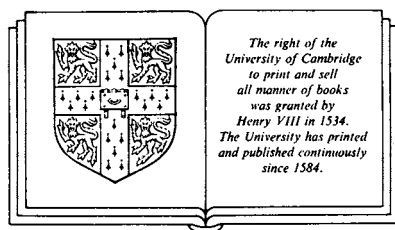


Judas Maccabaeus

THE JEWISH STRUGGLE AGAINST
THE SELEUCIDS

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Introduction: Deployment and tactics in field battles during the Hellenistic period

A brief survey of the combat methods of the Hellenistic period will make it easier for the reader to follow the discussion on the fundamental questions arising from the analysis of the courses of the battles. We shall deal here only with the two largest armies, the Seleucid and the Ptolemaic, omitting the Antigonid army of Macedonia, and also the small armies of the 'splinter' states like Epirus, Pergamum, Pontus, Cappadocia, Armenia, etc. Although these armies included most of the components of the Seleucid and Ptolemaic armies, they differed from the latter in the number of the various types of units, in the ethnic origin of the soldiers and the way they were recruited, as well as in the total number of troops at their disposal, and consequently also in the way they operated on the battlefield. It must also be remembered that only the Seleucid and Ptolemaic armies utilized war elephants, which had more than a minor influence on the deployment of forces and the planning of a battle.¹

¹ In the summary below of the armament and functions of the various tactical units only references relating to details and questions not sufficiently well known will be listed, and not those relating to matters familiar from the sources and that are generally accepted.

Notable among the many studies of the composition and operational methods of the Hellenistic armies are the comprehensive surveys in Rüstow and Köchly 1852: 336-435; Droysen 1888: 153-84; Kromayer and Veith 1926: 95-162. The last presents the conclusions deriving from Kromayer and Veith's five-volume comprehensive work analysing in detail the course of the chief battles fought in the Greek, Hellenistic and Roman worlds (1903-32). See also Couissin 1931: 65-93. A detailed treatment of the manpower sources of the Hellenistic armies, including recruitment methods, ethnic origin and tactical composition of the troops, appears in the monumental work of M. Launey, *Recherches sur les armées hellénistiques* (1949-50), which is also a mine of information on other questions, such as the armament of the Hellenistic armies, the service troops, the logistics and soldiers' pay, the social and civil status of soldiers of various categories, and the place of religious ritual in military life. Superior to it in analytical acumen and the critical view of the sources, though somewhat older, is Griffith, *The Mercenaries of the Hellenistic World* (1935), which deals also with the military settlements and the various units of allies and auxiliaries. The operational methods and tactics of the Hellenistic armies are the special subject of the excellent and fascinating work of W. W. Tarn, *Hellenistic Military and Naval Developments* (1930). On the basis of sundry papyrological material, there have been attempts to describe the structure of the Ptolemaic army, the most successful of which so far

The sources of information available to us are varied. They include primarily several dozen battle descriptions in the literary-historiographic works covering the Hellenistic period. As far as the Seleucid and Ptolemaic armies are concerned, the campaigns of Antiochus III, recorded by Polybius, are the most illuminating. In addition to battle descriptions, we have a number of treatises on the theory and art of warfare outlining mainly the composition of the various tactical units and sometimes also their deployment and operation on the battlefield. Noteworthy among them are the essays of the Tacticians – Aeneas Tacticus, Arrian, Onasander, Asclepiodotus – and Poly-aenus' collection of stratagems, the last being especially important as it gives succinct and reliable reports on many military episodes for which no other sources are available.

Besides the literary sources, there are papyrological and epigraphical material and archaeological findings: the many papyrus documents found in Egypt shed light on the structure of the units, the ethnic origin, and the table of organization of the Ptolemaic army, and consequently to an extent of the Seleucid army as well. The epigraphic documentation is scantier, and deals mainly with units of the Seleucid army and the military settlement system in Persia and Asia Minor. Especially valuable for an insight into the Hellenistic armies are the military regulations in regard to order and discipline, the practice in regard to sentry duty and patrols, maintenance of stores, handling of spoils, alertness, etc., in the tablets discovered in Amphipolis in Macedon and Chalcis on the island of Euboea, which reflect the practices of the Antigonid royal house during the reign of Philip V at the beginning of the second century B.C. The archaeological finds relevant to our subject include statuettes, reliefs, drawings on tombstones, walls and mosaic floors, as well as coins showing Hellenistic warriors with their typical weapons, and also war elephants. Of great importance are the tombstones uncovered in military cemeteries in Alexandria, Sidon, and Demetrias in northern Greece, and especially the reliefs depicting arms and armour in the balustrade of the precinct of Athena Polias Nicephorus at Pergamum. In recent years, at various Macedonian sites, discoveries have

