

## COMBINED ARMS AND THE ART OF ANCIENT GENERALSHIP

Combined arms is a modern military concept which describes the co-ordination of various different types of military units each with its own strengths and weaknesses. Combined arms doctrine attempts to have these different forces complement each other in such a way that the elements can cover each other's weaknesses while allowing them to emphasize their strengths. The problem is, of course, how to carry this out on a battlefield.

The Macedonian armies of the fourth to the second centuries B.C. were, at first glance, such forces. We have descriptions of the array of different forces which could be marshalled by kings such as Antiochus III and the variety of forces would seem to demand a combined arms approach.<sup>1</sup> The question is whether these armies were conceived of at the time in terms analogous to the modern combined arms doctrine. Was there the sense that these elements needed to be co-ordinated for best effect? Did the commanders train and command their forces with this in mind?

To examine this question we need to refer to the ancient sources, and examine a number of battles from the Hellenistic period for evidence of a true combined-arms doctrine. The actions and attitudes of the commanders will be of particular interest, since if the commander seems to have little interest or ability to co-ordinate his troops there can be no combined arms operations in any real sense.

The model for any commander in the Hellenistic period was Alexander's Macedonians and, especially, Alexander himself as their commander. Alexander's battles are well-documented at

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<sup>1</sup> Livy describes the array of different troops of Antiochus III's army before the battle of Magnesia. Livy, 37.40.

varying levels of accuracy.<sup>2</sup> Fortunately it is not necessary to examine all of the battles of Alexander in order to make an assessment of his own use or ignorance of a combined-arms approach to battle..

The basic military system used by Alexander, and most probably developed by his father Philip, is seen in the references to his battles. Generally, the phalanx is deployed in the centre of the line. Flanking the phalanx are light troops or hypaspists which link the phalanx to cavalry contingents on the wings. Alexander himself was usually on one of the wings with his companion cavalry.<sup>3</sup>

The tactics used at Issus and Gaugamela are based on this disposition of forces. In both cases the phalanx pinned the Persian centre. At both Issus and Gaugamela, Darius attempted to use his superior cavalry to outflank the Greek army on the Persian right wing. At Issus, Alexander perceived this, sent Thessalian cavalry to oppose the Persian cavalry while he himself led his companion cavalry across the Pinarus river on the Macedonian right wing to outflank the Persian army.<sup>4</sup> Darius had not expected such a manoeuvre, since, due to its steep banks, the Pinarus was thought to be too difficult for cavalry to cross where Alexander did.

At Gaugamela, although the Greeks were hard pressed on their wings, an attempt by Darius to outflank the Greek right wing led to a gap forming between his central mercenary phalanx and the Bactrian cavalry. Alexander, after having sent Thessalian cavalry to support an extremely hard-pressed Parmenion on the Macedonian left, drove his companion cavalry into this gap, posing an

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<sup>2</sup> Arrian's battle descriptions, while not always trustworthy are very detailed. The result gives the reader a good and usually logical sense of how the battle may have developed. (e.g. Gaugamela 3.11-15. His use of Ptolemy as a main source undoubtedly helped in this regard. For the Diadochi Diodorus Siculus following Heironymus of Cardia also provides a usable tactical description of Eumenes and Antigonos at Paraitacene. 19.27-31. Plutarch's descriptions are usually extremely general as is seen in his description of Pyrrhus' battle tactics at Heraclea. Pyrrhus, 16-17.

<sup>3</sup> He holds this position at the Granicus, Issus and Gaugamela. Arrian, *Anabasis*, I.14.1; II.10.3; III.11.8.

<sup>4</sup> Delbrueck's identification of the Pinarus and his description of the terrain in the area makes sense of Arrian's description which is not very clear. Delbrueck, *History of the Art of War*, 194-6.

*He is not interested in tactics per se.*

*A few books on general characterisation need to be added.*

immediate threat to Darius who fled.<sup>5</sup>

*much more can be said than this!*

In this admittedly brief survey of Alexander's tactics we note that the phalanx functions to pin the enemy line in place while cavalry fights on the wings. Hypaspists connect these two types of forces and prevent the formation of gaps such as the one which doomed Darius at Gaugamela. Alexander, while retaining command of a particular component of his force, the companion cavalry, also oversees the general battlefield developments. His awareness of troop dispositions and the geography of the battle area was excellent. This is particularly visible in the descriptions of the battle of Issus. The whole effect is analogous to a combined-arms approach with different forces complementing each other, other forces in reserve and operations coordinated by means of good command and control exercised by the person in charge.

