

# Saimaluu Tash and Zhaltyrak Tash

## An introduction to high-altitude petroglyphs in Kyrgyzstan

### Abstract

Like neighbouring southern Kazakhstan, mountainous Kyrgyzstan is rich in petroglyph sites from the Bronze Age to the Turkic Age. The largest and most important site is Saimaluu Tash, a remote place in the eastern Fergana Mountain Range where the petroglyphs are exceptionally well preserved. Most striking are the images of ploughs and light chariots, since the activities associated with such tools and vehicles cannot take place at such high altitudes, but only in valleys and plains. The meaning of such images may be found in ancient mythology.

### Introduction

Kyrgyzstan is fully landlocked and its landscape is more than 80 per cent mountainous; it is dominated by the Tian Shan and Pamir-Alay mountain ranges which account for two-thirds of Kyrgyzstan's territory. Due to its numerous high mountains which act as moisture catchers, Kyrgyzstan is relatively well watered. Kyrgyzstan is rich in petroglyph sites which mainly date from the Bronze and Iron Ages.<sup>1</sup> Some of the most important ones in terms of the number of petroglyphs or variety of motifs are in a chronological order:

- **Ak-Chunkur** is a cave located in the Tian Shan Mountains at an altitude of 3,151 metres asl in north-eastern Kyrgyzstan. The red paintings, made with ochre, date from the later Neolithic, sixth to fifth millennium BCE; they represent humans, ibexes and geometric symbols.<sup>2</sup> Unfortunately, they are covered by soot from torches lit by tourists and from fires made by local shepherds.
- **Saimaluu Tash** is a high-altitude site situated above 3,000 metres asl and is one of the richest and largest petroglyph sites of Central Asia. The petro-

glyphs date mainly from the Bronze Age and early Iron Age.

- **Zhaltyrak Tash** is another alpine site located 180 kilometres north-west of Saimaluu Tash and 50 kilometres south of Talas in north-western Kyrgyzstan. It is famous for its petroglyphs from the later Bronze Age and especially for its early Iron Age Saka images made in the typical Saka Animal Style.
- **Agynay Tor** is about three kilometres north of Zhaltyrak Tash; this small site has petroglyphs from the later Bronze Age and the Iron Age.
- **Tuyuk Tor** lies on the right bank of the small Karakol River in the Talas Oblast, north-western Kyrgyzstan; its petroglyphs date from the later Bronze Age and the Iron Age.
- **Sulaiman-Too**, 'Solomon's throne', is a mountain in the city of Osh, south-western Kyrgyzstan. Its petroglyphs date from the later Bronze Age to the Turkic period. Although a UNESCO World Heritage site, numerous petroglyphs have been vandalized by spray paint.



Fig. 1. Map of Kyrgyzstan with main petroglyph sites.

- **Cholpon-Ata, Ornok, Kara-Oy and Baetovo** are four connected sites at the northern shore of Lake Issyk-Kul. They are especially rich in petroglyphs from the Saka and Wusun<sup>3</sup> Iron Age periods.
- **ChiyimTash** is situated 24 kilometres north-west of Zhaltyrak Tash at an altitude of ca. 2,900 metres asl.; a second site is 200 m higher. Besides Bronze Age petroglyphs of animals, humans and vehicles, its interest lies in its various Turkic *tamgas*, that is tribal marks.

### Saimaluu Tash

The large site of Saimaluu Tash is located in the eastern Fergana Range which is part of the Tian Shan, about 115 kilometres north-east of the city of Osh (fig. 1). Due to its altitude – which ranges from 2,860 to 3,350 metres asl – the site is covered by snow for about ten months of the year and is only accessible in peak summer.

Since the snow protects the stones from rapid temperature fluctuations, they are exceptionally well preserved. The difficult access, involving a strenuous ascent and crossing a small glacier, further protects the petroglyphs from vandalism. The name of the site provides a strong clue about its nature, as ‘Saimaluu Tash’ means ‘stones with drawings’ in Kyrgyz. It was officially rediscovered by the military topographer Nikolai G. Khludov in 1902 while surveying the track of a road from Andijan to Naryn. In fact, Khludov got intrigued by the name of a pass and its approach called ‘Saimaluu Tash’, and by local information that rocks there were decorated with images.<sup>4</sup> He visited the site and drew the attention to it in a report addressed to the Turkestan Circle of Archaeology Amateurs (CAAT). The Circle then asked General I.T. Poslavsky, one of its members who was in charge of road construction, to conduct a proper survey. He visited the site only briefly yet confirmed its importance. Nevertheless, it was more

than forty years before B.M. Zima resumed research in 1946. One of the reasons for this neglect was the fact that in the earlier 1920s the Fergana Mountain Range, and hence also Saimaluu Tash, was a refuge for the anti-Soviet Muslim Basmachi fighters. In the following decades the Stalinist Red Terror and World War II paralyzed most archaeological work.

After Zima, A.N. Bernshtam conducted major research in 1950 and proposed a timeline classification in four periods which gave the basis for today’s classification into the Pre-Saka, Saka, Hunnish and Hunno-Turkic periods. He also erroneously assumed that the petroglyphs in the moraine of Saimaluu I had originally been pecked into cliff faces which were later destroyed by a huge earthquake.<sup>5</sup> After Bernshtam there followed the mathematician N.I. Podolsky in 1963, in 1966–8 the historian J.N. Gaulendukhin, in 1968–73 G.A. Pomaskina and in 1977–8 again Gaulendukhin and Y.A. Sher. Following them were E. A. Novgorodva in 1984, A.N. Maryashev and A.J. Martynov in the

1980s,<sup>6</sup> K. Tashbayeva (and H.-P. Francfort in the final stage) from 1991 until 2000, A.E. Rogozhinsky since the 1980s, and L. Hermann from 2012 to 2017.<sup>7</sup> During the investigations in the 1990s, a couple of Iron Age kurgans were identified and investigated, but no traces of more ancient settlements were identified.<sup>8</sup> The site is included on UNESCO’s Tentative List of cultural monuments.

