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Early Medieval Armor from Southern Siberia*

This article describes iron armor plates, weapons, and a horse harness from a randomly discovered site at the village of Filimonovo in the Kan Valley, southern Siberia. The reconstructed lamellar armor consists of several horizontal rows of vertically arranged and joined narrow iron plates. Parallels suggest a date and cultural attribution. The group of finds includes three-bladed arrowheads, stirrups, bipartite bits, buckles, twisted loops, and bronze plaques. These items of horse harness are typical of the Old Turkic culture from the middle of the first millennium AD. The armor, the decorated stirrups, and horse harness from Filimonovo apparently date to the late 500s, when the Yenisei Kyrgyz were forced into vassalage to rulers of the First Turkic Khaganate. We suggest that the Filimonovo assemblage is a cache. The tradition of caching weapons and armor was practiced by various peoples of southern and western Siberia during the Xiongnu-Xianbei age and in the Early Middle Ages. Based on the analysis of various types of plates, a reconstruction of the late first millennium AD Old Turkic armor is proposed.

Keywords: *Southern Siberia, Early Middle Ages, weapon cache, protective armor, lamellar armor, Old Turks, Yenisei Kyrgyz.*

Introduction

Metal armor is relatively rarely found at the sites of ancient and medieval nomads in Southern Siberia and Central Asia, because it was highly valued. The Central Asian nomads could have adopted iron plate armor in the Xiongnu period (Davydova, 1985: 49, fig. IX, 19, 19a; Hudiakov, 1986: 48). Such finds occur among the materials from the sites of the Xiongnu-Xianbei period in the Altai-Sayan. Armor plates have been found in the Bulan-Koba burial grounds Chendek and Yaloman II in the Altai Mountains (Soenov, 1997; Gorbunov, 2003: Fig. 7, *11*). The materials of the Kokel culture include individual finds of this type (Hudiakov, 1986: 86). Armor, first reconstructed as breastplates (Umansky, 1974: 147–148, fig. 7), but after restoration interpreted as a whole armor consisting of a breastplate and backplate (Gorbunov, 2002: 72, 75, fig. 8, *1–3*), was found in the Upper Ob region at the site of Tatarskiye Mogilki. One armor plate is known from the materials of Blizhniye Elbany XIV (Gryaznov, 1956: 104, pl. XLI, 11). Such plates were found at the burial ground of Kok-Pash (Bobrov, Vasyutin A.S., Vasyutin S.A., 2003: 24–25); a fragment of armor was discovered at the early Turkic site of Berel (Radlov, 1989: 465), while fragments of armor plates were found at the site of Kyzyl-Tash (Gorbunov, 2003: Fig. 21, *1–6*).

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In the Early Middle Ages, scale and lamellar armor were used by the Old Turks, the Yenisei Kyrgyz, and other ethnic groups (Hudiakov, 1980: 119–123; 1986: 158–159, 175, 196–197; 1991: 19, 42, 65). Armor plates have been found in Turkic memorial enclosures in Kudyrge, Mendur-Sokkon, and Kishneg-Atudar in the Altai Mountains (Gavrilova, 1965: Pl. V, 1; Soenov, Ebel, 1997: Fig. III, 2). A fragment of armor consisting of "long, overlapping armor plates" was found at the burial ground of Uzuntal I (Savinov, 1982: 107, fig. 8). Armor was found at the site of Balyk-Sook I (Kubarev, 2002: 88, fig. 1, *11*). A cluster of iron plates of "oval and semi-oval shape with holes for fastening" was discovered in the Kyrgyz joint burial ground at the Ulug-Khorum mound (Grach, 1982: 158, 164).

Plate armor from Abaza belongs to the Advanced Middle Ages in the Altai-Sayan (Sunchugashev, 1979: 133–134). Armor plates were found in the rocky cache of Iyi-Kulak in Tuva (Mongush, Grach, 1977) and subsequently were studied by M.V. Gorelik (1983: 251). The Pokrovka hoard and the finds from the village of Kamenka may belong to the same kind of "cache"—intentionally hidden objects of protective armor.

The plates from the brigandine, found in the Minusinsk Depression belong to the Late Middle Ages (Hudiakov, 1991: 89, fig. 2, *1*, *2*; 3, *1*, *2*; 4). Similar plates have been found in graves of the 17th century on the Chulym River (Radlov, 1989: 460, 478–480). Elements of plate armor have been found in the shaman's burial of Ortyzy-Oba (Hudiakov, Skobelev, 1984: 110, 113, fig. 6, *1–11*).