*Describe this then!*

This picture of the developed Macedonian army as a combined-arms force at the time of Alexander seems reasonable, especially since such military developments had been happening since the time of the Peloponnesian War in the Greek world. Already by the late fifth century generals such as Demosthenes and Iphicrates had seen the benefits of co-ordinating the activities of hoplites with light troops on the battlefield.<sup>6</sup> Alexander himself gained extensive experience in his father's wars and would have been aware of these developments.<sup>7</sup>

*There is a bibliography on this.*

To the extent that we may be dealing with a recognized military system, we would expect to see similar use made of the armies under Alexander's successors. This is also to some extent

*These battle accounts are quite complex - uncertain*

<sup>5</sup> In Arrian's account Alexander then aided Parmenion before chasing Darius. We can discount the slight at Parmenion here because whatever the exact events, it seems clear that Alexander retained firm control over his cavalry at this point and in the later pursuit of Darius. Arrian, Anabasis, III.15.

*exactly what Alex did re; Parmenion. Author should stress basic outline of coordination - the movements before the assault.*

<sup>6</sup> The education of the Athenian general Demosthenes shown in Thucydides' account is a prime example. In Aetolia in 426 B.C. his hoplite force was cut apart by a combination of hoplites and light troops. Thucydides notes his error in advancing without light troops. (Thucydides, III, 97-98.) At Sphacteria Demosthenes puts his hard-won tactical experience to use against the Spartans. IV, 33-34. Both Demosthenes and Thucydides perceive the importance of co-ordinating the different types of units for maximum results.

<sup>7</sup> Alexander had generally commanded the cavalry arm of his father's army.

confirmed, for example, in Antigonus Monophthalmos' battles against Eumenes at Paraitacene and Gabiene in 317/6 B.C. In both of these battles Antigonus was able to overcome defeats suffered by his phalanx in the centre by means of cavalry charges from the wings. At Paraitacene he repeated Alexander's tactic of Gaugamela by launching his cavalry into a gap which had formed between Eumenes' silver shields and the cavalry on Eumenes' left wing.<sup>8</sup>

One element of Antigonus' leadership style becomes apparent from the accounts of these battles. He seems to hold his personal troops in check and await developments on the battlefield. He then commits them at the key moment. Effectively Antigonus and Eumenes use reserves in their tactical systems.<sup>9</sup> Once again the use of different troops for different purposes and clear attempts by the commanders to coordinate the efforts of these troops are indicated.

Not all of Antigonus' battles show this, however. Perhaps the most famous example of this is Antigonus' final battle, Ipsus. Although there is no detailed account of the battle extant, Plutarch indicates that Antigonus lost at Ipsus because his son, Demetrius, led his cavalry on a successful charge and then failed to return to support the phalanx in the centre, due to the interposition of elephants by Seleucus, who had taken advantage of Demetrius' tactical lapse.<sup>10</sup>

Plutarch's account ends with the famous anecdote about Antigonus saying that "Demetrius will save me". The interpretation is clearly that Antigonus expected Demetrius to control his cavalry unit and maintain contact with the centre of his father's line. Antigonus' idea would have been consistent with his tactical operations at his earlier battles. Demetrius, however, appears to have by accident or design led his cavalry more independently. Given the difficulties of maintaining command control in the confusion of ancient battles, especially when part of the cavalry contingent,

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<sup>8</sup> Diodorus Siculus, 19.30.7-9

<sup>9</sup> Eumenes had a true reserve force of 300 cavalry, (Diodorus Siculus, 19.28.4), while Antigonus created an effective reserve force out of part of his line with which he was able to salvage a draw.

<sup>10</sup> Plutarch, Life of Demetrius, 28-29.

this is not surprising. Demetrius led his unit as Alexander had done by being in the thick of the fight with it, but he did not display Alexander's or his father's talent at maintaining an overall sense of what was going on over the entire battlefield. At this point we can say that Antigonus' army was not using combined arms tactics, since the different tactical arms are effectively being left to their own devices and fighting actions independently of each other.

