



تحلیل سلاح‌ها و زره‌های صحنه نبرد موسوم به “نبرد ایروان” (موزه ملی ایران)

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چکیده

موزه ملی ایران یک تابلوی نقاشی بزرگ با ابعاد چشمگیر دارد که نبرد فتحعلی شاه قاجار با نیروهای روسی را نشان می‌دهد. تاریخ پیدایش و همچنین نام هنرمند مشخص نیست. در حال حاضر در موزه ملی ایران به اشتباه با عنوان «نبرد گنجه» نامگذاری شده است. با این حال، بر اساس تصویر اسلحه‌ها و زره‌های حمل شده توسط سربازان روسی و همچنین فقدان هرگونه سلاح و زره و یونیفورم به سبک اروپایی توسط سربازان ایرانی، این نقاشی باید «نبرد ایروان» (ژوئن ۱۸۰۴ میلادی) را به تصویر بکشد. نه جنگ گنجه (۱۸۲۶ میلادی). دلایل مختلفی برای این فرضیه وجود دارد. پس از ورود ژنرال گاردان به مأموریت گاردان (۱۸۰۹-۱۸۰۷ میلادی)، تعدادی اصلاحات نظامی در ایران آغاز شد. این اصلاحات شامل استانداردسازی شمشیرها و اسلحه‌ها و معرفی فرم‌های نظامی اروپایی شده بود. اثرات این اصلاحات در این نقاشی به تصویر کشیده نشده است زیرا نیروهای ایرانی همچنان از سلاح‌های سنتی خود استفاده می‌کنند و همچنین لباس سنتی خود را بر تن می‌کنند. بنابراین، این نقاشی باید به زمان قبلی مانند سال ۱۸۰۴ میلادی اشاره داشته باشد. علاوه بر این، این نقاشی نشان می‌دهد که فتحعلی شاه در صحنه نبرد درگیر بوده است، که این نیز نشان‌دهنده تاریخی است که او در سال ۱۸۰۴ میلادی از سربازان خود در سلطنت بازرسی می‌کرد. به نظر می‌رسد این تنها باری بود که او به طور فعال در یک درگیری نظامی شرکت کرد. علاوه بر این، افسران روسی در این نقاشی کلاه برافراشته بر سر دارند و سربازان پیاده نظام نیز کلاه‌های نارنجک‌انداز (یا فوزلیتر) معمولی دوره ۱۸۰۴ میلادی بر سر دارند. تحقیقات بیشتری در آینده باید روی این نقاشی انجام شود تا ناهماهنگی‌های تصویر لباس‌های روسی همانطور که در نقاشی نشان داده شده‌اند، تحلیل شود.

واژگان کلیدی: شمشیر، مینیاتور، نقاشی، ارتش روسیه، ارتش ایران، نبرد ایروان، فتحعلی شاه قاجار، عباس میرزا قاجار.

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An Analysis of the Arms and Armor of the Battle Scene titled “the battle of Yerevan” (National Museum of Iran)

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Abstract

The National Museum of Iran keeps a large painting with an impressive size showing a battle of Fath Ali Shāh Qajar with the Russian troops. The date of origin and also the name of the artist are unknown. It is currently wrongly titled “the Battle of Ganja” in the National Museum of Iran. However, based on the depictions of arms and armor carried by the Russian troops and also the lack of any European-style arms and armor and uniforms worn by Persian troops, this painting should depict “the battle of Yerevan” (June 1804 CE) and not the battle of Ganja (1826 CE). There are different reasons for this hypothesis. After the arrival of Jaubert and General Gardane on the Gardane Mission (1807–09 CE), a number of military reforms were initiated in Persia. These reforms not only included standardization of issued military swords and weapons but also the introduction of Europeanized uniforms. The effects of these reforms are not depicted in this painting as Persian troops are still using their traditional arms and armor and also wearing their traditional attire. Therefore, the painting should refer to an earlier time such as 1804 CE. Further, the painting shows Fath Ali Shāh being involved in the battle scene, which is also an indication of an earlier date as he used to inspect his troops in Soltāniyeh in 1804 CE. It seems that was the only time he actively took part in a military engagement. Additionally, the Russian officers in this painting are wearing cocked hats and the infantry soldiers are wearing typical grenadier (or fusilier) caps of the period of 1804 CE. Further future research needs to be done on this painting to analyze the inconsistencies of the depictions of Russian uniforms as they are shown in the painting.

Keywords: Shamshir; miniature; painting; Russian military; Persian military; Persian army; Yerevan Battle; Fath Ali Shāh Qajar; Abbās Mirza Qajar.

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1. Introduction

A very impressive painting measuring 9 by 5 ½ meters showing a battle of Fath Ali Shāh Qajar with the Russians is kept in the National Museum of Iran (Iran Bastan Museum). Although the National Museum of Iran describes this battle scene as “the Battle of Ganja” and some publications also describe this painting as the battle of Ganja (see Āryāi, 2018), other researchers describe this painting as “the battle of Yerevan” [June 1804 CE] (Diba, 2006:98; Krugov and Nechitailov, 2016:164), which should more correctly be called “The Siege of Yerevan”. Diba (2006:98) provides detailed information on the original location and history of similar wall paintings. Different paintings of this period depict Fath Ali Shāh or Crown Prince Abbās Mirzā in battle. The paintings of military subjects portrayed Fath Ali Shāh or Crown Prince Abbās Mirzā in battle with Iran's two principal adversaries of the period, the Ottomans and the Russians. Paintings depicting Fath Ali Shāh himself in battle with Russian troops, the subject of the Iran Bastān painting, were recorded in only two locations, Tehran and Shiraz (Diba, 2006:98). The top of the painting seems to have been cut but it had originally a rounded top. It has an inscription that reads “ta'mirāt 'amal-e Mohammad Dāvudi 1319 A.H.” which means “Restoration is the work of Mohammad Dāvudi 1902-1903 CE” (see Diba, 2006:100). Unfortunately, the original dating and also the name of the artist are unknown (see Diba, 2006:100). The siege of Yerevan lasted from July to September 1804 CE. General Pavel Tsitsianov could initially place Yerevan under siege, but he did it with great difficulty. However, the Iranian forces inside the citadel of Yerevan stopped Russian forces to make a direct attack. Additionally, Iranian forces outside the citadel surrounded the Russian army cutting their supply lines. Led by Crown-Prince Abbās Mirzā and King Fath Ali Shāh Qajar, the Iranian forces defeated the Russian army (Atkin, 1980: 99, 120; Kettenhofen, 1998:542-551). After the defeat, Tsitsianov tried to shift the blame on others to hide his incompetence, he especially blamed general and prince Dmitri Mikhailovich Volkonsky.

