THE ORGANIZATION OF XERXES' ARMY

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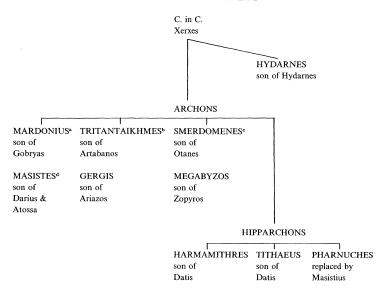
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"The Persians lost their wars in Greece in part, because the triumphant Greeks wrote the histories and other texts that survive;" wrote J.M. Balcer¹. Indeed, for the Persian ars, we must rely on the Greeks and especially on Herodotus as our major written source. I believe that most scholars, whether Grundy, Hignett or others, have relied first and foremost on Herodotus, Olmstead, Cook, Dandamaev and Lukonin are more willing to consider the Persian outlook by taking into account the value of archaeology and Achaemenid epigraphy. Unfortunately this evidence is often used to buttress the literary sources, which means some scholars too trustingly consider Herodotus as correct. On this point I think it is most important to take account of all available evidence. This means, therefore, making use of Herodotus and other useful ancient authors: for epigraphic evidence we have several inscriptions by Achaemenid kings and tablets from Persepolis. There is also considerable archaeological evidence relevant to the subject in the shape of Persian and Greek art. The reliefs at Persepolis and the royal tombs show immense detail and it is not always immediately obvious how important this proves to be. Greek vases of the period are useful regarding the appearance of Persian troops, tactics and formations.

Xerxes was the supreme commander of the invasion force of 480 B.C., but the running of the army, like the empire, relied on the King's ability to delegate. To encourage loyalty to his person, many of the top commanders and contingent commanders were related to the King and the royal house. For example, Mardonius, one of the six army marshals, was the King's brother-in-law and Masistes was the full brother of Xerxes (see diagram 1).

¹ Historia 38 (1938), p. 127.

DIAGRAM 1: STAFF COMMAND



a. Brother-in-law of the king.

These six marshals were the top echelon of military command after the King². Herodotus uses the term Archon³. Each Archon appears to have been responsible for what we might term corps command. Therefore, each Archon may have had one corps consisting of several lesser commanders and their various subject contingents. There is some evidence, however, that the army may instead have had three corps, since when acting independently, these corps seem to have two Archons⁴. This is a difficult point to evaluate as Herodotus never tells us what contingents

b. Nephew of Darius.

c. Nephew of Darius.

d. Xerxes' full brother.

² Hdt. VII, 82.

³ Ibid.

⁴ Hdt. VII, 121.

and their commanders served under which Archon, which would allow us to see if numerical strengths and types of units were commonb to each Archon. Dandamaev and Lukonin's interpretation of the Toparch⁵ would suggest that Archon and Toparch may be the same thing and that each would have corps-type forces under their command like Cyrus the Younger who was Karanos⁶. Dandamaev and Lukonin, however, say there were seven Toparchies in Xerxes' time⁷. This is attractive, but Herodotus calls the three cavalry generals Hipparchons — Archons of the horse — thus these three marshals seem to have had the same rank as Mardonius and his five colleagues. Two of the cavalry marshals were Medes⁸, customarily better horsemen than the Persians. The orther marshal was Pharnuches; his ancestry is not given. He fell sick at Sardis and appears to have been replaced by Masistius at Plataea by the latest.

Totally independent from the above army marshals was Hydarnes son of Hydarnes. He was responsible only to the King⁹. His command was the ten thousand Immortals. Four other guard units, two of a thousand spearmen each¹⁰ and two of a thousand horsemen each¹¹, were under Xerxes' control but could be detached as a Plataea¹².

Under the Archons were the subject contingents; there were twenty-nine of these and Herodotus calls them Ethnea¹³. They were commanded by Persians and many were, once again, related to the royal house such as Hystaspes the king's full brother who commanded the Bactrian and Sacae Ethnea. Thus we can immediately see that a Persian divisional commander or Myriarch could lead one or more racial types. Diagram 2 shows the make-up of these divisions with their commanders based on Herodotus' account. The term Myriarches suggests that each Myriad was ten thousand strong. This is almost certainly incorrect. It stems from the Greeks' way of describing large amounts and also from

⁵ M. A. Dandamaev & V. G. Lukonin, The Cultural & Social Institutions of Ancient Iran (1989) p. 222; but note also J. M. Cook, The Persian Empire (1983) p. 83.

⁶ Xen. Hell. I, 4, 4.

 $^{^{7}}$ Op. cit. Their interpretation, therefore, is that Toparch and Karanos are also one and the same thing.

⁸ Hdt. VII. 88: i.e. Presumably sons of the Datis who fought at Marathon.

⁹ Hdt. VII, 83.