One element, the crucial one in deciding whether combined arms tactics are actually being employed by the commanders, becomes clear from Ipsus. The commander must either individually or through his subordinates maintain an overview of the entire battle in order to co-ordinate the units. Perhaps, more importantly, the commander must have an awareness that this needs to happen. We see this in Antigonus' style of command, but not in that of Demetrius'. This is all the more surprising since Demetrius was in part learning his trade from Antigonus. *bal!*

When proper coordination of forces does not happen a Macedonian-style army is at a disadvantage. This problem is also seen in later Hellenistic battles. At Raphia in 217 B.C., Antiochus III made a mistake similar to that of Demetrius at Ipsus<sup>11</sup> Commanding the cavalry on his right wing, Antiochus defeated and pursued Ptolemy IV's cavalry off the field. Unfortunately for Antiochus, Ptolemy fled to his phalanx and once the phalanx had rallied, he led it to victory against the centre of Antiochus' line. Antiochus had effectively removed his cavalry by not co-ordinating its activities with his phalanx.<sup>12</sup> It is notable that Antiochus III made a similar error in his struggle with Lucius Scipio at Magnesia in 189 B.C. Once again Antiochus led a successful cavalry charge on the wing, but by maintaining pursuit too long allowed the Romans to defeat his phalanx in detail.<sup>13</sup>

The Syrian army under Antiochus III thus seems not to have functioned as a true combined-arms force. Based on our sources, its problem appears to have been one of command. Antiochus

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<sup>11</sup> Polybius, 5.80-85.

<sup>12</sup> Polybius specifically notes this lapse and blames it on Antiochus' inexperience, 5.85.11-12, but it is notable that Antiochus made exactly the same error at Magnesia.

<sup>13</sup> Livy, 37.43.

*Too complex  
there was a  
breakdown  
communication  
or a tactical  
blunder here.  
BUT our  
source record  
is not good  
enough to  
allow us to  
say what  
precisely happened.*

clearly had difficulties in coordinating his cavalry with the other sections of his armies. As stated above this problem is understandable, but in a combined-arms forces training or tactical doctrine attempts to mitigate it. Effectively, Antiochus' army fought as individual groups depending on their individual arms. This fragmentation removed the advantage of a varied army and it was the reason for the success of Antiochus' enemies in battle.<sup>14</sup>

At this point we must question whether we can accurately describe the situations we have been discussing as matters of combined arms and command. It could be argued that we are simply dealing with a more intangible matter of the overall competence of the commander (or lack thereof). This question bears directly on our discussion, since a developed combined-arms approach can be ruined by an incompetent commander. In contrast a gifted commander may effectively use combined-arms tactics in a "seat of the pants" manner even if there is no developed military doctrine.

Which of these two situations was more descriptive of Hellenistic warfare? In order to make this distinction we will need to examine the ancient concept of command as preserved in our sources

*Tactical manuals of the period are better indicators*

*What exactly were his sources? Pyrrhus wrote a tactical manual.*

A well-developed picture of Hellenistic leadership is shown in Plutarch's life of Pyrrhus. In his assessment of Pyrrhus Plutarch wants to show his purported strengths and weaknesses. Plutarch is using older sources to discuss Pyrrhus' character. It is clear that Plutarch sees in Pyrrhus an excellent field commander who was not blessed with political abilities to match his military ones.

*Source analysis is central*

This assessment is probably similar to those which Plutarch had encountered in his sources.

*to this approach & this analysis is weak*

While Plutarch's vision of Pyrrhus may or may not be close to the general's true character, Plutarch does give us a vision of what an educated man saw as the characteristics of a good field commander. We can use this information to assess attitudes about combined-arms tactics. In Plutarch's romanticized version of events, we see Pyrrhus as a symbol of kingship complete with

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<sup>14</sup> This problem of co-ordinating the different elements of the army is one of the main problems which Hellenistic commanders have against the Romans. Both Polybius' and Livy's description of Cynoscephalae describe Philip V's piecemeal deployment of his army against Flamininus. Polybius, 18.22-24; Livy, 37.7.

