MANOUSOS KAMBOURIS
The Association of Historical Studies
KORYVANTES
Athens, Greece
E-mail: mekambouris@yahoo.com

SPYROS BAKAS
The Association of Historical Studies
KORYVANTES
Athens, Greece

Received: March 20th 2022
Accepted: November 15th 2022
Original research article
UDC: 94:355.3(355)"-04"
94(55)"1721/1723"(093.2)
https://doi.org/10.18485/arhe_apn.2022.18.1

A REAPPRAISAL OF THE ETHNIC PERSIAN INFANTRY IN THE ACHAEMENID ARMIES

ABSTRACT

The form and function of the ethnic Persian infantry of the Persian Wars is little explored, although there have been many issues correctly identified by a number of scholars. Such are stereotypes, an overeager use of Occam's Razor and a distinct refusal to merge data from sources of less than 100 years apart under the silent pretext of possible reforms and resets. The combination of the report of Xenophon with that of Herodotus, and then with Arrian and Strabo, identifies the Persian draftees of the home guard and of the establishments/colonies of Persians abroad. These troops may have been called Kardaka and initially trained as sparabara archers of the standing army for a 10-year period, and then, when admitted to the citizen class as reserves, they were redelegated as close-quarter battle troopers, bearing body armour. This report by Xenophon and Strabo identifies the elusive Persian cuirassiers serving with Mardonius in Herodotus as the mobilised reserve Persian infantry and elucidates Arrian's of Kardaka, suggesting a massive rearming effort by Darius III to hoplite standards.

KEYWORDS: ACHAEMENID PERSIANS, SPARABARA, TAKABARA, KARDAKA, CUIRASS, AKINAKA.

INTRODUCTION

The Persians recast the already ancient fighting duo of shield-bearer and archer, seen in Mesopotamian illustrations and occasionally mentioned in the Iliad (VIII.266-72), so as to maximize firepower. The Persian version included one shield-bearer (similar to the pavisarii of the Middle Ages) followed by nine archers, in a single file, which provided a deep landing zone for the arrows (Sekunda, 1989). This depth accommodated for errors in aiming and was also excellent for assaulting an enemy deployment in depth, destroying its cohesion. It also insinuates that archery duels were fought with arrows flying at relatively low angles, in direct shooting; else the spara shield would offer but little protection to the rear ranks. The high angle used by the English archers during the Hundred Years' War may not be an accurate paradigm. Xenophon, having fought both against and alongside the Persians, mentions high-angle shooting by Cretan archers as an oddity due to the lack of proper ammunition (Xen Anab III.4,17) and, while corroborating Herodotus on the large size of the Persian bows (Xen Anab III.4,17 and Her VII.61,1), he makes it clear that their range was less than the range of the Rhodian slingers (Xen Anab III.4,16), implying direct shooting.

Moreover, all archers were armed with a spear and sidearm (sabre, dirk, such as the "akinaka", or axe, such as the Scythian "sagaris") as were the shield-bearers; thus, they could all engage in hand-to-hand combat (Raaflaub, 2013); again, the reader of the Iliad can relate (Il XV.466-75). Once the arrows caused casualties and disruption, a violent charge was initiated to destroy the enemy, and this onslaught was performed by all the fielded troops, increasing both the power of the impact and the killing efficiency.

This was the Persian line infantry, called the Sparabara due to the Spara, the long, rectangular leather-and-wicker-made shield of the file leaders. It was very different and much lighter than the (mainly) plank-constructed pavises of the Middle Ages. Other nations of the area, like the Medes, used it or a version of it and, in any case, adopted it under the Persian sovereigns. It is possible that their use of such equipment predated that by the Persians, but this cannot be surmised. In his 7th book, Herodotus describes at least three more national contingents outfitted similarly to the Persians (Her VII.62).

The spara was rectangular and flat, thus providing coverage without any seams and openings, especially when in contact with the other spara of the rank. It was easy to set on the ground, to create a seamless barrier or rather a field fortification from where to shoot in relative safety, without burdening the wielders' hands and interrupting their firing sequence. It was very light, which allowed the wielder high mobility, such as during forced marches, violent charges, manoeuvring at a jog and fast pursuits in the heat of battle. Its beauty was, though, that it was not issued to all troops, but only to the file leaders.

It is unclear whether all troops of such a combined formation were called Sparabara; this issue relates, most probably, to the existence or not of shields for the nine archer-spearmen. Greek pottery shows Persian archers with sabres, with or without a cuirass, but never with a spear. The latter is obviously artistic license; the reliefs of Persepolis show Persian archers in ceremonial dress, with conventional quivers or combined "gorytos" quivers/bow cases, carrying spears and occasionally straight dirks (akinaka). What is a bit more confusing is that Greek pottery shows sabres, or rather cleavers, but the Persian reliefs and Herodotus refer to akinakes dirks (Her VII.61,1). The cuirass might have been issued selectively (Charles 2012). The obvious choice would have been to issue them to the dathapata file leaders of the sparabara who would bear the brunt of close-quarter combat and perhaps missile barrages. Such armour can be identified with the Egyptian style mentioned in Herodotus (Her I.135) and seen in Greek art. Additionally, the other type of cuirass, the iron-scale type (Her VII.61,1), was issued to or otherwise used by cavalry, at the very least by noble cavalrymen (Her IX.22,2), if not by the entire mounted host of Persian stock, and/or by the elusive cuirassiers (Her VIII.113,2), had they have been an infantry unit (Charles, 2012) as suggested in this work. Alternatively, they could be identified with one of the two 1,000-strong infantry royal guard units (Her VII.40-41), most probably the first one (numbered in order of appearance in the narrative of Herodotus), which was made up of commoners, with spear counterweights of a pomegranate shape (Her VII.40,2 & 41,3) and probably recruited on merit from the Immortals (Charles, 2012).

