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Weapons and banners of Dzungarian Oirat in the middle of the 18th century, based on the Qingding Huangyu Xiyu tuzhi

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Annotation. *Introduction.* This article is devoted to the *Qingding Huangyu Xiyu tuzhi (QHST)*, a source from the second half of the 18th century. "It is devoted to the armament and military symbolism of the Oirat population of the Dzungarian state. This section of the CXTS has not been previously translated into Russian and did not become an object of a separate scientific study. *The aim of the study* is to study and enter into scientific circulation the data of the *Jouan* 41 CXTS concerning the armament and banners of the Dzungars. *Results.* This work was composed on the initiative of the Qianlong emperor after the annexation of the territory of the Dzungar state to the Qing dynasty. A group of Qing officials and European specialists was sent to explore the new lands. The main research work in Dzungaria was carried out between 1756 and 1757. The study of Eastern Turkestan was concluded in the spring of 1759. That same year, work on the text began and went on intermittently for 23 years (1759-1782). It was written by Manchu military commanders who participated in military operations in Central Asia, among others. The source describes Dzungar weapons of ranged and close combat, armor, and two types of Dzungar banners. The description of each item is accompanied by a transcription of its original name. In some cases material of manufacture and main typical dimensions are given. Comparison of the CHST data with authentic Dzungar armaments and images shows that imperial officials were very accurate in describing their construction and design features. Some information from the source is unique and is not found in other works of the 18th century.

In the Mongolian-language sources of the 17th-18th centuries, as well as in the Mongolian and Oirat epos. The Qing authors correlated original names of weapons and armor of Oiratians with their design features, which opens broad perspectives for a more detailed and comprehensive study of written works and the Central Asian epos. *Conclusions.* The analysis shows that the CXTS is the most valuable and detailed Qin written source on the arms and banners of the Dzungars in the middle of the 18th century that has been discovered and put into a scientific circulation to date.

Keywords: Qingding Huangyu Xiu tuzhi, Dzungaria, Dzungar weapons, Dzungar armour, Dzungar banners

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Weapons and Banners of Dzungaria's Oirats, Mid-18th Century: A Case Study of *Qinding Huangyu Xiyu Tuzhi*

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Abstract: *Introduction.* thThe article deals with "Qinding Huangyu Xiyu tuzhi" (QHXT), the Qing source of the second half of the 18th century, namely its chapter (*juan*) 41 devoted to the weapons and military symbols of the Oirats of the Dzungarian state (1635-1758). The chapter in question has not been translated into Russian, neither has it been the subject of a special study so far. The *aim* of the present article is to introduce the evidence of this part of the Qing source on the weapons and banners of the Dzungars. *Results.* The compilation of the document was initiated by Emperor Qianlong after the territory of the Dzungar state was annexed to the Qing Empire. A group of Qing officials and of European specialists was sent to explore the newly acquired lands. The work in Dzungaria was largely carried out in 1756-1757, while the study of East Turkestan was completed in the spring of 1759. The work on the text itself began the same year to continue for about 23 years (1759-1782). Manchu military leaders who participated in the war in Central Asia took part, among others, in the compilation of the document. The source includes descriptions of Dzungarian weapons for distant and close combat, armor, and two types of Dzungarian banners. Each item is supplied with description and transcription of its original name. In some cases, the material used for their manufacture and typical sizes are indicated. The data of the written source under study compared with authentic samples of Dzungar weapons and pertaining visual materials has shown that the Qing officials described the features of their construction and decoration with high degree of reliability. Some of this information is unique and can be found in no other sources of the period. The data of the source is of special relevance for attributing various types of weaponry cited in Mongolian sources of the 17th -18th cc. as well as in the Mongolian and Oirat epics. The Qing authors made comparisons of the original names of the Dzungar weapons and armor with their construction features, which opens new avenues for elaborate studies of written works and epics of Central Asian populations. *Conclusion.* thThe analysis undertaken in the present article has shown that to date QHST is the most valuable and detailed Qing written source on the weapons and banners of the Dzungars of the middle of the 18th century.

Keywords: "Qingding Huangyu Xiyu tuzhi", Dzungaria, Dzungar weapons, Dzungar armour, Dzungar banners

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Introduction

One of the important directions in the study of military and cultural heritage of the Oirats is the introduction into scientific circulation of previously unknown to a wide range of specialists materials on weapons and military symbols of the Dzungars, contained in Qing written sources of the late XVII-XVIII centuries. The most important of them is "Qingding Huangyu Xiyu tuzhi" (hereinafter - "Qingding Huangyu Xiyu tuzhi")¹, in the text of which the most detailed information on the subject of our interest has been placed by the Qing authors [Bobrov, Pastukhov 2021].

From the historiographical point of view, Siyu tuzhi was used by scholars to study the history of western peoples of the first half to the middle of the 18th century. However, the different information contained in this work was used unequally. For example, while the data on social-administrative structure and economy of Dzungaria were published in scientific articles and monographs, some other parts of "Siyu tuzhi" were not studied scientifically for a long time. This includes information on weapons, armor and banners of the Oirat population of Central Asia.

The beginning of Siyu tuzhi was directly connected with the annexation of vast territories of the Dzungarian state to the Qing Empire in the second half of the 1850s. To make the management of the new lands more effective, geographical maps had to be created,

¹ This abbreviated version of the name is confirmed by its mention in imperial decrees, and the title *Qingding* (approved by the Emperor) was given to this work in 1782.

The Manchurian authorities were also interested in the military and military affairs of the Dzungars, who opposed the Qing Empire in Central Asia for half a century. The Manchu authorities were interested, among other things, in the weaponry and military affairs of the Dzungars, who had opposed the Qing Empire in Central Asia for more than half a century.

The main initiator of the Siyu tuzhi was the Qianlong emperor himself (reigned 1735-1796). The analysis of sources shows that on March 25, 1755, the Celestial ruler issued a decree, i.e. before the capture of the Ili valley (the political centre of Dzungaria) by Qing dynasty troops, ordering his warlords to explore the annexed territories. As early as July 19, 1755 the Emperor approved the leaders of the expedition. The expedition comprised high-ranking Qing officials as well as European specialists. The main work in Dzungaria was executed between 1756 and 1757. The study of Eastern Turkestan was concluded in the spring of 1759. That year, work on the text began with interruptions for some 23 years (1759-1782). It was written by the Manchu military commanders who participated in military operations in Central Asia, including Agui, Zhaohui, and Shuhede, who were active in battles with the Oirats of Dzungaria and the Muslims of Eastern Turkestan. This woodcut edition of the *Qinding Huangyu Xiyu tuzhi*, complete with maps, was published in 1782 [CHST 1782]. [CHST 1782].

In assessing *Siyu tuzhi* as a historical source, this is the most extensive, comprehensive, and detailed study of Central Asia among all Chinese works from the ancient, medieval, and early modern periods. This is largely due to the special treatment accorded to this work by the Qianlong Emperor. The ruler of the Celestial Empire personally supervised the compilation of the text and approved the leadership of the commissions involved in its preparation.

Particular attention was paid to the reliability of the information collected. A great deal of information was obtained directly from representatives of the local population, including Oirat and Turkic feudal lords familiar with the specifics of their subordinate lands. This was done in 1756-1759, i.e., immediately after the incorporation of Dzungaria and Eastern Turkestan into the Qing state, when memories of the subjugated period of the "Last Nomadic Empire" were still fresh. The collected data was verified and clarified by Qing military and civilian officials [Bobrov, Pastukhov 2021: 510-517].

However, this work is a complex, multidimensional work in which current information from the field is interspersed with elements of earlier Chinese historical chronicles and other materials.

Most of the information on the weaponry and military symbols of the Junggarian Oirat is grouped by the authors of the *Siyu tu-ji* in a special subsection "Armament" (Chinese *Gongzhan zhi jiu*)² in *juan* 41. In addition, some data concerning arms production are wo-

² Literally 'A piece of equipment [to go] into an offensive battle'.

The main points of the Jungar case are scattered in other subchapters and chapters of the source.

The aim of the study is to study and introduce into scientific circulation the information of *juan* 41 "Siyu tuzhi" concerning the armament and banners of the Dzungarian Oirat. This section of the work was not previously translated into Russian and did not become the object of a separate scientific study³. However, these materials are of great interest to archaeologists, military historians, weapons scientists and ethnographers studying the military and cultural heritage of Central Asian peoples of the Late Middle Ages and Early Modern Age.

Materials and methods

The principles of historicism, objectivity, as well as the systematic approach, which consists in the holistic consideration of a set of objects, in which it is found that their interconnection leads to new integrative properties of the system, are the main methodological basis of weapons science research. The systems approach employs the rationalities of evolutionism (variability and heredity) and diffusionism (substitution, transfer, mixing) [Bobrov, Ogeredov 2021: 12].

The method of source processing is determined by the objectives of the study. At the stages of analysis and interpretation of the materials, the morphological, classification, typological, comparative and descriptive methods, the method of dated analogies, verification and correlation of the obtained results are traditionally applied [Bobrov, Ozheredov 2021: 12].

Of particular value for the topic of our study is the information reported by the *Siyu tuzhi* authors about the linear dimensions of Jungar weapons and military symbols. We used Wu Chenglo's calculations when converting lengths into metric units, according to

³ According to the information available to the authors, this *juan* has not previously been translated into English either. The exception is a short passage about the size of the Dzungar firearms, published in the History of Civilizations of Central Asia [History of Civilizations of Central Asia, 2003: 166]. [History of Civilizations... 2003: 166].

which in the Qing era, 1 *zhang* was 3.2 metres, 1 *bu* was 1.6 metres, 1 *chi* was 32 centimetres, and 1 *qun* was 1 centimetre.

3.2 cm, 1 *fen* is 0.32 cm [Shkolyar 1980: 358; Bobrov, Pastukhov 2021: 508, 509].

We emphasize that Siyu tuzhi gives average (typical) sizes of Central Asian weapons. It is doubtful that members of Qing expeditions and commissions deliberately measured a large number of Dzungar weapons and then calculated their average dimensions on the basis of a representative sample. The latter were most likely determined by eye during the inspection of captured trophies. This is the approximate value that was recorded in the document. Even so, the information is of exceptional scholarly interest, as it is unparalleled in other written sources of the period in question.

Information from Juan 41 "Xiyu tuzhi" on the weaponry and military symbols of the Dzungars in the mid-eighteenth century.

