals, Seleucus, Antigenes and Tauron. Curtius also notes three infantry commanders, but omits Seleucus, and instead includes Leonnatus. Neither Arrian nor Curtius make any reference to Cleitus, whose *taxis* we know to have been present at the battle, and who

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[1624] Hamilton, 1956, 29.
[1625] Bosworth, 1995, 297.
[1626] Griffith in Hamilton, 1956, 29.
[1627] Bosworth, 1995, 297.
[1628] Arrian 5.16.3.

should have been named.[1629] Seleucus appears to have been in command of the Hypaspists by this time, and Tauron commanded the light armed troops including the archers.[1630] Antigenes[1631] makes his first appearance in the sources here, and in Arrian he only re-emerges in command of one of the *pezhetairoi taxeis* which Craterus marched through the central provinces on the return to Babylon.[1632] Tarn[1633] suggested that Antigenes was Coenus' son, and that he commanded his *taxis* at the Hydaspes, and later took over its command permanently after his death. This cannot be the case, however, as we know that Cleitus' *taxis* was *asthetairoi*[1634] and not *pezhetairoi*,[1635] all of which were retained by Alexander and not given to Craterus.[1636] We also know that Coenus' command was given to Peithon after his death.[1637] The missing *taxis* whose command was assumed by Antigenes can only have been that of Cleitus who we know was transferred to the command of a hipparchy after the battle.[1638] We do not know where Cleitus was at this point, but he does not appear to have taken part in the battle, perhaps as a result of some illness or wound.[1639] With regard to the infantry commanders, the identification of Leonnatus is the only outstanding issue. Heckel[1640] believes him to have been the bodyguard, but he could equally be the son of Antipater[1641] who we know was a trierarch at the Hydaspes.[1642] If Antigenes commanded Cleitus' *taxis*, then Leonnatus was in command of Coenus' *taxis*. The reverse is also possible; the effect is the same.

With regard to the actual orders to the infantry commanders, Arrian tells us that they were:

> not to engage until it was evident that the
> Indians, both horse and foot, had been thrown
> into confusion by the Macedonian cavalry.

[1629] Curtius 8.14.15. Bosworth, 1995, 297.
[1630] Arrian 5.13.4. Devine, 1987, 105 suggested Tauron commanded the archers and *possibly* the light armed as a whole.
[1631] Heckel, 1992, 308-16.
[1632] Arrian 6.17.3.
[1633] Tarn, 1948, 2.146, 314; this hypothesis is unlikely and relies on a clever but very uncertain emendation of the text of Justin (13.4.17); Bosworth, 1995, 298. This Antigenes is more than likely the future commander of the Silver Shields, the elite group of heavy infantry that developed from the hypaspists. Antigenes is first attested in that role in 321 by Arrian (*Succ.* F.1.35), and he was probably first given any command in the hypaspists corps in 331 (Curtius 5.2.5). There is no suggestion, however, that he held a command with the hypaspists at the Hydaspes, or later under Craterus; in all likelihood he received his command of the Silver Shields in 322, when Neoptolemus (*cf.* Plutarch *Eum.* 1) was transferred from the hypaspists to the army in Armenia (Plutarch *Eum.* 4.2). Bosworth, 1995, 298.
[1634] Arrian 2.23.2.
[1635] For the difference, see English, 2009, 25-27.
[1636] Arrian 6.21.3.
[1637] Arrian 6.6.1.
[1638] Bosworth, 1995, 294.
[1639] Bosworth, 1995, 298.
[1640] Heckel, 1992, 99.
[1641] Bosworth, 1995, 298.
[1642] Arrian *Indica*. 18.6.

This is, of course, the crux of the matter, and provides us with ample information on Alexander's tactics for the battle, particularly when examined in conjunction with the orders to Coenus. Arrian tells us clearly, with no room for ambiguity, that the infantry were not to engage the enemy until they were in visible confusion as a result of his own flanking attack. The discipline of the Macedonian infantry, and of their commanders, is clearly demonstrated by the fact that this command was followed to the letter;[1643] the infantry only advanced when the Indian cavalry had been defeated and confusion reigned in the centre because some cavalry troops had fallen back onto the elephants and the infantry.[1644] Porus' fundamentally defensive strategy made it easy for the Macedonian infantry to stay out of the battle until the opportune moment, but we can also assume that less disciplined commanders might not have been able to prevent their men from engaging too soon.

The initial attacks by the horse archers were a vital element in the battle, as is recognised in the casualty lists.[1645] Their repeated attacks were all but impossible for the defenders to counter without dangerous gaps opening up. If the Indians had charged then Alexander would have had the situation he often craved, that of using a relatively minor unit to draw the enemy out of their pre-prepared positions to allow his favoured flanking attack. This was the case at the Granicus and at Gaugamela at the very least. Bosworth[1646] notes that this continued harassment prevented the Indian cavalry from reorganising themselves in order to meet the coming charge from the Companion Cavalry.

At this point in the battle, Alexander appears to have implemented a version of the same tactic that he used to open the battle of Gaugamela: he appears to have made an oblique movement to his right, away from the infantry, in order to make a flanking attack[1647] rather than a frontal attack against the Indian cavalry. This was for two good tactical reasons, firstly the horse archers would impede a direct frontal charge, and secondly Alexander's favoured strategy was to always attack an enemy in two directions simultaneously wherever possible.[1648] Devine[1649] spends considerable time on a discussion as to the formation of the Indian cavalry at this point, but it is not important; the main factor is that Alexander's movement forced the Indians to counter by extending their own line in an attempt to prevent a flanking attack.

Porus hoped that the arriving troops from his right flank would fill in any gaps that opened up as a result of his extending line. The brilliance of Alexander is that he had foreseen this tactic, and Coenus' orders were specifically designed to counter it. As the Indians began to transfer from their right to left, Coenus began his movement from the Macedonian right, encircling behind the Macedonian line and then following the Indian

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[1643] Arrian 5.17.3.
[1644] This is problematic, however; if the cavalry battle took place on the Macedonian right, how could the Indian cavalry have retreated through the Indian centre? I will try to explaim how this was possible below.
[1645] Arrian 5.18.3.
[1646] Bosworth, 1995, 299.
[1647] Arrian 5.16.4; *cf.* Arrian 3.14.6 for similar language.
[1648] Similar to the strategy used at the battle of Paraetacene where Peithon's horse archers held Eumenes' cavalry in position (Diodorus 19.29.1, 30.2), Bosworth, 1995, 299.
[1649] Devine, 1987, 106-7.

cavalry behind the Indian line.[1650] The Indian transfer would have been all but complete when they realised Coenus' cavalry were making a move to follow them. This was a disaster for Porus' strategy; if he continued to reinforce his right, then he would be attacked in the rear by Coenus' cavalry, if he turned his cavalry around to meet this threat, then gaps would inevitably open up in his left wing as it continued to extend.[1651] Porus' only solution was to divide the reinforcing cavalry into two; the strongest elements would move to the left wing, the weaker troops would wheel around and face the new threat posed by Coenus. Arrian notes that this division of forces by Porus was a disaster, both in terms of the confusion it created and for Porus' strategy as a whole.[1652]

In typical fashion, Alexander saw his moment to strike; As the Indians were extending their line on the one hand, and dividing their forces on the other, Alexander launched his flanking attack against the Indian cavalry. The Indians had, evidently, not been able to extend their line far enough to prevent Alexander from flanking it, largely because of a numerical inferiority. This was a critical moment in the battle, and Alexander was victorious without bloodshed to the Companions. Arrian tells us that:[1653]

> the Indians did not even wait to receive his charge,
> but fell back into confusion on the elephants, their
> impregnable fortress – or so they hoped.

The vulgate[1654] tradition only records the bare fact of the successful charge by the Companions, before moving to the more sensationalist material of the battle with the elephants.[1655]

Porus' carefully laid defensive strategy was in tatters; he was forced to move his elephants against the Companion Cavalry in order to prevent a flanking attack and the total destruction of his cavalry.[1656] The movement away from the centre gave the Macedonian centre the opportunity it was waiting for to take the offensive and finally join the battle: although Curtius strongly implies that they were already engaged by this point, this seems unlikely as the timing would have been poor: the tactical situation would not yet have been right.[1657] The confusion in the Indian ranks was rife at this point; all tactical cohesion had been lost. Curtius tells us that a small number of elephants led by Porus moved against the Macedonian centre in an effort to break the Greek infantry.[1658] The Macedonians were initially successful in the centre, but the reappearance of the elephants changed things: "Victors moments before, the Macedonians were now casting around for places to flee".[1659]

[1650] That the movement of cavalry occurred behind the Indian line is argued for above.
[1651] Polyaenus *Strat.* 4.3.22.
[1652] Arrian 5.17.2.
[1653] Arrian 5.17.2.
[1654] Diodorus 17.88.1; Curtius 8.14.17; Plutarch *Alex.* 70.10-11.
[1655] Bosworth, 1995, 300. *cf.* Diodorus 17.88.1; Curtius 8.14.17; Plutarch *Alex.* 70.10-11.
[1656] Arrian 5.17.3; Curtius 8.14.18.
[1657] Curtius 8.14.18.
[1658] Curtius 8.14.22.
[1659] Curtius 8.14.24.