Description of finds from the village of Filimonovo

An interesting find among the objects of medieval protective armor that have been found in southern Siberia is the assemblage of armor plates discovered in the village of Filimonovo in the Kansky District of Krasnoyarsk Territory. In 2012, Y.A. Filippovich received information about this discovery. According to this information, in the year 2010 local dwellers discovered a group of "ancient things" during earthworks at the outskirts of the village over an area of 5 × 5 m and at a depth of 30 to 40 cm. The finds included 422 fully and partially preserved iron armor plates of the same type with rounded upper edges, 42 fragments of larger plates of rectangular shape, two stirrups, one bit, 5 iron three-bladed tanged arrowheads, 5 iron buckles and one bronze buckle, 3 twisted iron chains, 47 bronze hemispherical sewn plaques with a rim, and a bronze "bell".

Iron arrowheads. According to the form of their attachment to the shaft, these arrowheads are tanged. Two groups can be distinguished according to the cross-section of the body. The first group contains three-bladed arrowheads, represented by three types according to the shape of the body.

Type 1. Elongated hexagonal arrowheads (2 spec.). The length of the body is 6 cm; the width is 2.8 cm; the length of the tang is 3.5 cm. These arrowheads have sharply angular tips, a massive elongated hexagonal body, as well as gently sloping shoulders and lower part of the body. Rounded holes are located at the bottom of the blades (Fig. 1, *1*, *2*). Such arrowheads first appeared among the Xiongnu (Konovalov, 1976: Pl. I, 12–15; II, 17–28). In the Early Middle Ages, they were used by the Old Turks, the Yenisei Kyrgyz, and the Kimaks (Hudiakov, 1980: 79–80; 1986: 145, 185).

Type 2. Stepped arrowheads (1 spec.). The length of the body is 6 cm; the width is 2 cm; the length of the tang is 2 cm. The arrowhead has a sharply angular tip, distinct extended striking part, widened trapezoidal blades, as well as gently sloping shoulders and lower part of the body. Oval holes are located on the shoulders (Fig. 1, *3*). Stepped arrowheads were used by Xiongnu shooters (Hudiakov, 1986: 31), by the carriers of the Kokel, the Tashtyk, the Kok-Pash, and the Upper Ob cultures, as well as by nomads who left sites of the Airydash and Berel types (Ibid.: 70–71, 92, 111–112).

Type 3. Elongated rhombic type (1 spec.). The length of the body is 5.3 cm; the width is 1.2 cm; the length of the tang is 4.2 cm. The arrowhead has a sharply angular tip, oblong-rhombic body, as well as gently sloping shoulders and lower part of the body (Fig. 1, *4*). Similar arrowheads were used by the Xiongnu (Konovalov, 1976: Pl. I, 1; Hudiakov, 1986: 32–33). They have been found at the sites of the Tes stage, as well as the Kokel and the Upper Ob cultures (Hudiakov, 1986: 54, 70, 92, 111). In the Early Middle Ages, such arrowheads were used by the Old Turks, the Yenisei Kyrgyz, the Kimaks, the Bayirqu, and the Shiwei (Hudiakov, 1980: Pl. XXIV, 6;

Fig. 1. Iron arrowheads.

XXV, 4, 5; Hudiakov, 1986: 143, 183; 1991: 30, 52). In the Advanced Middle Ages, they were used by the Yenisei Kyrgyz, the Kyshtyms, and the Uyghurs (Hudiakov, 1997: 9, 32, 80–81).

The second group includes a single arrowhead with a flat body. The arrowhead has a sharply angular tip, elongated pentagonal body, barbs, and concave shoulders. The length of the body is 4.3 cm; the width is 2 cm; the length of the tang is 4.9 cm (Fig. 1, *5*). A similar arrowhead was found in an early Turkic burial at the burial ground of Berel (Gavrilova, 1965: 55, fig. 5, 7).

Despite the small numbers, the set of iron arrowheads from this collection is unique. Its composition includes both common types, which were widespread for a long time, and rare forms whose presence makes it possible to give a more precise dating and cultural attribution of the site. The presence of the stepped elongated arrowhead with large oval holes gives grounds to date the finds from the village of Filimonovo to the period from the second quarter to the middle of the first millennium AD. The flat, elongated, pentagonal arrowhead made it possible to attribute this assemblage to the sites of the Berel type (Ibid.: 54–55).

