Armies of the Greek and Persian Wars

Campaigns, organisation, tactics, dress & weapons 80 illustrations & diagrams, 22 maps

by Richard Nelson

500 to 350 BC
INTRODUCTION

Armies of the Greek and Persian Wars is one of a series of books published by the Wargames Research Group giving details of Ancient Armies of various periods. It occupies the period between Armies and Enemies of Egypt and Assyria, by Alan Buttery, and Armies of the Macedonian and Punic Wars, by Phil Barker, although continuity is maintained by some overlapping between books.

The format of the present book covers three separate sections. The first describes Greek and Persian troop types, and the typical army compositions, and then deals with the Great Persian Wars in some detail. The second section describes Greek troop developments after this conflict, and the Peloponnesian War within Greece. The third section details the developments in the Persian Army following the time of Xerxes, and the various campaigns of the 4th Century B.C. as the Greeks took the offensive against Persia — in the intervals of warfare among themselves, frequently fomented by the Persians. The culmination of the military developments of the 4th Century was the army of Macedon, which finally overthrew the Persian Empire, after subjugating classical Greece.

In all three sections typical campaigns have been described in some detail. It has been thought better to cover such items as typical army size, composition, tactics and strategy in this way, particularly as they were under constant development, rather than to have sections giving general guidelines which might be open to misinterpretation by the unwary or unscrupulous wargamer.

While there has been some overlap between this book and others in the series, major duplication has been avoided. Thus details of Carthaginian mercenary troops, who are fully covered in Armies of the Macedonian and Punic Wars, have been omitted. Equally, no special figures have been shown for Carthaginian citizen, Etruscan, early Roman or Italian troops, all of whom were equipped in hoplite style, with similar ancillary troops. The sea battles of the period are covered by my own Warfleets of Antiquity. Seigecraft and Fortification will be covered by me in a book new in preparation for the same series.

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Richard Nelson.
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PRE-CLASSICAL GREEK ARMIES

The earliest Greek armies of which we have any knowledge are those of the Heroic period described by Homer, which appears to reflect at least in part Minoan and Mycenaean practice. In the 2nd Millenium B.C. Greece and Crete were ruled by highly organised states, apparently headed by monarchs, supported by a strong central bureaucracy. The troops which these states could put into the field were essentially 'aristocratic' in composition, with small elite forces, chariot borne, supported by footmen of no particular merit. The battles described by Homer are largely single combats, although there are hints of mass tactics, such as large scale chariot charges, and one vase, the so called Warrior Vase, shows uniform infantry, apparently marching in formation with spear shield and helmet.

In the Greek Dark Ages, the political structure and the type of troops tended to march in common. Governments were generally aristocratic, and fighting methods were still individualistic, with the advantage going to the soldier with the best equipment and protection; an advantage which the aristocratic rulers could keep for themselves. The chariot was still used extensively as a means of transport, but the typical weaponry was a pair of javelins, a sword, and a shield, not circular like the Greek hoplite shield, but waisted, similar to the Persian Gerron in form. These fighting methods, which could be paralleled in a number of places round the Mediterranean, were not unique.

What was unique was a system of mass tactics, becoming widespread in the 7th century B.C., in which the Greek infantryman, his armour still comprising basically shield, corselet and helmet, but now armed with a spear, fought in a dense mass formation, the phalanx, which was superior to any other hand to hand infantry unit in the eastern Mediterranean. With the introduction of the 'hoplite' type, the Greek soldier was now in demand by all the neighbouring powers as a mercenary. And it was about the period when the hoplite was introduced that the age of Classical Greece begins.

THE PERSIAN INVASIONS OF GREECE

CLASSICAL GREEK ARMY ORGANISATION UP TO 480 B.C.

The Army of Xerxes, and Persian Armies of this period, were highly regimented and organised at the strategic level, but were tactically undrilled and unco-ordinated. Greek armies were the complete opposite. The hoplite phalanx, which was the core of any Greek army, was a unit which operated in a drilled fashion, and in certain cases (such as the Spartan forces) was capable of considerable precision and adaptability of manoeuvre. At the strategic level individual Greek states could execute plans, but a combination of states would only act in concert if all the commanders agreed; the Greek word for obey is the same as to be persuaded. Nothing was more strange to Greek eyes than a Persian Council of War presided over by Xerxes, where each commander not only spoke in strict rotation, but kept silence while others were doing so!

For the Hoplite, however regimented his tactics, was not equipped or supplied by the state. A hoplite was a yeoman of sufficient status to provide his own (expensive) panoply, which could accordingly reflect individual preferences of style, and his supply arrangements in the field were strictly based on what he himself purchased from sutlers. Army commanders supply arrangements were limited to 'providing a market'.

Because being a hoplite was a mark of superior social status, tactics overall were stultified. In particular, light troops were neglected, where these could not be provided by lower class citizens with whatever weapons they had, since this would have meant having a permanent standing force, which would have to be paid for, and could become a bodyguard for a military dictator. Cavalry was supplied supplied by the highest income classes, who could afford to keep suitable horses and had estates on which to maintain them.

Greek armies were as a rule small. All Greece might provide over 100,000 hoplites, counting the islands and Asia Minor, but the major states individually could supply between 5,000 and 10,000, and in the supreme effort of Plataea in 479 B.C., the Hellenic League mustered about 40,000 from 23 states. Except in the case of the Spartan army, unit sizes were not standard, and the Athenian army, for instance, composed of 10 'tribal' regiments, had no officer rank lower than the taxiaxarch who commanded each regiment or taxis.
CLASSICAL GREEK WARRIOR TYPES UP TO 480 B.C.

1. **Hoplites:** The hoplite panoply consisted of a large round shield, 3ft or more in diameter, a bronze helmet, bronze greaves, and corslet. Weapons were a thrusting spear up to 9ft long, and a sword. Illustration 1 shows a hoplite of about 600 B.C., wearing full panoply. The helmet, of the type known to the Greeks as Corinthian, bears a large crest on a stilt. This is an early feature. The corslet is also of early type, the ‘bell’ corslet, back and breast plates of bronze flared out at the waist to ease movement. Bronze greaves are worn, and in addition to the standard armour, thigh pieces (parameridion) and pieces on the upper arm are also worn. The sword is carried on a baldric over the right shoulder, and in addition to the spear, a javelin is carried, to throw before the phalanxes met. The additional armour and the javelin were obsolete by the time of the Persian Wars.

   Illustration 2 shows a hoplite of Persian War period. The helmet is a variant of the Corinthian called Calcidean, and the crest (which was detachable) is now fixed direct to the top of the helmet. The interior of the shield is shown, and it may be seen that it is supported on the forearm by a band across the interior, the porpex, which was hooped in the centre to permit the arm to pass through. The left hand grips a handle inside the rim. The major change from the earlier hoplite is however the corslet. The Bell Corselet has been replaced by the Composite. This consisted of a single body piece, laced down the front of the chest, with two shoulder pieces, fixed at the back, which were drawn forward over the shoulders and laced to the front of the corslet. The basic material was leather, but the body part was normally covered in iron scales. Illustration 2a shows the method of fixing the corslet in more detail. The lower part of the body is protected by leather strips called pteruges (‘feathers’) forming a kind of kilt. It must be stressed that the normal type of helmet was the Corinthian, but because each hoplite provided his own gear, any variant in helmet or other equipment might be found.

   These two illustrations will also show the type of equipment worn by Greeks in Persian Service, as well as by the Lydians.

3. **Light Javelinman:** The typical Greek light troops were armed with a pair of javelins and perhaps a dagger or sword. Wearing no armour, his sole means of defence is a small shield, the pelta, typically in crescent shape with upturned points, or round.

   Greek javelins were provided with a loop midway along the shaft, which was wound round the first two fingers; the other two and the thumb gripped the shaft. When the weapon was cast, the loop unwound, tending to spin the javelin and giving greater range and accuracy. The typical javelin throwers hold with the first two fingers straight outstretched together very distinctive.

4. **Archer:** The bow was not a usual Greek weapon, although the Athenians had for a period in the Persian Wars a regiment of archers, almost the only instance of regular light troops maintained by a city state at this period. The Greeks themselves used a self bow, but Cretan archers, often hired as mercenaries, used a composite bow, and Scythian archers (similar in dress and equipment to Sakae in Persian service) were also hired by Greeks.

   From vase paintings it appears that archers were positioned between the hoplites in the phalanx, and fired from the partial shelter of the hoplite’s shields, normally in a kneeling position.

   4a shows the typical Cretan arrowhead, barbed, of bronze, and fairly large and heavy. Persian arrowheads were smaller and lighter, partly explaining why Persian Archers could outrange Cretans, even with both using a composite bow.

5. **Greek Cavalryman:** Horse was provided for Greek armies by the most wealthy citizens, and the typical heavy cavalryman is here shown. Although illustrated on vase paintings, such heavy cavalry were rare on the battlefield in our accounts of the Persian Wars. Armored as a hoplite, but without a shield, the cavalryman rides a small horse of pony type: Greece could not provide the big horses available to Persia.
6. **Thessalian Cavalryman**: The wide plains of Thessaly in northern Greece were the best sources of cavalry at the time of the Persian Wars for the Greeks, although the best Thessalian horses were inferior by far to Persian. A typical Thessalian cavalryman is shown, armed with javelins and a long sword. He wears no armour or helmet, but has the typical Thessalian hat. As with all Greek horsemen, he has no saddle or stirrups, merely the saddlecloth or equippion. Thessalians were widely used as mercenary horse by the Greek states.

7. **Mounted Hoplite**: In any phalanx, some of the hoplites had sufficient wealth to afford horses, and rode instead of marching to battle, dismounting to fight on foot. In certain states, even the Hippeis or Cavalry were elite hoplites who may or may not have had horses. The 300 Spartans who died at Thermopylae were in fact the Spartan Cavalry although they fought on foot and were the Royal Bodyguard. This illustration therefore is merely a hoplite on a horse.

8. **Groom**: Mounted hoplites were invariably accompanied by a groom, dressed in simple tunic, whose duty was to lead his master’s horse away when the hoplite dismounted to fight on foot. The grooms may themselves have fought as cavalry. There are numerous vase paintings of Greek cavalry dressed only in tunics and armed either with a long thrusting spear (used underarm) or with a pair of javelins, and this illustration could be used as a basis for these troops, with the addition of the appropriate weapons.

9. to 21. **Hoplite Shield Blazons**: The blazons hoplites carried on their shields were at first purely individual in character, usually either geometric patterns or animals (sometimes mythical) and birds. Later States used a standard blazon to avoid identification mistakes in battle, and this blazon could be adopted by their allies for a particular battle. Often a State’s shield blazon might be no more than the initial letter of the State’s name.

A number of these blazons are illustrated opposite. 9, 10 and 11 are examples of letters, used by Sparta (Lacedaemon), Sicyon, and Messenia respectively. 12 and 13 are also state symbols, the trident of Mantinea and the club of Thebes respectively.

14 is a bird. 15 is a Gorgon’s head, probably one of the common types used by Athenians as it was the blazon of Athene. 16 is a serpent; this was the blazon of Neochorus of Haliartus, who killed Lysander.

17 is an example of one of the abstract shield designs, and 18 is the winged horse Bellerophon, a symbol associated particularly with Corinth. 19 is a shield of heroic patter, which on coins was the symbol of the Boeotian League, and itself served as a shield blazon. 20 is a bull’s head, and 21 is a cup.

Shield faces were normally brightly polished bronze, with the blazon painted on.
THE ORGANISATION AND RECRUITMENT OF THE PERSIAN ARMIES OF INVASION

The Persian Army which fought the Classical Greeks presented no uniformity of appearance or troop type. The subject races of the Empire were simply employed in national units, each unit retaining its own dress, equipment and tactics.

There was however a unity of organisation, imposed from the centre. The various national contingents were organised into subunits on a decimal system, of 10, 100, 1,000, and 10,000 men. Mede Persian or Babylonian officers commanded all units probably down to the ‘company’ or 100 level. At the time of Xerxes’ invasion of Greece, the whole Persian army was divided into 29 ‘Line’ and 1 ‘Guards’ Corps. The size of these Corps was probably very variable, as the Guard Corps consisted of the Immortals, 10,000 strong, plus other smaller Guard units, while the ‘Line’ Corps, Herodotus infers, were 60,000 strong each. In fact the size of these units must have varied considerably. In addition to ‘Army’ units certain peoples furnished ships or troops for sea service, and these troops have been for convenience classified as ‘Marine’ Corps.

The commanders of the various ‘Corps’ were exclusively Medes or Persians of high rank. When Darius seized power, he was aided by six nobles, and Persian royalty or kinsmen of these six provided the majority of the Army commanders.
The very heterogeneous appearance of a Persian army belied the close planning and central control which governed its operations. Questions of supply and logistics were thoroughly dealt with, and vast supply dumps (including quantities of paper for the staff) were a familiar sight. A Persian General operating independently was expected to refer continually to the King, making for deliberate strategic movements. Persian Generals could however be expected to be efficient and resourceful, especially in adversity.

In the following section the different troop types of the Persian army are described, and illustrated with a reconstruction. For convenience, the various Corps have been allocated a number, but it must be borne in mind that these numbers (starting with I for the Guards and going to XXX to the ‘Exiles’) are a modern convenience. Persian practice appears to have been to name a unit after its commander of the moment, and not to use numbers. The core of our evidence for the Persian army is Herodotus, and this, though supplemented by archaeological evidence, means that many points of dispute must remain over some of the reconstructions of troop types.

The main strength of the Persian forces at this period lay in the Iranian cavalry and infantry, generally armed with bow and spear, and partly equipped with metal body armour. Surrounding areas produced unarmoured bowmen of variable quality, and spearmen and javelinmen were recruited from further west. The map shows the principle types of troops recruited from various geographical areas, and the second map the principal recruiting areas of the various Corps.

Perhaps of more interest than the troops of the Persian Empire recruited are those it did not recruit. Thus of the recent Empires of the Near East, Babylon provided no troops at all, only money, and Assyria and Egypt provided no bowmen. Since the Assyrian army had provided first class archers, and Egyptian bowmen were equally well known, this looks like deliberate Persian policy to keep the weapon they considered most effective out of the hands of potential rebels.
WARrior TYPES OF THE PERSian AMRIES OF INVASION

22. **Persian Nobleman:** The Persian Empire was in reality a joint Empire of the Medes and Persians, and different modes of dress were worn by the two races, which were extremely distinctive. The Persepolis sculptures clearly distinguish between the two, who are nevertheless carefully given equal prominence.

This is the dress of a noble Persian, consisting of a loose tunic with flowing sleeves, highly decorated, and a long skirt, equally highly decorated; the skirt is knotted at the top in front, and the typical Persian dagger is thrust into the waistline here. Light slippers are worn on the feet.

Headgear varies. A pillbox type of hat is shown here, probably of leather. As marks of nobility and the King's favour, a gold necklace and bracelets are worn.

23. **Median Noble:** The Median dress differs from the Persian largely in that the tunic has narrow sleeves and extends to knee level. Instead of there being a long skirt, trousers are worn under the tunic, these being also fairly tight. On the head is a round brimless hat that has a small tassel or ribbon at the back.

As with Persian dress, the garments were very brightly coloured and highly decorated.