The present author led an expedition to Saimaluu Tash in summer 2017, consisting of three petroglyph experts and two GIS specialists from Switzerland and Belgium, a Kyrgyz archaeologist and a local support team. The objective of the expedition was to survey, photograph and map the site with a view to producing interactive maps. Since the team stayed for a week on site, all equipment including tents and food had to be brought along. Accordingly, a powerful Russian Mi-8 helicopter equipped with two turbines was hired from the army which dropped the team at an altitude of 3245 metres asl. (fig. 2).

Fig. 2. Approaching the Fergana Mountain range by helicopter towards Saimaluu Tash, Kyrgyzstan.





Fig. 3. The main moraine at Saimaluu Tash I looking north. A mountain path is engraved in the rock at the right. Photograph taken at 3,140 metres asl.

The site of Saimaluu Tash extends over two high-altitude valleys which are separated by a steep ridge. Site I is the more important, and lies in the western valley, while the smaller and slightly less ancient Saimaluu Tash II is located along the upper edges of the neighbouring eastern valley. The larger site is located in a glacial corrie containing several moraine deposits; it stretches over a length of 1,800 metres; its maximum width is just over 1 kilometre, resulting in a total area of about 1.9 square kilometres. The majority of petroglyphs are to be found along a stretch of moraine 496 metres long. The second, smaller site Saimaluu Tash II measures a little under 1 square kilometre (figs 3,4).<sup>9</sup>

The mapping started in the western valley in the main, 496-metre-long moraine which is oriented in a north-south direction and rises from 3,055 m to 3,228 metres asl. (fig.

5). The location of the petroglyphs was surveyed using GNSS receivers with decimetre accuracy in combination with the Collector for ArcGIS application on mobile devices. The application was configured to allow of-line data collection on the basis of a high-resolution satellite image of the area. The orientation (azimuth) was recorded for each petroglyph, together with a photograph and description of the object. A digital elevation model (DEM) and orthorectified imagery of the study area were created from aerial photographs. The Leica GG04 GNSS receiver was also used to survey ground control points (GCPs) to improve the horizontal and vertical location accuracy of the DEM and orthophoto. The data were then categorized and stored in a geodatabase which allows for analyses of the spatial distribution of the petroglyphs within the site as a whole, as well as of individual classes of petroglyphs. From this dataset, various in-



Fig. 4. On the boulder in the foreground are the petroglyphs of two ibexes with extremely long horns, behind two wavy lines which represent either mountain paths or rivers. Saimaluu Tash II.

teractive 2D and 3D web applications were produced, as well as traditional paper maps showing the location and categorization of the petroglyphs.

Most of the petroglyphs at Saimaluu Tash are relatively small, but they were deeply pecked and great attention was given to details. Pecking began at Saimaluu Tash in the earlier Bronze Age (2200–900 BCE), around 2000 BCE, and continued during the Iron Age (900 BCE–CE 450); a few belong to the Turkic period (450–900 CE). In total, there are about 5,000 to 6,000 basaltic rocks or rock fragments, covered with a relatively thick crust of shiny dark grey varnish, which are adorned with petroglyphs, amounting to between 30,000 and 35,000 individual images.<sup>10</sup> The start of petroglyph engraving occurred in the period when the climate in the alpine regions of the Kyrgyz Tian Shan was still relatively warm and

moist.<sup>11</sup> Alpine glaciers had retreated and the tree line had advanced upwards, creating favourable conditions for an expansion of agriculture into the foothills. While crop cultivation flourished in the lower valleys, a semi-mobile pastoral economy thrived in the uplands. These pastoralists practised seasonal vertical migration that led them all the way to the steep grass slopes of Saimaluu Tash, which in those days were free of snow for several months. Images from this period include both arable and pastoral scenes, such as ploughing and simple carts being pulled by oxen. Erotic representations and sun symbols also occur; an analysis of their distribution with the help of the interactive map revealed that they occasionally appear in the vicinity of ploughing and, less frequently, of chariot-driving scenes. In one scene, eighteen humans are copulating in groups of two and three, with a snake in the centre of the scene (fig. 6).

