From Horsemen to Hoplites Some Remarks on Archaic Greek Warfare

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Abstract

In the present article, I argue that the horse was originally an integral part of the accoutrement of the heavy-armed warrior (the so-called 'hoplite'). In particular, I draw attention to the double-grip or Argive shield. I attempt to demonstrate that this type of shield was specifically developed for use by men who rode to the battlefield on horseback, the so-called hippobatai. As such, this article resurrects a hypothesis originally suggested by Detienne in 1968, namely that the hoplites of the Classical period find their origins in the mounted infantry of the Archaic age.*

INTRODUCTION

The reader may well roll his or her eyes at seeing yet another article on hoplite warfare. So much ink has been spent on discussing the origins and nature of the hoplite phalanx that the reader may well have come to believe that there is nothing left to write about. Some scholars perhaps feel that the article written by Lorimer in 1947 more or less said everything on the subject that there was to say. The influence of that particular paper is felt to this day, despite attempts at creating a more varied, less monolithic history of Greek warfare.1 The ideas espoused by Lorimer have had a profound impact on two generations of Classical scholars. The prevailing notions regarding ancient Greek warfare have become so ingrained that one can refer to these traditional views as an 'orthodoxy'.2 The main characteristics of this orthodoxy are described below.

This article has been divided into five sections. The purpose of the current section is to provide a brief overview of the main developments in Greek warfare during the Geometric and Archaic ages. The orthodox interpretation of these developments in particular features prominently in this brief survey. The second section discusses Greenhalgh's important book on horsemen and chariots in the Homeric epics and during the Archaic period. The third section provides a survey of the iconographic evidence for mounted warriors, drawing heavily on Greenhalgh's work and adding some further comments. In particular, I shall discuss more fully the equipment used by the mounted warriors, in particular the cuirass and the shield. In the fourth section, I shall try to place the *hippobatai* in context and examine the literary evidence, in particular the works of the so-called lyric poets. The fifth and concluding section briefly summarises the main points made in this article.

I wish to re-examine some of the developments in Greek warfare during the 7th century BC. I believe that some of the elements long considered to have been typical of infantry warfare were actually developed specifically for use by men who spent much of their time on horseback. Thus, this article in a way resurrects an idea first postulated by Detienne in 1968, who suggested that the first hoplite phalanxes may well have been mounted.3 Because of the emphasis put on mounted warriors, the article also extends, and to a certain degree revises parts of, the well-known book written by Greenhalgh on early Greek chariots and horsemen. It also incorporates some of the suggestions made by Anderson and Snodgrass to arrive at what I hope to be an overview of the developments in Archaic Greek warfare that better incorporates all of the available evidence than has hitherto been the case.



Fig. 1. Warrior with Dipylon shield on chariot, from a Late Geometric Attic krater (drawn after Greenhalgh 1973, 33 fig. 26).

In Geometric vase-painting, many fighters use shields that are round, rectangular, or of the socalled 'Dipylon' variety (i.e. round with scallops cut out of the sides); see figure 1.4 Swords rather than thrusting spears tend to be used in closeranged fighting. The relatively short length of spears in Geometric art suggests that most were presumably thrown (javelins). Evidence from graves indicates that swords were perhaps the most important weapons for Geometric warriors. However, at least some of the spearheads recovered from tombs are obviously too massive to have been thrown.⁵ In many instances, Geometric warriors may well have used a combination of thrusting-spears (lances) and throwing-spears (javelins).6 Cavalry as a separate arm apparently did not yet exist in this period, but the ultra-rich used chariots as a kind of 'individual taxi-service',8 in the manner of the Homeric heroes. It should be stressed that there is nothing inherently implausible about the Geometric (or indeed Homeric) use of the chariot.9 Furthermore, the evidence suggests that the chariot remained in use on the battlefield throughout the 7th and 6th centuries BC,10 although perhaps not on a scale comparable to that of the 8th. In any event, chariots disappear from the battlefield toward the start of the 5th century BC.¹¹

In the final quarter of the 8th century BC, a new type of warrior appeared, referred to as 'hoplite' by modern scholars. The orthodoxy holds that this type of warrior dominated the Greek battlefield down to Classical times. The hoplite was an infantryman equipped with metal body-amour (greaves and a cuirass), a helmet, and a thrusting-spear. A sword was used when the spear was shattered during combat. But the defining characteristic of the hoplite was his large, round, and hollow shield. Earlier shields were equipped with a single handgrip at the centre, but this new type of shield, also called an 'Argive' shield,¹² featured a double grip. At the centre it had a band (porpax) through which the left arm was thrust up to the elbow; near the rim was a handle (antilabê) that could be grasped by the left hand. Thus, the weight of the Argive shield was distributed across the arm and shoulder, rather than concentrated at the hand and wrist. It is this type of shield that has dominated much of the thinking on how hoplites supposedly operated.

The origins of this type of shield are shrouded in mystery. The Greeks claimed it to have been a Karian invention, but this is unlikely to be true. ¹³ In any event, Lorimer claims that the shield was referred to as a *hoplon* 'in the language of everyday'. ¹⁴ This erroneous assumption has found its

way in many books and articles. Only fairly recently has an article appeared in which Lazenby and Whitehead finally dispel this notion. The ancient Greeks, from Homer onwards, used the term hoplon (and its plural, hopla) to refer to (pieces of) armour and weapons in general; the principal Greek word for shield was aspis. Indeed, the word hoplite itself had not at all the specific meaning that modern scholarship has attached to it. To the ancients, a hoplite was simply a 'heavy-armed warrior'. Indeed, Xenophon could refer to Egyptian soldiers equipped with shields as 'hoplites'. 16

Lorimer also suggested that the Argive shield's 'range of movement was extremely restricted'.¹⁷ Because of this, the hoplite fought in a tightly-knit formation referred to as the *phalanx*. ¹⁸ This notion is central to orthodox thinking on Greek warfare. The word *phalanx*, or related forms of it, are attested in Homer, 19 as well as in Tyrtaios and some other literary sources,²⁰ where it is used to refer to a 'battle-line' or, more generally perhaps, a group of fighters.²¹ However, it did not refer to any specific formation until the time of Philip II of Macedonia and his son, Alexander.22 The phalanx was supposedly rigid and existed only by virtue of all the men holding their position. According to the orthodoxy, when opposing phalanxes met in pitched battle, a shoving and pushing (ôthismos) resulted, and when finally one phalanx broke through the enemy lines the battle was essentially over.²³ The orthodoxy holds that the Greeks conceived of battle as a ritualised contest, an agôn. This rather stylised way of fighting as proposed by adherents to the orthodoxy has been rightly criticised by a growing number of other scholars, the so-called 'heretics'.24

The basis for this interpretation of the Greek style of fighting is supposedly found in a passage in Thoukydides' History of the Peloponnesian War (5.71). However, Thoukydides refers to this tightlyknit formation only when he describes how the typical army of his own day advanced. Earlier in the same book, Thoukydides writes that the Spartans advanced slowly and deliberately to the music of flute-players (5.70). He mentions that this custom was 'designed to make them keep in step and move forward steadily without breaking ranks, as large armies often do when they are just about to join battle' (ibidem).25 That last remark suggests that even in the later 5th century BC, most battles apparently consisted of a mêlée between combatants, a mass of individual duels, rather than a concerted shoving or pushing (*ôthismos*) between opposing, rigid phalanxes, as the orthodoxy would have us believe.²⁶ Indeed, one can argue that in many instances use of the verb 'to shove' in our ancient sources may have been metaphorical rather than literal.²⁷