¹⁰ Hdt. VII, 40 f.

¹¹ Ibid.

¹² Hdt. VIII, 113.

¹³ IX, 33 & VII, 81.

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DIAGRAM 2: Herodotus' Army List

DIVISION	COMMANDER	DIVISION	COMMANDER
Persians	Otanes	Arabians African Ethiopians	Arsames
Medes	Tigranes	Libyans	Massages
Cissians (Elamites) Hyrkanians	Anaphes Megapanus	Paphlagonians Matieni	Datus
Assyrians Chaldeans	Otaspes	Ligyes Mariendeni Syrians	Gobryus
Bactrians Sacae	Hytaspes	Armenians Phrygians	Artochmes
Indians Eastern Ethiopians	Pharnazathres	Lydians Mysians	Artaphrenes
Arians	Sisamnes	Thracians (of Asia)	Bassaces
Parthians Chorasmians Sogdians	Artabazus Azanes	Pisidians Cabalees Milyae	Badres
Gandarians Dadicae	Artyphius	Moschi Tibareni	Ariomardus (son of Darius & Parmys)
Caspians Sarangae	Ariomardus (son of Artabanus) Pherendates	Macrones Mossynoeci	Artaycres
Pactyes	Artayantes	Mares Colchians	Pharandates
Utians Mycians	Arsamenes	Alarodes Saspires	Masistius (son of Siromitres)
Paracaninans	Siromitres	Exiles (island tribes)	

CAVALRY

Persians	N/K	Caspians	N/K
Sagartians			
Medes	N/K	Libyans (chariots)	N/K
Cissians	N/K	Paricanians	N/K
(Elamites)			
Indians	N/K	Arabians	N/K
(horse & chariots)	·	(camelry)	
Bactrians	N/K	N,B. Sacae not listed!	

Herodotus' generalizations, perhaps due to less than ample sources or a desire to invent! Note that the cavalry Myriads shown in diagram 2 do not have Myriarches. Herodotus did not have the information concerning cavalry commanders. Another possibility is that mounted units were in direct support of some infantry Myriads, but this would seem to negate the need for three Hipparchons. The whole list may be false as I shall discuss shortly.

Under the Myriarches decimal organization was prominent; commanders of a thousand men called Chiliarches were selected by Myriarches 14. The Chiliarch may correspond with the Persian Hazarapatish 15. The subdivision continued with the Myriarches selecting the Hekatontarches and Decarches, commanders of hundreds and tens respectively — what we might call companies and squads. Xenophon mentions half-squads of five men under a Pempadarch 16. Herodotus says that in addition to Persian officers, native leaders also accompanied their men¹⁷. Again Herodotus is more vague in giving details of the cavalry. He says that the Persians, Sagartians, Cissians, Bactrians, Caspians and Paricanians supplied cavalry¹⁸. The Indians supplied cavalry and chariotry, the Libyans just chariotry. The Arabians supplied camel-mounted troops. He adds that only these nations supplied mounted troops 19, yet the Sacae are mentioned playing a prominent part at Plataea²⁰. The organization of the mounted contingents was probably decimal but the number of chariots (if they existed) and how they were arranged is impossible to tell. Perhaps they too may have been decimal. A Myriad of chariots, however, or even three thousand (three men per chariot is a possibility) seems absurd when one considers that the whole Hittite confederacy raised a maximum of two and a half thousand for the battle of Kadesh²¹.

Herodotus gives us a great amount of detail regarding the units in Xerxes' army. Two passages are especially important. Firstly, when Xerxes left Sardis, the elite nucleus of the army is described ²². Xerxes has

¹⁴ Hdt. VII, 81.

¹⁵ Dandamaev & Lukonin, op. cit., p. 228.

¹⁶ Cvr. II. 1, 22.

¹⁷ VII, 81.

¹⁸ VII, 84 ff.

¹⁹ VII, 87.

²⁰ Hdt. IX, 71; presumably a different source from that for the Army List.

²¹ J. H. Breasted. Ancient Records of Egypt Vol. III (1906) p. 132.

²² VII, 40 f.

two units of guards, each a thousand men strong, that are not connected with the Immortals. Herodotus calls them Aichmophoroi or spearbearers. Such soldiers are often called Doryphoroi, which means the same ²³. I suggest that these soldiers are the type depicted on the Persepolis reliefs with spear and small figure-eight shield (Figure 1) and no bow, usually with the fluted Polos hat. On campaign, however, the Persians wore Median dress ²⁴, but equipment would appear to have remained the same. One unit at least consisted of nobles with the other being a select force. The two mounted guard units are described in the same passage. They were again one thousand strong each and the one unit left with Mardonius was of nobles ²⁵.