Main part of the petroglyph site Saimaluu Tash I, Kyrgyzstan

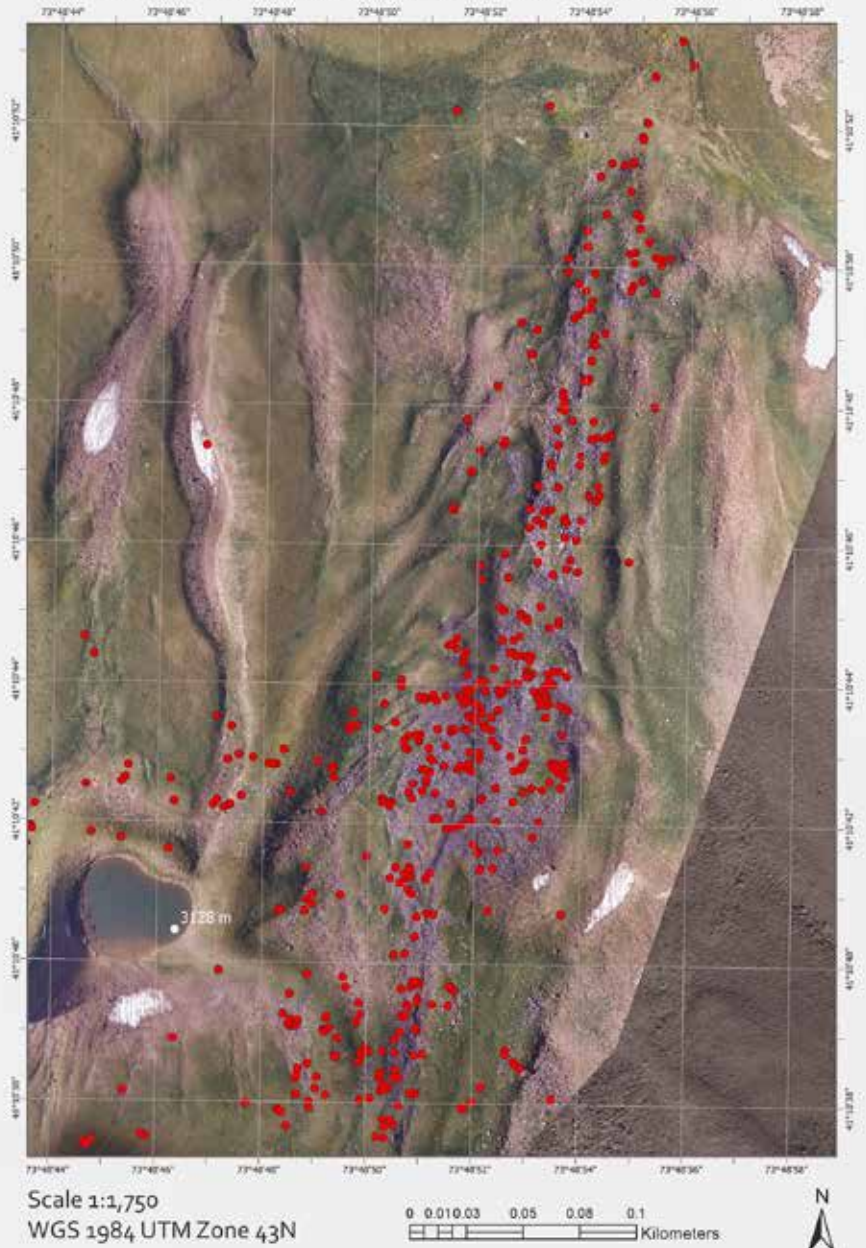


Fig. 5. Aerial map showing the distribution of petroglyph sites in the main moraine of Saimaluu Tash I. Lateral moraines have additional petroglyphs which are not featured in this preliminary map. The location of the petroglyphs was surveyed using Global Navigation Satellite System (GNSS) receivers with decimetre accuracy. Made by Matthias Schenker and Thomas Koblet. © Christoph Baumer and ESRI, Zurich.



Fig. 6. Erotic scene with 18 copulating humans and a snake. Bronze Age, Saimaluu Tash I.

The clustering of these symbols would fit with the presence of a fertility cult; zoo-philic illustrations showing sex between a man and a goat or a foal, or the copulation of a horse (or dog) with an ibex further suggest a fertility cult. By the middle to later Bronze Age, the climate became more arid, bringing a reduction in crop growing in favour of cattle breeding. This trend to

increased cattle breeding was accelerated by the arrival of pastoralists from the north belonging to the Andronovo Cultural Complex, who had left their homelands on both sides of the Urals when the productivity of their pastures decreased.<sup>12</sup>

By the advent of the Iron Age (ca. 900 BCE), semi-mobile pastoralism was the dominant

Fig. 7. Solar figures and a deer with huge antlers. Bronze Age, Saimaluu Tash I.



Fig. 8. On top a human holds a solar disc, below orants lift their arms towards the sun. Bronze Age, Saimaluu Tash I.



way of life in Fergana. This coincided with the disappearance of ploughing scenes, solar symbols and figures with arms raised (presumably in devotion, dancing or fighting) from the petroglyph repertoire (fig. 8).<sup>13</sup> Instead, the dominant motifs were now stylized archers, deer and ibexes shown in an expressive manner, as well as horses, wolves, and snow leopards attacking herbivores. Ithyphallic figures also vanished, with virility now expressed by the bearing of weapons. Finally, earlier representations of carts with plain wheels drawn by oxen were replaced by light chariots with spoked wheels pulled by horses. As in north-west-

ern Mongolia and Kazakhstan, the mastering of horse riding and the introduction of iron led to the emergence of a martial culture. This new worldview is reflected in increasing numbers of petroglyphs featuring horsemen and duels between mounted archers as well as archers fighting on foot. In one scene at Saimaluu Tash II, two archers shoot arrows at another archer who returns fire; the adversaries are separated by two zig-zag lines indicating mountain rivers or paths (fig. 8a). By around 2,000 years ago, the glaciers were advancing once more in the alpine regions. Very cold and dry winters alongside cold summers led to



Fig 8a. Archers shooting at each other who are separated by two zig-zag lines suggesting mountain rivers or paths. Saimaluu Tash II.

Fig. 9. Three complete and one fragmentary ploughing scenes with mixed draught animals. Bronze Age, Saimaluu Tash I.



a regression of grass meadows and a drop in the tree line, which today lies around 2,300 to 2,400 metres above sea level. Only very few petroglyphs belong to this period. Finally, from around 500 CE, the climate warmed once again. In the valleys, crop cultivation regained its importance. Alpine pastures, though, were still used during the summer months, as witnessed by petroglyphs dating to the Turkic period, including a few tamgas. While petroglyphs of tamgas are usually found at lower altitudes, they occasionally also occur in alpine regions, for example at the above named Chiyim Tash or in the Karakol Region south of Bishkek.<sup>14</sup> In the lowlands, pastures and water points were often marked by tamgas as the property of individual families or clans, whereas in the high mountains there were most probably collective rights of use in existence.<sup>15</sup>

It is a characteristic of the Saimaluu Tash petroglyphs that they often stand in relation to each other and depict scenes involving hunting, ploughing, carnivores chasing herbivores, duelling archers and mountain landscapes intersected by paths or rivers and dotted with animals, humans and solar figures. Sometimes scenes extend over several boulders. For example, in the main moraine a hunter with a drawn bow is depicted on a boulder, while two metres further on in the direction in which the arrow is pointing is the prey, an ibex, which is prevented from fleeing by a dog.