Iron armor plates. Most of the armor plates belong to the first type and can be called "figurate": their rounded upper part is inclined in one direction and forms a kind of "ridge", the middle part is widened and the bottom part is somewhat narrowed to a straight end. The plates have four pairs of rounded holes: one pair is along the bottom edge; two pairs are on the sides of the widened part, and one pair is on the central axis closer to the upper rounded edge. One more hole is located on the lower third of the plate (Fig. 2).

The height of the plates is 5.9–6.3 cm; the width of the "ridge" is 1.6–1.9 cm; the width of the middle (widened) part is 2 cm; the width of the lower part is 1.3–1.4 cm; the thickness of the plates taking into account corrosion of the metal is 0.07–0.09 cm; the diameter of the holes is 0.26–0.30 cm. The total weight of all plates of this shape is 1.796 kg. We also weighed individual fully preserved plates, and the weight of each such plate was about 5 g.

Such plates are known from the territory of East Turkestan, Central Asia, and Eastern Europe (Kubarev 2007: Fig. 10–12). According to Gorelik (1993: 170), they belong to the 5th–6th century AD.

Judging by the shape and location of the holes, the plates were located vertically in the protective plate armor with their rounded "ridge" on top. They were joined in horizontal rows with the help of leather straps. Each lower row was partially overlapped by the upper row.

On the basis of the remaining 42 fragments we were able to distinguish three types of plates. Although all these plates are similar to each other, they vary in length and curvature. The second type includes plates of rectangular

Fig. 2. Iron armor plates.

shape with a slightly rounded upper edge; all of them have survived in fragments. We have managed to glue together 23 fragments and obtain 15 parts of at least nine plates. The length of these plates is 31 cm; their width is 3.1 cm. These plates are slightly bent along the long axis. In the lower third they are curved in one direction, and in the upper part they are curved in the opposite direction. Six pairs of rounded holes are located along the long sides of the plate; one pair is at the upper edge perpendicular to the edge, and four holes are along the bottom edge.

The third type includes a single find. The length of the surviving part of the plate is 12.2 cm; the width is 3.1 cm. The plate has a broken upper and a straight lower edge. Three pairs of rounded holes run along each of the long sides; some of the holes are broken off. One rounded hole has survived at the upper edge. Originally there must have been two holes, and they were arranged vertically. Three holes are located along the bottom edge (Fig. 3, *2*).

Fig. 3. Iron armor plates.

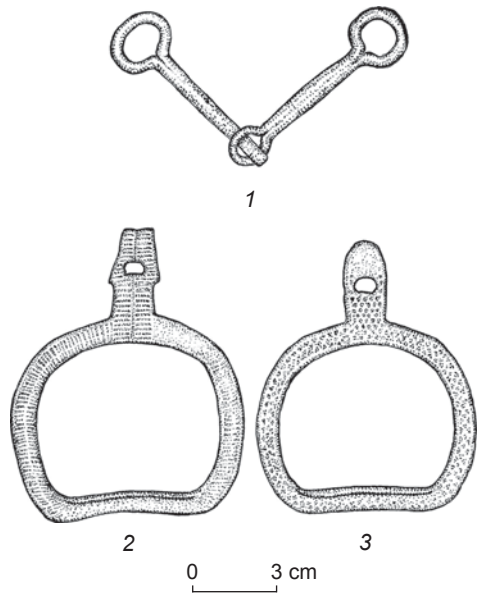

Fig. 4. Iron bit (*1*) and stirrup (*2*, *3*).

The fourth type of plate is also represented by a single find that has survived in a fragmentary form. Its length is 16.2 cm; its width is 2.8 cm. The plate is slightly bent along the long axis. Its top and bottom edges are broken off. The length of the plate could have been about 20 cm. Originally, there were two pairs of rounded holes along each of the long sides. Three holes at the bottom are partly or completely broken off. Two holes are located at the top perpendicular to the upper edge; they are damaged. An additional hole is located on the line of fracture in the middle of the plate across from the pair of rounded holes (Fig. 3, *1*).

Long rectangular plates of the second-fourth types were probably a part of a lamellar armor.