On some structural and substantive features of Juan 41 "Siyu tuzhi."

In the Siyu tuzhi, a paragraph is devoted to each item of weaponry, equipment and military symbols, informing the reader of the original name of the item in question. This is followed by a brief description of the item. In some cases, Siyu Tuzhi compares Oirat or Muslim weapons with their Qin counterparts, noting their similarities and/or differences in design and construction, specifying the material and the main typical dimensions of the items in question.

The translations of the relevant passages of the Siyu tuzhi⁴ have been extensively annotated by the authors of this study, based on comparisons of the Siyu tuzhi with other written as well as physical documents.

⁴ The original text of Siyu tuzhi is in italics to make it easier to read. The translation from Chinese is by A. M. Pastukhov from the woodcut edition published in scanned form on ctext.org [CCCT 1782].

and pictorial sources from the seventeenth and eighteenth centuries. Such an approach makes it possible to assess the authenticity of Qing officials' reports, which is important for determining the scientific value of

"Siyu tuzhi" in the study of the armaments of the Jungars and their neighbours in the first half and middle of the 18th century.

In addition to basic information on the weaponry and military symbols of the Oirat, the text of the Siyu tuzhi includes a poem by Qianlong on the "fan [barbarian] sword" (*fan jiang*) seized from Hodja Jahan,

"to the [barbarian] armour of fan" (*fanjia*),

"The poetic inserts will be translated and analysed in the framework of a special research study. These verse inserts will be translated and analysed in a special scientific study.

The stylistics of the Siyu tuzhi suggests that descriptions of weapons and military symbols may have been supplemented by representations of them in this work. However, the corresponding illustrative series has not yet been found in the known Qing editions of Siyu tuzhi.

It should be noted that the Chinese transcription of Mongolian and Turkic words has some peculiarity due to almost complete absence of closed syllables except for syllables ending with the sound "-n"/"-n". Similarly in Chinese language there is no "p" sound as such, it is replaced by different open syllables beginning with "l" sound or "er" syllable. Furthermore, there are some changes in the modern phonetics of some Mongolian languages, which have to be taken into account in reconstructing the original phonetics of the transcribed term. The accuracy of Chinese transcription of Oirati words may vary, reflecting not only the technical specifications of transcribing, but also 18th -century pronunciation.

Translation of Juan 41 "Xiyu tuzhi" on the weaponry and military symbols of the Dzungars in the mid-eighteenth century.

Juan 41. Clothing and utensils 1. Jungars (Zhonggaer bu)... Armament (Gongzhan zhi jiu).

"*Iledu* (伊勒都). *It is a saber/palash (Chinese Dao 刀). In form [it] is like those [made] in inland lands⁵, only in the hand made of iron has a thrust [divergent] on both sides instead of hushou⁶". [CCST 1782: tsz. 41].*

Obviously, "iladu" is an accurate Chinese hieroglyphic transcription of the Mongolian-speaking name of a long-knife weapon (Mong. *ild* [BAMRS, 2 2001: 269], *ildü* [Gedeeva 2015: 157]; Kalm. *yld* [KIRS 1977: 549]).

Of considerable interest is the fact that the term *ild* has traditionally been translated in Russian historiography as

The term "sword", i.e., a weapon with a straight double-bladed blade. In the *Siyu tuzhi*, however, the term *iledu* (*ild*) is confidently correlated with single-bladed *dao* (刀).

In the Kangxi Zidian hieroglyphic dictionary (康熙字典), compiled at the behest of the Kangxi Emperor in 1716.⁷, we note that "[*tao* has] a shank and a blade"⁸, which means it is a kind of single-bladed weapon but not a sword. The *Huanchao liqi tushi* [HLT 2004] that was compiled in parallel with *Siyu tuzhi* contains numerous descriptions of long-bladed weapons with words that include the generic morpheme *-dao*.

These are either sabres and broadswords or polearms such as *yanyuedao*⁹ etc., i.e. exclusively single-bladed weapons [HLT 2004: 699, 701-704, 710, 711, 714-720]. Neither

⁵ The Inner Lands (*Naidi* 内地) is a term used in older texts to refer to China proper, i.e. the area south of the Great Wall of China.

⁶ *Hushou*, also *panhushou* (lit. 'protection

The 'hand / disc protecting the hand') is a traditional name for a round, disc-shaped blade. This type of blade is more commonly known to domestic gunsmiths under the Japanese name of *tsuba*.

⁷ In the 18th and 19th centuries, this dictionary was considered the most authoritative compendium of hieroglyphic signs, encompassing both ancient and simultaneous interpretations.

⁸ See: [Kangxi Zidian].

⁹ *Yanyuedao* is a type of cutting weapon that is a more or less curved single-bladed blade on a wooden shaft. The Chinese equivalent of the European *glebe*, Siberian *palm*, and Japanese *naginata*.

In one case the word *Dao* is not used in this source to refer to a double-edged sword-type weapon, for which another special hieroglyph, the *jian* (劍), is used.

Such an attribution of the term *Dao* preserves the

The Chinese weapons history has continued up to the present day. For example, in the special dictionary *Zhongguo gudai qiu da qi dian. Bingqi, Xingyu* ("The Great Dictionary of Chinese Material Culture of Past Epochs. Weapons, implements of punishment) *dao* is defined as a "chopping weapon with a blade along one of its sides". [CH. 2002: 67]. Thus the traditional attribution of *yild* as a double-edged sword, at least, is not the only possible one.

It is interesting to note that Qing authors did not see much difference between the Dzungarian and Qing blades, and, as the main difference between them, called the use of so-called "*hosho-disk*" instead of the traditional East Asian disk-shaped garde.

The "stops [diverging] on both sides". Underneath these, a cross-shaped, elongated, rhombic or shaped guard, perpendicular to the blade and hilt, typical of the Muslim East (and some other territories), can be easily identified¹⁰.

Indeed, among the material and iconographic materials one can find both real specimens and images of long-bladed weapons of Oirat and their South Siberian vassals with cross-shaped guards [Bobrov, Khudyakov 2008: 281, fig. 88, 3, 4, 293, Fig. 92, 4; Armaments and Military 2008: 142]¹¹.

However, along with these, the Jungars also used straight single-bladed swords, as well as swords with a disc-shaped hilt.

¹⁰ In archaeological work, the term "crosshairs" is often used to describe this type of garden.

¹¹ From the territories of Northwestern China and Mongolia (located in the vicinity of Dzungaria and East Turkestan) a series of single-bladed swords (*zhibeidao*) of the XVII-XIX cc. with a shaped handguard perpendicular to the hilt [Deadly beauty... 2015: 328, 329, 331]. It is highly probable that such weapons were known to the Dzungarian warriors and could have been taken into account by the compilers of "Siyu tuzhi" within the category of long-bladed weapons designated as *iladu*.

The source is a source of the same kind of weaponry. This suggests that the compilers of the Qing source were primarily interested in original Central Asian weaponry that differed in design and decoration from their typical imperial counterparts.

The description of the "Siyu tuchzhi" suggests that the term *yld* in Dzungaria in the middle of the 18th century usually was not a sword, as we thought, but a long single-blade sword or a slightly curved saber. This last variant is supported by the fact that the most widespread blade weapons for Qin army were curved sabers, and the authors of the Xiuy tuchzhi mainly emphasized the differences between Manchurian and Dzungarian guards, while mentioning the similarity of their blades: "the form [yladu] is like ... those [made] in the inner lands"¹².

An indirect confirmation of the attribution of *the yld* as a sabre is the report of Evliya Chelebi, an Ottoman traveller who visited the Kalmykian nomads in late 1666 or early 1667. Among other "abusive words" of the Oirat, he mentions the term *uldy* (i.e. *ild*), which was re

¹² The main variety of long-bladed weapons of the Eight Banner and Green Banner of the Qing Empire were sabers, traditionally referred to in modern weapons studies as *yanmaodao* and *luedao*. The distinctive feature of *the yanmaodao* (literally 'goose feather') was the broad, massive blade with a slight bend beginning only in the last third of the saber strip. Conversely, the smooth curvature of the *luedao* (literally 'willow leaf') blade could be observed already at the end of the first or beginning of the second third of the blade. All main varieties of Qing swords were equipped with disc-shaped *husho* guards. The swords with disc-shaped quill-guard were practically not used by the Eight Banner troops and Chinese units of the Green Banner, but were used by warriors of the

The Khalkhas and Tibetan militias. However, Such weapons were unfamiliar to the Chinese inhabitants of the Middle Kingdom, the main readers of "Xiyu tuzhi". This suggests that the *iladu* in this Qing work meant, first and foremost, slightly curved swords, familiar to the Chinese population, but equipped with a cross-shaped guard that was exotic to the Far East region.

is given in the Russian edition of 1979 as 'sword, saber' [Çelebi 1979: 176]. However, in the Turkish edition of E. Chelebi's book the Ottoman equivalent of the term '*üldi*' is '*kiliç*'. In the late Middle Ages and modern times this term was used by the Turkic-speaking population of Eurasia as a generic term for a long-length weapon in general. However, in its narrower sense it specifically referred to a sabre.

A legitimate question arises: when did the term *ild* begin to be widely used to refer to the sword? It is most likely that this happened at a time when traditional weapons were gradually displaced from the military use of the Mongolian-speaking nomads, when the boundaries between the different types and kinds of bladed weapons began to be gradually erased. This may have been facilitated by the fact that the term *ild* could originally denote both a sabre and a broadsword with a straight single-bladed blade, which visually resembled a double-bladed sword blade¹³.

"*Jida* (濟達). *It is a spear (qiang 鎗). Those which are long are about 1 jiang 2-3 chi [in length] (about 3.8-4.1 m - L.B., A.P.), and those which are short are at least 1 jiang in length (from 3.2 m - L.B., A.P.). They take clean steel (chungan 純鋼) for a spike (bow 鐵) and make it about 6-7 tsun (about 19-22 cm - L.B., A.P.) long on both sides of the shaft. Wrap [stem] horse mane and make a ball (qiu 毬) from camel's hair, [which] is tied in the middle of the stem a little closer to one end, piercing through the hole. They tie leather straps [to the staff] to make it easier to carry [the weapon] when jumping.* [CCST 1782: tsz. 41].

