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TRADITIONAL TECHNOLOGIES AND ARTISTIC TECHNIQUES FOR FINISHING WEAPONS PRESENTED IN THE COLLECTION OF THE STATE MUSEUM OF TURKMENISTAN

The article provides an overview of some types of Asian historical weapons of the 17th-19th centuries, which are artistic thanks to their decorative decoration using the jewelry art of reception. Basically, these are edged weapons and firearms from Persia, Afghanistan, Khiva and Bukhara khanates, used in Turkmens, as well as products of Turkmen handicraft production. Particular attention is paid to the peculiarities of the technological process of weapon design and the theme of its decor. The author's goal is to show the variety of styles and technologies used in the design of cold steel and firearms, which is in the collection of the Ashgabat Museum.

Key words: cold arms and firearms, Turkmenistan, jewelry art, ornament, ethno-marking elements.

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THE DECORATION of weapons as an original phenomenon signifying the material and spiritual life of a human being has existed at least since the Bronze Age. Along with the samples of archaeological weapons in the State Museum of Turkmenistan in Ashgabat, there is a large collection of cold weapons and firearms dating from the 17th-19th centuries from Persia, Khorezm, Bukhara, Afghanistan and Turkmenistan and used by the Turkmen. The museum finds contain samples of almost the entire arsenal of this period.

The collecting of these weapons began right after the fall of the Geok-Tepe fortress in 1881 and the conquest of Turkmenistan. At the initiative of General A.N. Kuropatkin, who was the head of the Trans-Caspian region, a museum dedicated to the Geok-Tepe battle¹ was opened at the fortress in 1898. A entire wall was assigned to demonstrate the collection of Turkmen weapons (Fig. 1). The fortress and museum were located next to the railway station, and passenger trains stopped there for planned excursions. In 1900, the famous Russian poet Maximilian Voloshin came across one of these excursions. Among his letters there is one noteworthy statement:

"The train stopped because of the low, thin, dilap-

idated clay walls, blown by the wind. There is a small museum building nearby. At the station there is a salient named "Geok-Tepe." And these are the walls of an "impregnable fortress!" Does this conquest of such a "stronghold" constitute a "brilliant page of Russian history?" In the museum, next to the Russian Berdan rifles, there are naive flintlocks of the defenders of Geok-Tepe exhibited with a strong sense of irony. What an unconscious slap is given in the face of Russian glory by this museum and these ruins of a wind-blown fortress. Something deeply tragic is now seen in these beautiful figures of the natives, that are in harmony with their surroundings. They lived in these steppes and knew how to handle them...." (Voloshin 2009: 404).

Remembering his voyage to the Turkestan region, the poet admitted that his most vivid impression was not the beauty of Samarkand, which he called "Central Asian Rome," but "Geok-Tepe with its clay walls and flintlocks" (Voloshin 2009: 464).

Over the past 120 years, the collection has been transferred from one museum to another. Many exhibits were irretrievably lost, however new items also came in. The weapons, which are currently registered in the State Museum of Turkmenistan, are carefully stored in compliance with contemporary standards and requirements of museum work with monitoring, cleaning and restoration of the exhibits.

¹ "Ashkhabad" newspaper, 1899, January 3.



Fig. 1. Interior of the museum in Geok-Tepe. In the foreground are manikins of a Russian army soldier and a Turkmen militia soldier. In the next room there was a display with weapons of the Turkmen and Russian armies. Postcard, early 20th century

In 2009, a new museum dedicated to its defenders was opened on the territory of the Geok-Tepe fortress. The exposition of the museum's modern weapons collection now occupies more than one wall with the space of an entire floor encompassing an area of 1224 sq. m. Local residents, the descendants of those soldiers who defended the fortress, actively participated in the creation of the collection.

There are rare photographs of the late 19th and early 20th centuries, which clearly show the entire variety of cold weapons used by the Turkmen (Fig. 2). A participant in the conquest of Geok-Tepe and the first commandant of this fortress, Aleksey Maslov, testified in one of his books: "... there were knives with excellent finishing. Instead of daggers, on the belts of the Tekins they have a sharp-pointed knife with a round scabbard and a bone handle decorated with turquoise. A knife in a scabbard made of a solid elephant tusk was occasionally shown." (Maslov 1882, p. 165). A different opinion was expressed ten years earlier by an anonymous author of an article in the *Military Collection*, who noted that among the Turkmen there were blacksmiths, metalworkers and

silversmiths who were engaged in the repair and decoration of weapons, but they did not know how to do it beautifully (Turkmen 1872, p. 79). Of course, it is impossible to compare the products of a developed guild craft from the cities of Persia, Khiva and Bukhara with the handicraft production of nomads, however among their products there is a fair amount of apparent artistic value.

In the vast expanses of Asia, the same types of weapons were produced and used. Curved swords *shamshir* (*şemşir*)² and *tulvar*, *kard*, *khaiber*, *peş-kabz* knives, *hanjar*³ dagger, *teberzin*⁴ battle-ax are some examples from an incomplete list of cold weapons that have become widespread among the Turkmen. The names of the main types remained consistently Turkic or the Persian-Arabic terms were used in parallel. For example, the Persian *shamshir*, *tyg* and the

² TDDS, II: 358. Hereinafter, the terms are given according to the Turkmen phonetics on the basis of the contemporary Turkmen alphabet.

³ TDDS, I: 536.

⁴ TKES: 368.

