



# ARMY I. PRE-ISLAMIC IRAN

---

## ARMY

### i. Pre-Islamic Iran

*Introduction.* Source materials for a study of pre-Islamic Iranian military concerns fall into four categories: textual evidence; archeological finds of actual specimens of martial equipments; documentary representations (on monuments and objects of art); and philological deductions for organizational matters. The availability and value of these categories vary according to different periods. For the Avestan age no documentary depiction is at hand; the literary sources for the Achaemenid and Parthian epochs are mainly non-Iranian; and for the Sasanian time philological indications are even less significant. Therefore, in the study of these periods an ordered presentation is not easy, as each must be treated according to the evidence of the sources. Furthermore, the scope of the present article does not permit discussing several areas linked to Iranian history, namely the military concerns of the earliest Aryan settlements on the Iranian plateau, the Iranians of the steppes, the Macedonians of Iran, the Kushans, and of the Iranian kingdoms of Asia Minor in the Hellenistic age. Only the formative, early first millennium B.C. and the successive imperial epochs ending with the Arab invasion in the middle of the seventh century A.D. will be considered with regard to the formation, organization, equipments, tactics, and strategy of their respective armies.

1. *The Avestan period.* The military concerns of the “Avestan people”—the East



Iranians among whom Zoroaster appeared and the Avestan literature developed—can be gathered from scattered references found in the older parts of the Avestan texts supplemented by philological comparisons with Vedic terms and indications in later traditions (W. Geiger, *Ostiranische Kultur im Altertum*, Erlangen, 1882, pp. 438-50). The *Vendidad* gives (14.8-11) a list of twelve items for the fully equipped warrior, but this appears to reflect much later, maybe, even Sasanian practice, and so can not be used here. The Avestan society was broadly divided into three groups: priests, herdsmen, and warriors; for the latter the *Gāθās* used *nar* “man” hence “warrior,” while the Younger Avesta gave *raθaēštar* > *raθaēštā* “in chariot standing” hence “charioteer/mounted warrior” and by generalization “warrior” (E. Benveniste, “Les classes sociales dans la tradition avestique,” *JA*, 1932, pp. 117ff.; I. Gershevitch, *The Avestan Hymn to Mithra*, Cambridge, 1959, p. 170). Each clan provided a number of warriors, indicating its social standing; hence, “troops of warriors” were among the most cherished boons Iranians asked from their gods (Geiger, op. cit., p. 438). Blood-related warriors stood together under the banner (*drafša*) of the chief of the clan, so that the armed tribe was at the same time the tribal army (ibid., p. 439). Regional lords led the army (*spāda*: *Air Wb.*, col. 1617), arrayed its ranks (cf. *Yt.* 13.39), prayed to Mithra for victory (*Yt.* 10.8), and went to battle (*hamarana*) fully prepared (Geiger, op. cit., pp. 439-40). The military nobility fighting from their chariots formed the backbone of the *spāda*; common people gave battle on foot; horsemen (sing. *bāšar*: Benveniste, op. cit., pp. 353f.) also served in the army, at first occasionally, but then increasingly as the time went by (Geiger, op. cit., pp. 439ff., 353f.). The martial equipments of the “Avestan people” were the following: a spear (*aršti*) with edged, sharpened brass head, for throwing; a mace (*vazra*) often with metal head, used for striking, or sharpened angularly and used for throwing, fastened to the girdle; a short double-edged sword, made of brass and with ornamented hilt and blade, also fastened to the girdle; a bow with 30 brass-headed arrows; a *čakuša*, evidently a pole axe of metal used from either end; and a dagger (ibid., pp. 443-49). The defensive weapons included a coat of mail (*zrāda*) of uncertain pattern, probably consisting of metallic scales; a helmet, presumably leathern or metallic; and—on rare occasions—a shield (ibid., p. 444). Campaigns and battles were probably on a small scale, and the actual fighting very similar to the scenes described in the *Iliad*: the chariot-warrior was driven into the battlefield by a boon-companion, where he engaged the enemy while the charioteer managed the steeds and the cart; then they stood aside and let the bulk of the armies clash and decide the day (ibid., pp. 443f.).



2. *The first half of the first millennium B.C.* This is the period of the migration of Iranian tribes—breeders and trainers of horses—into Media, Persis, Carmania, Parthia, and other regions, and it is militarily characterized by the use of iron and the increasing employment of cavalry (R. Ghirshman, *Iran from the Earliest Times to the Islamic Conquest*, Harmondsworth, 1954, pp. 73ff.). Arriving with their women, children, and flocks, the Iranian horsemen settled the land, entered the service of local rulers and gradually supplanted the native aristocracy and formed political centers which eventually led to the formation of the Median and Achaemenid kingdom (*ibid.*, p. 76). Fortified strongholds appeared wherever the Aryans chose to settle, for instance over the mound of Siyalk, where the Necropolis B evidences the Aryan occupation in the early first millennium B.C. Here grave goods show that the warriors wore leathern helmets, and carried swords, daggers, shields, and bows with bronze—or iron—headed arrows while their horses had bronze or iron harness indicating the existence of cavalry units among the settlers (*ibid.*, pp. 79-80). The older social divisions still existed, since the tombs of the warriors at Siyalk Necropolis B, for example, were “bedecked with silver jewellery and furnished with a variety of weapons and tools, while others had only a few modest ornaments” (*ibid.*, p. 84). The weapons and harness were made of iron although bronze was also employed (*ibid.*, p. 87). Lorestān, for example, has produced long iron swords, bronze daggers, and picks, while from Siyalk, Ḥasanlū, Mārlik, and other sites iron arrow-heads, spear-heads and even remnants of bronze scale armor, helmets and ornamented harness pieces have come to light (R. Moorey, *Catalogue of the Ancient Persian Bronzes in the Ashmolean Museum*, Oxford, 1971, pp. 249ff.; I. J. Winter, *A Decorated Breastplate from Hassanlu, Iran*, University Museum Monograph 39, 1980).

In military actions the petty princes of Iranian settlers relied mainly on their cavalry units, and evaded formidable invaders—such as the Assyrians—by swiftly retreating to mountainous areas where chariots and infantry could not operate freely. Gradually, they forced imperial states to adopt their military armament and costume. Thus, the Assyrians, who lacked cavalry units in 860 B.C., began to organize mounted divisions, and soon gained mastery in this tactical force and subjugated or plundered vast areas of neighboring regions (Ghirshman, *op. cit.*, pp. 88-89; I. M. D’yakonov, *Istoriya Midii*, Moscow and Leningrad, 1956, pp. 156ff.). The Assyrian incursions into West Iran in turn helped local chiefs to unite, and so several Median states emerged in the eighth century B.C., which were ultimately incorporated into an empire. The Medes used the chariot sparingly and relied mainly on the cavalry (\**aspabāri*



attested in the proper name Aspabāra [Assyrian Išpabāra]: D'yakonov, op. cit., p. 222 n. 4) furnished with fine Nisean horses (see under Asb). Their martial equipments were the spear (*aršti*), the bow, the sword, and the dagger (Herodotus 1.103, 7.61-2). Their mountainous country and warlike nature contributed towards the development of a costume suitable for cavalry: tight-fitting trousers (often leathern) with an additional girdle from which a short sword (*acinaces*) suspended along the right thigh; a long tight tunic (leathern), and a felt round headgear (*tiara*) with cheek flaps and neck-guard, which could also cover the mouth; and a variegated long mantle (*\*kantuš*) thrown over the shoulders and clasped over the chest with empty sleeves suspended on the sides (Herodotus 7.61-2; Xenophon, *Cyropaedia* 1.3.2; 8.2.40.13f.). This Median costume rapidly gained popularity among other horse-breeding Iranians and—with slight modifications—became the general outfit of North Iranians (G. Walser, *Die Völkerschaften auf den Reliefs von Persepolis*, Berlin, 1966, pp. 70ff. and passim; G. Widengren, “Some Remarks on Riding Costume and Articles of Dress among Iranian Peoples in Antiquity,” in *Arctica, Studia Ethnographica Upsalensia* 11, 1956, pp. 228ff.).