Alexander, realising that his heavy infantry were singularly ill-equipped to deal with the elephants, moved his Agrianians and Thracian light-armed troops against the elephants and their mahouts. These skirmishers used javelins against the elephants and drivers, as well as the pressure exerted from the heavy infantry who had evidently regained some composure after the initial elephant charge.[1660] Curtius graphically described Macedonians being trampled by enraged elephants, as well as elephants picking up fully armed men and passing them over their heads to their drivers to be despatched.[1661] Arrian describes the battle as like no other Alexander ever fought; the success of the elephants filled the Indian cavalry with renewed courage and the recovered enough to make a coherent attack upon the Companion Cavalry,[1662] but ultimately they were no match for the Macedonians and they broke again. At some point during the confusion, Arrian tells us that Coenus reformed with Alexander's cavalry into a single body that made successive attacks on the Indian cavalry, and we can assume flanking attacks against the infantry given that this was one of Alexander's favoured strategies.[1663]

The pressure exerted by the skirmishers and heavy infantry from the front, and the Companion Cavalry from the right[1664] forced the elephants back onto their own troops in confusion; many of the mahouts who might have been able to maintain a semblance of control by now having been killed. Arrian graphically tells us:[1665]

> they trampled to death as many of their friends as enemies. The result was that the Indian cavalry, jammed in around the elephants and with no more space to manoeuvre than they had, suffered severely;...many of the animals had been wounded, while others, riderless and bewildered, ceased altogether to play their expected part, and, maddened by pain and fear, set indiscriminately upon friend and foe, thrusting, trampling, and spreading death before them.

The Macedonian infantry were in a better position to deal with the maddened elephants, having more space to manoeuvre and escape, but the Indians, trapped as they were, suffered badly.

[1660] Curtius 8.14.25.
[1661] Curtius 8.14.26-7.
[1662] Arrian 5.17.3.
[1663] Arrian 5.17.4; *cf.* Bosworth, 1995. 300.
[1664] We can assume the involvement of the Dahae horse archers too, although they are not specifically mentioned.
[1665] Arrian 5.17.5.

The battle wore on into the evening[1666] and, the elephants gradually became exhausted, their charges became ever feebler. Alexander again seized his chance and surrounded what remained of the entire Indian army, signalling for his infantry to lock shields and advance upon the enemy in a solid mass.[1667] The expression "lock shields" used in Arrian is curious; if the heavy infantry were equipped as we might expect them to have been, with sarissa and *pelta*, then it would quite simply have been impossible to "lock shields": the *pelta* was too small. I have argued earlier[1668] that on occasion, as in the Shipka Pass, the Macedonians were occasionally equipped as regular hoplites having first commandeered the shields of the mercenaries and allies (who were not employed then and probably not here either). I'm not convinced that Alexander would have equipped his heavy infantry with the hoplite shield here as the night crossing of a river in spate would be difficult enough with the small shield, doubly so with a larger one. If the infantry were still equipped with the *pelta* then the order reported by Arrian is simply a reference to forming in the most compact formation available, not literally to "lock shields". Following the same argument as used with the shield, I am not convinced that the sarissa was used at the Hydaspes for much the same reason. The sarissa is not specifically mentioned at the Hydaspes by any source, and indeed it is not mentioned at all after Gaugamela. For the Hydaspes I believe the infantry were equipped with the *pelta* and hoplite spear which I argued earlier would have been carried with the army in great numbers for just such an occasion.

There is some evidence that the sarissa was used at the Hydaspes. Alexander produced decadrachms of the battle depicting Porus as mahout being attacked by a Macedonian infantryman wielding a spear of such length that it can only have been a sarissa;[1669] this was likely a stylised depiction showing the *pezhetairoi* wielding the iconic weapon of the Macedonian heavy infantry, rather than an actual representation of events.

The Indian cavalry and Infantry suffered severe losses, and those that were able to flee through any small gap in the Macedonian cavalry line did so. These were hunted down mercilessly by Craterus' fresh troops that had been crossing the Hydaspes during the battle.[1670] Arrian tells us that Craterus began to cross when he saw Alexander's triumphant success; but this cannot be the case: if he was able to overcome the Indian troops still left at the main camp, and chase down fleeing Indians, he must have begun crossing as soon as the battle was joined to allow enough time to ferry across sufficient troops to be effective. Porus surrendered to Alexander only when there was obviously no chance of victory, and their exchange is well known, but not relevant here save to say that Porus was reinstated in his kingdom which was also subsequently expanded. If Porus'

[1666] Plutarch *Alex.* 60.11; tells us that the enemy was not overcome until the eighth hour. This only gives us a general picture that it must have been evening as the Macedonians had to march from the crossing point and defeat the Indian advance force before this battle was fought, we can reasonable assume it would not have started before mid day.
[1667] Arrian 5.18.1.
[1668] See above p.29 n.126.
[1669] Bosworth, 1995, 301.
[1670] Arrian 5.18.2.

enemies had been hoping to use Alexander to remove him from power, and thus increase the size of their own kingdom, they had spectacularly misjudged the new Great King.

Losses

Only Arrian and Diodorus provide us with casualty figures for the battle.[1671] Arrian's figures are atrocious, yet expected, underestimates as far as Macedonian losses are concerned: 80 Infantry and 230 cavalry.[1672] Diodorus' figures are a little more realistic: 280 cavalry and over 700 infantry. Arrian's infantry figure, however, is specific only to the force "which had been 6,000 strong in the first attack".[1673]

This 6,000 is a reference to the two *taxeis* and the total of the hypaspists. If we can assume that there would have been losses amongst the light infantry, those that were in amongst the elephants most of the time, then Diodorus' figure looks the more realistic.[1674]

The recorded losses for the Indians are the converse of the Macedonian: unbelievably high. Arrian gives 20,000 infantry and 3,000 cavalry, Diodorus does not distinguish between troop type but gives 12,000 dead and 9,000 prisoners;[1675] almost the same total number. Both also note the capture of the surviving elephants and the destruction of all of the Indian chariots.[1676] The only thing that we can really learn from the figures for losses was that the fighting was hard, Macedonian losses were relatively high with the Indian losses being significantly higher; more than this we are not in a position to say.

The Hydaspes campaign was intricately planned by Alexander; he again saw a means of recycling an earlier strategy with great success, that of crossing the river upstream and unopposed as I believe occurred at the Granicus seven years earlier. Alexander managed to effect a potentially extremely tricky crossing of a major river in spate and tricked Porus to allow him the time to do so unopposed. The main battle also shows tremendous tactical and strategic planning. He immediately determined Porus' strategy and the greatest strength of the enemy army and designed a strategy of his own to counter it. The orders to Coenus were a gamble, but one that was calculated against Porus' defensive strategy. Alexander gambled that, concentrating all of his cavalry initially on his own right (so I believe), he would force Porus to concentrate his cavalry in that same sector, and that Porus would not take the opportunity to launch a flanking attack on Alexander's infantry. The orders to Coenus were nothing short of brilliant when taken in conjunction with another recycled strategy, that of a movement to the right to extend the enemy's front and force gaps, first used of course at Gaugamela. The third brilliant use of an old strategy was to draw out the enemy cavalry onto terrain of his own choosing by the use of his Dahae horse-archers; some would have to be sacrificed for this

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[1671] Arrian 5.18.3; Diodorus 17.89.3. Devine, 1987, 108.
[1672] Broken down into 10 Dahae horse archers, 20 Companion Cavalry and 200 other cavalry.
[1673] Arrian 5.18.3.
[1674] Devine, 1987, 108.
[1675] Arrian 5.18.3; Diodorus 17.89.1-2.
[1676] Diodorus 17.89.1-2, the only source to mention the loss of the Indian chariots.

to work, but they were not Macedonian and therefore Alexander would not have been bothered unduly by this. The sacrifice of a few non-Macedonian troops to achieve victory over Porus was a small price to pay, and one that had been paid previously during all of his set-piece battles.