The Immortals were ten thousand strong and always kept up to full strength²⁶. Herodotus does not describe them as Aichmophoroi or Doryphoroi, but as footsoldiers (Pezoi)²⁷, suggesting they were like other native infantry in the army in the way of equipment; that is to say with a combination of bow, spear and shield²⁸. Of the ten thousand Immortals, Herodotus says that nine thousand had spears adorned with silver pomegranates instead of buttspikes and that the remaining thousand had golden pomegranates²⁹. These thousand men will have been the front

²³ VII, 146; IX, 107 and 112: Cf. also VII, 55 where he uses Aichmophoroi and "Hoi Tas Lonchas Kato Trapontes".

²⁴ Hdt. VI, 112.

²⁵ Hdt. IX, 63.

²⁶ Hdt. VII, 83.

²⁷ VII, 41.

²⁸ Hdt. VII, 61 describes the weaponry of typical Persian infantry, but he implies that bow and spear and a Gerron (wicker shield) were carried by each man. This does not agree with the Persepolis sculptures; no figure depicted there carries all three items. The majority carry bow and spear, and some have Spear and Gerron, Significantly, no Greek vase shows a Persian with all three objects. The reliefs must be considered more reliable than Herodotus, Cf. Hdt. IX, 61 f., 99, and 102 plus Plutarch Aristides XVIII, 3: All these passages mention the wall or front rank of Gerra through which the Greeks had to penetrate. The other Persians are then Anoploi (IX, 62). From studying the Persepolis reliefs. I suggest that the Gerrophoroi were also Decarches and formed the front rank in battle. Persians carrying bow and spear made up the remaining ranks, with the formation being almost certainly ten-ranks deep. The reasons for this are that Herodotus uses the term "Decarches" and secondly the passage IX, 62 in which, if not attacking singly, they attacked in tens. We should also bear in mind the Persian liking for working in decimals. Xenophon's mention of the Pempadarch (Cyr. II, 1, 22) leads me to believe that effectively the Decarches/Gerrophoroi were the file-leaders and the Pempadarches, the file-closers.

²⁹ VII, 41.







Figure 2

rank Decarches on the battlefield and I believe carried the Gerra (wicker shields) — see Figure 2. Herodotus also mentions that those nearest (Angchista) to Xerxes had apples (Mela) rather than pomegranates on their spears. This distinction seems to relate to the two senior thousand-strong units of guardsman, making one of them Melophoroi³⁰. This makes Xerxes' guard division total fourteen thousand men. I feel there is no reason to doubt Herodotus' sources on this point as the organisation is comparable to later Archaemenid armies in many respects and he may have received this information from an eyewitness account.

³⁰ Cf. Arrian, Anab. III, 11,5.

The units described in Herodotus' Army list³¹, as it is often called, pose a very difficult problem. The contingents which he lists and their Persian commanders are at face value very convincing, especially if one adds his descriptions of each contingent's equipment and dress. Additionnaly, it complicates one's perspective of the size of Xerxes' army. This is because all sholars have had the idea of the fifth century Greeks turning back a gigantic army, consisting wholly of nations under the Great King, firmly implanted in their subconscious. This can be seen when any book on the Persian Wars is published. There is a sense of duty or need to justify Herodotus' veracity and, most important of all, an obvious attempt to rationalize the size of the Persian army; most scholars immediately reject three million for the size of the army, but they still try to keep the army total very high — even Maurice a professional soldier³². I believe the Westerners' ideology regarding the Persian Wars is to blame. It started when Herodotus first wrote his history. Whith the idea of a vast Persian army in one's mind, it is very difficult to disbelieve his list of subject contingents.

There is no evidence to contradict the twenty-nine names of the Persian commanders that Herodotus gives but I am most doubtful regarding the twenty-nine infantry divisions and the cavalry contingents. I have already said that the fourteen-thousand-strong guards division seems appropriate. The other units are more problematic. Certainly it appears that Herodotus had the opportunity (perhaps at Sardis) to gain access to official sources for the twenty-nine Persian commanders. Did he also have a list of the twenty-nine divisions and their constituent Ethnea? I suspect not. I further suspect that he allocated subject peoples within the empire to hypothetical contingents under the twenty-nine Persian commanders.

There are several reasons for this. It is evident that Herodotus collected his information on the Persian Empire and its resources from various sources. His Satrapal List³³ does not equal his Army List in its lists of peoples. One example is the division under Artochmes consisting of Phrygians and Armenians; in Herodotus' Satrapy List Phrygia is part of his Satrapy Three and Armenia is part of Satrapy Thirteen along with the

³¹ VII, 60-88.

³² F. Maurice J.H.S. 50 (1930) pp. 227 f.

³³ Hdt. III, 90-97, cf. R.G. Kent, *Old Persian* (1953) p. 138 and p. 151; Darius' and Xerxes' inscriptions differ from the account of Herodotus.