Iron stirrups. Both stirrups are plate-like with a wide semicircular opening and narrow horizontal footrest at the bottom part of the opening, decorated by indentations over the entire surface on one side. They have plate-like loops of different shapes. The loop in one stirrup is topped by a trapezoid finial with an oval hole for the stirrup-leather; the loop in the other stirrup is of semi-oval shape with an oval hole. The stirrups are slightly different in size: the height of the first stirrup including the loop is 20 cm, and width of its opening is 16 cm; the height of the second stirrup including the loop is 19 cm, and the width of its opening is 15 cm (Fig. 4, *2*, *3*).

In 1917, a similar stirrup from the Minusinsk Depression was published by A.M. Tallgren (1917: Des. 86). In 1965, using the materials from the burial ground of Kudyrge in the Altai Mountains, A.A. Gavrilova (1965: 34, pl. XIV, 7) designated as a special type a stirrup of unusual shape "with a rectangular earlet, without a neck, made of a wide plate that was battered in the upper part, for a footrest that is T-shaped in cross-section". Gavrilova attributed it to the Kudyrge type of sites of the 6th–7th centuries (Ibid.: 60, pl. XXXI). In 1973, such stirrups were called one of the most important inventions of the Early Middle Ages (Ambroz, 1973: 83). In 1982, similar finds from a joint burial ground with the horse in the Ulug-Khorum mound were studied by V.A. Grach (1982: 158, 160) who dated them to the late 5th–mid 6th century AD. In 1990, a similar stirrup from the Middle Volga region, dated to the same period, was published (Izmailov, 1990: 62–63). T.N. Troitskaya and A.V. Novikov (1998: 45, fig. 23, *13*, *14*) studied similar finds from the Upper Ob site of Krokhalevka-23. In 1999, Y.V. Grichan and Y.A. Plotnikov (1999) published a find consisting of a decorated stirrup of the same shape from the village of Karakol.

Most scholars believe that this type of iron stirrup was the earliest, and was typically used in the nomadic cultures of the Eurasian steppes in the late 5th–first half of the 6th century AD. The distribution of stirrups of the same type over such a vast territory from Trans-Baikal region to the Middle Volga region, including the Altai-Sayan and Western Siberia can be associated with the emergence of the First Turkic Khaganate, which united these lands and triggered an active borrowing of Old Turkic weaponry and horse equipment. The chronology of the spread of the stirrups in Eurasia was substantiated by S.I. Weinstein (1972: 129–130). Judging by the parallels, the stirrups found in the village of Filimonovo can be dated to the 5th–6th centuries AD.

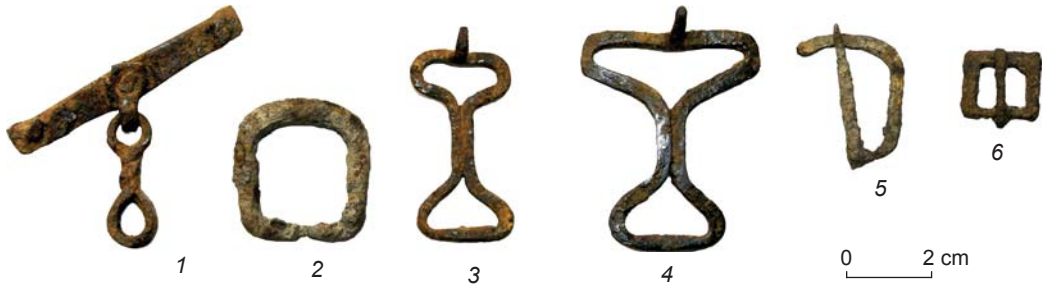

Fig. 5. Sheath fitting (*1*) and buckles (*2–6*).

Fig. 6. Bronze plaques (*1*, *2*), a buckle (*3*), and a "bell" (*4*).

Iron bit. It is bipartite with single-ringed endings of the parts (Fig. 4, *1*). Such bits have been found in the Kudyrge assemblages (Gavrilova, 1965: 58, 61).

Iron fittings of a sheath. One of the fittings is a plate with rivets; a link of a twisted chain is passed through the loop of the fitting. The length of the plate is 6 cm; the width is 4.5 cm. Another fitting has an elongated rectangular shape; a link of a chain with rounded endings and a twisted central part is passed through the loop attached to the fitting. The length of the fitting is 5.6 cm; the width is 0.6 cm; the length of the chain is 3 cm (Fig. 5, *1*). Fittings of similar shapes with twisted links of chains have been found at the burials of Blizhniye Elbany XII and XIV of the Upper Ob culture and at a joint burial ground in the Pazyryk locality (Gryaznov, 1956: 101, 103–104, pl. XXXII, 1, 22; XLI, 10; Gavrilova, 1965: 52, fig. 3, 5–7). Similar links have been found at the site of Kok-Pash in the Eastern Altai (Bobrov, Vasyutin A.S., Vasyutin S.A., 2003: Fig. 35, *7–9*). Similar chains for sheaths are known from the materials of the Upper Ob and Relka cultures (Troitskaya, Novikov, 1998: 44). Another find is a chain of interconnected twisted links of different sizes. Its length is 9 cm; its width reaches 0.8 cm.