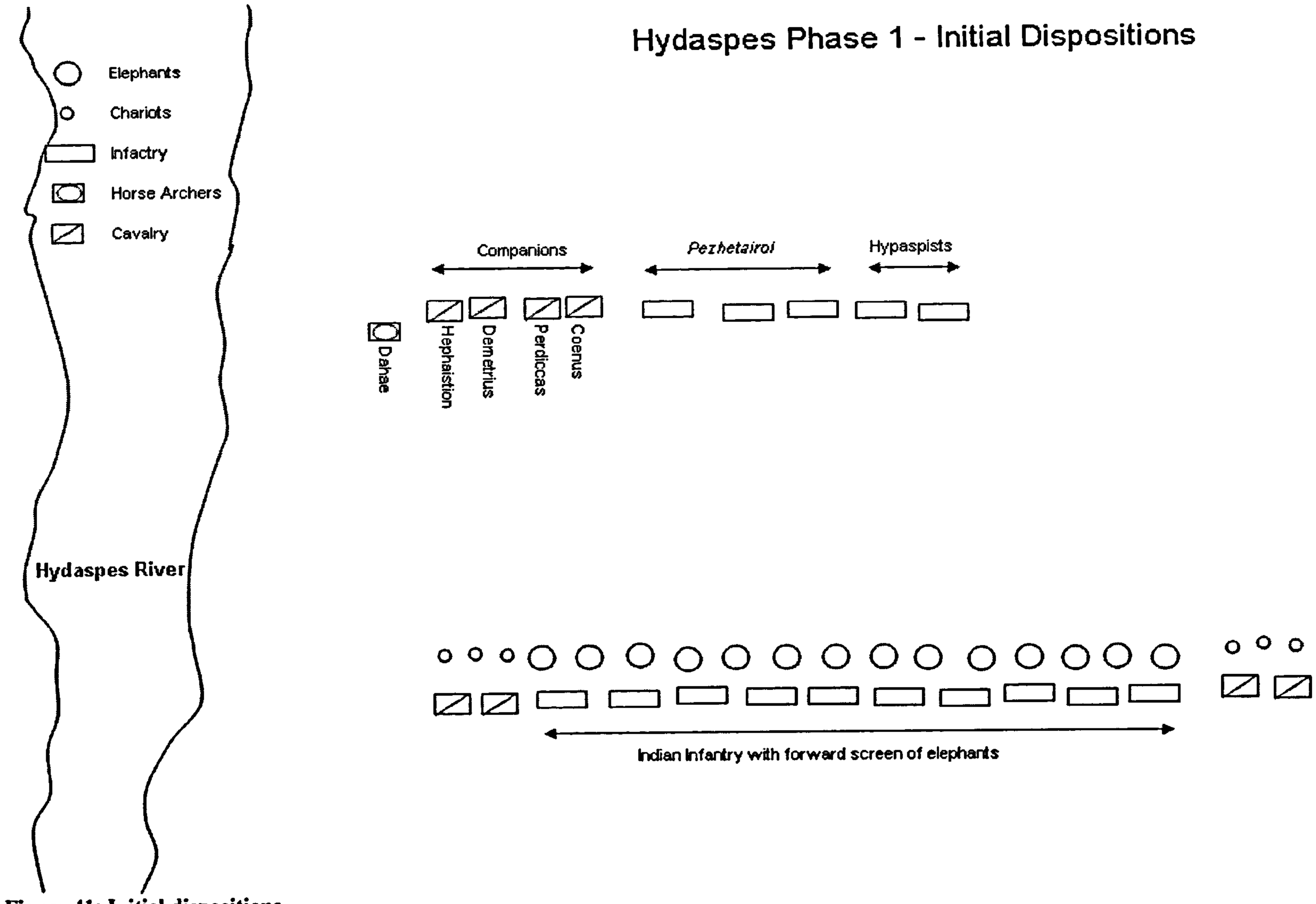


Figure 41: Initial dispositions.

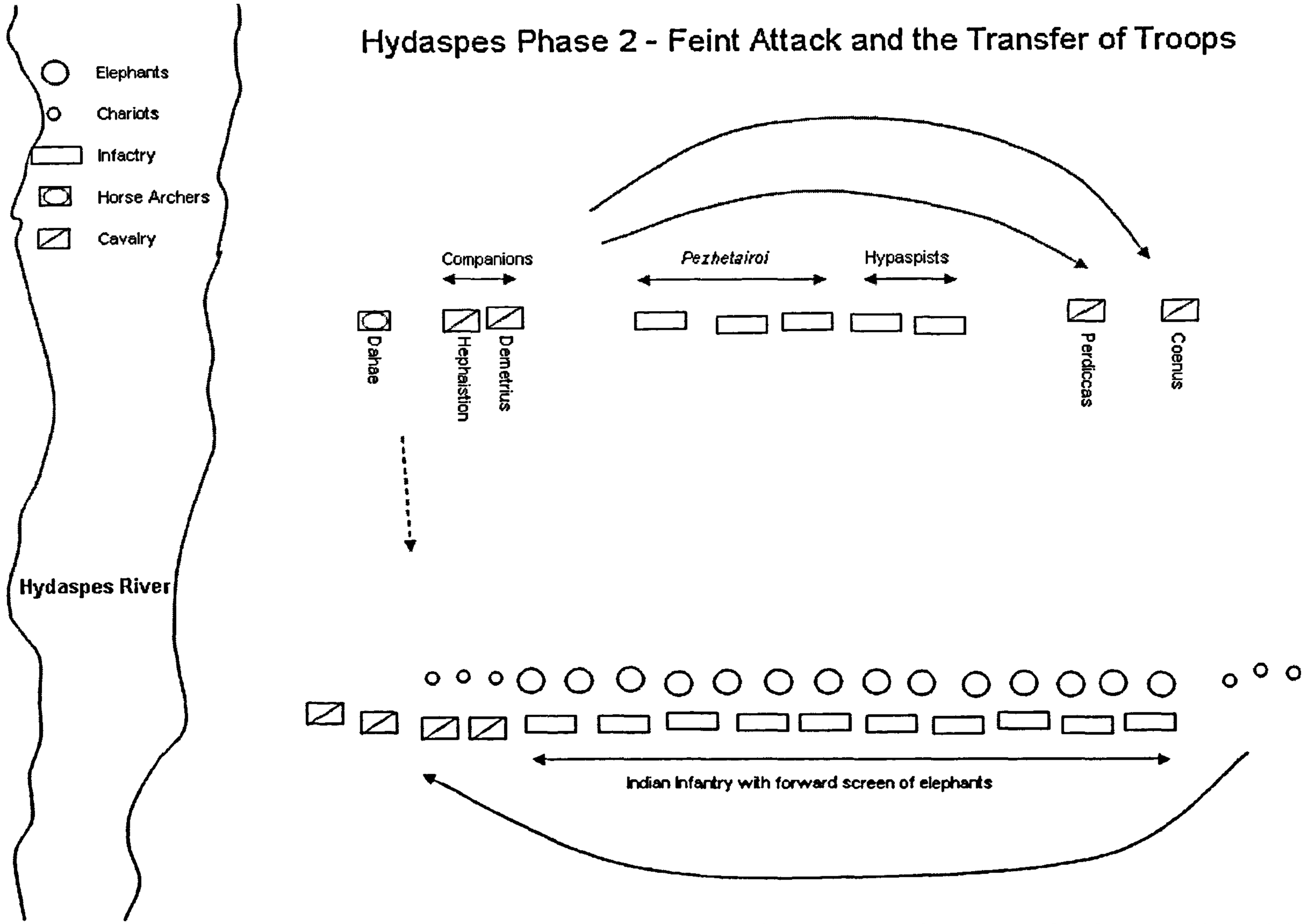


Figure 42: Alexander makes a feint attack to draw the Indian cavalry from their right to their left. He then transfers Coenus to his own left.