is J. Lesquier's old book, *Les institutions militaires de l'Égypte sous les Lagides* (1911). On the composition and operational methods of the Seleucid army see Bar-Kochva 1979. A comprehensive bibliography up to 1928 on armies and war in the Greek and Roman world appears in the two Kromayer and Veith works (1903–32, 1926). A bibliography covering the period 1917–38, along with summaries and assessments, appears in Lammert 1941: 1–114. Partial bibliographies for the post-1938 years are provided in the principal works published since, especially Launey (1949–50). See recent valuable summaries in Lévêque 1968: 261–90; Garlan 1972; Préaux 1978: 1.295–357; Garlan 1984: 353–62; Pritchett's excellent *The Greek State at War* (1974–85) is also relevant to the Hellenistic period.

been made of actual weapons in a satisfactory state of preservation, dating from just before and from the start of the Hellenistic period. Those published have come mainly from the royal tomb at Vergina-Aegae (Lower Macedonia) which is attributed to Philip II.

The Hellenistic armies presented a splendid sight on the battlefield: sometimes they numbered tens of thousands of soldiers, and the front line stretched for several kilometres, with the soldiers deployed in very close order. Some of the tactical units included in the array were equipped with long pikes which made them look like a bristling porcupine, while others had large shields covering most of the soldier's body. The many horsemen and the elephants also contributed to the variegated picture. The shields of white, silver, gold and bronze created an extraordinary visual effect together with the scarlet tunic or jackets of most of the soldiers, and the uniforms of a number of units in black, golden yellow and blue (see Plates V, IX, X). The difficulties of coordination resulting from the extended front line were overcome by a ramified signalling system using flags and bugles, which in themselves added to the somewhat theatrical atmosphere. All these, together with the war cry and the din of the advancing troops, were designed to instil confidence and enthusiasm in the soldiers, and fear and dread in the enemy. Among the many accounts reflecting the special effect that the Hellenistic armies created and the shock they gave the enemy, especially noteworthy is Plutarch's description of Mithridates' army in the clash in Greece with Sulla:

The rest of the commanders... deployed the army for battle and filled the plain with horses, chariots, shields and oblong shields (*thyreoi*). The air could not contain the shouting and noise of so many nations that came together for the battle. The conspicuousness and splendour of their equipment too had the power and might to spread dread; the shining brilliance of the arms, marvellously decorated with gold and silver and the hues of the tunics of the Scythians and Medes blended with the gleam of copper and iron and created a frightening play of fire when the army moved and separated, so that the Romans cleaved to the palisade (*kharakōma*) before the camp. And Sulla, who with no word (of reasoning) could remove their astonishment, and did not want to force on them (a battle) they might flee from, waited idly and found it hard to bear the sight of the barbarians who insulted him with boasting and condescending laughter. (*Sulla* 16[2-6])

The units and their deployment

The basic Hellenistic battle deployment consisted of heavy infantry in the centre, cavalry that protected them on the wings, and light infantry who served as 'skirmishers' and were deployed in the centre in front of the heavy foot soldiers. Within the framework of the general pattern of the formation it was sometimes necessary to introduce changes and variations such as the placement of cavalry units between the heavy infantry in the centre, of light cavalry between the foot skirmishers, and the like. All these were sometimes augmented by war elephants and, more rarely, by scythed chariots. The position of the elephants varied from battle to battle depending on the terrain and the tactical requirements.