Iron buckles. These include some specimens with a fixed prong on the frame. The sides of the frame are connected in such a way that they form two triangular openings with rounded corners for attaching a waist belt that was supposed to be passed through the opening and attached to the fixed prong. One buckle has identical openings. Its length with the prong is 5.8 cm; the width of the openings is 2.3 cm. In the second buckle, the opening with the prong is noticeably wider than the first opening to which the belt was attached. Its length is 5.5 cm; the width of the first opening is 4 cm; the width of the second opening is 2.7 cm (Fig. 5, *3*, *4*). Two iron buckles with a fixed prong have trapezoidal frames.

The collection also includes iron buckles with a movable prong. One buckle has a square frame. The end of the movable prong protrudes over the frame (Fig. 5, *6*). The length of the frame is 2.8 cm; the width is 2.7 cm. Two more buckles have not been completely preserved. One buckle is represented by a subrectangular frame to which the prong used to be attached. Its length is 3 cm; the width is 2.8 cm. Another buckle preserves three parts of a frame of subrectangular shape with rounded corners and a movable prong. The length of the frame is 3 cm; the width of the preserved part is 2.4 cm (Fig. 5, *2*, *5*).

Bronze buckle. It has an oval opening, movable prong, rectangular base and fixed semi-oval shield with a pointed end. Its length with the shield is 4.3 cm; the width of the frame is 2.6 cm (Fig. 6, *3*).

Bronze plaques. They have a hemispherical bulge in the center, a narrow rim, and a bar on the inside (Fig. 6, *1*, *2*). The diameter of the plaques is 1.5–1.7 cm; the height is 0.3–0.4 cm. Plaques of similar shapes are known from the materials of the Bolshaya Rechka and Sargat cultures, as well as of the Tes stage; plaques without the rim are known in the Kok-Pash and Kudyrge assemblages (Gavrilova, 1965: Pl. XV, *2*; Bobrov, Vasyutin A.S., Vasyutin S.A., 2003: Fig. 43, *12–15*, *18–21*, *29–33*).

Bronze objects from the village of Filimonovo include a cone-shaped object with a plate-like loop at the top, which looks like a bell. Its diameter is 2.4 cm; the height is 1.4 cm (Fig. 6, *4*).

Dating, cultural attribution, and functional purpose of the assemblage

The assemblage of weaponry, and military and horse equipment found in the village of Filimonovo includes

a variety of things, some of which were used for a short period of time in the middle of the first millennium AD, while others were used throughout the entire Early Middle Ages. The three-bladed arrowhead with narrow elongated stepped body and the flat arrowhead with elongated pentagonal body and barbs (Gavrilova, 1965: Fig. 3, *2*; 5, *7*) can be dated to the period from the second quarter to the mid first millennium AD. Concerning the items of protective armor, the set of plates of different types, including the "figurate" armor plates, should be dated to the mid first millennium AD (Gorelik, 1993: 170). The sheath fittings with twisted chains (Gavrilova, 1965: Fig. 3, 5–7) and stirrups (Grach, 1982: 160; Grichan, Plotnikov, 1999: 77; Izmailov, 1990: 65) belong to the same period. On the basis of parallels, the Filimonovo assemblage can be dated to the late 5th–third quarter of the 6th century AD. Other objects from this collection were used throughout the entire Early Middle Ages. However, their presence among the finds from Filimonovo does not contradict the suggested dating.