Pactyes. Geographically the Armenians were not contiguous with the Phrygians and it thus seems odd that they were brigaded together. Note that the Parthians and Chorasmians were in the same division under Artabazus son of Pharnaces and are geographically contiguous and are part of Satrapy Sixteen. The forces of the Assyrians and Babylonians (Chaldeans) were brigaded together and were geographically adjacent in Satrapy Nine³⁴. So it would seem that Herodotus' Army List is more suspect than his Satrapy List since Xerxes' and Darius' inscriptions of the peoples under them are more compatible with this than with the Army List, but still only roughly. Despite the propoganda problems inherent in the nature of inscriptions, these have at the very least a Persian sense of direction. Herodotus describes the empire from the Greek point of view and from West to East rather than from the Persian homeland35 Herodotus' Army List, however, may tell us the races in the empire and their equipment (not too accurately), and Cook 36 believes the Army List to be correct in its identification of units, but this still does not mean that these were the troops who went to Greece with Xerxes. Herodotus' descriptions of some troop-types ring true with the Persepolis reliefs; it is not true for all the nations that he lists. We cannot locate the Caspians or Phrygians at Persepolis³⁷. Whetever Herodotus' source, it seems to lean towards the western portion of the empire in that there is a large chunk of Xerxes' army recruited from mountaineer tribesmen of Asia Minor and armed with javelins and target such as the Phrygians, Mycians, Paphlagonians and Psidians. None of these are to be seen at Persepolis! Perhaps this suggests a source of greater detail for the western part of the empire where his local knowledge might have been greater. Sardis may have been the source of the earlier Hecateus. Could Herodotus, perhaps, have simply made these contingents up from a rather basic and poorly balanced knowledge of the Persian Empire? It does seem curious that rough and ready mountaineer tribes could raise a Myriad of men each

³⁴ For further examples see O. Kimball Armayor T.A.P.A. 108 (1978), p. 2f.

³⁵ Ibid., p. 6 f.

³⁶ Cook, op. cit., p. 80.

³⁷ O. Kimball Armayor, op. cit., pp. 3-5; I agree with all his comments in full, except that he misunderstands Persian dress and does not compare it fully to Greek vase paintings or Herodotus. The Persepolis reliefs show parade costume rather than campaign dress.

when Xerxes could raise only ten thousand Immotals and ten thousand native Persians from Persis. I believe that O. Kimball Armayor rightly detected Herodotus' inventive tendencies when he noted that his account of Darius' empire had sixty seven nations in it, Xerxes' army, navy and cavalry contingents totalled sixty seven and that the heroic leaders in the Iliad (Greek and Trojan combined) totalled sixty seven³⁸. I judge, therefore, that the Army List cannot be treated as anything except highly suspect.

The troops kept behind in Greece by Mardonius in 479 B.C. show a huge predominance of Iranian and Eastern Iranian units — Persians, Medes, Bactrians, Sagartians and Sacae. Only Indians, Phrygians, Mysians, Poenians, Thracians and some Egyptian/Ethiopian marines are mentioned in addition. This makes one question the whereabout of the Psidians, Moschi, Macrones and others. It seems odd that Xerxes should take back to Asia his most expendable troops. Herodotus has used his "Asia Minor Source" or imagination to pad out units for the list of twenty-nine Persian commanders. The difference in the units retained for Plataea suggests that Herodotus had another source — presumably an Athenian of other Greek eyewitness of the battle who described what he saw, mainly Iranian troops. Other pieces of evidence that back this up are Attic Red Figure vases of the period³⁹. None of these show Xerxes' troops in anything except Median costume. It may have been that Greek vase painters always depicted a stereotyped Persian. This is possible, but there are just a few which show Ethiopian armoured soldiers of the period⁴⁰; probably the Ethiopian/Egyptian marine-type of soldier at Plataea, suggesting that Greek artists could differentiate if they had adequate ideas of troops viewed by themselves or from descriptions from Greek veterans. Another possibility is that all members of the Great King's army were equipped in Persian style. I do not consider that the Persian King, even with his financial resources, would spend his money on such a costly exercise and highland mountaineers would not have the finances themselves. The cavalry, however, may have been able to afford this as they would be the wealthy aristocracy capable of assimilating

³⁸ Ibid., p. 7.

³⁹ A. Bovon, *B.C.H.* 87 (1963) pp. 579-602; all Persians depicted in her plates are in Median costume.

⁴⁰ A. D. Fraser, A.J.A. 89 (1935) pp. 35-45 and plates.

themselves into Persian ways and equipment. One thinks particularly of mounted troops such as Croesus' Lydian lancers renowned for their ability⁴¹. If these were in Xerxes' army, they receive no mention by Herodotus and must have been regarded as part of the Persian cavalry contingent that was brigaded with the Sagartians⁴². Whatever the case, there were many units and peoples that did not take part in Xerxes' invasion of Greece and I shall discuss this point further when we come to look at the number of persons in the army of theKing of Kings.