A few motifs at Saimaluu Tash deserve special attention. In particular, there is a unique collection of roughly 50 renderings of wheeled vehicles and tools (figs 9, 12, 14). These range from early two-wheeled frame ploughs with tiny (or even no) wheels, to double-axle wagons and, finally, more than two dozen light chariots. As Bernshtam and Kuzmina hypothesized,<sup>16</sup> the Bronze Age petroglyphs of a (sometimes ithyphallic) man with braided hair walking behind a harnessed pair of animals probably represent ploughing scenes involving a frame plough with miniature wheels – although the possibility that they depict a driver following

his cart on foot, as postulated by Yakov Sher, cannot be excluded.<sup>17</sup> In those scenes where the tiny wheels are missing, the interpretation of the scene as one of ploughing seems evident. It is striking that the braided hair of the plough drivers is shown stretched out straight as if it were part of a solar wreath. A solar reference is all the more likely as figures on stones neighbouring the main concentration of ploughing scenes can be seen either lifting sun discs above their heads or representing some kind of sun-headed anthropomorphs (figs 7, 10). Conceptually similar sun-headed figures from the same period are found in Kazakhstan, especially at Tamgaly, in Khakassia and on older stone steles of the Okunev culture (2,400–1,750 BCE).<sup>18</sup> The tails visible on some figures evoke either the fur jackets worn at that time, or maces or ball-flails.<sup>19</sup> That ball-flails were part of Bronze Age weaponry is shown in another scene where at least twelve men are fighting, or

Fig. 10. A sun-headed anthropomorph with smiling face. Bronze Age, Saimaluu Tash I.



performing a mock fight, with ball-flails and bow and arrows.

Ploughing images are unusual within the wider corpus of Central Asian petroglyphs, and so too is the pairing of different harnessed draft animals, such as a bull and a horse, a bull and a donkey, or a bull and a goat. Given that combining different animals in a single harness is possible but not really practical, these petroglyphs probably had a mythological significance.<sup>20</sup> At Saimaluu Tash, as is the case at many other rock art sites, the animals depicted do not necessarily constitute a proportional representation of the fauna existing at the time: in rock art those animals predominate whose characteristics were either admired or feared, or which carried a mythological connotation. For example, sheep, domestic pigs, poultry, birds and insects are virtually excluded from Central Asian petroglyphs. Petroglyphs not only reflect the environment, they also express beliefs and visualize rituals. This interpretation fits with some 'bulls', identified by their long horns, that have the body of a horse, like at Tamgaly, Kazakhstan.<sup>21</sup> A pairing of different draft animals appears in the mythologies of at least three cultures speaking Indo-European languages.<sup>22</sup> First, a text from Hattusa, once the capital of the Hittite Empire, describes the ritual harnessing of a horse and a mule to a chariot. Then, in Greek mythology, Apollo pairs two lions with two boars to the chariot of Admetus who had to drive it to King Pelias, while Dionysus is represented driving a chariot pulled by a team of various beasts, such as a bull, a griffin and a lion.<sup>23</sup> Finally, in the hymns of the Indian *Rig Veda*,<sup>24</sup> the youthful twin divine horsemen known as the Ashvins harness not only winged horses to their chariot, but also a bull and a porpoise.<sup>25</sup> Indeed, a scene featuring a chariot team consisting of two horses and a bull is also found on an Indian bronze libation cup from the Maurya Period, dating to 235–185 BCE and now in the Cleveland Museum of Art.<sup>26</sup>

Probably, the Andronovian Indo-European immigrants shared their mythological world-

view with the inhabitants of the Fergana region, from which a combined agrarian fertility and solar cult arose. The ploughing scenes at Saimaluu Tash may, then, be interpreted as the visualization of a cultic enactment of a ritual believed to ensure fertility. Yet the pairing of different animals can also be viewed as a magical attempt to combine the venerated attributes of different animals into a single team under human control. By harnessing two different animals on the same yoke, the commanding figure symbolically magnifies the power at his disposal. A similar mythological mechanism can be observed in the petroglyphs of Tamgaly mentioned above, showing horses with bulls' horns, and the later, Iron Age burial custom found in the Russian Altai at Pazyryk, Tuekta and Ak-Alacha, in the Mongol Altai at Olon-Kurin Gol and in northern Kazakhstan at Berel, where sacrificed horses were adorned with representations of bovines' and caprines' horns made from leather.<sup>27</sup> The juxtaposition of ploughs and chariots in a confined space indicates that the Saimaluu Tash petroglyphs were inspired by an agrarian as well as a nomadic worldview.

The following types of wheeled vehicles and ploughs are rendered in petroglyphs:

- Ploughing scenes in which a ploughman holds the reins and, sometimes, a stick, with two pulling animals; no wheels are visible. The ploughman walks behind the plough and animals.
- Ploughing scenes where a ploughman holds the reins and, sometimes, a stick. Two very small, plain wheels are attached to the frame of the plough which is pulled by two draft animals. The ploughman walks behind the plough and animals. Another, less likely, interpretation is that these petroglyphs may depict a cart.

Following spread:

Fig. 11. At the left an engraved mountain landscape with two rivers and ibexes, at the right three complete and one fragmentary ploughing scenes. Bronze Age, Saimaluu Tash I. Photo taken at night.





Fig. 12. A charioteer standing on the floor of a light chariot. The front horse wears a pair of horns. Bronze Age, Saimaluu Tash I.



Fig. 13. A pair of footprints and two wavy lines. Bronze Age, Saimaluu Tash I.

Fig. 14. An ithyphallic man walking behind a light chariot with spoked wheels. Bronze Age, Saimaluu Tash I.



- A two-wheeled cart or chariot with large plain wheels and with the charioteer standing on the vehicle and directing the two animals with narrow reins, seen from the side in profile.
- A two-wheeled chariot with large, spoked wheels and with the charioteer standing on the chariot directing the two harnessed horses with reins, seen from above.
- A two-wheeled chariot with large, spoked wheels and harnessed horses, but with the ithyphallic driver walking behind the vehicle, and seen from the side.
- A harnessed four-wheeled wagon with the driver standing on its floor, seen from above.
- A harnessed four-wheeled wagon without driver, seen from above.
- An isolated cart, chariot or wagon without draft animals or driver.

It is possible that the petroglyphs of a pair of footprints, ca. forty centimetres long and oriented in a north-south direction, could also be associated to Andronovian mythology inasmuch as they may mark the presence of a venerated person or deity (fig. 13). The *Rig Veda* and *Avesta* describe solar deities leaving their footprints in the sky as symbol of their presence.<sup>28</sup> Compared to the multitude of petroglyphs of footprints found in Scandinavia, Africa or North America, as well as the countless stone engravings of footprints on the floors of Hindu, Jain and Buddhist temples, such images seem to

be, based on the author's perennial research in Central Asia, rather rare in Central Asia.