The infantry forces positioned in the centre comprised mainly phalangites, heavy units which were the backbone of the Hellenistic armies. Their main offensive weapon was the *sarissa*, the long Macedonian pike to which was added a short sword, and for defence a round shield, as well as a helmet and greaves or leg protectors (*knēmides*). The *sarissa* both characterized and shaped the deployment of the phalanx. In Alexander's time it was about 3.60 m long and then grew gradually longer, reaching about 6.30 m in the Hellenistic period. The *sarissa* was made of the flexible and strong cornel wood with some metal components. It weighed 6.7 kg (Plate I).² Because of its length, it was wielded with both hands. It is hard to know in exactly what position the *sarissa* was held at the ready. Some believe it rested on the shoulder or under the armpit, others that the soldier held it with his arms stretched forward and down. It has also been suggested that every row held it in a different position. Be that as it may, it is clear that on the battlefield the soldier stood with his left foot forward, holding the *sarissa* with both hands. Polybius reports that one hand, certainly the right, grasped it two cubits (*ca* 90 cm) from the back, and the distance between the two hands was also

² The various problems relating to the length, weight and manner of holding the *sarissa* were the subject of a number of dissertations in Germany in the late nineteenth and early twentieth centuries; a number of others deal with offensive and defensive weapons common in the Hellenistic period. The most valuable of these is Lammert's comprehensive work on the *sarissa*, a summary of which appears in *RE* (s.v. 'sarissa', cols. 2515–30). Objections have been raised to some of Lammert's assertions, especially that the different rows of the phalanx had *sarissai* of different lengths, which is contradictory to a definite statement of Polybius' (18.29.7). On these see also Walbank 1957–79: 2.588; and on his estimates of *sarissa* dimensions and weight (especially on the basis of metal parts found in Greece and Macedonia) see Markle 1977: 323ff.

90 cm. Thus the pike extended about 4.5 m from the soldier's left hand, that is, beyond the line. The phalanx soldiers were arrayed in the row in close order, being allotted only 90 cm each, including the distance to the next man, so that there was a space of about 45 cm between one soldier and the next.³ This great compactness provided among other things maximum protection for the soldier in the formation: his shield covered the left half of his body as he inclined forward and the shield of the phalangite to his right provided some protection from that angle.

The shield of the Macedonian phalangite differed from that of the Greek hoplite, so well known from Classical art. As the phalangite held the long *sarissa* with both hands, his shield was necessarily smaller and flatter than the *hoplon*. It was held in place by a strap that fitted around the warrior's neck, and a second strap fixed to its inner surface through which the phalangite threaded his arm. Generally called *peltē*, the shield had a diameter of about 60 cm (see Plate II).⁴ As to the material it was made of, in regular units the soldiers carried shields described as 'bronze shields' and in the elite units 'silver shields' and 'gold shields'. The latter were made of some metal simply plated with silver or brass respectively. It is also possible that these and the bronze shields, or some of them, were actually made of wood and covered with metal sheeting.⁵

³ Many scholars think that the distance between the phalanx soldiers was even smaller; see the recent work by Pritchett (1974: 1.145-54).

⁴ On the size ('eight palms') and form ('not too hollow') of the shield see Asclepiodotus 5.1; Aelian, *Tact.* 12. On the way that the *sarissa* was wielded and the shield held see Plut. *Cleom.* 11.2, *Aem.* 19.1-2. See also Couissin 1931: 76; Markle 1977: 326-31; contrary to Pritchett (1974: 1. 150-1) and others, who estimate the phalangite shield as 80 cm long or even more, that is, like the hoplite shield. For the term *peltē* for the phalangite shield, which itself indicates that it was smaller than the hoplon, see Plut. *Dem.* 49.2 (according to Polyaeus 4.9.3, Seleucus I was accompanied in that battle by the 'hypsaspists', that is, the Royal Guard of the phalangites), *Aem.* 19.1-2; Livy 42.51.4-5, 44.41.2 (*peltē* = *caetra*; see Livy 28.5.11, 31.36.1); *I. Lindos* II. 2, c 127; and even Polyaeus 4.2.10 (on the period of Philip II, influenced by the shield of the Hellenistic phalangites). The name 'peltasts' too, that Polybius applied to the Royal Guard in the Hellenistic kingdoms (see p. 414 below) which was composed of genuine phalangites, testifies to the size of their shield. The codex of Amphipolis contains the term *aspis* (Feyel 1935: 31, line 4), as in Philopoemen's phalanx (Plut. *Philop.* 9.5; cf. Polybius 11.9.5). Pausanias' statement (8.50.1) that the shield of Philopoemen's men was an *argive*, i.e. of the traditional hoplon type (noted in Snodgrass 1964: 184), if actually based on reliable information, certainly does not attest the size of the phalangite shield of the Macedonians proper. For additional examples of phalangite shields see Head 1911: 233; id. 1932: 62 n. 5; Schober 1933: pls. 14-15; Hatzopoulos and Loukopoulos 1980: 39, 60-1.