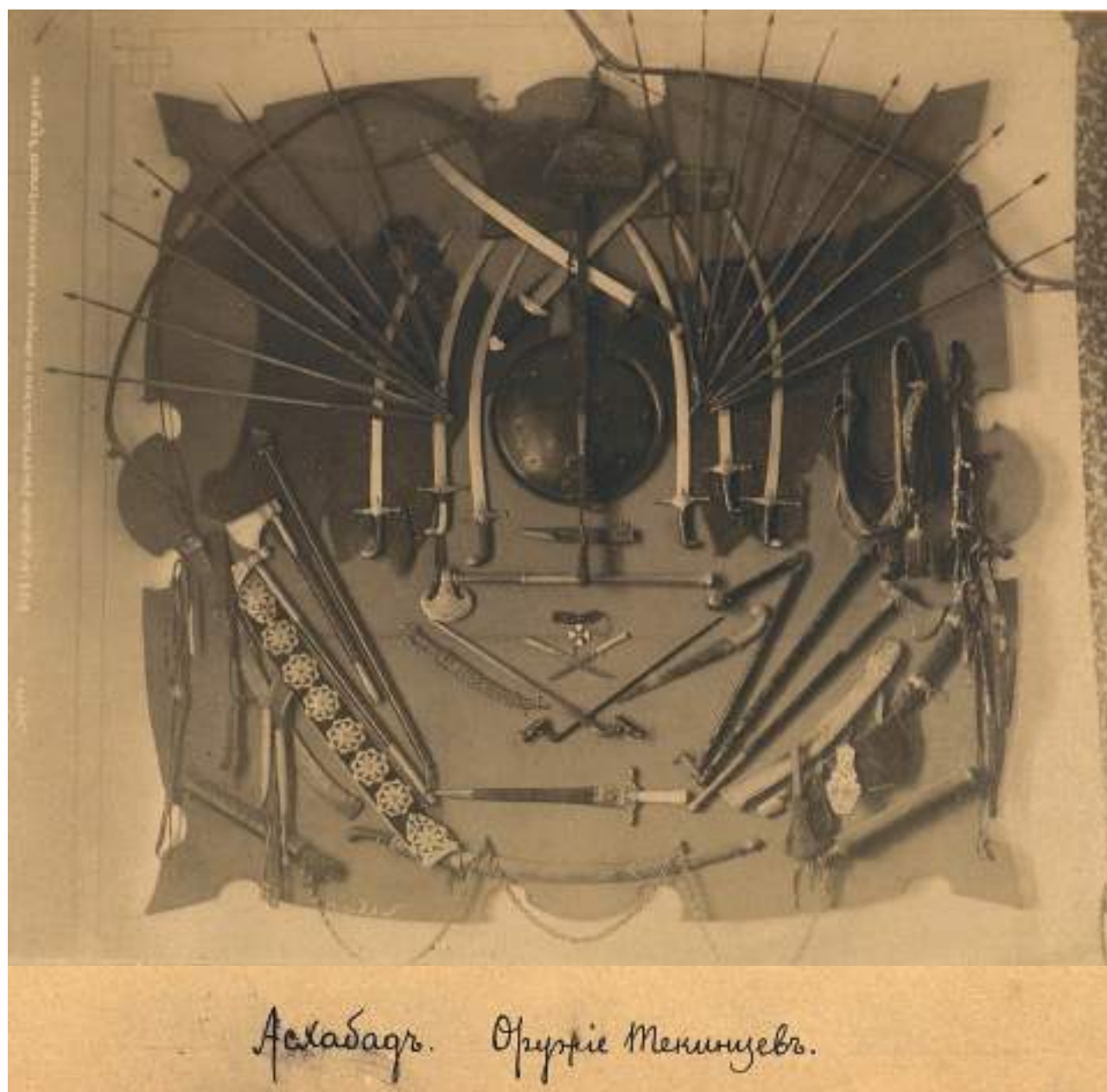


Fig. 2. Display from the Ashgabat Museum. Photo from the early 20th century. Museum of Anthropology and Ethnography RAS, St. Petersburg (No. 255-212)

Turkmen *glych* (Garajayev 1989: 25) or *teber* and *palta*, stood for the same thing. In addition to products made by local craftsmen, the Turkmen used weapons produced in Persia, Afghanistan, India, Bukhara and the Khiva Khanates. The basis of their arsenal was made up of captured weapons, or those acquired as a result of trade exchange. In the 17th-19th centuries the nomadic tribes of the Turkmen were in a constantly hostile environment; therefore, weapons were essential. Participation in raids or defense of

native places required the continuous acquisition and repair of weapons. Small workshops (*ussahana*),⁵ which were arranged right in the yurts, handled the manufacture and repairs. The production of knives and swords was not commercial, but purely artisanal. Products of Turkmen craftsmen (*demir ussa, ahangyr*)⁶ were more functional and less embellished (Maslov 1882: 165). Their embellishment was shaped under the influence of neighboring countries, but at the same time, Turkmen products had their own

⁵ TKES: 368.

⁶ TDDS, I: 260; TKES: 35



Fig. 3. Khorezm sword. Total length 980 mm, blade length 830 mm, width at the heel 33 mm, curvature ratio 12/34 cm (KEK-1638)



characteristic ornamentation and a close examination allows one to see the ethnic characteristics. The purpose of this article is to show the variety of styles and technologies used in the design of cold weapons and firearms which are presented in the collection of the Ashgabat Museum.