It is striking that petroglyphs featuring single-axle battle chariots are also present within this mountainous landscape. These chariots are clearly distinguished from the two-wheel frame ploughs by the light, eight-spoke wheels and the platform on which the charioteer stands. Such a prominent presence at Saimaluu Tash within the rugged Fergana Range – where chariots obviously had no practical use – is best understood within a mythological framework. Its source can again be traced to the early Andronovians, who came from the cultural realm of Sintashta, in the eastern Ural region, where the origins of the light battle chariot can be found around 2000 BCE. Chariots are often mentioned in the *Rig Veda* and in the Iranian *Avesta* as the vehicles of gods, mainly deities associated with the sun, such as *Surya*, *Agni*, *Indra* or *Mithra*. Intriguingly, in some scenes at Saimaluu Tash the charioteer does not stand in the chariot, but walks behind it while holding the reins, or even pushes the chariot harnessed to horses, which might also serve to emphasize the sacred character of a divine chariot (fig. 14). In the *Histories*, Herodotus narrates an army review by the Iranian King of Kings Xerxes. There, the sacred horses 'were followed by the holy chariot of Zeus [that is Ahura Mazda] drawn by eight white horses, with a charioteer on foot behind them holding the reins – for no mortal man may mount into the chariot's seat'.<sup>29</sup> Given that the ancient Iranians drew on the same mythological heritage as the Andronovians, one might suspect that this concept is reflected in the rock art scenes. Possibly they visualize ritual chariot drives. Since the chariot petroglyphs at Saimaluu Tash were made in an area without prehistoric burials, the present author interprets them as the vehicles of Indo-Iranian divinities or as solar symbols rather than an al-



Fig. 15. Two horses pull a solar disc behind them. Bronze Age, Saimaluu Tash II.

legory of a dead person's journey to the netherworld.

An intriguing variant on the chariot motif can be found at Saimaluu Tash II, where two horses are pictured pulling a large disc or sphere, which is attached to the vehicle's drawbar (fig. 15). This image might allude to the myth of one or two divine horses drawing the sun across the sky during daytime. The mythological concept of solar horses pulling the sun is found not only in the Indian *Rig Veda*,<sup>30</sup> but also in Nordic mythology and rock art, for example at Balken, in Bohuslän in southern Sweden. Another intriguing notion related to solar mythology is an attack on the sun disc or on a star by a monster or a wild bull (fig. 16). This petroglyph possibly relates to the ancient myth of the cosmic pursuit of the sun which was widespread in Siberia. This myth concerns the eternal disappearance and rebirth of the sun, the fight between light and darkness. It tells of a ferocious monster, symbolizing the forces of death and everlasting darkness, chasing the sun, symbol of life and abundance, in order to devour it.<sup>31</sup> When the sun escapes into the west, transforming itself into the underground and nocturnal sun, darkness covers the earth. But when the sun has completed its nocturnal journey through the underworld, it reappears in the east, bringing light again.<sup>32</sup>



Fig. 16. A bull charges a solar disc. Bronze Age, Saimaluu Tash I. Bronze Age, Saimaluu Tash I.

Fig. 17. A male and a female predator, probably wolves, attack a hybrid animal with the body of a horse and disproportionately long bull's horns. Bronze Age, Saimaluu Tash I.



In later versions of this ancient myth, the sun is attacked and abducted by a giant elk.<sup>33</sup> These myths reflected the frightening fact that in northern climates the sun disappears from the sky in winter for weeks or even months at a time. With that in mind, the chase of a mythical hybrid animal in the shape of a horse (or bull) with disproportionately long horns by predators such as wolves may be understood not only as an allegory of life being dogged by inescapable death, but also of animals associated with the sun being pursued by primeval predators (fig. 17). In another scene, an archer with three rays protruding from his head prepares to shoot at a large sun disc that stands on two tiny feet (fig. 18). This image could possibly suggest a content similar to a myth of the northern Siberian Nenets which explained the origin of petroglyphs in a particular way: in a distant past there were three suns in the sky. It was so hot on earth that rocks melted like wax, and the demi-gods drew petroglyphs into the molten stones with their fingers. Two of the three suns had to be shot down with arrows.<sup>34</sup>

Two other motifs may also be understood in the context of astral bodies. The first resembles a kind of dumbbell, which consists of a straight rod between 15 and 90 centimetres in length, with a disc or ring fixed at each end. In some instances, one of the two discs is shaped like a sun, which suggests an interpretation of these 'dumbbell' objects as either the sun and moon, or, perhaps, the sun during the day and at night (fig. 19). In other instances, such petroglyphs may not have a solar significance



Fig. 18. An archer stands in front of a solar disc with tiny legs. Bronze Age, Saimaluu Tash I.

but simply illustrate a straight bar snaffle which was rather uncomfortable for the horse and only used on draft horses.<sup>35</sup> The second motif with a possible astral connection features a small human who seems to wear a giant headdress in the shape of a mushroom (fig. 20). Some authors have interpreted such widespread images as a shaman and the fly agaric mushroom (*Amanita muscaria*) that produces trances and hallucinations when consumed.<sup>36</sup> However, it remains unknown whether such shamanism existed in Central Asia during the Bronze Age.<sup>37</sup> The present author, following Martynov et al.,<sup>38</sup> understands these petroglyphs instead as a human standing under the infinite vault of the sky; however, in a single petroglyph at Saimaluu Tash, the figure seems to hold a flat drum. Another unusual image is the petroglyph of a tree that with its almost circular shape and a lower,

straight extension looks like a mirror with a handle. However, this petroglyph doesn't show a mirror, for this is a typical way to render trees in the Bronze Age, in which the branches surround the trunk, forming a circular shape.