⁵ We have no explicit information indicating the use of a wooden base for the phalangite shields. There is, however, no reason to assume that the shields of the ordinary warriors, if not of the officers, differed in this respect from the Greek hoplite shields or the Galatian shields. Even the splendid ceremonial(?) shield attributed to Philip II that was found at Vergina was made of wood, and only the rim and a cruciform strut on the inner surface were of metal. On this

In some of the Hellenistic armies, the phalanx soldiers, or at least some of them, were equipped with metal coats of armour. That was the case with all of the phalangites of Philopoemen, the infantry commanders in the Antigonid army, and apparently also the picked units in the Seleucid phalanx. Other phalanx units may have used leather jackets. It may be that the provision of armour to certain units was decided for each battle according to the battleground and the enemy's armament.⁶ Made of thick heavy metal, the coat of armour covered the upper part of the body, and interfered with the mobility of the phalangite, which was in any case limited. It was chiefly valuable against projectiles from a distance and, if the phalanx rows were broken up, in hand-to-hand combat. In a clash with heavy forces, the shield was enough to parry the blow of a pike, although the armour offered some possibilities of manoeuvring in such a confrontation (see Plate III).

The phalanx was generally arranged in rows sixteen deep. For special cases an even greater depth is recorded, such as in the battle of Magnesia for which thirty-two rows are reported. The space between rows was quite small, about 90 cm. Thus the *sarissai* of the second row protruded 3.60 m beyond the first row of soldiers, those of the third 2.70 m, of the fourth 1.80 m, and of the fifth 90 cm. The soldiers of the sixth and following rows held their *sarissai* at an angle upwards, ready at any moment to lower them and join in the fray in place of those who were hurt or exhausted, and meanwhile also producing a kind of 'hedge' protecting the forward rows against arrows, sling-stones and the like.

From the description above it is clear that every soldier in the front line was preceded by five pikes, the forwardmost extending 4.5 m ahead of him. The front line was thus a tangled porcupine of pikes, with great offensive and defensive power. The *sarissai* provided maximum protection, preventing enemy soldiers equipped with shorter offensive weapons from approaching for hand-to-hand combat. The close order protected the individual phalangite and reduced

shield see Hatzopoulos and Loukopoulos 1980: 220. On the wooden hoplite shields see Anderson 1970: 16. On the Galatian wooden shield see the hint in Diodorus 5.30.2. Galatian shields made of small pieces of wood covered in felt were found in the Fayum in Egypt and Hjortspring in Denmark, see Kimming 1940: 106-11; Rosenberg 1927: 103-14. On the plating of shields with hammered silver see Polyaeus 4.16 (the reign of Antiochus II). On bronze, gold and silver shields see also pp. 325-7 below.

⁶ On the question of the phalanx soldier's body armour see Walbank 1940: 293; Griffith 1956-7: 3-10; id. 1979: 422-3; Bar-Kochva 1979: 54-6, 65-6; cf. Plut. *Philop.* 9; Polyb. 11.9.5; Arrian, *Tact.* 3.2; Asclepiodotus 1.2 and the tablets from Amphipolis (Feyel 1935: 31, l. 7).

the chances of injury from the side. In an assault, if it succeeded in keeping its structure intact, the phalanx could cleave and crush any close formation in its way, either infantry or cavalry, unless the enemy was similarly equipped.⁷

The phalangites were organized as follows: the basic unit was the column (*lokhos*), generally made up of sixteen soldiers. The smallest tactical unit in the battlefield was the *syntagma* with sixteen columns totalling 256 soldiers, and the largest was the *stratēgia* or *phalangarkhia* made up of 256 columns totalling 4,096 soldiers. At times the formation comprised more than ten *stratēgiai*. It is hard to know whether there was some room between the subdivisions of a *stratēgia* or just between one *stratēgia* and the next. In any case, a phalanx formation of 40,000 fighters, for instance, occupied an area at least 2.5 km wide.