The main type of Turkmen cold weapon was a sword (*gylyç*).⁷ This is confirmed by numerous extant material and various sources (*Karazin* 1874: 234; *Khiva* 1840: 58). Various swords from different regions of the country are also found in the collections of other museums in Turkmenistan. The swords made in the Khiva Khanate are richly decorated with silver and gilding. This type of sword was used by the Turkmen from the Yomut, Garadashly and Chovdur tribes who lived within the khanate as a military class – the *nuker* (*nöker*).⁸

Let's consider one of these swords from the museum collection (Fig. 3). The sword blade has a prominent curvature. The handle of a traditional *shamshir* has a regular cap, but with an original ring (*halka*) for

⁷ TDDS, I: 511

⁸ TKES: 277

the sword-knot. The sword-knot is silk woven of red, yellow and green threads and the cord ends with a tassel in the form of a silver hemisphere with a fringe of threads and chains with spherical bells (*düwme*). The crossbar and the ferrule on the scabbard are sometimes made of damask steel, but more often they were made from ordinary iron. A double cord (*reje*) is attached to the upper ferrule of the scabbard to hold the sword in the scabbard when riding a horse. The belts are made of bright lilac velvet with eight-pointed openwork rosettes sewn on them. The rosettes are designed using a technique of white metal casting. There are also belts of green and crimson colors. The belts converge on a distributor plate in the form of a hemisphere. The ornament on the plate is executed in the form of a six-foil flower and is made using the *basma* technique. Small turquoise stones are inserted in a dense row along the edge of the dome. The belt ends with a metal buckle. Silk belts are a distinctive feature of the Khorezm swords.

The mouth and the point of the scabbard are gilded and the middle part is silver. The turquoise is installed in rows in the form of rosettes in settings. A continuous row of turquoise is also laid along the edge of the ferrules, mouth, point and along the contour of the scabbard. On the side of the mouth is a notch for easy removal of the sword from the scabbard. All over the surface of the scabbard is a rich embossed decoration (*basma*). This technology involves applying a to a thinly flattened gold or silver sheet using an embossing technique. Then mastic, gypsum or tar is poured in from the reverse side (Chvyr' 1977: 16). The theme for the decor is usually of a floral ornament. Most often, the scabbard was covered with velvet (*mahmal*) of crimson in burgundy or green colors.

The Saryk Turkmen live in the southeastern part of Turkmenistan on the border with Afghanistan. In the border area apart from traditional *shamshirs*, Af-



Fig. 4. Afghan pulwar. Total length is 1010 mm, blade length – 875 mm, width at the ricasso – 35 mm, curvature ratio – 120/390 mm (KEK-1775)





Fig. 5. Turkmen sword. Total length is 923 mm, blade length – 760 mm, width at the ricasso – 30 mm, curvature ratio – 9.5 / 35 cm (KEK-2663)

ghan weapons were widespread among the Turkmen. For example, one well-known person in the region, Arnageldy-bai Yagmyr-ogly owned a pulwar, which is now kept in the school museum of the city of Takh-tabazar. Afghan pulwars, *kaibers* and Indian *talwars*, which are in private collections and museums in Turkmenistan, mainly come from these places.

Let us consider one of these blades from the collection of the Ashgabat Museum. It is made of finely worked reticular damask steel and has a sharpened 230 mm long blade. Several fullers are found of 160 mm from the handle. The central fuller narrows and is closer to the point's ends and six short fullers are located on the butt side. On the front side, the first short fuller bends underneath the central one; on the back side are seven short fullers which begin flush with the central one. The ends of the fullers are semi-circular, between the fullers there is a gold notching in the form of flowers. The Turkmen term for fuller is *ganakar*, which is translated as “blood flow,” absolutely does not correspond to its purpose.⁹ The purpose of the fuller is to lighten the weight of the sword, increase the rigidity of the blade and at the same time to provide an element of decor.

On the front side of the blade, there is a calligraphic composition consisting of one round cartouche and two obliquely arranged frames with Arabic epigraphy. The gold notching is made with the *takh-i-nishan* technique. The name of the master is engraved in the round cartouche: “Made by Muhammad,” the inscription is clearly visible. On the reverse side there is a decorative inscription at the crossbar. The handle has a hemispherical end with a cone and ball characteristic of a pulwar. The hemisphere has



⁹ TDDS, I: 386

decorative openwork cuts. The handle itself thickens at the place of the grip, the crossbar is bent inward and ends with decorative elements in the form of tulips. The central ray of the crossbar is in the form of a leaf with an openwork cut. There are convex lines along the handle, in the center on the crossbar there is a decorative gold rivet. The handle is also made of good damask steel.

There is another example of a unique Turkmen sword, traditional in form, but with a zoomorphic handle in the shape of a horse's head (Fig. 5). This sword is completely metal (steel, silver with gilding). The decoration involves an artistic technique that is typical only for Turkmen jewelry art. The master engraver would slightly sway from side to side with the cutting tool when applying the pattern to the surface of the product. As a result, various pictorial elements in the form of rhombuses, triangles, and curls were placed over the entire surface. The line of the drawing at high magnification looks like a zigzag and provides a border between gold and silver. Some parts were covered with gold, others remained pure steel. The result was a two-tone design. Just two colors – matt silver and shiny gold – give an unusual effect. All the pictorial elements of these two colors simultaneously interact and compete with each other, but at the same time they remain a single integral composition. The Turkmen called such a combination a mix of milk and honey.

Gilding was applied using the amalgam technique (*gyzylama*, *gyzyl çayma*, *altyn çayma*, *tylla suwyny berme*) involving mercury (*simap*). The process melted gold with mercury over low heat. The ready alloy was poured into cold water which created a gray pasty substance. The etching was filled in with this substance, after which the object was fired. The mercury evaporated covering the object with a thin layer of gilding (*Pirkuliyeva* 1973: 53). This weapon should not be considered as a combat weapon, but rather as a replica gift. The master who made the sword proved himself more as a jeweler than a weapons smith.