To conclude the interpretation of Saimaluu Tash's petroglyphs with the help of mythology, it seems apparent that they reflect a mixture of non-Indo-European and Indo-Iranian cultural heritage. Saimaluu Tash retained its status as a special place where rituals were performed into the twentieth century, since local hunters informed the author that a few decades ago people still used to climb to the site in August bringing lambs, which they would ritually slaughter next to the tiny lake near the main moraine.<sup>39</sup>

Another characteristic of the Saimaluu Tash petroglyphs are various animals such as horses, goats, wolves and snow leopards with bodies that consist of two triangles connected at the top (fig. 21). A similar bi-triangular style of body has recently been found on a petroglyph of the same age at Kayrit Oasis and on a painted pottery sherd from Dzarkutan, both sites located in south-eastern Uzbekistan, 650 kilometres south-west of Saimaluu Tash. These finds confirm, *contra* Martynov et al.,<sup>40</sup> Bernshtam's opinion that there existed a cultural connection between the Chust culture and the Saimaluu Tash petroglyphs,

Fig. 19. A so-called dumbbell probably featuring sun and moon or the sun by day and night. Bronze Age, Saimaluu Tash I.





Fig. 20. A tiny human stands under the vault of the sky. The object he holds in his right hand might be a flat drum or a bow. The steep slope in the background leads to Saimaluu Tash II. Bronze Age, Saimaluu Tash I.

Fig. 21. An ibex with body in bi-triangular style. The archer shooting at the ibex's neck was possibly added later. Late Bronze Age, Saimaluu Tash I.



for two painted potsherds found in Osh which belonged to the Chust cultural realm display obvious similarities with petroglyphs at Saimaluu Tash. One decoration shows a bull with bi-triangular body and extremely long horns, the other the bi-triangular body of an unidentified animal.<sup>41</sup> On the other hand, the hypothesis formulated by Bernshtam, Masson and Ploskhikh, as well as Sher, whereby there existed a connection between the bi-triangular figures at Saimaluu Tash and similar renderings of ibexes on painted ceramics from Susa I, Tepe Sialk, and Namazga III, all dating from the fourth millennium BCE,<sup>42</sup> is highly unlikely due to a time gap of more than a millennium and the huge geographical distances. To date the Saimaluu petroglyphs to 4000–3000 BCE is also impossible.

Contrary to Tashbayeva who claimed that palimpsests were absent at Saimaluu Tash,<sup>43</sup> there are in fact quite a few superimpositions, among others the image of a hybrid human–ibex, in which a standing human was transformed into the front legs of a stylized ibex. In several other cases, petroglyphs from the Iron Age were superimposed onto images from the Bronze Age. Finally, the rock art of Saimaluu Tash does not include indoor domestic activities, with the exception of enclosures or compartmented dwellings seen from above. Children and humans clearly portrayed as women are also absent, with the exception of erotic images and some birthing scenes.<sup>44</sup> On the other hand, certain predators are clearly identified as female by their teats (fig. 17). No traces of prehistoric settlements – in terms either of buildings or of deposits of ancient sherds – or burials were found, besides the Iron Age kurgans that were already known. However, since the expedition's survey did not extend below 2,800 metres a.s.l., the future discovery of traces of permanent settlements and of further burials at a lower level cannot be ruled out.

### Zhaltyrak Tash

The alpine site of Zhaltyrak Tash can only be reached on foot by following the Tabyl-

gaty and Kaman-Suu rivers or by crossing the 3,004-metre-high Agynay Tor Pass, at the top of which are ca. one hundred rocks bearing petroglyphs dating from the Bronze and Iron Age. The name Zhaltyrak Tash means 'shining stone', as the dark brown varnish of the basaltic rocks shines in the sun. The site was allegedly rediscovered in 1956 by the local explorer G.M. Gaponenko who at first called it Ur-Maral.<sup>45</sup> It is situated on situated at the confluence of the Kandybay and Agynay rivers which merge to form the Kaman-Suu in the Talas Alatau mountain range, north-western Kyrgyzstan (fig. 22). Later, in 1985–6, the site was investigated by Y.A. Sher who named it Zhaltyrak Tash in order to differentiate it from the several other petroglyph sites within the Ur-Maral valley system. Finally, in 2003 Zhaltyrak Tash was researched by H.-P. Francfort and K.I. Tashbayeva.<sup>46</sup> The petroglyphs are concentrated on two surfaces of a huge cliff 180 metres long at the bottom and 140 metres at the top; the height varies from around eight to thirteen metres. The petroglyphs are engraved in the upper horizontal surface, where they are quite weathered and in parts covered by lichen, and on the slanted eastern side; they date from the Bronze Age to the medieval Turkic period. At Zhaltyrak Tash the petroglyphs were created by deeply stamping points close to each other, following the contour lines; occasionally, on parts of larger images such as the legs of bears or bulls, the varnish was removed across the entire surface inside the contour. Later, in the Turkic period, a different method was applied and the petroglyphs were thinly carved.

Besides several Bronze Age images of single-axle chariots and single wheels, Zhaltyrak Tash has one of the richest collection of petroglyphs from the Saka Iron Age. There is a bear more than one metre long, a group of three hybrid animals consisting of heads and bodies of bears and long tails curved at their tips like those of predators (fig. 23), and in another group a small bear is facing a larger one, while to their left stands a fantastic winged animal with a strongly toothed muzzle, with two



Fig. 22. The site of Zhaltyrak Tash is situated at the confluence of the Kandybay river (at the left) and the Agynay river (not visible) which form the Kaman-Suu river in the Talas Alatau mountain range, north-western Kyrgyzstan.

Fig. 23. Petroglyphs of three hybrid animals with the heads and bodies of bears and curved tails like a panther. Saka Iron Age, Zhaltyrak Tash, north-western Kyrgyzstan.



Fig. 24. Petroglyphs in the Saka Iron Age style: at the top a bull and a hunting scene; at the bottom a fantastic winged animal with bared teeth, two bears and two mountain goats. Zhaltyrak Tash, north-western Kyrgyzstan.



Fig. 25. Petroglyph showing a kind of snow leopard or horse. Saka Iron Age, Zhaltyrak Tash, north-western Kyrgyzstan.

gazelles to their right and a bull above (fig. 24). The images of this fantastic animal and of the bears resemble some petroglyphs at Sauiskandyk (Kazakhstan), at Chuy-Oozy in the Russian Altai, and on the stele of Arzhan 1 (Mongolia) more than 2,000 kilometres away as the crow flies.<sup>47</sup> This similarity shows that it is correct to refer to a specific Saka style of petroglyphs. Then there are several deer and stags standing on tiptoe with their antlers stretching straight upwards, and two small reclining caprines chiselled inside the body of a larger deer. From the same period date the petroglyphs of a

wolf, another predator attacking a man and his cow, and a large camel.