24. **Immortal Spearman:** The I Corps of the Persian Army included the Immortals, so called because their number was never permitted to fall below 10,000, plus superior Guard units of 1,000 Infantry and 1,000 Cavalry. A typical member of these Guard troops is illustrated. The dress is Persian, without headgear; a simple fillet of twisted cord is worn round the head. The typical Persian weapons, bow and spear, are carried. The bow and quiver are carried together on the left shoulder, and the quiver is highly decorated. The spear is about 7ft long, and the Immortals had a silver pomegranate instead of the usual buttspike, gold for the 1,000 decarchs, silver for the men. This reconstruction is based on the Persepolis reliefs, and probably illustrates parade dress. As with line troops, the more practical Median dress was probably the rule on campaign, as shown for number 25.

25. **Iranian Spearman:** The normal Iranian troops of the Persian army wore Median, not Persian dress, which was more practical for campaigning. Bow and Spear are carried, as for the Immortal, and in addition the distinctive shaped wicker shield or gerron. The headgear is the Tiara, a loose cloth hood which completely conceals the head except for the face, and is the typical headgear for Persian troops. From literary sources we learn that these troops wore metal (iron) scale armour, which does not appear in representations and it is logical to assume that it was worn under the tunic, which was a fairly loose garment, as was later practice in hot climates with metal armour. The dress and equipment shown here were standard for Corps II (Persians) III (Medes) V (Hyrcanians) and XXX (Exiles), and with substitution of the Mitre for the Tiara, for IV (Kashshites). As usual with Persian troops, the clothing is brightly coloured and embroidered. There is some evidence that tunics of uniform colour were worn. At Cunaxa in 401 B.C. Cyprus' troops (including his Greek mercenaries) had red tunics, Artaxerxes' white.

26. **Assyrian Spearman:** The Assyrians provided Corps VI together with the Chaldaeans. Their weapons and armour were similar to those carried previously by Assyrian troops, consisting of a bronze helmet of distinctive type, and a quilted linen corselet, with spear, club and dagger, and a large wooden shield. The shield and weapons were of Egyptian type. The linen cuirass was a quilted garment which can easily be mistaken for scale armour in reproductions; it was a far more functional garment than the linen cuirass worn for instance by Roman senior officers, which was of stiffened material reproducing the appearance without the weight of metal armour. The Assyrian corselet is of varying length, some going nearly to ground level, and is belted with decorative fringing, typically Syrian/Phoenician. High boots are worn.
27. **Sakae Infantryman**: The Sakae or Scythians provided (with the Bactrians) Corps VII. They wore a distinctive pointed hat which is widely reproduced in contemporary illustrations. Their principal weapon was the bow, here shown carried in a combined bowcase and quiver. In addition a dagger was carried and the distinctive Sagaris or axe, which had a transverse head, like an adze, rather than like a modern axe.

28. **Bactrian Spearman**: These troops were armed with spear and self bow, and wore Median dress with the addition of boots and bagger trousers than usual. No armour or shields are mentioned with any of these units. The Bactrians themselves provided part of Corps VII; X (Parthians and Chorasmians) XI (Sogdians) and XII (Gandarians and Dadicae) were similar, as was IX (Arians) except that this unit had composite instead of self bows.

29. **Indian Bowman**: The Indians supplied Corps VIII of the army, being armed with a wooden self bow. They were for the most part clad in a cotton kilt, with men of the better class wearing a long cotton robe with the right shoulder left bare.

The Indian here shown is based upon the descriptions of Herodotus, and the Persepolis figures, and various points of difference will be noted with the figures shown in Armies of the Macedonian and Punic Wars (Companion to this work) by Phil Barker. Although Indian Society was relatively static, and it would therefore be expected that the Indians of 480 B.C. would be similar to those later, the very definite statement of Herodotus has been followed for preference.

30. **East Ethiopian**: Brigaded with the Indians in Corps VIII, the East Ethiopians were similarly armed, with the addition of an unusual headdress, made of the scalp of a horse with mane and ears left on, and of a shield of crane skin.

31. **Caspian Bowman**: Of Corps XIII, the Caspians were another unit of unarmoured bowmen armed with self bow, dressed in Median dress with the addition of a cloak. Similar were XV (Pactyans) XVI (Utians and Mycians) and XVII (Paricanians).

32. **Sarangian Bowman**: The Sarangae provided Corps XIV, being distinguished chiefly by their knee high boots. Unlike the units above, they had the composite bow and spear.

33. **Arab Bowman**: Providing Corps XVIII with the Ethiopians were the Arabs. Arabs are represented wearing a tunic or kilt, and had a cloak which is described as belted in. They carried a long recurved bow.

34. **Ethiopian**: The Ethiopians provided the other half of Corps XVIII, wearing leopard and lion skins, and armed with a 6ft bow and a spear. This people had no metals, the arrows being tipped with obsidian, and the spear with gazelle’s horn.
35. **Libyan**: Another primitive people, providing Corps XIX. Armed with fire hardened javelins, they were clad in leather garments.

36. This is the **Paphlagonian** style of dress and armament, with high boots and a helmet described as 'plaited', possibly either wicker or leather. This type of troop supplied Corps XX (Paphlagonians and Matieni) XXI (Ligyes, Mariandem and Cappadocians) and XXII (Phrygians and Armenians). Tunic and trousers are worn, and the weapons carried consist of short spear, small shield, javelins and dagger.

37. The **Mysians**: provided part of Corps XXIII with the Lydians, who wore Greek style armour. The Mysians were a primitive people, their sole weapons consisting of firehardened javelins; they had in addition small shields and helmets. This reconstruction must be considered largely conjectural. Mysian javelinmen are one of the few specific troop types mentioned however by Aeschylus in his Persai as accompanying Xerxes.

38. **Thracians**: provided the troops for Corps XXIV, which was recruited in Bithynia. Their dress consisted of deerskin boots, tunic and fox fur cap, and the Zeira, a brightly patterned cloak which was also worn by the Arabs. The Zeira is described as 'girded up', was of fair length, and was belted up to prevent the wearer tripping in action. Offensive weapons were javelins and dagger, and the typical shield, the pelta. This could either be round, or crescent shaped, held with the 'horns' upwards as shown by 38a.

   It will be noted that the Thracians did not at this period carry the Rhomphaia, the heavy steel blade which was in later time their hallmark. Neither Herodotus, nor Thucydides writing of the period of the Peloponnesian War, describes Thracians as carrying anything other than javelins and sword (Machaira).

39. **The Mityae**: provided part of Corps XXV. Their sole weapon was a short spear, except for some armed with a self bow. Their garments were secured with brooches; some of them had leather caps.
40. **The Pisidians:** also provided part of Corps XXV. They had small rawhide shields and javelins. The helmets were bronze, crested, with ox horns and ears wrought in bronze. Round the legs were bound strips of purple cloth, apparently like puttees.

41. **The Cabelees:** provided the remaining part of Corps XXV. Their basic dress was Cilician, with woollen tunic, rawhide shield, helmet, and javelins. They also carried an Egyptian type sword.

42. **The Moschi and Tibareni:** provided Corps XXVI, the Macrones and Mossynoecci Corps XXVII; all these tribes were similarly dressed and armed. The helmets were wooden, and they had a shield and a short spear with a long head. They apparently wore Median type garments.

43. **The Mares:** provided part of Corps XXVIII. They wore a plaited helmet, possible wicker or leather, and carried small shields, and javelins.

44. **The Colchians:** provided the other part of Corps XXVIII. They had wooden helmets, small rawhide shields, short spears and swords. Similarly armed were the Alarodes and Saspires, supplying Corps XXIX.
Persian Cavalry

45. Of the Cavalry units, the Persians provided Corps I. The Persian horse is described as exactly similar to the Persian infantry by Herodotus, except that some of them wore bronze or iron helmets. The cavalryman here is accordingly shown with a shield and spear, although other sources reasonably suggest that the shield was not usually carried. The horse was not armoured, and there is no evidence for Persian armoured horses in the army of Xerxes, although Cyprus had 600 horses partially armoured in 401 B.C. Persian horses had a bridle basically similar to a modern bridle, but no saddle or stirrups, and the rider sat on a saddle-cloth secured to the horse by girths. This type of cavalry supplied Corps II (Medes) and II (Kashshites or Cissians), in addition to Corps I.

46. The Sagartians, a Nomad people, provided 8,000 troops in Corps I. Unarmoured, they were equipped with twisted leather lassoes and bronze daggers. Their mode of fighting was to lasso an enemy, haul him in, and despatch him with the dagger. There is no record of these colourful troops in actual battle in the invasion of Xerxes!

47. Indian cavalry. This again was equipped like the Indian infantry, with a long bow and no armour. These troops equipped Corps IV of the Persian Cavalry.

The armament of the Indian cavalry is definitely given as the bow in our sources, although from later evidence one would have expected a pair of javelins to have been carried at this period. However this may be another case of the Persians deliberately not recruiting a particular type of troops, like Assyrian archers.

48. The Bactrians, Caspians and Paricanians provided Corps V, VI and VII of the Persian Cavalry. Again armed like their infantry, the only difference was that the Bactrians had a short spear, and the other two units had cloaks. All these cavalry units were armed with the self bow.
49. Sakaе Cavalry. Similar to the Sakaе infantry were the Sakaе horse, armed with the composite bow. They are not mentioned in the Herodotean ‘Army List’, but are the most devastating cavalry unit in all the battle descriptions. It may be assumed that they were in fact part of Corps V, being brigaded with the Bactrians, like their infantry. These Nomads possessed saddles, but no stirrups.

50. Arab Camel Corps. This was Corps VIII of the Cavalry, and was a unit of mounted bowmen. The illustration shows two men per camel, based on archaeological evidence; more usual will have been one rider/one camel. The camel riders are not wearing the zeira in accordance with the original illustration.

**Persian Marine Units**

51. Phoenician Marine. The Phoenicians provided the largest and best of the fleet contingent for Xerxes. Their marines were armed with a Greek style helmet, linen cuirass, rimless shields, and javelins. These marines were aboard 300 ships.

52. Egyptian Marine. The second fleet contingent was that of the Egyptians (200 ships). The Egyptian marines had plaited helmets (wicker or perhaps linen), and a linen cuirass was worn by most of the troops. The large wooden shield with broad rim (also carried by the Assyrian contingent Corps VI) was supported by a shoulder strap, and offensive weapons included large axes, long spears, and swords. It is noteworthy that none of the Egyptians carried bows.

53. Lycian Marine. The Lycians provided 50 ships. Their equipment comprised cuirass and greaves, apparently of Greek pattern, and a goatskin cloak. On their heads were caps surrounded by feathers. Weapons were a bow of cornel wood (which was also employed by Persian cavalry for javelins) and unflighted arrows and javelins. Daggers were carried as well as the drepanon, a sickle shaped hand weapon.

Other Marine contingents either wore standard Hoplite equipment (Cyprians, Asian Greeks and Islanders) or the Cilician gear (see illustration 20).
### SUMMARY OF PERSIAN ARMY LIST, 480 B.C.

<table>
<thead>
<tr>
<th>Corps</th>
<th>Composition</th>
<th>Figures illustrating troops</th>
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<tbody>
<tr>
<td>I</td>
<td>Immortals and other Guard units</td>
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</tr>
<tr>
<td>II</td>
<td>Persians</td>
<td>25</td>
</tr>
<tr>
<td>III</td>
<td>Medes</td>
<td>25</td>
</tr>
<tr>
<td>IV</td>
<td>Kashshites (Cissians)</td>
<td>25</td>
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<tr>
<td>V</td>
<td>Hyrkanians</td>
<td>25</td>
</tr>
<tr>
<td>VI</td>
<td>Assyrians and Chaldeans</td>
<td>26</td>
</tr>
<tr>
<td>VII</td>
<td>Bactrians and Sakæ</td>
<td>27, 28</td>
</tr>
<tr>
<td>VIII</td>
<td>Indians and East Ethiopians</td>
<td>29, 30</td>
</tr>
<tr>
<td>IX</td>
<td>Arians</td>
<td>28</td>
</tr>
<tr>
<td>X</td>
<td>Parthians and Chorasmians</td>
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<td>XI</td>
<td>Sogdians</td>
<td>28</td>
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<td>XII</td>
<td>Gandarians and Dacicae</td>
<td>28</td>
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<tr>
<td>XIII</td>
<td>Caspians</td>
<td>31</td>
</tr>
<tr>
<td>XIV</td>
<td>Sarangae</td>
<td>32</td>
</tr>
<tr>
<td>XV</td>
<td>Pactyes</td>
<td>31</td>
</tr>
<tr>
<td>XVI</td>
<td>Utians and Mycians</td>
<td>31</td>
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<tr>
<td>XVII</td>
<td>Paracianians</td>
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<td>XVIII</td>
<td>Arabians and Ethiopians</td>
<td>33, 34</td>
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<td>XIX</td>
<td>Libyans</td>
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<td>Paphlagonians and Matieni</td>
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<tr>
<td>XXI</td>
<td>Ligyes, Mariandeni and ‘Syrians’ (Cappadocians)</td>
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<tr>
<td>XXII</td>
<td>Armenians and Phrygians</td>
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<td>XXIII</td>
<td>Lydians and Mysians</td>
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<td>XXIV</td>
<td>Thracians</td>
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<td>XXV</td>
<td>Pisidians, Cabelees and Milyae</td>
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<td>XXVI</td>
<td>Moschi and Tibareni</td>
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<td>XXVII</td>
<td>Macrones and Mossynoei</td>
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<td>XXVIII</td>
<td>Mares and Colchians</td>
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<td>XXIX</td>
<td>Alarodes and Saspires</td>
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<tr>
<td>XXX</td>
<td>‘Exiles’</td>
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### Cavalry Units

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<tr>
<td>I</td>
<td>Persians and Sagartians</td>
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</tr>
<tr>
<td>II</td>
<td>Medes</td>
<td>45</td>
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<tr>
<td>III</td>
<td>Kashshites</td>
<td>45</td>
</tr>
<tr>
<td>IV</td>
<td>Indians</td>
<td>47</td>
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<tr>
<td>V</td>
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<td>Caspians</td>
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<td>VII</td>
<td>Paracianians</td>
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<tr>
<td>VIII</td>
<td>Arabs (Camele Corps)</td>
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<tr>
<td>Unlisted</td>
<td>Sakae (part of V?)</td>
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### Marine Units

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<td>II</td>
<td>Egypt</td>
<td>52</td>
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<td>III</td>
<td>Cyprus</td>
<td>G</td>
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<td>IV</td>
<td>Cilicia</td>
<td>20</td>
</tr>
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<td>V</td>
<td>Pamphylia</td>
<td>G</td>
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<td>VI</td>
<td>Lycia</td>
<td>53</td>
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</tr>
<tr>
<td>VIII</td>
<td>Asian Greeks</td>
<td>G</td>
</tr>
<tr>
<td>IX</td>
<td>Aeolian Greeks</td>
<td>5 G</td>
</tr>
<tr>
<td>X</td>
<td>Pontus</td>
<td>G</td>
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</tbody>
</table>

G indicates troops armed in hoplite fashion (illustrated in Greek section).
THE MARATHON CAMPAIGN 490 B.C.