The massive structure described had a number of weak points deriving from the utilization of the *sarissai*: the long pikes which engaged both the soldier's hands prevented him from entering into hand-to-hand combat with any enemy soldiers who managed to penetrate the wall of *sarissai*. The short sword he was doubtless provided with (e.g. the *kopis*: Arrian, *Anab.* 1.15.8) was supposed to help in hand-to-hand combat, but to use it he had to let go of the *sarissa* and that was liable to produce a further break in the protective wall of the phalanx. In order to avoid penetration of that sort and provide the formation with the greatest power in the offensive, it was necessary to insist on the dense deployment of the rows and columns. However, that structure could be properly maintained only on more or less level terrain, and even there at the expense of speed. In rugged and difficult terrain, gaps appeared in the phalanx, especially when it was advancing. These enabled an enemy with high mobility to penetrate and engage in hand-to-hand combat in which the phalanx soldiers were almost helpless. The necessity of maintaining the set formation also limited the manoeuvrability of the phalanx and made it difficult for it to defend itself against a concerted frontal and flank (or rear) attack, especially if the force attacking the flanks was a fast, mobile unit like cavalry. In the case of such a simultaneous attack, the phalanx was vulnerable on its flanks, as it operated only in a forward direction. An attack from the flank alone would not disrupt the

⁷ Data on the length of the *sarissa*, the distance between rows and soldiers, and on how far the *sarissai* extended beyond the front row are reported in detail in Polybius 18.29. The figures cited are based on the assumption that the Polybius cubit (*pēkhas*) was about 45 cm long. (Some reckon the Macedonian cubit was the equivalent of 46.2 cm, others 44 cm; for simplicity I have chosen to round off the figures to 45 cm.)

equilibrium of the phalanx because the whole formation could change direction and transform its flank into the front line.⁸

In order to counter a concerted assault on the phalanx, the Hellenistic armies deployed cavalry on both sides of the heavy infantry. Consequently the attacking cavalry had to strike at those flanking cavalry units before approaching the phalanx. That was the origin of the cavalry battles which played such a vital role in the wars of the period. When the phalanx formation was spread particularly wide, or when the surface abounded in obstacles which might produce dangerous gaps in the formation, cavalry units were deployed also at weak points within the phalanx formation in the centre of the battlefield. Cavalry was deployed among foot soldiers for the purposes of offence as well: in that way it was possible to locate easily gaps in the enemy's infantry line and reach them as rapidly as possible. If the wall of phalangites was pierced as a result of topographical conditions, uncoordinated advance, or heavy losses at certain points following protracted sniping by light skirmishers, the opposing cavalry could exploit the gap and penetrate the phalanx formation. Once inside, they could break up the phalanx from within in hand-to-hand combat where the cavalry also had the advantage of height and mobility. In addition to all the activities noted that were directly connected with the phalanx in the centre, the cavalry (if it was not too heavy), being mobile, was used to disrupt the enemy's mounted and unmounted skirmishers and snipers who endangered the integrity of the heavy foot formation by shooting from afar, and to break up semi-heavy foot formations, as well as for long-range pursuits.

The cavalry of the Hellenistic period can be classified in four categories: light, semi-heavy, heavy and 'super-heavy' or rather cataphracts (= 'covered with mail'). The lights included mounted archers and akontists who generally fought as skirmishers together with the light infantry in the front of the phalanx; we shall therefore deal with them later in the discussion on the skirmishers.

Units of 'semi-heavy' cavalry were made up of troops of various peoples who retained their traditional weapons. What was common to all was their relatively short offensive weapons and rather light defensive ones, facilitating rapid movement and action. Especially notable were the Thracians, who combined a thrusting spear about

⁸ Some of the chief advantages and disadvantages of the phalanx formation are discussed in Polybius' famous excursus (in his report on the battle of Cynoscephalae) in which he compares the Roman legion with the Macedonian phalanx (18.28-32; cf. Plut. *Fam.* 8.4-8). Polybius notes especially the phalanx's dependence on the structure of the terrain, and the difficulty of forcing a broad, level battle site on its foe. On the same passage see also p. 126 below.

a metre long with a long sword and javelins, and protected themselves and their horse with an oval shield, but had no metal body armour at all (see Plate IV). These cavalry units were deployed on the battlefield on the flanks and among the infantry in the same way as the heavier mounted units, and proved especially valuable in situations requiring speedy action. At times, however, they operated like the light cavalry, as 'skirmishers' wielding their javelins.