The compilers of Siyu tuzhi have managed to

The name of the Oiratian long-handled stabbing weapon - *tzida* (from Mong. *zhad* [BAMRS, 2 2001: 155], *žida* [Dybo 2015: 221]; Kalm. *æcid*

¹³ It is characteristic that in the modern language of the Xinjiang Oirat there is no clear division of the terms of traditional weapons: for example, the word *ulde* (*yldy*) can denote both sword and saber [Todaeva 2001: 366]. The same is observed with regard to the word *selme*, which may be used to denote both sword and sabre [Todaeva 2001: 293].

[KLRS 1977: 226]), xinjiang.-oirat. *жиде* [Todaeva 2001: 142])¹⁴.

Of high value for our study is information about the size of Oirat spears and pikes, reported by the Tsinist authors, who divide Oirat long wood weapons into "long" (about 3,8-4,1 m) and "short" (from 3,2 m). Note that even the shortest variants of Oirat spears exceed three meters in length, i.e. they are comparable to the longest variants of pikes used by Russian Cossacks and cavalrymen of the Russian regular army in the 18th and 19th centuries.¹⁵ These data correlate well with the reports of contemporaries that nomadic spears were much longer than their Cossack counterparts [Bobrov 2014: 123, 124, 131].

It is highly probable that the Oirat spears of more than four metres in length were not the fantasy of the Qing authors either. In any case, the Russian ambassador Captain I. Unkovsky, who visited Dzungaria in 1722-1723, mentions Dzungarian "spears" even longer: "... Their arms are bows, *spears 7 1/2 arshin long* (about 5,3-5,4 m - *L.B., A.P.*), and many sabers, but all with *jagrons*¹⁶, and sabers. [Veselovsky 1887: 194]¹⁷.

¹⁴ It should be noted that in the Cyrillic alphabet for Mongolian and Oirat words, the letters "g" and "ж" stand for the sound "j" and "z" for "zz".

¹⁵ For comparison: Cossack pikes of the first third of the 19th century usually were 2,8-2,85 m long, Cossack pike of 1839 was 3,4 m long, cavalry pike of 1843 - from 2,84 to 3,2 m, pike of 1862 - from 3,2 m.

2.76 m, etc. [Kulinsky 1994: 135-139].

¹⁶ *Jagra* is the Russian name for serpentine wick gun.

¹⁷ The first Russian Emperor Peter I (1682-1725) introduced the measurement measure, measuring 71.12 cm, which was only firmly established as a standard during the reign of Emperor Alexander I (1801-1825). However, under Tsar Alexei Mikhailovich (1645-1676) was also introduced a "decree" length measuring measuring jug 71.776 cm, which was used in parallel with Peter I's jug throughout the XVIII century and in the early XIX century. Thus, the length of a Dzungarian goad, depending on the variety of a jug, could be from 533.4 to 538.32 cm. It should be taken into account that in Dzungaria, according to

Unfortunately, the entire shafts of Dzungar pikes have not yet been found, but Qing pictorial materials (including lifetime portraits of Oirat military leaders in Qing service, which are highly accurate in detail) confirm that Oirat spears were about 3-4 m long.

An additional indirect argument in favor of the possibility to use such a weapon is a Qing spear with a *section*¹⁸ for warriors of the *Jianzhui-ying* detachment¹⁹, possibly made in imitation of Central Asian analogues and reaching 3.296 m in length, which almost exactly corresponds to the length of the "short" Dzungarian spear in the text "Xiyu tuzhi" (from 3.2 m) [Bobrov 2013: 193].

According to the Huanchao Liqi Tushi, the spear of the Chinese Green Banner troops²⁰ (also

There appeared to be no clearly defined standards for the dimensions of the spear, and the measurements were taken roughly by Unkovski, "by eye".

¹⁸ *A cut* is a sharpened straight blade of oblong-rectangular or elongated trapezoidal shape, which was fastened to the butt of a spear or pike. It was to protect the staff from blows of the enemy, and also to prevent an enemy warrior from intercepting the staff of a spear with his hand and deflecting a stabbing blow of the spear (hence the original name 'cut-off', given to it by Russian Cossacks in the 18th century). When necessary *the slash* could also be used for cutting blows. In military practice of the Great Steppe people spearheads with *rips* continued to be used up to the second half of the 19th century. [Bobrov 2013: 184-195].

¹⁹ According to N.Ya. Bichurin, the detachment of *Jian-zhuyin* (erroneously referred to as *Zhui-jia-ying*) was a kind of special forces that could act separately from the main forces and was able to perform various combat tasks up to storming fortresses. The detachment created in July 1748 during the war with mountain tribes Jinchuan was small in number: only 4,000 people, including 200 commanders and 3,800 common soldiers [Bichurin 2002: 207].

²⁰ Although this spear was intended for the Chinese Qing military units, it was also used by the Latin "[army] of the Eight Banners" (八旗). The latter was the basis of the military forces of the Jurchen state of the Late Jin (from 1636 - the Qing Empire).

The spear (with a *cut* presumably of Central Asian origin) reached a length of 4.78 m [HLT 2004: 727], which is close in size to the five-metre spear in I. Unkovsky's report. Finally, a spear with a length of "three fathoms and an arshin (*dalim*)", i.e. approximately 5.5 m, is mentioned in the Mongolian law of 1718.²¹

The Siyu tuchzhi authors' observation about two *tou-tips* of "pure steel" that were attached to "both sides of the staff" is of some interest. It is a steel spearhead and a conical undertone that was put on the heel of the spear or pike. The presence of the underpinnings on Dzungarian long-trunk weapons is confirmed by Qing pictorial materials (Fig. 1, 1).

Finds of conical and spear-shaped undercurrents come from Central Asia and South Siberia [Khudyakov 1980: 53, Table X, Fig. 4, 8; LaRocca 2006: 179, fig. 82; Bobrov and Khudyakov 2008: 298, Figure 93, 4].

Some examples of Central Asian and South Siberian spearheads are indeed 19-22 cm long. However, the majority of tips (like their Qin counterparts) are of

The Late Jin army consisted of eight "banner corps" (Manchu *gusa*, Chinese *gushan* 固山), each of which was given a banner of a particular colour. Later, the number of corps increased to 24 - eight Mongolian and eight Chinese "banners" were added to the eight Jurchen (Manchu) *gusa*. However, the original name, the Eight Banners, was retained.

"The Green Banner Troops (*Liuyi* 綠旗, *Liuyinbin* 綠營兵) was a part of the military forces of the Qing Empire recruited mainly from the Chinese who were not included in the privileged Chinese corps of the Eight Banners (*Hanjun Baqi* 漢□八旗) [Bobrov, Khudyakov 2003: 127, 128; Nepomnin 2005: 104, 105].

²¹ The Mongolian *sajen* (*ald*) was the distance between two arms spread apart. Based on the translation of the Mongolian expression *tavan ald urgha* (5 *ald*) as "eight-meter long", it is possible to calculate the length of

ald - c. 1.6 m [BAMRS, 1 2001: 73]. Arshin (*delim* - from *delih* 'to draw a bow to the end') was thus about 60 cm [BAMRS, 2 2001: 107].

The size of the area is considerably larger [Bobrov and Khudyakov 2008: 297-308].

It is possible that the Qing authors "Siyu tuzhi" did not indicate the total length of the entire tip of the *jid*, but only the length of its feather.

Thus, information about average size of Oirat spades given in "Siyu tuchzhi" (total length - about 3,2-4,1 m, with the length of the spike or its quill about 18-21 cm) should be admitted as reliable. However, this does not mean that the Oirat people could not use long-tree weapons of smaller or larger size.

In the above description of the *jid*, it is stated that the Jungar "wrap [the shaft] with horse mane". It seems to refer to the wrapping with horsehair of the upper part of the shaft under the tip and the *cut*. Such wrapping is mentioned in

"Huanchao liqi tushi" when describing the spear of the *Jianzhuying* detachment: "Under it (*the cut* - L.B., A.P.) the wood is wrapped in a circle with red and black horse hair" [Bobrov 2013: 193].

Judging by the image of the spear in the "Huanchao liqi tushi" and the portrait of the Oirat colonel Ayushi in the Qing service (Fig. 1, 2), such wrapping could cover the whole upper part of the spear from the lower edge of the tip sleeve to the lower edge of the *cut* (which reached 44.8 cm in length) and sometimes even lower [Bobrov 2013: 186, Fig. 1, 16]. It is unknown that dense hair wrapping was used not only to decorate weapons, but also to reinforce the upper part of the wooden pike's shaft, which was traditionally the main object of attack for enemy's cutting weapons [Bobrov 2013: 190, Fig. 5, 191, Fig. 8, 192, Fig. 9].

In the text "Siyu tuzhi" cited above it is noted that the inhabitants of the described region "... make a ball from camel's hair, [which] is tied in the middle of the shaft a little closer to one of the ends, piercing through a hole" [TSHST 1782: tsz. 41]. Apparently, this is some kind of kopeck badge (presumably a small hair bunchuk), whose form and suspension system differed from its Qin counterparts²².

²² In the mid-18th century, long-stemmed Qing warriors' weapons could be adorned under the tip with hair tassels of various



1.1



1.2

Fig. 1. Mounted portrait of "Har-baatar" Ayushi, an Oirat warlord in the service of the Qing Empire (painting "Ayushi destroys rebels with a spear" by J. Castiglione (Lan Shinin), painted between 1760 and 1766). Gugong Museum, Taipei, Taiwan. Taipei, Taiwan

[Fig. 1. Equestrian portrait of Khara Baatar Ayushi - Oirat warlord in the Qing service (painted by G. Castiglione (Lang Shining) titled 'Ayushi Holding a Spear to Eradicate Rebels', created circa in 1760-1766). National Palace Museum, Taipei, Taiwan]

In the portrait of an Oirat officer in the Qin service of Ayushi, where the spade is shown in the most detail, a pair of rounded metal rings or other holders are inserted in the upper part of the antler, to which miniature hair tassels are suspended (Fig. 1, 2). Judging from other depictions, such ornaments were very characteristic of Oirat longwood weapons²³. They are also present on the spear of *Jianzhuying* detachment [Bobrov 2013: 186, fig. 1, 16].