The fall of the Lydian Empire brought the Greek cities of Asia Minor under the control of the Persian Empire; the revolt of those cities, aided by Athens and Eretria in mainland Greece, in the first decade of the 5th Century B.C., made an extension of Persian rule westwards inevitable, once the revolt had been crushed.

An initial Persian invasion was destroyed by storms while negotiating Mount Athos in the northern Aegean. In 490 B.C. a further invasion force was prepared, with an army and fleet meeting in Cilicia, and moving together to an advanced base at Samos. Two Persian Generals, Datis and Artaphernes, commanded the force.

The fleet is reported to have consisted of 600 triremes, and in addition there were special vessels to transport horses, then new and marvellous. If these took the form they did later, they were modified triremes with the innermost rowing positions removed to allow horses to be accommodated down the centre line. If we take the total fleet as 600, of which 100 were horse transports, the following figures for the expedition are likely:

<table>
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<tr>
<th>Category</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>Infantry, at 30 per ship</td>
<td>15,000</td>
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<tr>
<td>Cavalry, at 8 per ship</td>
<td>800</td>
</tr>
<tr>
<td>Sailors, rowers and non combatants, 170 per ship</td>
<td>102,000</td>
</tr>
<tr>
<td>Total</td>
<td>117,800</td>
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</table>

In fact the number of troop carrying ships could probably be reduced to 400 and still carry 15,000 troops. The best troops were Persian heavy infantry supported by Sakae archers. They were supplemented by levies from the Empire, including some Ionian Greeks of doubtful loyalty.
The great fleet made its way westwards across the Aegean from island to island. Naxos was destroyed, Delos visited and the religious community ostentatiously placated, the submission of the islands obtained either voluntarily or in the case of Carystos by force; and finally the fleet reached Eretria, the first of its objectives. After a short siege the city was betrayed and the inhabitants enslaved.

So far, so good. Datis and Artaphernes next moved against Athens, and landed in Attic territory at the bay of Marathon. Athenian exiles were with the expedition, hoping to be restored, and had recommended the site. Athens had a strong army and the site was sufficiently far from the city to permit an unopposed landing; there were sufficient beaches for the fleet (600 ships will have required about 3 miles of beach); finally the plain of Marathon was excellent cavalry country and the Athenians could not hope to attack the Persian camp without exposing their flanks to the Persian horse. The Athenians had effectively no horse, although some of the hoplites will have ridden on the march.

The Persians were waiting for Athens to be betrayed by Persian sympathisers in the city, just as Eretria had been. However there was no sign of this occurring, and the Athenian army, together with a force from the little city of Plataea appeared at the south end of the Marathon plain, and covered the main road to Athens. It was further known that the Spartans were preparing to send a force to aid Athens, and that this would be setting out as soon as a religious festival had been celebrated.

As every day passed, the chances of Persian success receded. Finally it was clear that if they delayed any longer they would have to retire back to Asia ignominiously. Before the Spartans could arrive, the Persians determined to move direct on Athens in the hope of precipitating action by their supporters.

Previously, the Athenian forces had avoided a battle. In the wide confines of the Marathon plain, their battle line would be outflanked by the enemy cavalry. Now they were advised by the Ionians with the enemy that on the following day the cavalry would no longer be present.

Commentators normally suggest that the Persians had divided their force, and embarked the cavalry, plus part of the army, for the move on Athens, while leaving the rest to face the Athenians. If this was the case, why embark the cavalry? Athens was undefended, and the cavalry would be far more use in the Marathon plain harrassing the Athenians if they attempted to retreat. It would rather seem that the entire Persian force was being embarked, which would involve considerable activity over a lengthy period, loading stores, non combatants, and horses. In the meantime the Persian infantry was screening this evacuation, and approached within 1 mile of the Athenian position, so as to be able to intervene if the Athenians attempted to withdraw.

But at this point the Athenians attacked, taking the enemy by surprise. Swiftly debouching from their camp, the army came out in two columns, which swung outwards with the heads forming the wings and the tails the centre. The Polemarch, the Athenian commander, held the right wing, the Plataeans the left. Of the 10 Athenian tribal regiments, the two centre ones were commanded by Themistocles and Aristides, who led the Athenians subsequently at Salamis and Plataea.

As usual with a Persian army in formal array, the best troops were in the centre, with the levies on the wings. The Athenian force was perhaps 10,000 strong, and to avoid being outflanked the centre was thin. Here the Persians broke through, but their success was more than countered by the defeat of their wings. The Athenians then swung inwards, and surrounded the enemy centre, routing it, and pursuing it northeastwards up the plain towards the camp and ships.

The ships were obviously held waiting for the fugitives, and as many as possible were picked up before the Athenians forced them to push off. Seven ships delayed too long and were taken, and the Athenians tried to destroy more with fire (obviously from the remains of campfires in the camp area). A total of 6,400 Persians were killed, but it is significant that both Datis and Artaphernes escaped. If the Persian infantry had been engaged in anything more than a screening operation, it might be expected that the generals would have been in the centre, and would have been surrounded by the Greeks.
The survivors of the battle immediately made off for Athens, still hoping to anticipate the arrival of the Athenians, but the latter forstalled them by a rapid countermarch. The Persians were thus left with no alternative but to retreat to Asia.

Results of Marathon were not conclusive. Athens had beaten off an invasion attempt, but merely ensured that the next Persian expedition would come in overwhelming force. The Persians may have falsely assumed from the success of their own heavy infantry that troops thus armed could beat hoplites face to face, thus explaining Xerxes heavy reliance on these troops in his invasion 10 years later.
THE THREAT TO GREECE IN 480 B.C.

The defeat of the Persian expeditionary force at Marathon by no means settled the issue, as far as the Great King was concerned. The death of Darius and the accession of Xerxes, followed by a revolt in Egypt, delayed matters, but by 481 B.C. massive preparations, shipbuilding and preparing of supplies and magazines, were in train. These preparations were quite open and if anything advertised to the Greek world, and the Persian aim was obviously the subjugation of Greece. If Greece submitted without a fight, so much the better. Hence the wide advertising of the preparations, and a concentrated Persian campaign, using the infinite financial resources of the Persian Empire, to buy submission without a fight.

Allied with the Persian attack from the east, and obviously to a greater or lesser degree co-ordinated with it, was a Carthaginian invasion planned for Sicily. A great danger, as far as Xerxes was concerned, was that the Sicilian Greeks, relatively wealthy, especially in cavalry and grain, would reinforce the Greeks of the mainland and aid their resistance to Persia. This threat was averted by the Punic attack on Sicily.

By the winter of 481/480, Xerxes preparations were complete, and his forces gathered at Sardis, in western Asia Minor. Believed by the Greeks to number millions, and gathered from all over the Empire, the expeditionary force probably in fact numbered about 150,000 fighting troops, with the main fighting strength (about half the army) Iranian troops, and the rest probably token contingents from all the subject races on the army list. On the following pages a conjectural reconstruction of the Persian Order of Battle is given with the possible changes during the campaign, but it must be stressed that this is highly conjectural.

It is suggested that the heart of the army consisted of ten myriads of units of 10,000 men, one being the Immortals, the Guard Infantry which was always up to strength, eight being from the 4 infantry units with metal body armour, and one from the Bactrians and Sakae from the north east frontier. All the Myriads except for the Immortals are somewhat understrength at 8,000 each. All the other units have token numbers present only, 2,000 troops from each ‘Corps’, representing a variable proportion of the actual manpower available to that ‘Corps’. In addition there was a powerful cavalry component.

The invasion force crossed the Hellespont by two huge pontoon bridges, accompanied by the Persian fleet and by supply vessels, on which the army chiefly relied for food. The army moved towards Greece in three separate columns wherever possible, partly to shorten the column on the march, more particularly to avoid as much strain on the water supplies as possible. One of the legends is that Xerxes army drank the rivers dry; in northern Greece water is restricted and this is literally possible, with an army of this size.

By July, 480 B.C., the Persian Army was poised to enter Thessaly; the fleet was in company with it, its journey shortened by a ship canal cut through the base of the Athos peninsula.

The Persian invasion was a formidable exhibition of centralised planning and control. On the other side, the Greeks showed no such unanimity. Particularly in northern Greece, cities were merely waiting for Xerxes to arrive before declaring for him; others, such as Argos, intended to stay neutral, partly out of jealousy of Sparta, and there was not even unanimity within the Hellenic League cities preparing to resist the invader. Overall command was vested in Sparta, but any Spartan had to ensure that everyone agreed with his policy if there was to be any hope of them all adhering to it. It is small wonder that the prospects for free Greece looked black.
THE THREAT TO THE GREEK WORLD IN 480 B.C.

CARTHAGE
200 SHIPS
?100,000 TROOPS

SICILIAN GREEKS
200+ SHIPS
50,000 HOPLITES
5,000 CAVALRY

HOMELAND GREEKS
400 SHIPS
40,000 HOPLITES
25,000 NEUTRAL OR MEDIZING HOPLITES

PERSIAN EMPIRE
650+ SHIPS
150,000 TROOPS

Map 5
### The Persian Army Conjectural

<table>
<thead>
<tr>
<th>Corps</th>
<th>Nation</th>
<th>Herodot Possible Team Strength</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>Infantry</td>
<td>Immortals</td>
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<td>10,000 Reported at Thermopylae</td>
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<td></td>
<td>Persians</td>
<td>60,000</td>
<td>16,000</td>
</tr>
<tr>
<td></td>
<td>Medes</td>
<td>60,000</td>
<td>16,000 Reported at Thermopylae</td>
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<tr>
<td></td>
<td>Cissians (Kashites)</td>
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<td>Hyrkanians</td>
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<td>Assyrians + Chaldaeans</td>
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<tr>
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<td>Indians + East Ethiopians</td>
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<td>2,000 Token Unit</td>
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<td>Arians</td>
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<tr>
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<td>'Exiles'</td>
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<tr>
<td><strong>Total Infantry Units</strong></td>
<td></td>
<td>1,175,000</td>
<td>130,000</td>
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</tbody>
</table>

### Cavalry

| Corps          | Guards                          | 1,000                          | 1,000                           |
|                | Guards                          | 1,000                          | 1,000                           |
|                | Persians + Sagartians           | 18,000                         | 2,500 No Sagartians             |
|                | Medes                           | 10,000                         | 2,500                           |
|                | Cissians                        | 10,000                         | 2,500                           |
|                | Bactrians + Sakaie              | 10,000                         | 5,000                           |
|                | Indians                         | 10,000                         | 1,000                           |
|                | Caspians                        | 10,000                         | 1,000                           |
|                | Parthians                       | 10,000                         | 1,000                           |
| **Total Cavalry** |                               | 80,000                         | 17,500                          |

### Camels

| Corps          | Arabs                           | 20,000                         | 2,000                           |

**Grand Total**

1,275,000 149,500

---

Reconstruction of Persian Order of Battle
## NUMBERS 480 + 479 B.C.

<table>
<thead>
<tr>
<th>BATTLE LOSSES IN 480</th>
<th>RETURNED WITH XERXES</th>
<th>REMARKS</th>
<th>LEFT WITH MARDONIUS</th>
<th>REMARKS</th>
<th>479 LOSSES</th>
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<td>2,000</td>
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<td>Troops with Mardonius lost at Plataea*</td>
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<td>1,500</td>
<td>15,500</td>
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<td>500</td>
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<td>Phrygians escaped with Artazabus</td>
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THE HIMERA CAMPAIGN IN SICILY 480 B.C.

Whatever the degree of co-ordination with Xerxes' invasion of Greece, the Punic invasion of Sicily in 480 B.C. was in reply to the threat posed to Carthaginian interests in Sicily by the expansionist activities of two tyrants or military dictators, Theron of Akragas and Gelon of Syracuse.

Gelon had offered to send a force of 20,000 hoplites to Greece with supporting light troops and cavalry (an indication of the more developed military art of the Sicilian Greeks), but this offer fell down ostensibly on his demand to be given the overall leadership of the Greeks. In fact it was probably influenced by the Carthaginian preparations for invasion.

The actual casus belli was the town of Himera, on the north coast of Sicily, near Panormus, the main Punic city on the island, with Motya. Himera had fallen into the possession of Theron. The Punic plan was to regain Himera and link up with their Greek allies in the northeast of the island, independent of, and alarmed by, the increasing influence of Gelon and Theron.

The Punic force was under the command of the Shophet or Suffete Hamilcar (Abd Melkart), who was himself half Syracusan. The army was alleged to be 300,000 strong, and was recruited from the whole western Mediterranean seaboard from north Africa round to northern Italy. The invasion fleet, convoyed by 200 warships, reached Panormus and there landed before moving off to lay siege to Himera. The voyage had not been uneventful however, as the Punic horse transports had become detached and were lost in a storm.

Theron moved to support Himera, and blockaded himself in the city, facing the Carthaginian camp on the beaches and hinterland west of the walls. Here he was joined by Gelon, the combined Greek forces including 5,000 cavalry (another arm in which Sicily far outstripped the Greek homeland), and totalling at least 50,000 men.

This army was nevertheless outnumbered by the Carthaginians, and neither side was prepared to move, Hamilcar because he had sent to Selinous, a Greek city under Punic control, to obtain cavalry to replace those lost in passage. This message fell into the hands of Gelon, who at once resolved to turn it to his advantage, by a daring substitution.

Gelon's plan was that his own cavalry should appear in the guise of the reinforcements from Selinous, enter the Carthaginian camp, and raise havoc to divert the enemy while his other troops also attacked. The plan was entirely successful. The Syracusan horse rode through the camp, creating pandemonium, and killing Hamilcar himself as he was engaged in sacrificing before a large pyre (other stories of his end included the pious fiction that he flung himself into the flames as a sacrifice when the situation was seen to be hopeless). Despite a rally by the Carthaginians, their forces were either destroyed in the camp, or fled to surrender a few days later.

This victory was so complete that it eliminated Carthaginian threats to Sicily for years to come. Equally it destroyed the threat to the Greeks from the west in 480.
THE CAMPAIGN IN SICILY
480 B.C.

CONTOURS AT 400 + 1000 METRES

Map 6
THE THERMOPYLAE AND SALAMIS CAMPAIGNS 480 B.C.

The original intention of the Hellenic League had been to defend the line of the Tempe pass, in northern Greece, and a force of 10,000 men was sent. This army was reinforced by Thessalian cavalry on arrival, but the dubious loyalty of the Thessalians, and the danger of being outflanked by the Persians north of Mt. Olympus, forced a retreat. The first resistance to the Persian force was thus made at Thermopylae.

The force sent to Thermopylae consisted of a total of 5,200 hoplites, of which the core was the Spartan Hippeis, 300 strong. There were a further 2,800 Peloponnesian troops, but from Boeotia only 400 Thebans and 700 Thessians. The Boeotians were only waiting for the arrival of Xerxes to change sides, and the 400 token force was made up of political opponents of the government. The Thessians were seeking to establish their independence from Thebes. It was the intention of the Greeks to reinforce their army under Leonidas of Sparta substantially, but it appears to have been felt that the Thermopylae position could be held for a considerable period, so the reinforcements were late.