Towards the end of the seventh century B.C., the Medes achieved remarkable military progress and success under their ablest king Cyaxares (Huvaxštra): “of him it is reported that he was still more warlike than any of his ancestors, and that he was the first to give organization to an Asiatic army, dividing the troops into companies, and forming distinct bodies of the spearmen, the archers, and the cavalry, who before his time had been mingled in one mass, and confused together” (Herodotus 1.103). This testimony shows that before Cyaxares the Medes went to war in tribal organization—every chief bringing and leading his infantry and mounted troops—and that the king drilled the forces into an army divided into tactical groups with unified weapons; he supplemented this with a battalion of siege-engines (D'yakonov, op. cit., p. 295). Having organized an army (*spāda*, attested in the proper name Taxmaspāda: Behistun 2.82, 85), and having supplemented it with Sacian archers (Herodotus 1.74), Cyaxares finally invaded Assyria and with Babylonian cooperation he overthrew that empire (D'yakonov, op. cit., pp. 223ff.). Two generations later, his great-grandson, Cyrus of Persis, united the Medes, Persians, and other Iranians and established the Achaemenid world-empire.

3. *The Achaemenid period.* The Achaemenid army is well known through descriptions by Herodotus, Xenophon, and Arrian as well as by illustrations on



Persepolitan and Greco-Persian monuments (see especially G. Rawlinson, *The Five Great Monarchies of the Ancient Eastern World* III, London, 1871, pp. 172ff.; E. Meyer, *Geschichte des Altertums* [1939 ed., Stuttgart] IV/I, pp. 63-73; W. Hinz, *Darius und die Perser* II, Baden-Baden, 1979, pp. 135-50). Of particular importance for the topic are the Greek representations of Persian warriors (A. Bovon, “La représentation des guerriers perses et la notion du barbare dans la I<sup>re</sup> moitié du V<sup>e</sup> siècle,” *Bulletin de correspondance hellénique* 87, 1963, pp. 579-602) and the evidence of the so-called Alexander Sarcophagus from Sidon (V. v. Graeve, *Der Alexandersarkophag und seine Werkstatt*, Berlin, 1970, pp. 95ff.). The Persians whom Cyrus united (Herodotus 1.125) did not possess a professional army: as in days of old, the “people” of a region was represented by its backbone, the “military force,” so the two words were used synonymously in one Old Persian term, *kāra* (cognate with Lithuanian *kārias/kāris* “war, army,” Gothic *harjis* “army,” and German *Heer* “army,” see W. Brandenstein and M. Mayrhofer, *Handbuch des Altpersischen*, Wiesbaden, 1966, p. 129), a sense still retained in the New Persian term *kas-o kār* “relatives and supporters.” At first the Achaemenid army consisted wholly of Persian warriors, and even when other regions were subjugated, Persians formed the nucleus of the imperial army (C. Hignett, *Xerxes’ Invasion of Greece*, Oxford, 1963, pp. 40ff.). Darius advises his successor: “If thus thou shalt think: “May I not feel fear of (any) other,” protect this Persian *kāra*; if the Persian *kāra* shall be protected, thereafter by the will of Ahuramazdā happiness shall come down uninterruptedly and eternally upon this royal house” (Darius, Persepolis e, 13ff.). With the expansion of the petty kingdom of Persis into a world-empire embracing all Iranian groups from Central Asia to the Danube, a standing army was formed from Persians, Medes, and closely related peoples, and an imperial army was organized by incorporating warriors of all subject nations. Persepolitan representations, and official Persian economic and military documents ultimately used by Herodotus (3.90ff.; 7.61ff.) prove that the closer a nation was to the Persians, the more it shared in the domination of the empire by paying less tribute but contributing more soldiers. Thus, the Medes who had the second position in the empire furnished more soldiers than others and indeed many of the imperial generals were chosen from the Medes (Mazares, Harpagus, Taxmaspāda, Datis, etc.). Then came the Sacians, Bactrians, Hyrcanians, and other East Iranian groups (see in general P. J. Junge, *Dareios I. König der Perser*, Leipzig, 1944).

The general term for the professional army was *spāda*. This consisted of infantry (*pasti*), cavalry (*asabāri* “horse-borne,” and occasionally *ušabāri*



“camelborne”), and charioteers (only the noblest warriors used the then obsolete but symbolic chariot), and a large number of camp followers (Rawlinson, op. cit., pp. 172ff.; Meyer, op. cit., pp. 64ff.; Hinz, op. cit., pp. 137ff.; M. Ehtecham, *L’Iran sous les Achéménides*, Freiburg, 1946 [revised Persian version: *Īrān dar zamān-e Haḳāmanešīān*, Tehran, 1976, pp. 57ff.]). From the moment they met the Greeks, the Persians incorporated subject or mercenary Greeks in their army (Ionians and Aeolians in the army of Cyrus: Herodotus 1.171; in the army of Cambyses: *ibid.* 3.1.25). As the time went by, not only Persian satraps in Asia Minor but also the Great King employed Greek mercenaries, each of whom received free board and a monthly wage (a gold Daric per month in 401 B.C., Xenophon, *Anabasis* 1.3.21). By the time of Alexander, these mercenaries had become a regular part of the *spāda* and their leaders had been incorporated into Iranian aristocracy (for Greek mercenaries in Persian service see H. W. Parke, *Greek Mercenary Soldiers*, Oxford, 1933; J. Roy, “The Mercenaries of Cyrus,” *Historia* 16, 1967, pp. 287-323; G. F. Seibt, *Griechische Söldner im Achaimenidenreich*, Bonn, 1977). They played a major role in Greco-Persian cultural relations, and helped an eastward expansion of Hellenism.

The size of the imperial army was never as large as the Greeks asserted. Careful examination of topography, logistics, organization of the *spāda*, and official battle orders enable historians to arrive at reasonable figures for Persian forces. Thus, Xerxes’ 3,000,000 fighting men (Simonides cited by Herodotus 7.228) or 2,641,610 soldiers and an equal number of attendants (Herodotus 7.185f.) are reduced to 70,000 infantry and 9,000 horsemen (Hignett, op. cit., p. 355); the 900,000-strong army of Artaxerxes II at Cunaxa (Xenophon, *Anabasis* 1.7.12) was in reality no more than 40,000 (E. Meyer, *Geschichte des Altertums* V [1921 ed., Stuttgart], p. 185), and the 1,040,000 soldiers of Darius III at Gaugamela (Arrian, *Anabasis* 2.8.8; 3.8.6) is brought down to 34,000 cavalry and some infantry (E. W. Marsdon, *The Campaign of Gaugamela*, Liverpool, 1964, p. 37). Unfortunately, historians have seldom paid attention to these exaggerations, accordingly, their judgments of Persian tactics, strategy, and motives have been impaired by faulty calculations (Hignett, op. cit., pp. 344ff.).

