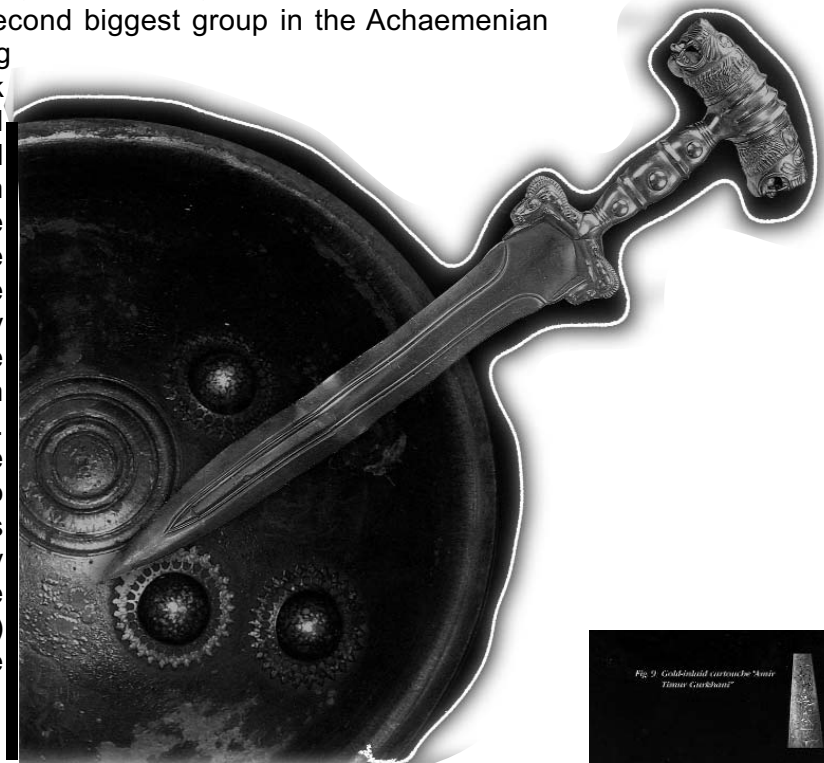


# Arms and Armor of Achaemenians and Sassanians

**The glorious Achaemenian and Sassanian Empires, which ruled over vast lands, were protected for centuries by courageous warriors. These warriors defended the national integrity of Iran by using a sophisticated military strategy and also well-crafted offensive and defensive weapons. In the following, a short introduction is given on the nature of some important weapons used during these periods.**

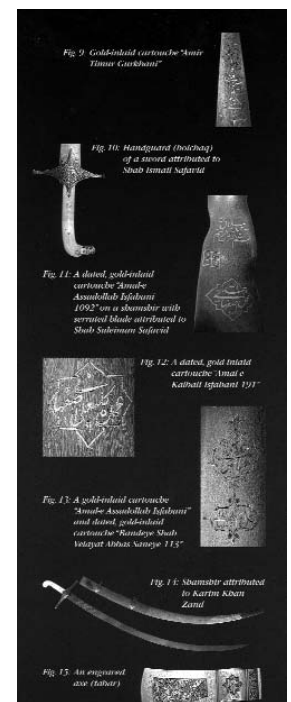
Manouchehr Moshtagh Khorasani

The Achaemenian army was made up of troops provided from different regions but with the Iranian warriors forming the main group. They came from different regions of the Empire stretching from the Persia, Central Asia, to the Danube. After the Persians, the Medians made up the second biggest group in the Achaemenian army, with many generals being Medians. The descriptions of Greek writers, such as Herodotus, Arrian, and Xenophon provide some useful information about the Achaemenian army, but one should note that these descriptions are biased as Greeks were at war with the Achaemenians, hence the Greek accounts are highly exaggerated as to the number of the Achaemenians to glorify their own victories (Marsdon, 1964:37). Unfortunately many publications have only taken the Greek accounts into consideration, therefore, the numbers provided by these reports are highly doubtful and pure speculations. On the other hand, Wiesehöfer (1993:25-148) provides a balanced view on the Achaemenians wars.