According to the orthodoxy, the hoplite panoply, especially the shield, was somehow unwieldy or otherwise stimulated the development of the phalanx and, by extension, this ritualised way of fighting. The scholars who formulated this rather stylised way of fighting found their share of detractors quite early on.²⁸ In more recent years, it has been Peter Krentz and Hans van Wees in particular who have criticised this interpretation of the evidence,²⁹ and they have been found support among a few other writers.³⁰ They reject the notion of the hoplite panoply stimulating the development of the closed phalanx; there is, indeed, nothing about the helmet or shield that would preclude hoplites to fight in a more open, fluid manner.³¹ Krentz sums up this point succinctly in the abstract to one of his most recent contributions, saying 'that the ideology of hoplite warfare as a ritualized contest developed not in the 7th century, but only after 480, when nonhoplite arms began to be excluded from the phalanx. [...] Archaic Greeks probably fought according to the limited protocols found in Homer.'32 This means that warfare in the Archaic period was characterised by "mass" fighting, but not "massed" fighting.'33 Thus, for much of the 8th to 6th centuries BC - and arguably the 5th as well - we have an image of warfare in which formations were apparently used solely when advancing and perhaps for defensive purposes;³⁴ the actual battles were disorganised affairs, consisting of a multitude of duels and engagements between individuals, 'one-on-one, two-on-one, three-on-two,'35 and so on.36

In short, the two most important terms that are used nowadays to define Greek warfare in the Archaic and Classical periods - 'hoplite' and 'phalanx' - are, in fact, modern constructs. They imply differences between the Geometric and Archaic modes of fighting that perhaps never existed. Snodgrass, in the 1999-afterword to his Arms and Armour of the Greeks, originally published in 1967, mentions new research in which it is (rightly) claimed that the masses in Homer are more important in the fighting than has hitherto been assumed. However, he opposes the assertion 'that these armed masses did not significantly differ from the hoplite armies of the later historical period', because 'then the revolution in tactics' the so-called hoplite 'reform' - 'would be both less abrupt and distinctly earlier in date,' than is usually claimed.³⁷ Indeed, I would contend, as others have,38 that there likely never was a 'revolution'

in Greek warfare. Furthermore, I believe that the style of fighting from at least Geometric times down to the Classical period remained largely the same, namely open and fluid.

It is important to stress that the ancient Greeks themselves were far from consistent in their terminology. It would therefore be a mistake to attach too specific a meaning to ancient Greek words like hoplite or phalanx. Hence, certain questions, such as whether or not Homer in some passages describes a 'hoplite phalanx', are in my opinion essentially pointless. To expand on this example, most of the princes (basileis) in the Homeric epics fight as 'spearmen' (aichmêtês),³⁹ not as 'hoplites'. I believe we should therefore discuss Archaic Greek warfare on its own terms, however vague or unsatisfactory modern scholars may believe the ancient terminology to be. In the end, we should try to approximate the truth as closely as possible without trying to shoehorn the evidence into our modern conceptual frameworks.

GREENHALGH'S HORSEMEN AND CHARIOTS

One should also consider the context in which modern scholars operate. Greenhalgh's important book on horsemen and chariots in Homer as well as in the Archaic period (roughly the 8th to 6th centuries BC) was published in 1973. In the seventies, the orthodoxy ruled supreme, and we find in Greenhalgh's work frequent allusions to the hoplite phalanx. Homer was thought to incorporate Mykenaian elements in an attempt to archaise his poems. Furthermore, the period between about 1200 and 800 BC was also considered to have been a true 'Dark Age'. Archaeology has in the meantime shed quite some light on this period. Finds from Lefkandi and elsewhere have shown that this age was not at all as debased as was once thought.

In any event, Greenhalgh has assembled much of the available evidence on horsemen and chariots and produced a detailed synthesis of the collected material. In his book, he examines the Homeric epics and a large number of vase-paintings. He concludes that the use of the chariot as a glorified battlefield-taxi is largely nonsensical, and must therefore be a deliberate attempt at archaising or heroising the epics.⁴⁰ As a solution to this 'problem', Greenhalgh suggests that Homer had in mind the mounted warriors of his own time, but replaced the horse by the chariot to indicate to his listeners that the story he tells is an ancient one, in which heroes did not ride on horseback but instead used chariots to transport themselves to the battlefield.



Fig. 2. Mykenaian chariot; fragments of a Late-Helladic-IIIC krater found at Tiryns (drawn after Vermeule/Karageorghis 1982 plate XI.16).

Fig. 3. Detail of an Early Protokorinthian aryballos by the Evelyn Painter (drawn after Shanks 1999, 76 fig. 3.3).

Greenhalgh is undoubtedly correct in attaching great value to the use of the horse in combat. He suggests that 'The horse's role in transporting the warrior to and from the battlefield and for pursuit and flight continued to be valuable in hoplite warfare as in the earlier style, and Helbig was right to speak of earlier aristocracies of knights as mounted footsoldiers.'41 However, after the introduction of phalanx-tactics, Greenhalgh argues, the war-horse 'could only be used for transporting him [the hoplite] behind the lines, and for pursuit and flight.'42 This idea stems from the (orthodox) assumption that horses and hoplites cannot mix freely when on the battlefield, since the phalanx is thought to be a tightly-knit formation.

Furthermore, Greenhalgh argues that while the Argive shield 'was not impossibly ill adapted to the unorganized warfare of the javelin era [...] it did nothing to encourage the development of the phalanx, to which it was *certainly* better adapted.'43 He goes on to add that the Argive 'shield had one aspect which I believe prompted the development of the phalanx, [...] that the shield covers not only the left side of its bearer but also the right side of the man next to him.'44 Greenhalgh claims that since the shield could not be easily slung round to protect the back (unlike the earlier single-grip shields), it ultimately led to the development of the phalanx.⁴⁵ In short, the new tactics prevented hoplites from riding into battle as had been possible in the older style of fighting.

Greenhalgh's suggestion that chariots in Homer and Geometric art are deliberate attempts at archaising or heroising is not entirely convincing. He may be echoing Snodgrass in this regard, as he too believed that the use of chariots in Homer as well as the Geometric painted scenes were deliberately archaising: 'It is far more reasonable to assume that both Homer and the Geometric artist were vague about the real use of chariots in war.'46 Hence, Snodgrass assumes, like Greenhalgh later does, that the Geometric and Homeric warriors 'actually' rode horses rather than used chariots, obviously because the way that the chariot is used in the original sources is not deemed 'proper'. There is, however, nothing inherently improbable about the Homeric use of the chariot, as Anderson has shown.⁴⁷ Indeed, chariots were apparently used to transport heavy-armed warriors to the battlefield during the Late-Helladic-IIIC-period, as figure 2 illustrates.⁴⁸

Furthermore, I disagree with Greenhalgh that the adoption of phalanx tactics slowly reduced the role of the horse in the 7th century. ⁴⁹ It seems very likely to me that fighting remained open and fluid down to the 5th century at least. It seems probable, therefore, that horses continued to be ridden into battle; some of the ultra-rich may even have continued to use chariots. ⁵⁰ Nevertheless, despite these criticisms much of Greenhalgh's book remains useful, and an attempt is made in the next section to incorporate his data as well as the comments made by a few other authors to create a revised

overview of the developments in (early) Archaic Greek warfare, which I believe to correspond better with all of the available evidence. Central to this re-assessment of the evidence is the purpose of the Argive shield. Just why did the Greeks create this large, double-grip type of shield? I believe we can arrive at an answer by looking more closely at the mounted warriors of the late 8th and 7th centuries BC.

THE ICONOGRAPHIC EVIDENCE

The iconographic evidence for mounted warriors and chariots will be briefly surveyed in the present section. In Korinth, a new style of vase-painting developed in the final quarter of the 8th century that was very different from the Geometric styles popular in Athens and elsewhere. An Early Protokorinthian vase (no later than ca 700 BC), attributed to the Evelyn painter, depicts a warrior on foot walking behind a youth on horseback (*fig. 3*). This is the earliest known depiction of the motif of the 'knight and squire', one that remains popular in the Greek world throughout the 7th and 6th centuries BC.