The organization of the *spāda* was based on a decimal system “far superior to anything on the Greek side” (Hignett, *ibid.*, p. 42) and was not employed in any Asiatic army until the Mongols (Hinz, op. cit., p. 135). Ten men composed a company under a *daθapati* (on the term see W. Hinz, *Altiranisches Sprachgut*



*der Nebenüberlieferungen*, Wiesbaden, 1975, p. 87 with literature); ten companies made up a battalion under a \**θatapati* (Hinz, op. cit., p. 240); ten battalions formed a division under a \**hazārapati* (J. Marquart, *Untersuchungen zur Geschichte von Eran I*, Göttingen, 1896, p. 57); and ten divisions comprised a corps under a \**baivarapati* (Marquart, op. cit., p. 19 n. 84). The whole *spāda* was led by a supreme commander (probably \**spādapati*, although a generalissimo with full civil authority was called \**kārana* [Greek *karanos*]; Xenophon, *Hellenica* 1.4.1-4), who was either the Great King himself or a trusted close relative or friend (e.g., Mazares the Mede led Cyrus' army and Datis the Mede that of Darius at Marathon). A characteristic of the Achaemenid period is that commanders and dignitaries participated in actual fighting, and many of them lost their lives in action (five of the eleven sons of Darius the Great fell on the front: Ariabignes [Herodotus 7.89], Achaemenes [ibid., 3.12; 6.7.], Arsames [Aeschylus, *Persae* 36f., 310], Abrocomas, and Hyperanthes [Herodotus 7.224]).

The training of the Persian nobility was arduous. As a youth, the Persian was schooled—in companies of fifty—in running, swimming, horse grooming, tilling the land, tending the cattle, making various handicrafts, and getting accustomed to standing at watch; he would be trained in the arts of the chase (both afoot and on horseback), archery, throwing the spear and javelin, and of sustaining forced marches in unfriendly climate (Strabo 15.3.18, 19; Herodotus 1.136, 9.122; Xenophon, *Cyropaedia* 1.2.9-11). At twenty he started his military profession (Herodotus 1.209; Strabo 15.3.19) which lasted till the age of fifty (Strabo 15.3.19) as a foot soldier or a rider. The elitist groups were trained for both tasks. Thus, Darius says proudly: “Trained am I both with hands and with feet. As a horseman I am a good horseman. As a Bowman I am a good Bowman both afoot and on horseback. As a spearman I am a good spearman both afoot and on horseback” (Darius, Naqš-e Rostam b, 40-45, tr. Kent, *Old Persian*, p. 140). The foot soldier carried a short sword (*acinaces*), a spear with wooden shaft and metal head and butt, a quiver full of arrows of reed with bronze or iron heads, and a bow about one meter long with ends formed in animals' heads, and a case which combined the bow-case and quiver-holder (Herodotus 7.61, cf. Rawlinson, op. cit., pp. 174ff.; Hinz, *Darius und die Perser* II, pp. 140ff.). A symbol of kingship and the Iranian national arm, the bow was held in the hand of the Great King on his tomb and coins. Battle-axe was also used, especially by North Iranians (Walser, *Die Völkerschaften*, pp. 65, 93ff.). For protection, the infantryman relied on his wicker shield (made of sticks evidently threaded through a wet sheet of leather capable of stopping arrows:



P. H. Rahe, “The Military Situation in Western Asia on the Eve of Cunaxa,” *American Journal of Philology* 101, 1980, pp. 82f.). The shield was either small and crescent-shaped or large and rectangular; the latter could be planted in the ground allowing the archer to discharge his arrows from behind it (Herodotus 9.61, 102). Some guards carried the large “figure-of eight”-shaped shield known as the Boeotian, while the Gandharans carried round shields not dissimilar to those of Greek hoplites (Walser, op. cit., pls. 28, 77; Hinz, op. cit., pl. 14). Some Persians wore metal helmets, but only the Egyptians and the Mesopotamian contingents wore armor for body protection (Hignett, op. cit., p. 44 with references). The elite infantry had variegated costumes: either the fluted hat, short cape over a shirt, pleated skirt and strapped shoes of the Elamite court dress, or the conical felt hat, tight-fitting tunic and trousers and boots of the Median cavalry suit. One division of the infantry comprised “one thousand spearmen, the noblest and bravest of the Persians” who formed a special royal guard; their spears had golden apples as butts from which they were called the Apple-bearers (Herodotus 7.41). As a prince, Darius served in this guard of spearmen under Cambyses (Herodotus 3.139). Their commander was the *hazārapati* of the empire, who, as the officer next to the king, possessed vast political power (F. Justi, “Der Chiliarch des Dareios,” *ZDMG* 50, 1896, pp. 659-64; Marquart, op. cit., pp. 57-63; P. J. Junge, “Hazārapatiš,” *Klio* 33, 1940, pp. 13-39; E. Benveniste, *Titres et noms propres en iranien ancien*, Paris, 1961, pp. 67-70). All members of this guard fell at Plataea defending their position (Herodotus 9.63). One corps of the *spāda* consisted of ten thousand elite Iranian foot soldiers, the so-called “Immortal Guard,” whose “number was at no time either greater or less than 10,000” (Herodotus 7.87 where his “Persians” must be understood in the sense of Iranians, as Persis alone could not furnish such an army). These had variegated costumes (A. T. Olmstead, *History of the Persian Empire*, Chicago, 1948, pp. 238-39 describes the dress) and acted as the Imperial Guards (Herodotus 7.41). “Of these one thousand carried spears with golden pomegranate at the lower end instead of spikes; and these encircled the other nine thousand, who bore on their spears pomegranates of silver” (Herodotus 7.41). The cavalry had been instrumental in conquering subject lands, and it retained its importance to the last days of the Achaemenid empire. The horseman was equipped more or less like the foot soldier; but he carried two javelins, one for throwing and one for fending—at least this was the case in Xenophon’s time—(*Anabasis* 1.8.3; *The Art of Horsemanship* 12. 12). Some wore metal helmets and padded linen corselets covered with metal scales (the Chwarazmians had formed heavy cavalry units—predecessors of the Parthian *Cataphracti*—by Cyrus’ time: B.



Rubins, “Die Entstehung der Kataphraktenreiterei im Lichte der chorezmischen Ausgrabungen,” *Historia* 4, 1955, pp. 264f.; for remnants of lamellar armor from Persepolis see E. F. Schmidt, *Persepolis II*, Chicago, 1957, p. 100 with pl. 77). A Babylonian document dated to the second year of Darius II lists the requirements of a horseman as follows: a horse along with its girdle (?) and bridle, a helmet, a cuirass of iron, a bronze shield, 120 arrows, a mace of iron, and two iron spears (E. Ebeling, “Die Rüstung eines babylonischen Panzerreiters nach einem Vertrage aus der Zeit Darius II,” *ZA*, N.F. 16, 1952 pp. 204-13, esp. p. 210). There were also units of camel-borne troops, and some riding chariots and scythed-chariots, but these were very seldom effective against massed infantry. At Gaugamela 15 elephants were also present but their action is not recorded (Arrian, *Anabasis* 3.8). Various divisions bore particular standards (Herodotus 9.59), but the imperial banner was a golden eagle with outstretched wings borne on a spear at the side of the commander-in-chief of the army (Xenophon, *Anabasis* 1.10.12, Q. Curtius 3.3.10).