It is possible that the text of the Xiyu tuzhi is referring to this kopeck badge. Indeed, the rods of the rings inserted in the shaft "through the holes", while the short miniature tassels (which differ from the longer and broader Qing tassels that were attached directly under the tip) could remind the Manchu authors of hair "balls". However, we cannot rule out that under the "wool ball" there might be another kind of hair bun that was attached to the shaft of a spear or lance like the tip of a fur cap or a flattened ball. Such decorations mainly made of yak hair occur on the Tibetan long-trunk weapons of the late Middle Age and early modern period [LaRocca 2006: 175; Bobrov and Khudyakov 2008: 304, 298, Figure 93, 6].

Concluding the description of *the Jid*, the compilers note that the Jungars to their spears "Tie leather straps so that there is

types. For example, a brush made of red dyed horsehair was used to the "long spear of [warriors of] the Brave Cavalry guard detachments" (*Huojun Xiaoqi changqiang*) of the Eight Banner Troops, As well as the "long spear of the [Chinese warriors] of the Green Banner" (*Liuyin changqiang*) and the combined spear of the "tiger tooth" of the Green Banner warriors (*Liuyin huqiang*), the tip of which was supplemented by a pair of curved-down blades resembling tiger's fangs [HLT 2004: 723; Armaments and Military 2008: 249].

²³ The Qing materials show that The spears of the Jungars and their Muslim vassals were usually adorned with a pair of tassels, but there are also known images of Central Asian pikes whose shafts are decorated with one or three miniature hair bunches.

easier to carry [weapons] when galloping". In these

It is not difficult to recognize the "belts", standard for the Great Steppe warriors' peak and adjacent territories, as leather braces used to carry a long-handled weapon behind the warrior's back. A large loop (in the central part of the shaft) functioned as a shoulder strap, which allowed the spear to be carried on the right or left shoulder. A smaller loop, tied at the lower end of the shaft, served as an additional restraint. It covered the ankle or toe of the rider's boot to keep the spearhead upright.

This way of carrying the pike made it much easier to transport and freed the rider's hands for controlling the horse, as well as for using weapons from a distance and close range. Before a lance attack begins, a warrior can quickly draw the pike from behind, releasing an arm and a leg from its leather loops. According to reports of contemporaries, the Nomads could do this procedure (which the Cossacks called "to pique") right at full gallop [Smolensky 1873: 240].

The image of the leather loops described in the Siyu tu-ji can be seen in the same portrait of Ayusha (Fig. 1, 1).

"*Numu* (努穆). It is a bow (*gong* 弓). It is similar in shape to those [bows] used in the hinterlands, but slightly smaller. Instead of birch bark, goat skin is used for decoration (Chinese *shanyan* 山羊). A bowstring is made of [hair] from the mane and tail of a horse (*xian* 弦)". [KHST 1782: tsz. 41]. The Qing authors quite accurately reproduced the name onion in Mongolian languages: Mong. *num* [BAMRS, 2 2001: 425], *num*, *numun* [Gedeeva 2015: 157]; Kalm. *numn* [KIRS 1977: 386], *xinjiang-man/noon* [Todaeva 2001: 253].

The comparison of *the numu* with Qing bows seems justified. The known Central Asian and South Siberian throwing weapons are, indeed, structurally similar to their Manchu counterparts²⁴. At the same time, their average dimensions

²⁴ In both cases, active use is made of The "paddle-shaped" bone pads on the handle, shoulder pads made of horn, birchbark covering tendons, etc. [Bobrov and Khudyakov 2008: 79-95; Armaments Military 2008: 31-35, 97, 99-10].

[Bobrov and Khudyakov 2008: 79-95; Armaments and Military 2008: 31-35, 97, 99-109].

often somewhat smaller than Qing bows, which is consistent with the Xiu tuzhi²⁵.

Causes of interest The technological detail noted by the Qing authors is interesting: "... instead of birch bark, goatskin is used for decoration". On most Central Asian and South Siberian bows, birch bark is used to waterproof *the kibiti* and protect tendons from mechanical damage [Bobrov, Khudyakov 2008: 80-]. 86, 88, 91, 94].

Leather covering of *kibiti* also occurred, but more rarely [Bobrov and Khudyakov 2008: 80; Darja 2013: 31, 32]. Perhaps, as in the case of the cross-shaped saber blade, the Qing authors' attention was attracted by the most exotic design and decoration solutions, while the usual materials and technologies were ignored²⁶.

It is likely that the same situation can be observed with bowstrings. The statement that Central Asians "use [hair] from a horse's mane and tail to make a bowstring" is only partially true. Most authentic examples of Central Asian and South Siberian bowstrings are made from leather or thin, tightly twisted sinewy threads pulled from the vertebral veins of bulls and other large animals. The central part of the bowstring was wrapped in silk thread or thin leather. This secured the bowstring against chafing from frequent contact with the eye of the arrow. The cheapest bowstrings were made from leather (also skins of cows, horses, goats, ibex, bears, also males of Siberian Roe deer etc.), from unfurled stems of past year nettles, hemp or roots of trees (spruce, cedar etc.) etc. [Bobrov, Khudyakov 2008: 80, 87; Darja 2013: 32, 33].

²⁵ The predominant size of the *kibiti* of Central Asian bows: with the *teti* down

The wings are 140-170 cm and the stretched ones are 130-160 cm. Most of the known Qing bows are about 165-180 cm long with the bowstring lowered and 155-170 cm with it drawn.

²⁶ The covering of *kibiti* bows with birch bark strips was a traditional element of Qin bows of the period in question [Armaments and Military 2008: 31, 100, 103, 105, 107].

At the same time, it is possible that before the incorporation of Dzungaria and Eastern Turkestan into the Qing Empire, horsehair *teti* did indeed prevail on these territories. At present, it can be stated that this issue requires further study.

"*Sumu* (蘇穆). *These are arrows (jian箭). The shape is similar [to arrows used] in the hinterland, but slightly shorter. The shaft of the arrow (箭桿) is wooden, also called sumu. The quality [of the arrows] is good, [the finish] is fine, [the arrows] are very powerful.*" [CCST 1782: tsz. 41].

In Mongolian languages arrow is Mong. *sum*, *sumun* [BAMRS, 3 2001: 128], *Sumun*, *suman* [Gedeeva 2015: 157], Kalm. *Sumn* [KIRS 1977: 461], Xinjiang. *Suman/sumun* [Todaeva 2001: 302; Pyurbeev 2009: 284]. The Qing transcription in this case, too, conveys the sound of the Oirat word quite accurately.

The constructive similarity of arrows of Central Asian nomads and warriors of the Qing Empire is confirmed by the analysis of material materials. In both arrow complexes arrows with wide flat (asymmetrical-rhombic, sector, oval-winged) feathers, intended to hit unarmed enemy warriors and combat horses, as well as "universal" and "armor-piercing" arrows of different (but in general similar) types were widely represented [Bobrov, Khudyakov 2008: 95-108; Armaments and Military 2008: 39, 41, 44, 45, 109, 110, 112-115, 117-135].

Unfortunately, only Mongol, Oirat and South Siberian arrowheads have survived, as well as fragments of shafts, which makes it difficult to verify that Qin arrows were longer than their Central Asian counterparts. The available evidence seems to corroborate the Siyu tuzhi information, but a somewhat larger sample is needed to reach a valid conclusion²⁷

²⁷ Indirect confirmation of the data on shorter arrows of the Dzungars is the above information about the use of smaller bows by nomads compared to their Qin counterparts. The known materials indicate that the length of arrows is usually directly proportional to the size of the bow for which they are intended.

The high appreciation of Dzungar arrows by the Qing military is of interest. The distance cavalry fighting with the bow and arrow was one of the key elements of the Qing tactical art of the period under consideration. The making of sadaqs, equipping troops with them, and training soldiers in archery received great attention. The fact that the compilers of the *Siyu tu ji* emphasize the "good" quality of the "delicate" finish of the "powerful" Jungar arrows is evidence that the latter were indeed made to a fairly high standard.

"**Sholo** (碩羅). *It is a double-edged sword (chin 劍). The long ones are 3 chi over (about 1 m - L. B., A. P.), and the short ones are 2 chi over (over 64 cm - L. B., A. P.). The sword scabbard (ch. jianqiao 劍鞘) is made of leather (ch. pi 皮). There is a ring of copper on the end of the hilt (tan 鐔) (tunhuang 銅環).*

[Followed by] *Highly composed verses in [year under the cyclic signs of] bingzi (1756. - L.B., A.P.) "About the sword [var- vary] fan".*²⁸ [CCST 1782: tsz. 41].

By the transcription "sholo" the Qing authors transcribed a Mongolian name of a weapon known as *shor* [BAMRS, 4 2002: 369]. In *Siyu tuzhi* it is correlated with the character *jian* (劍).

In the Qing Empire of the empire in question

From the period *Jian* was a special kind of cutting and stabbing weapon with a double-bladed and, as a rule, straight blade. In most cases the term *jian* was understood as a sword or, less frequently, a double-edged dagger, *konchar*²⁹, epee, etc.

²⁸ The Qing source text goes on to quote a poem by Emperor Qianlong about the sword [barbarians] *fan* (*fanjian* 劍) taken from Hoja Jahan. *Fangs* are usually understood in Sinology as Tibetan tribes. However, in the *Siyu Tuzhi*, the term is often used in a broader sense, including to refer to the population of Central Asia as a whole.

²⁹ The *konchar* is a type of long bladed weapon with a narrow, straight, faceted blade, designed primarily for stabbing.

In this sense, the main distinguishing feature of *the jian* from *the dao* was the presence of two blades, while the shape of the blade was an important, but secondary feature. For this reason, for example, the straight but single-bladed ceremonial broadsword of the *Shenfeng* imperial suite members (神鋒, "Magic Sharp") was pointed in *Huanchao liqi tushi* as *tao* [XLT 2004: 700]³⁰, and the curved (in many cases) but double-edged *Hanjar* dagger was pointed as *jian* [KHST 1782: zz 42].

Nevertheless, the most widespread variety of *jian* in the Far East during this historical period were swords³¹. Thus, the first established feature of the *shor* weapon design was a double-bladed, presumably straight blade³².

Swords are traditionally thought to be of limited use among Central Asian warriors in the

³⁰ It is indicative that these ceremonial weapons belong to the so-called

"The sword is a sword-shaped blade, i.e., it has a pointed point rather than a beveled blade, as is typical of a sword. Nevertheless, with only one blade, the *Huangchao liqi tushi* confidently categorizes *Shenfeng* as a *Dao*."