During battle, the Achaemenians positioned their foot archers and stone slingers in the front, flanked by the cavalry, with light-armored and heavy-armored infantry supporting the archers and slingers. In the beginning of the battle, archers and slingers threw their arrows and stones to confuse the enemy lines then the heavy infantry armed with spears and swords, supported by the cavalry units, attacked the flanks. These tactics worked very well against the Asiatic enemies of the Achaemenians, but they proved to be ineffective against the tight formations of heavily armored Greek hoplites and Macedonian phalanx units, who kept their tight formations, using long spears to defend against the attackers. Being well protected by their body armor against arrows and missiles, the Greeks were not confused or seriously injured and could prevail the ensuing arduous hand-to-hand combat.

**AKENAKES**, a short sword 40 to 50 centimeters long was one of the major weapons used by the Achaemenians (Zoka, 1971/1350:69). Pur Davood (1969/1347:43) states that the ancient Iranian word for akenakes is not known. Pur Davood (1969/1347:43) quotes Herodotus, who reported on Xerxes' invasion of Greece in 480 B.C. and states that, on a bridge in Helsintus, King Xerxes threw leaves into the sea, poured a draught from his golden cup, praised the sun, and



threw an akenakes into the water as a gift. The scabbard of this sword was made entirely of wood, and the blade from iron (excavated in Egypt) and can be seen in the Ashmolean Museum, Oxford.

**THE MEDIAN AND THE PERSIAN AKENAKES:** Based on the stone reliefs of Persepolis (Takhte Jamshid), Zoka (1969/1347:1350:211) differentiates between two different forms of this type of weapon: a) the Median akenakes and b) the Persian akenakes. The Median akenakes was hung from the belt by a thong passing through its projecting 'ear' and worn on the right side. Over the end of the scabbard and the chape, a belt was passed to keep the scabbard from dangling once the bearer was mounted on horseback or during marches as infantry (Zoka, 1971/1350:70). Koch (2000:258) shows a stone relief depicting a guard from Tripylon in Persepolis wearing a Median akenakes.

In contrast to the Median akenakes, the Persian akenakes was tucked under the belt in front of the belly. The I-shaped handle of the Persian akenakes was very different to the Median akenakes. The lower parts of the projecting ear and the whole scabbard head were shaped in three semicircular forms to prevent the sword from slipping through the belt. The Persian akenakes does not have a chape but tapers with the blade, ending in a sharp point.

There were also akenakes made of pure gold, with beautiful ornamentation. Burton (1987:212) quoting Xenophon reported that the royal gift from Iran was a

Figure 1 left: A golden akenakes from the National Museum of Iran in Tehran

golden akenakes, a Nisaen horse with a golden bridle, and other battle gear. A magnificent, golden akenakes (museum inventory number 1322) from the Achaemenian period is kept in the National Museum of Iran in Tehran (see Muzeye Meli Iran, 2001/1380:109). Huot (1965:192:223) states that this lion-headed, golden akenakes was discovered in Hamadan (Ekbatana) and dating back to 500 B.C. This piece resembles an akenakes stored in the Metropolitan Museum of Art in New York (Sekunda, 1992:56).

## SPEARMEN AND SPEARS

Units of spearmen were among the most important in the Achaemenian army, with a spearman ranking highest in the Achaemenian army (Pur Davood, 1969/1347:41). According to Pur Davood (1969/1347:39), and confirmed by Matufi (1999/1378:218) the spear is mentioned in the Vendidad, Fargard 17, verse 43 and is called *arshtayascha* ( *arshti*). Referring to the inscriptions on the stone relief in Naqsh-e Rostam, Pur Davood explains that the spear bearer of King Darius is named "Gaubaruva" (*arshti-bara* ..spear bearer). Different shapes of spearheads were used during the Achaemenian period. Based on the Achaemenian stone reliefs, Zoka (1971/1350:64) distinguishes between two general types of spearheads a) wide, leaf-shaped spearheads and b) narrow and long, willow-leaf spearheads. As for the length of spears Zoka distinguishes a) the long spears/lances used by cavalry units and infantry units in conjunction with cane

<sup>1</sup>Yahya Zoka was a renowned Iranian scholar and a leading Iranian archeologist who graduated in literature and archeology. He did extensive research in the field of Iranian art, archeology and military history of Iran. He was the director of Decorative Art Museum, the Director of National Library, the consultant of art and culture ministry, and cooperated with Negarestan and Reza Abbasi Museum.