Apart from the standing army, the rest of the levies were recruited when the need arose, and it took a long time, sometimes years, to muster a grand army. There were many Persian garrisons in important centers of the empire, and satraps and governors also had their guards and local levies, but these could not be depleted to form an army on short notice because the danger of revolt was always present. Tribal troops, especially from East Iran, were more readily available. Levies were summoned to a recruiting station (*\*handaisa*, Hinz, *Altiranisches Sprachgut*, p. 115) where they were marshaled and reviewed. Campaigns usually started in early spring (Herodotus 4.43, 7.37, cf. 1.190). Provisions were stored at various magazines along the route of the army, and were also brought with it in baggage-trains (Rawlinson, *op. cit.*, pp. 192f.; Meyer, *op. cit.*, pp. 66ff.). Royal and religious emblems accompanied the center of the army where the commander had his position: the eagle standard and the holy fire in portable fireholders attended by Magi chanting hymns, and the sacred chariots of Miθra, Ahura Mazdā and others (Herodotus 7.40; Xenophon, *Cyropaedia* 8.3.12; Q. Curtius 3.8.11). Mounted scouts were sent in advance to watch the enemy’s movements (Xenophon, *Anabasis* 1.7.11; Arrian, *Anabasis* 2.8). There was also an excellent system of communication: couriers on the royal road changed horses at short intervals and speedily conveyed their messages to their destinations (Herodotus 8.98); also by their light and mirror signals the kings in Susa and Ecbatana received the news from the whole empire—it is claimed—on the same day (Aristotle, *de Mundo* 398<sup>a</sup>). Fire signals communicating the news from towers and heights were widely used



with good results (Hinz, *Darius II*, p. 146). Fortified gates were set up in narrow passes leading into various provinces not only for custom checks but also for stopping the advance of an enemy (e.g. Cilician Gates: Xenophon, *Anabasis* 1.2.21; Arrian, *Anabasis* 2.4; The Caspian Gates, Arrian, *ibid.*, 3.2.; The Persian Gates: *ibid.*, 3.18.2). The Persians disliked night marches and did not attack at night; their daily marches were, however, in slow pace because of the heavy baggage-train which often comprised litters for conveying the wives and concubines of the commanders (Rawlinson, *op. cit.*, pp. 188ff, with references). When night fell, they encamped in a flat area, and if they were approaching the enemy, they dug a ditch and set up ramps of sand-bags around it (*ibid.*, pp. 190f.). Rivers were forded by using rafts, boat-bridges, or inflated skins or simply by riding across on horses and camels (Herodotus 1.90.208; Xenophon, *Anabasis* 1.2.5; Darius, Behistun 3.86ff.).

Before the battle (*hamarana*), a council of war was held and plans of action discussed. The line of battle was usually drawn up as follows: the foot archers were stationed in the front, flanked by cavalry and supported by light-armed and heavier-armed infantry. The commander-in-chief occupied the center, observing the lines and directing the actions from an elevated point, where he was best protected, and his orders were received by both wings at the same time. When the battle was joined the archers discharged their arrows, and the slingers (there were units of them: Xenophon, *Anabasis* 3.3.6, 4.16; Q. Curtius 4.14; Strabo 15.3.18) threw their stone missiles (lead missiles with longer range became fashionable from 400 B.C., and an actual lead bullet bearing the name of Tissaphernes in Greek has survived: C. Foss, "A Bullet of Tissaphernes," *Journal of Hellenic Studies* 95, 1975, pp. 25-30). The aim was to throw the enemy lines into confusion. The effective range of the Persian archer was about 120 yards (Hignett, *Xerxes' Invasion of Greece*, p. 44 with n. 6). Then the heavier infantry with spear and sword moved in, supported by cavalry attacking the flanks. These tactics worked well against Asiatic armies, but failed against heavy-armed Greek infantry (hoplites) and Macedonian phalanxes: the arrows were simply stopped by the body armor and the huge shield of the hoplites, and once the hand to hand combat began, no amount of personal bravery could compensate for the Persians' lack of armor and their inferior offensive weapons (see especially W. W. How, "Arms, Tactics, and Strategy in the Persian Wars," *Journal of Hellenic Studies* 43, 1923, pp. 117ff.; Hignett, *op. cit.*, pp. 40ff. with extensive documentation; Rahe, *op. cit.*, 79ff.). At the battle of Plataea, for instance, a fierce hand-to-hand combat raged between the Persians and the Greek hoplites: The Persians "many times seized hold of



the Greek spears and broke them; for in boldness and warlike spirit the Persians were not a whit inferior to the Greeks; but they were without shields, untrained, and far below the enemy in respect of skill in arms. Sometimes singly, sometimes in bodies of ten, now fewer and now more in number, they dashed forward upon the Spartan ranks, and so perished” (Herodotus 9.62). Another weakness of the Persians was the attitude towards their commander: with an able and farsighted general, they displayed unsurpassed courage, but the same men took to disorderly flight as soon as the commander was killed or forced to flee (Rawlinson, *op. cit.*, pp. 186-87 with references). Knowing that the Great King was the heart of his army, Cyrus the Younger ordered Clearchus—his Greek mercenary leader—to attack the center where the Great King was stationed: “and if,” he said, “we are victorious there, our whole task [of defeating his army] is accomplished,” (Xenophon, *Anabasis* 1.8.12-13).

Cyrus the Younger who knew both the Persian and Greek armies, tactics and strategies, nearly succeeded in removing Persia’s military weaknesses. He supplemented his Asiatic force with a large army of Greek hoplites, formed battalions of heavy cavalry which wore helmets, breast-plates, and thigh-guards (this protected the sides of the horse as well), and carried a Greek sword in addition to their own arms; their horses too were protected with frontlets and breast-pieces (Xenophon, *Anabasis* 1.8.6, cf. *The Art or Horsemanship* 12.8-10 and P. Bernard in *Syria* 41, 1964, pp. 195-216; J. K. Anderson in *Journal of Hellenic Studies* 80, 1960, p. 9; A. Sh. Shahbazi, *Irano-Lycian Monuments*, Tehran, 1975, pp. 140-42). He made effective use of the coordination of heavy cavalry and heavy infantry—an art which later Agesilaus and especially Alexander employed to the fullest and with the best results. It must be remembered, however, that the effectiveness of the Persian shock cavalry was severely hampered by the lack of stirrup and the saddle. “Encumbered with a corslet of scale armor and poised precariously atop his steed, the horseman kept his seat only through the pressure of his knees. He will have been in serious danger of being unhorsed whenever he delivered a blow with his saber or came within reach of an enemy soldier” (Xenophon, *Anabasis* 3.2.18-19; cf. Rahe. *op. cit.*, p. 85).