It is also unclear whether the spara-bearing file leader, portrayed with a cuirass or jerkin (obviously the Egyptian style mentioned in Her I.135 made from stuffed linen) on Greek pottery, was an archer as well. The Spara could be solidly planted on the ground, as seen in said pottery, so both hands were free, but only a portion of the abovementioned representations show a bow (but not a quiver) for spara-related troops (Miller, 2006/7). Herodotus (VII.61,1) confusingly endows all Persian national infantry with a full kit of wicker shield of unstated shape and size, a short spear, a long bow hanging from the shoulder (from where it could be brought to notch position with just one move within the left palm), one quiver on the back (for fast drawing of the reed arrows), iron-scale armour and a dirk hanging from the belt to their right side. Herein lies a problem: there is not one image of a Persian with such a full kit, making the description of Herodotus read like the full inventory of the infantry, rather than the standard-issue kit of an infantryman.

The spara was quite a feat of manufacturing, despite its mundane materials, and had a sizeable footprint. The size and form of the spara allowed the formation of a veritable shield wall, as mentioned above, with the file leaders planting their spara one next to

the other to create a movable linear field fortification, from which they were entrusted to repulse by spear-thrusts any enemy resilient enough to cross the hail of arrows and assault their shield wall. It should be noted that, contrary to some views, there could be little possibility for more than one spara bearer per dathabam (10-man file). Even less so for an adjustable number of spear bearers according to the tactical situation (Ray 2009). The idea that an array of weapons was available to all soldiers and the selection was made before deployment is impractical for anything but pitched battle, as it denies the ability to deploy promptly after a forced march or in battles by encounter. It might be suggested that all sparabara, all ten warriors of the file, had a spara. This would corroborate with the abovementioned text of Herodotus (Her VII.61,1), and also with texts from Xenophon (Cyr I.2,9) and Strabo (Geog XV.3,19), although this would change the whole concept of the Sparabari as we understand it….

Thus, the Persian armies had multiplied their firepower, as almost all of the (first) line infantry shot bows and then doubled as shock troops (Raaflaub, 2013). The Persians had practically doubled the effective sizes of their armies, and by fielding quite large ones they were really able to cloud the sky with their arrows (Her VII.226). An ethnic Persian boy was taught from the age of 5 until 24 to ride, shoot a bow and speak the truth (Her I.136; Strabo XV.3,18), and then he was required to follow either a military career or be released to civilian life as a reservist, always prone to mobilisation (Xen Cyr I.2,13). There was a slight problem though: the infantry was by far the Persian decisive arm. Xenophon (Cyr I.2,15) estimates that the Persians were approximately 120,000 souls. This however, may mean the portion of the Persian nation that was eligible for conscription and fully enfranchised. The bondsmen/bandaka were the intermediate social stratum, between the slaves/mariaka and the aristocrats/azata (Sekunda, 1992) and accounted for the equivalent of the free citizenry, who were clearly the bulk of the manpower. These could not own a horse and had no military use for it. So how, and, most importantly, why would they need to "learn to ride since childhood"? Most probably, the renowned motto referred to the scions of the Persian nobility, similarly to the slightly more expansive and diversified syllabus of Homeric heroes and medieval knights. It is possible that this kind of training was provided to all enfranchised Persian youths who could afford the public training (i.e., azata and bandaka), possibly under the collective term of Kardaka (see below). The acquisition of a horse could occur during adulthood, due to legitimate gains from any conceivable resources or activities, including, but not limited to, plunder, the spoils of war, granting by the authorities for virtue or courage or nominal purchase or promotion. Thus, the training syllabus followed should have anticipated such possibilities and included basic horsemanship skills learning for all eligible conscripts to better exploit further developments in the career of any of them.

THE PERSIAN INFANTRY IN THE PERSIAN WARS

The long Persian bow, firing a long, hollow arrow shaft (Her VII.61,1) had a good range (Xen Anab III.3,15). The massive firepower practically reduced any need for defensive weaponry, which brought down the cost and increased the flexibility, speed and endurance of the troops. Although Persian troops are regularly mentioned as unarmoured (Her IX.62,3), Herodotus mentions iron-scale cuirasses for the Persian national infantry, possibly implying the first-rank Sparabara (Her VII.61,1) but this may be a mistaken supposition.

In any case, such armour was a quantum leap compared to the bronze-scale panoplies of centuries previous. Moreover, quilted jerkins and equivalents to Greek linothorax models are shown in pottery for imperial troops, the archers and/or sparabara. By any account, the protection afforded by the Persian shield and armour was optimised against arrows, as they were the only actual threat

to the Persian war machine, and secondarily against a chance slashing blow in the melee. Still, this picture of both literary and representational evidence is very far from the picture of "naked", fully unarmoured troops explicitly referring to the Persian line infantry and considered a key reason for their defeat in Plataea (Her IX.62,3).