Professor Pur Davood was one of the most eminent specialists in Iranian studies and the first person to translate the Avesta into modern Persian (Pur Davood, 1969/1347:10).

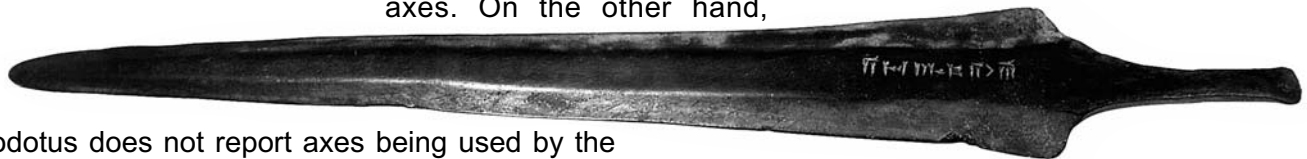
shields and b) short spears ( zubin or javelins) used by infantry soldiers for close combat.

Herodotus reported that the shafts of Iranian spears were six to seven feet long and made of cornel wood. Zoka adds that the spear shafts ended in apple-shaped spear butts hence certain spearmen were nicknamed "applebearers." Sekunda (1992:6-7) explains that the apple bearers were the noblemen among the 10,000 Immortal Guards. One thousand soldiers of the Immortal Guards, carried spears ending in golden spear butts and guarded the chariot of the king, and were called arstibara in Old Persian (Sekunda, 1992:6-7); 1,000 other soldiers carried spears with silver spear butts (Zoka, 1971/1350:64). One bronze apple-shaped spear butt was recovered from the 5th century cemetery at Deve Hüyük in Northern Syria (for a picture, see Sekunda, 1992:6-7).

**VADR: MACE or AXE** : Pur Davood (1969/1347:45) states that the gorz is one of the oldest weapons used by angels and izadan (deities) in the Avesta. He further states that many mythical Iranian heroes like Sam, Gharshab and Rostam wielded maces as their favorite weapon. Different types of maces are mentioned in the Avesta. One of them is called a vadr, mentioned in Yasna 32, verse 10 in Ahunavaiti Gatha (chapters 28-34), in Hom Yasht, Yasna 9 (verses 30-32). According to Pur Davood (1969/1347:46), Avesta scholars have different opinions regarding this term: some say that vadr is a type of mace, and some that it is a type of axe. However, Pur Davood is of the opinion that vadr probably denotes a type of mace as the weapon of the Indian god Indra is a mace named Vadhar in Sanskrit Vedic texts and due to the common roots of the Indian and Persian languages vadr should refer to mace.

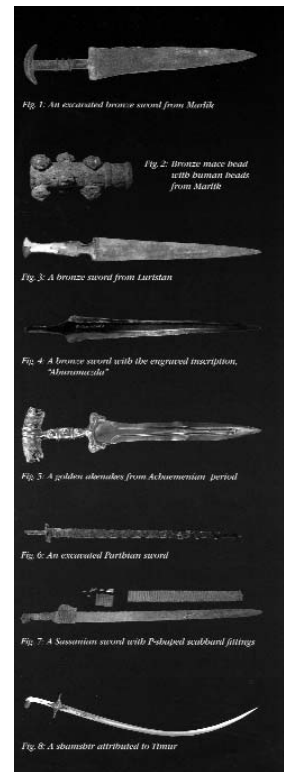
There are two other types of maces mentioned in the Avesta: vazra, used for smashing, (see Ohrmozd Yasht, verse 18; Khwarshed Yasht, verse 5; Mihr Yasht, verse 96, verse 132; Fravardin Yasht, verse 72) and gadha , for throwing (see Mihr Yasht, verse 101, verse 131) (see Pur Davood, 1969/1347:47). Bull-headed maces were used during the Achaemenian period as well and were often mentioned in the Iranian epics. Harper (1985:247) provides Fereydun as an example, describing how he designs his ox-headed mace for use against the evil Zohak. Rostam, Giv, Esfandiar, and Gushtasp also use this form of the mace. In the Sassanian era, Bahram V holds his ox-headed mace when he takes his crown from a pair of snarling lions. This weapon was later used as a prestigious, symbolic weapon, an attribute of the kings in Iran.