Traditionally, swords made by Turkmen craftsmen are somewhat simpler. The blade usually has a strong curvature, without an expanding blade. Often there is a notched cartouche at the ricasso. The blades have either one fuller or several small ones. The handles can be made of ivory, walrus tusk, antler or wood are often embellished with silver rings.

The scabbard (*gyn* or *gylyç gap*, *gylap*, *niýam*)¹⁰ of any type of cold weapon is the most important eth-

nic indicator. In different Turkmen regions, design was determined according to location. It was by the scabbard that the Turkmen easily identified compatriot's belonging to a particular region. Moreover, a Turkmen warrior could easily determine the tribal affiliation of any stranger he met according to the peculiarities of how the person wore a sword, how it was suspended from a belt, or even they way it was tied to the waistband, (*Grodekov* 1883: 84, *O'Donovan* 1883: 161). The sword scabbard consisted of a wooden sheath covered with smooth or pebbled leather or overlaid with thin sheet metal. In the upper half of the scabbard, there were two iron fullers (*bilekse*) mounted with rings for attaching the bands of the sword-knot to them. In the lower part had a tip (*päýnek*),¹¹ which was covered with an additional layer of leather. The main part of the scabbard consisted of wooden plates. The plates followed the contour of the sword blade, with only a slight overlap. In its cross-section, the scabbard was almond-shaped. Deep engraving with traditional ornamentation were applied on the outside of the wooden sheath. On the inside, exactly along the contour of the blade, wood which measured slightly more than half the thickness of the blade. Then, both halves were merged, glued together and covered with green, pebbled leather (*sagry*).¹² The head of the scabbard was covered with a different type of leather (*teletin*)¹³ possessing a smooth red-brown surface. Leather of both types was sewn with a straight seam from the back side and placed in a groove preselected in the wooden sheath. The outer side was embossed with straight lines in the form of herringbone or linear geometric patterns and solar symbols. Silver (*kümüşmyh*) or copper (*mismyh*) nails were used as decorations.

There was also another original decorative technique. Since the head of the scabbard consisted of two layers of leather, a round or oval hole was cut in the upper part of it. The edge around the hole was covered with copper nails, creating an unusual effect. Of course, all the design techniques were used in combination with each other. Quite often the head ended with a decorative leather tassle (*gotaz*).¹⁴

Another decorative technique is also often visible on the Tekin scabbard. This involved twisting a thin leather braid (*tasma*) around the scabbard from the mouth (*gyn agzy*) to the upper part of the head. On

¹¹ TDDS, II: 223

¹² TDDS, II: 249

¹³ TDDS, II: 397

¹⁴ TDDS, I: 451

¹⁰ TDDS, I: 513; Garajayev 1989: 25; TKES: 35



Fig. 6. Sword-knot. The design consists of two running belts 970 mm long, a waist belt 880 mm long and two belts 240 mm and 360 mm long. Width of sword-knot belts is 43 mm (KEK-1073)

one end of the braid a nail was attached at the scabbard's mouth and then the braid was woven around the scabbard. The braid then passed over the metal clips and reached the upper part of the scabbard tip and nailed in place (Fig. 5). This type of design enhanced the scabbard's elegance. Studs with decorative silver caps (*gölmyh*) were nailed over the braid along its entire length and were made using soft stamp technology. A sheet of silver was placed on a steel or bronze mold (*galip*), and hammered through the lead plate. This created a low relief ornamentation (Pirkuliyeva 1973: 52). Then a nail or a double pin was soldered from the back side, which fastened the cap the leather.

The sword-knot belt (*gylyç bagy, gylyç gaýyşy*) extended from the fullers on the scabbard in two straps of different lengths reaching up to the buckle. The short strap was non-adjustable whereas the long one adjusted according to preference of the wearer. The short strap passed in front and an S-shaped metal buckle was attached to it. At the end of the adjustable strap was a metal receiving ring. Known as a *falar* this metal connector had an oval or round shape and was decorated on the outside. It had U-shaped brackets on the back of the belts. The connector was made of silver with gilded engraving. The surface was inlaid with semi-precious stones. Traditionally, these were carnelian (*hakyk, maşat*) and turquoise (*piruze, pöwrize*), placed in settings.

Carnelian is the most popular stone used in the decoration of Turkmen cold weapons. It is a red mineral, a type of chalcedony. It is divided into three levels of quality. The best was considered to be a dark-red carnelian called *hakyk*. *Tarashi* stone was considered of medium quality and has a bright red color. The third type is a yellowish stone with white splotches, known as *nyatarashi* (Kyýasowa 2011: 177). According to popular belief, carnelian protects health and serves as a talisman against the evil eye and also wards off lightning as well as protects against scorpion bites. Another popular stone is turquoise, a blue mineral of the phosphate class. Biruni wrote that turquoise gave victory (*Chvyr'* 1977: 98). Actually, in Persian, *piruzi* (□□□□□□) is "victory." Small pebbles of turquoise was often used as a framing around a large carnelian or in the form of decorative bands.

In the finds of the State Museum of Turkmenistan, there is an original sword-knot, designed in the way described above (Fig. 6). The wide leather straps are entirely covered with stamped silver details. On the sword-knot there are two silver buckles of the *falar* type measuring 75 mm in diameter. One has

five oval carnelians in the settings and is decorated with gilding. The other buckle has one large carnelian. The sword-knot is fastened with a traditional S-shaped clasp. The setting is cast from bronze.