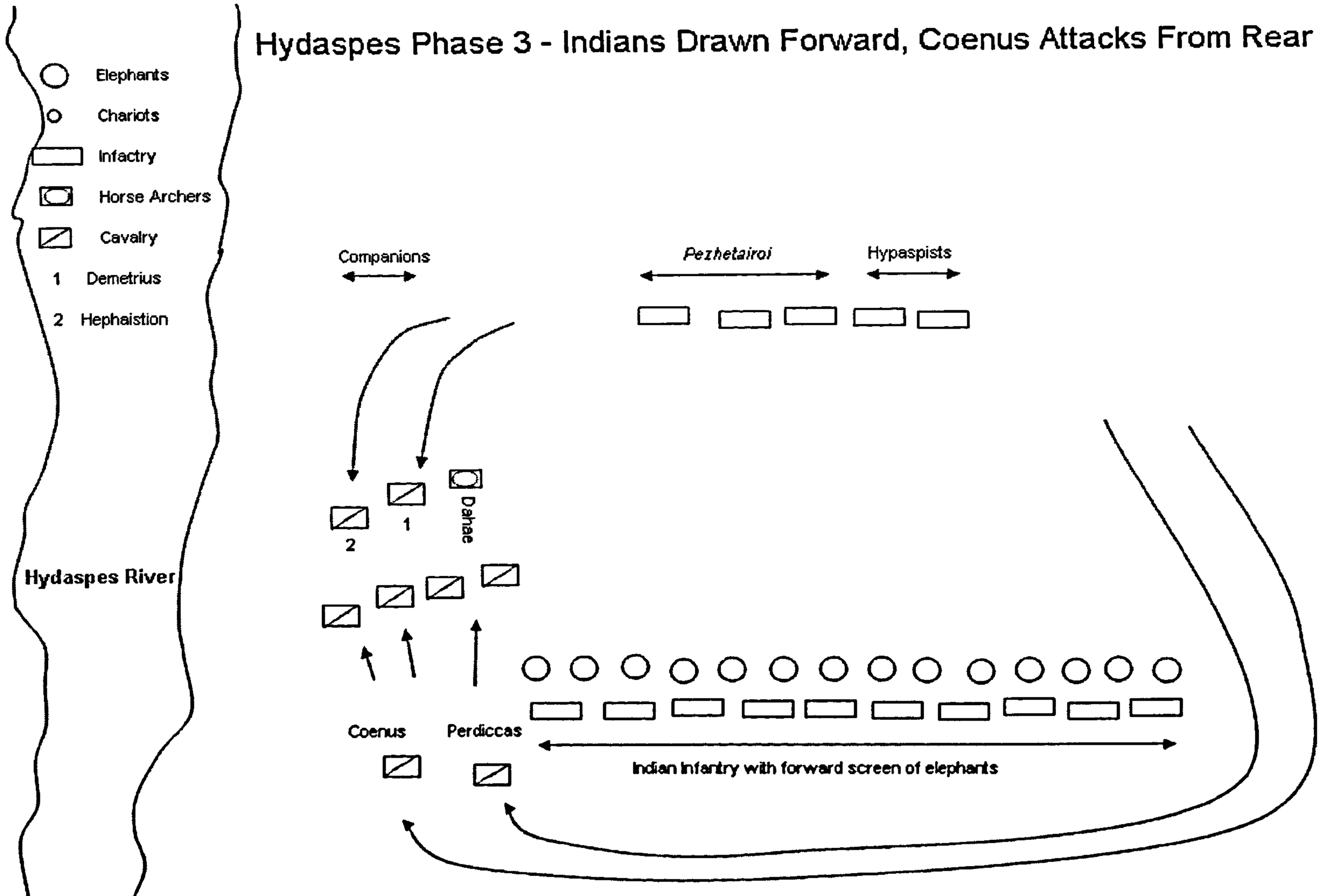


Figure 43: Indian cavalry drawn forward to be engaged by the Companions. Coenus continues his movement behind the Indian lines and attacks Indian cavalry from behind. Indian chariots prove ineffective.

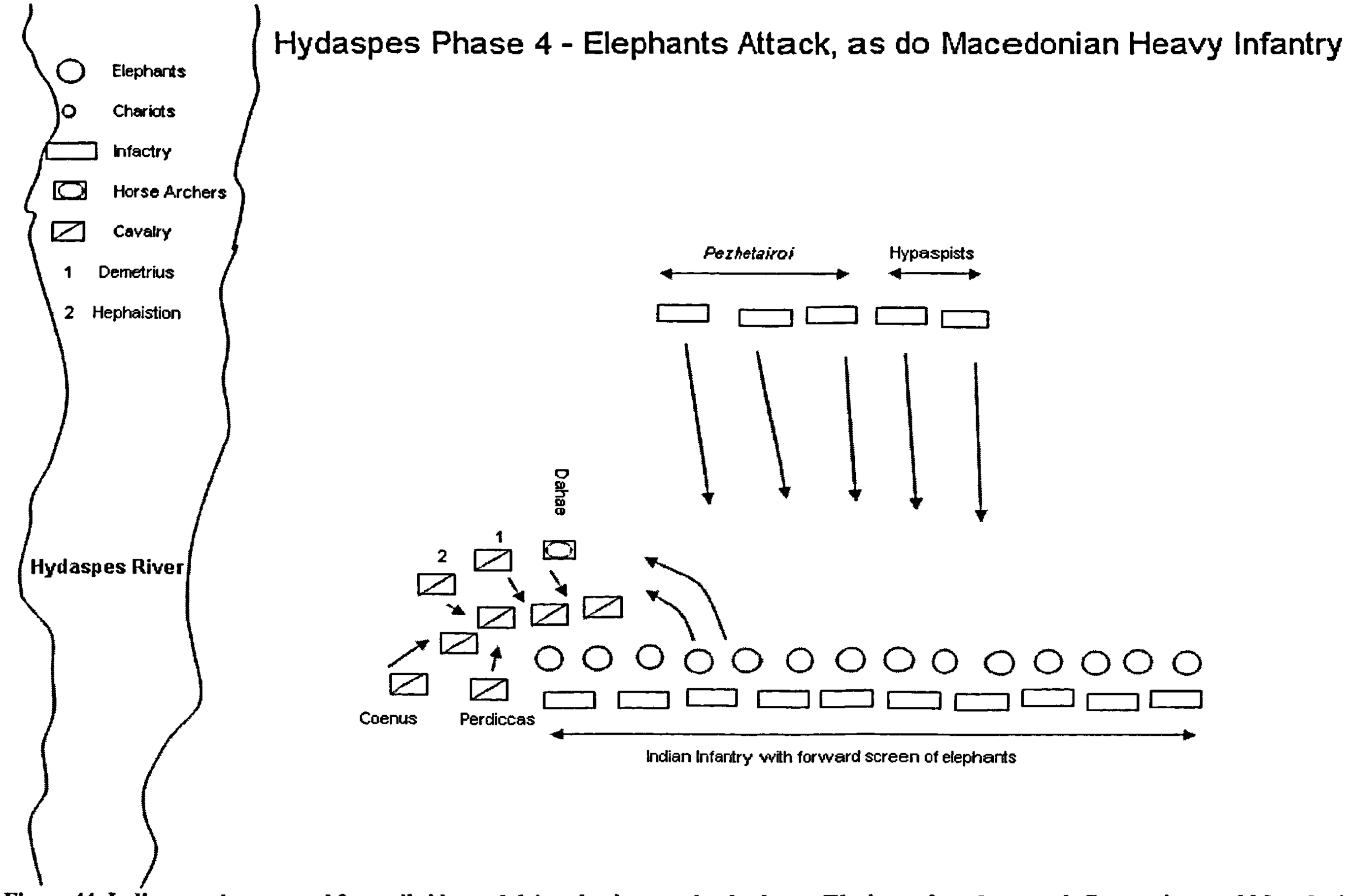


Figure 44: Indian cavalry engaged from all sides and driven back upon the elephants. Elephants forced to attack Companions and Macedonian heavy infantry, seeing their opportunity, begin to advance.

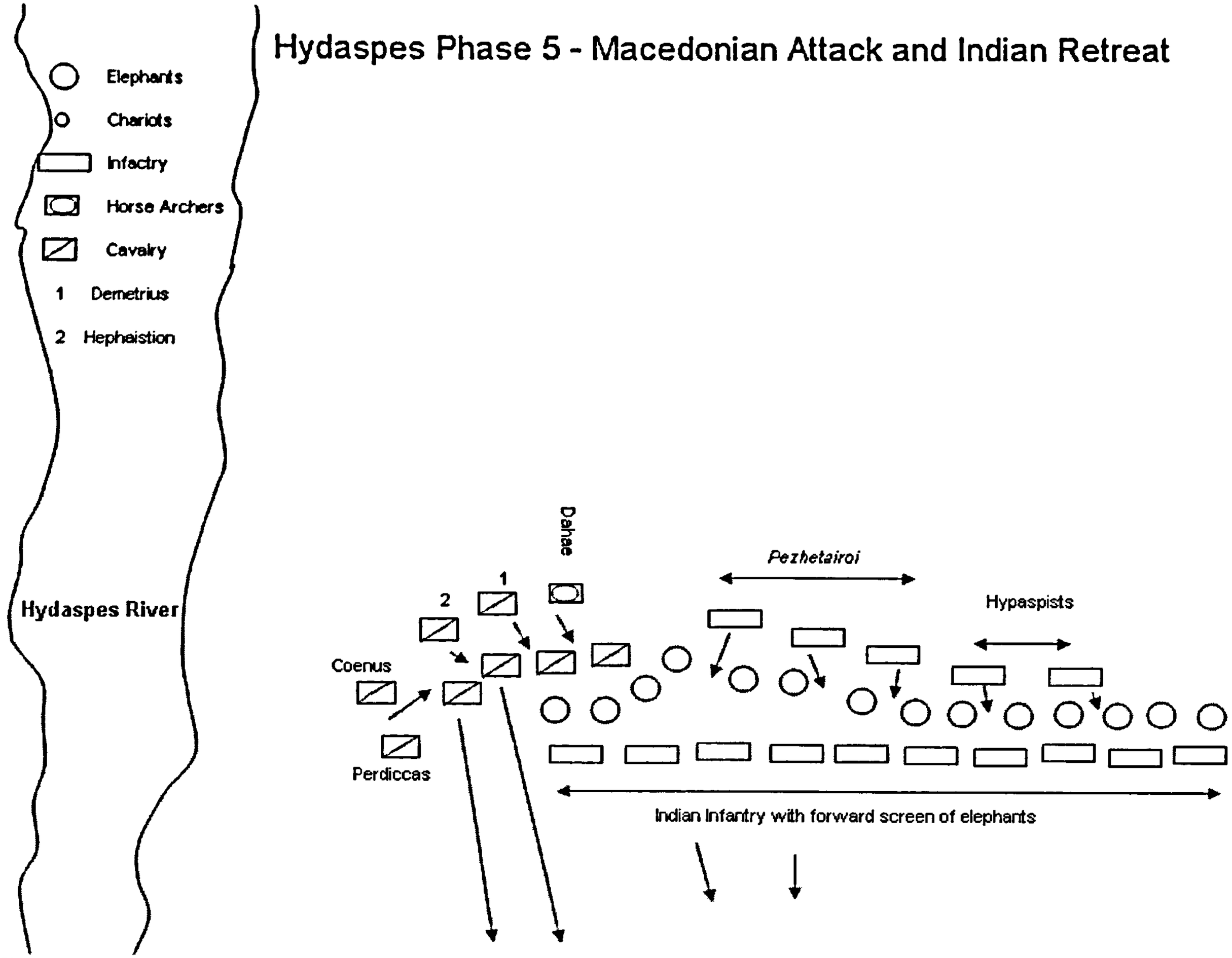


Figure 45: Indian cavalry breaks and retreats, Macedonian infantry presses the elephants and Indian infantry who also break.