Zoka (1971/1350:66) based on reports by Xenophon and Estrabon stresses the point that the stone reliefs of Persepolis show Achaemenian foot soldiers with axes. On the other hand,



Herodotus does not report axes being used by the Achaemenians and only mentions that the Sakas used a type of axe called a sagaris. The depicted axe head was a bird, probably a duck head, with an open beak where the axe blade protrudes from its beak. The other side of the axe head terminates in a semi-circular shape with two sharp spikes, probably for breaking armor. The end of the wooden handle is engraved with a V-shape for allowing a better grip (Zoka, 1971/1350:68).

**BOWS** serving as a symbol of kingship and sovereignty played a very important role for the Achaemenian army (Zuttermann, 2003:142). The bow was carried in a bow case (gorytoi) together with the arrows. It was characteristically Iranian and carried by different Iranian groups, such as Medians as well as Persians clothed in typical Persian garb and wearing riding costume. The Achaemenian kings used the



bow to display their martial abilities and courage during combat and as a status symbol. In his edict (Bande 9) at Naqsh-I Rostam, Darius I stated, "I am skilled with my both hands and feet. I am a good rider, I am a good archer on foot and on horseback, I am a good spearman on foot and on horseback" (see Sharp, 1964/1343:85).

## THE SASSANIAN ARMY

Ardeshir I was responsible for creating a number of reforms in the Sassanian army. He created a standing army under his personal command. While retaining the Parthian cavalry system, he separated the army officers, from satrapy from local princes and nobility, and introduced a number of new weapons such as new types of armor and siege engines into the army.

Mail armour consisted of interlinked, metal rings and was in full production by the time of Ardeshir I (see Farrokh, 2005:17). Farrokh adds that although mail armour was more difficult to produce, it had a number of advantages namely greater strength, durability, and flexibility, and it also allowed heat to escape, which was an important factor in hot climates. He stresses that it was more effective when worn in combination with other types of armour. Quoting Bivar and Shahbazi, Farrokh states that one of the reasons for the Parthian defeat at Firuzabad was their heavy reliance on lamellar in contrast to the Sassanian elite cavalry, who were additionally wearing mail armour. The reforms under Ardeshir I proved to be very successful as the Sassanian Empire could defend itself against Central Asiatic nomads and Byzantine Roman armies for over four centuries. During the reign of Ardeshir I, a military manual was written and attributed to him. This now lost manuscript is mentioned in the Arabic work *Al Fihrist*, written by a Persian named: Ibn al Nadim, in the second half of the 10th century A.D. In the chapter on works of military art there is a mention of a work entitled "The art of war and the methods of conquering fortresses and towns, to prepare ambushes, to place guards, to push spies, to send detachments, and to place garrisons." This work was based on a treatise written in the 3rd century A.D. for Ardeshir, the son of Papak. The Arabic title of this book is *Al Furusiya Al Shamiti* (Zakey, 1956:163-4).