The army was recruited on the basis that all levied must obey that call to arms and follow the Great King. Even to request exemption could result in the most harsh of penalties, as Oeobazus and Pythios discovered 43. Pythios was a Lydian and this shows that the rule applied to Xerxes' vassals as well as to native Persians. Eligibility for armed service began at the age of twenty and individuals remained so qualified until fifty years old⁴⁴. Xenophon says there were almost 120,000 Persians in the empire⁴⁵; most likely meaning those men of military age, but it is difficult to determine how accurate such a figure is. Among the Persians, the infantry was recruited from the farmers and the nobility formed the cavalry 46. Medes, Bactrians and Sacae were another constant in Achaemenid armies⁴⁷. These nations formed the majority of the cavalry. Poorer peasants seem to have been recuited by the Achaemenids as slingers, but these are only mentioned by Xenophon and Curtius⁴⁸. I cannot believe that the sling, a typical peasant weapon, was only in use from Xenophon's time onwards. Note that Herodotus does not mention them. This suggests that Xerxes only took along his best and most useful infantry and that such poorly armed peasants were mustered only in defence of their homeland against Xenophon's Ten Thousand and Alexander's armies at Issus and Gaugemela.

⁴¹ Hdt. I, 79.

⁴² Cf. Plutarch, *Aristides*, XVII, 8; Plutarch must be using a different source to Herodotus. It may, however, be false and purely a device of Plutarch to explain the mythical origins of a religious ceremony. Note also Hdt. VII, 38 concerning the Lydian Pythios and his five sons.

⁴³ Hdt. IV, 84 f. & VII, 38.

⁴⁴ Hdt. I, 209 & Strabo, XV, 3, 19.

⁴⁵ Xen.. Cyr. I, 2, 15.

⁴⁶ The Immortals seem to have been privileged nobility: cf. Hdt. VII, 83.

⁴⁷ Hdt. VI, 113, VIII, 113; Aeschylus, *Persae* Li. 732; Diodorus XI, 7, 2.

⁴⁸ Xen. Anab III, 3, 6; Curtius, III, 9, 1.

Levy documents from Babylonia list the equipment that a horseman had to provide⁴⁹ and make it evident that there, at least, a substitute could be hired and equipped in lieu of performing military service oneself. Perhaps Oeobazus and Pythios should also have offered substitutes; it seems strange that they did not. The King of Kings, however, had absolute power and perhaps political and strategic reason for these decisions. Semi-autonomous states provided troops too; the Cilicians, if Herodotus can be believed, provided Marines⁵⁰. One should note that mercenaries were raised and maintained by Xerxes. A notable example being the Jewish garrison at Elephantine in Egypt⁵¹. Many of the Asia Minor mountain tribes may well have been mercenaries paid, perhaps, in plunder. The Psidians, for example, seemed prone to banditry and raiding 52. Again this does not necessarily mean that they were in Xerxes' army and also they would be incapable of standing up to a heavy hoplite phalanx. The Scythian nomads may well have been mercenaries and the Indians in Xerxes army too53. Note that Mardonius retained them for his Plataea campaign 54. This emphasises their quality since Mardonius' army was a select force.

The training of troops was very varied. Darius speaks of being a good horseman, archer and spearman, both on foot and on horseback 55. It probably sums up the training only for the nobility, Archery was most likely learnt from the Scythians initially, as it has been by the Medes 56. The Athenians used Scythians on board their ships and as a police force. They are common on Greek vases around this period⁵⁷ and must have been masters of their craft. Strabo gives an account of Persian training 58. Much, it seems, was learnt from the hunt: spearthrowing, archery, and curiously, the use of the sling. He is writing, however, about the Cardaces

⁴⁹ Dandamaev & Lukonin, op. cit., p. 227.

⁵⁰ Hdt. VII, 91 and note guard cavalry in III, 90.

⁵¹ Dandamaev & Lukonin, op. cit., p. 230 f.

⁵² Xen., Anab. II, 5, 13 & Hell, III, 1, 13.

⁵³ N.V. Sekunda, "The Persians" in J. Hackett (ed.) Warfare in the Ancient World (1989) p. 89, mentions the Hydrakai as a source of Indian Troops available to the Achaemenids.

⁵⁴ Hdt. VIII, 113.

⁵⁵ Kent, op. cit., Darius' Naq-i-Rustam A inscription p. 138.

⁵⁶ Hdt. I, 73.

⁵⁷ A. M. Snodgrass, Arms and Armour of the Greeks (1967), pl. 38.