An aryballos of the Early Ripe Korinthian period (last quarter of the 7th century BC) again depicts a warrior on foot behind a mounted youth (*fig.* 4). This time, however, the two figures are named. The warrior is called a *hippobatas* or 'horse-fighter'; his squire is referred to as a *hippostrophos*

or 'horse-turner'.⁵¹ These *hippobatai* and *hippostrophoi* are also represented in the iconography of other regions, from Lakonia to Athens (see section IV). In some scenes, the squire is omitted; in others, the outline of a second horse is visible behind the one used by the *hippobatas*. The *hippobatai* are often shown in scenes depicting single combat. In such scenes, two dismounted *hippobatai* fight each other with thrusting spears (never swords); their mounted squires, often depicted holding the reins of their masters' horses, are usually present on either side of the battle.⁵²

This much is presumably known by anyone familiar with Greenhalgh's book. I should, however, like to draw attention to the equipment used by the *hippobatai*, and in particular the bell-shaped cuirass and the Argive shield. The bell-shaped cuirass, so called because of its distinctive shape, was made of bronze and consisted of two halves; one covering the chest, the other the back. These two plates were hinged on one side and fastened with buckles on the other. Snodgrass was perhaps the first to suggest that the bell-shaped cuirass was developed specifically for use by horsemen.⁵³ The design of this type of cuirass allows the wearer to sit on one's haunches,54 as well as ride comfortably on horseback.55 It is surprising, however, that few authors have drawn any conclusions from these facts, and that most are content to consider it primarily as a piece of armour worn by infantrymen, pure and simple.

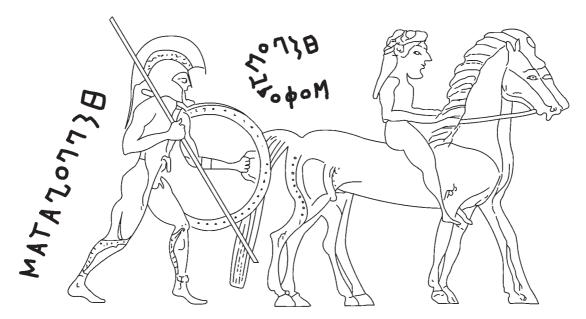
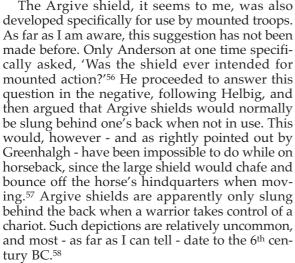


Fig. 4. Detail of an Early Ripe Korinthian aryballos: hippobatas and hippostrophos (drawn after Alföldi 1967, 14 fig. 1).



Fig. 5. Detail of an Early Ripe Korinthian aryballos: warrior leaping from his horse (drawn after Greenhalgh 1973, 87 fig. 48).



The Argive shield, with its *porpax* and *antilabê*, would have been less strenuous to carry around than the older single-grip shields. The Argive shield was worn on the left arm, and because it was hollow it could also be supported by the shoulder. This means that when carried on the left arm the shield would be on the left side of both horse and rider, exactly as depicted on Archaic vases, without chafing or hurting the animal. It also provided the *hippobatas* with a measure of safety from enemy weapons, particularly if he approached the enemy line at an oblique angle, keeping the unshielded side away from enemy missiles. Depictions of *hippobatai* on horseback



Fig. 6. A terracotta shield of the early fifth century, found in the Korinthian Kerameikos (drawn after Newhall 1931, plate II).

show them to be fully armed and combat-ready; all they need do is approach the enemy and leap from their horses, while their squires take hold of the reins and move the animals to safety.

There are a few depictions that indicate that hippobatai sometimes did not leap from their horses until they were within easy reach of the enemy. An Early Ripe Korinthian aryballos from Perachora is discussed by Greenhalgh, who calls it an 'extraordinarily clumsy drawing', the product of a 'poor' artist (fig. 5).⁵⁹ It depicts a hippobatas holding his spear overhead; both his legs are drawn clearly. He is facing another warrior, approaching from the left. The scene probably depicts the start of a violent encounter. Greenhalgh suggests that it might possibly be a depiction of a heavy-armed warrior fighting from horseback, but adds that it might just as well show the warrior dismounting. Only the latter interpretation seems to me correct, since the two figures are too far apart to be fighting already and both legs of the dismounting figure are clearly drawn. Anderson also believed that the figure was dismounting.60

A very similar, although much later, depiction of a dismounting *hippobatas* is found on a terracotta relief shield unearthed in the Korinthian Kerameikos in the 1920s (*fig. 6*). The shield itself is clearly of Argive type and has been dated to the early 5th century BC. It has a carefully crafted relief 'blazon' that shows a *hippobatas* leaping from his horse. The image is comparable to that of the aryballos, except that it is better made. The only thing



Fig. 7. Detail of a 6th-century Attic black-figure vase with dismounting warrior (drawn after Greenhalgh 1973, 120 fig. 62).

lacking is the spear, but this omission might be attributed to the complexity of the composition (explaining perhaps, why the scene on the aryballos is so 'clumsy'). The difficulty in portraying such a dynamic scene might also explain its rarity in early Greek art. Nevertheless, a few other examples are known, some of which are Attic and usually date to the 6th century BC.⁶¹ One example, also included in Greenhalgh's study,⁶² is illustrated in figure 7.

The way that these warriors leap from the backs of their horses itself is informative. Nowadays, it is standard practice to mount a horse by grabbing hold of the saddle or of the point where the horse's neck meets the shoulder, putting the foot in one stirrup, and then pulling one's self up, swinging the other leg over the horse's hindquarters. Dismounting is generally done by performing the same manoeuvre in reverse. The ancient Greeks, of course, knew no stirrups, and most Greek horsemen apparently rode bareback (sometimes a saddle cloth was used).63 In mounting and dismounting, the modern-day rider always faces the side of the horse and exposes his back. Yet, in the scenes discussed in this section, the hippobatai, when dismounting, always face away from the horse. In other words, the dismounted hippobatas is battleready and facing his opponent the moment his feet touch the ground. The warriors presumably achieve this by swinging one leg over the horse's neck or head. The lack of stirrups means that the shift in weight allows the rider to slide off the side of the horse or, perhaps with a gentle push, leap from the horse's back in the manner depicted on the monuments.

In short, this evidence suggests that at least some *hippobatai* did not dismount until they were very close to the enemy. One imagines them riding into battle, accompanied by their squires (and perhaps followers), dismounting only when they are perhaps a few yards away from their opponent. The multitude of vase-paintings depicting duels might even suggest that a hippobatas could ride out to meet his (mounted) opponent and issue a formal challenge,64 after which both would dismount for combat, while their squires took their horses and stood back, perhaps observing the battle in the manner depicted on Korinthian vases. Of course, such practices would be hazardous if either side used a large number of archers or other missile troops, explaining perhaps the pact made by the combatants in the so-called Lelantine War, which specifically prohibited the use of missiles.⁶⁵

It is perhaps useful to compare the depictions of *hippobatai* to those involving war-chariots. In the Geometric period, many warriors depicted on

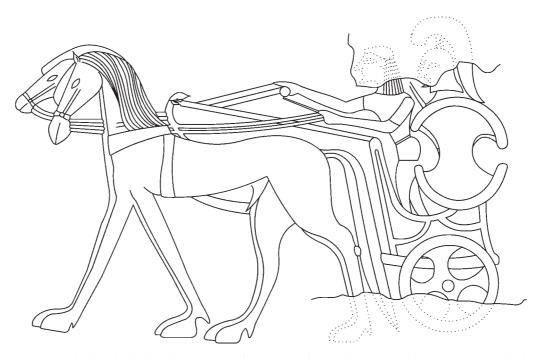


Fig. 8. Detail of a relief pithos from Naxos depicting a chariot (660-650 BC); note Boiotian shield (drawn after Simantoni-Bournia 1990, plate 7).

chariots are equipped with shields, generally of the Dipylon-variety, slung behind their backs.⁶⁶ Usually, there is no room in Geometric painted scenes to depict a separate charioteer. From the 7th century BC onwards, however, new styles in figurative art allow for greater detail. A relief vase from Naxos (dated to 660-650 BC), for example, depicts a chariot with an unarmed youth for a charioteer and a warrior next to him equipped with a Dipylon-shield or its double-grip variant, the Boiotian shield (*fig. 8*).⁶⁷ Depictions of warriors equipped with Argive shields stepping onto a chariot are known from the 6th century BC onwards.⁶⁸ A Boiotian figurine from the 5th century depicts a driver with an old-style Dipylon-shield slung behind his back, accompanied by a warrior with an Argive shield.⁶⁹ Since the *hippobatai* are invariably depicted with Argive shields, this appears to support the idea that the Argive shield was specifically developed to be easy to carry on horseback.