Tsitsianov claimed that Volkonsky failed to provide supplies to his troops, ignoring the fact that the whole area between Yerevan and Georgia was controlled by Iranian troops (Atkin, 1980:76-77). In the National Museum, the painting depicts Fath Ali Shāh facing a Russian general, most probably General Dmitriyevich Tsitsianov across a sea with many warriors fighting between them. It is painted with a directional composition. According to Diba (2006:98), this painting certainly shows a scene from the first Perso-Russian War of 1804-1813 CE as Morier referred to the painting in 1809 CE and based on Zokā the painting was kept in a building that had been constructed in 1804 CE. When the campaign started, the Persian military forces were successful and could attain some victories. Hence, Diba (2006:98) believes that this work most likely is a commemoration to the battle of Yerevan, which happened in June 1804 CE. The painting shows Fath Ali Shāh being present and involved in the battle scene. A shared common belief among European sources is that Fath Ali Shāh did not play an active role in the military affairs as he delegated the daily military operations to the Crown Prince Abbās Mirzā and his senior generals and even appointed Abbās Mirzā as the commander in chief in 1805 CE. However, contemporary Persian sources believe that Fath Ali Shāh went to Soltāniyeh every year to inspect his troops and the military campaign in 1804 CE seem to be the only time he actively took part in a military engagement (Diba, 2006:100). As Persian troops are not wearing European military uniforms, and there are no English or French military advisors in the painting, the battle painted should predate the European reforms that were implemented after the arrival of Jaubert and General Gardane in 1807 CE (see Diba, 2006:101). In the painting, from the top right side of the painting, the Russian troops are shown entering the battle. This is an indication of the geographical area of Russia that is located north of Iran. The Iranian troops occupy three fourth of the whole scene although individual Russian fighters can be seen fighting in other places on the painting or being taken as prisoners among them. The

Fig. 1. Fath Ali Shāh Qajar in the Battlefield

cavalry and infantry soldiers are shown wearing traditional Persian armor and dress with lances and decorative banners. Some of the advancing infantry soldiers are portrayed carrying muskets with gilded mounts and lances. They also wear karakol caps, brocade jackets, and white felt boots (Diba, 2006:101; Calmard, 2000).

2. Arms and Armor of the Iranian Army

In this painting, the Persian army uses several traditional sets of arms and armor. In the following, some of these arms and armors are described.

2.1. Equipment of Fath Ali Shāh Qājār

In this battle, Fath Ali Shāh Qajar is portrayed as the most prominent figure together with Abbās Mirzā who went to fight in the battle with him. Following an Eastern tradition, he is shown in overproportioned dimensions to stress his importance. The only weapon carried by Fath Ali Shāh is a gilded quiver with arrows. He is sitting on a white steed observing the battle scene. He is wearing a red dress in lavishly ornamented gilded embroidery. He is also wearing a *kiyāni* crown, gilded and bejeweled armbands, belt, and shoulder protection. His horse is also fitted with a bejeweled gilded saddle and harness (Diba, 2006:101). The belly of his horse is painted red and opinions differ on its significance. Diba (2006:101) believes that the red color is an indication of henna painting. On the other hand, Āryāi (2018) thinks that the red color is an indication of the bravery of the king as it shows that the king has killed so many enemy soldiers that the red color of his enemy’s blood reached the body of the horse.



2.2. Arms and Armor worn by Abbās Mirzā

Abbās Mirzā is shown riding a horse and attacking a Russian horseman with a long lance. The lancehead is double-edged and has the typical shape of an Iranian lancehead / spearhead. The spear has a slender blade with a reinforced tip (*tokme-ye maxruti* or *noke maxruti*), and its end terminates in an octagonal, rounded heel. Āryāi (2018) identifies this figure as Abbās Mirzā. This is in line with many other of him in period paintings. However, Diba (2006:101) identifies the handsome youth in the foreground wearing armor and carrying a bejeweled gilded shield and mace as Crown Prince Abbās Mirzā. Diba bases her attribution on an illustration in a manuscript of a Shāhan-shāh Name dated 1810 CE MS (India Office Library, MS 3442).

The spear butts and the heels are sometimes decorated with chiseling and inlays of gold and silver (Moshtagh Khorasani 2006, 248). It is a typical Iranian spear form (see Zeller & Rohrer 1955, 233). The length of



Fig. 2. Abbās Mirzā wielding a lance.

lancehead or spearhead ranges from 12 cm to 80 cm and the shape is triangular or quadrate and, sometimes, flat and wide (Kobylynsky 2000, 67). Long spears or lances ranged from 3-4.6 meters and short spears ranged from 1.5 to 2 meters (Kobylynsky 2000, 67). Shorter spears were also called *nimneyze* as evidenced in the *Adab al-Harb va al-Shojae* (Ma'tufi 1999, 431). There is a beautiful spearhead made of patterned crucible steel attributed to Fath Ali Shāh Qajar that is kept in the Military Museum of Tehran (museum inventory number 2). The tip of the spearhead is broken off. A reinforcing midrib runs through the whole blade. There is steel openwork (piercing) at the base of the blade. The faceted base is decorated with gold overlay in a floral design. The total length of this spearhead is 46 cm, and it weighs 285 grams (Moshtagh Khorasani, 2006, 248). In this miniature, Abbās Mirzā attacks the buttocks and the lower part of the Russian cavalryman, who is trying to escape the scene.

The same technique is also depicted in many Persian miniatures and paintings on horseback and on foot. The Russian cavalryman is turning and trying to shoot at Abbās Mirzā using a flintlock pistol.