A traditional, mandatory element of a Turkmen's clothing was a knife tucked into the belt (*aksaply, bil pyçak, gezlik, ýan pyçak*) (Garajayev 1989: 27). The quality of the blade, the elaborate decoration of the scabbard and handle demonstrated the owner's wealth and emphasized his social status (Fig. 7). A knife made of Damascus steel (*jöwher, polat*) (Garajayev 1989: 28) was an obligatory item in a Turkmen's house and it had a special mystical meaning. The Turkmen believed that the knife guarded the house; was considered as a talisman; and it was put under the pillow of a sick person. The knife was passed down from father to son.

One of the most common types of knife among the Turkmen is the *kard* (Pers.) Originating in Iran, by the 16th century it had reached North India with the armies of the Great Moguls (Skralivetskiy 2013: 30). From Persia, the *kard* came to its northern neighbors – the Turkmen. It had a single-edged straight blade that smoothly tapered towards the end. The technology and design principles of knives was the same as for swords.

However, there is no word *kard* in the Turkmen language. The Turkmen called this type of cold weapon a *pyçak*.¹⁵ The ancient Türkic spelling of this word is *bichak* and comes from the verb *bich* – to cut.¹⁶ The *kard's* form remained very stable over time and region and was almost unchanged in India, Iran, Turkmenistan, and Uzbekistan. Such a knife did not have a cross. A metal bushing was an obligatory structural element. For the Tekins, Saryks and Salors, the sheath looked almost identical. The Tekins and Iomuds called it *yaglov*,¹⁷ whereas the Saryks and Salors called it *gulbend*,¹⁸ which is translated as "flower belt."

The ferrule had a cylindrical shape with truncations on the sides and a small protrusion at the front. There were bushings in the form of a short and round baluster. The presence of a ferrule on Turkmen knives had a sacred meaning. If the ferrule was absent, then such a knife was considered unclean and could not be to slaughter cattle. The meat of an animal killed with such a knife was considered improper for food

¹⁵ TDDS, II: 232

¹⁶ DTS: 98

¹⁷ TDDS, II: 493

¹⁸ TDDS, I: 494



Fig. 7. Turkmen knives. Photograph of 1885 from the collection of the National Library of France (BnF), used in the book by Henri Moser (Moser 1886, p. 141, 231)

(*haram*). After use, any knife was thoroughly washed, since the residual blood on it was considered a bad omen.

If the blade was made of damask steel but the grip of ordinary iron. In the upper part of the grip there was a longitudinal wedge-shaped cut, and the lower part of the blade was sharpened in a similar shape. The blade was inserted into the grip's notch and welded by hammer-welding. The halves of the ferrules were soldered on the ricasso of the bushing, and rectangular plates were soldered along the edge. The ferrule and plates were very often decorated with engraving or gold notching. Almost all sides were embellished, but the ferrule made of damask steel was considered of a special value.

Two bone overlays were installed on the grip and fastened together with metal rivets. The diameter of the rivets on one knife could also vary. It was believed that the number and size of rivets were the personal mark of the master artisan. The material for the handle could be made of ivory, walrus tusk, antlers, or

large camel bones. The Saryk Turkmen also used the horns of the mountain ram, known as *argali*. A characteristic feature of Saryk knives was a bifurcation at the end of the handle in the form of a hoof (*toýnuk sap*). This shape of the handle allowed an attacker to direct the knife's blade toward himself with the thumb placed into the forked end. The stab motion was made from top to bottom, resulting in a more confident and firm grip. (Botyakov, Yanborisov 1989: 54). This element was very similar to the shape of the handle of the Turkish *yatagan*.

In the design of handles, the most popular design element was a circle with a dot in the middle, a symbol for the sun. The history of this sign dates back to ancient times. During the Bronze Age, the inhabitants of ancient Margiana adorned their bone products with similar symbols (Sarianidi 2002: 151). Bone knife handles with these marks are found among the artifacts from medieval Dekhistan in the southeastern Caspian region. They date back to the 12th to 13th centuries (Atagarryyev 1986: 135).



Fig. 8. Turkmen kard knife with scabbard. Knife length – 365 mm, blade length – 233, width at the ricasso – 30 mm (KEK-2505)



Fig. 9. Kard knife of Persian workmanship with a sheath of Turkmen workmanship. The total length of the knife together with the handle is 300 mm, the length of the blade is 180 mm, the width at the ricasso – 22 mm (KEK-2468)



Fig. 10. Persian pesh-kabz knife with a sheath of Turkmen workmanship. The total length of the dagger with the handle is 305 mm, blade length – 220 mm, width at the ricasso – 27 mm (KEK-14304)

Various techniques known at that time were used in the design of the blades. Using a simple tool, master-engravers (*hekgak-ussa*)¹⁹ created genuine masterpieces in their cramped workshops. One of the ways to design the blades was by engraving (*haşam*)²⁰ with a stylus (*bezeg galam, parma galam, oýguç*). Another, more complex type of engraving was *embossing* in which the background of the pattern was stamped into the blade. This made the pattern voluminous and embossed, and sometimes the pattern itself was covered with gold. Of course, this type of engraving was considered more valuable.

The technique of notching with gold or silver wires was even more expensive and effective. This design technology first appeared in Persia and from there it spread to the neighboring countries of India, Afghanistan, Turkmenistan and beyond. There were three types of notches: *koftgari*, *takh-i-nishan*, *zer-i-nishan*. The ricasso of the blade on expensive knives was embellished with engraving or gold notching.

The simplest method of notching was *koftgari*, it was also called a “false notch.” The artisan would engrave straight lines in the form of a grid with an awl or stylus on the flat surface of the blade. This was followed by engraving the contour of the pattern on the grid more deeply with the awl. The gold wire wound on a spool was gradually unwound and hammered into the grooves of the pattern. The final step involved polishing it with agate powder and cleaning the blade with lemon juice. This placed the gold firmly on the steel surface of the blade and remained in this form for a long period of time (Egerton 2007: 114).