Chapter 9

The Journey to Babylon – The Final Campaign

Following victory at the Hydaspes River, Alexander resumed his march east, after first leaving Craterus evidently to construct a further series of outposts in Porus' realm.[1677] Arrian tells us of a series of campaigns against some 37 cities in the area between the Hydaspes and Acesines, east of Porus' kingdom.[1678] The smallest of these cities apparently contained 5,000 people; the largest more than double this. That the numbers are exaggerated hardly seems worth mentioning, but the fact is the campaigning continued apace.

Along with a number of minor campaigns, the only one deserving of mention is the siege of Sangala. Alexander's intelligence network had informed him that an independent Indian tribe called the Cathaei were preparing to resist him, Alexander immediately changed direction and two days later was in the vicinity of Sangala.[1679] The siege took essentially the same form as that of Massaga, first an engagement outside the city, secondly a siege of the city, thirdly the final assault once the siege engines had been constructed and deployed.[1680]

The initial engagement took place on a hill outside the city; around the hilltop the Cathaei placed three consecutive defensive rings of carts.[1681] Their intention was to force the Macedonian infantry's formation to be broken as they passed through or over the carts, thus allowing the defenders to fall upon a disorganised enemy.[1682] Alexander did what I have tried to argue he always did: in the words of Arrian "Alexander modified his tactics to suit the circumstances".[1683]

Instead of blindly attacking the defenders, Alexander used the same tactic that had been so successful only weeks earlier at the Hydaspes: he opened the battle with his Dahae horse archers firing upon the defenders from a distance; this time it was to prevent the defenders attacking Alexander's forces whilst they were still deploying. Arrian again now mentions Cleitus as a cavalry commander; his hipparchy had evidently performed well enough at the Hydaspes for him to be given its permanent command. I would argue one exception to this, however: Arrian also mentions the "special cavalry hipparchy"[1684] in conjunction with Cleitus' command. This special hipparchy I would argue was that which Cleitus had commanded at the Hydaspes, which is to say it consisted of cavalry recruited in Bactria and Sogdiana. Cleitus was evidently transferred from this hipparchy

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[1677] Arrian 5.20.2.
[1678] Arrian 5.20.4; he later (6.2.1) refers to some 2,000 cities between the Hydaspes and Acesines Rivers. Strabo 15.1.3 (686), 33 (701) and Pliny *NH*. 6.59 both note 5,000 cities in the same region.
[1679] Arrian 5.22.2.
[1680] For siege of Massaga see Arrian 4.26.1-4. Bosworth, 1995, 328.
[1681] Arrian 5.22.4; Curtius 9.1.17.
[1682] Ashley, 1998, 330.
[1683] Arrian 5.22.6.
[1684] Arrian 5.22.6.

to another one, presumably one whose hipparch had been lost at the Hydaspes.[1685] The fact that the Persian cavalry were still closely linked to Cleitus is in recognition of his special bond with those troops having commanded them in the Bactria/Sogdiana region, as well as at the Hydaspes. This special cavalry hipparchy cannot have been the *agema*, as Arrian uses that term specifically of that unit; they were something different from the normal troops and can only have been the Persians formerly commanded by Cleitus.

Bosworth interprets Arrian's text as locating the Agrianians in the centre of the line between two heavy infantry *taxeis*, although he also noted the improbability of this scenario, and that Arrian no doubt misinterpreted his source. It seems to me, however, that Arrian clearly places the Agrianians on the right, stating:[1686]

> he brought Cleitus' mounted regiment and the special cavalry round to the right wing of his army, with the guards and Agrianians in close touch...before his dispositions were complete, the rear-guard, both horse and foot, arrived on the scene; the cavalry was used to strengthen the wings, and the additional infantry units to increase the solidity of the phalanx.

The Macedonian order of battle, therefore, shows a traditional pattern: heavy infantry in the centre, the hypaspists and Agrianians to their right and cavalry on both wings. The only major difference was the strength of the rear guard: this was not a tactical requirement as the battle would not be against a foe likely to break through the Macedonian lines, but a large reserve was employed simply because the front line would have been very short, and there was not enough space to locate all of the front line troops in their usual positions.

Alexander then launched his typical limited initial attack, hoping to draw the defenders out onto his own ground, but on this occasion they did not bite. Alexander was therefore forced to surround the wagons and attack from all sides.[1687] Curtius tells us that the unorthodox defensive tactics of the Cathaeans caused some disarray among the Macedonians,[1688] but he overplays the situation with the attack on the outer ring of wagons. Arrian focuses his attention on the inability of the cavalry to have any positive impact on the battle; the defenders on the outer ring would have soon been dislodged, however, when the infantry came within striking distance. The critical time of the battle was almost completely ignored by Curtius: this would have been the attack on the inner rings, as the infantry would be disorganised after scrambling over and through the outer ring of carts, to be met immediately by bands of defenders who were waiting to fall upon them.[1689] This fighting would have been more brutal and casualties would have been higher than in the attack on the outer ring. After the second ring of carts was breached,

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[1685] Bosworth, 1995, 330.
[1686] Arrian 5.22.6.
[1687] Arrian 5.23.1; Curtius 9.1.15.
[1688] Curtius 9.1.15.
[1689] Arrian 5.23.2.

the Cathaeans withdrew to the relative safety of the town, after suffering significant losses;[1690] Alexander rested his troops the remainder of the day.[1691]

Alexander evidently only had with him a part of the army, as Arrian tells us that there were not enough men to surround the city completely. There was also an evident breakout attempt by the Indians in the early morning that was repulsed with heavy Indian (probably civilian) losses. [1692] As part of the second phase of the battle, apparently while the siege engines were being constructed, Alexander built a double circumvallation around the town,[1693] similar to that at Gaza. This investment would have taken a number of days, and Alexander used this time to have his engineers construct siege engines for the final assault. Another similarity with the earlier siege of Massaga is evident in Arrian: he ignores this central portion of the siege, only concentrating on the two failed Cathaean sorties, both of which were repulsed with heavy Cathaean losses.[1694]

After an unspecified time, but it cannot have been shorter than a week or two, Porus arrived with his remaining army of "the rest of his elephants and 5,000 Indian troops".[1695] Given that we know that Alexander captured all of the elephants left alive after the Hydaspes, Porus must not have committed his entire reserve to that battle. Operations must have been ongoing by means of undermining and the use of scaling ladders,[1696] as well as presumably rams, as a breach appeared in the brick outer wall. The breach was forced and 17,000 Indians were killed, 70,000 captured.[1697]

After the capture of Sangala, Alexander marched ever forwards into India; the Hydaspes had been fought probably in May,[1698] and the further campaigning had taken another month; much of this time had been spent in monsoon rains and floods in an unknown land with no end in sight. It is no surprise at all that the army had finally had enough, and refused to go any further. The revolt was not the end of the campaign, however, as Alexander decided to take a circuitous route back to Babylon rather than travel through friendly (already conquered that is) territory, and to continue to expand the Empire in the process.

Immediately after the revolt on the Hyphasis River, the army marched back to the Hydaspes and a fleet was quickly constructed to transport some of the army down river;

[1690] Curtius 9.1.17 notes 8,000 Indians dead; Bosworth, 1995, 331, notes this as "not impossible", but I would suggest it is an unlikely high number; perhaps it would be more fitting for the entire campaign rather than only the opening skirmish.

[1691] Arrian 5.23.2.

[1692] Arrian 5.23.4.

[1693] Arrian 5.23.6, only notes losses during the second sortie, 500 in number.

[1694] Bosworth, 1995, 332.

[1695] Arrian 4.24.4.

[1696] Undermining again as at Gaza: as there we would benefit from knowing far more about this technique of siegecraft in the ancient world. Arrian 5.24.7; Curtius 9.1.18.

[1697] Arrian 5.24.7; the numbers, of course, seem exaggerated to say the least.