For example, a miniature from the *Šāh-nāme Qavām* from the Safavid period shows how a mounted warrior is attacking his fleeing opponent on the back with the technique *neyze bar pošt zadan* (to strike the back with a spear/lance) in understabbing position (Moshtagh Khorasani 2013, 122, miniature 88). The same technique is shown in *Tāriḫ-e Jahāngošāye Nāderi* (The History of Nader's World Conquest) where an Iranian soldier on foot is thrusting his fleeing opponent on the back with a spear in an understabbing position (Moshtagh Khorasani 2013, 122, miniature 89). In the painting, Abbās Mirzā is wearing a quiver (*tarkeš*) full of arrows. The quiver is hanging via a belt to his shawl/belt. Similar quivers were already used in earlier periods as

a miniature from the *Šāhnāme Qavām* shows (Moshtagh Khorasani 2013, 65, miniature 28). For a quiver with a similar design from the Safavid period see Moshtagh Khorasani (2006, 737, Cat. 436). This quiver is made of leather and covered with blue velvet. Abbās Mirzā has tucked a dagger named *kārd* (knife) in his belt in front of his belly. The *kārd* is the short, one-edged weapon or knife in the Iranian arsenal. The handle is either made of two slabs made of elephant ivory or walrus ivory. Judging by the yellowish color of the handle of the knife carried by Abbās Mirzā, the handle should be made of either walrus or elephant ivory. This type of knife is often portrayed in Persian miniatures. For example, a *kārd* is depicted in the Iranian miniature *Timur Receiving the Subject Princes on His Accession*, attributed to Bihzad from the Timurid period (Bahari 1996, 69). In this miniature, two guards behind Timur are carrying *kārd*. One of them has two *kārd* knives hanging from the left side. The *kārds* are not tucked under the belt or girdle but are hanging from a strap or a thin cord. That is the usual way of carrying a *kārd* in contrast to *xanjar* or *pišqabz* daggers that were tucked under the belt or the sash. The other guard has one *kārd* hanging similarly from his belt (see Bahari, 1996, 71). For examples of Persian knives with walrus ivory or elephant ivory handles, see Moshtagh Khorasani (2006, 602-613). Abbās Mirzā is also wearing a *xaftān* (gambeson) to protect his body and arms. He is also wearing a set of *bāzuband* (vambrace) without hand protectors. *Bāzubands* are mostly shown without hand protectors in Persian miniatures. But most of them have hand protection made of mail armor (*maille*) or a combination of mail and small plates. *Bāzubands* were used in Iran

for protecting the forearms (see von Folsach et al 2021, 163). Many examples were used for protecting the arms and the hands. Those with hand protection have textile gauntlets reinforced with mail for protecting the hands (Kobylynsky, 2000, 69). Some of them also have handguards in the form of a glove called a *dastvāna* (Zeller and Rohrer, 1955, 36). There are three types of attaching the main plate of a *bāzuband* to the smaller plates: a) *bāzuband* with hinges (for these examples, see Moshtagh Khorasani 2006, 283, 687, Cat. 384), b) *bāzuband* with clasps and leather straps (for these examples see Moshtagh Khorasani 2005, 283, 684, Cat. 380-381), and c) *bāzuband* with mail rings as an attachment device (see Moshtagh Khorasani 2006, 283, 686, Cat. 383). The plates of the *bāzuband* of Abbās Mirzā shown here are connected via hinges. He is also wearing a *sineband* (chest protector) to protect his chest and abdomen. It seems that the chest protector is worn under his gambeson and is partially visible.

2.3 Persian swordfighters in the painting

In the painting, different Persian swordfighters are shown. A Persian warrior is shown in a high guard of a *šamšir* (sword) and *separ* (shield) (for a high guard with *šamšir* and *separ*, see Moshtagh Khorasani 2013, 144-145). A part of the scabbard of his sword and one of its sword fittings (*varband*) can be seen hanging on the left side of his body. The handguard (*bolčāq*) of his sword ends in rounded knobs as in most Persian *šamšir* from this period. Persian swords have three types of quillons: a) quillons ending in knobs (for examples, see Moshtagh Khorasani 2006, 429, Cat. 429; 438-439, Cat. 78), b) spatulated quillons (for examples, see Moshtagh



Fig. 3. A Persian *kārd* with patterned crucible steel blade.

Khorasani 2006, 435, Cat. 75; 436, Cat. 76), and c) quillons ending in downward dragon heads (for examples, see Moshtagh Khorasani 2006, 485, Cat. 114; 489, Cat. 119). The white-yellowish color of the sword handle indicates that the handle slabs are made of walrus ivory tusk (for examples of swords with handles made of walrus ivory, see Moshtagh Khorasani 2006, 432, Cat. 75; 435, Cat. 75). As most *šamšir* (sword) of the period, the pommel cap (*kolāhak*) is set at 90 degrees to the handle (for examples, see the pommel caps of swords attributed to Fath Ali Shāh Qajar, see Moshtagh Khorasani 2006, 526-527, Cat. 151; 528-529, Cat. 152; 530-531, Cat. 153; 532, Cat. 154; 533, Cat. 155). The Persian warrior depicted in the picture is positioned as the bearer of a large shield with six buckles on the body. Six buckles correspond to three straps in the shield. This fighter passes his left elbow through the corner strap of this shield and then grabs two central straps in the palm of the left hand. The brownish color of the shield indicates that he is holding a hide/leather shield (for Persian leather shields with six buckles, see Moshtagh Khorasani 2006, 669, Cat. 361; 671, Cat. 363-364; 672, Cat. 365; 673, Cat. 367; 675, Cat. 369-370; 676-677, Cat. 372; 678, Cat. 374; 679, Cat. 375). He is wearing a set of *bāzuband* (vambrace) without hand protectors. It seems that the plates of the *bāzuband* are attached with clasps and leather straps. He is also wearing a green *xaftān* (gambeson) to protect his body and arms. To protect his body, he is wearing a four-mirror armor (*čāhārāyne*). A four-mirror-armor consists of four plates: chest protector (*sineband*), back protector (*poštband*), and two side protectors (*baqalband*) (Moshtagh

Khorasani 2010, 133; Moshtagh Khorasani, 2006, 281-282). Judging by the grayish color this example is made of steel (for four-mirror armor sets made of steel, see Moshtagh Khorasani, 2006, 713, Cat. 404), but there are also examples made of hardened hide/leather (see Moshtagh Khorasani, 2006, 712, Cat. 403). Four-mirror armor sets were attached in three ways: 1) *čāhārāyne* with four pinned plates (for examples, see Moshtagh Khorasani, 2006, 281-282), 2) *čāhārāyne* with four plates attached via leather straps and buckles (Moshtagh Khorasani 2006, 704, Cat. 398), and 3) *čāhārāyne* with five pinned plates (for examples, see Moshtagh Khorasani, 2006, 703, Cat. 397). He is wearing a helmet (*kolāhxud*) with a mail coif protecting his neck, nose protector (*damāqak*), and a helmet spike (*neyzak*). For a very similar helmet from the Safavid period, see Moshtagh Khorasani (2006, 717, Cat. 408). For another similar example from the David Collection, see von Folsach *et al.* (2021, 171).