There were two categories of heavy cavalry. In the mother country, Macedon, some were supplied with the *hoplon*, the heavy round shield of the Classical period, which together with the helmet constituted their defensive equipment. For offensive purposes they had a spear the length of a man of average height or less, and a short sword.⁹ Yet the desire to lengthen the offensive weapon – expressed among the infantry by the use of the *sarissa* – was discernible in the cavalry as well. The second and more common type of heavy cavalry was armed with a *xyston* (a spear which judging by the illustrations of the period was as long as the *sarissa* of Alexander's heavy infantry: 3.6 m) and with the short sword.¹⁰ The extension of the pike made it necessary to discard the shield, and the horsemen were protected by a heavy solid metal cuirass as well as a helmet. The rider was able to hold and control the long pike on the move thanks to a loop at the horse's neck that supported the shaft (Plate V). The length of the offensive weapon turned these heavy horsemen into a kind of mobile phalanx which, when able to maintain a tight formation, was superior to semi-heavy and heavy infantry (i.e. hoplites, not phalangites) as well as to semi-heavy and heavy cavalry armed with short spears. The form and weight of the armour, however, restricted the horseman's movements, and the elimination of the shield made the horse and to a degree the rider's face as well more vulnerable. As to the offensive weapon, it was still short compared with the *sarissai* of the Hellenistic phalangites, so that the heavy cavalry were not capable of making a frontal attack against phalanx units that maintained their close formation.

The defensive deficiency of the heavy cavalry and the desire to

⁹ See, e.g., on the column erected by Lucius Aemilius Paullus at Delphi to commemorate the battle of Pydna, most recently published in Kähler 1965: 34, nos. 4, 9, 22, 26, and pl. 1. It is not clear from what has survived of the column whether the horsemen were also protected by suits of armour. One of the Macedonian horsemen (Kähler 1965: 34, no. 4, and p. 26) is wearing a tunic with leather strips, but that does not necessarily mean that he was equipped with a suit of armour, and in any case it is doubtful whether he had a shield.

¹⁰ Markle (1977: 333ff.) argues for a Macedonian cavalry pike equal in length to the infantry *sarissa* already by the time of Alexander. His calculations are based on the assumption that the rider must always have grasped the pike in the middle. This was not necessary, however (see Plate V); the loop at the horse's neck permitted considerable flexibility in wielding the pike.

form a mobile force that would have the advantage over the earlier types of heavy cavalry and be able to face the phalanx was remedied to an extent in the 'super-heavy' cavalry, the cataphracts. This combat style which originated in central Asia was introduced to the Near East following Antiochus III's anabasis in 210–206 B.C. The brilliant success of the cataphract cavalry in the battle of Panium (200 B.C.), in which they quickly bested the Ptolemaic heavy horsemen facing them and then attacked the phalanx from the rear, led to the reorganization of most of the mounted contingents in the Seleucid standing army (apart from the national contingents) to suit that combat method and equipment.¹¹

The precise equipment and combat method of the cataphracts in the Seleucid empire is not well known because of the paucity and brevity of the references to them. The only real information on their equipment appears in Livy's description of the deployment of the Seleucid army at the battle of Magnesia. After mentioning the cataphracts Livy states that next to them were the horsemen of the *regia ala*, one of the Royal Guard units, who were equipped with 'lighter armour for themselves and their horses' (37.40.12). Thus both the men and horses of the cataphracts were rather heavily armoured. And as the available illustrative material indicates a considerable increase in the length of the offensive weapon, it seems likely that that trend persisted in the new cavalry combat style as well. These conclusions make it possible to utilize the general information in the many pictorial and literary sources on cataphracts of the first to the third centuries A.D. who were similarly armoured, although in details (type and extent of armour, form of helmet, etc.) they differed as