The iron arrowheads, armor plates, bit and stirrups that belong to the mid first millennium AD have parallels in the Old Turkic Berel and Kudyrge assemblages (Gavrilova, 1965: Fig. 5, 7, pl. XIV, 7). The presence of the "figurate" armor plates may testify to contacts with the population of East Turkestan and Central Asia, where lamellar armor with similar plates was widely used in the middle of the first millennium AD. At the same time, the twisted iron chains and hemispherical bronze plaques have parallels in the material complexes of the Tashtyk, the Kok-Pash, and the Kokel cultures (Bobrov, Vasyutin A.S., Vasyutin S.A., 2003: Fig. 6, *15*; 12, *17*, *18*; 35, *7*). Some similarities can be observed between the iron buckles with the fixed prong from the village of Filimonovo and the buckles from the Tes stage and the Kokel culture. Judging by the set of iron arrowheads, armor plates, and the stirrups, most of the objects from the village of Filimonovo belong to the culture of the Old Turks at the Kudyrge stage of its development. Only a small amount of Tashtyk artifacts are present.

In our opinion, the collection found at the outskirts of the village of Filimonovo can be considered a "weapon cache". The tradition of hiding such "caches" goes back to the Metal Age when it was customary to preserve bronze objects intended for smelting in this manner. In the Tes time, in the Minusinsk Depression, people began to bury not only the objects of toreutics, but also weaponry. According to one hypothesis, these "weapon cashes" were the offerings of the ancient and medieval population to the higher powers. In the forest zone of Western Siberia, such sites were the sanctuaries of the Ugric and the Samoyed tribes (Plotnikov, 1987: 131). At the Yenisei, objects of protective armor were placed in caches throughout the entire Middle Ages (Gorelik, 1983: 251).

The find from the village of Filimonovo suggests that the tradition of including armor into "weapon caches" emerged in Southern Siberia at the turn of the Metal Age and the Middle Ages. This "cache" contains a unique set of weapons, military equipment, and horse harness, which distinguishes it from the Tes and Medieval caches in the Minusinsk Depression and Tuva. It could have belonged to a warrior from the local tribes of the Kyrgyz State on the Yenisei.

Reconstruction of the armor from Filimonovo

On the basis of the iron plates from the collection, Filippovich made a material reconstruction of the lamellar armor. It was supplemented by a protective covering of the neck and a helmet with an aventail (Fig. 7). Protection of the body includes a rectangular breastplate that consists

Fig. 7. Reconstruction of the armor based on the plates from the village of Filimonovo, made by Y.A. Filippovich.

of a horizontal row of vertically arranged plates of the third type found in Filimonovo, connected by straps. It is bordered on the bottom and on the sides by leather piping stitched with a strap. The breastplate is connected with the protective covering of the body, which partially overlaps the breastplate at its lower edge, consisting of a horizontal row of vertically placed plates of the second type. They are fastened with straps and are bordered with leather piping along the bottom edge and partially along the upper edge. The shoulder protection consists of horizontal rows (six in each row) of vertically arranged "figurate" plates of the first type placed with their rounded "ridge" up. They are interconnected with straps and are bordered with leather piping on the bottom and on the sides. Each row except the uppermost partially overlaps the rows located above with the "ridges" of the plates. The lower edge of the shoulder protection is decorated by silk fringe with ornamental décor. Both shoulder protection pieces are connected to each other with leather straps. The leg coverings consist of the same horizontal rows (nine on each side) of "figurate" plates. The lower edge is also bordered by decorated silk fringe. The armor was additionally tightened by a military belt with metal buckle, onlays, and plaques.

Conclusions

Items of weaponry, military equipment, and horse harness found in the village of Filimonovo indicate that at the turn of the Metal Age and the Middle Ages, the valley of the river Kan was involved in the events associated with the expansionist policy of the Old Turks during the First Turkic Khaganate. According to Chinese sources, in 554–555, the Turkic Muqan Qaghan "conquered Tsigu in the north and put fear in all the lands lying beyond the border" (Bichurin, 1998: 233). The Yenisei Kyrgyz fell into vassalage to the Turks. The Minusinsk Depression became the base for manufacturing weaponry for the Turkic qaghans. The "extremely sharp weapons", produced by the Kyrgyz, "were constantly exported to the Tūjué" (Ibid.: 360). However, already in 581, the Yenisei Kyrgyz freed themselves from the vassalage as a result of internal strife and weakening of the Khaganate. Subsequently, the Old Turks conquered them again in the early 8th century. Most likely, the Old Turkic lamellar armor and horse harness with early stirrups could have reached the valley of the river Kan in the period when the Yenisei Kyrgyz were the vassals of the rulers of the First Turkic Khaganate from 555 to 581 AD. After the Khaganate lost its military superiority over the Central Asian nomads and disintegrated, it became less likely that such objects could have reached the eastern outskirts of the Yenisei Kyrgyz State.

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