The second way of notching, *takh-i-nishan*, had a different appearance. The design was engraved on the blade according to the desired pattern to such a depth that the wire was sunk by two-thirds of its diameter. Finally, the entire surface was polished and the pattern was completely aligned level with the surface. This method affixing the gold wire was more reliable and durable.

And finally, the third and most beautiful method was *zer-i-nishan*.²¹ Everything was done in the same way as in the second method with the only difference that the wire protruded slightly above the surface. This slight protrusion added volume to the design and had a more impressive appearance. The expensive gift weapons for the *shahs* and *khans* were designed in this same way.



Fig. 11. Makhtumkuli Khan, one of the leaders during the defense of Geok-Tepe. Behind the belt is a pesh-kabz in a sheath with a thick handle (Grodekov 1883)

The most common themes in the design of blades of cold weapons were calligraphic texts in Arabic script. The most frequently used fonts were *naskh*, *suls*, *nastalik*, *talik*, and less often, *kufi*. The content of the texts was usually made up of quotes from the Qu’ran, religious formulas, and also verses. In addition, the design included *islami* floral ornamentation, mythological subjects, and scenes from royal life. Images of various animals and birds were popular.

These texts were usually enclosed in small *toranj* cartouches (Pers. *toranj*). They provided the name of the master or owner and sometimes the place and date of manufacture of the weapon. The text inside the cartouche traditionally began with the word *am-alya* (Arabic *أما*), which in Arabic means “made.” This was followed by the word *ustad* (Arabic *أستاذ*), which means “master.” After that, came the master artisan’s name and location of manufacture which is called *nisbet* (Arabic *نسبت*). The word *sahib* or “owner” (Arabic *صاحب*) came next followed the exact name of the owner. The whole sentence usually concluded

¹⁹ TKES: 425

²⁰ TDDS, II: 544

²¹ GTS: 90



Fig. 12. Turkmen-yomut with a khanjar in the belt.
Postcard from the early 20th century

Fig. 13. Persian khanjar with scabbard. The total length of the dagger with the handle is 32.7 cm, the length of the blade is 21.7 cm, the width at the ricasso is 4.3 cm. The blade at a distance of 21 cm from the ricasso bends sharply by 45 degrees (KEK-14306)



with the word *sene* (Arabic *سنة*), which means “date of manufacture,” and with Arabic numerals giving the year of manufacture according to the Hijri calendar. However, all of the listed components of this design were consistently placed in such an order and there were various combinations.

Let’s consider another knife from the museum collection (Fig. 8). Its scabbard is made of pebbled leather. On the surface of the leather there are characteristic pimples, and the original green color is extant, which is quite rare. The mouth of the scabbard is narrowed and decorated with silver stamped elements. The body of the scabbard is also decorated with similar elements. The silver ferrule is engraved with a floral pattern. At the end of the scabbard there is a wire wrapping and a faceted cone in the form of a tear drop. The back of the ferrule has an Arabic inscription and is easily discernable with the translation: “Made by master Dovletgeldy, son of Tajik-bai, in 1342.” According to the Gregorian calendar, this dates in 1923 or 1924. A religious text in Arabic is also engraved on the knife. It has a classic *kard* shape. The handle is made of walrus bone and on the metal parts are floral engravings. Along the ridge of the handle is notched with gold wire. On one side, the ricasso of the blade is decorated with an ornament and the other side has an inscription that reads

. The same inscription that is on the scabbard, however, without a date. It does, however, indicate the place of manufacture as of Jold (?). The fact that the knife and scabbard were made by one master is more of the exception than the rule, however, here we see a very high-quality work of the armor smith and artisan in one person.

There is another Persian *kard* with a scabbard in the museum (Fig. 9). Its blade is damask steel and it is decorated with delicate transverse stripes. This appears to be a similar pattern to the so-called *kirknarduban*, known as the “ladder of the prophet.” The ricasso has a deep traditional engraving in the form of a floral *islami* pattern. The ferrule is small and round and appears to have been repaired in the past. The ivory handle is solid and mounted without glued-on rivets. The remains of restoration are visible. The scabbard was made from silver, is conical-shaped, and gilded by the Turkmen craftsman. The back contains a ring for the sword-knot.

Turkmen knives come three different types sheaths. The first type is made completely from leather, the second has a wooden base covered with leather and a metal point, and the third has a tubu-

lar sheath composed entirely of metal. On all three types of scabbards, the knives are almost completely sheathed, which was very important for the wearer.

The first type of scabbard was mainly intended for hunting knives. These were inexpensive knives made of a lower quality steel. The scabbard was sewn from two types of leather with the mouth and point made from smooth leather and the middle section made of suede or shagreen leather. Often the space between the mouth and the point was embossed with a geometric decoration. Some scabbards have all the elements made from smooth leather, but painted in a variety of colors. The mouth of those scabbards made of two layers of leather were decorated with fringe (*seçek*) or an angular cut. The fringe was found on both the front and back sides. A leather loop for attaching to a belt is sewn on the back of the scabbard’s mouth. At the end of the point there was usually a leather tassel or sometimes a triangle talisman (*doga*). The general color of the scabbard was brownish red. It was sewn with one seam along the entire length on the back side.

The second type of scabbard was intended for more expensive knives, and therefore the manufacturing technology was more complex. Two wooden slats were shaped to fit a specific knife. The slats were covered with simple engraving on the outside. A recess for the blade was cut from the inside. Then the slats were put together. On the outside, the scabbard was covered with pebbled leather. After drying, the leather would conform to wooden slats. Often the leather was dyed black or green.