The backbone of the Sassanian army was the heavy cavalry unit, the so-called Savaran, also called cataphracts. Farrokh (2005:13) states that from the early Sassanian period, the lance was the main weapon of attack of the Savaran. Zoka (1971/1350:117) states that the Sassanian cataphracts armed with lances mounted their horses and were as stable sitting in their saddles as if they had been chained there. They made up the first ranks, like walls, of Sassanian battle formations; behind them were positioned the bowmen, then came the war elephants (a new weapon introduced by the Sassanians). They attacked in very concentrated ranks and were supported by the bowmen who constantly shot arrows at the enemy lines. Wiesehöfer states that the commander was situated in the center, protected by elite soldiers, giving orders to his troops. These heavy cavalrymen were supported by light horse archers who skirmished and harassed the enemy. According to Nicolle (1996:20), the light horse archers outnumbered the heavy cavalry by ten to one as was the case in Parthian times. Nicolle is of the opinion that heavy cavalry could rarely break infantry with a direct charge; thus, the Sassanian heavy cavalry had to move and maneuver in close-packed squadrons with the best protected troops at the front while the light infantry worked around the enemy infantry flanks. Another interesting point is that Sassanian cavalry did not use stirrups until the last few years of their empire.

**SWORDS** The Sassanian rock reliefs in Firuzabad I and II, Naqsh-I Rajab III, and Naq-sh-I Rajab III, and Naqsh-I Rostam I (see Masia, 2000) show the sword as the royal symbol and emblem. Similar to the Parthian swords, the Sassanian swords were double-edged and long. According to Ghirshman (1963:295), Persian



sources on arms of the Sassanian period are poor and offer scant information. This dearth of academic information is filled to some extent by the work of Tirarsian, who offers chapters written by contemporary Armenian historians of the Sassanian period in the first half of the 5th century A.D.

These historians distinguish between three types of Sassanian arms carried simultaneously by the nobles:

- a) tour (short sword) attached to a belt on the right side,
- b) sousser (long sword) attached to the belt on the left side,

Figure 2 (RIGHT): An excavated early Sassanian sword with quillons.

- c) nran (dagger) attached to the thigh.

In early New Persian, the sword was called sneh, or shamshêr and in early Manichean Middle Persian it was called shafsher (see MacKinze, 1971).

Based on the archeological examples of Sassanian swords in the Iranian museums, one can classify the Sassanian swords into:

- a) swords with a crossguard,
- b) swords with scabbards with P-shaped attachments (with and without feather pattern),
- c) swords with a feather pattern and without P-shaped scabbard attachments, and
- e) two-handed Sassanian swords.

The swords with scabbards and with P-shaped attachment are remarkable as the front side of all of these swords are decorated with a feather pattern, and the same pattern can be seen as well on other Sassanian decorative art. Harper (1978:84) quotes Ghirshman, who interprets the feather pattern as a symbol of the Varagna bird, one of the shapes of Verethragna, the Zarathushti deity of victory (for



Figure 3: A Sassanian sword with P-shaped scabbard attachments and feather pattern

Verethragna, see Khorde Avesta, 14 Warharan Yasht). Sassanian warriors used the feather pattern on the scabbard and handle of their swords and armour to protect themselves against their enemies.

**LANCE** : The two-handed lance used by the heavy cataphract cavalry units dates to the Achaemenian period, and a molded terracotta flask excavated from a tomb at Koi-Kyrglan-Kala on the banks of the Oxus river has a representation of a cavalryman (Sekunda, 1992:29).

The ancient word arshti (spear), which was used by the Achaemenians, was transformed to arsht during the Sassanian period and the word nêzak also referred to spears in this period. Pur Davood (1969/1347:39) says the root of the word for spear, neyze, is used in modern Persian. Farrokh (2005:13) states that the Sassanian lance was used with two hands, usually at waist level.

**AXES** or tabarzin were also used by the Sassanians. Al-Sarraff (2002:162) states that the Sassanian tabarzin had a massive, broad blade and a rather long haft, and the Sassanian horsemen had to choose between the use of a tabarzin and the gorz, as carrying both would have been cumbersome and unnecessary. Al-Sarraff adds that in the Sassanian legend of Bahram Gur, he chose the tabarzin as his only



weapon when he decided to confront and kill, single-handedly and on foot, the two starving lions that guarded the royal crown.