The main road by which Xerxes would have to move passed between mountains and sea in a narrow pass (since 480 B.C. the sea has retreated very considerably), and this pass was narrowest at three points, the west, middle and eastern gates respectively. Leonidas placed his camp at the middle gates, where there was in existence the remains of a defensive wall (the Phocian wall), and derived his supplies from the village of Alpenoi at the east gates.

The strength of the Thermopylae position was diminished by the presence of several flanking routes either southwards or eastwards round the Gates. At the most dangerous of these Leonidas stationed 1,000 Phocians, local troops, who might be supposed to be the best force in a situation where local knowledge would be at a premium.

The Persian army arrived mid August to the north west of the Thermopylae position, with the fleet unable to make direct contact with them because they were facing the Greek fleet at Artemision. Lack of his fleet had two serious results for Xerxes; he could not use them to land troops behind Leonidas, and his supply position was difficult because the store ships were with the fleet.

While the Greek fleet was engaged in a series of battles off Artemision, Xerxes made attacks frontally on the Spartans position on two successive days, using Median and Cissian troops. In other words his best type of infantryman. On the narrow front his numbers were useless to him, and the Persian infantry proved hopelessly outclassed by the hoplite. The result of the fighting was thus disastrous, with many casualties, and no change in the Spartan position. The Persians do not appear to have used archery, but space to deploy to use archers was limited, and with the type of troops used, they would have had to have advanced their front ranks to within about 100 paces of the Spartans, and then put down their shields to use their bows. As the Greeks had shown themselves quite ready to make limited counterattacks, troops attempting to use archery could find themselves charged before they could resume shield and spear. Furthermore, stationary hoplites facing an enemy were a well protected target.

The Persian attacks by land and sea were thus stalemated, until a local traitor (there are several named candidates, of whom the chief is Epialtes) offered to lead a Persian force round by a path to take the Greek position in the rear. This is the path shown on the sketch map, which is today still traceable and capable of being followed. One modern scholar traversed it in a jeep, and there is no difficulty in moving a large force along it. Leonidas was of course aware of it and had stationed the Phocians to guard it.

To the outflanking movement Xerxes committed his Guard unit, the Immortals, 10,000 strong, under Hydarnes. To avoid being observed by the Greeks, this force set out at dusk, and by dawn reached the Phocian position. Both sides were surprised, but the Persians opened fire on the Phocians with their bows, and the latter retired to a high position and prepared to defend themselves.
The Persians paid no heed to them, however, but continued down to take the main Greek force in the rear. Their movement had already been observed and reported to Leonidas, who had about 3 hours before his escape would be cut. A Greek council of war followed, as a result of which the Peloponnesian contingents fell back, leaving only the Spartans, Thespians and Boeotians, 1400 men, less the casualties from previous days fighting, or one third of the army. It is unclear whether the Peloponnesian contingents broke off of their own accord, or whether they were sent away by Leonidas. Those who remained knew that there would be no escape, and Leonidas himself may have been influenced by an oracle prophesying that either a Spartan King or Sparta itself would perish in the war.

Xerxes committed his forces to the attack when it was calculated that Hydarnes would have descended the mountain. He was met by the Greeks, who on previous days had occupied the narrowest part of the pass, and relieved the frontline troops in relays. Now Leonidas led them into a wider part so that all were committed at once, and a furious battle commenced, in which Leonidas himself was killed. A violent struggle for his body was won by the Greeks.

The Immortals were now coming, and a lull seems to have ensued. Xerxes was perhaps regrouping, and the Greeks retired beyond their previous position to a small mound, where they formed up for their last stand. Here they were assailed from all sides, and shot down by overhead fire while under attack frontally. No Spartan, and only a few others (libellously said by other Greeks to be all Thebans) finally surrendered.

The loss of the Thermopylae position meant that all Greece north of the Isthmus fell to Xerxes. Thebes promptly changed sides and declared for the Persians, and Xerxes entered Athens and destroyed it.

The Athenians, with the Greek fleet, held the island of Salamis. The Peloponnesian armies held the Isthmus. In order to outflank the Isthmus defences Xerxes had to destroy the Greek fleet, but the Battle of Salamis instead resulted in the destruction of his own ships. Strategically, this was disastrous. So large an army could not live off the land, and was dependent upon the supply ships with the fleet. Furthermore, with the Greeks in command of the Aegean, the Persian line of communication was very vulnerable. Xerxes accordingly immediately retreated, with the bulk of his army.

This retreat was executed in good order, and the Persian threat was by no means dispelled. Xerxes left behind Mardonius, Satrap designate of Greece, with a strong force, to renew the campaign in 479 B.C.
THE PLATEA CAMPAIGN 479 B.C.

Following the retreat of Xerxes, the winter of 480/479 B.C. was spent in concentrated diplomatic activity. The Peloponnesians, secure in the knowledge that the Isthmus could not be turned since the Persians had no fleet, sought to remain behind that barrier, keeping the Athenians and other cities north of the wall fed from Peloponnesian resources. The cities north of the Isthmus, Athens and Megara, naturally sought a full Peloponnesian commitment by land to seek out and destroy Mardonius’ army. And Mardonius, banking on Athenian war weariness, was seeking to detach Athens from the Greek cause. With the Athenian fleet the Persians could outflank the Isthmus Wall, and all the Peloponnesians would fall.

The campaign opened with the Greek strategy still not declared. Mardonius left his winter quarters in Thessaly and marched through Boeotia into Attica, picking up the levies of the Greek cities on the way. Athens was devastated for the second year in succession, and the Athenians again withdrew to Salamis and the other islands.

The Peloponnesians now at last declared their hand, and began to move north. When their leading units had reached Megara, the Persian army retired north to Boeotia through the Dekeleia pass. The alternative was to fight in the Thessalian plain or near Athens, with a long supply route back to Thebes, and a difficult retreat in the event of defeat. Mardonius set up his camp south of Thebes, on the north bank of the river Asopus, in open country where his own cavalry, supported by the cavalry of Boeotia and Thessaly, the best in Greece, would have an overwhelming advantage. His army, said by Herodotus to have totalled 300,000 men, was in fact probably about 35,000 Persian infantry and maybe 12,000 cavalry, with perhaps some 15,000 Greek troops. Most of his infantry were heavy Iranian units including the Immortals, the cavalry a mixture of Persian heavy horse, including the Guard Cavalry, 1,000 strong, and light bow and javelin armed cavalry, the best of it the Sakae horse from the Steppes.

The Greek army was drawn from the states shown on the map, all from southern and central Greece, with the sole exception of Potidaea, a Corinthian colony from the north, which had revolted from the Persians, and sent a force to aid the Greeks. In addition to the hoplites, there were a number of light troops, mainly armed with javelins, but only one unit of archers (Athenian) and no cavalry. It was commanded by the Spartan King Pausanias.

The Greeks advanced out of the mountains (the foothills of Kithaeron, southwest of Plataea) by the Eleutheran and Dryoskephalae passes, but remained on the north slopes, in poor cavalry country. They were here attacked by the Persian cavalry, led by Masistius. The most exposed unit (the Megarians) was suffering severely and was assisted by the Athenians, who sent a picked force including archers, and one of these archers wounded Masistius’ horse, he being thrown, set upon by the Athenians and killed.

It has been plausibly suggested that Mardonius sent his horse against a strong Greek position in the knowledge that they would be defeated, and that this would tempt the Greeks into more open country. At any event the Greeks now descended into the plain, and took position along a ridge (the Asopus ridge) facing slightly east of north and lying a short distance south of the river. Here they almost immediately found themselves in difficulties. The line was long, with Athenians on the left and Spartans on the right, and the main source of water was a spring in rear of the Spartans. This flank was not only open, but most exposed to the Persian camp, and the whole Greek line was suffering from continual attacks by the Persian horse, to whose missiles they could make no reply. Further, the Persians succeeded in getting round the exposed flank and choking up the Spring, and also cut off the Greek supply line, which extended through the passes.

The Greek generalship so far appears astonishingly inept. In overall command was the Spartan king Pausanias, and the sole logical explanation of his move forward is that it was to tempt the Persians to attack him in force. This obviously Mardonius had no intention of doing, except on his own terms. The Greeks were now in a position where, without supplies, they had to retreat to restore their line of communication.
SALAMIS + PLATAEA CAMPAIGNS
GREEK STATES PROVIDING TROOPS AND SHIPS

10,000 = Nº OF HOPLITES
20 = Nº OF SHIPS

Map 8
The mystery is that the move was not fully made by night, and it would appear from this that the retreat was partly a deliberate move, carried out in apparent disorder, to tempt the Persians to attack. During the night the Greek centre retired to a position nearer the Kithaeron foot hills, but the Spartan and Athenian wings only commenced their move at first light.

Whatever the intentions of Pausanias, a general engagement was precipitated. Mardonius led his Persian troops against the Spartans, and the medizing Greeks attacked the Athenian wing. The Persian centre was slow to come into action.

The outcome of the battle was still undecided when Mardonius himself, leading the Guard Cavalry, was killed, and his wing broke and fled. Meanwhile the Thebans and Athenians were fighting hard, until the Athenians at last broke their opponents.

The Persian centre never got into action at all. Its commander, Artabazus, had apparently been reluctant to engage at all, and the left wing was already in flight when he appeared. He at once led his troops off the field, and successfully got them back to Persian territory without loss, in a masterly piece of generalship. Under his command were the Indian and Bactrian and Sakae Corps, so a large part of the Persian army was saved.

Not so fortunate were the survivors of Mardonius’ wing, including the Immortals and the Median troops. They fled to the fortified camp, and were there pursued by the victorious Greeks, who burst in, and slaughtered the majority of them; only 3,000 survived, according to Herodotus.

The victory of Plataea meant that the Persian threat to Greece was entirely destroyed; simultaneously the Greek fleet won a victory over the remnants of the Persian fleet at Mycale, on the coast of Asia Minor, thus clearing the Aegean completely and permanently of Persian warships. And without a fleet no army large enough to threaten Greece seriously could again invade.
THE PLATAEA CAMPAIGN
479 B.C.

PERSIANS
MARDONIUS
IMMORTALS (REINFORCED BY PERSIANS) 12,000?
CORPS III (MEDES)
CORPS VII (BACTRIANS + SAKAE)
CORPS VIII (INDIANS)
OTHER PERSIAN TROOPS
CAVALRY 10,000?
MEDIZING GREEKS 15,000?

GREEKS
PAUSANIAS OF SPARTA
35,000 + Hoplites
PLUS LIGHT INFANTRY

Map 9
THE VICTORS QUARREL

LATER GREEK WARRIOR TYPES

The following figures show some of the developments in Greek troops which took place after the Persian Wars.

54. **Hoplite 400 B.C.** This figure shows various developments in armour which were noted by 400 B.C. The cuirass is of the ‘muscle’ type, a single plate formed to an idealised torso shape, and the helmet is of the type known as Attic.

As part of the general lightening of equipment which took place about this time, boots are worn instead of greaves.

55. **Spartan Hoplite 400 B.C.** This figure illustrates the effect of the reduction in armour which many hoplites were making to increase mobility at this period. Instead of a cuirass, the leather or canvas ‘spolas’, a short protective tunic, is worn. Instead of a helmet, of traditional type, the non metallic ‘pilos’ is worn; the Spartan troops on Pylos in 425 B.C. had helmets of this type.

The figure had the usual Spartan shield blazon, lambda, and wears his hair in typical Spartan fashion, in long pigtails. He is standing in the usual Greek hoplite ‘at ease’ position, with the shield resting against the knees and the spear upright. In this position he would be relaxed but could be ready for action with very little delay.

Red is the usual colour associated with Spartan uniform.

56. **Greek Cavalryman – 400 B.C.** This is the typical Greek cavalryman, little changed from the Persian War period. Classical Greek cavalry were not a particularly efficient arm, and the standard of horsemanship was not particularly high. Even Xenophon sometimes suggests that the cavalryman’s main preoccupation was staying on the horse, and advises his readers that horses may be safely ridden downhill without dislocating their shoulders.

The horse was a small ponylike animal with a hoggled mane. It was not shod, and the rider had no saddle, but sat on a cloth (ephippion). There were no stirrups, but a bridle, bit and reins were standard.

As offensive weapons the cavalryman used primarily javelins, although a spear was sometimes carried. Exercise for the cavalry consisted chiefly of javelin throwing at a mark, but in the Athenian cavalry this appears not to be compulsory, as Xenophon suggests that the officers should attend javelin practice as an example to the men to do so. In addition to the javelins or spear the horseman has a sword.

A corselet of normal hoplite type is worn, with pteruges. The helmet is the type called Boeotian, which can be best described as a metal hat with downturned brim. For cavalry use it had the advantage that the face was open and the wearer could hear commands without difficulty. The usual lack of standardisation will however have prevailed, and every type of helmet will have been worn by cavalrymen.

Xenophon’s recommended equipment for the cavalryman includes, in addition to the usual equipment, armour to protect the neck, arms and thighs, and high boots to protect the lower leg. Furthermore he recommends armouring the head, neck, chest, sides and belly of the horse; this will have been leather or quilting rather than metal. Persian cavalry sometimes had armoured horses of this type, but there are no references to Greek cavalry with armoured horses, and it is likely that Xenophon’s recommendations were not generally adopted.

It will be noted that the cavalryman carries no shield, which was the usual practice at least until about 300 B.C.
57. **Greek Slinger:** Slingers were commonly used light troops in Greek armies, being either drawn from the state’s own citizens, or being hired in as mercenaries. The most notable slingers came from the island of Rhodes.

Like other Greek light troops, the slinger had no armour, but carries a small round shield. The sling bullets were usually of lead, almond shaped, and weighing 20–30 grams. They were often (particularly in siege warfare) cast bearing messages to the recipient, such as DEXA (take that!).

Persian slingers used stone missiles, which though larger and possibly heavier than lead, are said to have carried for about half the distance.

58. **Peltast:** Regular light troops were a feature of Greek armies in the 4th century B.C. Originally mercenary Thracians, they were later regular troops of Greek origin.

Armed with a sword and a pair of javelins, they might wear light body armour, such as the 'spolas' shown here, and would be likely to have a helmet, the one illustrated being a Boeotian one. The shield would be the light pelta, sometimes crescent shaped, more often round. This could be wicker, leather, or sometimes bronze.

59. **Cretan Archer:** Cretans were the specialist archers of Greek armies, using a composite type bow which was fairly large and used an arrow similar in size to the Persian, but with a broad head. Again equipment will have varied considerably, but the Cretans who accompanied the 10,000 had no body armour, but carried the round pelta, which was in their case of bronze. The tunic was red, in the case of the Cretans with the 10,000.

60. **Iphicratean Hoplite 375 B.C.:** The Athenian General Iphicrates made major alterations in hoplite equipment, bringing this type of soldier much closer to the peltast in type. The metal corselet was dispensed with, and a quilted linen one substituted (the spolas could be a variant), and the great heavy hoplite shield was exchanged for the pelta. Iphicrates so hoped to make the hoplite lighter and more mobile. The soldier illustrated also wears boots instead of greaves; Iphicrates designed a style of boot which was called the Iphicratid after him.

The helmet illustrated is the Ionian; yet another variety which was worn by hoplites. The chief point of difference is that the cheek pieces are hinged to the helmet and can be swung upwards.