The short spear with the apple-like (or spherical, sensu lato) counterweight (Her VII.41) was more important than usually acknowledged. Short in length, it was useful in congested conditions, such as the melee after a storm of arrows. Its spherical counterweight and short length made its use safer for the rest of the ranks, contrary to the constant danger for the following ranks represented by the butt-spike of the Greek spear. This, usually disregarded, spherical counterweight allowed the user to hold the shaft far towards the back, which allowed the maximisation of the useful length and reach within a given total length, with minimal projection backwards. This feature further enhanced the collective safety and reduced the cumbersomeness of such a weapon. It must be noted that the Greeks had difficulty spearing in congested conditions and preferred spear fights at a distance in set-piece battles and/or on open ground. The Persian spearman, due to his nimbler weapon, could be more mobile in the open and more dexterous in congested conditions, although at the cost of a somewhat reduced reach. Some projections assigned a central grip in an overhead position as the sole technique of using the Persian infantry spear, resulting in limited reach, maybe only 1.4m. Both this conclusion and the notion of fragility due to its smaller shaft diameter (Matthew, 2013) might be due to a misunderstanding that confuses the dual-use palton of the cavalry with the counterweighted infantry spear attested by Herodotus (VII.41,3) and shown in various reliefs. The counterweight allowed, as mentioned before, a very asymmetrical hold, near the rear tip, and also both high and low positions, with the latter offering a longer reach and being reminiscent of the Iklwe of the Zulus under Shaka; the former was the only suitable grasp for use from behind a fully developed spara wall, where spearing over the upper edge of the spara was required.

Moreover, the counterweight allowed a policing function, as a less-than-lethal club for riot control, and an alternative military function: as a lethal club to strike at heads and to break inflexible shields and armour, thus giving the user a dual-use weapon: a battle club with substantial reach paired with the conventional spear. This is, by itself, a noteworthy innovation compared to the armament of the Assyrians in the Army of Xerxes, which included the lance, club and dagger (Her VII.63).

Furthermore, it is as yet unresolved what the Persian spearman-archer would do with his spear when shooting arrows: leaving it lying on the ground would make picking it up somewhat difficult, while the possibility that the sphere allowed it to balance upright should be taken into consideration and tested on different types of surface. Without the butt-spike of the Greek weapons it might have been planted on the ground head-on (Ray, 2009), which would expose its point to damage and rust; but also infest it with soil microbes, adding a septic dimension to any wound.

The sparabara may not have been intended for a defensive main function, meaning to pin down and bleed the enemy, as is commonly projected (Ray, 2009). Their purpose must have been the dispersal and stunning of the enemy. This would allow to tilt sideways or retract by any other means the few light spara, thus enabling a massive egress of the spearmen-archers. The latter would deliver a violent charge with close contact weapons to fragment the enemy by eroding his unity and dissolving his line, very much like the practice of the Roman legionaries some centuries later. Without this in mind, one cannot explain the use of spears barely able to reach a target positioned two ranks ahead by all 10 ranks. Practically, the fighting style of the Persian infantry was very Roman-like, perhaps lacking the same kind of body armour and using the bow instead of the javelin as a missile

and the short spear instead of the gladius-type sword for close-quarter combat. (Xen Cyr I.2,9 & 13; Her VII.61,1; Strabo XV.3,19)

The file of ten men was both operational and administrative. It was the administrative unit, but also the standard file of one shield-bearer who led and commanded the file (Dathapatis) and nine, most probably, but not definitely, unshielded archers. All ten men were armed with a spear and sidearm. Thus, the standard file depth of a Persian unit was ten, and to increase the depth for a better defensive function or to adapt to a confined space, the successive deployment of units in consecutive lines was most probably the standard procedure. If a higher echelon was depleted or undermanned, personnel were reassigned and restructured to create full units. For example, a Persian century (Satabam) may be understrength, maybe because some dathaba had been dispatched to other guard/outpost duties and, thus, less than 10 dathaba were present. In mobilization, such dispatches would return from their remote deployment to the base of the unit/Satabam to bring the latter up to strength for expeditionary duty. Still, low manning and casualties could also be reasons for understrength dathaba. Consequently, a Satabam, originally of 100 men in ten Dathaba, if left with 70 men, would disband three of its Dathaba and use the residual manpower to fill the remaining seven Dathaba to full strength (Ray, 2009; Sekunda, 1992). The net result was that understrength units may cover smaller fronts but always had a steady, 10-man deep landing zone for their arrows, when assaulting the enemy.

The decimal organization does not exclude the possibility of a binary tactical division, where in each echelon one half would be under a vice-commander (Xen Cyr II.1,22-6). The 50-strong companies of the Kardaka trainees (Strabo XV.3,18) suggest such a scheme, perhaps from the dathabam (two half-files of 5) to the baivarabam (two commands of 5,000).