We can securely date the appearance of the first *hippobatai* to the last quarter of the 8th century based on the aryballos by the Evelyn Painter. It seems likely that the *hippobatai* are a Korinthian development that soon spread to other areas of the Greek world. The motif of the 'knight and squire' appears on Protoattic vases of the 7th century and remains a feature on Athenian vases down to end of the 6th century. A knight is also portrayed on a 7th-century ivory plaque found at Sparta;⁷⁰ depic-

tions of hippobatai and hippostrophoi, as well as both armed and unarmed vouths on horseback, are encountered on 6th-century Lakonian pottery.⁷¹ Similar mounted warriors are also known from Krete.⁷² The *hippobatai* furthermore found their way to the colonies, especially in Italy, where the local people apparently adopted this mode of fighting as well. Figure 9 is based on an Etrurian bucchero oinochoe from Ischia di Castro. It depicts an archer who is run down by a chariot, while a youth (?) on horseback approaches from the left; at right, two heavy-armed warriors in Greek armour are engaged in single combat. The chariot may belong to one of these two warriors; the youth at left certainly looks like a mounted squire. The so-called Horseman of Grumentum, dated to about 560-550 BC, is similar to a hippobatas, except that he lacks a cuirass and greaves (the shield on his left arm is missing).⁷³ In Italy at least, the *hip*pobatas apparently remained an important motif down to the 4th century, as demonstrated by the Black Horseman slab found in Tomb 58 at Andriuolo (dated to 340 BC).⁷⁴ While widespread, it should be stressed that the hippobatai were not universally adopted by the Greeks. There is little iconographic evidence, as far as I have been able to find, for the existence of *hippobatai* on the smaller Aegean islands. It seems likely therefore that *hip*pobatai were limited geographically to those regions which could support several hundred horses for use by the élite.

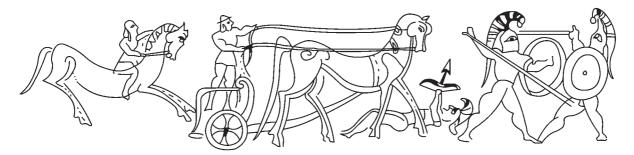


Fig. 9. Bucchero oinochoe from Ischia di Castro (drawn after Stary 1981, plate 7).

There is some evidence which indicates that the part played on the battlefield by hippobatai slowly diminished, at least within the Aegean basin. Toward the end of the 7th century BC, or early in the 6th, a new piece of body-armour appears: the thigh-guard. Greenhalgh has pointed out that 'it is the thighs that provide a horseman's main grip, and they were the only part of the otherwise completely mailed Parthian cataphract to be left unprotected'.75 Thigh guards are depicted frequently in 6th-century art, but only one actual example is known (from Olympia); its date is a matter of contention.⁷⁶ Needless to say, thigh guards are associated solely in the iconographic evidence with fighting on foot, since it is next to impossible to maintain one's grip on horseback when the thighs are covered with bronze.

Furthermore, from the middle of the 6th century, the bell-shaped cuirass is slowly replaced by more lightweight body-armour, generally made of linen or a composite of linen and metal scales.⁷⁷ Previously, armoured troops are invariably depicted wearing metal body-armour.⁷⁸ Jarva argues, on the basis of dedications of armour at Olympia, that not all heavy-armed warriors were equipped with metal armour.⁷⁹ I believe, however, that the artistic representations in which metal armour is consistently depicted - barring those instances of heroic nudity - to be an accurate reflection of historical reality. Only in the second half of the 6th century is non-metal armour depicted in significant numbers, and eventually such armour largely displaced metal body-armour.⁸⁰ The evidence is consistent in this regard.

HORSEMEN AND WARFARE IN ARCHAIC GREECE

Hippobatai are usually shown in specific contexts. For my master's thesis, I collected a sample of 29 Korinthian vases that featured depictions of warriors or battles. (It should be emphasised that scenes featuring human figures on Korinthian pottery are relatively uncommon.) I have divided the scenes into specific types; the table provides an

overview. *Hippobatai* are usually depicted in single combat (dismounted) or on the move (mounted). If there is enough room on the surface of the pot, the squires are usually indicated; their presence is sometimes indicated only by the outline of a second horse behind the one used by the mounted warrior. Horses are never indicated in scenes featuring mass combat, at least not during the 7th century.

Two famous Korinthian vases that display mass engagements are the Chigi olpe and the Macmillan aryballos, both dated to about 640 BC.81 The battle-scenes on both feature large numbers of heavily-armed men, but no horses. In both cases, horses are depicted on other parts of the vases, but they are not connected in any obvious way to the main scenes featuring massed combat. Instead, we encounter mounted squires as well as solitary horses in scenes of single combat between two (dismounted) hippobatai. It is possible that ancient painters and their audiences simply assumed that the heavy-armed warriors had ridden to the battlefield, even if the horses were not indicated (for lack of space on the pot or for other reasons). On the Chigi vase, there are two figures who are still arming themselves; others are running to catch up with their compatriots who are already marching toward the enemy. It seems unlikely that these had first ridden to the battlefield, only to dismount and then equip themselves. It is perhaps more likely that the warriors moving from left to right marched to the battlefield because it was close to their base of operations, their city or perhaps camp.

In any event, all that we can say for certain, is that the impression given by the Korinthian iconographic evidence of the seventh century indicates that *hippobatai* and *hippostrophoi* on the one hand, and scenes of mass fighting on the other, are mutually exclusive. Exceptions to this general rule seem to appear only on pottery of the Ripe Korinthian era (as well as on the larger Athenian pottery of the 6th century). 82 For this period, Greenhalgh recognises different kinds of riders, which can be

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	3%	9	4%	~
Donaton 1707.12 10.1 (Dveryn)		X		
Korinth CP-2096			X	
Ashmolean 504				X
Brindisi 1609	X			
Berlin 3319				X
Louvre CA 617				X
Perachora 27			X	
Perachora 673	X			
London 1889.4-18.1 (Macmillar	ı)		X	
Johansen 1923 plate 34.2			X	
Johansen 1923 plate 34.1				X
Taranto 4173				X
Louvre CA 931			X	
Villa Giulia 22679 (Chigi olpe)			X	
Berlin 3148 (still life of panoply	y)			X
Berlin F 1056		X		
London 1922.10-17.1		X		
London 1958.1-14.1				X
Lucerne, Käpelli inv. 407		X		
Lucerne, Käpelli inv. 408		X		
Rhodes 13008	x*			
Athens 341		X		
Perachora 1556		X		
Perachora 1571		X		
Perachora 1590		X		
Perachora 2434		X		
Korinth CP-2634		X		
Greenhalgh 1973, 97 fig. 50		X		
London 1814.7-4.491 (OC 421)			X	
Totals	3	12	7	7
(out of 29 items)	10%	41%	24%	24%