The offensive weapons were also altered. The spear was made longer; either double or 1½ times as long as the normal hoplite spear. The sword was also much increased in length.

The spear may therefore have been of the order of 13–14ft in length, and approaching the dimensions of the Macedonian sarissa, which it may have inspired. Nevertheless, the Iphicratean hoplite must have continued to hold the spear with one hand only, as the pelta was not affixed to the arm in the same manner as the Macedonian shield.

The extent to which hoplites so armed replaced normal hoplites is not known but was probably not great.
61. **Bellybowman**: The bellybow or gastraphetes was the forerunner of all classical artillery, and was invented under the patronage of Dionysuis of Syracuse in 399 b.c.

The bow consists of a composite bow of considerable power (say 200lbs pull) fixed to a stock. The stock is in two parts, a fixed lower part secured to the bow and a sliding upper part.

The drawings illustrate the firing sequence. In 61a the operator pushes the sliding portion of the stock as far forward as possible, until the trigger on the upper part of the sliding stock engages the bowstring.

In 61b the operator puts his belly against the end of the fixed stock, and seizing the handles, presses with all his weight on the end of the bow, with the end of the sliding stock on the ground or against a wall. The sliding part of the stock including the trigger thus draws the bow, and a ratchet keeps it from moving forward again.

In 61c the operator has fully cocked the bow and laid a bolt in the groove on the upper part of the sliding stock. The bow is now ready to fire.

Whilst powerful and accurate, the bellybow was quite impossible to use in the field. When modified, however, by the addition of a rest or stand, and a winch to pull the sliding stock back, it became a formidable piece of artillery, capable of considerable development.
SPARTAN ARMY ORGANISATION AND DRILL

The Spartan Army, representing the only force in Greece approaching a standing army, brought the tactical development of the hoplite phalanx to its highest degree. The actual size and composition of the army varied from period to period, but the same basic organisation can be discerned.

The total number of troops available to the Spartans declined throughout the Classical period. At Platea they put 10,000 troops into the field, but by Mantinea in 418 B.C. the number mustered may have been about 4,000 and in the years following the Peloponnesian war the field strength was about 3,000. Of these numbers perhaps half would represent full Spartiates, and the rest were Laconians with limited citizen rights.

The actual smallest formed unit was the ENOMOTIA, which varied in size, but probably averaged about 30 men. This was the basic tactical unit, and could assume various frontages and depths as might be required.

All drill movements within the enomotia were based upon the file, and the front rank man and rear rank man were in consequence the most experienced. All drill movements were initiated by these troops, and the remaining soldiers merely had to follow the man in front. The most common manoeuvre was the Laconian Countermarch, with each file countermarching to the rear, thus forming front to the rear with the original front rank men still in the front rank. Since officers would normally be in the front rank, a simple about turn would have left them in the rear unable to control their units.

The next sized unit was the PENTEKOSTYS which could contain 2 or 4 enomotiae. According to Thucydides, writing of the battle of Mantinea in 418 B.C., the next size unit was the LOCHOS, containing 4 Pentekostyes under the command of a Lochagos. However Xenophon has only two Pentekostyes in a Lochos, and 4 Lochoi in a Mora.

What Thucydides calls a Lochos and Xenophon a Mora contained about 500–600 troops, and appears to have been recruited on a territorial basis. In either case the Spartan army contained 6 of these units, and in addition a unit called Sciritae who appear to have been an elite comparable to the Grenadier company of an 18th century battalion. At Mantinea in 418 there was a seventh Lochos, composed of freed helots and troops which had served under Brasidas in Thrace.

Some time after Xenophon described the Spartan organisation it was reorganised again into 12 Lochoi, each of which was the equivalent of half one of the old morae, and this organisation was in effect by 365 B.C.

Such a degree of organisation was not the rule in other Greek states — at Athens the smallest unit was the tribal regiment which could be up to 1,000 strong, and even an army of professional mercenaries such as the 10,000 does not seem to have had regularly appointed officers below the level of the lochos (possibly 100–200 men strong). Even Athenian Generals (10 in number) were amateur in the sense that they were annually elected. Boeotian armies were commanded by Boeotarchs, 11 in number, two from Thebes, the rest from the various subject cities.
ORGANISATION OF SPARTAN LOCHOS
AS DESCRIBED BY THUCYDIDES AT MANTINEA 418 BC.
21 OFFICERS
512 MEN
535 (NOT INCLUDING FLUTEPLAYERS)
ORGANISATION OF SPARTAN MORA
AS DESCRIBED BY XENOPHON 380 B.C.
29 OFFICERS 576 ? MEN
605 ?
SPARTAN ARMY DRILL

Spartan Mora
Forming line from column of March
(Enomotia 1–16)

LACONIAN COUNTERMARCH – FOR FORMING FRONT TO REAR

11 21 31 41
12 22 32 42
13 23 33 43
14 24 34 44
15 25 35 45
16 26 36 46
17 27 37 47
18 28 38 48

1. Enomotia facing front.
2. Files countermarch
3. Enomotia facing rear.

Diagram 3
ATHENIAN CAVALRY ORGANISATION

The organisation of the Athenian cavalry on an ideal basis is given by Xenophon. Like all Athenian military institutions, the basis was the Tribe or Phyle, and the cavalry, which was drawn from the wealthiest citizens, capable of providing their own horse and equipment, were officially 1,000 strong. As there were 10 Phylae, each tribe was officially to produce 100 cavalry under a phylarch.

The organisation of the cavalry described by Xenophon is similar to and possibly derived from Spartan infantry formations. The Phylarch has 10 subordinates called Dekadarchs, each of whom commands 9 men in one file, and leads them. In each section of 10 the second in command is the File Closer, who brings up the rear of the section.

Actual tactical training was limited to drill and training in javelin throwing, and it does not appear that the Athenian cavalry, or other Classical Greek cavalry, were expected to charge home — for which indeed their over dense formation was not well suited.

The Athenian cavalry had the equipment and training to fight as hoplites if necessary, and could thus fight if required as mounted infantry. The sole difference would be that they would take spear and shield, and discard their javelins.

The actual efficiency of any Classical Greek cavalry as cavalry tended to be low under normal circumstances.

Numbers of cavalry and other troops supporting a phalanx in a Greek army tended to be related to the number of hoplites, and the rule frequently found was that each type of specialised troops was 10% of the number of hoplites. Thus the Athenian cavalry was 1,000 where the infantry was about 10,000, and if regular bodies of archers or javelinmen were added they would also each be 10% of the number of hoplites.
THE PYLOS CAMPAIGN 425 B.C.

Following the defeat of the Persian attempt to invade Greece, the Athenians, who had played so great a part in that defeat, increased in power and influence. Heading the offensive maritime league of Aegean states which was prosecuting the war against Persia, it gradually converted its allies into tributary vassals, and the league into an Empire. By 431 B.C., therefore, the Athenians were at war with the Spartans and their allies, in the Peloponnesian War, the aim of which was (on the Peloponnesian side) to diminish the great power of Athens.

The Athenian strategy was based upon the fact that the city of Athens itself, which had been connected to the port of Piraeus by fortifications (the Long Walls), could not be starved into surrender or taken by an enemy without command of the sea. There was thus no way in which the vastly superior Peloponnesian armies could effectively harm Athens, with her fleet which was so much superior to theirs, both in numbers and in quality.

The early years of the war were thus spent in peripheral campaigns apart from a routine annual invasion of Attica by the Peloponnesians which did not alter the balance of power. However in 425 B.C. the Pylos campaign gave Athens the chance of striking a war winning blow at Sparta, the leader of the Peloponnesians.

The scene of the campaign was the bay of Pylos in the south west Peloponnese, which is now Navarino bay.

At the start of 425 B.C. the Athenians sent a fleet of 40 ships out from Athens. The fleet was commanded by two of the ten Generals for the year, Sophocles and Eurymedon, and accompanying it was one of the Generals (now out of office) from the year before, Demosthenes. The orders for the fleet were somewhat contradictory. The fleet was supposed to be going to Sicily, but had been ordered to aid the democratic party in Corecyra where a civil war was in progress on the way, and Demosthenes had in addition (although holding no official position) been given authority to use the fleet en route for any purpose which he saw fit! Obviously there was no real central authority setting the priorities.

In the meantime the Peloponnesians had also sent a fleet of 60 ships to Corecyra, and Sophocles and Eurymedon were anxious to overrule Demosthenes, and press on to engage them. However, the ships were forced into Pylos by bad weather, and Demosthenes was enabled to put his plan into operation.

Demosthenes' plan was simply to fortify the Pylos peninsula and hold it. It could be readily supplied by sea, and it was in Messenian territory. As the Messenians were unwilling subjects of the Spartans, a centre of revolt would have far reaching effects. The plan was accordingly put into effect, the place fortified — which was not a difficult problem as the peninsula is mostly a natural fortification — and Demosthenes left with a small garrison, and five ships. His garrison was augmented by two small ships of Messenians who joined him, and the total force under his command will have been somewhat over 1,000, made up as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Athenian Hoplites</td>
<td>5 x 10</td>
<td>50</td>
</tr>
<tr>
<td>Athenian Archers</td>
<td>5 x 4</td>
<td>20</td>
</tr>
<tr>
<td>Athenian light troops</td>
<td>crews with improvised arms</td>
<td>930</td>
</tr>
<tr>
<td>Messenian hoplites</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Messenian light troops</td>
<td></td>
<td>50</td>
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The Spartan response to the fortification of Pylos was immediate. The main Peloponnesian army facing Athens was immediately withdrawn, and the entire weight of the Spartan army was diverted to dislodge the small Athenian landing force. The core of the Spartan army, the Spartiates, together with the nearest Laconian forces arrived first; the remainder followed. Furthermore the fleet sent to aid Corecyra was hurriedly recalled, and also arrived to blockade Pylos.
Strategic Plans for 425 B.C.
In total, therefore, the Peloponnesians had several thousand hoplites, of which the Spartiates had no equals in Greece, and with the 60 ships from Corcyra, sufficient force at sea to force a blockade of the peninsula. The two entrances to the bay of Pylos were blocked by the fleet, and the island of Sphacteria which shielded the bay from the sea was occupied by a force of Spartiates, 420 strong, with a number of helots to support them. Even, therefore, if the Spartans failed to take the Pylos position by storm, they could expect to hold it besieged and keep away any Athenian relief force.

The only weakness in this plan was the holding of the southern entrance to the bay, which is some 1,000 yards across. If the Spartans had (as is reasonable) 50 ships available, and placed them in two lines, this would require one ship at 40 yard intervals, which would be a reasonable formation to hold the entrance to the bay. However, the depth at the entrance to the bay is over 30 fathoms, so that the ships could not be permanently anchored in position, even if it had been possible to keep the crews aboard permanently.

However, the first attempt made by the Spartans was an assault simultaneously by land and sea. The landward assault was difficult as it could only be made along the curving sand spit connecting the peninsula to the mainland; slow going and a formidably strong position to assault at the end of it, even without the benefit of fortification. The seaward attack was not quite so difficult, but the rocky nature of the peninsula made a naval assault feasible only at the south west corner, and only a few ships at once could attack.

For the naval assault the Spartan ships were modified and equipped with apobathra — these were temporary gangways which were fixed at the forward end of the parekseiresia or outrigger — down which troops could charge either to board an enemy, or as in this case to assault a shore. As apobathra are only otherwise found in the Persian wars, this is an indication of the old fashioned character of Spartan naval tactics.

To defend the Pylos peninsula, Demosthenes placed the majority of his troops to face the landward assault, while the seaward attack he prepared to meet himself with the best of his hoplites. The landward attack was contained as expected, and while the attack from the sea was pressed with vigour, particularly by a rising Spartan officer, Brasidas, it too was beaten off, and Brasidas himself was seriously wounded.

The Spartans thereupon made preparations to renew the attack, sending off for wood to make assault engines to attack the landward wall, and also preparing to renew the offensive at sea. Before they could renew the attack, however, the main Athenian fleet returned from Corcyra, having failed to intercept the Spartans who had turned back earlier. It had picked up various reinforcements from the Athenian base at Naupactus and elsewhere, and now numbered 50 ships. On arrival off Pylos the Athenians made a reconnaissance, and retired to the nearby island of Prote, to prepare for battle.

The next day the Athenians returned at dawn, planning to engage and destroy the enemy fleet. The Spartans were already at sea within the bay, but had not blocked the entrances, and did not attempt to engage the Athenians outside the bay. The Athenians accordingly entered the bay by both entrances, and defeated the Spartan fleet; from the account of Thucydides it is clear that part of it was still in the process of getting to sea. After pursuit, a combined naval and land battle developed in the vicinity of the Spartan camp, at the end of which the Athenians had command of the sea and had taken 5 Spartan ships.

More important, the Athenians were now in a position to blockade the Spartans on the island of Sphacteria.

This was an extremely serious matter for the Spartans, as the troops on the island included a good number of Spasites, the full Spartans, few in number, who were the hub of the Spartan system. They thus formed a bargaining counter of immense importance, so important to the Spartans that they negotiated an immediate armistice, so that an approach could be made to Athens itself regarding an end to the war.

As part of the armistice terms the Spartans handed over all the ships in the area, and all supplies to the island were sent over under Athenian supervision.
The failure of the peace negotiations at Athens meant that the armistice was at an end; the Athenians, alleging certain breaches of the armistice, however, refused to hand back the Spartan vessels. They now had the job of blockading the island so as to prevent the Spartans being supplied, and so starving them into submission. This turned out to prove a far more difficult problem than had been anticipated, as large rewards were offered by the Spartans to anyone who would run the blockade, and when there was a strong wind off the sea the Athenian ships had to take refuge inside the bay, while their enemies had people who were willing to run small boats ashore on the seaward side of Sphacteria, wrecking the boats, but getting supplies through.

In consequence the summer wore on and the Athenians were no nearer success. If the stalemate persisted until winter, the Spartans could expect to find an opportunity to withdraw their troops from the island without the Athenians being able to stop them. There was thus an urgent need for them to make an assault on Sphacteria.

Such an assault was being planned by Demosthenes when Cleon, the Athenian democratic politician, made a boast to the Assembly that he could take Sphacteria within 20 days — and the Assembly took him at his word.

Cleon must have had some inside information, because the few troops he chose to take with him were all light infantry of the type which Demosthenes was planning to make the main strength of the forthcoming operation.

The Spartan dispositions were as follows. Since the island is very rocky and landing places were few, the main body of the Spartans was concentrated in the centre of the island, with a small outpost at the southern end. The island had been densely wooded, which had made Demosthenes more reluctant to assault, as he had recently suffered a heavy defeat at the hands of light troops in wooded country. However, because of the wooded character of the island, and the impossibility of the Spartans defending every landing place, some of the Athenian crews had been in the habit of landing in secluded spaces to cook meals, and one of these crews had accidentally set the wood on fire. This made Demosthenes more confident in planning his assault, although he now saw that the enemy numbers on the island were larger than he had thought.

The Athenian plan called for an initial assault on the outpost at the southern end of the island just before dawn by the hoplites available (800), who were landed from a small force of ships which the Spartans mistook for a normal blockade movement. The small garrison at this point, 30 men, was surprised and outnumbered, and immediately overwhelmed.