**BOWS** continues to play an important role in the Sassanian period, based on the traditional archery of the Achaemenians and Parthians. The Sassanian bows had a set-back grip; relatively short, curved, working parts (limbs), angled knees, and long, stiff ears with the upper limb of the bow being longer than the lower.

## CONCLUSION

Different types of weapons were used during the Achaemenian and Sassanian periods in Iran. Many of these weapons were not only carried and used on the battlefields, but they were also symbols of the kingdom. A thorough research of the development of arms and armor based on depictions of warriors on rock reliefs, art objects together with archeological examples gives a clear picture of how these weapons evolved over time. Due to military confrontations with other civilizations, new weapons were introduced and the existing weapons were further improved to reach a maximum level of efficiency in combat.

*NOTE* The royal akenakes of King Darius is carried by his weapon bearer on the northern stairs of the audience relief of Apadana. The delegations of different nations on the stone reliefs of Apadana are also being led with a Persian who is carrying a Persian or a Median akenakes.

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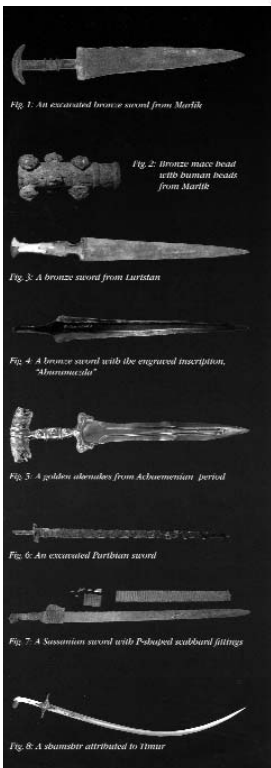
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<http://www.arms-and-armor-from-iran.de>

Photographs: courtesy of "Manouchehr Moshtagh Khorasani



## Manouchehr Moshtagh Khorasani



Lives in Frankfurt and is Assistant Vice-president and Executive Coach at a major international German Bank headquartered in Frankfurt. He received his undergraduate education in Germany and in Spain and his postgraduate studies from University of Wisconsin, Milwaukee and Germany. His PhD in English from Justus Liebig Universität Giessen, Germany deals with forensic linguistics and is entitled "Computer Authorship Identification in Written Texts : A Study in Forensic Linguistics ". In addition Manouchehr is an instructor in Laido and Kenjutsu (traditional Japanese swordsmanship), holds a Black Belt second dan degree in full contact Karate and has years of active experience in International Martial arts competition in different countries.

His book "Arms and Armor from Iran : the Bronze Age to the End of the Qajar period" 700 pages with 2500 colored images, and 900 black and white images and sketches is based on a thorough research on the inventory of ten museums in Iran and based on over 800 references. It will be published by Legat Publishers in August 2006.



# SASSANID DWELLINGS

## Discovered in "Red Village" of Abyaneh

*Dr Ardeshir B. Damania*

In the Isfahan province of Iran, there is a small village **Abyaneh**, famously known as the "Red Village " because of its red soil and houses built of red clay. The architectural style of this historical village is like a staircase, with houses constructed at different levels. The village is included in the list of the National Historical Heritage Sites of the country.

It is famous for good, hardworking and knowledgeable people as well as its red mud-wall dwellings dating back to the Sassanid period. In addition, it boasts of a very pleasant climate, being located on the northwestern slopes of the Karakas Mountains, a rocky range that runs north-south from the town of Kashan to Ardestan - a distance of 110 Km. The nearest town Natanz is 28 Kms to the village. The architectural facet as well as the rituals and the clothing of the habitants of the Abyaneh village is a sight worth seeing at least once.

The Jame-e-mosque of this village, with its historical wooden altar dating from 776 ACE and its wooden pulpit dating 466 ACE, has an inscription in the 'kufi' script. It was most probably built over a Zarathushti fire-temple whose remains have been excavated by an Iranian team of archaeologists in 2005.