The mouth was narrowed and soft without a wooden frame. After long-term use, a silk cord was wound around the mouth which allowed its shape to be preserved. Scabbards of this type with a metal mouth were extremely rare. The scabbard usually had an iron or silver point. The tip of the point was teardrop-shaped and composed of solid-metal. Gilded engraving was often applied along the entire surface of the point. Sometimes a silver wire was wound around the point.

The third type of scabbard was used for the most valuable knives. The scabbard’s construction consisted of an entire sheet of silver with an solid-metal point which caused the scabbard to resemble a hollow cone. It had a wide-brimmed mouth with a row of arrowhead-shaped stamped designs under the mouth. A design element containing an elongated teardrop with two semi-circles on the sides is found on all sheaths of this type and it symbolizes masculinity. This is followed by two to five decorative bands.

The body of the scabbard is completely covered with traditional Turkmen engraving with gilding.

Often some scabbards were blackened rather than gilded, which was more common in the Caucasus region and traditions. In these instances, silver wiring is wrapped around the end. The scabbard ends with a smooth, faceted or corrugated teardrop-shaped point. Closer to the mouth, an elongated plate with a hole for a decorative ring was sawdered on the back which provided a place for a silk cord with a tassel to be attached to the ring. This type of scabbard was worn exclusively behind the belt, and the cord was intended to attach the scabbard to the belt. The knife, as in the first two cases, was totally encased in the scabbard with only a small part of it exposed. The knife fit deeply into the scabbard which was very important when riding a horse. When removing the knife, the left hand held the scabbard, and with the help of the thumb and forefinger of the right hand the upper part of the handle was grasped. As the knife was pulled out the palm completely embraced the handle.

A type of combat knife known as the *Pesh-kabz* was widespread in North India, Afghanistan, Iran and Turkmenistan. After the *kard*, this was the most popular type of knife among the Turkmen. Its has an unusual appearance with a thick, short handle with a beak-shaped head and a significantly curved S-shaped blade (Fig. 11). From the ricasso, the blade is curved inward toward the middle and the curvature of the blade turns outward. Sometimes, at the end of the blade, the *pesh-kabz* had an armor-piercing thickening known as *noke-makhruti* (Persian), but more often the edge was not thickened, thus it was known as *noke-tyg* (Persian

). A knife with a reinforced point was exclusively a combat weapon designed for piercing the chainmail. It was more of a piercing weapon than a slashing one. The blade and ricasso were often decorated with engraving or gold notching in the form of floral designs and calligraphic texts of religious or magical content. The handles had a very short metal ferrule. The thick handle consisted of two halves. As a rule, it was made of ivory but sometimes of rhinoceros horn or just a hardened wood. On the pommel of the handle there is a metal attachment with a hole for a ring, which had a decorative cord with a tassel attached to it. The scabbard was usually solid metal, with a flared mouth. It was often abundantly embellished with silver, gold and turquoise, purely leather sheaths were not uncommon. The knife enclosed the sheath up to the handle, and the ferrule of the handle abutted against the flare. The handle was fully exposed for

easy access. The *pesh-kabz* was worn in a scabbard exclusively in front of the waistband.

The *pesh-kabz* at the Ashgabat museum (Fig. 10) has a blade made from damask, reinforced steel and the butt is T-shaped at the middle. Starting from the center of the blade, the butt has two reinforcement ribs and ends with an armor-piercing point. Along the butt to the middle there is gilded floral engraving. The ricasso has a prominent gilded relief. The relief etching has images of a hare, a gazelle and a predator attacking a sheep. In the etching's background there is a floral design. The blade has a characteristic S-shaped curve. The shape of the handle can also be attributed to a *kard*, it is made of ivory and consists of two halves fastened with two gilded rivets. On one side of the handle is a carved image of a young man with a sultan's turban, apparently a prince. The other side has an older man with a beard and a royal headdress. Behind his belt is a *khanjar* (dagger) and he is holding a mace. The engravings on the handle is based on Persian motifs with everything skillfully made. Along the verticle ridge of the handle are images of a hare and a gazelle that alternate between another. The shape of the handle is not standard for a *pesh-kabz*, but is closer to that of a *kard*. The scabbard is silver with gilded designs curved to conform to the shape of a dagger. Turkmen motifs are clearly rendered in the design making it possible to conclude that the scabbard was made by Turkmen craftsmen.

Another type of combat cold weapon which was very rarely found among the Turkmen was the dagger known as a *khanjar*.²² It's was had a double-edged blade with a sharp curve. In appearance, the *khanjar* resembles the Arab dagger or *jambiya*, and the word *khanjar* itself is of Arabic origin. Due to its double-sided blade, it was not very popular with the Turkmen. The blade had a reinforcement rib in the center. Apparently because of the blade's sharp curve it received the epithet "tiger's tooth." The handles of such daggers were usually carved from solid bone. The *khanjar* is mentioned in heroic epics of the Turkmen (Gyor-oglu 1983: 372).

The blade of the *khanjar* kept in the State Museum of Turkmenistan, is made of damask steel and has a dark base. Its quality is excellent (Fig. 12). The blade is double-edged in the center there is the characteristic reinforcement rib. The handle is solid, made of ivory and is pear-shaped. Persian inscriptions can be seen on the guard and head. The grip has an image of a young couple with twin children at their feet. The

²² TDDS, I: 536



reverse side portrays a seated couple and children. The handle is attached by a bolt going through the head. The scabbard is covered with pebbled leather with some remaining green remnants. The metallic mouth is decorated using the *basma* technique. A large flower is depicted in the scabbard's center with two mirrored birds framing the sides. The head of the scabbard is missing. The scabbard on the reverse side in the center was sewn with one seam using silver thread. Judging by the iconography, this *khanjar* belonged to the Qajar dynasty (1794 to 1925).