Plutarch as a source is not equal to a transcript of an actual debate.

It becomes apparent that these are the sorts of questions which most concern ancient analysts of command ability.

They exist in the Iliad & Odyssey!

The basic arguments about what makes a good commander are already visible in debates of the fourth-century B.C. Plutarch in his life of Pelopidas preserves what may have been part of an account of the trial of Timotheus in 355 B.C. in which he and Chares argue about the role of the general.<sup>19</sup> Timotheus argues that the general as the most important member of his army should be the most protected, while Chares simply showed the wounds he had received while fighting with his men.<sup>20</sup> The basic Greek attitude toward generalship is obvious from this. The general fights at the front with his men.<sup>21</sup>

The military sources which we have from the fourth to the second centuries B.C. appear to follow the basic Greek preference for a commander's actions as a warrior in battle as opposed to his managing and co-ordinating troops.

Not exactly. Charismatic leadership was an important element even since Alexander. This was not all, however. And it is dangerous to argue from our pathetic source record.

A very good example of this debate is provided in Xenophon's Cyropaedia. Although the work is fictional, the attitudes toward command displayed in it are not. Very early in the work Xenophon presents Cyrus as learning from his father that military tactics are a minor skill. Cambyses takes Cyrus' military instructor to task for neglecting the teaching of economic and hygiene issues in order to concentrate on tactics, by which is clearly meant troops dispositions.<sup>22</sup> This scene

<sup>19</sup> Plutarch, Life of Pelopidas, 2.3-4.

<sup>20</sup> Timotheus makes the comment that he felt shame at the fact that an arrow fell close to him at the siege of Samos. Had he died it would have demoralized the army. This argument is presented by Onasander in his treatise on generalship, The General, 33. The argument seems to have become something of a military trope by the Roman period.

Nevertheless, it is very probable that, given the reference to the siege of Samos, that this anecdote is related to Timotheus' trial after the battle of Embata. It is notable that Chares won this case. The Athenian jury expected generals to be at the front with their troops. I am grateful to Prof. Richard Parker of Brock University for his insights into this attitude.

<sup>21</sup> This is visible in stories of generals in the classical period. Callimachus died at Marathon, Miltiades was mortally wounded at Paros, all the generals at Syracuse fall with their troops.

<sup>22</sup> Xenophon, Cyropaedia, I, vi.12-15.

supports what Xenophon has presented in earlier vignettes. We have scenes in which we learn that hunting is the best school for war, followed by Cyrus' tutelage under Astyages in warcraft. Astyages teaches Cyrus about the cavalry after which Cyrus has to operate in battle, but in so doing he shows too much bloodlust (charmone-love of battle). Astyages explains to Cyrus that the commander must not lose his head in the midst of battle. He is portrayed as angry with Cyrus' rash actions.<sup>23</sup>

*Xenophon watched Cyrus get carved away at Cunaxa.*

In this vignette Xenophon neatly portrays an ancient commander's dilemma. In order to follow traditional practice and to maintain the respect of his troops he must fight bravely. But he must also maintain enough detachment to have a sense of what is going on over a large part of the battlefield. This sounds easy but, in actual practice, it is an extremely difficult thing to do. The modern practice has been to keep the senior commanders away from the battlefield in order to help them maintain the larger view of the action.<sup>24</sup> As "face-of-battle" analyses have indicated, when a person is in combat his perceptual world tends to shrink. One becomes wrapped up in fighting and survival.<sup>25</sup>

*use of arms & killing in concert w/ others*

Ancient discussions of tactics often deal with just this issue. Usually, when the aim is to develop a good commander, hunting is a preferred method of training. Xenophon mentions this and it remains a basic view of many commanders.<sup>26</sup> In Polybius' account of the aftermath of the battle of Pydna he notes that Aemilius Paullus felt that hunting was the best education for the young Scipio Aemilianus.<sup>27</sup> This type of training is effectively physical training. The object is to train a person to act under battlefield conditions. He should develop his reflexes, strength and riding abilities. The

<sup>23</sup> Xenophon, Cyropaedia, iv, 19-22.