³¹ The modern Chinese explanatory dictionaries explain the term *jian* as follows: "*Jian*, the name of a weapon; there are blades on both sides, a stiffening rib runs in the middle, and there is a hilt at the bottom" [Wang 1937: 1296]. [Wang 1937: 1296]. Thus, the *jian* is a weapon with a double-edged blade of rhombic cross-section. In this case, if *the Dao* is defined as "cutting weapon", the functional purpose of *the jian* is emphasized by the words:

"stabbing and cutting weapons" (刺劈兵器) [CHGDC 2002: 176].

³² It is interesting that in some dictionaries the term *shor* has been translated as "spear" until recently (Mulaeva 2010: 79). Such errors in attribution are probably due to the fact that the term was used relatively rarely. For example, it is never mentioned in the largest collections of the Central Asian nomadic laws "Ikh Tsaz" (1640) and "Khalkha Djirum" (first half - middle of the 18th century), which list numerous varieties of protective and oncoming weapons [Pürbeye 2009].

period. Nevertheless, authentic specimens of swords of XVII-XVIII centuries of various types were recorded among Mongolian, Oirat, Tibetan and South Siberian materials of the Late Middle Ages and New Age [Bobrov, Khudyakov 2008: 264-269].

The greatest number of swords comes from the territory of Tibet, which was connected with Dzungaria by close political and cultural contacts. Some of the Tibetan swords' tips are equipped with a metal ring mentioned in Siyu tuchzhi, to which a tourniquet or a silk ribbon brush was attached [Bobrov, Ozherodov 2021: 187, fig. 90, 2]³³. Their scabbards could be covered with leather or even be entirely made of this material. The length of such swords is about 70 cm, which corresponds to the size of a "short sholo" in the text of Shihu tuzhi [LaRocca 2006: 16, 17]. [LaRocca 2006: 163, 164; Bobrov and Khudyakov 2008, 265, fig. 80, 3]. These facts allow us to assume that the term *sholo* in the text of the considered source most likely refers to the mentioned variety of the Central Asian sword.

At the same time, it is possible that some other types and types of long bladed weapons, including *conchars* and swords of European type, could also be included in the "sholo" category by Qing authors. The latter came to the Oiratians as trophies during conflicts with the Russians or were acquired privately by Dzungar diplomats during trips to Russia. Despite prohibitions by the Tsarist authorities, Dzungar envoys secretly hired local craftsmen to train Oirat gunsmiths. For example, a certain

The "foreigner" "sword master" I. Fedorov undertook to teach two Dzungarian craftsmen "how to make swords and cast them". [Bobrov, Khudyakov 2008: 261]³⁴.

³³ Focusing the reader's attention

"The reason for the placement of the temple ring at the end of the hilt is probably because it was not a common sight on a Celestial weapon, as it was not usually attached to the saber point, but through a hole in the hilt.

³⁴ It is interesting to note that in Mongolian dictionaries *the shor* is defined as a "weapon".

Thus, *the shor* ("sholo" in "Siyu tuzhi") can nowadays be attributed as a type of long-length weapon with a double-edged and, most probably, straight blade. Highlighted by "Short (over 64 cm) and long (about 1 m) *shor* worn in leather knives. The hilt was equipped with a brass ring for a knot or a brush made of cloth ribbons.

It is most likely that the *shor* was a variant of the Tibetan-type double-edged sword. It is possible that other types of weapons with a straight double-edged or faceted blade also fell into the same category. The limited distribution of such weapons among the nomads of Central Asia led to the rarity of their references in written sources (including Mongolian and Oirat) of the XVII-XVIII centuries.

"*Duhulaha* (都呼拉哈). *This is a helmet* (Ch'i Zhou 胄). *In form [their helmets] are like [those used] in the inland lands* (i.e. China. - L.B., A.P.). *Or they use thin iron* (ch. *tepi 鐵皮*)³⁵ *in the front part of the helmet make zhanmian*³⁶, *from under which both eyes are barely visible.* [CCST 1782: tsz. 41].

Thus, among "dukhulakha" (from Mong. *duulga* [BAMRS, 2 2001: 79], *duuly-a* [Dybo 2015: 237], Kalm. *duulh* [KIRS 1977: 217], Xinjiang.-Oirat. *duulha* [Todaeva 2001: 136]) the Qing authors single out the headlands,

The helmets are "similar" to the traditional Zhou helmets of the empire, as well as some original (unaccustomed to the Far East) helmets with additional "thin iron" face protection.

Indeed, the vast majority of both Oirat and Qing metal helmets of the 17th and mid-18th centuries belong to the Oirat and Qing.

Longer than a sword, a sword" or even "a bayonet". [BAMRS, 4 2002: 369; Todaeva 2001: 460]. According to

The latter attribution is not applicable to the weaponry of the mid-18th century region, but the emphasis on the narrow, straight, faceted blade in the dictionary definition of the *shor* is quite revealing.

³⁵ The same is true of 'iron skin', i.e. of an iron thin sheet or thin plate.

³⁶ *Zhanmian* (障面) - lit. 'screen on face'.

The awning is of the iron type and the awning is of the riveted type, depending on the material used. Both are usually equipped with visors, as well as combined tops consisting of a cylindrical or hemispherical over- verm and a sleeve-tube for the plume. However, the tulle of Qing *zhou* was usually riveted from two plates, and in combination with the visor a special *hui* forehead (often equipped with brow notches) was used [Bobrov et al. 2017: 1151-1164].

As for Central Asian and South Siberian helmets, in most cases they were riveted from 4-8 plates additionally fixed by a hoop. *Hu*é headplates (護額), so typical for Qin heads, have not been documented on Oiratian materials yet [Bobrov and Khudyakov 2008: 416-445, 453-463, 474].

Of particular interest for the topic of our study is the "face shield" mentioned in the description [CCST 1782: tsz. 41]. It is not entirely clear what kind of protective element is described by the authors

"Siyu tuzhi". On the one hand, there is the term *ima karige* (이마가리개, lit. 'frontal screen coir / shading object') in Korean, which is used in modern studies to refer to a forehead plate with overbrow notches similar to the Qing *hui*. However, it is doubtful that Manchu and Chinese authors of the second half of the eighteenth century, the imperial officials began to use such a complex and elaborate description for a familiar defensive element as the one given in the Siyu tuzhi. It is clear that this was some kind of original, unaccustomed design for imperial officials. Unfortunately, the compilers

"The Siyu tuzhi notes only two main characteristics of the *jangmyan*: the small thickness of the metal from which it was made, and the fact that from under it "you can barely see both eyes" [CCCT 1782: tsz. 41]. [KHST 1782: tsz. 41]. This gives a wide range of interpretations: from a ringed or ringed-plate segment, covering the face, to a non-standard visor, an unusually shaped headband or even an iron mask-face.³⁷

³⁷ At first glance, the correlation of *zhang mian* with 'thin iron' ('iron skin')

Deaf ringed blades (including those made of thin iron rings), covering a large part of face, were recorded on some Central Asian and Siberian helmets of XVII-XVIII cc. [Bobrov and Khudyakov 2008: 448, 449, 458, fig. 189, 5, 467, fig. 193; Ahmet-Gen 2015: 83, fig. 33, 5].

A ringed-plate helmet of Sindian type with a triangular face ring blade with notches for eyes [Bobrov, Borisenko and Khudyakov 2010: Fig. 13], as well as helmets of Circassian type, brought to the region by Volga Kalmyks, are from the territory of East Turkestan. The latter were equipped with a wide ring segment that covered the upper part of the face³⁸.

It would seem to rule out the possibility of it being made from ring cloth, so there was a special term for ring cloth in Chinese, *soo-zuijia* (also mentioned in

"The text of this work was compiled on the basis of different informants' information. However, it should be borne in mind that the work under study was compiled on the basis of data from various informants. Different officials worked on this compilation into a single text. While some of them were familiar with the construction of ringed armour, for others it was a barbaric exoticism that was difficult to describe in a conventional way. This does not allow us at present to dismiss the possibility of interpreting *jangmyan* as a protective element made of ringed armor, especially in view of its wide distribution in the area in question (see below).

³⁸ See, for example, the helmet in the collections of the Return to the East Museum (Dong Gui 東 □ 博物館), Hejing County, Bayan-Gol-Mongol Autonomous Region, Xinjiang Uygur Autonomous Region of the PRC. However, the appearance of such helmets in the area is usually attributed to the "Tor- gut escape" in 1771. For example, about 15,000 nomads from the Northern Caspian came to Central Asia together with Sanjip (son of Ayuka Khan) at the beginning of the 18th century. [Tepkeev 2018: 170, 181, 183, 184]. The warriors of Eastern Europe and the North Caucasus in the 18th century also used various types of headdresses equipped with ringed-plated barbettes. The forehead part of the latter could be fitted with a rectangular plate (or plates) [Bobrov,

Finally, it is possible that the term *zhanmian* could conceal a common *mishurka* or a chainmail "bashlyk" with a forehead or upper face covering the forehead. These types of combat heads were well known to Oirats and their Turkic neighbours of the 17th-18th centuries, but were weapon exotics for the residents of continental East Asia [Bobrov and Khudyakov 2008: 469-472]. Possibly, further study of material, pictorial and written sources will allow to clarify the meaning of the term *zhanmian* mentioned in the text "Siyu tuzhi".

"*Huyake* (呼雅克). *It is a chainmail (Chinese sojia 鎖子甲). Or there are such [armour] that is made of silk wata (chit. mien 綿). Their name is ele-boke/aoleboke* (鄂勒博克). *The supremely composed verses in [the year under the cyclic signs of] bingzi (1756. -L. B., A. P.) "On the armor [of the barbarians] fang..."*³⁹ [CXST 1782: tsz. 41].

The term *huyag* (Mong. *huyag*, *quyay*, Kalm. *huyg*) in Mongolian languages in the late Middle Ages and early New Age usually referred to the body armor (without taking into account the structure of its armor). If it was necessary to specify the peculiarities of its construction, an explanatory definition was added to the word *huyag*. A chainmail was indicated as *küü-e' kyo*. This is how it is spelt, for example, in the text of the Halha Jirum, a 18th-century codex. "Khalkha Jirum". [Pyur-beyev 2009: 284]⁴⁰.