⁵⁸ XV, 3, 18 f.

who are a difficult subject to interpret before circa 368 B.C.⁵⁹. They too appear to be part of the nobility, but their weaponry (except the sling, perhaps used only on the hunt by nobles) seems identical to Herodotus' description of ordinary Persian infantry⁶⁰, who must have been skilled archers and spearmen when one inspects the accounts of Thermopylae and Plataea. The basic infantry would simply lack the time to become as proficient as the nobility. The guard units were full-time professionals, obviously outranking the troops of the line. Training for the Medes and Cissians (Susians) was almost certainlysimilar, as they were important races within the empire; they may have contributed men to the Immortals⁶¹. The eastern Iranian contingents such as the Bactrians and Parthians were largely nomadic; training would again be from hunting and any local disputes that might occur.

For mercenaries warfare and often garrison duty was a way of life and, therefore, training. Mountain tribesmens' skills would depend upon the individual. According to Sekunda⁶², conquered states had their military potential extinguished by the termination and discouragement of any martial training; he cites the Lydians. This would, therefore, conflict with my previous suggestion on the Lydian cavalry and would further show Herodotus' Army List to be a fabrication, (since Mysians, Caspians and others would not have seen any training; or would these be mercenaries?) indicatingthat only Persian regular troops and mercenaries were used in 480 B.C. This may be going a little too far because Phrygians, Mysians and Thracians are mentioned at Plataea⁶³. Aeschylus, a veteran of Salamis, notes the Mysians as javelinmen 64, suggesting that they were not an unusual part of the Persian army. Dandamaev and Lukonin quote a Babylonian tablet of 513 B.C. relating to a mother's payment to an army commander in Elam for her son 65, which argues that not all Babylonian military training had ceased down to that date at least. One nation in

⁵⁹ V. V. Sekunda, Iran 26 (1988), p. 42.

⁶⁰ Hdt. VII, 61.

⁶¹ A.T. Olmstead, History of the Persian Empire (1948), p. 238.

⁶² Op. (1989) cit., p. 96.

⁶³ Hdt. IX, 32; see also note 42 for Lydians.

⁶⁴ Persae Li. 52.

⁶⁵ Dandamaev and Lukonin, Op. cit., p. 233; they suggest that Babylonians must train outside Babylonia but this is still not extinguishing military service.

particular which served as vassals rather than mercenaries and was not demilitarized was Egypt. Its troops served very effectively as marines in the fleet and were then transferred to Mardonius' land force. There were two classes of soldiers: the Kalasires and the Hermotubies 66. Herodotus says that they were professionals, since they were forbidden to practice any other trade. It is possible that the Kalasires were Egyptians and the Hermotubies were Libyans 67. Herodotus may have been confusing Ethiopians of Libyan descent.

Having got some idea regarding the organization of Xerxes' army, it is now necessary to look at the size of the force and the manpower involved. As I mentioned earlier, nearly all scholars feel almost duty bound to make the Great King's army as large as possible "in the spirit of Herodotus" as Cuyler Young puts it 68. Firstly I shall put forward my interpretation, having consulted various works. Secondly I shall look at Achaemenid forces down to Alexander the Great's campaigns. These are important since the armies at Issus and Gaugemela were levied in defence of the Empire. Armies for home defence are almost always larger than invasion forces sent out of a home country simply because it is possible to turn out the fullest levy available. This is a point no scholars seem to have considered. I believe it to be an important factor.

Cook and Burn ⁶⁹, following Maurice ⁷⁰, seem intent on stressing the immense size of Xerxes' army. Balcer and Cuyler Young ⁷¹, however, write more logically in that they take account of the other frontiers of the Persian Empire and view the invasion force also from the Persian outlook. Cook believes that 300,000 men was the size of Xerxes' army ⁷², and considers that the fleet and land commissariat was capable of supplying the army until Salamis. There is no doubt that the Persians were skilled and well organized when it came to supply. The invasion was planned

⁶⁶ Hdt. II, 164 ff.

⁶⁷ How & Wells commentary on Hdt. for note 66.

⁶⁸ Iranica Antiqua 15 (1980), p. 218.

⁶⁹ Cook, op. cit., p. 115; A. R. Burn, Persia and the Greeks 2nd ed. (1984), pp. 326-9.

⁷⁰ J.H.S. 50 (1930), p. 228.

⁷¹ J. M. Balcer, Historia 38 (1989), pp. 127-143; T. Cuyler Young, op. cit., pp. 213-239.