The Persians gave quarter to the adversary who requested it, and usually treated their captives with respect and kindness. Noble prisoners were accorded due honor, and princes treated royally. Even rebellious peoples were deported only to be given new lands and houses and enrolled as ordinary subjects. Personal valor was greatly esteemed, and special boons were



conferred on brave servants of the empire (Rawlinson, op. cit., pp. 193ff. with references). Records of battles were kept, detailing the course of an engagement and casualty figures (Darius, Behistun 1-5). The commander-in-chief's scribe wrote down distinguished deeds of warriors: "During the whole battle Xerxes sat at the base of the hill..., and whenever he saw any of his own captains perform any worthy exploit he inquired concerning him, and the man's name was taken down by his scribe, together with the names of his father and city" (Herodotus 8.90). In the same way Darius recorded the names of his six helpers, together with those of their fathers and nationality, adding: "Thou who shalt be king hereafter, protect well the family of these men" (Behistun 4.80ff.). In 335 B.C. both Athens and Thebes sought Persian help, and the ambassadors of the latter city were received with the greatest honor at the royal court and their wishes were granted on the account that their forebears had rendered military assistance to Xerxes 150 years earlier (Diodorus 17.14).

4. *The Parthian Period.* The Greco-Persian wars and Alexander's victories proved that light-armed troops could not stop heavy, well-trained, and brilliantly led infantry of the type of hoplites or phalanx. These could only be encountered with heavily armed and highly professional cavalry causing disorder in the massed ranks and then attacking them on vulnerable points with bowshots capable of piercing armor and lances effective against shields. This lesson went home with the Parthians who in ousting the Seleucids from Iran had ample opportunity to experience the effect of heavily armed professional infantry led by Macedonian kings, and soon came to learn about the armament, tactics, and strategy of the Roman empire as well. So they formed their armies on sound bases, taking into consideration what was needed and what was available to them.

In extent, the Parthian empire was smaller than that of the Achaemenids; it was also far less centralized. It lacked, for instance, a standing army (Herodian 3.1). There were of course the garrisons of towns and forts as well as armed retinues of tribal chiefs, feudal lords, and of the Great King himself, but these were limited and disunited. The military concerns were conditioned by the feudal system: when the need arose, the Great King appealed to his subordinate kings (there were 18 of them at one time: Pliny, *Natural History* 2.26), regional, and tribal lords and garrison commanders to muster what they could and bring them to an appointed place at a given time (Herodian, loc. cit.). The feudal lords and officials brought the mustering levies (*\*hamspāh*: E. Herzfeld, *Altpersische Inschriften*, Berlin, 1938, pp. 313f.), and sometimes



supplemented them with foreign mercenaries (Josephus, *Jewish Antiquities* 18.9.2, 22.3.4; on the mercenaries in general see J. Wolski, “Le rôle et l’importance des mercenaires dans l’état parthe,” *Iranica Antiqua* 5, 1965, pp. 103ff.). The backbone of the army (Parth. *spā’*) and the chief power of controlling the empire consisted of the Parthians themselves. Accustomed from an early age to the art of horsemanship and skilled in archery, the Parthian secured a reputation that is still echoed in the Persian term *pahlavān* (< Pahlav < Parθava) while Parthian tactic and shooting are exemplary in military histories.

The nature of their state and political conditions combined with lessons of history enforced an unusual military structure in Parthia: North Iranian nomads constantly threatened eastern borders while in the west first the Seleucids and then the Romans were ever ready for full-scale invasions. Any stratagem against such a double danger required rapid mobility for going from Armenia to the Jaxartes on short notice; and the solution the Parthians found was to rely on cavalry (*asbārān*; *’sb’r* attested in Nisa documents; V. G. Lukonin in *Camb. Hist. Iran* III/2, 1983, p. 700). It is true that Parthian armies did have foot soldiers, but their numbers were small and their function insignificant (Plutarch, *Crassus* 19; Appian, *Bella civilia* 2.18). On tactical considerations, too, only the cavalry could be useful to the Parthians, for the nomads of the east could easily break through any infantry that the Parthians were able to muster, while no Parthian infantry could have matched the Roman phalanxes on the western front. The Parthian nobles (*āzāt*, misunderstood by Greek and Roman sources as “free-men,” Lukonin, loc. cit.) formed the army by bringing along their dependants (misunderstood by Greek and Roman sources as “slaves,” Lukonin, *ibid.*). The example *par excellence* was Sūrēn who was not yet thirty years old when he vanquished Crassus: he came escorted by a thousand heavy-armed horsemen and many more of the light-armed riders, so that an army of 10,000 horsemen was formed by his bondsmen and dependants (Plutarch, *Crassus* 21 ). 400 Parthian *āzāts* threw an army of 50,000 mounted warriors against Mark Antony (Justin 41.2).

Experience had shown that light cavalry—armed with a bow and arrows and probably also a sword—was suitable for skirmishes, hit-and-run tactics, and flank attacks, but could not sustain close combat (Justin, loc. cit.; Plutarch, *Crassus* 24; G. Rawlinson, *The Sixth Great Oriental Monarchy*, London, 1873, p. 405). For the latter task, heavy cavalry (cataphracti) was formed, which wore steel helmets (Plutarch, *Crassus* 24), a coat of mail reaching to the knees and



made of rawhide covered with scales of iron or steel that enabled it to resist strong blows (ibid., 18, 24, 25; Justin, loc. cit.; on the description of the armor worn by the cataphracti given by the third-century story writer Heliodorus of Emesa, *Aethiopica* 9.15, see F. Rundgren, “Über einige iranische Lehnwörter im Lateinischen und Griechischen,” *Orientalia Suecana* 6, 1957, pp. 31-65 esp. pp. 33ff. with references). This was akin to the lamellar armor of the Sacians of the Jaxartes who in 130 B.C. overthrew the Greco-Bactrian kingdom (A. D. H. Bivar, “Cavalry Equipment and Tactics on the Euphrates Frontier,” *Dumbarton Oaks Paper* 26, 1972, pp. 273f.). The charger too was covered from head to knees by armor made of scale armor said to have been of steel or bronze (Justin, loc. cit., Plutarch, *Crassus* 24). An actual example of this horse-armor was found at Dura Europos (M. I. Rostovtzeff, *The Excavations at Dura-Europos: Preliminary Report of the Second Season*, New Haven, 1931, pp. 194ff.), while a famous graffito of the Parthian cataphract from the same site clearly demonstrates his full panoply (idem, *Caravan Cities*, Oxford, 1932, p. 195; F. E. Brown, “Sketch of the History of Horse Armor,” in M. I. Rostovtzeff and A. R. Bellinger, eds., *The Excavations at Dura-Europos: Preliminary Report of the Sixth Season of Work*, New Haven, 1936, pp. 444ff.). For offensive weapons the cataphract had a lance and a bow. The spear was of unusual thickness and length (Plutarch, *Crassus* 27, *Antony* 45; Dio Cassius 40.22; Herodian 4.30), and was used with such skill—relying on its weight—and power that it “often had impetus enough to pierce through two men at once” (Plutarch, *Crassus* 27). The bow was of the powerful and large compound type which outranged Roman weapons and its arrows, shot with swiftness, strength, and precision, penetrated the armor of the legionaries (Plutarch, *Crassus* 18, 24; see further Rawlinson, op. cit., p. 404; N. C. Debevoise, *A Political History of Parthia*, Chicago, 1938, p. 86; F. E. Brown, “A Recently Discovered Compound Bow,” *Seminarium Kondakovianum* 9, 1937, pp. 1-10). The cataphract was probably equipped with a knife as well (Rawlinson, loc. cit.). So armed and thus skilled, he was one of the ablest and most feared soldiers of antiquity (on the cataphract see in more detail O. Gamber, “Grundriss einer Geschichte der Schutzwaffen des Altertums,” *Jahrbuch der kunsthistorischen Sammlungen in Wien* 52, 1966, pp. 7ff. esp. pp. 49-52; idem, “Katafrakten, Clibanarii, Normanenreiter,” ibid., 64, 1968, pp. 7ff.; B. Rubins’s summary of *Drevniĭ Khorezm* by S. P. Tolstov, Moscow, 1948, in *Historia* 4, 1955, pp. 264ff.). The Parthian army was at times additionally supported by camel-borne troops (Herodian 4.28, 30). The animal could bear the weight of the warrior and his armor better and endure harshness longer than the horse; also, the archer could discharge his arrows from an elevated position. These would have made