[Salnikov 2018: 16-30]. Ringed-plate helmets supplemented with headplates and masks were used in various regions of South Asia, which maintained various (including economic) contacts with the East Turkestan subjected to Dzungaria [Bobrov and Salnikov 2018: 11-14]. However, no finds of similar North Caucasian and South Asian headstocks on the territory of Dzungaria have been documented so far.

³⁹ The Xiyu tuzhi text then cites a poem by Emperor Qianlong on the "armor [of the barbarians] fan" (*fanjia* 蕃甲).

⁴⁰ In modern Mongolian, the word combination *garkhin huyag* denotes a chain mail [Pyur-beyev 2009: 284; BAMRS 1 2001: 391], i.e. 'kolcha'. The terms *khø huyag* (from *garhi(n)*, a small metal ring). The terms *høø huyag* were also used,

In the text "Siyu tuchzhi" the sound of the Central Asian "soft" quilted shell, which was referred to as *olboy quyay* [Pürbeyev 2009: 284] or simply *olboy/olboğ*, is also very accurately conveyed.

After the displacement of traditional protective clothing from widespread military use, the term has come to refer to a mattress, a bedding, a quilted mattress, etc. However, folk memory has preserved the original meaning of the term: "a jacket quilted on hemp and worn at war", "a short road jacket quilted on cotton wool" [Banzarov 1955: 163, 304; BAMRS, 2 2001: 467]⁴¹.

The wide use by Dzungars and their vassals at the end of XVII - first half of XVIII centuries of both ringed and quilted armour is confirmed by material, pictorial and written sources [Bobrov, Khudyakov 2008: 392-416].

"*Bao* (包). *These are cannons (pao 礮)*⁴². *Iron (kits te 鐵) is used to make the barrel, saltpeter (kits xiaohuang 硝黃) and lead projectiles (kits qiantan 鉛彈) are used for the charge. [Their firearms] belong either [to the type] 2-3 chi length (64-96 cm - L.B., A.P.) and 3 tsun diameter (9.6 cm - L.B., A.P.), which are carried on the back of the back dishes and shot, or [to the type] 2-3 chi length (64-96 cm - L.B., A.P.) and diameter 5-6 tsun (16-19.2 cm - L.B., A.P.), which are fired from a wooden lapet (muja 木架)⁴³, or [to a type] more than four chi long (more than 128 cm. - LB,*

høø deel [BAMRS, 4 2002: 141] 'a ringed armour' and 'a ringed garment' respectively.

⁴¹ It is worth noting that in this passage "Siyu tuzhi", as the padding of the Dzungar soft armor the *olbogs* are named as *oshki* of silk wool, which in the absence of their own developed silk production in Dzungaria seems unlikely (see below).

⁴² In this case, the context implies a slightly broader meaning of the Chinese word *pao* (礮) - firearms in general.

⁴³ The basic meaning of the word *muja* (木架) is wooden frame, wooden structure, wooden frame, batten, wooden cage; wooden trestle; wooden frame; frame wooden support. In this case the most appropriate translation is "carriage", regardless of its specific construction.

A. P.), similar to [those] wick rifles (Chinese *nyaoqiang* 鳥鎗) that [are used] in the inland lands, from which one shoots with his hands. The people in charge of firearms were called "baoqin" (包沁). [CCST 1782: tsz. 41]⁴⁴.

The Mongolian name for firearms is *buu* (*buu*).

"Siyu tuchzhi is referred to as *bao*, and the title of a Dzungar official - "firearms superintendent" (Mong. *buuchin*) - as *baoqin*"⁴⁵.

Iron is named as the material for making barrels and lead (*Qian* 鉛) as the raw material for ammunition, which is only partially true (see below).

It is a bit strange to make the assertion that

⁴⁴ In another part of the text the authors of Siyu tuch-zhi note: "The craftsmen (*u-lu-te* 烏魯特, Mong. *urad* [BAMRS, 3 2001: 340]) are blacksmiths (*tejiang*) and casters of utensils [foundry workers]. Goldsmiths (*a-er-ta-tsin*, Mong. *altachin* [BAMRS, 1 2001: 79]) are those who do all the work of depicting and sculpturing Buddhas. *Buuchin-er* (*bao-tsi-na-er*) are those in charge of guns and rifles in a military camp and other similar matters. *Buuchin* (*bao-tsi-na-er*) are especially in charge of cannons. [CCST 1782: tsz. 29].

⁴⁵ According to the "Qing shi gao" materials, the cannon masters were predominantly Muslims, but they were settled in the eastern part of Jungaria on the territory of *Buuchin otok*, adjacent to the border guard *otok* - *Dzakhchin*, located in the Mongolian Altai: "Originally, the oirat Mamut (Ma-mu-tae) was called Kukesin and was a *zaisan* of Jungar *dzakhchins*. *Dzakhchin* - translated as "security troops" (*shuntsu*), were led by *Zaisans*. Mamut was in charge of the Altai guard, herding cattle in Bulagan-Tsagaan To- hoy. To the east of him were Khalkha and *ru-gies* of Uryankhay, to the west was Dzungaria, boundaries of *Buuchins*, various Dzungars and *Galdzats* with five *jas*. The *Buuchins* were a Muslim tribe (*Huizu*). The Jungars call the cannon *bao* (包), make the Muslims lead the cannons, hence the name. *Galdzats* and five *jas* are all Jungar *otoks*. *Otok* is like *tszolin* (Mong. *suman* [BAMRS, 3 2001: 128]) in *qi* (Mong. *hoshun* [BAMRS, 4 2002: 123])" (cf. [TSHG 1927: tsz. 523]). The "Xinjiang zhi liao" specifies that the total population of *Buuching otok* was 1 thousand kubitoks with three *zaisans* [Ochirov 2010: 11].

The Jungars "use saltpetre (*Xiaohuang* 硝黄) for the charge" rather than gunpowder (*Hoyao* 火藥). Saltpetre is indeed the main component of gunpowder (along with charcoal and combustible sulphur), but it cannot be used as an independent explosive, the effect of which is similar to gunpowder. In this case, the Siyu tuzhi compilers may have made a mistake (typo?).

The authors of the essay divide all Dzungarian firearms into three main groups. Let us consider them in more detail.

The first includes large-calibre guns or light small-calibre guns about 64-96 cm long (perhaps, in this case it is not the total length of the weapon, but only the length of the barrel) with a muzzle diameter of about 9.6 cm. These guns "are carried on camels' backs and shot" [CCST 1782: tsz. 41].

In Russian written sources of the 18th century this type of firearms was called "marching cannons" [Bobrov, Pastukhov 2007: 203, 208].

It seems that they were an analogue of the Russian *zatunny pishkas* and Iranian *jazair* (*jazail*). Visually, these weapons resembled conventional shotguns, but differed by their massive stock, impressive size and larger caliber. The text "Huanchao liqi tushi" contains a description and picture of a captured "Muslim gun" (*khuybao* 回礮), which looked like a long large-caliber shotgun and a special saddle in which it was carried [Bobrov, Pastukhov 2007: 210, Fig. 1, 3]. According to these data, the total length of the weapon was 1.6 m [Bobrov and Pastukhov 2007: 210, fig. 3, 211].

According to the unanimous opinion of Qing and Russian contemporaries, large-calibre guns ("cannons", "marching guns") were transported on the back of camels or horses [Bobrov, Pastukhov 2007: 203].

The first samples of large-caliber wick rifles appeared in the arms of Dzungars, probably in the second half of the 17th century, or even earlier [Bobrov and Stukhov 2007: 209].

According to Oirat diplomats (confirmed by Russian contemporaries), in the early 40s of the 18th century there were about three thousand large-calibre rifles in the Dzungarian army.

"marching cannons that are carried on camels" [Bobrov, Pastukhov 2007: 203]. [Bobrov, Pastukhov 2007: 203].

The second group includes guns of light field artillery. They have the same length as the large-calibre guns (about 64-96 cm), but a much larger diameter barrel (about 16-19.2 cm). Of these "fired from a wooden gun carriage". [CCST 1782: tsz. 41].

This information is very close to other sources reporting data on the size and construction of Dzungar guns. For example, the Kashgar merchant Aitbag Baimuratov, who visited Dzungaria in January 1749, described the Oirat guns as "an inch and a half long (about 1 m) ... which are mounted on camels". [Bobrov and Pastukhov 2007: 228].

Trophy Dzungar guns are depicted on Tsing maps of the second half of the 18th century. It is interesting that these guns have no wheelbase, but a wooden bar is tied to their front part (not far from the muzzle), which provided an elevated muzzle position during firing [Bobrov, Pastukhov 2007: 214, Figure 2, 1].

It is possible that this device is referred to as a "wooden carriage" in the Siyu tuzhi text. Otherwise it could be understood as a more complex wooden (including framed) construction, also recorded in the Qin images of the 18th c. [Bobrov, Pastukhov 2007: 227, fig. 6]. [Bobrov, Stukhov 2007: 227, fig. 6, 1].

Apart from those noted by the compilers "The Jungars also used other metals to produce weapons and ammunition, as well as iron guns⁴⁶ and lead bullets and cores. For example, the Oirat ambassador Donduk (Düring) reported that "The Zengors, those cannons and their cannonballs, as well as mortars, are made of copper, iron and iron, and cannonballs and tin, to which copper, iron and iron, and tin are made by themselves" [Bobrov, Pastukhov 2007: 203]. [Bobrov, Pastukhov 2007: 203].

⁴⁶ In this context, it probably refers to artillery barrels made from cast iron.

Information about tools made of copper alloy is also confirmed by other sources [Bobrov, Pastukhov 2007: 192, 196, 202, 205, 206, 228, 233].

The third group of Dzungar firearms is represented by rifles longer than 128 cm, which the authors of Siyu tuzhi consider "similar" to "... *nyao qiang*, which [are] used in the inner lands" [CHST 1782: tsz. 41]. [CCST 1782: tsz. 41], i.e. on wick rifles of Qin manufacture.⁴⁷

Comparison of known samples of Dzungarian rifles and their images with their Qing counterparts leads to the conclusion that they were of similar construction and size, although they had some differences in barrel design, wooden stock, buttstock, etc.