⁷² Cook, op. cit., p. 155; yet he realises on p. 113 that though the number of beings in the Persian Empire was more than Greeks in Greece, the number of ethnic Persians was much less; he still seems too ready to follow Herodotus.

for three years and the Persepolis tablets give the impression that Persian administration was capable of organizing rations easily enough. Cambyses had crossed the Sinai desert to attack Egypt through the clever planning of supplies 73. The camp of Artaxerxes in the fourth century was a well supplied and equipped affair 74. There is no reason to think that Xerxes was any less prepared. Supply dumps were set up in Persian-controlled areas 75, on the Thracian coast, Tyrodiza, Doriscus, Eion and Macedonia. When Herodotus writes about the Abderians and Thasians 76, it suggests that Xerxes would have his army supplied by vassals where convenient. In addition, one suspects that his attempts to cajole Greek states to offer earth and water as tokens of submission were his diplomatic way of obtaining potential forward supply bases. Medizing Thebes supplied such needs at the time of Plataea. Also Xerxes had said, according to Herodotus,

"For we carry much food with us while we march and we shall have the food of those whose land and people we invade. And the men that we march against are not nomads but farmers."

Xerxes was well aware of what had happened to Darius in Scythia. As long as there was no determined resistance, he could establish another supply base in mainland Greece⁷⁸. It was that resistance which the Great King underestimated.

From the above, one would think the Persian commissariat capable of supplying a huge army and hence justifying such a force; Burn and Grundy seem reluctant to argue against it. Burn is willing to reduce the number in the Army from Herodotus' 2,100,000 down to General Maurice's 210,000 men and 75,000 animals⁷⁹. Maurice's views are sensible but Cuyler Young proves himself very capable of taking them another step forward⁸⁰. Basically by using logistical formulae of D.W. Engels⁸¹, Young suggests, most convincingly, that once away from the

⁷³ Hdt. III, 4 ff.

⁷⁴ C. & T. Muller, Fragmenta Historicorum Graecorum, (1853) fr. 125.

⁷⁵ Hdt. VII. 25.

⁷⁶ Hdt. VII, 118ff.

⁷⁷ Hdt. VII, 50.

⁷⁸ Burn, op. cit., p. 353.

⁷⁹ Maurice, op. cit., p. 224.

⁸⁰ T. Cuyler Young, op. cit., pp. 213-239.

⁸¹ Alexander the Great and the Logistics of the Macedonian Army (1978), pp. 123-130.

supply base at Therma, Persian resources became strained even though the invasion was timed to coincide with the Greek harvest. His conclusion is that an army, even reduced to Maurice's size, was not feasible; nor is the figure of 70,000 troops for Mardonius at Plataea. Young actually considers that whatever the number of troops that left Doriscus, it was certainly not the same as the number that reached Athens and that any superiority the Persians had was minimal⁸².

What we must note is that the Persian Empire had other considerations in 480 B.C. Greece was one of them, but not the only one. Egypt had only recently been won back after a revolt, requiring a Persian and Jewish mercenary garrison, and Babylon too had lately been forced back into submission by Xerxes. It is not possible to determine with how much strength Macedonia and the Indus basin were held. The empire's northern frontier was always vulnerable to Scythian incursions. Besides all these, the less volatile provinces had to be garrisoned and administered. Native Persian manpower was not all that sizeable, since a thousand men seems to have been the largest garrison-command a satrap might have 83. So is there any other way of gaining an insight into the size of Xerxes' army? I would say that there is; by looking at the later forces deployed by the Achaemenids.

The battle of Issus took place in 333 B.C. Arrian says that Darius had 600,000 troops 84. The troops of any actual use and given specific mention amount to 140,000 85. Of these, 30,000 were Greek mercenaries, 30,000 were cavalry and 20,000 were light infantry. The light infantry are the slingers and javelinmen of the type encountered in Xenophon's *Anabasis* 86. No slingers are mentioned by Herodotus but they are in Xenophon's *Cyropaedia* 87; they were peasants raised only in time of local distress, not the quality troops needed for Xerxes' task force. The Greek mercenaries were not available to Persia in 480 B.C. and the Asiatic Greeks were not of the same calibre. Arrian, however, writes of 60,000 Cardaces 88; these were equipped in very similar fashion to line infantry of Xerxes' time (see

⁸² T. Cuyler Young, op. cit., p. 237.

⁸³ Hdt. III, 127.

⁸⁴ Arrian, Anab. II, 8, 8.

⁸⁵ Ibid. II, 8, 5-6.

⁸⁶ III, 3, 6.

⁸⁷ I, 5, 5.

⁸⁸ Anab. II. 8, 6.

above). It would be rash to say the Cardaces and the Persian line infantry of Herodotus were the same type of unit, but the similarity in equipment and their function on the battlefield is most interesting. This makes their number of 60,000 suggest itself as a maximum for good native Persian infantry available for defence of the homeland. Any force sent abroad must certainly contain fewer. What I emphasise is that on the assumption that there was no population decline among the native Persians from 480-333 B.C. (none is evidenced), the amount of good Persian infantry available for overseas ventures could not have exceeded 60,000. Arrian's figures may also be exaggerated and we could, perhaps, decrease this figure. Note also that while Persia used mercenary Greeks in this period, Xerxes had something like 13,000 Greek allies at Plataea. So consistently Greeks, in one way or another, formed a sizeable part of Achaemenid armies from 479 B.C. onwards in the western theatre. Around 14,000 were in Cyrus the Younger's army of 401 B.C. Only troops of useful military value would have been taken to Greece with any reliable allies recruited en route.