Various technologies and artistic techniques were used in the design of firearms. The butts of the rifles and handles of the guns were made of wood since this is a soft and malleable material commonly used by craftsmen when designing these weapons. The butts were carved and nailed with decorative studs and were inlaid with bone and overlaid with non-ferrous metal. The design involved traditional motifs, both geometric and floral designs. The design of the firearm's lock sheet, barrel, barrel bands and the trigger guard were engraved and notched with gold or silver wire. The mark of the craftsmen was usually stamped with steel matrices on the top of the barrel in the breech.

Cattle bones, usually from the scapula, served as the material used for inlay. Ivory was used sometimes, and even less often, mother-of-pearl (*sadap*) which was more widely used in India, Afghanistan, and Persia. The bone was leveled, flattened into sheets and then the details of the pattern were cut out and underwent preliminary rough processing. Then a drawing of the future composition was applied to the surface of the butt, then each design element was carved on the butt. It was then filled with glue, and the previously processed bone material was inserted within the carving. After the glue dried, the surface was leveled and the finally polished. The bone inlays were additionally attached using decorative nails (*gülmyh*) made of copper, brass (and less often) silver creating an even greater decorative effect. Sometimes a different affect was achieved through the use of nails with different sized heads. The nails with large heads and mother-of-pearl were common in Mary Velayat, a region in Turkmenistan bordering Afghanistan.

There was one other unique artistic technique utilized in bone processing. The bone elements in such compositions were called openwork, that is, the pattern was bored completely through. The resulting voids were then filled with blue and red colored pigments. Similar inlay techniques were found on the territory of Kazakhstan (Masanov 1963: 106).

The patterns that were used in the design of the butts have deep, traditional roots. The most common element is a square rotated to a 45 degree angle. The sides of the square had small slits, which made it look like a five-petaled flower. This element is found on Persian and Indian matchlock guns. This design appeared both individually and in groups in the form of a decorative rosette. They were lined up in strips closer to the edge of the rear of the butt and were also installed around

Fig. 14. Smooth-bore gun. Total length – 1385 mm, barrel length – 1037 mm, caliber – 13 mm (KEK-1784)



Fig. 14a. Fore end of rifle stock and lock of smooth-bore gun

the shank in the breech. The shapes of the bone inlay were triangles, rhombuses and circles. Most often, the plates were covered with well-known solar symbols. Sometimes zoomorphic images were in the design of the guns.

The museum has a rare type of smooth-bored gun with a flintlock (Fig. 14). Its butt is made of a dark red wood and the entire surface is covered with the finest carvings. Sling swivels are located on the left side of the fore grip. There is residual silicon in the lock of the screw along with a special pad cover that was put on the frizzen to protect it from accidental firing. The cover is woven out of red wool and embroidered with Turkmen designs. There are three decorative tassels on the pad. On the barrel there is a relief and chased pattern. The barrel is fastened on the fore grip with

eighteen silver barrel bands, the last five are connected by one strip at the bottom. The rings are engraved with images of leaves. Everything is done with great taste and skill.

There is a noteworthy Persian musket known as a *khyrly* (Fig. 15). Its butt has a hexagonal shape and is made from the stump of a walnut tree. It is decorated using the Persian technique known as *hotemkar* mosaic. The back of the butt is missing but the sling swivels are on the side. At the bottom of the butt there is a cluster of weapon fittings but no cover. The shank, lock, breech and muzzle are engraved with shapes of floral and geometric patterns. There is only one band around the barrel.

A more typical kind is a *khyrly* with a percussion-cap lock (Fig. 16). The butt is made of a dark red



Fig. 14. Smooth-bore gun.
Total length – 1385 mm,
barrel length – 1037 mm,
caliber – 13 mm
(KEK-1784)

wood and decorated with bone mosaic. The design is traditional, with solar signs on the metallic work. The barrel in the breech, at the muzzle, and the trigger guard are engraved in the form of a floral design. The barrel has a master's mark but the text is not readable. The hammer is shaped in the form of a lion's head, the image of a lion is also on the lock sheet.

Of course, various types of Afghan, Indian, Persian, Bukharan and Khivan weapons were more elab-



Fig. 16. Turkmen rifled gun – khyrly with a percussion-cap lock. Total length – 1670 mm, barrel length – 1270 mm, caliber – 15 mm (KEK-2885)

orately designed than similar products of semi-nomadic tribes who appreciated the functional rather than decorative qualities of their products. Weapons, if they are not ceremonial, but made for combat, do not tolerate decorative excesses. At the same time, weapons, especially cold ones, were a sign of status, prestige, and they needed artistic embellishment. The decoration of weapons required a reasonable balance and the Turkmen masters reached certain heights in this regard.

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LIST OF ABBREVIATIONS

- DTS – Ancient Türkic Dictionary. Leningrad: Nauka Publ., 1969 (in Russian).
- TKES – Turkmen klassyky edebiyatynyn sozlugi (dictionary of Turkmen classical literature) Ashgabat: Turkmenistan Publ., 1988 (in Turkmen).
- GTS – Gadymy türkemn sözlügi (Old Turkmen dictionary). Ashgabat: 2007 (in Turkmen).
- TDDS – Türkmen diliniň düşündirişli sözlügi. I-II volumes (explanatory dictionary of the Turkmen language in 2 volumes) Ashgabat: Türkmen döwlet neşirýat gullugy Publ., 2016 (in Turkmen)