Zhaltyrak Tash has in addition some interesting petroglyphs from the Hunnic and Turkic periods. Very unusual are the heavily weathered images of a centaur shooting an arrow and of dragons or winged dogs.<sup>48</sup> There are also engravings, again heavily weathered, of Hunnic warriors fighting on foot with lances, which look very similar to the warriors engraved in the famous bone plate of Orlat found north of Samarkand in Uzbekistan more than 500 kilometres to the north-west.<sup>49</sup> Then, on an isolated small



Fig. 26. A standing archer carrying a recurved bow in his gorytos. Possibly reworked petroglyph from the Turkic period. Zhaltyrak Tash, north-western Kyrgyzstan.

boulder, features the (probably reworked) petroglyph of a standing archer carrying a recurved bow in his gorytos (fig. 25). Close to the petroglyphs there are also a couple of kurgans from the Saka period which have been looted as indicated by the depressions in their middles. These burial tumuli suggest the hypothesis that this place, located at the confluence of two rivers flowing from two glaciers, was formerly perceived as a sacred site. As in the case of Saimaluu Tash, the pastoralists leading their sheep and goats to the meadows located near Zhaltyrak Tash still use this place for high-altitude summer pasturage.

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and the author. I thank Andrzej Rozwadowski (Poland), who shared valuable information on the petroglyphs of Saimaluu Tash, prior to the departure of the expedition. I also thank the peer reviewer for valuable comments and questions.

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## Notes

<sup>1</sup> For an overview of Kyrgyz rock art sites: Amanbaeva, Bakyt et al., 'Rock Art in Kyrgyzstan', in: Clottes, Jean (ed.), *Rock Art in Central Asia* (Paris: ICOMOS, 2011), pp. 43–72. Tashbayeva, K., 'Petroglyphs of Kyrgyzstan', in: K. Tashbayeva et al. (eds.), *Petroglyphs of Central Asia* (Bishkek: International Institute for Central Asian Studies, 2001), pp. 9–79.

<sup>2</sup> Abdykanova, A.K., 'New data on the Mesolithic and Neolithic Kyrgyzstan: A brief review', in: *Bulletin of IICAS*, vol. 20 (Samarkand: International Institute for Central Asian Studies, 2014), pp. 5–7. Мосолова Л. М. К вопросу о датировке пещеры Ак-Чункур. Культура и искусство Киргизии = To the question about the dating of the Ak-Chunkur cave. Culture and Art of Kirghizia. Proceedings of the All-Union Scientific Conference. (Leningrad: 1983), pp. 27–29. Tashbayeva, K., 'Petroglyphs of Kyrgyzstan', (2001), pp. 18f.

<sup>3</sup> The Wusun (second century BCE–fifth century CE) were semi-mobile pastoralists who probably spoke an East Iranian language. They migrated from their homeland of Gansu to Semirech'e in the second century BCE.

<sup>4</sup> Martynov, A.J., Mariachev, A.N. and Abetekov, A.K., *Gravures rupestres de Saimaly-Tach*, ed. Karl Baipakov (Almaty:

Ministère de l'instruction publique, 1992), pp. 13f, 23f, 46. Tashbayeva, K., 'Petroglyphs of Kyrgyzstan', (2001), p. 11.

<sup>5</sup> Martynov et al., *Gravures rupestres de Saimaly-Tach*, (1992), pp. 13f, 23f, 46.

<sup>6</sup> Martynov et al., *Gravures rupestres* (1992), pp. 5–20.

<sup>7</sup> Hermann, Luc, 'Les cultes du soleil et du taureau dans l'art rupestre de l'âge du Bronze en Asie centrale (Kazakhstan et Kirghizstan)', in: *Praehistoria*, vol. 1-2 (11-12), (Miskolc: University of Miskolc, 2019-2020), p. 306.

<sup>8</sup> Rogozhinsky, A.M., 'Petroglyph sites of Kazakhstan and Western Central Asia as part of the archaeological landscape: New challenges', in: *Archaeology, Ethnology and Anthropology of Eurasia*, vol. 36 (Amsterdam: Elsevier, 2008), p. 86.

<sup>9</sup> For a comprehensive photographic documentation of Saimaluu Tash see: Reckel, Johannes, *Saimaluu Tash. Antike Felsbilder in den Hochgebirgen Kirgistan / Ancient Rock Art in the High Mountains of Kyrgyzstan* (Göttingen: Göttinger Verlag der Kunst, 2024).

<sup>10</sup> Based on eight field campaigns conducted between 1991 and 2000, Tashbayeva and her team estimated that about 10'000 rocks in Saimaluu Tash I and about 1'500 rocks in Saimaluu Tash II have petroglyphs. This estimate and the total number of images of 100'000 that was advanced by Bernshtam, (which was later often repeated), seem to the present author too high. The estimate of ca. 5'000 stones advanced here is rooted in an extrapolation taken from the GIS-based map made of the main moraine at Saimaluu Tash I. Hermann, for his part, mentions about 3'000 rocks. Hermann, Luc, 'La sexualité dans l'art rupestre d'Asie centrale', in: *Notae Praehistoricae* 35 (Liège: Studia praehistorica belgica, 2015), p. 59. Tashbayeva, K., 'Petroglyphs of Kyrgyzstan', (2001), pp. 16, 21, 22.

<sup>11</sup> Rogozhinsky, 'Petroglyph sites of Kazakhstan and Western Central Asia' (2008), p. 88.

<sup>12</sup> Rogozhinsky, 'Petroglyph sites of Kazakhstan and Western Central Asia' (2008), p. 88.

<sup>13</sup> It remains difficult to decide if the petroglyphs of two humans facing each other with their arms held high are dancing, fighting or in veneration.