With the landing place secured, the main Athenian forces landed. It is a measure of the moral superiority which Spartan troops enjoyed that although the Athenians had already landed twice their opponents numbers in hoplites, they followed up with about 10,000 other troops, of which 800 light archers and at least the same number of peltasts were to be the spearhead of the attack. The majority of the Athenian force was made up of the crews of somewhat over 70 ships, less the thalamite oarsmen, armed as best they could be, primarily with missile weapons.

The Athenian hoplites accordingly formed up to face their Spartan opposite numbers, but when the Spartans advanced to engage, the Athenian hoplites refused to meet them, and the light troops, who had been split up into units of about 200, fell upon their flanks and rear with missiles. Unable to reply effectively, and steadily losing men, the Spartans retired in relatively good order to the northern end of the island, where there was an old fort, which was held by some of their own men. Here at last they were able to keep their flanks secure, and obtained relative security from the Athenian missile men; hoplites were frontally relatively heavily protected against missiles because of the protection of their shields.
A deadlock ensued, until one of Demosthenes subordinates (the commander of the Messenians) volunteered to find a way round the rear of the Spartan position, and taking some of the archers and peltasts, succeeded in working his way into a position commanding the Spartan rear.

With no further retreat possible, the Spartan position was hopeless, and the Athenians hastened to propose terms, as the Spartans as prisoners represented an immensely valuable bargaining counter. Following negotiations, the surviving Spartans, 292 in number, of whom 120 were full Spartiates, were taken under guard to Athens.

The results of the Pylos campaign were important to Athens. First, it provided them with a very valuable bargaining counter to use against the Peloponnesians, as the threat of killing their hostages was a deterrent against any vigorous offensive by the enemy. Pylos itself was permanently garrisoned and used as a base for raiding and subversion into Messenia. More important, it illustrated the lesson that Greek Generals were starting to learn, that under proper circumstances, a small body of light troops could be far more use than a force of hoplites.
The Pylos campaign went a long way towards neutralising the power of the Peloponnesians to harm Athens, but in the following year an ambitious strategic plan was formulated by the Athenians, aimed at similarly neutralising Boeotia.

The aim was the same as with Pylos, to establish bases in enemy territory which would act as centres of dissenion and raiding bases. The plan was for the Athenian fleet based on Naupactus in the Gulf of Corinth to transport forces who would seize with assistance from Boeotian traitors the cities of Siphae and Chaeronea. Simultaneously the Athenian army would march north from Athens to the eastern border with Boeotia, cross it, and fortify the temple of Apollo at Delium just inside Boeotian territory. It was anticipated that the Boeotians, faced with simultaneous movements at both ends of their country, would be unable to move in time to interfere with either movement. Once the bases were established, it was the Athenian hope that they would entirely tie up the Boeotian forces. This would in turn further prevent the Peloponnesians invading Attica, since the invading forces had to rely on Boeotian cavalry.

Map 13
Such was the ambitious master plan. Success however depended upon detailed preplanning being agreed beforehand, and the plan came to the ears of a Peloponnesian sympathiser, who betrayed it. When Demosthenes therefore appeared with his ships to seize Siphæ, he found the traitors had gone to ground and the Theban army ready in full strength to oppose him. He thus had to withdraw to Naupactus without having had any success at all.

He had not even succeeded in creating a diversion to assist the Athenian main force commander, Hippocrates, since he appears to have made an error over the date for the attack, and moved early. At any rate, when the Athenian main army moved out from Athens, the Boeotian forces had already dispersed to their homes after Demosthenes’ withdrawal.

Hippocrates occupied Delium unopposed and his troops began to fortify the temple, part of which was in a ruinous conditions. A ditch and rampart crowned with stakes was prepared round the temple and the walled precinct, and wooden towers were also put up where necessary. On the fifth day, when the work was largely completed, the Athenians retired towards Athens. The light troops (citizens too poor to have hoplite armour, not regular light troops) went straggling on ahead while the main army halted to rest about 2000 years from the temple. Hippocrates himself was still at the fortified temple finalising the arrangements for the defence.

At this point the Boeotian army, which had started to muster when the Athenians invaded, was reported to be near. The supreme commander of the force, Pagondas, had overridden some of his colleagues who were opposed to a battle since the Athenians were already in retreat, and was preparing to engage.

Hippocrates left 300 cavalry in the fortification to guard it and also to intervene in the battle if possible (Athenian cavalry had the equipment and training to fight as hoplites on foot, so could form an effective garrison), and drew up his army facing the enemy in the position where they had halted on the road back to Athens. He drew up his 7,000 hoplites 8 deep, giving a frontage of about 1,000 yards, and his 1,000 cavalry were on the wings.

Pagondas diverted a force to mask the Athenians in Delium, and drew up his own troops behind a ridge out of sight of the Athenians. The troops from Thebes proper were on the right wing and were 25 deep; the remainder of the hoplites were apparently in more normal hoplite formations. It is interesting to find at this period the Thebans already moving towards the concentration of decisive force in part of the hoplite line, which Epaminondas was to perfect 50 years later. The Boeotian cavalry was on the wings of the hoplite phalanx, and the light troops beyond the cavalry.

The Thebans advanced to the attack before Hippocrates had finished addressing the troops – he evidently made the same speech at intervals down the line, because he was in the centre when he had to break off because of the enemy approach.

The battle that ensued was purely a hoplite clash, since broken ground and dried up stream beds prevented the wings meeting. On each side the right wings were victorious, and broke their opponents, but Pagondas was able to counterattack the victorious Athenian right with uncommitted cavalry and break them in turn. Hippocrates was presumably unable to take an equal opportunity because he was in the centre of the line, where the Theban advance had caught him.

The Athenian army thereupon broke and fled suffering heavy losses as it ran, but the approach of night (the battle started late in the day) enabled more of them to escape than would otherwise have been the case. Some of them got into Delium or the border town of Oropus, some back to Attica itself. Those in Delium and Oropus were evacuated the next day by the Athenian ships offshore which were supporting the whole operation, except for the actual garrison of the Delium fortification.

Hippocrates himself was killed in the battle, together with about 1,000 of his troops, while Boeotian casualties were about 500. The sole success of the whole operation was the establishment of a fort at Delium, and even this triumph was short lived, as the Boeotians soon advanced from their base at Tanagra to assault it.
THE BATTLE OF DELIUM
424 B.C.

THEBAN ARMY
11 BOEOTARCHS (EFFECTING COMMANDER PAGONDAS)
7,000 HOPLITES
1,000 CAVALRY
10,000+ LIGHT TROOPS
500 PELTASTS

ATHENIAN ARMY
HIPPOCRATES
7000 HOPLITES
1000 CAVALRY

Map 14
Under normal circumstances it would be expected that the Boeotians would not be able to accomplish much against a hastily built fortification. The Spartan army had been powerless against Pylos, which had been strengthened in much the same haste as Delium. The difference with Delium was, first, that it was built in level country, so that wheeled engines could be got up to the walls; at Pylos the only land approach had been along a sandspit, and the actual position was precipitous and rocky. Second, at Delium a large amount of wood had been used in the construction, and therefore fire could be used with effect.

Some unnamed engineer produced a weapon which would enable the Thebans to take advantage of these two weaknesses in the Delium fort. The sketch shows the principle of the construction used, although the actual dimensions are not given. The engine consisted of a long beam hollowed out and sheathed with iron, mounted on carts. At the business end hung an iron cauldron, down into which an iron tube led from the hollow beam. The cauldron was filled with sulphur, coals, and pitch — the coals being lighted.

The engine was wheeled up to the Athenian wall at a point where a particularly large amount of wood had been used in the construction, and a large bellows was blown into the Boeotian end of the beam. This fanned the combustibles in the cauldron to give such a blast of flame as to set fire to the fortifications and force the defenders to flee. Most were captured; some got away to the still present Athenian ships and so escaped.

Thus the Delium campaign ended with the complete failure of the Athenian plan.
THE GREEK RIPOSTE PREPARES

LATER PERSIAN WARRIORS

At the time of the invasions of Greece the Persian army consisted of ethnic Iranian troops supported by large numbers of subject levies of doubtful enthusiasm and fighting quality. The invasions demonstrated beyond doubt that these troops were no match for Greek hoplites.

A trend is therefore apparent whereby the Persians attempted to compensate for their inferiority in heavy infantry by large recruitments of Greeks. All the western Satraps maintained a permanent bodyguard of hoplites; at the time of Cyrus' revolt, Cyrus himself had a guard of 300 under Xenias of Parrhasia, and Tissaphernes had the services of one Phalimus, who according to Xenophon 'claimed to be an expert' in hoplite warfare. Where a major campaign was expected, these mercenary forces would be very largely increased. Cyrus had over 10,000 Greeks, and in later campaigns in the 4th century B.C. the standard number recruited was 20,000.

The situation even reached the ridiculous extreme where provinces in revolt against the King would recruit their own Greeks, who would thus be providing the main infantry force on both sides. Persian Infantry of the Immortal type seem to have disappeared.

A typical Persian army of this later Achaemenid period would thus consist of a large contingent of mercenary hoplites, possibly supported by peltasts, also recruited as mercenaries. They could be supplemented by varying numbers of Oriental troops, but the tendency was now to quality, not quantity, and under normal circumstances only troops likely to be of actual use would be brought into the field.

The cavalry remained a typically Persian arm, with a feudal system of land tenure providing reasonable numbers of Persian heavy cavalry. The cavalry at this period seems to have been armed exclusively with javelins as opposed to the bow — at least that Persian cavalry with whom Greeks came regularly into contact — the eastern areas of the Empire still being able to field horse archers. Some at least of the Persian cavalry were now equipped with horse armour — normally only a small proportion.

Persian cavalry as such would be supported by such local cavalry as might be useful; in the west these were frequently Paphlagonians, who were a light javelin armed cavalry.

The following pages show some of the types of Persians now being found in the King's armies.
62. **Persian Heavy Cavalryman 400 B.C.**: This is a typical Persian cavalryman, wearing Median dress, over which a cuirass similar to the composite corselet worn by hoplites is worn. A sword is worn, and weapons consist of a pair of javelins in addition, which could be used for throwing or thrusting if necessary. No shield is carried, and there appears to be no mention by eyewitnesses of Persian cavalry at this period carrying shields, although most of the other items of their equipment are found mentioned several times in descriptions.

The Satrap Tissaphernes had a unit of 500 cavalry at Cunaxa who wore uniform white corselets, which suggests a leather version of the composite cuirass.

63. **Persian Extra Heavy Cavalryman 400 B.C.**: The unit of 600 cavalry which formed the Guard of Cyrus at Cunaxa are the first Persian unit which we have record of who are stated to have had horse armour.

Equipment included cuirass (here worn under the tunic but could be over) and helmet, possibly of Greek style. The usual Persian cavalry weapons are carried, but once again no shield is mentioned, or depicted in monuments.

Additional armour consists of a frontlet for the horse and a chest piece, like an armoured apron. This is the type of horse armour which Herodotus describes the Massagetae of Scythia having in the 6th century B.C., so it may be an earlier feature of Persian cavalry. Also worn are thigh pieces, again taking the form of a scale apron, apparently fixed to the belt and hanging relatively freely, covering most of the leg. Thigh wounds were of course one of the most frequent and disabling hazards for a horseman, particularly when fighting infantry.

64. **Paphlagonian Cavalryman**: Paphlagonian light horse was frequently employed by the Persians, and appears to have been similarly armed to the Persian heavy cavalry, with a sword and a pair of javelins. Swords carried by Persian cavalry vary in type, with some long and others like the short swords carried by Greek infantry.

The ‘Paphlagonian’ helmet appears to have been as illustrated; it was made of leather and was carried by other troops as well as Paphlagonians. The illustration of the Paphlagonian helmet is based on Xenophon and differs markedly from the ‘plaited’ helmet detailed by Herodotus.
65. **Persian King:** The Persian King of Kings is here shown in his chariot; omitted is the charioteer.

Persian Royal garb was distinctive, and consisted of a purple or crimson tunic with a broad white stripe down the front. The tiara was also worn in a unique fashion, with the top of it high above the head instead of lying down as usual with Persians. A purple cloak is here illustrated.

The chariot shown is based on the Alexander Mosaic.

66. **Mossynoei:** Although the Mossynoei were described by Herodotus as part of the Persian Empire, and army, at the time of Xerxes, Xenophon found them an independent nation, and gives a somewhat different version of their dress to Herodotus. Thus Herodotus gives them small spears with long points, whereas Xenophon has them with a spear fully 6 cubits long, or 9 ft. Xenophon also gives them wicker shields covered with white shaggy oxhide, shaped like an ivy leaf, and short but thick linen tunics. Some of them were equipped with the sagaris — the small battleaxe with the transverse head.

67. **Drilae:** Another of the tribes of northeast Asia Minor encountered by Xenophon was the Drilae. Their troops are described as having gerra — wicker shields presumably of Persian shape, greaves, Paphlagonian helmets, and spears.

68. **Chalybes:** The Chalybes were a further tribe encountered by Xenophon. Their armour consisted of a helmet (type unspecified), greaves, and a long linen tunic, presumably quilted. Instead of the leather pteruges of a Greek corselet, the Chalybes had plaited cords to provide protection below the cuirass.

They had a long spear as offensive arms, together with a knife stuck into the belt.

69. **Persian Two-Horse Scythed Chariot:** Scythed chariots were used by 400 B.C. by the Persians as an expedient to break up a phalanx. They had scythe blades on the axle ends, yoke ends, and under the axle, and a spear as a projection of the chariot pole. Since a collision with a solid body of infantry would be dangerous for the driver, drivers tended to whip up the horses and point them in the right direction before baling out, with consequent loss of accuracy.
THE ANABASIS

The Peloponnesian War falls effectively into two parts: the first, culminating in 421 B.C. in the Peace of Nicias, saw the position of Athens at the start of the war consolidated and improved.

The second part of the war began with an attempt by Athens to dominate the island of Sicily, which would have left her in a position of immense and unassailable power in mainland Greece. The destruction of the Athenian fleet in Syracuse harbour, following a badly conducted siege of Syracuse, forced the retreat of the Athenian army which was totally destroyed or captured. The Sicilian expedition thus ended in utter disaster for Athens.

The remainder of the Peloponnesian war saw Athens, her offensive power crippled by the Sicilian disaster, on the defensive against enemies strengthened by financial backing from Persia. Further weakened by a base permanently established in her territory at Dekeleia, which acted (as had Pylos on Sparta) as a permanent centre for subversion and raiding, Athens was finally forced into surrender by the destruction of her last fleet at Aegospotami in the Hellespont.

The chief tactical lessons of the war were already forshadowed in the Pylos campaign; namely that properly established light troops could under certain circumstances defeat hoplites. In the next few years the Athenian general Iphicrates would give further demonstrations of the powers of javelin armed infantry. Hoplites however remained the best heavy infantry in the Mediterranean world, and their equipment and tactics were imitated even before this date in Carthage and Italy. What was a new development was the widespread employment of mercenary troops, who were available in numbers following the end of the war in Greece.

Persian Satraps had always, since the defeat of Xerxes, tried to secure for themselves mercenary companies of hoplites as personal guards and to provide the heavy infantry which their own Empire could not provide. When, therefore, one of these Satraps determined to seize the Throne of Persia for himself, the instrument which he chiefly relied on was a large force of hoplites.