In the following scene, the second swordsman is depicted who has raised his *šamšir* in a



Fig. 4. A Persian warrior with a *šamšir* in a high guard and a separ



Fig. 5. A Persian hide shield.

high guard. Only his right arm, head, and part of his upper body are visible as he is mostly hidden behind the Persian soldier in front of him. His sword is highly curved and its pommel cap is set at 45 degrees to the handle. His right *bāzuband* (vambrace) is visible. The steel plates are possibly attached via hinges. He is wearing a helmet (*kolāhxud*) with a mail coif protecting his neck, and nose and a helmet spike (*neyzak*). A part of the handle of his *šamšir* is visible and judging by its yellowish color, it indicates that it has slabs made of walrus ivory.

In another scene two mounted Iranian warriors are shown holding a cut-off head of a Russian soldier and riding back to the Persian lines (Rozdoka and Seymouc 27). The rider in front is holding his head close to the neck of his horse and is holding the head of the Russian soldier in his right hand. A *šamšir* is hanging on the left side of his body. It has a crossguard with spatulated quillons. The pommel cap is set at 90 degrees to the handle. The handle slabs are painted in yellowish color indicating that the handle slabs are made of walrus ivory. He is wearing a brownish gambeson. Both warriors are wearing a helmet (*kolāhxud*) with a mail coif for protecting the neck, a nose protector (*damāqak*), and a helmet spike (*neyzak*). On the right side, the warrior, holding the head of a Russian, is wearing a green gambeson with a frontal part in yellowish color.

2.4. Persian Lancefighters

In this battle scene, Persian warriors either handle their lance/spear with two hands or single-handedly. A part of the painting shows a Persian warrior wielding a lance with two hands. He is thrusting a Russian horseman on the back and dismounting him. He is using the same lance technique as *Abbās Mirzā*



Fig. 6. Another Persian warrior with a *shamshir* in a high guard and a spear.



Fig. 7. A Persian warrior with a šamšir in a scabbard.



Fig. 8. A Persian shamshir with a patterned crucible steel blade.

and wearing a thick dark green gambeson. He is wearing a helmet (*kolāhxud*) with a mail coif for protecting his neck. His helmet does not have a nose protector (*damāqak*), and a helmet spike (*neyzak*). He is wearing a set of *bāzuband* (vambrace) without hand protectors. The handle of a Persian *šamšir* hanging from his left hip is visible. It is hanging in a reverse position indicating that the sword can be drawn with an edge up. Most Persian *šamšir* were drawn with the edge down (see Moshtagh Khorasani 2013, 142-145). The handle is drawn in a yellowish color. This indicates that they are made of walrus ivory.

In another scene, a mounted Persian warrior is shown in this part of the painting wielding a lance (*neyze*) with his right hand. He is holding it above his shoulder ready to deliver an overhand thrust. Overhand thrusts with a *neyze* are shown in paintings in the *Tārix-e Jahāngošāye- Nāderi* (The World Conquest of Nader) (Moshtagh Khorasani 2013, 118, miniature 71). To protect his body, he is using a four-mirror armor (*čāhārāyne*). The plates are attached via cords and buckles. He is wearing a helmet (*kolāhxud*) with a mail coif for protecting his neck. His helmet does not have a nose



Fig. 9. A Persian lancer is attacking a Russian with a lance in the middle guard.

protector (*damāqak*), but it has a helmet spike (*neyzak*). He is also wearing a gambeson and a set of *bāzuband* (*vambrace*) without hand protectors. The plates are attached to each other via belts and buckles. He is holding the horse reins with his left hand.

In the following picture, a group of cavalrymen armed with lances attack the Russian artillery and musket lines. Front lines are holding their lances in the middle position. They are wearing a gambeson and a helmet (*kolāhxud*) with a mail coif for protecting the neck, a nose protector (*damāqak*), and a helmet spike (*neyzak*). They are flanked by musketeers armed with matchlock muskets on the right side. They are wearing a gambeson and a felt hat.

In the following scene, two Iranian mounted cavalrymen approaching the Russian line of musketeers with their lances. To avoid bullets, the attackers bend their upper body and hide their heads behind the right side of the horse

neck. The cavalryman in front is wearing a mail armor (*zereh*). He is also wearing an arm protector (*bāzuiband*), a helmet (*kolāhxud*) with a mail coif for protecting the neck, a nose protector (*damāqak*), and a helmet spike (*neyzak*). He is also wearing a quiver (*tarkeš*) full of arrows on his right side. Both are wearing a helmet (*kolāhxud*) with a mail coif for protecting the neck.

2.5. Heavy weapons: Javelins, axes, and maces

In the following group, five Persian soldiers are presented with an interesting array of weapons. The soldier on the right is holding a javelin (*zubin*) in his right hand. The javelins have a strong blade with a pronounced midrib and a reinforced tip. Similar javelins from the Afsharid period are kept in the Military Museum in Sa'ad Abad Palace in Tehran, Iran (see Moshtagh Khorasani 2006, 639, Cat. 302-303). He is wearing a long-sleeved brownish gambeson.



Fig. 10. A mounted Persian lancer with a lance in a one-handed high guard.