The numbers refer to inventory numbers, except where those are not known (by me, anyway), in which case I have referred to the source of the pictures (Johansen 1923 and Greenhalgh 1973). Rhodes 13008 features single combat between apparently dismounted *hippobatai*: the battle, however, is not flanked by mounted squires but by panthers, so I have catalogued it as 'single combat' only. I have included, among the knight (+squire) scenes, those rare instances in which the *hippobatai* are apparently not accompanied by squires or second horses. The items are listed roughly in chronological order.

conveniently summarised as follows: (1) the standard *hippobatas*, sometimes accompanied by his squire, but always equipped with greaves, bell-shaped cuirass, helmet, and shield, as well as one or two spears; (2) a rider equipped with at least a helmet and a spear, often too a cuirass and greaves, never accompanied by a squire and always lacking a shield, and; (3) a tunic-clad youth similar to a *hippostrophos* but for the single (thrusting) spear

with which he is equipped.⁸³ The first type is undoubtedly 'mounted infantry', i.e. men who rode on horseback but dismounted to fight. The second type is classified by Greenhalgh as cavalry proper, and there is no reason to doubt him. The third type is at first confusing: Helbig thought all mounted youths to be squires, whereas Greenhalgh suggests that some of them were light cavalry.⁸⁴ I should like to suggest, on the basis of similarly equipped youths known from earlier Egyptian iconography,85 that in some instances these youths are actually mounted scouts. In both Greek and Egyptian art, these riders are unarmed save for the spear. It does not seem too far fetched that, while on the move, some (armed) 'squires' would be sent ahead of the army to explore the terrain and seek out the enemy.86

The *hippobatas* and his squire are features of the 7th century BC and may have spread from the north-east Peloponnese to other regions within the Aegean basin.⁸⁷ They were probably introduced at Korinth.88 I contend that the Argive shield was specifically invented so that it could be easily carried by someone on horseback. Considering the expense of the panoply it seems not at all unlikely to me that all of the heavy-armed warriors were owners of horses, at least in those regions that were suitable for horse-rearing. The poorer segment of society would presumably be called upon to serve as light-armed troops in times of war. In the fragments of the Spartan warrior-poet Tyrtaios (fl. 650 BC) we encounter for the first time the basic subdivision of troops in panoploi and gymnêtes: 'armoured' and 'naked' troops, respectively.89 However, he does not describe *hippobatai*. In fact, hippobatai are conspicuously absent in the works of the lyric poets of the 7th and 6th centuries BC.

Horses play a prominent part in the *Iliad*, but those that are described in any detail are the ones yoked to the chariots of the principal heroes. There is one instance, which occurs in the Doloneia, where horses are specifically said to be ridden. During the night expedition, Diomedes and Odysseus steal the horses of the Thracian king Rhesos, mount them, and then ride back to camp. 90 Another (contentious) passage describes how horsemen, rather than chariots, killed each other. 91 Snodgrass is probably correct when he states that 'it is far easier to understand the un-Homeric plural as meaning horsemen, than to believe that we have here a direct clash of chariots, unique in the *Iliad.*'92 Homer often uses simply the term *hippêes* (*hippeis*), which refers to both 'horsemen' as well as 'chariots'. Perhaps, then, in some instances Homer did have the former in mind rather than the latter, but it seems nevertheless clear that the heroes themselves, who presumably belonged to the ultra-rich, generally travelled by chariot.

It is unfortunate that the songs of Korinthian poets, like Eumelos, have been lost. Fragments remain of the work of Archilochos (fl. 650 BC) and Alkaios (fl. 600 BC). They were residents of Paros and Mytilene (Lesbos), respectively. Neither Archilochos nor Alkaios mention horses in the cases where they had to flee (fr. 5 West; fr. 401B Voigt, respectively), although only Archilochos emphasises running (fr. 233 West). However, I have noted earlier that the iconographic evidence for the presence of hippobatai on the smaller Aegean islands is virtually non-existent. Mimnermos of Smyrna describes a warrior who fought off the Lydian cavalry, but he apparently does so on foot (fr. 14 West). This need not imply anything about his mode of transport, since the *hippobatai* were at any rate mounted warriors rather than cavalry proper.93

Sizeable fragments of the poetry by Tyrtaios remain. His descriptions of battle resemble those in the *Iliad*, but horses are never mentioned. Instead, the emphasis is placed squarely on footsoldiers, who are divided into two main groups, panoploi and gymnêtes.⁹⁴ Horses are not mentioned. It is perhaps possible that Tyrtaios assumed that some of the warriors would have ridden to the battlefield. Perhaps it is more likely that the situation resembles what we have already noted about the Korinthian iconographic evidence: horses may have been fairly unimportant in mass combat. In large conflicts between different communities, warriors were perhaps expected to march to the battlefield rather than ride, particularly if there were many gymnêtes present who could never have kept up with the *hippobatai* if the latter had moved at speed. There is insufficient evidence to decide which solution is the best, but the latter perhaps has the most merit.

During the 7th century BC, it seems likely that most Greek armies were relatively small,⁹⁵ and all of the heavy-armed troops were therefore probably drawn exclusively from the aristocracy.⁹⁶ These armies consisted of a number of small warbands.⁹⁷ These war-bands were the military equivalents of the different (aristocratic) factions that existed among the élite in any given community. When fighting another polity, these war-bands united to form a single army to defend against a common foe. In Homer, we find that the Achaian army consists of a multitude of war-bands, brought together using networks of friends and dependants.⁹⁸ However, war-bands could also operate

independently and for private, rather than public purposes. In times of *stasis* or internal strife, members of the élite could use their war-bands against each other. Alkaios, for example, in one fragment reminds his friends of the great store of weapons and armour that they have at their disposal and which they should use to prevent one man from seizing sole political power (thereby becoming a tyrant).⁹⁹ Alkaios has no qualms about using his military might to secure his future as a member of the aristocracy.

War-bands could also be used for other private purposes, such as raiding or other forms of predatory warfare. ¹⁰⁰ It seems likely that in small military operations where speed was at a premium, such as ambushes and raids, horses would be used whenever available. In large-scale conflicts, horses would be less important, since enemy missile troops could easily hurt or even kill the animals, as evidenced by the rules used during the Lelantine War. This hypothesis would eliminate the apparent contradictions between the written sources and the contemporary iconographic evidence.

Early in the 6th century, it is clear that Greek forces become more specialised, and heavy infantry emerges in its own right, apparently separate from the hippobatai. Cavalry may have slowly developed as a separate arm in the first half of the 6th century, 101 although initially it may have been a relatively unimportant part of the archaic armies of the Peloponnese and Central Greece. 102 (True cavalry did exist from a relatively early age in Thessaly, Macedonia, and Thrace.)¹⁰³ As Van Wees has recently shown, 'hoplite' warfare did not exist for centuries prior to the Classical period, but was a relatively recent development.¹⁰⁴ He suggests that 'drastic social and cultural changes in the late 6th and early 5th centuries BC established greater state control in political and military institutions'. 105 One may object to certain details of Van Wees's overview of the development of Greek warfare, but the general tendency toward increased military specialisation and the important part played therein by the emerging Classical Greek State seem clear. 106 It is likely that cavalry proper appeared in numbers at around the same time, maybe 500 BC or a little later.