<sup>24</sup> In fact even in modern times the debate carries on. Modern researchers have noted the morale and command benefits of forward leadership. Hansen, The Western Way of War, 109-110. On the other hand if such a leader is killed the result to his troops' morale can be catastrophic.

<sup>25</sup> This is described extremely well by Hansen, The Western Way of War, 96-104.

<sup>26</sup> Xenophon, Cyropaedia, I.ii.10.

<sup>27</sup> Polybius, 31.29.



expected skills of a cavalry officer.

The other side of tactics, and the more important one from the point of view of combined arms, is troop dispositions. The ancient sources understand this as well, but as one reads the treatises on this branch of tactics it becomes apparent that the writers do not really view it as a primary goal of the commander. Xenophon's assessment via Cyrus' father has already been noted, but the general approach to dispositions of troops can be seen in the discussions of later writers such as Asclepiodotus and Onasander.

Asclepiodotus' Tactics is a rather dry and mathematical approach to military dispositions. It has the sense of being a parade guide. The mathematical and geometrical intricacies of various infantry and cavalry formations are dealt with, but there is never any attempt to associate these formations with a real battlefield.<sup>28</sup> Asclepiodotus was a philosopher and the fact that his approach to troop dispositions is not related to real operations is indicative of the divorce of this aspect of command from actual practice in Greek military theory. Tactical dispositions, although extremely important from the point of view of combining the different arms in mutually supporting ways, were not seen to be crucial in the training of a commander. It was a realm left to philosophers.<sup>29</sup>

Onasander in his treatise The General emphasises ethics and morality in addition to skill at arms. Although writing in a Roman context (his work is dedicated to Quintus Veranius) he does, however, deal with an old Greek argument when he suggests that the General should stay out of the immediate battle. He also shows more interest in discussing troop arrangements and battle formations, but the discussions here are abbreviated. In fact most of his work stresses the kind of

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<sup>28</sup> Asclepiodotus' shows this in his calculated perfect phalanx number of 16,384 for example. Tactics. 2. 6-7.

<sup>29</sup> Polybius shows this too in his discussion of Greek armies. Rather than seeing the army as a group of different forces to be combined, he sees it as the phalanx. Polybius, 18.28-30.

person (well-born) who makes a good commander.<sup>30</sup>

We have little to indicate that there was an accessible body of military writing dealing specifically with what a commander should do to co-ordinate the disparate elements of a Hellenistic field force. The image of command which was propagated into the Roman period was a quintessentially aristocratic one of a dashing commander showing arete while leading his troops in battle. He is devious and quick-thinking, but is also chivalrous and morally upright. His general abilities may be learned but his tactical abilities are inherent, a manifestation of his arete or virtue in its literal sense. In short, we have a vision of Alexander the Great. The effective use of tactics does

*We simply lack sources to demonstrate this aspect of training*  
 not seem to have been considered a teachable skill. From Xenophon's anecdote in the Cyropaedia and its treatment in Asclepiodotus we get the sense that it was not a primary concern in evaluating a commander. In fact the sneer which Xenophon has Cambyses show to Cyrus' tactical instruction indicates that the elements of dispositions and tactics which were teachable were seen as a low-level skill.<sup>31</sup>

*Tactics & parade ground stuff is what made Alex. & his army so effective*

*Plunged by our sources Philo Bygg. shows how faulty this analysis is.*  
 This long-standing attitude insured that in the Hellenistic period command was envisioned as it had been implemented by Alexander or Pyrrhus. This answers our question. There is no doubt that excellent commanders could and did create what were effectively combined-arms forces. Alexander and Pyrrhus depended on this for their victories. Nevertheless, we should not consider the Hellenistic army a true combined-arms force since a key doctrine, the role of command as coordinating the various elements never appears to have been developed in a systematic way.

<sup>30</sup> Onasander himself notes that he is attempting to gather together the practical military elements which have made roman armies successful. Onasander, The General, Proem. 7-8. His outline of the good general in his first book is, however, primarily ethical and quite similar to Xenophon's approach in the Cyropaedia.

<sup>31</sup> Plutarch mentions this lackadaisical approach to command training. In discussing whether virtue can be taught he attacks a notion that one must learn basic skills but can be expected to command only as the skill chances or not to the individual. Plutarch, Moralia, 440B.