[1698] Diodorus 17.89.6; the date is disputed (Brunt, 1976-83, 2.456-7), but appears sound based upon Arrian mistakenly assuming that the battle took place when the river was in full spate (around the summer solstice) rather than at the beginning of the monsoon season. *Cf.* Bosworth, 1988, 131; Anspach, 1903, 40-1; Schachermeyr, 1973, 423.

the remainder marched alongside on land.[1699] After three days sail, news reached Alexander of another tribe that was preparing to resist his advance, the Mallians.[1700] These people were numerous and Curtius[1701] tells us that they could put over 100,000 men in the field; this was resistance that to be overcome so he hastened into their territory with the intention of catching them unprepared for his advance.[1702] The location of the city of the Malli is unknown, partly because of the changing course over the centuries of the various rivers that feed into the Indus. It seems likely, however, that their territory lay either side of the Hydraotes River, and some distance from the confluence of the Acesines River; generally to the north-east of the modern city of Multan.[1703]

Alexander divided the army, as has now become very familiar. Nearchus sailed south with the fleet to the borders of Malli territory. Craterus and Philip[1704] led a large column down the west bank of the river whilst Hephaestion and Ptolemy were to take separate columns down the east bank five days apart.[1705] The main striking column was, of course, led by Alexander himself; the hypaspists, Peitho's *taxis*, half of the Companion Cavalry and Alexander's new favourite unit, the Dahae horse archers.[1706] The small lightly-armed fast-moving columns that Alexander created during and after the Indian campaign were significantly different from those previous to it. The Agrianians and archers were a standard addition to any flying column; both are here ignored in favour of the Dahae horse archers. Alexander seems to be utterly enamoured of these new troops: they had more flexibility and firepower than the Cretan archers, and proved far more operationally useful to Alexander.

This flying column marched directly towards the capital city of the Malli, across the Sandar-Bar desert, taking them utterly by surprise from the north. The campaign against the Malli on the Hydraotes was brutal and, by this time, very predictable.[1707] Civilians in the area that were caught in the open were slaughtered and no mercy was shown. This was a terror campaign like that conducted in Sogdiana a couple of years previously. It is difficult to see what Alexander hoped to achieve by these tactics, other than repression of the populace by a campaign of fear (which may have been goal enough for him). The first fortified position that Alexander encountered was treated the same way as Sangala. It was surrounded and the walls were sapped at the same time as scaling ladders were being used. The defenders retreated to an inner citadel, but this lasted no longer than the outer wall. There is a hint in Arrian of the lack of motivation felt by the rank and file that would soon almost cost him his life. Arrian tells us:[1708]

[1699] Arrian 6.1.1*ff*.
[1700] Arrian 6.4.2.
[1701] Curtius 9.4.15: 90,000 Infantry, 10,000 cavalry and 900 chariots. Diodorus 17.98.1 notes 80,000 infantry, 10,000 cavalry and 700 chariots; Arrian 6.8.5*ff*. notes 50,000 Mallians. Justin 12.9.3 has 80,000 infantry and 60,000 cavalry.
[1702] Arrian 6.4.2.
[1703] Mughal, 1967, 16-23; Bosworth, 1988, 135.
[1704] Son of Machatas, the satrap of northern India.
[1705] Arrian 6.6.2.
[1706] Arrian 6.6.4.
[1707] It is known only from Arrian 6.6-10.
[1708] Arrian 6.8.2.

> Alexander, ahead of his men, was up (the scaling ladder) in a moment, and stood there alone, a conspicuous figure, holding the breach. The sight of him struck shame into his troops, so up they went after him in scattered groups.

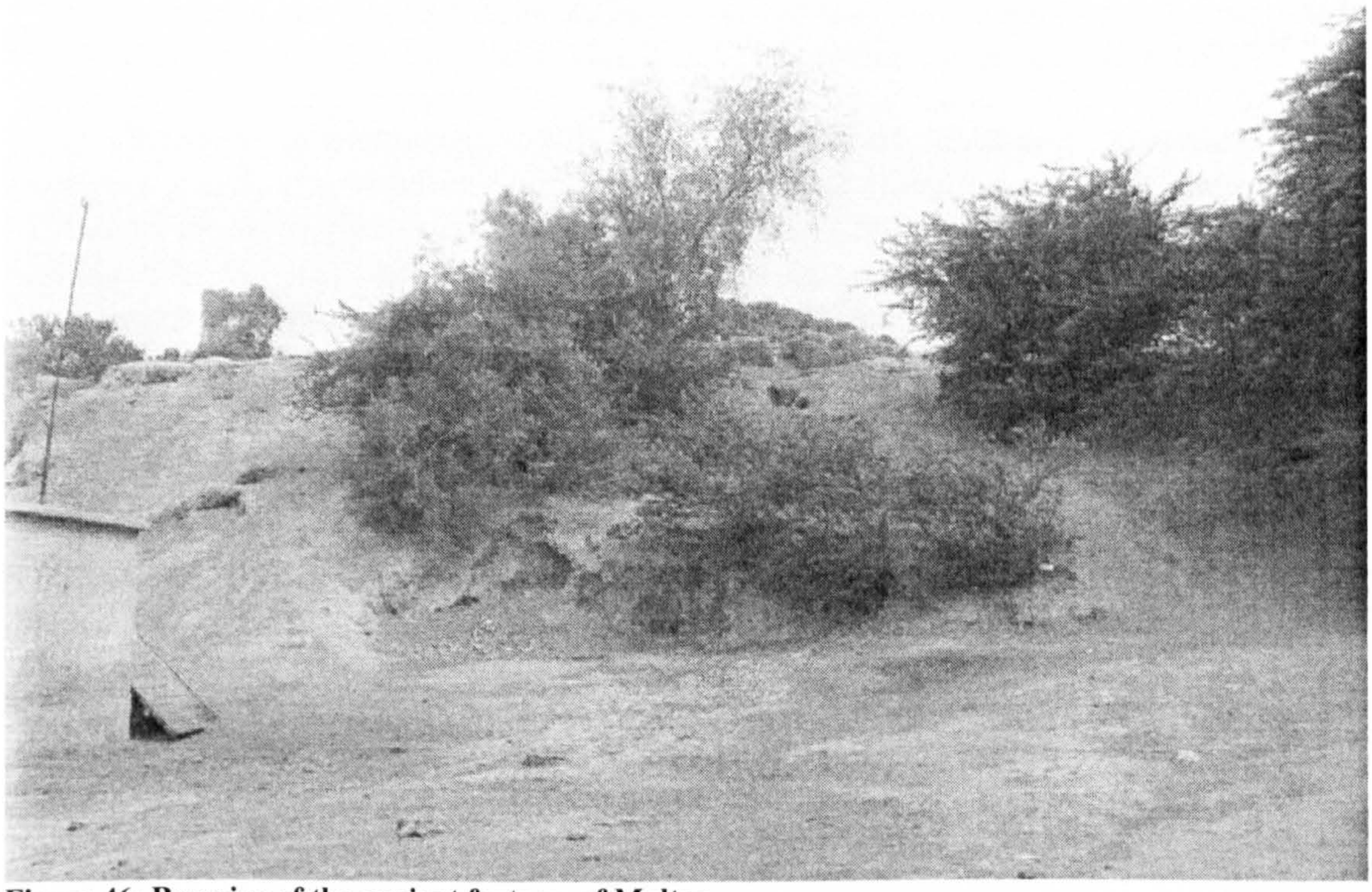


Figure 46: Remains of the ancient fortress of Multan.

Alexander quickly captured the city, despite the lack of enthusiasm from his men. The defenders that managed to escape fled to the Hydraotes River with the intention of opposing Alexander's crossing,[1709] but upon his approach withdrew towards the capital city of the Malli people.[1710] Alexander immediately pursued them, but he had allowed his cavalry to advance beyond the heavy infantry by some distance; upon seeing this, the Indians, numbering some 50,000, turned to face the Macedonian cavalry.[1711] Alexander evidently realised his mistake and kept the cavalry manoeuvring around and out of reach of the enemy. The light-armed infantry, specifically the Agrianians and archers, quickly caught up to the cavalry, and the heavy infantry appeared in the distance; this was enough for the Mallians to retire to their capital city and await the inevitable siege.[1712]

[1709] Arrian 6.8.4*f*. *cf*. Bosworth, 1988, 136.
[1710] The city is never actually mentioned by name.
[1711] Arrian 6.8.5*f*.
[1712] Arrian 6.9.1.