Despite these changes, one can still find in the literary evidence of the 5th and 4th centuries BC traces of the earlier *hippobatai*.¹⁰⁷ As others have pointed out, it seems likely that the Spartan royal guard, the élite *Hippeis*, may have originally been a contingent of mounted troops.¹⁰⁸ In his history of the Peloponnesian War, Thoukydides casually mentions that the Boiotians fielded 'five hundred

dismounted troops trained to operate with the cavalry'.¹⁰⁹ Greenhalgh suggests that these *hamippoi* were light-armed troops,¹¹⁰ but Thoukydides does not make this clear. In the 4th century BC, Xenophon was one of the few mounted infantrymen in his mercenary army.¹¹¹ Furthermore, at certain games and festivities, young men practised jumping on and off both (moving) chariots and horses.¹¹²

In the *Politics,* Aristotle provides a brief overview of the development of political systems in Greece. He asserts that:

The earliest constitution (after kingships) among the Greeks was in fact composed of warriors, of the cavalry [hippeis] in the first place, because it was in them that strength and superiority in war were to be found (for without organized formations a hoplite force is useless, and the ancients had no fund or experience of such things and no tactical procedures for them, so that their strength rested with their cavalry). 113 It is interesting that according to Aristotle the 'cavalry' were originally a force to be reckoned with.¹¹⁴ It is possible that Aristotle was thinking of the age of *hippobatai* in Korinth and Athens. The English word 'cavalry' denotes a specialised use of the horse that the equivalent term in ancient Greek does no possess; rather, it simply refers to a warrior associated with a horse, be it a charioteer, a mounted warrior, or a cavalryman proper.¹¹⁵ The age of kings perhaps refers to the Homeric epics. Homeric society is dominated by a warrior élite, the basileis ('princes'), 116 who are frequently associated with horses and, in this case, chariots. Perhaps, then, Aristotle's run-down of early Greek history retains a memory of the age of hippobatai.

CONCLUSIONS

I started this article with a brief discussion concerning the traditional (orthodox) interpretation of Greek warfare. I have sided with the so-called 'heretics' who believe that battle remained relatively open and fluid from at least the 8th century onwards down to the end of the 6th. I then summarised the most important points of Greenhalgh's study into horsemen and chariots and criticised some of his conclusions. I then proceeded to reexamine some of the iconographic and literary evidence of the late 8th to 6th centuries BC.

Fighting in heavy armour must have been exhausting. Certainly, it would have been difficult for a man equipped with a bell-shaped cuirass, bronze greaves, and other elements of the complete pan-

oply to march for hours on end. It seems likely that this is an important reason why heavy-armed warriors are frequently shown, first, using chariots (Mykenaian and Geometric times) and, later, riding on horseback (the hippobatai), at least in those regions that were suitable for the rearing of horses. While chariots continued in use throughout the 7th and 6th centuries BC, it is odd that *hippoba*tai feature prominently in the ancient evidence from about the end of the 8th century onwards. One possible explanation is perhaps that conflicts between neighbouring settlements became more common, requiring armies to travel by land more frequently. Since good roads were scarce in Greece, chariots would have been difficult to use in most cases. Instead, heavy-armed warriors decided to ride on horseback, perhaps because the animals could move over tracks and paths not easily accessible to chariots. The older, single-grip shields were not well adapted to riding on horseback. I have tried to show that the Argive shield was much better suited for this purpose, since it was carried on the left arm (and shoulder) and so did not interfere with riding.

In the 6th century, Greek body-armour gradually became lighter. The linen corslet certainly displaced the bronze bell-shaped cuirass toward the end of the 6th century. Perhaps this indicates that Greek armies came increasingly to rely on a larger number of relatively well-equipped close-range fighters than could be provided by the horseowning aristocracy on its own. While this should not be connected to the rise of a so-called 'middle class', it can perhaps be connected to processes of state-formation, whereby older aristocracies were increasingly replaced by timocracies. Perhaps members of a non-governing élite were allowed to procure panoplies previously reserved for the aristocracy; the latter at any rate continued to be associated with horse-ownership. Cavalrymen were undoubtedly drawn from the aristocracy. Cavalry proper may have appeared in the first half of the 6th century BC. It is clear that cavalrymen continued to wear metal body-armour all the way down to the Classical period, 117 and possibly beyond. This supports the notion that heavy bodyarmour and horses are connected, and the Argive shield may have originally been developed specifically for use by the aristocratic hippobatai.

Even after the shift in emphasis to infantry proper, horses continued to be useful not just as cavalry, but also as a mode of conveyance for some of the heavy-armed, for raids, surprise attacks, and ambushes. In short, all activities where speed is at a premium. Horses are uncommon in mass

engagements, where most of the warriors instead operate solely on foot. A 6th-century black-figure lekanis lid from Athens depicts dismounted hippobatai marching among regular heavy-armed warriors on foot (see note 86). We can perhaps assume that in large battles, only some warriors rode to the battlefield as *hippobatai* and dismounted long before the fighting actually began. It seems likely that in an all-out battle between armies of different communities, there would have been plenty of missile troops that could injure or kill the valuable horses.

I hope to have shown that there is ample proof to suggest that the horse was an integral element of the accoutrement of the heavy-armed warrior in the late 8th and 7th centuries BC. The bell-shaped cuirass has for some time now been recognised as a piece of armour well-suited for use by men on horseback. The Argive shield too was very probably invented for the same purpose, since in my opinion it has specific advantages over the older central-grip shields when it comes to riding on horseback. Thus, it seems to me - as Detienne once suggested - that the Classical Greek hoplite finds its origins in the hippobatai, the mounted troops, of the 7th century BC. I believe that this hypothesis has the advantage of taking into account all of the available evidence in a manner hitherto not attempted.

NOTES

- This article has benefited from the helpful advice of Jan Paul Crielaard, for which I am grateful. My thanks also to H. Singor, who read the manuscript and commented on it. In addition, I should also like to thank Greg Tyler and Kevin R. Danzey for proof-reading the manuscript and providing me with helpful comments. The support and advice that these readers have given me does not mean that they necessarily agree with the contents of
 - All illustrations were prepared by myself, made after photographs and drawings published in the sources that are cited in the captions.
- For example, Van Wees 2004 and Lendon 2005.
- Holladay 1982; Cawkwell 1989.
- Detienne 1968, 134-8.
- Some commentators believe the Dipylon-shields to be heroic or otherwise unrealistic (e.g. Snodgrass 1964b, 58-60 with references), but I can find no compelling reasons to support such a notion; cf. the hands-on approach to the Dipylon and Boiotian shield in Connolly 1998 [1981], 51 (although I do not believe that the Mykenaian figure-of-eight shield is the direct predecessor of the Dipylon-type shield, as Connolly purports). As regards Geometric vase-paintings of battle, Ahlberg 1971 remains the most useful guide.
- Snodgrass 1964b, 136-139.
- Although in Geometric vase-paintings, all spears are apparently thrown; see Van Wees 1994, 143-146.

- This contra Snodgrass 1971, 46 (and by extension contra Aristotle *Politics* 1289 b36f).
- The phrase is lifted from Greenhalgh 1973, 2.
- Anderson observes that 'there is enough evidence elsewhere to show that there was no single "proper" system of chariot-tactics in antiquity. Homer's evidence is not to be discredited because it contradicts modern preconceived theories' (1975, 187; contra Greenhalgh 1973, 14-18).
- Van Wees 2004, 176-177.
- Adcock 1967, 47.
- Snodgrass 1964b, 63-67.
- Refer to the discussion in Snodgrass 1964a, also Snodgrass 1964b, 182-183.
- Lorimer 1947, 76.
- Lazenby/Whitehead 1996.
- As pointed out by Pritchett 1985, 11 (with references).
- Lorimer 1947, 76; echoed in Cartledge 1977, 20.
- Snodgrass 1971, 45 used the word 'massed force' as a synonym for phalanx.
- Latacz 1977, especially pp. 45-49. Tyrtaios fr. 12.21-2 West.
- Cf. Van Wees 1994, 3-4.
- As a technical term, the word phalanx 'was first generally applied to the Macedonian phalanx' (Adcock 1967, 3 n. 5). The word is nowadays used more generally to denote a massed group of armed men who are ordered in ranks and files. Classical authors used the term generally to denote either a battle-line or an arrangement of troops that was broader than it was deep (Wheeler 1991, 156 n. 21).
- Hanson is currently perhaps the most outspoken advocate of the orthodoxy, e.g. Hanson 2000 [1989]
- The earliest critic is perhaps Frazer 1942; 'heretics', see note 2, above.
- See also the discussion of these passages in Cawkwell 1989, 379-380
- Cf. Latacz 1977, 226-229, who compares the Homeric descriptions of battle with those of Thoukydides and finds that there are far more similarities between the two than most modern commentators allow for.
- Krentz 1985, 55-60.
- For example, Frazer 1942.
- Krentz 1985, 1994, and 2002; Van Wees 2000b, 2001, and
- For example, Lendon 2005.
- For example, Krentz 1985.
- Krentz 2002, 23 (expanding on points made in Van Wees 2000b, 155-156).
- Krentz 2002, 35.
- In some instances shields would be locked together to present a 'wall of shields' to the enemy. Later Greeks referred to this formation as the synaspismos (however, cf. Krentz 1985, 51-52), a purely defensive formation, perhaps first described in the *Iliad* (15.614-629). See also the rather strict interpretation in Latacz 1977, 55-65.
- Krentz 1985, 61.
- I find myself in agreement with Krentz 2002. Snodgrass 1999 [1967], 135.
- Van Wees 2004, 183 provides a reasonable overview of the developments from the introduction of the Argive shield down to the Peloponnesian War, although I do not regard Tyrtaios' descriptions of battle as being significantly different from those in the Iliad.
- For example, Iliad 1.290-291.
- Greenhalgh 1973, 40-62 passim.
- Greenhalgh 1973, 75.