On top of it, he is wearing a yellow jacket with visible rivetheads. This is possibly an indication of an armored jacket. The warrior behind him is wearing a pišqabz tucked in front of his belly. The greenish handle of it indicates that it has a jade handle (for pišqabz daggers, see Moshtagh Khorasani 2006, 618-619, Cat. 260-261). The warrior on the far left is holding a flanged mace in his right hand (for Persian flanged maces, see Moshtagh Khorasani, 2006, 656-657, Cat. 338-

339). He is wearing a plate armor that protects his upper body. This is an imitation of a European body armor. The breastplate is in the shape of a stylized male torso. The front and the back plates are joined with hinges on the sides and on the shoulders. You can see a similar armor from the Khalili Collection with the inscription in the name of the fifth Nizam of Hyderabad, Nizam Ali Khan (reg. 1762-1803) (Alexander, 1992, 174-175). Another similar example is inscribed



Fig. 11. A Persian four-mirror armor (čāhārāyne) from the Military Museum of Tehran.

with Nawab Muhammad Nizam al-din Khan dated 1871-2 CE is in the collection of the Metropolitan Museum of Art (see Alexander, 1992, 174). Alexander states that this style of India was common in 19th-century India. An example of this armor from Northern India is dated to 1846 CE and shown in a lithograph. For another similar Indian armor attributed to Deccan from the Collection of Hew Kennedy, see Ricketts (1988, 78). Ricketts attributed it to attributed to the 16th-17th century. But the armor shown by Ricketts (1988, 176-177) also has the inscription “His honor Mir Nizam Ali Khan”. Ricketts argues that although the armor is inscribed to the Nizam of Hyderabad (during the 18th century), this armor might have been manufactured in the previous century. Pant (1983:4) shows a drawing of a similar armor kept in the National Museum of New Delhi and attributes it to the 17th century. The warrior depicted in the painting has his arms covered with overlapping small plates that are riveted to each other. He is also wearing shoulder protectors made of steel plates. He is also wearing an armored skirt consisting of different riveted vertical plates. All these warriors are wearing felt heads and no helmet.

Another battle scene depicts a Persian warrior holding a tabarzin (saddleaxe) with his right hand in a high guard above his head with the edge of the axblade facing the ground (for similar axes, see Moshtagh Khorasani 2006, 663, Cat. 351, 664, Cat. 353, 665, Cat. 353-354, 666, Cat. 355). In his left hand, he is holding the sleeve of a Russian soldier by pulling it above his head. It is a wrestling technique to control the opponent. Similar techniques can be seen in *košti-ye bā čuxe* (a traditional jacket wrestling art practiced in Khorasani, Iran) (for this wrestling art, see Moshtagh Khorasani, 2014, 116-129). He is wearing a helmet (*kolāhxud*) with a nasal (*damāqak*), and a helmet spike (*neyzak*). He is wearing a mail armor above his gambeson (*zereh*). He is also wearing a set of *bāzuband* (vambrace) without hand protectors.

The mounted warrior in this corner of the painting is wearing a gilded shield with one central buckle and eight greenish buckles placed around it. He is also wearing a gilded and bejeweled round-headed mace indicating his high rank (for examples of round-headed maces, see Moshtagh Khorasani 2006, 657, Cat. 340; 2013, 337, Cat. 32). He is wearing a mail armor. He is wearing a helmet (*kolāhxud*) with a mail coif for protecting his neck. His helmet does not have a nose protector (*damāqak*), but it has a helmet spike (*neyzak*). He is wearing a set of *bāzuband* (vambrace) without hand protectors. As mentioned before, Diba (2006:101) identifies this figure as Crown Prince Abbās Mirzā. But this attribution is doubtful.

2.6 Short Weapons: Xanjar (khanjar)

In this scenario, a Persian warrior is shown throwing and controlling his Russian opponent by the technique “knee on stomach”. This is a common technique shown in Persian miniatures that is followed by a dagger (*xanjar*) strike as shown in this painting (for other examples of this technique, see the following miniatures “Sohrāb throwing Rostam on the ground”, “A battle between Keyxosrow and Šide”, “Salam and Tur killing Iraj”, “Xosrow is killing Šide”, “A battle between Sohrāb and Rostam”, see Moshtagh Khorasani (2013, 221-222). The dagger he is wielding in this painting is dou-



Fig. 12. Persian mounted lancers attacking with lances in the middle guard.



Fig. 13. Persian mounted lancers in a bent position.



Fig. 14. A Persian lancehead made of patterned crucible steel (Al-Qarashi Collection).



Fig. 15. A Persian pišqabz with patterned crucible steel blade.



Fig. 16. Persian warriors with a flanged mace and a javelin.



Fig. 17. A Persian flanged mace from the Military Museum of Tehran.

ble-edged and almost straight. Although most Persian daggers from the Qajar period have a more curved blade (for examples, see Moshtagh Khorasani 2006, 582, Cat. 212-213; 583, Cat. 214-215; 584, Cat. 216-217; 585, Cat. 218), there are also examples of Persian xanjar with lesser curvature (see Moshtagh Kho-

rasani 2006, 598, Cat. 232). The handle of the dagger shown here in the painting is painted yellow indicating it has walrus ivory handle scales. He has tucked the gilded scabbard of his dagger under the belt on the right side of his body. He is wearing a set of bāzuband (vambrace) without hand protectors. The

steel plates are attached to each other via hinges. He is wearing a mail armor (*maille*) with a top opening. This type of mail armor did not have a frontal opening but it could be worn over the head (for examples of Persian mail armor, see Moshtagh Khorasani 2006, 724, Cat. 417; 725, Cat. 725). He is wearing a helmet (*kolāhxud*) with a mail coif protecting his neck, nose protector (*damāqak*), and a helmet spike (*neyzak*).

A Russian soldier has been taken as a prisoner by another Persian warrior. He is kneeling on the ground and tying the hands of the fallen Russian soldier on his back. He is wearing a set of *bāzuband* (*vambrace*) without hand protectors. The steel plates are attached to each other via hinges. He is wearing a helmet (*kolāhxud*) with a mail coif protecting his neck, nose protector (*damāqak*), and a helmet spike (*neyzak*). He is wearing a green gambeson (*xaftān*). He has tucked a dagger (*xanjar*) in his belt on the right side of his body.



Fig. 18. A Persian warrior armed with a *tabarzin* in a high guard.

2.7 Firearms

In the following scene, three Iranian marksmen shoot with long matchlock muskets. They are all wearing gambesons and felt hats. Matchlock muskets were in use starting from the Safavid period and many of them existed next to the flintlock muskets at this period. But in this painting, Iranian musketeers are using matchlock muskets. For similar matchlock muskets from the Safavid period, see Moshtagh Khorasani (2018, 147-171, Cat. 1-26).