¹¹ On the source and history of cataphract warfare see Rostovtzeff 1933: 217–21; Herzfeld 1920: 87ff.; Tarn 1930: 73ff.; Rubin 1955: 264–83; Eadie 1967: 162–8. On its introduction in the Mediterranean region by Antiochus III see Tarn 1930: 76. On the cataphracts in the battle of Panium see Bar-Kochva 1979: 156. In that battle the Seleucid right cavalry wing that tipped the scales was composed of cataphracts (and see Polybius 16.18.8). The retraining of all the cavalry in the Seleucid standing army for cataphract-style combat can be inferred from the deployment of the Seleucid cavalry (with the exception of the national contingents) at the battle of Raphia (217 B.C.) compared with their deployment at the battle of Magnesia (190 B.C.). At Raphia there were 6,000 regular Seleucid horsemen, of whom 2,000 were Royal Guard (on the permanent complement of the Royal Guard see Bar-Kochva 1979: 68ff.), all of them called simply 'cavalry' (Polybius 5.79.12; one Guard unit with no mention of its size appears in 5.84.1 and 5.85.12). At the battle of Magnesia, on the other hand, there were 6,000 cataphracts in addition to 2,000 Royal Guard (Livy 37.40.5–6, 11). As to the Royal Guard units, their retraining for cataphract warfare of a certain variety is suggested by Livy 37.40.11. At the Daphne procession the mounted standing army numbered as usual 2,000 Royal Guard, plus 1,500 cataphracts and 1,000 'Nisaeen horsemen' (Polybius 30.25.6–9). The latter rode Nisaeen horses, an especially large, strong breed, intended from the outset for cataphract combat (see Tarn 1930: 77–81, 156–7). On the identity and status of the other cavalry contingents that took part in the Daphne procession see p. 30 n. 3.

much from the Hellenistic cataphracts as they did among themselves.¹²

The unique aspect of the cataphracts, as their name indicates, was their defensive equipment: instead of a solid suit of armour and a shield, they were protected by scale armour which covered them from neck to knees, and by a helmet which covered the face. The horses too were amply protected by scale armour. As to their offensive weapons, they used a pike, the *kontos*, which was substantially longer than the heavy cavalry's *xyston*, and almost equalled the phalangite *sarissa* (Plate VI).

The extensive scale armour and long spear gave the cataphracts a number of advantages over the heavy cavalry. Their armour generally provided effective coverage against missiles, spears and pikes of various kinds (although the chain mail was by nature more penetrable than solid armour), and the pike enabled them to block the enemy's advance and attack at a greater distance. These advantages gave the cataphracts great confidence which facilitated bolder action. Their rapid advance made the thrust of the *kontos* more effective than that of the infantry *sarissa*, so that it was said to be possible to spear two enemy soldiers with one thrust. The infantry phalangite did have a defensive advantage, however, for each soldier in the front row had five *sarissai* before him, which terrified the horses too, while the cataphract had only his own *kontos*.

The defensive and offensive reinforcement inevitably led to an increase in weight. Compared with solid armour, the scale armour allowed greater flexibility to the upper part of the body, but its overall weight, the weight and length of the pike, and the horse's scale protection made it necessary for the cataphracts to rely on their close formation and to prefer level terrain. Furthermore, they were vulnerable to attack from the flank and rear no less than the phalangites. According to the later sources these difficulties were exploited by infantry units which assaulted the cataphracts from the flanks, attacking body parts of the riders and horses that were unprotected by armour (e.g. eyes, legs below the knees, and horses' bellies), grabbing the pikes and turning them so as to unseat the horseman who could no longer function, and the like. In order to avert such disasters, the cataphracts needed the protection on their

¹² On the equipment and combat method of the cataphracts see especially Rattenbury 1942: 113-16; Eadie 1967: 170-3. The main literary sources are Heliodorus, *Ethiopia* 9.15ff.; Plut. *Crass.* 18-19, 24-5, 27, *Luc.* 26-8; Cassius Dio 40.15.2; Ammianus Marcellinus 16.10.8ff., 25.1.12; Julian, *Or. in Constanti laudem* 1.37c ff., 2.57c; Suidas s.v. θώραξ. The description below of the cataphracts' equipment in the Hellenistic period is contrary to Rostovtzeff 1933: 218-21.