Alexander began siege operations in a relatively standard fashion: he surrounded the city with his cavalry to prevent anyone escaping, or help arriving. Once the infantry were in place, the assault began; scaling ladders were used and we can presume sapping operations also, given that they had occurred in recent siege operations with great success. The outer wall of the city was taken with ease, and the inner citadel was invested. At this point, the enthusiasm of the infantry evidently flagged;[1713] they had expected to be travelling home after their mutiny, but it was evident to them now that Alexander was continuing to campaign just as he did previously. Arrian tells us that the reason the assault flagged was that there was a shortage of scaling ladders and some reluctance among the hypaspists to mount the final assault.[1714] Alexander's response to their reluctance was what Bosworth called "one of his most heroic feats of arms".[1715]

The feat was undoubtedly bold, but also remarkably foolhardy. Alexander scaled a ladder himself, and stood atop the battlements in an effort to inspire his men; the act worked as the hypaspists were evidently falling over themselves to join him.[1716] Their renewed vitality was their undoing, however, as the scaling ladders broke under their sheer weight of numbers and Alexander stood almost completely alone atop the battlements with thousands of Malli looking on. Alexander only had with him a mere handful of companions, including Peucestas who carried the shield of Achilles that had been looted from Troy in 334.[1717]

In an act that was at best a calculated gamble,[1718] and at worst rank foolishness, Alexander leapt from the wall into the city to face the Malli in hand-to-hand combat. The fight within the city must have been brief; Alexander was shot through the lung by an arrow and for a time Peucestas, Abreas and Leonnatus took the brunt of the Mallian attack, fending them off the body of the injured Alexander.[1719] The hypaspists quickly recovered their composure and forced a way through the main gates to come to the aid of Alexander; the carnage was terrible. Every living soul in the city was slaughtered in a massive act of revenge.[1720] The incident of the siege, and of Alexander's wound, has subsequently become almost legend, but that hides a number of key issues. The army was clearly losing all enthusiasm for continued conquest, and it was only by increasingly rash acts that Alexander was able to keep it motivated.

The siege of the capital city of the Mallians was to be Alexander's last major campaign, and it was one that almost cost him his life. From this point, until his death in 323, the campaigns were minor affairs, and not conducted personally by Alexander, given

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[1713] Bosworth, 1988, 136.
[1714] Arrian 6.9.2-3; *cf.* Curtius 9.4.30.
[1715] Bosworth, 1988, 136.
[1716] Arrian 6.9.3.
[1717] Arrian 6.9.4, also notes Leonnatus, a hypaspists commander, and Abreas, "one of the chosen soldiers on double pay."
[1718] Arrian 6.9.5 tells us that Alexander was under fire from ranged weapons in nearby towers, and that Alexander reasoned he would have grater chance if he were not such an obvious target on the wall.
[1719] Arrian 6.10.1; Curtius 9.5.9-10; Diodorus 17.99.3; Plutarch *Alex.* 63.9.
[1720] Arrian 6.11.1; Curtius 9.5.20; Diodorus 17.99.4.

his grave injury. As his final military act, the siege shows at once his bravery and recklessness. Alexander always led from the front, he was always the first to engage the enemy; be that as commander of the Companion Cavalry or the first over a wall during a siege operation. These were characteristics that have given him an enduring legacy but could so easily have cost him his life much earlier, perhaps at the Granicus during the famous incident where he was almost beheaded. We also see in this siege (and also earlier at Sangala) the Macedonians were utterly tired of constant conflict; they had been promised a journey home and they could only see endless warfare in front of them. Alexander would soon, if he had lived, have to increasingly rely on native Persian troops such as the 30,000 "successors" and Persian cavalry that he was using more and more; we can only imagine how his tactics would have changed to accommodate the changing army structure.

The destruction of the city of the Malli was followed by a number of minor campaigns, as mentioned above, of which we have too little information to be of interest, followed by the march through the Gedrosian Desert which is not of significance to this study. Upon emerging from the desert, Alexander headed for Susa; summoning a number of satraps and troops that were ultimately executed for some quite heinous crimes;[1721] Alexander was attempting to restore order and discipline and at the same time sending a message that he was still in charge. From Susa, the army was divided into several columns, all of which ultimately headed for Babylon; Alexander taking the more direct route through Opis.

[1721] Bosworth, 1988, 146-158.

Chapter 10

Conclusion

This thesis has partly been an attempt to reconstruct the major campaigns in Alexander's career, and frequently I have attempted some new explanation where I believe one is required, but it has also been an examination of tactics and strategy from which many conclusions about Alexander can be drawn.

Alexander's achievements have stood the test of time as being amongst the most extraordinary and impressive in the entire annals of military history. Whilst it is possible, as I have done, to criticise some individual mistakes on the part of Alexander, he consistently showed himself capable of adapting to every new challenge and environment that presented itself. The set-piece battles of his early career gave way to vicious guerrilla campaigns in Bactria and Sogdiana, and he adapted his tactics and strategy, as well as the organisation of the army, in order to meet these emerging threats. He also showed himself capable of adjusting his strategies in order to capture a series of seemingly impregnable fortresses throughout his career, like Tyre and The Sogdian Rock, for example.

The only field of battle in which Alexander did not show himself to be a master was naval warfare, but even here there were victories. Alexander tended to avoid naval warfare for a number of reasons, primarily because he had no experience or knowledge of it at all: we get hints during the discussions with Parmenio in 334 that if he had accepted a naval battle with the Persians, he would have attempted to make it essentially a land battle fought at sea. His use of his navy at the siege of Miletus to occupy a natural harbour and prevent the city from being re-supplied by sea showed tactical insight; he demonstrated that his fleet could be capable of assisting in a victory without forcing a battle with the superior Persian fleet. The siege of Tyre also showed Alexander using his fleet to assist in an essentially land-based victory. Although some naval engagements were fought, these were the only ones in Alexander's career, and it is worthy of note that the city fell by means of a ship-borne assault. Alexander's lack of ability as an admiral, or lack of confidence in his navy, led him to devise an ingenious strategy of defeating the Persian navy on land. This is a much-discussed strategy that led him to disband his fleet,[1722] a decision that he evidently soon deemed a mistake as the fleet was essentially reformed shortly afterwards. Discussions and potential criticism of this decision should not detract from the ingenuity of the strategy: ancient warships had to put in at harbour every evening; they were not capable of remaining at sea from long periods, and starving them of their ports was a long-term strategy but one which Alexander could control, he fighting his naval battle on land, terrain that he understood.

Alexander was evidently a man who was aware of certain limitations, be they lack of experience of naval warfare or lack of knowledge of enemy lands. To this end he frequently employed local guides to provide him with intelligence that he was lacking when in unknown territory. Alexander is, or course, not the first commander in history to

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[1722] For issues surrounding the army see English, 2009.

do this: Xerxes famously used local guides to turn the pass of Thermopylae and defeat Leonidas and the 300 Spartans.[1723] Alexander used the same tactic to similar effect frequently, including the turning of the Persian gates. We also know of local guides in Bactria, India and in almost every one of Alexander's campaigns. He evidently was aware of the need for acquiring as much intelligence of the enemy and the terrain as possible.

A division of forces was a strategy that Alexander used throughout his career,[1724] from the very first campaign in the Balkans to the journey back to Babylon. There were a number of reasons why Alexander chose to utilise this strategy, depending on circumstance. This was a strategy frequently used to reduce the logistical problem as he travelled through new territory. We almost never hear of problems of food supply during the career of Alexander:[1725] he clearly paid a great deal of attention to this element of strategy.[1726] We have no direct evidence of secondary columns being used primarily for this purpose, but we do frequently hear of large foraging parties being despatched, such as during the Balkan campaign where they ran into considerable difficulties. Secondary columns were also used in order to conquer more territory than a single column would be capable of. There are good examples of this in Bactria and Sogdiana where the nature of the combat led to Alexander using smaller more mobile flying columns to subdue the enemy. This tactic could also be used to confuse the enemy: if Alexander's army appeared to be in several places at once, Darius' own tactics would be potentially compromised. We do not hear of this as a specific strategy of Alexander, but this is perhaps more of an indication of the lack of Persian sources than anything else. Along with this confusion in the enemy, this strategy allowed Alexander to approach from several directions at once; on a small scale we see this at the battle of the Hydaspes; Alexander divided his forces in order to cross the river and attack the enemy from an unexpected direction.

Coupled with dividing the army into secondary columns, partly in order to confuse the enemy, were the famous lightning forced marches that Alexander frequently conducted so as to surprise an enemy before he could finalise preparations for resistance, such as the march from the Balkans to Thebes in only a few days. Time and again, Alexander achieved rates of march that were staggering, and so often caused such a great psychological impact upon the enemy as to make the subsequent battle or siege far less difficult.

Alexander repeatedly shows himself capable of learning from his mistakes. Frequently, the first time Alexander attempted something new it was less than a stellar success: for example in the first field campaign at Pellium, Alexander allowed himself to be essentially trapped and boxed in on all sides by the enemy and had to execute a tactical withdrawal in order to extricate himself from an extremely difficult situation; subsequent campaigns were, of course, rather more successful. His first real siege at Halicarnassus

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[1723] As well as the almost forgotten thousands of Thespians, Plataeans and others.
[1724] Lonsdale, 2007, 148-9, calls these separate forces "centres of gravity".
[1725] With the obvious notable exception of the Gedrosian Desert disaster.
[1726] See Engels, 1976, 11-25, for Alexander's logistical system.

was not a glowing success: he only actually managed to capture one of the towers before moving the army on further into Persian territory; the much more successful sieges of Tyre and Gaza came some time afterwards. Alexander failed to protect the mole and the siege towers at Tyre, something that he rectified during the later sieges of the seemingly impenetrable mountain fortresses in India. He also demonstrates a willingness to learn from his enemies, as soon as the Bactrian/Sogdian campaign was over; Alexander employed a group of Dahae horse archers that he employed with devastating effect in the final years of his life.