- 42 Greenhalgh 1973, 76.
- 43 Greenhalgh 1973, 71 (emphasis mine).
- 44 Greenhalgh 1973, 71-72; cf. however Van Wees 2004, 167-169 and figs. 14-17 (stance of the hoplite).
- 45 Greenhalgh 1973, 73.
- 46 Snodgrass 1964b, 160.
- ⁴⁷ Anderson 1975, 187.
- 48 Crouwel 1981, especially p. 145.
- ⁴⁹ Greenhalgh 1973, 146-147 (summary).
- ⁵⁰ See note 10, supra.
- ⁵¹ Greenhalgh 1973, 58-61.
- For example, Greenhalgh 1973, 85 fig. 45; there are many more examples in Amyx 1988.
- ⁵³ Snodgrass 1971, 45-46.
- ⁵⁴ Jarva 1995, 25.
- ⁵⁵ Anderson 1961, 143.
- ⁵⁶ Anderson 1975, 185.
- ⁵⁷ Greenhalgh 1973, 108.
- ⁵⁸ For example, Carpenter 1991, 227 fig. 326.
- ⁵⁹ Greenhalgh 1973, 87-88.
- 60 Anderson 1975, 185.
- 61 Boardman 1991 [1974], 209 notes that on some mid-century black-figure vases from Athens, 'the warrior himself is seen jumping from his moving horse in the military exercise of the *anabates*,' although he does not provide any illustrations.
- 62 Greenhalgh 1973, 120 fig. 62.
- 63 Anderson 1961, 80-81.
- 64 Cf. Van Wees 1996, 34.
- 65 Summary of the evidence for the Lelantine War, see Crielaard 2002, 259-263; use of horses, see Greenhalgh 1973, 91-92; cf. also Donlan 1970.
- 66 The famous oinochoe depicting Aktorione-Molione shows a shieldless figure, the twins themselves (with a rectangular body or shield), as well as a Dipylon warrior, all on chariots; Ahlberg 1971, 13 fig. 2.
- 67 Simantoni-Bournia 1990, 27 (no K19); illustrated figs. 7 (bottom) and 10.
- 68 Some are illustrated in Boardman 1991 [1974], e.g. figs. 47 and 114.
- 69 Van Wees 2004, 208, plate XXII.
- ⁷⁰ Greenhalgh 1973, 95 fig. 49.
- ⁷¹ See Stibbe 1972, plates 75.1 (hippobatai and hippostrophoi), 108.1 and 108.4 (riders); Stibbe 2004, plates 23.1 (hippobatai and hippostrophoi), 39 (mounted youth with spear), 67.1 (unarmed mounted rider with outline of second horse), and 95.1 (youths on horseback). My thanks to Jan Paul Crielaard for pointing out Stibbe's work.
- ⁷² Relief decoration on the temple at Prinias, see Rizza/Rizzo 1984, fig. 429.
- 73 Illustrated in Bottini 1996, 544.
- ⁷⁴ Illustrated in Pontrandolfo 1996, 469.
- ⁷⁵ Greenhalgh 1973, 101.
- On the basis of the thigh guard's pattern of perforation, Jarva suggests a date in the first half of the 7th century, but 'Stylistic comparison with monumental sculpture would suggest an essentially later date in the first half of the 6th century' (Jarva 1995, 80 n. 495). A 6th-century date does seem much more likely in my opinion.
- 77 Cf. Jarva 1995, 33-44.
- ⁷⁸ Linen corslets were already known to Homer. See also Jarva 1995, 34 fig. 9.
- ⁷⁹ Jarva 1995, 154-156.
- 80 Jarva 1995, 33-34.
- 81 There are more examples comparable to both, but as the Chigi and Macmillan vases are the best known I shall limit my discussion to them.

- 82 In general, refer to Greenhalgh 1973, 96-111.
- ³ Greenhalgh 1973, 100. I agree with Greenhalgh's assessment as regards the use of the second horse, discussed on pp. 103-108 (largely contra Alföldi).
- 84 Greenhalgh 1973, 109-111.
- 85 Schulman 1957.
- The position of such riders on an Attic lekanis lid (discussed by Greenhalgh 1973, 110; see also Anderson 1961, 292-293 plate 29), namely ahead of the main force, seems to confirm that these are indeed scouts.
- 7 'The evidence for warfare of other states is much poorer, but what there is attests mounted hoplites elsewhere in Greece and in the colonies of the East and West' (Greenhalgh 1973, 147).
- Some circumstantial evidence is perhaps provided by the origins of horses used by the Athenian cavalry as detailed in an 'archive' (i.e. 111 inscribed lead tables) described in Kroll 1977 and dated to the 4th and 3rd centuries BC. It appears that horses were raised not only in Makedonia and Thessaly, but at Korinth and Sikyon as well, all regions which apparently contained 'the established stables and herds that provided the finer mounts for the whole of Greece' (Kroll 1977, 88).
- 89 Tyrtaios fr. 11.35-8 West.
- 90 Iliad 10.498-514.
- ¹ Iliad 11.150-153.
- 92 Snodgrass 1964b, 175.
- 93 Greenhalgh 1973, 93.
- ⁹⁴ See note 18, supra.
- The wealth required to purchase the expensive armour and weapons of the *panoploi* will have meant 'that the first phalanxes were far smaller than we have evidence for in the 5th century, and were to be numbered in the hundreds rather than thousands' (Salmon 1977, 94).
- 96 Singor 1988, 300-310 (small size of the army); 310-321 (sociopolitical implications of the heavy-armed troops being limited exclusively to the aristocracy).
- ⁹⁷ Van Wees 2004, 95-97.
- ⁹⁸ See especially Van Wees 1992, 338 n. 81.
- ⁹⁹ Alkaios fr. 140 Voigt.
- 100 Van Wees 1992, 207-217 (predatory warfare in Homer); cf. Thoukydides 1.5.
- ¹⁰¹ Greenhalgh 1973, 98-100.
- 102 Gaebel 2002, 59.
- ¹⁰³ Snodgrass 1999 [1967], 45-46.
- ¹⁰⁴ Van Wees 2004, 177.
- ¹⁰⁵ Van Wees 2004, 196.
- ¹⁰⁶ A balanced opinion, partly inspired by Van Wees, can be found in Lendon 2005, 48-49; also Krentz 2002.
- 107 'Traces survive, in Classical Greek institutions, of a day when the richest had fought on horseback' (Lendon 2005, 44).
- ¹⁰⁸ Greenhalgh 1973, 94-95.
- ¹⁰⁹ Thoukydides 5.57, translation Rex Warner.
- ¹¹⁰ Greenhalgh 1973, 136.
- ¹¹¹ For convenience, refer to Van Wees 2004, 57-58.
- ¹¹² See note 61, *supra* as well as Crowther 1991 *passim* (with references); Alföldi 1967, 23-26.
- ¹¹³ Aristotle *Politics* 1297 b1-11, translation T.A. Sinclair (revised by Trevor J. Saunders).
- ¹¹⁴ Regarding the sociopolitical aspects of this passage, which were first elaborated upon by Nilsson in 1929 and which I have at present ignored, refer to the very balanced opinion expressed in Lendon 2005, 44-45.
- ¹¹⁵ As rightly pointed out by Greenhalgh 1973, 75.
- ¹¹⁶ See especially Van Wees 1992, 31-36.
- ¹¹⁷ Anderson 1961, 142-144 (with references).