In another combat scene, an Iranian warrior has tied the hands of a Russian behind his back and is pushing him back to Persian lines by using the butt of his musket. In the painting, the fire mechanism of the musket is not visible. The butt cap of the gunstock is painted in a yellowish color indicating a walrus ivory tusk. For similar Persian matchlock muskets with a butt cap of the gunstock made of ivory from the Safavid period, see Moshtagh Khorasani (2018, 150, Cat. 5). The gun has four yellowish barrel straps indicating that they are made of copper alloy. For matchlock muskets with barrel straps made of copper alloy, see Moshtagh Khorasani (2018, 154, Cat. 9). The warrior is wearing a helmet (*kolāhxud*) with a mail coif for protecting his neck. His helmet has a nose protector (*damāqak*), and a helmet spike (*neyzak*). He is wearing a green gambeson with a frontal part in yellowish color. He has tucked a dagger (*xanjar*) on the left side of his body under the belt. It means that the warrior should be left-handed as this type of dagger is drawn in a reverse grip. The handle is in yellowish color indicating that the handle scales are made of walrus ivory. A greenish stone is set on top of the handle (for a similar dagger with a walrus ivory handle and a ruby stone set on the top of it, see Moshtagh Khorasani (2006, 589, Cat. 222).

In this scene, two Iranian marksmen are shown armed with matchlock muskets. On the right side, the match of the musket of the Iranian marksman is clearly visible. The musket is held in a vertical position by him. Both muskets are very long and are mounted with a short bayonet. The warrior on the left is placing his matchlock musket on his left shoulder (for a



Fig. 19. A Persian tabarzin (saddle axe).



Fig. 20. A Persian helmet made of patterned crucible steel.



Fig. 21. A Persian bāzuband made of patterned crucible steel.



Fig. 22. A Persian mounted warrior with a round-headed mace.

very long Persian matchlock musket from the Safavid period with a length of 210.2 cm, see Moshtagh Khorasani 2018, 159, Cat. 14).

A number of camel riders are also shown. The rider in front is holding a swivel gun (zanburak).

As to the reasons why Diba (2006:101) claims that swivel guns caused more damage to the Persian troops than the Russians, it is not clear why. Swivel guns were considered to be very effective weapons.

3. Arms and Armor of the Russian Army

In accordance with the statements of Diba, this painting should depict “the battle of Ye-

revan” (June 1804 CE) and not the battle of Ganja (1826 CE). The reasons for this are various as it has been mentioned before. In this painting, the Russian officers wear cocked hats and the infantry soldiers wear typical grenadier (or fusilier) caps of the period.

This is another reason why this painting refers to “the battle of Yerevan” (June 1804 CE) and not “the battle of Ganja” (1826 CE). Wearing cocked hats for officers and grenadier caps for infantry soldiers means that the painting could not be depicting the battle of Ganja in 1826 CE. From December 1805 CE, officers in the Caucasus were permitted to wear cocked hats, which were worn by the lower ranks (Visk-



Fig. 23. A Persian warrior with a khanjar (dagger) in a reverse position.



Fig. 24. A Persian khanjar with a patterned crucible steel blade.



Fig. 25. A Persian warrior tying the hands of a Russian soldier.

ovatov, 1851:324) for convenience reasons. Further, since December 1807 CE, the Grenadier caps for the lower ranks were transformed into shakos (Viskovatov, 1851:327-328).

The Grenadier caps remained in use only in the Life Guards of the Izmailovsky Regiment, on the personal order of Alexander I. Finally, from December 1809 CE, the officers of the Grenadier regiments received shako hats instead of hats (Viskovatov, 1851:335-336). Accordingly, fusilier caps were also absent in the troops after the reforms of Alexander I. Ad-

ditionally, the color of the uniforms also support the idea that this picture shows the battle of Yerevan. A group of Russian infantry soldiers in the painting are wearing red uniforms with black lining. We should note that already by Napoleonic Wars (1803-1815 CE), all uniforms of Russian infantry and artillery soldiers were changed to the green color with different colors of shoulder straps and trim. Additionally, they had tailcoat cut (Viskovatov, 1857:1, 38-39). We should note that the red and black uniforms are the uniforms of Russian fusiliers



Fig. 26. Persian mail armor and helmet attributed to Fath Ali Shāh Qajar from the Military Museum of Bandar Anzali



Fig. 27. Persian musketeers shooting with matchlock muskets.

and artillerymen until 1798 CE (Viskovatov, 1844:62, 73). But since 1798 CE, a dark green caftan was introduced in both grenadiers and field artillery (Viskovatov, 1848:83-84; *ibid.*, 1849, 52-53). This is again in line with the assumption that the painting depicts the Battle of Yerevan. The fact that the colors of the uniforms on soldiers do not correspond fully even to 1804 CE should not be surprising as the rearmament and new uniforms of the Russian troops in the Caucasus always appeared with a great delay. Therefore, the uniforms of the time of Paul I at the beginning of the reign of his son Alexander I would not have caused much perplexity. The problem is that in the picture we do not see the uniforms of the time of Paul I at all. These uniforms of this color and cut (not always correctly conveyed by the artist) relate only to the reign of Catherine II. Moreover, these fairly stylized uniforms clearly belong to the era before the reform of the uniforms of the Russian army carried out by Count G.A. Potemkin in 1783-1796 CE. During this period, the heads of all Russian infantry and cavalry (except for mounted jaegers and hussars) should have characteristic "Potemkin" helmets with a transversely sewn plume (Viskovatov, 1843:116, 126, 129, 165, etc.). However, we do not see any of these changes in the picture. Therefore, the model for the artist was an even earlier sample of the Russian form of Catherine's time, which he depicted as best he could in his painting. But Russian uniforms of the "pre-reform" model could have been



Fig. 28. A Persian musketeer hitting the back of a Russian soldier with the butt of the musket.



Fig. 29. A Persian matchlock musket from the Military Museum of Tehran.



Fig. 30. Two Persian musketeers with matchlock muskets.



Fig. 31. Persian camel riders with swivel guns.