the division very desirable had it not been greatly hampered by Roman caltrop (*tribulus*) which, scattered on the battlefield, injured the spongy feet of the animal (*ibid.*).

The Parthian tactic was that of harassing the enemy by the hit-and-run action, dividing his forces by pretending retreat and enticing pursuit but then turning unexpectedly back and showering the foe with deadly arrows, and, finally when he was reduced in number and courage, to surround him, and destroy him with volleys of missiles. The tactic was thus unfavorable to close combat operation, and inefficient in laying siege to forts and walled towns; nor could the Parthians sustain long campaigns, especially in the winter months (Rawlinson, *op. cit.*, pp. 406ff.). Since they lacked siege-engines, the Parthians made no use of Roman machines whenever they captured them (Plutarch, *Antony* 38). And since the army was composed mainly of the dependants of the *āzāts*, it had to disband sooner or later and go back to the land and the crops. The Parthian general desired to bring to a close a campaign as soon as possible and return home. When the Great King led the army this haste was doubled by the fear of insurrection at home, the frequency of which was the greatest weakness of the Parthian empire. The battle was furious: war cries and kettledrums resounded from all sides, setting fear in enemy ranks (Plutarch, *Crassus* 23, 26; Justin 41.2; Herodian 4.30); mounted on the light horse the archers showered the enemy with volley after volley, and then retreated but again turned back to shoot while the charger was at full gallop—an ancient art which came to be known as “the Parthian shot” (M. L. Rostovtzeff, “The Parthian Shot,” *AJA* 47, 1943, p. 174ff.). Then the shock cavalry (cataphracts) moved in, still avoiding hand-to-hand combat but picking up the enemy with their missiles and piercing them with the heavy lance. Charging on large and trained war horses (see under *Asb*), of which some were brought as reserves (Dio Cassius 41.24), the Parthians avoided the deficiency of the Achaemenid cavalry by carrying camel-loads of arrows for use in the field as soon as their archers ran out of their own; this enabled sustained and effective long-range engagements and reduced the number of the enemy rapidly (Plutarch, *Crassus* 25, see further Rawlinson, *op. cit.*, pp. 160f.; 402ff.).

The organization of the Parthian army is not clear, and lacking a standing force, a strict and complicated organization was unnecessary in any case. The small company was called *wašt*; a large unit was *drafš*; and a division evidently a *gund* (G. Widengren, “Iran, der grosse Gegner Roms: Königsgewalt, Feudalismus, Militarwesen,” in H. Temporini and W. Haase, eds., *Aufstieg und*



*Niedergang der römischen Welt* II/9.1, 1976, 220ff. esp. pp. 281f.). The strength of a *drafš* was 1,000 men (Lucian cited by A. Christensen, *Smeden Kāvāh og det Gamle Persiske Rigsbanner*, Copenhagen, 1919, pp. 23f. [tr. J. M. Unvala, “The Smith Kaveh and the Ancient Persian Imperial Banner,” *Journal of the Cama Oriental Institute* 5, 1925, pp. 22ff. esp. p. 37 n. 2]), and that of a corps 10,000 (cf. Sūrēn’s army). It seems, therefore, that a decimal grade was observed in the organization of the army. The whole *spā’* was under a supreme commander (the Great King, his son, or a *spā’pat*, chosen from the great noble families). The largest army the Parthians organized was that brought against Mark Antony (50,000: Justin 41.2). At Carrhae the proportion of the lancers to the light horse was about one to ten, but in the first and second centuries the number and importance of the lancers as the major actors of the battle-field increased substantially (Bivar, op. cit., pp. 274-75). The Parthians carried various banners, often ornamented with the figures of dragons (Christensen, op. cit., tr. Unvala, pp. 37f.), but the famous national emblem of Iran, the *Drafš-e Kāvīān*, appears to have served as the imperial banner (ibid., p. 39). The Parthians marched swiftly but very seldom at dark (Plutarch, *Crassus* 29; *Antony* 47). They used no war chariots, and confined the use of the wagon to transporting females accompanying commanders on expeditions (Rawlinson, op. cit., p. 409).

The Parthian period holds an important place in military history. Several Parthian kings—including the first and the last—fell in action, and their three century-long conflicts with Rome had profound effects on Roman military organization. For they not only succeeded in repulsing repeated Roman attempts at the conquest of Iran, but they inflicted severe defeats—even in their last days—upon the Roman invaders; and to face the long-range fighting tactics of the Parthian armored cavalry and mounted archers, the Romans started to supplement their armies of heavy and drilled infantry with auxiliary forces of riders and bowmen, thereby increasingly modifying traditional Roman arms and tactics (for details see E. Gabba, “Sulle influenze reciproche degli ordinamenti militari dei Parti e dei Romani,” in *La Persia e il mondo greco-romano*. Rome, 1966, pp. 51ff.). The Parthians finally submitted to an Iranian dynasty which had close links with them and retained the power of their nobility, one reason for their defeat being that while they still wore the old style lamellar armor, the Sasanians went to battle with the Roman type mail shirt, i.e., armor of chain links, which was more flexible and afforded better protection (Bivar, op. cit., p. 275).



5. *The Sasanian period.* The Iranian society under the Sasanians was divided—allegedly by Ardašīr I—into four groups: priests, warriors (*artēštār*), state officials, and artisans and peasants. The second category embraced princes, lords, and landed aristocracy (Christensen, *Iran Sass.*, p. 98), and one of the three great fires of the empire, Ādur Gušnasp at Šīz (Taḳt-e Solaymān in Azarbaijan) belonged to them (*ibid.*, pp. 166f.). With a clear military plan aimed at the revival of the Persian empire (Dio Cassius 80.4.2; Herodian 6.2.2), Ardašīr I formed a standing army which was under his personal command and its officers were separate from satraps and local princes and nobility (Agathangelos [Greek version] 1.8). Ardašīr had started as the military commander of Dārābgerd (Ṭabarī, tr. Nöldeke, *Geschichte der Perser*, p. 5), and was knowledgeable in older and contemporary military history, from which he benefited, as history shows, substantially. For he restored Achaemenid military organizations, retained Parthian cavalry, and employed Roman-style armor and siege-engines, thereby creating a standing army (Mid. Pers. *spāh*) which served his successors for over four centuries, and defended Iran against Central Asiatic nomads and Roman armies (Christensen, *op. cit.*, p. 207).