Cyrus was the younger brother of the King of Kings, Artaxerxes. Passed over for the succession, he nevertheless claimed by right of porphyrogeniture instead of primogeniture, and had support at Court; notably from his (and Artaxerxes) mother. Determining to make an attack on his brother, he hired as many hoplites and peltasts as he could, and mustering the military forces of his province, set off.

Waming of what he intended was already on its way to Artaxerxes from one of the neighbouring Satraps, Tissaphernes, an enemy of Cyrus, who set off hurriedly to join the rightful King accompanied by his own guards, 500 cavalry.

Cyrus' army was a strong and well balanced force. The core of his infantry was his 10,000 hoplites, organised into units of varying size, each under the General who had recruited it. Accompanying one of these Generals (Proxenus of Boeotia) was a young Athenian aristocrat, Xenophon, to whom we owe our best account of the campaign. These hoplites were supported by about 2000 peltasts and other Greek light troops including Cretan archers. A large force of barbarian infantry also accompanied the army. There was a cavalry force of about 3,000, of whom 1,000 were Paphlagonian light horse, and 600 were Cyrus' own guard. The balance were probably typical Persian javelin armed heavy cavalry. Cyrus' own guard is interesting in that the horses were armoured - this is the first mention of Persian cavalry with horse armour.

Cyrus advanced down the river Euphrates, and his brother awaited him before the city of Babylon, the engagement taking place about 50 miles northwest of the city. Cyrus had been expecting to be intercepted earlier in the march, and discipline had been relaxed, so that the appearance of the Royal army surprised him.

Artaxerxes' army is difficult to reconstruct. The total number of troops given to him in the ancient sources is incredible, but from the relative positions of Cyrus and his brother, both of whom held the centres of their lines, it would appear that he probably had about 50% more troops, but his frontage was similar to Cyrus because of his relatively dense formations. The most probable reconstructed deployment is illustrated.
BATTLE OF CUNAXA 401 B.C.

ARTAXERXES (PLAIN),
- 50,000 INFANTRY
- 7,500 CAVALRY
- 150 SCYTHED CHARiOTS

CYRUS (SHADED)
- 40,000 INFANTRY
- INCLuRING 10,000 + GREEK MERCENARY HOPLITES
- " 2,000 + " " PELTASTS
- 3,000 CAVALRY

EGYPTIAN INFANTRY
- TROOPS WITH GERRA (?10,000)

TISSAPHERNES
- 500? CAVALRY (WHITE COIFRASSES)

RIVER EUFRATES

Map 15
Cyrus had apparently been marching in one column down the line of the Euphrates. His line of battle was therefore formed with the leading troops taking the right wing, succeeding formations forming up on their left as they came up. It appears that only the Greeks and the troops to the right of them, together with Cyrus own bodyguard, and possibly the left wing cavalry under Ariaeus, got into battle, with the Asiatic infantry, intended to form the left wing, not arriving in time.

Artaxerxes was relying on a charge of scythed chariots to break up the hoplite formation, and he had a total of 200 deployed down the front of his formation, one approximately every 20 yards. These could be formidable weapons, but were highly erratic, as the driver apparently bailed out as soon as the horses had been whipped into a gallop and pointed in approximately the right direction. Some of them accordingly swung back through their own ranks and those that reached the Greek lines were channeled harmlessly through gaps the Greeks opened in the formation. This sounds like a drill practised against this contingency, suggesting that the use of scythed chariots by Artaxerxes was expected.

At the same time, the Persian left wing cavalry charged the Greek peltasts, who similarly opened ranks to let them through. These Persians were under the command of Tissaphernes.
The Greeks, and their supporting troops then advanced and put to flight the Persian troops opposite them, most of whom fled before contact was even made. Although the Greeks believed that the battle was thus won, there was a danger that Artaxerxes' cavalry in the centre, 6,000 strong, could swing left and intervene by charging the Greek left flank. To prevent this, Cyrus committed his own guard cavalry. Success against the enemy centre would not only protect his victorious Greeks, but would, if he could kill his brother, end the campaign at a stroke.

Although vastly outnumbered, Cyrus had the advantage that his opponents were probably in the act of changing formation, and his armoured horses probably gave him an additional advantage over the enemy. Their personal armour, apparently derived from Greek models, was also probably superior to standard Persian equipment.

At any rate, Cyrus got close enough to his brother to wound him, and the Persian centre and his own men drove eastwards in a confused melee in which Cyrus, separated from most of his men, was killed.

At the conclusion of the battle, so they thought, the Greeks halted their pursuit. Meanwhile the disengaged Persian right wing had advanced unopposed, and they and Tissaphernes met in the vicinity of Cyrus camp, part of which was plundered. Perceiving this, the Greeks turned and retraced their steps to attack the Persians again, but again the enemy evaded action, leaving the Greeks to regain their camp.

The battle thus ended with both sides in a difficult position. The Greeks were isolated in the middle of a hostile land. But the Persians equally did not know quite what to do with them, as they had no troops who could be relied upon to defeat them if need be. They thus began by offering them facilities to return home, which were accepted. The 10,000 thus began to retreat, not as before along the Euphrates, but northwestwards along the north bank of the Tigris, accompanied by a loyal Persian army under Tissaphernes, and the survivors of Cyrus' Persian troops under Ariaeus. In course of the march the attitude of the Persians altered, and they treacherously massacred the Greek Generals at a parley. Subsequently they attacked the retreating Greeks. The series of engagements which ensued is interesting in that the 10,000, who were largely hoplites attacked by cavalry and light troops, succeeded in protecting themselves and maintaining good order. The advance in tactical skill is evident, as even in the Peloponnesian war hoplites had shown themselves powerless against cavalry and light troops.

The tactics of the 10,000, one of whose commanders was now Xenophon, were based on a strong defensive box or square of hoplites, with the baggage and the non combatants in the centre. This was impervious to cavalry. The problem was that under attack by Persian missile troops, the hoplites had to face the attack, which would prevent the box moving at all.

The solution adopted was to form an improvised force of slingers from the Rhodians in the army. The Rhodians, who slung a lead bullet, were able to outrange even the Persian archers, and could keep them away from the box. In addition a small cavalry troop was embodied which had some success in local counterattacks.

An increasing skill in drill is also noticeable, with adoption for the rearguard of Spartan drill formations to aid formation keeping. From Xenophon's comments, it appears that the rearguard was only 600 strong, indicating that the box was in fact a long rectangle about 75 x 600 yards.

By improvised tactics, apparently in many cases hastily devised to meet particular emergencies, and new to Greek military techniques, the Greeks succeeded in reaching the mountains of Kurdistan (Carduchia) which was the effective limit of Persian domination. From this point their chief problem was somewhat different, in that their enemies were not as a rule prepared to stand up to fight them, and therefore the military skills which they showed did not involve the same degree of application to major tactics.
RETREAT OF THE 10,000 - DEFENSIVE FORMATION

Diagram 6

100 YDS

GENERAL FORMATION
Square or box of hoplites
With supporting mobile +
Light troops.
Scale 16 based on 8
Deep formations.

2 REARGUARD FORMATION

6 LOCHOI OF 100 MEN

1 sq. = 1 sq. yd

ORGANISATION OF LOCHOS

1 LOCHAGOS

2 PENTEKONTERS

4 ENOMOTAI

96 RANK & FILE

Frontage of each formation could be on
basis 4, 2, or 1 ENOMOTAI. Giving frontage
of 72, 36 or 18 YARDS TO REARGUARD

Diagram 7

1 sq. = 1 sq. yd
RETREAT OF THE 10,000
GREEK REARGUARD TACTICS
IMPROVISED GREEK TROOPS, PELTASTS AND
CAVALRY SUDDENLY CHARGED PERSIAN
PURSUING TROOPS AND TRAPPED THEM
AGAINST THE DRIED UP STREAM, THUS
INFlicting A SHARP DEFEAT.

Diagram 8

Diagram 9

RETREAT OF THE 10,000
GREEK REARGUARD TACTICS
CROSSING A SERIES OF RIDGES, DETACHED
PELTASTS IN FLANKING POSITION PREVENT
PERSIAN PURSUERS FROM HARRASSING
MAIN BODY, VULNERABLE WHILE DESCENDING
SLOPE.
THE MILITARY DEVELOPMENTS OF DIONYSIUS OF SYRACUSE

An independent line of development of military tactics from that of mainland Greece, and the refinements being added by the mercenaries serving overseas may be discerned in Sicily, where in the last years of the 5th Century B.C. Dionysius made himself tyrant of Syracuse, and in that position dominated the affairs of the island for a generation. Dionysius had two things which were normally lacking in mainland Greece, ample funds and large manpower. Using these, he was able to challenge the power of Carthage, who had for many years disputed the hegemony of Sicily with the Greek colonies there.

In 397 B.C. Dionysius, after two years of extensive preparations, involving a massive increase in the size of the Syracusan navy and the recruiting of large land forces, declared war on Carthage, and advanced to the western end of Sicily to lay siege to Motya, the main Punic base on the island.

Dionysius had, according to Diodorus, 80,000 infantry, over 3,000 cavalry, about 200 warships (including the earliest quad- and quinque-remes) and ships numbering 500. No details of the composition of his land forces are given, but they included numerous allied contingents, so that there will have been a preponderance of hoplites. The armies of Sicily had however shown a wider range of troop types than mainland Greece, and there will have been large numbers of peltasts and other light troops.

The city of Motya occupied a typical Punic site, being located on an island in a sheltered bay, affording a first-class harbour and well defended site. Communication was mainly by means of a causeway to the mainland, but the defenders had cut this to deny a means of approach to the Syracusans. A large part in the defence was taken by Greek mercenaries; the Carthaginians themselves were unprepared for war and had recently been afflicted with a serious outbreak of plague which had further reduced their readiness to defend themselves.

Despite this, their Commander, Himilco took what steps he could to prevent Motya being taken. Despatching a naval force first to Syracuse as a diversion, he himself prepared to attack the force besieging Motya.

The force of 10 triremes sent to attack Syracuse achieved notable surprise and success, destroying a large quantity of shipping, but it did not divert Dionysius from his objective. His ships and fleet were now in position before Motya, the ships apparently between the causeway and the shore, the army preparing to mount an assault along the causeway. This force Himilco determined to attack by surprise at dawn.

Himilco skirted Lilybaeum and fell upon the Syracusan ships drawn up on the beach. After success initially, Syracusan land forces forced him to withdraw to a position offshore where he could attack the Syracusans as they emerged to engage him. This Dionysius declined to do, since this gave the skilled Carthaginian seamen every advantage. Instead he used his abundant manpower to haul his fleet over the causeway under cover of fire from his missile men on shore, and particularly from his newly invented catapults. By this means he succeeded in getting his whole fleet into a position to attack the Carthaginians, and seeing himself so substantially outnumbered, Himilco had no option but to withdraw.

Dionysius now settled down to lay siege to Motya in earnest. Repairing the causeway and probably also widening it, he advanced his siege machines. Brief mention has already been made of the newly invented catapult, initially similar to a large crossbow, not a torsion weapon. This was a missile weapon of notable accuracy which made a successful assault possible.

The Siege technique of Dionysius was the classical technique which formed the basis of every subsequent siege. Three different types of weapon or machine were deployed. Siege towers were wheeled up to the walls as a base from which missile men could engage the men on the wall. Battering rams were used to attempt to break down the walls. And most important of all, the new catapults kept the walls swept clear so that the defenders were unable to intervene effectively and prevent the inexorable destruction of their defences.
These techniques used in combination were new, although centuries earlier similar techniques without benefit of catapults had been used by the Assyrians. Dionysius soon succeeded in making a breach, and forcing his way into Motya.

Even so his task was not over. The restricted nature of the site meant that the houses were particularly high, and bitter house to house fighting, in which the siege weapons again had to be brought into action ensued. Finally Dionysius took Motya and a violent sack took place, in which it is difficult to know who suffered worse, the inhabitants or their Greek mercenaries taken fighting against their compatriots. At any event Motya was never again a major Punic base, and Dionysius made it a base for his own fleet, under his brother, Leptines.
For it was not to be expected that the Carthaginians would let the fall of Motya rest unavenged. In the next year Himilco prepared a large expeditionary force for despatch to Sicily. Mercenaries were obtained from North Africa and Spain; at least 100,000 in number, there were 4,000 cavalry, 400 chariots, 400 warships, and 600 transports. Part of the convoy was intercepted by Leptines, but the majority of the armament landed at Panormus, on the northern coast of the island. Taking advantage of the absence of Dionysius, Himilco recaptured Motya, and then took Messene, cutting any hope Dionysius might have had of obtaining reinforcements from Italy or Greece. In the meantime defections by Dionysius’ allies to the overwhelming Carthaginian strength had forced him to retire to his main base at Syracuse.

The area of Syracuse consisted of three areas, the island of Ortygia, which was the old city where Dionysius had his palace, the mainland area, and the Epipolae heights. When the Athenians had tried to take Syracuse nearly 20 years before, only Ortygia and the mainland area had been walled, and the fate of Syracuse had depended upon whether the Athenians could build a wall from harbour to sea cutting off the city before the Syracusans could build one cutting it, and eventually control of the Epipolae heights had been decisive. Dionysius had made the strength of the defences much greater by enclosing the Epipolae heights with a wall and placing a strong fort at the summit, Euryalus.

While, therefore, the Carthaginians were able to use their strength to raid the vicinity of Syracuse and destroy buildings and crops up to the walls, they could make no real attempt to take the town, and in any case lacked the siege weapons and catapults which Dionysius had had at Motya. Furthermore, wherever the Syracusans sortied to attack the Carthaginians by land or sea, they were successful in inflicting local defeats on them.

But the poor camp discipline of the Carthaginians was their downfall. Their camp was in any case pitched in a marshy and unhealthy place (where the Athenians had been camped also) and a virulent plague broke out, of which the symptoms resemble smallpox. When the enemy were thus weakened, a major sortie was made by Dionysius by land and sea which destroyed most of the Punic ships and rendered their position hopeless.

Dionysius now entered into negotiations secretly with Himilco by which the Carthaginian citizens were allowed to escape, abandoning the mercenaries. Dionysius could have destroyed the whole expedition, but as his personal position was preserved by his being the only one strong enough with the Punic Peril, he obviously wished to be still some Punic Peril remaining! Further, Himilco paid an indemnity of 300 talents, an enormous sum, into Dionysius’ own coffers.

The Carthaginian citizens then withdrew by night in 40 triremes (suggesting that their numbers had been about 15% of the whole expedition). Even so they were not unmolested, as a Corinthian force which had joined Dionysius despite the Carthaginian attempt at a blockade, who were not in the secret Treaty, reported the breakout, and attacked the last ships without orders when Dionysius was unaccountably dilatory in ordering a pursuit.

The Carthaginian mercenaries were pursued and destroyed, apart from a small contingent of Iberians, whom Dionysius took into his own service.

The consequence of these two years campaigns was that the Carthaginian influence in Sicily was for the moment destroyed, and in fact a revolt immediately broke out among their subjects in North Africa. Dionysius continued his efforts to gain supremacy in the West.
HIMILCO'S SEIGE OF SYRACUSE
396 B.C.