The data on the typology and size of firearms of the Dzungars recorded in the Siyu Tuzhi is unique. It is difficult to find a source among the written evidences of the 18th century in which this problematics would be studied in such details. This is especially important for the study of large-caliber Dzungar shotguns and cannons, the real specimens of which are still undiscovered and are known only from pictorial materials [Bobrov & Pastukhov 2007: 210, fig. 1, 3, 214, fig. 2, 1, 2].

"*Mani* (瑪呢). This is a banner (*qi* 旗). It is made of cotton cloth and a lapel (*qi* 幅) of completely different colours⁴⁸. There are banners almost as long as

⁴⁷ In domestic studies, the term *Niaoqiang* is traditionally translated as 'shotguns' or 'hunting rifles'. This translation is inaccurate, as the meaning 'hunting rifle' or 'shotgun' was not given until the 20th century, when the obsolete fuse-type weapon was used mainly by hunters or militiamen. In the 16th-19th centuries, a *niaoqiang* was a common fuse-type gun that was also used by imperial The "eight-bench" armies. Thus in "Huanchao liqi tushi" among the weapons of Qing warriors, for example, there is a mention of "army *niaoqiang*" (Chinese *bindin niaoqiang* 兵丁鳥鎗).

⁴⁸ In this context, the phrase *tsaise jun* 雜色俱 (literally 'multicoloured completely/all') mo- The fabric is not a colourful fabric, but it can also be coloured and dyed in different colours. It is also possible that this

The cloths are as wide as their length [in the ratio] of 10 to 8, painted with Lamaist mantras all over the cloth. In the wind [the cloths] move and [as if] recite [mantras] by heart. The [mani banners] are displayed by the zaisan and [the chiefs] below them. [CCST 1782: tsz. 41].

The etymology of the word in this context is not entirely clear. It is possible that the name of a miraculous precious stone from the Buddhist religious tradition - *mani* (Sanskrit 'precious stone'), meaning 'preciousness', 'treasure', was used to denote the banner. In the 18th c. depictions the Oirat banners are sometimes topped with a typical figured tip, which can be attributed also as a symbolic meaning of the 'jewel' - *mani* [Bobrov and Khudjakov 2008: 315, fig. 97, 12; Bir 2013: 246]⁴⁹.

According to the description, the main element of the Dzungar banner was a coloured flag, which was a large rectangular cloth, about 3.2 by 2.6 m, made of cotton cloth. The authors of "Siyu tuchzhi" do not focus readers' attention on this, but, judging from authentic Oirat banners and their pictures, the cloth flag was attached to the flagstaff vertically, i.e. this "length" corresponds to the "height" of the cloth. This form of flags, which originated from the flags of early medieval nomads, was characteristic of the Mongolian-speaking nomads of Central Asia of the late Middle Ages and early New Age [Bobrov and Khudyakov 2008: 314-316].

Of considerable interest is the observation by the authors of the Siyu tuzhi that the surface of the banner was covered with "... la mantras all over the cloth. In the wind [the cloths] move and [as if]

They recite [the mantras] by heart. [CCCT 1782: tsz. 41].

The tradition of writing mantras and prayers on battle banners was linked to the notion of the protective function of sacred texts. If such a banner was waved, "interdooms and epidemics would cease, and the enemy would be defeated" [Sharayeva 2012: 55]. [Sharayeva 2012: 55].

An authentic specimen of an Oirat military banner covered with mantras was kept in the Aleksandrovsky *khurul* at the beginning of the 20th century⁵⁰ and was examined by G. N. Prozriteliev. In the author's opinion, it was dated "to the time of the arrival of Kalmyks in Russia" [Prozriteliev 1912: "The relics of the Dukhoborsky khurul in Pushkin]. [The khurul was stored at the Alexandrov khurul and was examined by G. N. Prozriteliev.

On the fabric base of the flag "...only sayings in Tibetan are inscribed. The banner bears the inscription: "Sain-ka Isil-be", i.e. Prince Sain Isilbeyev⁵¹. On the banner are engraved three "tarni" (incantations) of burkhans: Ochir-Vani, Tsagan-Shukurteni and Naimen-gegeni... Except these incantations (prayers) on the banner there is a prayer "OLZE DAVKHAR". [Prozritelev 1912: 92-94]. These spells were supposed to make the owner of the banner strong "as iron", to protect against enemy's weapons, evil spirits and other dangers, and also to help in various undertakings [Prozritelev 1912: 92-94].

According to G. N. Prozriteliev: "This sign is highly revered by the Kalmyks because of the sacred inscriptions on it, but no one from the Kalmyks can read it, and only clerics are allowed to read the Tibetan manuscript" [Prozriteliev 1912: 95]. The Tibetan manuscript can only be read by clerics [Prozritelev 1912: 95].

From the photograph of the banner, the texts were placed in the central part of the vertically positioned banner, and along the

⁵⁰ A *khurul* is a Buddhist temple (monastery, abode) in Oirat Lamaism.

⁵¹ Dictionary. 'The Holy Bodyguard of Isilbe'. (*Sain* 'good', *ka* is the Oirat form of the word called *Erdene* or *Chandman Erdene* [BAMRS, 4 2002: 306].

The phrase Qing authors were trying to point out that the Jungars used banners that differed from one another in the colour of the cloth.

⁴⁹ It is also possible that the term in question means *chintamani*, i. e. "The jewel that grants wishes". In Mongolian this stone is more often

The word 'khya' means 'bodyguard, aide-de-camp'. It is possible that the reference is to the famous Oirat ruler and commander Eselbain Sainka (lit. 'Sain-ka, [son of] Eselbae'). From 1574 he was a ruler of the Khoit, one of the most influential Oirat princes. He is mentioned among the heroes of the famous tale "The song about Ubashi khuntaiji's march on the Oirat". [[Written monuments 2016: 170, 171, 236, 237](#)].

The perimeter of the flag had a wide (red?) border. Like other Oirat banners, the flag from *the Aleksandrovsky khurul had* long narrow ribbons, the so-called "tongues". The use of brightly colored fabric on this banner correlates well with the report of the authors of "Siyu tuchzhi" that Dzungar flags "...are completely different colours". [CCST 1782: tsz. 41].

Mantra-covered banners decorated with bright embroidery, coloured images and applique continued to be used by the Kalmyks until the first quarter of the 20th century. [Sharayeva 2012: 55]⁵².

Notably, according to the Siyu tuzhi, such flags could be used not only by *Zaisan*⁵³ but also by lower-ranking commanders. This suggests that colored flags covered with Buddhist mantras of rectangular shape were one of the main features of banners of higher and middle commanding officers of the Dzungar army of the first half to the middle of the 18th century.

It should also be noted that the "Siyu tuchzhi" probably indicates the maximum size of the cloth of such a banner. Genuine examples of Oirat flags, as well as Dzungar banners in the images of the period under consideration usually had significantly smaller dimensions [Bobrov and Khudyakov 2008: 314, 315].

"*Tukemani* (圖克瑪呢). *These are large banners with a bunchuk* (Chinese *da duqi* 大纛旗). *Length in zhang* (3.2 m.-L.B., A.P.), *width the same as [the] banners [mani]*. *For the cloth they use green silk, painted with Lamaist mantras across the top. [These banners] are displayed by the taiji.* [CCST 1782: tsz. 41].

The transcription *tukemani* is the monolithic word *tug-mani*, i.e. literally "flag jewel".

The size of *the tug mani* was somewhat larger than the usual *banner mani* used by *the Zaisan* and the lower-ranking

⁵² In Tibet, mantra-covered colourful 'prayer flags' (*Dar Cho*) are used in various religious ceremonies up to the present day.

⁵³ According to A. I. Chernyshev's calculations, there were at least 64 *Zaisan* in Dzungaria in the mid-18th century [Chernyshev 1990: 74].

The main features of the *tug mani* were the material (silk instead of cotton) and the green colour of the cloth.⁵⁴ . In addition to the size, the main features of *the tug mani* were the material (silk instead of cotton) and the green colour of the cloth.

According to the description, the flagstaff could also be additionally equipped with a *hair-tug* (Chinese *du* 纛). Jungar banners with a vertical cloth and a bunchuk under a shaped top are depicted on paintings of the mid 18th century. [Bobrov and Khudyakov 2008: 315, fig. 97, 12].

The phrase that the green silk cloth was covered with "*lamasic mantras on the top*" is not entirely clear [CCST 1782: tsz. 41]. This can be interpreted as putting the inscriptions on top of the green cloth, as well as indicating their location in the upper part of the flag.

According to the Siyu tuzhi, only *taiji* had the right to use such "great banners with bunchuk". The latter were divided into "Great Taiji" (大台吉 *Da Taiji*), who led the four main Oirat tribes, and "Little Taiji" (小台吉 *Xiao Taiji*). The *Tsüan* 41 "Siü tuzh-ji" summarizes this information on the weaponry and military symbols of the Dzungars with a historical account of the military activities of the oirat predecessors in Central Asia. It also provides a general assessment of the military research of the

of Jungar culture.

"In the "Narrative of the Turks" ("*Tujue Zhuan*") in the "*Bei shi*"⁵⁵ among the weapons [of the Turks] are horned bows (Ch. *jiaogun* 角弓) and whistling arrows (Ch. *midi* 鳴鏑), armor (Ch. *Jia* 甲) and spears (*Sho* 稍), swords (*Dao* 刀) and shields (*Dun* 楯), banners (*Qi* 旗) and banners (*Du* 纛) with a golden wolf's head (*Lantou* 金狼頭) on top. When raising troops for a campaign, they make notches on the wood, counting [the army], as well as sealing the arrow with wax

⁵⁴ The *mani banner* was 'almost zhang' in length, i.e. slightly less than 3.2m (see above). While the length of *the tugmani* is confidently defined as 1 zhang, i.e. 3.2m.

⁵⁵ This refers to the historical narrative "The Bei Shi (History of the Northern Dynasties) chronicles the events of 386-618. This chronicle was compiled during the Tang dynasty (618-907).

The car was equipped with a gold tip, which was considered a sign of faith.

In the "Narrative of Juanjuan" (Juanjuan zhuan), for the first time the military regulations were described: 1,000 people were an army (jun 軍) and 1 commander was placed over the army (jiang 將). 100 men made up the banner (chuan 幢), and 1 warlord (shuai 帥) was placed over the banner. Shenlun⁵⁶ studied the laws of the Middle State and, having established military rules (lit. 'order and army'. - L.B., A.P.), made outlaws on the borders.