With Herodotus there is a tacit question: After the engagement at Plataea, the Imperial Army found refuge in their fortified camp, from where they repelled Spartan assaults. How exactly did they do that? The ready answer is "with their bows and javelins". However, they did not carry many javelins. The cavalry, if the later, 4th century BC practice is taken into consideration, would have been issued with the pair of palton double-purpose spears, one for hurling one for thrusting (see later), and in that day they had just shot all the available ones, and perhaps then some, after rearming at the rear. The infantry had their bows. They were shooting relentlessly and in some cases threw away their bows to revert to sidearms. Thus, many had no arrows, others no bows. If the case made below for the CQB (close-quarters battle) -oriented cuirassiers holds water, and some had no ranged weapons at all, what were they using?

The answer may be "their slings". Roman legionaries are supposed to have had training to this weapon as standard, and use it to repel attacks at their fortified camps. Perhaps due to this knowledge Strabo says that all Kardaka (meaning fully enfranchised draftees) had slings (Strabo XV.3,19). The sling takes no volume and has no weight, thus the vets may have carried it even when they deployed for CQB, with a sidearm and shield, and used it when and if needed, as in hunting. This suggestion is not accepted by Xenophon, who provides some useful details for the tactical use of the sling by the Persians (Xen Anab III.3,17 & 15 & 7) but explicitly mentions the slingers as a specialised branch of the Persian army, not the everyday rank and file (Xen Anab III.3,6 & 4,2). This, of course, may be due to the Greek practice, where nobody knew how to use a sling apart from some Rhodians, serving as Hoplites but having training, skill and knowledge in slinging as a national tradition, sport or customary weapon (Xen Anab III.3,16). Although Xenophon is highly unlikely to have been anything other than perfectly informed on all things Persian (he campaigned with Persians, side-by-side, for a year or so), it is the only plausible explanation, and not entirely unprecedented. It is still a mystery the way the Greek hoplites were

expected to fight off their enemies on broken terrain. When in the defensive, how were they able to engage and repel the attackers. They were not trained slingers, and by casting stones and rocks they could not expect to stop hoplites, although it certainly helped. However, a most successful use of stones cast by hand is described (Thuc I.106.1-2) as a peculiarity, a phenomenon due to the very peculiar conditions of the terrain. What were they using in regular conditions, for example how were supposed to engage the attacking enemy the Athenian hoplites serving on and defending the Long Walls of Athens? The spear was useful at the last 2-3 meters. Not taking advantage of the exposed enemy for some tens if not a hundred metres was a waste, considering the investment in fortifications. Perhaps all these points might imply a tacit case for the javelin. All the troops were trained to use it, being the weapon of the hunter as the Greeks had no love for the bow. The insistence of Xenophon for the usefulness of the hunt as training for war (Xen Cyr I.2,10) cannot be explained if the casting of javelins is not considered a skill needed by everybody, hoplites included. The peltasts and other light infantry (and the cavalry from the early 4th century) kept using it even in field action and set-piece battles, where the hoplites would trust their spear. Whether the Persians would make a similar case (Xen Cyr I.2,8), instead of the abovementioned for the sling, remains plausible.

LATER SOURCES

The authority on the Persians is Xenophon, as he fought with and against them and saw and studied them from within. He is occasionally suspected of promoting his own ideas, some stemming from Spartan and others from Athenian practices, projecting them as Persian ones, especially in the semi-fictional Cyropedia. The point is, though, that most feudal/aristocratic societies had, throughout the ages, many things in common and, thus, similarities may be actual and not due to assumptions. For example, the fervently egalitarian Spartans, were equals amongst their peers; their society was strictly stratified and their kings commanded the utmost respect and were assigned divine lineage and honours, although not absolute power, except during wars (Her VI.56-8). This situation is not very different from the Persians': Xerxes did not wage war until after the, more or less biased, approval of the tribal council (Her VII.8). The proceedings of the Macedonian Kingdom were similar: Alexander had to persuade the army to undertake successive campaigns once a set objective was achieved (Arr Anab II.16-7).

Xenophon mentions that the Persian infantry was divided, by age criteria, into a standing and a reserve component (Xen Cyr I.2,13-14). Both components could be used for expeditionary service abroad, and they differed in both tactical employment and equipment. This differed from 5th century Greek practice but was similar to that of the Romans (Connolly 1981). The Greeks in the 4th century did differentiate, in terms of tactics, their infantry by age, but the basic equipment was that of the hoplite, minus the body armour. These lighter hoplites were the mobile Ekdromoi, the younger hoplites that assumed mobile tactics (Xen Hell IV.5,14-6). But in essence the Ekdromoi were able (and expected) to fight as the veterans did, in a phalanx. The non-phalanx infantry was not selected due to age, but to social status (Hanson, 1983).

Thus, Xenophon directly states that the Persian national infantry differentiated its armament according to its active or reserve status: the former were archers, the latter assault troops armed with hand-to-hand weaponry and issued with cuirasses (Xen Cyr I.2,13). Thus two major issues in Herodotus are resolved immediately: the first is the identity of the cuirassiers that Mardonius selected to remain with his host for the 479 BC campaign. They were the veteran Persians of the infantry, and not some cavalry regiment, as supposed based on the explicit mention of the cuirass of the cavalry commander Masistius in Plataea (Hdt IX.2), in the context of a 422 BC catalogue of cavalry equip-

ment and on the explicit mention by Herodotus that the Persian infantry engaging the Spartans had no armour (Her IX.63,2). This common interpretation implies that there was Persian cavalry without body armor, something unsupported by evidence (including, but not restricted to, the abovementioned catalogue) and very unlikely due to their feudal status.