If we look at cavalry, we see that 35,000 were available for Gaugemela 89. This again suggests a maximium for home defence. Gaugemela was a major battle for the empire, whilst Xerxes' invasion was effectively a large expedition, with many of the horsemen under Darius III being called up from the eastern half of the empire. At Cunaxa, Cyrus had only about three thousand cavalry 90 and Artaxerxes about six thousand 91. This seems rather small and may be representative of the real mounted forces that eastern and central portions of the empire were capable of mustering. The accounts of later battles of the Achaemenids conflict with the statements on troops that Herodotus gives for his period. The Arachosians provided cavalry at Gaugemela 92; they provided no troops in 480 B.C., yet appear at Persepolis. The Hyrkanians provided cavalry at Gaugemela but only infantry for Xerxes 93. Whilst events of one hundred and fifty years could alter the situation greatly, we have no real evidence

⁸⁹ I follow E. W. Marsden, *The Campaign of Gaugemela* (1964), p. 36 f. but note also Curtius IV, 12, 13 and Arrian Anab. III, 8, 6.

⁹⁰ Diod. XIV, 19, 7.

⁹¹ Xen. Anab. I, 7, 12.

⁹² Arrian, Anab. III, 11, 4; Curtius, IV, 12, 6.

⁹³ Hdt. VII, 62 and Arrian, Anab. III, 8, 4.

of change within the miliary framework of the empire. We know which sources Arrian relied on for his history of Alexander; but with Herodotus we cannot be as certain and I suspect that the Army List is, for the most part, a fabrication.

We may conclude, therefore, that Xerxes' army was based on the decimal system. It cannot be considered de facto that any vassal contingents were organized in this way; probably only the guards, Persians, Sacae, Medes, Bactrians, Egyptians and perhaps the Indians. who are all cited at Plataea, were thus organized 94. We certainly cannot take Herodotus' statements for many of the twenty-nine divisions that he lists as accurate. Any units not mentioned at Thermopylae or Plataea. such as the Caspians and Cabalees may be pure invention and should be treated with great caution. Many of these Ethnea do not qualify for a position in either Darius' or Xerxes' inscriptions, or on the Persepolis reliefs. In addition, peoples not cited by Herodotus appear in later periods of Achaemenid history and some others are mentioned in 480 B.C. appearing as infantry but at the later date as horsemen. If any Ethnea from Herodotus' Army List did take part in the invasion of Greece, their role was almost certainly guarding the supply dumps and the long lines of communication back to Sardis, which would be a logical task for low quality soldiers and tribesmen. I believe that the Phrygians, Thracians, Mysians and Poenians were the only troops used in addition to those above. Artabazus may well have retreated from Plataea with them 95 because he knew their quality was definitely low. We should note that it was the Medizing Greeks who made up a considerable part of Mardonius' force (both in infantry and cavalry) and this point would argue that, until Plataea, the Persian invasion was largely successful since Xerxes held most of the northern Greece.

⁹⁴ The Cissians are another possible and probable addition. Cf. Hdt. VII, 210, i.e. they are not only in Herodotus' Army List, but are also at Thermopylae. Perhaps Herodotus was using another source. Note also Diod. XI, 7, 2: here are mentioned Cissians and Sacae. If Diodorus had only written of Cissians, we could assume he was following Herodotus. However, his inclusion of the Sacae could mean he had a further source. There is also a différence in the battle order at Thermopylae: Herodotus has the Medes and Cissians together whilst Diodorus describes the Medes attacking first, then the Cissians and Sacae together.

⁹⁵ Hdt. IX, 66 f. Artabazus being in command of those listed in IX, 32.

The size of Xerxes' army will be a source of controversy, I suspect, for a long time to come. Cuyler Young has shown that even General Maurice's ideas on the army size are too large and that Xerxes could bring far less troops to the battlefield than he actually took to Greece. Also, other areas and frontiers of the empire had to be held at the same time. Later Achaemenid armies, representing a full muster for home defence against Alexander in the fourth century would suggest, I believe, around 100,000 for the maximum useful manpower available. Xerxes' force, operating outside the empire, was probably less. Perhaps Xenophon's figure of 120,000 Persians in the empire may be quite realistic. Whatever the true size of Xerxes' army was, Herodotus magnified it because he and other Greeks wanted to believe it was so. It has taken us nearly two and a half millennia to cease wishing it was so too.