The backbone of the *spāh* was its heavy cavalry “in which all the nobles and men of rank” underwent “hard service” (Ammianus Marcellinus 23.6.83) and became professional soldiers “through military training and discipline, through constant exercise in warfare and military manoeuvres” (*ibid.*). From the third century the Romans also formed units of heavy cavalry of the Oriental type (Rundgren, *Orientalia Suecana* 6, 1957, pp. 35ff.); they called such horsemen *clibanarii* “mail-clad [riders]” (e.g. Ammianus Marcellinus 16.10.8), a term thought to have derived from an Iranian \**grīwbānar* < \**grīwbānwar* < \**grīva-pāna-bara* “neck-guard wearer” (Rundgren, *op. cit.*, pp. 48f., evidently unaware that the Pahlavi *grīwbān* “neck-guard” is attested in *Vendidād* 14.9: A.V. W. Jackson, “Herodotus VII. 61, or the Arms of the Ancient Persians Illustrated from Iranian Sources,” in *Classical Studies in Honour of Henry Drisler*, New York, 1894, pp. 95ff., esp. p. 118). The heavy cavalry of Šāpūr II is described by an eye-witness historian as follows: “all the companies were clad in iron, and all parts of their bodies were covered with thick plates, so fitted that the stiff joints conformed with those of their limbs; and the forms of human faces were so skillfully fitted to their heads, that since their entire body was covered with metal, arrows that fell upon them could lodge only where they could see a little through tiny openings opposite the pupil of the eye, or where through the tip of their nose they were able to get a little breath. Of these some who were armed with pikes, stood so motionless that you would



have thought them held fast by clamps of bronze” (Ammianus Marcellinus 25.1. 12-13, cf. 24.6.8). The described horsemen are represented by the seventh-century knight depicting Ƙosrow Parvēz on his steed Šabdīz on a rock relief at Ʀāq-e Bostān in Kermānšāh (E. Herzfeld, *AMI* 9/1938, pp. 91ff.). Since the Sasanian horseman lacked the stirrup (A. D. H. Bivar, “The Stirrup and its origins,” *Oriental Art*, N.S. 1, 1965, pp. 61-65), he used a war saddle which, like the medieval type, had a cantle at the back and two guard clamps curving across the top of the rider’s thighs enabling him thereby to stay in the saddle especially during violent contact in battle (E. F. Schmidt, *Persepolis III*, Chicago, 1970, p. 135). The inventory of weapons ascribed to Sasanian horsemen at the time of Ƙosrow Anōšīravān (Ʀabarī, I, p. 964 [tr. Nöldeke, pp. 248f.]; Baḷami, *Tārīk*, p. 1048; Ferdowsī, *Šāh-nāma* VIII, p. 63), resembles the twelve items of war mentioned in *Vendidad* 14.9 (Jackson, loc. cit.), thus showing that this part of the text had been revised in the later Sasanian period. More interestingly, the most important Byzantine treatise on the art of war, the *Strategicon*, also written at this period, requires the same equipments from a heavily-armed horseman (Bivar in *Dumbarton Oaks Papers* 26, 1972, pp. 287-88). This was due to the gradual orientalization of the Roman army to the extent that in the sixth century “the military usages of the Romans and the Persians become more and more assimilated, so that the armies of Justinian and Khosrow are already very much like each other;” and, indeed, the military literatures of the two sides show strong affinities and interrelations (C. A. Inostrantsev, “Sasanian Military Theory,” tr. L. Bogdanov in *Journal of the Cama Oriental Institute* 7, 1926, pp. 7ff. esp. p. 23). According to the Iranian sources mentioned above, the martial equipments of a heavily-armed Sasanian horseman were as follows: helmet, hauberk (Pahlavi *grīwbān*), breastplate, mail, gauntlet (Pahlavi *abdast*), girdle, thigh-guards (Pahlavi *rān-ban*), lance, sword, battle-axe, mace, bowcase with two bows and two bowstrings, quiver with 30 arrows, two extra bowstrings, spear, and horse armor (*zēn-abzār*); to these some have added a lasso (*kamand*), or a sling with slingstones (Nöldeke, *Geschichte der Perser*, pp. 248f.; Jackson, op. cit., pp. 108ff.). The elite corps of the cavalry was called “the Immortals,” evidently numbering—like their Achaemenid namesakes—10,000 men (Christensen, *Iran Sass.*, p. 208 with references). On one occasion (under Bahrām V) the force attacked a Roman army but outnumbered, it stood firm and was cut down to a man (Socrates Scholasticus 7.20). Another elite cavalry group was the Armenian one, whom the Persians accorded particular honor (Christensen, op. cit., p. 210). In due course the importance of the heavy cavalry increased and the distinguished horseman assumed the meaning of “knight” as in European chivalry; if not of



royal blood, he ranked next to the members of the ruling families and was among the king's boon companions (*ibid.*, pp. 112, 368-69; J. M. Unvala, *The Pahlavi Text "King Husrav and his Boy,"* Paris, 1921).

The Sasanians did not form light-armed cavalry but extensively employed—as allies or mercenaries—troops from warlike tribes who fought under their own chiefs. “The Sagestani were the bravest of all” (Ammianus Marcellinus 19.2.3); the Gelani, Albani and the Hephthalites, the Kushans and the Khazars were the main suppliers of light-armed cavalry. The skill of the Dailamites in the use of sword and dagger made them valuable troopers in close combat (Agathias 3.17), while Arabs were efficient in desert warfare (Christensen, *op. cit.*, pp. 209, 275).

The infantry (*paygān*) consisted of the archers and ordinary footmen. The former were protected “by an oblong curved shield, covered with wickerwork and rawhide” (Ammianus Marcellinus 24.6.8). Advancing in close order, they showered the enemy with storms of arrows. The ordinary footmen were recruited from peasants and received no pay (*ibid.*, 23.6.83), serving mainly as pages to the mounted warriors; they also attacked walls, excavated mines and looked after the baggage train, their weapons being a spear and a shield (*ibid.*, 23.6.83; Procopius 1.14.24, 52; Christensen, *op. cit.*, p. 209). The cavalry was better supported by war elephants “looking like walking towers” (Ammianus Marcellinus 25.1.14; see also E. Herzfeld *AMI* 3, 1931, pp. 26ff.), which could cause disorder and damage in enemy ranks in open and level fields. War chariots were not used by the Sasanians (contra Alexander Severus in Lampridius, *Vita Alex. Sev.* 56). Unlike the Parthians, however, the Persians organized an efficient siege machine for reducing enemy forts and walled towns. They learned this system of defense from the Romans but soon came to match them not only in the use of offensive siege engines—such as scorpions, balistae, battering rams, and moving towers—but also in the methods of defending their own fortifications against such devices by catapults, by throwing stones or pouring boiling liquid on the attackers or hurling fire brands and blazing missiles (Ammianus Marcellinus 19.5f., 20.6-7, 11).