In terms of the utilisation of the army, it has long been recognised that Alexander used the Companion Cavalry as his main strike weapon; in every set-piece battle they were the primary means of defeating the enemy. Their objective was to punch a hole through the enemy's defensive front (always from the right), stream through the newly formed gap and wheel upon the centre to coincide with an infantry attack from the front. This was Alexander's primary battle-winning tactic, and it never failed and so never required to be modified or amended. The hammer and anvil analogy is frequently used of Alexander's set-piece battles, but it is used entirely incorrectly. It is always assumes, with little discussion, that the infantry were the anvil against which the enemy were broken; this was not the case. The infantry were as much a strike weapon as the Companion Cavalry. They were not heavily armed hoplites, but were essentially peltasts armed with the sarissa.[1727] This lack of defensive equipment, coupled with the sarissa that gave them a significant advantage in firepower over the enemy, meant that they were essentially a shock weapon. There initial impact was when they were most effective; once the enemy got past the first few sarissas, the weapon was essentially useless in close quarters combat, and their lack of armour meant they were vulnerable to more heavily armoured opponents. If the infantry engagement drew on for any length of time, the Macedonians would be at a significant disadvantage. Timing was everything, therefore; Alexander had to time the infantry engagement to correspond with his breakthrough on the right so as to gain the biggest possible shock impact of the infantry and Companion Cavalry.

The hammer and anvil analogy is still valid, however; just not with the infantry as the anvil. The defensive part of the army was always the Thessalian cavalry under Parmenio. In every set-piece battle up to the Hydaspes, the Thessalians were charged with fighting a defensive battle on the left. The Thessalian cavalry were an invaluable part of the army, and fundamental in every one of the early set-piece battles. They always fought against significant odds and were always able to hold off the enemy long enough for the strike arms to complete their task of routing the Persian centre. If they had failed, then the Persians could have conducted the same operation as Alexander was performing against them, rolling up the Macedonian infantry from the right. If this had occurred then the Macedonian infantry would surely have been routed as they would have found it extremely difficult defending themselves from a flanking attack with the sarissa as their primary weapon. Alexander did usually plan for this eventuality by having a second line of heavy infantry; we know of them at Gaugamela and can presume their presence at Issus.

[1727] Assuming that the sarissa was used in each of the set-piece battles, that is; there is a possibility that the only time it was used was at Gaugamela.

Alexander created what was probably the first combined arms[1728] force in world history:[1729] he developed a series of units that were specifically suited to individual tasks and utilised them to their fullest potential with devastating effect. Individual units were highly trained and some highly specialised: the hypaspists, for example, were employed to maintain a cohesive link with the Companion Cavalry during the set-piece battles; if they failed then a gap would have opened in Alexander's line that the Persians could have exploited. Light infantry, specifically the Agrianians, were assigned specialised tasks, and even fought alongside the cavalry unity at Gaugamela. Later the Dahae horse archers were deployed with devastating effect against the Indians at the Hydaspes. Each of the individual units of Alexander's army were dangerous if engaged independently, but when combined formed an army that was one of the finest the world had yet seen; when this was coupled with the tactical genius of an Alexander, the results are there to see.

Along with some general conclusions we have made about Alexander, there are a number of signature strategies that Alexander employed at almost every opportunity: firstly it was always his strategy to fight a battle on ground of his choosing. This can be viewed both on the scale of grand strategy, such as enticing Darius into the narrows of the Issus plain, or on a much smaller tactical scale at Gaugamela with the movement to the right, or of drawing the defenders away from their city at Sangala. In almost every military encounter, Alexander sought to draw the enemy towards him, or away from ground that was favourable to themselves.

Following from this previous point, another hallmark tactic of Alexander was the use of what Devine called a "pawn sacrifice". In order to draw the enemy out further, Alexander always opened his battles by using a small detachment of troops and not the whole army. At the Granicus, for example, Alexander used Socrates' *ile* to attack the Persians; a similar attack was launched at Gaugamela. These initial attacks were not intended to cause a breakthrough, and Alexander was fully aware that he was sacrificing some of his men; the desired effect, however, was always to draw in a much larger body of the enemy, to take them out of their defensive positions. It also allowed for the possibility of a counter-attack against their flanks as they were falling upon the much smaller "pawn" unit. This sort of action enabled Alexander to engage, and keep engaged, a massive unit of Persian cavalry with very small numbers of his own allied cavalry, and to keep the Companions free to launch their usual attack against what remained of the Persian left at Gaugamela. If the Persians had not been engaged in this way, it is unlikely that the Companions could have effected their breakthrough and the entire battle would have been in the balance. It may seem callous on the part of Alexander to order a unit of troops forward when he knew they would be defeated with heavy losses,[1730] but Alexander was always the pragmatist; their efforts would be instrumental in assuring victory and the sacrifice was, therefore, worth it.

[1728] Lonsdale, 2007, 150, makes a similar point when he notes that the creation of a successful combined arms force was a key element in Alexander's success. *Cf.* Sekunda, 2007, 333.
[1729] Although the contribution of Philip in the creation of the army should not be underestimated.
[1730] Especially when they were Macedonians, as at the Granicus.

The third element that can be considered a hallmark of Alexander's strategic thinking was attacking the enemy in multiple directions simultaneously. This is again a strategy that was employed at every opportunity, and is one of the key reasons for Alexander's consistent success. Alexander realised that no matter how well trained his army was, it was always massively outnumbered, and that his infantry were not hoplites and thus not suited to a simple hoplite-style battle. If the enemy stood up to the initial shock of the sarissa attack, the tide would quickly turn against them if the battle was prolonged. We do indeed see the Macedonian infantry hard pressed at Issus and Gaugamela precisely because the battle lasted longer than Alexander would have liked. Alexander deployed the flanking attack strategy for a number of reasons: it shortened battles, and both reduced the possibility of the heavy infantry breaking and increased their shock potential as they knew they did not usually have to fight for long. Flanking attacks against the enemy also routed them far more rapidly then an unsophisticated frontal assault, thus ensuring a more rapid and guaranteed victory. Shortening the battle also led to fewer casualties; a vital consideration as Alexander moved further and further away from Macedonia and easy replacements. The supreme example of the flanking attack during the career of Alexander is at Issus; Alexander planned a whole series of brilliantly conceived and executed flanking movements that devastated the Persian host and gave Alexander a rapid and decisive victory with an apparently small loss of life on the side of the Macedonians.

Alexander certainly demonstrated that he was capable of devising quite brilliant and original tactics when the situation presented itself, such as the mole at Tyre and the powerful flank guards at Gaugamela; but more then anything Alexander was a great recycler of strategies. The small number of key tactics that Alexander employed, as highlighted above, were used at every opportunity in every sphere of warfare. Flanking attacks were used, for example, at Tyre and Gaza to prevent the enemy from concentrating their defence against the sector where Alexander expected to break through. Even during sieges, Alexander was able to draw the enemy onto ground of his choosing, as at Sanagala: where the defenders chose initially to engage Alexander outside the city, Alexander retreated to a nearby hill to draw them away from their city ensuring more would be slaughtered as they fled after the inevitable defeat. Alexander's key strategies were so effective, and executed with such brilliance, that he seldom needed to innovate beyond them. The execution is, however, a fundamental issue. These were not simply strategies that were slavishly followed at the expense of any other considerations; they were adapted and evolved to different conditions, theatres and environments with equal success. Alexander's real creativity as a tactician was in developing and adapting his existing set of strategies to cope with every situation that presented itself throughout his career.

Was there a development in strategy? This is a fundamental question, and not easy to answer without obfuscation. At the very start of his career, from the first campaign in the Balkans, Alexander appears to have a set of strategies that was fully developed and used repeatedly in every operational environment. This, however, is to mask the more complex issue that those same strategies that were employed at, say the Hydaspes, were rather different from those used at Issus. They were essentially the same

ideas, but were constantly being adapted and developed to cope with new enemies and new theatres of warfare. The answer, therefore, can only be both yes and no; the strategies employed were fundamentally the same throughout his career, but were constantly being adapted.

Why was Alexander ultimately so successful? Firstly we have to consider his almost superhuman ability to inspire his men continuously to ever greater feats across the breadth of the known world. Secondly, the career of Alexander the Great represents a remarkable nexus of events that is virtually unparalleled in history. Alexander was also the finest strategist and tactician the world had yet seen. He repeatedly demonstrated an ability to fight in every theatre of war the ancient world had to offer and to continuously adapt his strategies and tactics to every emerging circumstance. These factors – genius and circumstance – combined to enable the Macedonians to create, in less than a decade, an empire that spanned the known world. Alexander's achievements are legendary, and always worthy of study.

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