The second is the battle order of the Persians in successive lines, as realised by Mardonius (Her IX.31,2). It was simply two different lines of two different troop types. The younger troops, forming the standing army, were bow-armed sparabara (Sekunda, 1992). The veterans may well have been the takabara (ibid.), but this will be discussed later.

Another issue in Herodotus is the apparent incompatibility of his statement regarding the Persian infantry equipment in the invasion force (Her VII.61,1), where a bow, arrows, a spear, a sidearm, a shield and armour (cuirass) are mentioned, while the explicit description of said infantry in Plataea was unarmoured.

The first passage obviously refers not to the infantry equipment, but to the entire infantry arsenal in an aggregated manner. In this light, the latter passage refers to the mass of sparabara impacted by the Spartan phalanx once their arrow barrage had been defeated and their spara wall overcome. These troops, if caught before being exchanged with the posterior units, as was the legionary SOP, would have been slaughtered, given their disadvantage without protective armour.

There is an issue with the secondary equipment. The interpretation followed here accounts for the spara shields, carried by the commanders of the 10-man file, the dathabam. The spara protected the file from arrows and other missile exchanges. However, this leaves open the issue of individual shields for the rank and file for use in more contested conditions, as in the assault after the archers' barrage. Herodotus implies that the Persian archers were equipped with some sort of close-quarter weapons (Her IX.62,1) as secondary arms, but this is all. Shields are not mentioned. By the same token, the veterans are explicitly mentioned by Xenophon to bear armour and close-contact weapons (Xen Cyr I.2,13), but the examples he provides are limited to shields, axes, and sabres, plus a very clear but not helpful mention regarding equipment depicted in contemporary art. Whether spears were issued remains contentious. It is confusing that he insists, as does Strabo (Strabo XV.3,18-19), on the issue of a pair of dual-use spears (palta), while ceremonial and artistic depictions from Persia and Greece show counterweighted thrusting spears for somekind of-infantry, corroborating Herodotus (Her VII.41,3).

Greek art is mentioned by Xenophon and should, at this point, be brought into the discussion. Achaemenid troops are occasionally shown with cuirasses, axes, sabres, small scalloped shields or body shields. Initially, the Greek artists would have had witnessed live Persians themselves, or at least the equipment taken as booty, but eventually, pottery copies might have become a product of higher volume and lower fidelity. Patterns may have been created by different workshops and applied massively. Thus, some types of cuirasses could have been depicted whenever an armoured figure was needed, Greek, Persian, Amazon or whatever. This would explain the use of Greek type linen corselets, complete with Greek symbols, by Achaemenid troops, instead of the iron-scale type mentioned by Herodotus (Her VII.61,1) and Strabo (Strabo XV.3,19), although in later years the acquisition of weaponry, especially some specific items, did find their way across the borders, as in the case of the army of Cyrus the Younger (Xen Anab I.8,7). Whether Persian infantry with scalloped shields, and spears, obviously Takabara, may be identified with Xenophon's Persian veterans is a valid question, whenever cuirasses and sidearms are not shown. When they are shown, the identification may be considered secure. The file leaders of the sparabara could well have been issued with body armour as well, and there are such representations with a corselet being inter-

pretable either as a scaled/lamellar version of a linothorax, or as a genuine linothorax, or as a padded jerkin made from some type of soft material. Oblong spara bearing troopers armed with bows, spears and sabres/ cleavers are often depicted in Greek art (Miller 2006/7)

Herodotus mentions nothing about javelins as a weapon of the Persian infantry, but seems to consider it having been issued to cavalry only, and as their main weapon at that (Her VII.61,1 & IX.17,3). Both imperial and Greek representations support this view, clearly showing spears, not javelins. The spherical, apple-like counterweights in imperial representations indeed imply spears, not javelins, for two reasons: the obvious one is that they would weigh down a missile, reducing its range and upsetting its balance. The less obvious reason is that they are immensely useful for spears as already mentioned. They allow a longer reach by balancing it when held near the back end, thus increasing the useful length of the shaft. The spherical counterweight also allows the weapon to be used as a crushing instrument, reversed as a mace, or held in two hands, like a fighting shaft in oriental martial arts. Even in Xenophon it is not clear whether the javelin was among the weapons of the standing army; it is clear that it was not used by the veterans.

Greek art shows Achaemenid troops with a spear or sidearm and a small shield. These are usually identified as takabara, and it has been suggested (Sekunda, 1992) that these were garrison troops rather than expeditionary troops. This might have been the case, but it is just as possible that these were the veterans mentioned by Xenophon and were encountered more often when the Greeks took the offensive, possibly deprived of the support of expeditionary elements if the aggressors launched surprise attacks. The cuirass may have been carried over or under the garment (Her IX.22,2). It is debatable whether double-scalloped shields in Achaemenid representations of spearmen suggests takabara and/or veterans (if the two are not the same). Another interpretation is that these are one of the two guard units (Her VII.40-1), with the other one being represented without shields, actually with spears only.

Successive baivaraba: a blunder or a tactical improvisation?