Map 18
THE BATTLE OF DASCYLEUM 395 B.C.

This battle was fought between about 700 Greek hoplites of King Agesilaus' Spartan and allied army, and two scythed chariots and 400 Persian cavalry under the command of the Satrap of Dascyleum, Pharnabazus. Agesilaus was operating in Asia Minor, following the end of the Peloponnesian War.

The Greeks were caught foraging and hurriedly formed up. Pharnabazus charged immediately home with his scythed chariots, breaking up the Greek formation, and followed up with his cavalry while the formation was still in disorder. About a hundred Greeks were killed before they could be supported by their main body.

This action is interesting in that it is a rare example of scythed chariots actually succeeding in their designed role of breaking up a phalanx. Pharnabazus showed tactical skill in combining cavalry and chariots — more skill than the Persians showed at Cunaxa five years previously. Perhaps it might have been expected from a direct descendant of the Antabazus who so skilfully extricated his command from the Plataea disaster.

**PHARNABAZUS' ACTION**

**NEAR DASCYLEUM 395 B.C.**

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**PERSIAN CAVALRY**

**PERSIAN SCYTHED CHARIOTS**

**GREEK Hoplites**

Map 19
THE CORINTHIAN WAR

This conflict broke out in 394 B.C., with most of the major states of Greece combining against the Spartans, whose tyrannical behaviour since the end of the Peloponnesian war had made them universally unpopular. The revolt in Greece was further fomented by the Persians, who were seeking to have recalled the army with which the Spartan King Agesilaus was having disturbing successes in Asia Minor (part of this army included the survivors of the 10,000). The Persians had also manned a fleet, one of whose admirals was the Athenian Conon, who was the only Athenian to escape from the Aegospotami disaster with any credit. (This fleet destroyed the Spartan led fleet at Cnidus in 394.)

The war in Greece opened with an internal revolution in Corinth, as a result of which a number of oligarchic supporters were exiled. The allies then combined at Corinth, and a series of discussions on plans, battle tactics, and the leadership of the allied army dragged on in true Greek fashion.

Meanwhile the Spartans acted, sending an army up into Corinthian territory via Sicyon. The Allies moved to meet them, and met them in the vicinity of the river Nemea. The Allies had a big superiority in numbers, having the following hoplite strength:

- Athenians 6,000
- Argives 7,000
- Thebans 5,000
- Corinthians 3,000

The Spartans had 13,500 hoplites of whom 6,000 were Laconian and the rest their allies. They also had 700 cavalry and 700 archers and slingers, while the Allies had a proportional superiority in these arms. However the cavalry and light troops took no apparent part in the battle, possibly because of the character of the terrain, which was overgrown, possibly because mainland Greece was still backward in the effective use of these arms.

Instead, it is clear that both sides were seeking to improve on the usual stereotyped hoplite tactics. The Allies had a long argument between those who wanted to use their superior numbers to make the phalanx as deep and possible, to avoid being broken, and those who wanted as long a line as possible, to avoid being outflanked. A 16 deep formation had therefore been agreed upon, which was as deep as a later Macedonian phalanx and 4 times as deep as the 10,000 had considered necessary under certain circumstances. The instigators of these weight tactics appear to have been the Thebans, and their other innovations foreshadow the development of tactics under Epaminondas a generation later.

For the Thebans unsportingly waited until it was someone else's turn in the days prior to battle to face the dreaded Spartans, and then announced that the omens were favourable and that a battle would be fought! They then led off the deployment, and not only disregarded the agreed 16 deep formation and went much deeper, but also led off well to the right, ensuring that their invincible formation would handsomely outflank their opponents. The result was that the unhappy left wing contingent (Athenians) were bound to be outflanked by the Spartans, even if the Spartans had not (as they did) also led off too far right to ensure that their wing was victorious! Both sides were evidently capitalising on the 'rightward drift' phenomenon of a hoplite phalanx.

The result of the battle was thus that the right wings of both armies were easily victorious, and the allied centre drove back the Spartan centre. But the Spartans kept their troops well in hand, while each of the victorious allied contingents merely returned towards its camp after defeating its opposite numbers. The Spartans therefore swung across the battlefield, catching each returning contingent on its unshielded flank, and defeating it.

1. INITIAL DEVELOPMENT   BATTLE OF THE NEMEA 394 B.C.   Map 20

100 YARDS

ATHENIANS ARGOS CORINTH THEBANS
The main action of the war, following the initial battle of the Nemea and a victory by Agesilaus as he led his troops from Asia back through Boeotia, remained in the vicinity of Corinth. Corinth was held by the allies, with the exiled Corinthians and a Spartan garrison in Lechaeum, the port of Corinth on the Gulf of Corinth, west and north of the city. It was in the vicinity of Lechaeum that traditional hoplite tactics suffered a further blow in 390 B.C. with the rout and destruction of a Spartan Mora by the Athenian General Iphicrates.

At this period of the war Corinth had an Athenian garrison including both hoplites and a force of peltasts under Iphicrates. Iphicrates was an innovator in the tactical field (Diodorus begins to relate some of his improvements, and goes on to say ‘but it would be tedious to list them all’ and changes the subject!), who had family connections in Thrace, and was a particular enthusiast for properly trained light troops. He is also credited with a reform whereby the length of the hoplite spear was increased and the size of the shield reduced, which forshadows the Macedonian Phalanx.
Iphicrates had been raiding into Spartan held territory with almost invariable success, although his peltasts had suffered one reverse when they were countercharged and caught by Spartan hoplites before they could evade. This had made Spartans confident that peltasts could be defeated by a resolute and sudden countercharge (which had not been possible at Pylos because of the character of the terrain).

In consequence, the Spartan commander in Lechaemum did not anticipate danger from the peltasts. The action itself occurred when the main Spartan force was raiding north of the Isthmus, and the Lechaemum garrison had been ordered to provide an escort for a number of troops who were returning home to celebrate a religious festival. The Lechaemum garrison, 600 hoplites and possibly about 10 cavalry, accordingly set off with the homegoing troops towards Sicyon.

Now this led them past the Athenian held walls of Corinth, and the Athenian commanders, Iphicrates with his peltasts and Callias with a force of hoplites, considered this a tempting target. When the polemarch left the convoy in the care of the cavalry and began to march back to Lechaemum, the sight of a column of Spartan troops exposing their shieldless sides, and unaccompanied by supporting troops, proved too tempting for the Athenians.

The peltasts accordingly came out and assailed the column with their javelins, with the hoplites in support. The result was a repeat of the Pylos battle. The Spartans found to their surprise that the peltasts could in fact evade before they could be caught, even on level ground, and they could do nothing to avoid being shot down one after the other.

The return of their cavalry ought to have saved the Spartans. But the Hipparch in charge of the cavalry badly mishandled it, keeping strict formation with the hoplites when they sorted, and so failing even with his superior mobility to contact the peltasts. Finally the Spartans broke and fled, losing about half their numbers in casualties.

![Gulf of Corinth Diagram]

**Action Near Lechaemum 390 B.C.**

Map 21
This battle, which marked the end of Spartan hegemony in Greece, marks a further stage in the advance in tactical skill by Greeks. This is not so much because Epaminondas, the Theban commander, is supposed to have invented his Oblique Order and used it to gain victory, but because it marks a new skill in the combination of arms and particularly in the combination of cavalry and infantry. This effective combination of arms was further developed by the Macedonians, in due course, under Philip, who was at this time a hostage held in Epaminondas' own house.

The battle itself was a pitched battle at Leuctra in Boeotia, between a Spartan army under the King Cleombrotus, and a Theban and Boeotian army led by Epaminondas. Neither army will much have exceeded 10,000 men, of whom most were hoplites, and perhaps 1,000 on either side cavalry.

The disposition of the troops was to some extent similar on both sides, with the cavalry posted in front of the phalanx. The terrain was a level valley between hills. The Spartan line was 12 deep, and appears to have been somewhat concave in form.

The Thebans themselves were on the left wing of their array, and were 50 deep, following their preference for at least 50 years. What appears to be a new departure is that the remainder of their array was echeloned away so that the main clash of the Thebans would take place before they got into action.

The Theban cavalry was much superior to the Spartan, which was recruited from nominees provided by the rich men who supplied the horses and equipment. Since the best Spartans wished to serve as hoplites, and since the nominee first met his horse and equipment on mobilisation, standards were not high. The result was that the cavalry clash, which took place while the armies were still drawing up, was swiftly over, with the Spartan horse being driven back in disarray.

The victorious Theban horse was rapidly followed up by Epaminondas, and the result was that the fleeing Spartans broke through their own ranks, disorganising them, and they were still disorganised when the Theban column hit them, and broke them in turn.

Spartan losses were severe in this, the first defeat in memory of a Spartan Army in a pitched battle. Of 700 Spartiates present, 400 were killed, and 1,000 other troops from Laconia died.

Nine years later at the battle of Mantinea, Epaminondas similarly combined cavalry and infantry and defeated a Spartan army, but was himself killed at the moment of victory.
MACEDONIAN ARMY ORGANISATION

King Philip of Macedon created an army which combined all the various elements which Greek tacticians had developed during the course of the 4th Century B.C., and used this army to make himself supreme in Greece. With this army, the old style warfare of Classical Greece can be considered at an end.

Macedon had traditionally been a feudal state, with a strong force of cavalry, but had never developed a hoplite force. Philip, or less probably one of his predecessors, had created out of the Macedonian peasantry an infantry which could defeat hoplites on equal terms.

The Macedonian phalanx was a synthesis of the arms reforms which had possibly been introduced by Iphicrates, and the tactical ideas of the Thebans, with whom Philip had spent an enforced period in his youth. The soldier had neither metal body armour nor the big bronze hoplite shield (both of which were expensive), but had helmet, greaves, and light body protection. The shield was small, and carried on the left arm with the left hand free. The main offensive weapon was a long pike, the sarissa, which was probably at this period up to 12 cubits (18 ft) long. In view of its extreme length, the sarissa had to be grasped with both hands, which is why the shield design had to leave the left hand free.

In the Macedonian army, the phalanx was organised into territorial regiments either named after the commander (e.g. Coenus) or after the territory (e.g. Elimiotis).

Supporting the phalanx were the Hypaspists, whose tactical function is clearer than their style of equipment. Since the army of Macedon appears to contain no peltasts as such, it is probable that the hypaspists were armed on this style.

The true light infantry function of the Macedonian army was filled by Thracian javelinmen and Cretan archers, with other light troops – Philip for instance used slingers.

The Macedonian cavalry elite were the Companions, who were heavy cavalry, wearing corselet and helmet, but not having a shield at this time. Their chief offensive weapon was the xyston, the short thrusting spear, and they carried a sword as well. Some of them instead of the xyston carried sarissas, and Alexander himself is shown in one representation with this weapon.

In support of the heavy Companion cavalry there were light cavalry units drawn from allied nations.

Well balanced as this force was, it was in the combination of the various troop types that the Macedonian commanders at this time excelled; a combination which had not previously attained by Greek commanders to anything like the same extent.

The army which Alexander took into Asia perhaps represents an untypical army, in that it was supplemented by large numbers of Greeks of the Classical type, and by a number of Thracian troops in addition to his regular light troops. The Macedonian army of Philip consisted of the four infantry elements, Phalanx, Hypaspists, Cretan Archers and Argianes Javelinmen. The Cavalry was in two parts, Companion heavy cavalry, and Thessalian and other light cavalry.
MACEDONIAN WARRIOR TYPES

Information on the appearance of the Macedonian army is scanty, but sufficient information exists to give some idea of their fighting appearance.

Those types which differed from Greek soldiers already illustrated are given here.

70. Macedonian Cavalryman: Macedonian cavalry wore a metal corselet, giving better body protection than was enjoyed by the phalanx, but of course they did not at this stage carry shields. The open faced types of helmet were now most popular, in view of the needs for ready communication. Normal weapons were the xyston, a thrusting spear about 6ft long, and an effective sabre. Some Macedonian heavy cavalry were however armed with the sarissa, as shown here, and Alexander himself carried one in battle on occasions.

The rider shown here has read his Xenophon, and sits with his thighs as near straight towards the ground as possible, with the lower leg swinging free.

71. Macedonian Phalangite: Again wearing an open faced type of helmet, the phalangite is shown in a quilted type of corselet, and holds the sarissa as described by Polybius. The small shield is bronze faced, and bears a star. The star or star and crescent was the typical Macedonian shield device.

The sarissa was at this period up to 12 cubits (18ft) long at this period. The normal tactical formation was 16 deep, and later tactical formations were based on a unit 16 x 16 men.

A curious story in Diodorus (XVII 100) features a member of Alexander’s Companions equipped with both sarissa and javelin, but this is not a typical mode of phalanx equipment.

72. Macedonian Hypaspist: The armament of the Hypaspist is the subject of considerable debate, but it is clear that they acted as a light medium peltast, with the capacity to take a place in the line of battle. The reconstruction here has helmet and spolas, and carries a type of shield which had a bronze facing and was carried by Macedonian cavalry in later times. Offensive arms are a spear and javelins, plus sword, but it is equally possible that the hypaspist had a much longer single handed spear, on the lines of the reform of the hoplite equipment suggested by Iphicrates.
APPENDIX 1
CLASSIFICATION OF TROOPS UNDER WRG RULES

The following is intended to clarify the list classification of the main troop types described in this book under WRG Rules.

<table>
<thead>
<tr>
<th>Class</th>
<th>Troops</th>
<th>Regular or Barbarian</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1. Spartan Infantry</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>2. Theban Sacred Band</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>3. Macedonian 'Companion' units</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>4. Persian 'Guard' units, e.g. Immortals</td>
<td>R</td>
</tr>
<tr>
<td>B</td>
<td>5. Mede, Ethnic Persian, Bactrian and Sakae Infantry and Cavalry</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>6. Athenian and Theban (city) hoplites</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>7. All Macedonian Army Units not enumerated above</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>8. Carthaginian citizen troops</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>9. Satrap's personal guard units</td>
<td>B or R</td>
</tr>
<tr>
<td></td>
<td>10. Elite Greek mercenary troops (e.g. 10,000, Iphicrates troops)</td>
<td>R</td>
</tr>
<tr>
<td>C</td>
<td>11. Greek city state hoplites and cavalry</td>
<td>R</td>
</tr>
<tr>
<td></td>
<td>12. Most mercenary Greek troops</td>
<td>R</td>
</tr>
<tr>
<td>D</td>
<td>13. Persian units with metal body armour (Herodotus' list)</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>14. Persian chariots</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>15. Persian, Carthaginian and Sicilian non Greek mercenary troops</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>16. All Greek citizen light troops</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>17. Thracians (other than mercenary peltasts)</td>
<td>B</td>
</tr>
<tr>
<td>E</td>
<td>18. <em>All</em> Persian national levy troops not expressly stated above</td>
<td>B</td>
</tr>
</tbody>
</table>

Troops when fighting as Persian levies, and classified as E might well merit a better classification if fighting independently — e.g. Egyptians in revolt.

The only troops to merit 'Regular' classification are those which have been drilled in Greek style. Persian troops were not drilled, although the Immortals are judged to have attained equal standards.

All cavalry should be shieldless.
APPENDIX 2

Select Bibliography

1. Ancient Authors
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