Fig. 32. A Persian swivel gun made of brass from the Military Museum of Tehran.

seen by the Persians in such a combination only during the events of the Russo-Persian War of 1796 CE (the campaign of General V. A. Zubov to Derbent), or immediately after it, while the Russian troops had not yet been withdrawn to Russia. Therefore, if the artist or one of his apprentices depicted Russian soldiers simply from memory, then inaccuracies in small details of their ammunition or the old

cut of uniforms no longer look so strange. At the same time, it is quite obvious that the presence of the outdated Catherine uniform with the total absence of the Pavlovian one in the combat units of the Russian army in 1804 CE is completely excluded.

Also, serious doubts are caused by the figures of riders in Russian uniforms. If a figure in red can still be suspected of being a fleeing artillery



Fig. 33. The grenadier cap of the Izmailovsky Life Guards Regiment from the Military Historical Museum of Artillery, Engineers and Signal Corps (St. Petersburg, Russian Federation).



Fig. 34. A shako hat of the Guards infantry for 1826 CE from the Military Historical Museum of Artillery, Engineers and Signal Corps (St. Petersburg, Russian Federation).

officer, then a falling rider in a green uniform is quite difficult to associate with anyone. Perhaps it is a dragoon, but his drawing is so conventional that it is impossible to identify him more accurately. Finally, a strange figure in a cocked hat and a blue uniform is holding an object in his hand that strongly resembles a grenade, although it is not a grenadier at all. Apparently, all this is also a tribute to the conventionality of the depiction of this battle, where dramatic effects were more important than strict historical accuracy in some details. In addition, it cannot be completely excluded that some of these details were actually drawn from memory, based on already outdated data about the Russian army.

3.1 Swords

In the two Russo-Persian wars (1803–1814 CE and 1826–1828 CE), different edged weapons and swords were used. However, the main types can be classified into:

a) Russian cavalry of the period used the following saber patterns: 1798, 1802, 1807, 1809, and 1822

- **Light cavalry saber pattern 1798** was used by the Hussar and Ulan regiments. The dragoon regiments of the Caucasian inspection used this pattern until 1809, and Lifeguard Uhlan Regiment used this pattern until 1812. The light cavalry saber pattern 1798 was single-edged and had a curved blade with a length of 87 cm and a blade width of 4.1cm. The total length of this sword is 100 cm. The saber had a wooden grip covered in leather with a guard with the knuckle bow and a double langet. This saber weighed 2.1 kg with a steel scabbard and 1.8 cm with a wooden scabbard.

- **Light cavalry saber pattern 1802** had a blade of 89 cm in length with a pronounced curvature. The brass hilt has three bars. The wooden grip is covered in leather and bound with spirals. The total weight of the scabbard is 2.180 kg (see Dellar 2013; SwordsDB).



Fig. 35. Russian light cavalry saber pattern 1798.

- **Light Cavalry saber pattern 1807** had a curved fullered blade and had a back edge towards the tip of the blade. It has a stirrup hilt, a knuckle guard, and a wire-bound grip. It has a blade of 83.5 cm in length (Dellar, 2013, 80-87).

- **Light cavalry saber pattern 1809** replaced all other older saber patterns in the Lifeguard Uhlán Regiment, Lifeguard Hussar Regiment, and the dragoon regiments of the Caucasian Inspection. This saber pattern also substituted the old sabers in all Hussar and Ulan regiments. The light cavalry saber pattern 1809 was 103 cm long with a blade length of 88 cm. The blade was circa 3 – 3.6 cm wide. The saber grip was made of wood covered in leather. The iron guard had three bars with a cross-guard. The saber weighed 1.9 kg with a steel scabbard (see Bezotosnyi, *et al.* 2000).

- **Light cavalry saber pattern 1817** was 101 cm long with a blade length of 87 cm. The blade was circa 2.8 cm wide.

- **Light Cavalry saber pattern 1822** was based on the French light cavalry model with a more pronounced curved blade with a three-bar hilt molded in one piece. The wooden grip was covered in leather and bound with two twisted wires. The blade is 92 cm and the total weight of the sword is 2.1 kg (see Vasse Online, Delperier 1987; also Kulinskij, 2005:114-118).

b) Infantry and cavalry officer swords pattern 1798: They were similar to the unusual French Infantry Officer's sword which again resembled the English sword pattern 1796. These swords had a plain blade, a clam-shell cross guard with braided twist wire handle. In France,

this style of sword existed for a short period, and later they were substituted by the Napoleonic sword styles (see Russian Cavalry of the Napoleonic Wars 1805-1815). This is the only sword that is depicted in the painting. This sword is shown carried by the Russian cavalry three times. Two Russian cavalymen on the right side are thrown off their horses. The straight swords are still hanging on the hip of these two Russian officers. One is mounted by a Persian warrior who is controlling him with the technique “knee on the stomach” and attacking him with a xanjar (dagger). The other Russian officer who is standing in the water is trying to help his friend. The handle is painted in a whitish color indicating the use of ivory for handle scales. The other Russian officer is in the position of falling off his horse. He has a similar straight sword but his sword has a double knucklebow. It has also a whitish handle indicating the use of ivory.

In the other part of the picture, Russian infantry soldiers are shown. They are carrying straight swords that resemble infantry sword pattern from 1798. Two of them have a single knuckle bow and one lacks it. The handle of all of them are painted in white.

c) Hangers patterns 1797, 1798, 1807 and 1817: The infantry also used short sabers or hangers of patterns 1807 and 1817 (Kulinskij, 2005:269-270).

d) Hand-made local swords: In addition, the Cossack units were armed with their shashkas and sabers (of a non-regulatory type) and they also used captured Ottoman Turkish and Persian sabers.

e) Hand-made local swords: In addition, the Cossack units were armed with their shashkas and sabers (of a non-regulatory type) and they also used captured Ottoman Turkish and Persian sabers.

3.2 Firearms

Rearmament of the Russian army in the Caucasus was always seriously delayed. Thus, at the start of the Russian-Persian War of 1803–1814 CE, there were still many old-style weapons produced under Catherine II and Paul I.

3.2.1 Small firearms: The Russian army used



Fig. 36. A Russian cavalry officer with an officer sword pattern 1798 hanging from his waist.