The area of impact of arrows shot by a baivaraba must have been roughly equal to its own depth, i.e., the depth of the dathabam, nearly 10-15 metres, which is double the depth of a standard hoplite phalanx. A hoplite phalanx running could cover that distance in 5-10 seconds, which means that it would be impacted by two arrows per archer before its motion makes necessary a correction of the aiming. A deployment based on successive baivaraba, if these were all made of sparabara, which is debatable as already mentioned, means that this zone would be made deeper, perhaps proportionately, which would also allow the target to remain for longer within the landing zone of the arrows without any aim correction being required. The preceding baivarabam, thus, would have time to correct its aim and adjust for distance while the target is pounded by the following baivarabam. In this way, the target, although running fast, would be kept under a continuous hail of arrows. Alternatively, when the quivers were empty, a baivarabam posted to the rear could slide through the ranks to the front (or a front one slide into the rear), to allow the rear one to emerge, so as to present the enemy with constant fire and a deep magazine, reducing any notion of vulnerability due to spending all the arrows of a quiver. Nonetheless, this is a hypothesis based on an all -sparabara contingent. If the second echelon were takabara, or the CQB-oriented Persian veterans, endowed with armour, they could well slide into position to take the brunt of the Greek onslaught with their better CQB-oriented equipment (Xen Cyr I.2,13).

KARDAKA: A REAPPRAISAL

The difference in equipment between the expeditionary and the reserve parts of the Persian national conscription (Xen Cyrop I.2,13-14) might be evident more than anywhere else during the reign

of Darius III. In the battle of Gaugamela, there were no masses of sparabara, nor storms of arrows. A backward, pastoralist tribal unit of Persis, the Mardians (Her I.125,4), are explicitly stated to have beeen archers in the Acahaemenid deployment at Gaugamela (Arr Anab III.11,5), as if to underline that the other Persian infantry were not.

Actually, Arrian in Issus mentions two wings of 30,000 Kardaka each, describing them as hoplites and totalling 60,000 (Arr Anab II.8,6). The number is reminiscent of the extrapolated Achaemenid corps strength as described by Herodotus (Her IX.96,2 &VIII.126,1)and could well imply a common drafting area; Persis should be understood, due to their elite status, as being posted on the flanks of] the invaluable Greek mercenaries (Arr Anab II.8,6).

Thus, Arrian should be understood as mentioning Kardaka outfitted as hoplites, not Kardaka being (by definition) Barbarian hoplites. What the herodotean term was for such troops is elusive and would have shed light to their identity; the suffix –ka means man, generally a human subject (see amrtaka, bandaka, mariaka) but not trooper, which is –bara (artsibara, sparabara, takabara). With Strabo (XV.3,18) this is indeed the case and the meaning is looter, robber or manly one, possibly a wrong interpretation. Arrian might refer to some effort of the known military innovator Darius III, who issued enhanced offensive arms (Diod XVII.53,1) and fielded scythed chariots extensively (Arr Anab III.11,6-7; Diod XVII.53,1-2), along with elephants (Arr Anab III.11,6), to recast the Persian national infantry in a hoplite form (Charles 2012; Bosworth 1980), so as to follow the most successful paradigm of the day, that of his Greek mercenaries and "frenemies".

Whether the mercenary commander Charidemus of Athens was behind this rebooting is anyone's guess. His insistence to lead a campaign against Alexander with a specially raised army (Diod XVII.30,3), not a regularly drafted one, shows some anxiety over the selection, training and abilities of troops and perhaps a concern and pressing need to test his creation, which would have been heavily criticised, at the very least, by Persian aristocracy. His anxiety was so acute that it cost him his life, and the Persians their empire (Diod XVII.30,4-5). The Achaemenid deployment at Issus, with a first line of 90,000 heavy infantry, a third of which were Greek mercenaries (Arr Anab II.8,6) sounds suspiciously like the proposal of Charidemus (Diod XVII.30,3), with the 10,000 balance probably being cavalry in the Greek 1:10 cavalry to infantry ratio..

If indeed the Kardaka were the Persian troops mobilised for expeditions out of Persis (Xen I.2,9 & 13), the militia (Xen I.2,14) must have been left with the standard kit (Xen I.2,13). These were the 40,000 infantry troops mobilised by Ariobarzanes to defend the Persian Gates (Arr Anab III.18,2). The division of a national levy into two parts, with the younger part, the active army, being rebooted and outfitted with new gear while the rest, the veterans/reserves being left with the traditional outfit, has a historic parallel. It may be detected in the Antigonid creation of Romanised infantry out of their active army phalanx units (Sekunda, 1994, Polyb XXX.25,3). The whole idea of the Romanisation may have been a misunderstanding (Van Wees, 1997), with the objective not to introduce/produce a local version of the legionaries, but rather to develop a tactically flexible medium infantry type, the Thorakites troops of the era (Beston, 2002). The change, though, irrespective of its specifics, must have included only the active army component and not the reserves. Other cases of massive re-equipping, such as the Romans becoming hoplites and then manipularii (Diod. XXIII.2,1), include the Achaean confederates turning from hoplites (Paus IX.22,6) to thyreophoroi light infantry and then to fully armoured pikemen (Plut Phil 9,1-2) and the Lacedaimonians becoming pikemen (Plut Cleom 11,2) and are well attested, but whether the change referred to the whole levy or just to active units cannot be safely deduced; the whole levy is implied in all these cases, especially ex silencio.