In the "Narrative of the Uyghurs" ("Huigu zhuan") in the "Tang shu"⁵⁷ [states]: "Xia-jias⁵⁸ is an ancient possession of Jian-kun⁵⁹. Among their military [equipment] are bows and arrows (gongshi 弓矢) and banners (qizhi 旗幟). Their riders split wood (qit. simu 析木) and make shields (qit. dun 盾) that cover their legs to the hip, and use round shields (qit. yuandun 圓盾) on their shoulders to protect themselves from arrows and blades (qit. shizhen 矢刃).

The Jungars], based on the ancient rules of warfare Zhuanzhuang, the military equipment of the Turks and considered the strongest among the western tribes [Turks] Shato, in modern times [the Jungars] also relied on strong armor (kits jian-jia 堅甲) and sharp weapons (kits libin 利兵) to kill with hatred, becoming [the] most cruel and cunning among the tribes of the northwest. [We] have studied their warrior's equipment (ch'i zhanjiu 戰具), especially describing their banners (ch'i qidu 旗纛), written entirely in Sans-Cretan script.

⁵⁶ Shelun (? - 410) - the first Kaghan of Zhujia-Nei.

⁵⁷ It refers to tsz. 217 "Uyghurs" in Xin Tang Shu (A New History of the Tang Dynasty), which describes the events of the Tang Dynasty (618-907). The work itself was compiled between 1044 and 1060 during the Song dynasty (960-1279).

⁵⁸ Xiajian is a possession in Central Asia and South Siberia, identified with the Yenisei Kyrgyz Khaganate (840-925).

⁵⁹ Jiankun, a possession in Central Asia and South Siberia, is identified with the lands of the Yenisei Kyrgyz and, based on "Xin Tangshu", with the possession of Xiajasa.

However, although [they] embraced the Buddhist faith, they actually [followed the principle of] survival of the fittest⁶⁰, and they would rather die than betray themselves. [They] were good at warfare (ch. shanzhen 善戰) and good in the field (ch. shanzhen 善陣)⁶¹, but were totally dependent on retribution!" [TsKhST 1782: tsz. 41].

Conclusions

Our analysis of tsüan 41 "Siyu tuzhi" shows that it systematized information on weaponry and military symbols of the Dzungars known to Qin officials in the second half of the 18th century. It is supposed that most of this information was received by the members of the expedition to Dzungaria and East Turkestan in 1756-1759. The main informants were probably representatives of the local Oirat and Turkic population and Qin servicemen who had participated in the incorporation of these regions into the empire. Later, this information may have been supplemented and edited by members of the imperial commission, which included Manchurian military commanders who had fought in Central Asia.

The text of Siyu tuzhi describes two varieties of bladed, long-handled weapons, hulled armour and helmets, three types of firearms, a bow and arrow, and two variants of the banners of the Junggarian army each. The description of each item is accompanied by a transcription of its original name. In some cases, the material of manufacture and the main typical dimensions are given.

It should be noted that the Qing authors showed a good knowledge of Mongolian languages, successfully transcribing with the help of hieroglyphs the names of various kinds and types of weapons and armor. This made it possible to confidently identify most of the items mentioned in the source.

The comparison of the Siyu tuzhi data with authentic weapons of the Oirat population of Central Asia, as well as the

⁶⁰ The letter 'the food of the strong is the meat of the weak'.

⁶¹ Literally "[were] able to line up troops well in the field', i.e. to fight a field battle.

It is clear from the images that the Qian authors were very accurate in their descriptions of the design and decoration of the weapons and armor of the population of the region under study. This also gives credibility to those items and weapons mentioned in the text that are not yet confirmed by real sources. Such items include, for example, additional facial protection "made of thin iron" on Oirat helmets (*zhanmian*).

The Siyu Tuzhi provides valuable information about the size and design of long-string arms, large-caliber guns, cannons and banners, as it is either absent or briefly described in other written sources of the 17th-18th centuries.

The Qing's authors have a rather high opinion of the armament and military skills of their western opponents. In particular, they note that the Oirat "relied on strong armor and sharp weapons" and "were able to fight well and were good in the field". [TSHST 1782: tsz. 41]. Items of defensive and offensive armament are described either neutrally or even praised by the Siyu tuzhi compilers. For example, they emphasize "good quality" and "fine finish" of "very powerful" Oirat arrows [TSHST 1782: tsz. 41]. Such an assessment contrasts with the entire

In the first quarter of the eighteenth century some Qing dignitaries made restrained and sometimes openly disparaging remarks about the Dzungar army [Khafizova 2013: 121]. [Khafizova 2013: 121]. In our opinion, this change of emphasis is due to several reasons. First, the authors of the Siyu tuzhi emphasized the significance of Qianlong's triumph, which defeated such a strong adversary, giving rather high assessment to the military art of the Dzungars. On the other hand, the not always successful actions of the Qing military forces against the Dzungars in the late 1920s and early 1930s probably caused the Qing authorities to treat the military abilities of their western neighbours with great respect.

The Siyu tuzhi is of great interest because it attempts to show the breadth of their historical knowledge and to examine Oirat martial practice within the context of the overall text of Central Asian martial art development. The *zyüan* 41 dedicated to the Dzungans concludes with the historical inserts about the weaponry and military symbols of ancient Turks and Yenisei Kirghiz, and also about the decimal military organization of Jujans [IIXCT 1782: tsz. 41]. Allegedly the military traditions of the Iranians themselves were based on "the ancient military traditions" of these peoples, as well as "the strongest among the western tribes [the Turks] of the Shato" [TSXT 1782: tsz. 41]. The military traditions of the Oirat peoples themselves were based on [KHST 1782: tsz. 41].

While emphasizing the high scientific value of the Siyu Tuzhi as a source on weaponry and military symbols of Central Asia, there are some important points to be made about the specificity of the information contained in the source.

The work under consideration lists many items of defensive and protective armaments of the Junggarian Oirat. However, this list is not exhaustive. For example, striking (maces, clubs etc.) and cutting weapons (fighting axes, axes), knives, swords and broadswords with a disk-shaped guard, plasti- stitching and ringed-plated armor, miscurcas and ringed "bashlyk", handcuffs etc. are not mentioned at all. Material, pictorial and written sources (including Qing sources) show that the above mentioned armament was used by the peoples of the region under study, but there is no information about it in *Ji'an* 41⁶².

It is also worth noting that the Qing's attention was primarily drawn to weapons of a design and system unusual for the Far East.

⁶² Some of these subjects (for example, half-cutting axe "aipaletu", i.e. *aibalta*, plate armor "kuyake", i.e. *huyag*, *kuyak*) are mentioned in the armament of "Muslim tribes", i.e. of Muslim population (*huybu*) of East Turkestan and neighboring territories in *the tsüan* 42 "Siyu tuzhi" [Bobrov, Pastukhov 2021: 518-520]. [Bobrov, Pastukhov 2021: 518-520].

The sabres or swords have a cross-shaped hilt, rather than the typical East Asian sword hilt. The sabres or swords with a hilt with a cross-shaped hilt and not the disc-shaped guard typical of East Asia, helmets with additional facial protection, etc.

Even when the list included more common and widespread weapons for Central Asian warriors (spears, bows and arrows), the authors of *Siyu tuchzhi* tried to emphasize their nonstandard East Asian design elements: miniature pinnacles on the shafts of Oirat spades, braces on the handles of long-lance weapons, original design of banners, and so on.

In addition, the division of weapons of the peoples of the region into "Dzungar" (*Juan* 41) and

The term "Muslim" (*juan* 42) is rather provisional and reflects the political realities of the second half of the eighteenth century. Up to that time the Turkic population of Eastern Turkestan had been successfully supplying the troops of the Dzungarian *khuntaiji*. Therefore, some items of arms, classified as "Muslim" by Qin authors, could be used by ethnic Oirat (e.g. plate armour, cleaver-shaped sabers and swords "se-liem", etc.). Conversely, firearms made by the masters of the Dzhungar *otok Buuchin were used by units* manned by warriors from Eastern Turkestan.

The text of *Siyu tuchzhi* sometimes contains dubious statements and outright errors. For example, during the description of the Dzungarian quilted armor *elepake* (Mong. *olbog* [[BAMRS, 2 2001: 467](#)]) it is mentioned that silk wool was used as a stuffing, which is improbable in the absence of the developed silkworm breeding in Dzungaria.

In the first half of the 18th century, we know that in Dzungaria there was mass production of gunpowder, etc. Some of these inaccuracies are presumably not due to the bad faith of the informants, but due to the mistakes of the scribes who prepared the text for the carvers of the xylograph blueprints. We can assume that some of these inaccuracies were caused not by the bad faith of the informants, but by the mistakes of the scribes who prepared the text for the engravers of the xylograph, who could

The text of the work has a similar, but different meaning.

However, these discrepancies do not affect the overall high estimate of "Siyu tuchzhi" as the main and most valuable Qin written source on weapons and banners of the Oirat population of Dzungaria of the first half to the middle of the 18th century. Some information recorded in "Siyu tuchzhi" is absent in other works, which makes this work unique and endows it with special scientific value.

To conclude, let us note the significance of *Siyu tuchzhi* for deciphering the original Oirat terms used to denote various types of weapons and armor. Until recently attribution of armament terms that appear in folklore (including epics) and written sources was based on the later ethnographic interpretations of the 19th - early 20th centuries. However, during that period many items of traditional Central Asian armament either left wide military usage, or due to different reasons changed their names. As a result, new or updated meanings of terms were introduced into historical dictionaries in addition to the original ones. Because "Siyu tuchzhi" correlates names of different kinds and types of weapons and armor with peculiarities of their construction, it appears possible to clarify the original meaning of some or other weaponry terms used by Mongolian peoples in the first half and middle of the 18th century. This opens broad perspectives for more detailed and comprehensive study of Central Asian written and folklore heritage of the late mediaeval and early modern periods.

Overall, it should be noted that *Siyu tuchzhi* is by far the most detailed and detailed Qin written source on the armament and banners of the Oirat population of Central Asia in the mid-eighteenth century, introduced by the authors into scientific circulation.

Abbreviations

- lit. - literally
 b/g - no year of publication b/m -
 no place of publication
 Kaz. - Kazakh Kalm. -
 Kalmyk Chinese -
 Chinese Mong.
 Xinjiang-Oirat. - xinjiang yirat tsz. -
quan

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