The organization of the Sasanian army is not quite clear, and it is not even certain that a decimal scale prevailed, although such titles as *hazārmard* (Nöldeke, *Geschichte der Perser*, p. 284 n. 2) might indicate such a system. Yet the proverbial strength of an army was 12,000 men (Ferdowsī, *Šāh-nāma* VIII, p. 343). The total strength of the registered warriors in 578 was 70,000 (Ṭabarī, tr. Nöldeke, p. 271). The army was divided, as in the Parthian times, into



several *gunds*, each consisting of a number of *drafšs* (units with particular banners), each made up of some *wašts* (Christensen, op. cit., p. 210). The imperial banner was the *Drafš-e Kāvīān*, a talismanic emblem accompanying the Great King or the commander-in-chief of the army who was stationed in the center of his forces and managed the affairs of the combat from the elevation of a throne (A. Christensen, *Smeden Kāvāh*, tr. Unvala, pp. 28f.). At least from the time of *Ḳosrow Anōšīravān* a seven-grade hierarchical system seems to have been favored in the organization of the army (M. Grignaschi, “Quelques spécimens de la littérature sassanide conservés dans les bibliothèques d’Istanbul,” *JA*, 1966, pp. 1ff. esp. pp. 24, 42 n. 76). The highest military title was *argbed* which was a prerogative of the Sasanian family (Nöldeke, op. cit., p. 5 n. 3). Until *Ḳosrow Anōšīravān*’s military reforms, the whole of the Persian army was under a supreme commander, *Ērān-spāhbed*, who acted as the minister of defense, empowered to conduct peace negotiations; he usually came from one of the great noble families and was counted as a counselor of the Great King (Christensen, *Iran Sass.*, pp. 130f.). Along with the revival of “heroic” names in the middle of the Sasanian period, an anachronistic title, *artēštārān sālār* (q.v., Greek rendering *adrastadaran salanes*: Procopius 1.6. 18) was coined to designate a generalissimo with extraordinary authority, but this was soon abandoned when *Anōšīravān* abolished the office of *Ērān-spāhbed* and replaced it with those of the four marshals (*spāhbed*) of the empire, each of whom was the military authority in one quarter of the realm (Christensen, op. cit., pp. 131, 370). Other senior officials connected with the army were: *Ērān-ambāragbed* “minister of the magazines of empire,” responsible for the arms and armaments of warriors (*ibid.*, pp. 107-108); the *marzbāns* “margraves”—rulers of important border provinces (*ibid.*, pp. 102, 108, 371ff.; 518ff.); *kanārang*—evidently a hereditary title of the ruler of *Ṭūs* (*ibid.*, pp. 108, 351, 507); *gund-sālār* “general” (*ibid.*, p. 210); *paygān-sālār* “commander of the infantry” (*ibid.*); and *puštīgān-sālār* “commander of the royal guard” (*ibid.*).

A good deal of what is known of the Sasanian army dates from the sixth and seventh centuries when, as the results of *Anōšīravān*’s reforms, four main corps were established; soldiers were enrolled as state officials receiving pay and subsidies as well as arms and horses; and many vulnerable border areas were garrisoned by resettled warlike tribes (*ibid.*, pp. 367ff.). The sources are particularly rich in accounts of the Sasanian art of warfare because there existed a substantial military literature, traces of which are found in the *Šāhnāma*, *Dēnkard* 8.26—an abstract of a chapter of the Sasanian Avesta entitled



*Artēštārestān* “warrior code”—and in the extracts from the *Āʾīn-nāma* which Ebn Qotayba has preserved in his *ʿOyūn al-aḵbār* and Inostrantsev has explained in detail (in *Journal of the Cama Oriental Institute* 7, 1926, pp. 7-52; see also Christensen, op. cit., pp. 215f.). The *Artēštārestān* was a complete manual for the military: it described in detail the regulations on recruitments, arms and armor, horses and their equipments, trainings, ranks, and pay of the soldiers and provisions for them, gathering military intelligence and taking precaution against surprise attack, qualifications of commanders and their duties in arraying the lines, preserving the lives of their men, safeguarding Iran, rewarding the brave and treating the vanquished (Sanjana’s tr. in *Dēnkard*, vol. XVI, Bombay, 1917, pp. 6ff.). The *Āʾīn-nāma* furnished valuable instructions on tactics, strategy and logistics. It enjoined, for instance, that the cavalry should be placed in front, left-handed archers capable of shooting to both sides be positioned on the left wing, which was to remain defensive and be used as support in case of enemy advance, the center be stationed in an elevated place so that its two main parts (i.e., the chief line of cavalry, and the lesser line of infantry behind them) could resist enemy charges more efficiently, and that the men should be so lined up as to have the sun and wind to their back (Inostrantsev, op. cit., pp. 13ff.).

Battles were usually decided by the shock cavalry of the front line charging the opposite ranks with heavy lances while archers gave support by discharging storms of arrows. The center, where the commander-in-chief took his position on a throne under the *Draḡš-e Kāvīān*, was defended by the strongest units. Since the carrying of the shield on the left made a soldier inefficient in using his weapons leftwards, the right was considered the line of attack, each side trying to outflank the enemy from that direction, i.e., at the respective opponent’s left; hence, the left wing was made stronger but assigned a defensive role (ibid., pp. 16ff.; Bivar, op. cit., pp. 289f.). The chief weakness of the Persian army was its lack of endurance in close combat (Ammianus Marcellinus 25.1.18). Another fault was the Persian’s too great a reliance on the presence of their leader: the moment the commander fell or fled his men gave way regardless of the course of action.

During the Sasanian period the ancient tradition of single combat (*mard o-mard*) developed to a firm code (Christensen, op. cit., p. 216). In 421 Bahrām V opposed a Roman army but accepted the war as lost when his champion in a single contest was slain by a Goth from the Roman side (Johannes Malalas [in B. G. Niebuhr, ed., *Hist. Byzant. Scriptores*, Bonn, 1831], p. 14a). Such duels are



represented on several Sasanian rock-reliefs at Naqš-e Rostam (Schmidt, *Persepolis III*, pp. 130ff.), and on a famous cameo in Paris depicting Šāpūr I capturing Valerian (R. Ghirshman, *Iran 249 B.C.-A.D. 657: The Parthian and Sassanian Dynasties*, London, 1962, fig. 195).

Sasanian kings were conscious of their role as military leaders: many took part in battle, and some were killed; the *Picture Book of Sasanian Kings* showed them as warriors with lance or sword (Ḥamza, pp. 50-54; *Moǰmal*, pp. 33ff.). Some are credited with writing manuals on archery (Bivar, op. cit., p. 284), and they are known to have kept accounts of their campaigns (e.g., Šāpūr's inscription on the Ka'ba-ye Zardošt, and cf. Ebrāhīm b. Moḥammad Bayhaqī, *al-Moḥāsen wa'l-mosāwī*, ed. F. Schwally, Giessen, 1902, p. 481: "When ǰosrow Parvēz concluded his wars with Bahrām-e Čübīna and consolidated his rule over the empire, he ordered his secretary to write down an account of those wars and related events in full, from the beginning to the end").

While heavy cavalry proved efficient against Roman armies, it was too slow and regimentalized to act with full force against agile and unpredictable light-armed cavalry and rapid foot archers; the Persians who in the early seventh century conquered Egypt and Asia Minor lost decisive battles a generation later when nimble, lightly armed Arabs accustomed to skirmishes and desert warfare attacked them. Hired light-armed Arab or East Iranian mercenaries could have served them much better.

See also under Armor and individual weapons.

## BIBLIOGRAPHY

---

Given in the text.