If Xenophon's testimony and that of Strabo are combined, they produce a coherent picture: the

Persian males were divided by age into children from 5 or 7 to 16, youth to 25, grown men to 50, and elders over 50 (Xen Cyr I.2,4 & 8 & 13). The elders make up the militia and do not campaign abroad. When the Persian youths are mentioned they are only the enfranchised part of the male society, which graduated from the public education system (Xen Cyr I.2,15), and they qualified for leadership positions (Xen Cyr I.2,13). They served from 16 to 25 as the expeditionary, standing part of the Persian army (Xen Cyr I.2,12) - the Spartan counterparts served from 20 to 30. It is this part of the citizen body that must have been the Kardaka, as the translation by Strabo (XV.3.18) means anything from warriors to yeomen, while any association to the word Kara, the Persian conscript army (possibly its standing part but conceivably the full force), is for linguists to prove or reject. If the association exists then Kardaka (Strabo XV.3,18) were the members of the Kara, and this means soldiers. According to the meaning of the Kara, the standing or the full force, the Kardaka were the ones serving at any given time, (Strabo XV.3.18); originally outfitted as sparabara, at Issus as hoplites. If Kara implies the full force (Strabo XV.3.19), the Kardaka were outfitted with two different suites of weapons i.e. as Sparabara and as Takabara (Charles 2012), as described for youths and men by Xenophon (Xen Cyr I.2,9 & 13 respectively), rather than the obviously all-inclusive detailing of weaponry by Strabo (XV.3,19). The latter concept, based on the full force would fit their massive numbers in the works of Nepos (Datames 8.1, 100,000 Kardaka) and Arrian (Anab II.8,6 mentioning 60,000 Kardaka). The 60,000, as mentioned by Arrian, equals half the total number of the enfranchised Persians given by Xenophon (Xen Cyr I.2,15), that is 120,000. This relationship corroborates the practice of mobilizing only half the available force for a task (Xen Cyr I.2,9).

It is unclear what happened with the disenfranchised youths, who had no means of sustenance to graduate from public education (Xen Cyr I.2,15). One would expect that these would have been few in number as Persia became an empire, but in Sparta the Imperium drove more people to a disenfranchised status.

Given that Kardaka refers to both the cavalry and infantry draft (Strabo XV.3,19), it is not a troop type. It is a term for a socio-military classification, before and beyond any assignment of particular arms. Thus, when it is found in our sources it perhaps indicates a lacuna in the source's knowledge of the troop type, perhaps in a transient period or a period of experimentation. Whether the Kardaka of Datames were sparabara, takabara or Iphicrateans, archers, javelinists, lancers/pikemen/spearmen or any other troop type is impossible to conclude. What is very obvious, though, is that although Xenophon's account refers to the proceedings of a royal city (Xen Cyr I.2,9), this is not so; it applied in other parts of the realm, where the highest authority was not the king, at least not for the control of routine functions (Xen Cyr I.2,5). The same social mechanics applied in different cities both in Persia and in the Persian colonies located in different satrapies, where the layout of the Persian administration would have been established, as the highest authority was the king or the satrap (Strabo XV.3,18). In the latter case, land ownership for the Persians would have been at the expense of the defeated, (Her VI.20); for example, the Persians defending Sardis after the surprise of the insurgents' advance took them unawares (Her V.100-101), must have been of this category.

Last, but not least, Xenophon (Cyr I.2,8-9) and Strabo (XV.3,18) do not agree with Herodotus in one most important issue: the javelin, at least for the infantry. In Herodotus, javelins are the main (perhaps not the only) weapon of the Asabari cavalrymen. The infantry had short spears, and there is no mention of casting them. Xenophon and Strabo both agree that the equipment of the Kardaka (in the latter) and of the standing army/Kardaka (in the former) includes the javelin and that it was used regularly. Moreover, a pair of javelins were used as the cavalry palta, one for hurling, the other for thrusting. There is no men-

tion of one spear, as is implied in Herodotus and seen in the representations. Either the infantry equipment had been changed, with the palton replacing the short spear, or the use of the palta was a part of the training applicable to cavalry service (Strabo XV.3,18) while being part of the syllabus of both arms. It must be noted that in Arrian and Xenophon the Persian cavalry does not use bows, they fight with palta and sidearms.

Similarly, the representations and Herodotus corroborate each other in the matter of counterweighted spears that could not be used as javelins. However, there is not one mention in Herodotus that suggests that regular infantry spears, like those of the Persian national contingent (her VII.61), were counterweighted. They were short, but the counterweight might have been a privilege of the elite units due to its peculiar tactical use, as already mentioned.

CONCLUSIONS

The ethnic Persians, in their homeland or when living in occupied territories, had a standardised public education system that produced fine soldiers and aristocrats, a landed warrior caste. Due to their conquests, few back home had want of means to undergo this formal training, similar to the Spartan agoge. The trainees and graduates were called Kardaka. They were sparabara during the Persian Wars and for their mandatory 10-year service as a standing army. Then they moved to the reserves and, when mobilised, they were deployed (as Takabara?) for close-quarter combat, with a shield, sidearm and body armour; this refers to the infantry. The cavalry, perhaps drawn from the aristocracy, underwent the same basic training, and riding was in the syllabus for everybody. An infantryman might get rich and be promoted to the cavalry in the course of war and conquest.