Fig. 37. A Russian infantry with a sword pattern 1798 hanging from his waist.

too many types of firearms for the war in 1803-1814 CE. The infantry soldier's gun pattern 1798 was officially adopted on June 30, 1798 simultaneously with the non-commissioned officer's gun, the jaeger's rifle, the dragoon musket, carbines with rifled and smooth

barrels (Markevich, 2005:95-96, 99-100, 105). Most of the components and parts on the weapons of the 1798 model were interchangeable, and the traditional differences between guards and army models of weapons were removed. The rearmament of the Russian army



Fig. 38. Russian infantry half saber pattern 1807.

undertaken by Paul I became systematic. The soldier's rifle in this system was the basic one - in fact, its production began back in 1797 CE (Markevich, *ibid.*). Later, in the midst of the war, more modern models were also adopted by the Russian army. Among them are the jaeger rifle and non-commissioned officer's rifled gun of 1805 (Markevich, 2005:117-118). But the most common were the following:

a) Dragoon pistol pattern 1798: caliber: 17 mm, barrel length: 240 mm, total length: 415 mm.

b) Cavalry pistol pattern 1809: All Russian cavalymen were equipped with a pair of saddle pistols with a flintlock mechanism that was carried in holsters attached to both sides of the bows of the saddle. The issued pistol for the rank-and-file cavalymen was the 17.6-mm cavalry pistol pattern 1809. It had a total weight of 1.5 kg, a caliber of 17.78 mm, and a barrel length of 263 mm (see Russian Cavalry of the Napoleonic Wars 1805-1815). The painting shows a Russian mounted cavalymen armed with a pistol shooting at Abbās Mirzā. The rendition of the cavalry pistol pattern 1809 is very detailed and very close to its original form.

a) Infantry soldier's gun pattern 1798. It was a gun with a flintlock. It had a caliber of 7.8 mm (19.8 mm) smoothbore. It was created to replace the infantry gun pattern 1763 and had a shooting range of 300 paces.

b) Infantry musket pattern 1808: It was a flintlock musket, and had a shooting range of 300 paces; however, the effective range of

fire was shorter than the average of 300 paces (see Russian Cavalry of the Napoleonic Wars 1805–1815 CE). Russian infantry soldiers are shown using this musket.

c) Cavalry rifle pattern 1803: It had a shooting range of 1000 paces. It weighs 2.62 kg. It had a caliber of 17.78 mm and a length of the barrel of 637.5 cm (Russian Cavalry of the Napoleonic Wars 1805-1815). A cavalry rifle is not shown in the painting.

3.2.2 Cannons

During the Russo-Persian wars of 1803-1814 CE, the Russian troops used several artillery samples at the same time. Until 1805 CE, the following cannons were used:

a) In field artillery: They used 12, 8, 6 and 3-pdr. cannons; 1, 1/2, 1/4-pood., 8, and 3 lb. field unicorns.

b) In regimental artillery: They used 3-pdr. cannons; 1/4-pood., 8 and 3 lb. unicorns.

These could have been cannons and unicorns pattern 1787 cast under Catherine II. Although since 1797, only 12-pdr. cannons and 1/2-pood unicorns remained in the Russian foot artillery; 6-pdr. cannons and 1/4-pood unicorns — in the horse artillery. And all the regimental artillery that was with each regiment (except the Guards, who did not have it at all) was armed with 6-pdr. cannons and 1/4-pood unicorns cast under and Paul I (Nilus, 1904:271-272, 274-276). At the same time, the old guns of canceled calibers still remained in the troops. But the most frequently mentioned artillery pieces during this war (1804-1813) are:

a) Russian 3-pdr. unicorn (that had been used since 1802 CE). It resembles 1/4 and 1/2-pood field unicorn pattern 1805 had exactly the same design.

b) Russian 12-pdr. field cannons (of «small proportion»). They closely resembled Russian 6-pdr. field cannon pattern 1805, differing only in size and caliber. The painting shows five cannons of this type that are placed in a line and they shoot at storming Persian cavalry. But judging by the size of the cannons depicted in the painting, these are small-caliber (most likely regimental) pieces.



Fig. 39. A Russian cavalry man shooting with a cavalry pistol.



Fig. 40. A Russian cavalry pistol.

At the beginning of the 19th century, there were several types of firearms in service with infantry and cavalry. Light infantry rangers were armed with chasseurs of a model 1805 g. (16,5-mm with 6 cuts) with bayonets, non-commissioned officers, and the best 12 rifle companies armed with fittings arr. 1805 g (16,5-mm with 8 cuts). The range of their shooting was 1000 steps. Linear infantry (grenadier and musketry regiments) was armed with infantry flint rifles

arr. 1805 g. (19-mm), infantry flint rifles arr. 1808 of the year (17,7-mm).

4. Conclusion

The large painting kept in the National Museum of Iran shows a battle of Fath Ali Shāh Qajar with the Russian troops. The painting is wrongly identified as “The Battle of Ganja” by the National Museum of Iran. However, based on different indications and clues shown in the



Fig. 41. Russian infantry soldiers shooting with flintlock muskets.



Fig. 42. Russian flintlock infantry musket.

painting, it cannot be depicting the battle of Ganja that took place between the Persians and the Russians in 1826 CE. As we have shown the original dating and also the name of the artist are unknown, but based on several factors, we could surely identify it as a painting depicting “the siege of Yerevan”. We are aware that Abbās Mirzā sought European military advice and assistance from the French after a series of defeats against the Russian troops. The European military advice back then was based on standardizing the equipment and uniforms of the troops. However, in the painting, Persian troops are still using the traditional sets of arms and armor and

there are no traces of military reforms such as European-styled uniforms and weapons introduced after the arrival of Jaubert and General Gardane on Gardane Mission (1807-09 CE). It means that the weapons used by Persian troops resemble the original ones used in the early Qajar period. Fath Ali Shāh is also shown in the battle scene, which is also an indication of an earlier date as he used to inspect his troops in Soltāniyeh in 1804 CE. In later periods, he did not take part in the battles and delegated those tasks to Abbās Mirzā. Even Russian troops are depicted in an archaic way and do not represent the uniforms and hats that they were wearing in

1826 CE. The Russian officers in this painting are wearing cocked hats and the infantry soldiers are wearing typical grenadier (or fusilier) caps of the period of 1804 CE. Additionally, their uniforms (a combination of colors and cuts) indicate even an earlier dating. But there is no logical explanation for this as of now.

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