- Adcock, F.E. 1967, The Greek and Macedonian Art of War, Berkeley/Los Angeles.
- Ahlberg, G. 1971, Fighting on Land and Sea in Greek Geometric Art. Stockholm.
- Geometric Art, Stockholm.

 Alföldi, A. 1967, Die Herrschaft der Reiterei in Griechenland und Rom nach dem Sturz der Könige, in Gestalt und Geschichte: Festschrift K. Schefold. Berne, 13-45.
- Amyx, D.A. 1988, Corinthian Vase-Painting I-III, Berkeley/Los Angeles/London.
- Anderson, J.K. 1961, Ancient Greek Horsemanship, Berkeley/Los Angeles.
- Anderson, J.K. 1975, Greek chariot-borne and mounted infantry, *AJA*, 175-189.
- Anderson, J.K. 1991, Hoplite weapons and offensive arms, in Hanson 1991, 15-37.
- Boardman, J. 1991 [1974], Athenian Black Figure Vases, London.
- Bottini, A. 1996, The impact of the Greek colonies on the indigenous peoples of Lucania, in Pugliese Carratelli 1996, 541-548.
- Cawkwell, G.L. 1989, Orthodoxy and hoplites, *CQ* 39, 375-389.
- Connolly, P. 1998 [1981], *Greece and Rome at War*, London. Courbin, P. 1957, Une tombe géométrique d'Argos, *BCH* 81, 322-386.
- Crielaard, J.P. 1995, Homer, history and archaeology: some remarks on the date of the Homeric world, in J.P. Crielaard (ed.), Homeric Questions. Essays in Philology, Ancient History, and Archaeology, Including the Papers of a Conference Organized by the Netherlands Institute at Athens, 1993, Amsterdam, 201-288.
- Crielaard, J.P. 2002. Past or present? Epic poetry, aristocratic self-representation and the concept of time in the eighth and seventh centuries BC, in F. Montanari (ed.), *Omero tremila anni dopo*, Rome, 239-295.
- Crouwel, J. 1981, Chariots and Other Means of Land Transport in Bronze Age Greece, Amsterdam.
- Crowther, N.B. 1991, The apobates reconsidered (Demosthenes lxi 23-9), JHS 111, 174-176.
- Detienne, M. 1968, La phalange: problèmes et controverses, in Vernant 1968, 119-142.
- Donlan, W. 1970, Archilochus, Strabo, and the Lelantine War, *TAPA* 101, 131-142.
- Frazer, A.D. 1942, The myth of the phalanx scrimmage, CW 36, 15-16.
- Hanson, V.D. (ed.) 1991, Hoplites. The Classical Greek Battle Experience, London/New York.
- Hanson, V.D. 2000 [1989], The Western Way of War, Berkeley/Los Angeles/London.
- Helbig, W. 1904, Les hippeis Athéniens, Mémoires de l'Institut National de France 37, 157-264.
- Holladay, A.J. 1982, Hoplites and heresies, *JHS* 102, 94-103. Jarva, E. 1995, *Archaiologica on Archaic Greek Body Armour*, Oulo.
- Johansen, K.F. 1923, Les vases sicyoniens, Paris.
- Krentz, P. 1985, The nature of hoplite battle, *CQ* 4, 50-61. Krentz, P. 2002, Fighting by the rules: the invention of the hoplite *agôn*, *Hesperia* 71, 23-39.
- Kroll, J.H. 1977, An archive of the Athenian cavalry, Hesperia 46, 83-140.
- Lazenby, J.F./D. Whitehead 1996, The myth of the hoplite's hoplon, CQ 46, 27-33.
- Latacz, J. 1977, Kampfparänese, Kampfdarstellung und Kampfwirklichkeit in der Ilias, bei Kallinos und Tyrtaios, Munich.

- Lendon, J.E. 2005, Soldiers and Ghosts. A History of Battle in Antiquity, New Haven/London.
- Lloyd, A.B. (ed.) 1996, Battle in Antiquity, London.
- Lorimer, H.L. 1947, The hoplite phalanx, with special reference to the poems of Archilochus and Tyrtaeus, *BSA* 42, 76-138.
- Newhall, A.E. 1931, The Corinthian Kerameikos, AJA 35, 1-30.
- Nilsson, M.P. 1929, Die Hoplitentaktik und das Staatswesen, Klio 22, 240-249.
- Pontrandolfo, A. 1996, Wall-painting in Magna Graecia, in Pugliese Carratelli 1996, 457-470.
- Pugliese Carratelli, G. 1996, The Western Greeks, Venice. Rizza, G./M.A. Rizzo 1984, Prinias, in Creta Antica. Cento anni di archeologia italiana (1884-1984), Rome, 227-256.
- Schulman, A.R. 1957, Egyptian representations of horsemen and riding in the New Kingdom, *JNES* 16, 263-271.
- Shanks, M. 1999, Art and the Greek City-State: an Interpretive Archaeology, Cambridge.
- Simantoni-Bournia, Ε. 1990, Οι ανάγλυφοι πίθοι (Ανασαφές Νάξου), Athens.
- Singor, H. 1988, Oorsprong en betekenis van de hoplietenfalanx in het Archaïsche Griekenland (Ph.D. dissertation), Leiden.
- Snodgrass, A.M. 1964a, Carian armourers: the growth of a tradition, *JHS* 84, 107-118.
- Snodgrass, A.M. 1964b, Early Greek Armour and Weapons, Edinburgh.
- Snodgrass, A.M. 1971, The first European body-armour, in *Studies in Honour of C.F.C. Hawkes*, London, 33-50.
- Snodgrass, A.M. 1999 [1967], Arms and Armour of the Greeks, Baltimore.
- Stary, P.F. 1981, Zur eisenzeitlichen Bewaffnung und Kampfesweise in Mittelitalien, Mainz.
- Stibbe, C.M. 1972, Lakonische Vasenmalerei des sechsten Jahrhunderts v.Chr. (2 volumes), Amsterdam.
- Stibbe, C.M. 2004, Lakonische Vasenmalerei des sechsten Jahrhunderts v.Chr.: Supplement, Mainz am Rhein.
- Vermeule, E./V. Karageorghis 1982, Mycenaean Pictorial Vase Painting, Cambridge (MA).
- Vernant, J.P. (ed.) 1968, Problèmes de la guerre en Grèce ancienne. Paris.
- Wees, H. van, 1986, Leaders of men? Military organisation in the Iliad, *CQ* 36, 285-303.
- Wees, H. van, 1992, Status Warriors: Violence and Society in Homer and History, Amsterdam.
- Wees, H. van, 1994, The Homeric way of war: the Iliad and the hoplite phalanx, *G&R* 41, 1-18 and 131-155.
- Wees, H. van, 1996, Heroes, knights, and nutters: warrior mentality in Homer, in Lloyd 1996, 1-86.
- Wees, H. van, 2004, Greek Warfare: Myths and Realities, London.
- West, M.L. 1993, Greek Lyric Poetry, Oxford.
- Wheeler, E.L. 1991, The general as hoplite, in Hanson 1991, 121-170.

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