The expeditionary quotum of the standing army was 50%, contrary to the Spartan 2/3 of the total force. The veterans were liable for mobilisation for expeditions abroad, but the quotum is not mentioned. The reserves, not liable to be mobilised to campaign abroad ("abroad" being very relative in a vast empire) are not further discussed in our sources neither regarding their outfit nor in any other function.

The Kardaka were perhaps recast to hoplite standard by Darius III. The date is unknown, but they were deployed with hoplite equipment in 333 BC, at Issus, where their performance was substandard. Whether the veterans that valiantly defended the Persian Gates the following year, the last line of defence of Persis against Alexander, had been outfitted as hoplites as well is unknown; though they must have been the elders (militia) of the Persian system, trained during their tour of duty as Kardaka in the old ways and, thus, making hoplites of them would have been a bad idea and one that was most probably not pursued.

BIBLIOGRAPHY

Ancient

Arrian: *Anabasis of Alexander*
Diodorus Sicilus: *Library of History*
Herodotus: *Muses*
Homer: *Iliad*
Nepos: *On eminent commanders*
Pausanias: *Description of Greece*
Plutarch: *Lives*
Thucydides: *Histories*
Xenophon: *Anabasis of Cyrus*
Xenophon: *Hellenika*
Xenophon: *Cyropaedia*
Strabo: *Geographika*

Contemporary

Beston, P. 2002
Review, *The Classical Review*, New Series, Vol. 52, No. 2: 388-389.

Bosworth, A.B. 1980
A Historical Commentary on Arrian's History of Alexander, Vol. 1, Oxford: Oxford University Press.

Charles, M.B. 2012
THE PERSIAN ΚΑΡΔΑΚΕΣ, *The Journal of Hellenic Studies*, Vol. 132: 7-21.

Connolly, P. 1981
Greece and Rome at War, London: Greenhill Books.

Hanson, V.D. 1983
Warfare and Agriculture in Classical Greece, Berkeley: University of California Press.

Matthew, C.A. 2013
Towards the Hot Gates. In: Matthew, C.A. & Trundle, M. (eds.) *After the gates of fire*. Barnsley: Pen & Sword Military.

Meiklejohn, K.W. 1938
Roman Strategy and Tactics from 509 to 202 BC, *Greece & Rome*, Vol. 7, No. 21: 170-178.

Miller, M. 2006/7
Persians in the Greek Imagination, *Mediterranean Archaeology*, Vol. 19/20: 109-23.

Ray, F. E. 2009
Land battles in 5th century B.C. Greece. Jefferson: McFarland & Company Inc.

Raaflaub, K.A. 2013
Early Greek Infantry Fighting in a Mediterranean Context. In: Kagan, D., & Viggiano, G.F. (eds.), *Men of Bronze: Hoplite Warfare in Ancient Greece*, Princeton: Princeton University Press.

Sekunda, N. 1989
The Persians. In: Hackett, J. (ed.) *Warfare in the ancient world*, London: Sidgwick & Jackson Ltd.

Sekunda, N. 1992
The Persian Army 560-330 BC, Elite 42, Oxford: Osprey.

Sekunda, N. 1994
Seleucid and Ptolemaic Reformed Armies 168-145 BC, Volume 1: The Seleucid Army, Stockport: Montvert Publications.

Van Wees, H. 1997
Review of N. Sekunda 'Seleucid and Ptolemaic Reformed Armies 168–145 BC. Vol. 1: The Seleucid Army under Antiochus IV Epiphanes', *The Classical Review*, Vol. 47: 356-357.

REZIME

NOVI POGLED NA PERSIJSKU PEŠADIJU U VOJSCI AHEMENIDA

KLJUČNE REČI: AHEMENIDSKI PERSIJANCI, SPARABARA, TAKABARA, KARDAKA, OKLOP, AKINAKA

Forma i funkcija etničke persijske pešadije iz perioda Persijskih ratova slabo su istražene teme, iako postoje mnogi aspekti koje su brojni autori ispravno identifikovali. Stereotipi, preterana upotreba Okamove britve i izrazito odbijanje da se uklope podaci iz izvora koji su manje od stotinu godina udaljeni, posledica su prećutnog izgovora da bi to moglo izazvati promene i nova preslaganja. Kombinovanje Ksenofontovog izveštaja sa Herodotovim, a potom sa Arijanovim i Strabonovim, omogućava da se identifikuju persijski regruti iz redova rezervnih snaga dobrovoljaca iz naseobina/kolonija Persijanaca van matične zemlje; za ove trupe se možda koristio naziv kardaka i isprva su bili obučavani kao strelci sparabare za stajaću vojsku, za period od deset godina, da bi potom, nakon što su bili primljeni u redove građanske klase kao rezervisti, bili preusmereni na borbu prsa u prsa, noseći oklop. Ovi Ksenofontovi i Strabonovi izveštaji identifikuju neuhvatljive persijske kirasire koji su služili pod Mardonijem kod Herodota kao mobilisana rezerva persijske pešadije i razjašnjavaju Arijanovu napomenu koja sugeriše da je Darije III uložio ogroman napor da ponovo naoruža redove hoplita.

* * *