<sup>14</sup> Hermann, Luc and DeKastle, Amadeus, 'Tamga Petroglyphs in the Rock Art of the Karakol Region (Chuy and Naryn Oblasts) in Kyrgyzstan', in: *Margulan Readings – 2022: Proceedings of the international scientific and practical conference, Almaty 2022* (Almaty: Margulan Institute of Archaeology, 2022), pp. 397–404.

<sup>15</sup> Rogozhinsky, Alexey E., 'Medieval Petroglyph Tamgas of Southern Kazakhstan and Semirechie', in: Voyakin, Dimitri A. and Iskanderova, A.D. (eds), *Tamgas of Pre-Islamic Central Asia* (Samarkand: International Institute for Central Asian Studies, 2019), p. 275.

<sup>16</sup> Bernshtam, A.N., 'Naskalnyje izobrajenije Saimaly Tash = Rock art images of Saimaluu Tash', in: *Soviet Ethnography*, no. 2 (Moscow: Publishing House of the USSR Academy of Sciences, 1952), p. 61. Kuzmina, E.E., Древнейшие скотоводы от Урала до Тянь-Шаня = *Ancient Pastoralists from the Ural to the Tian Shan* (Frunze: Izdat Ilim, 1986), p. 124.

<sup>17</sup> Sher, 'Interpretation of scenes on some petroglyphs of Saymaly Tash' (1978), in: Lukonin, V.G. (ed.), *Культура Востока: Древность и раннее средневековье = Culture of the East: Antiquity and Early Middle Ages* (Leningrad: Aurora, 1978), pp. 168–70. See also: Martynov et al., *Gravures rupestres* (1992), pp. 37f. Shvets, Irina, *Studien zur Felsbildkunst Kasachstans* (Darmstadt/Mainz: Philipp von Zabern, 2012), pp. 24, 196. Whether the two-wheeled frame plough was known in the Fergana Valley in the second millennium BCE remains unsure.

<sup>18</sup> For the topic of sun-headed figures, see, among else: Esin, Yury N. et al., 'Les peintures dans l'art pariétal de la culture Okunieiev', in: *Bulletin Musée d'Anthropologie préhistorique de Monaco*, vol. 54 (Monaco: MAP, 2014), pp. 163–183. Francfort, Henri-Paul, 'Central Asian petroglyphs: Between Indo-Iranian and shamanistic interpretations', in: Chippindale and Taçon (eds.), *The Archaeology of Rock-Art* (Art (Cambridge: Cambridge University Press, 1998), pp.

307f. Hermann, Luc, 'Rock art of Tamgaly, Kazakhstan', in: *Adoranten* (Tanumshede, Sweden: Scandinavian Society for Prehistoric Art, 2011), pp. 35-37. 'Les cultes du soleil et du taureau dans l'art rupestre', (2019-2020), pp. 303-328. Hermann, Luc and Zheleznyakov, B., 'Tamga petroglyphs from Akkainar (Almaty Region) in Kazakhstan', in: *Қазақстан археологиясы = Archaeology of Kazakhstan*, no. 22 (Almaty: Margulan Institute of Archaeology, 2023), pp. 142f. Rogozhinsky, Alexey E., *Petroglyphs within the Archaeological Landscape of Tamgaly* (Almaty: Margulan Institute of Archaeology, 2011), pp. 185-191.

<sup>19</sup> Shvets, *Studien zur Felsbildkunst Kasachstans*, (2012), p. 188. There are petroglyphs where people on foot carry either ball flails or throw stones. Jacobson-Tepfer, Esther, *Monumental Archaeology in the Mongolian Altai: Intention, Memory, Myth* (Leiden: Brill, 2023), p. 179, fig. 7.20.

<sup>20</sup> Two different animals can indeed be yoked into a single harness. Semenenko Aleksandr, бычьё-эквидные упряжки двухколёсных повозок в древности и современности = *Two-wheeled Ox-drawn Carriages in Antiquity and Modern Times* (Voronezh: 2021).

<sup>21</sup> Francfort, Henri-Paul et al., 'Les pétroglyphes de Tamgaly', in: *Bulletin of the Asia Institute*, vol. 9 (1995) (Bloomfield Hills MI: The Asia Institute, 1997), pp. 168, 185-197. Hermann, Luc, 'Les cultes du soleil et du taureau dans l'art rupestre' (2019-2020), pp. 309-315, 317-325.

<sup>22</sup> Martynov et al., *Gravures rupestres* (1992), p. 42.

<sup>23</sup> Sher, 'Interpretation of scenes on some petroglyphs of Saymaly Tash' (1978), pp. 168-170.

<sup>24</sup> *Rig Veda*, book 2, hymn 13.2.

<sup>25</sup> *Rig Veda*, book 1, hymn 116.18; book 1, hymn 34.19. Sher, 'Interpretation of scenes on some petroglyphs of Saymaly Tash' (1978), pp. 169-170.

<sup>26</sup> <https://www.clevelandart.org/art/2001.2> (accessed 17 July 2024). Semenenko, *Two-wheeled Ox-drawn Carriages* (2021).

<sup>27</sup> Baumer, Christoph, *The History of Central Asia*, vol. 1: *The Age of the Steppe*

*Warriors* (London: I.B. Tauris, 2012), pp. 99, 187f.

<sup>28</sup> Novozhenov, *Communications and the Earliest Wheeled Transport of Eurasia* (Moscow: TAUS Publishing, 2012), p. 325.

<sup>29</sup> Herodotus, *The Histories*, VII.40, trans. Aubrey de Sélincourt (London: Penguin, 2003), pp. 431f.

<sup>30</sup> See *Rig Veda*, for example 1.50.1, 1.164.2, 5.62.1, 5.63.7, 7.70.2.

<sup>31</sup> Less probably, the myth could also be connected to solar or lunar eclipses.

<sup>32</sup> Devlet, Ekaterina and Marianna, *Myths in Stone: World of Rock Art in Russia* (Moscow: Aletheia, 2005), p. 236.

<sup>33</sup> Okladnikow, Aleksej Pawlowitsch, *Der Hirsch mit dem goldenen Geweih. Vorgeschiedliche Felsbilder Sibiriens* (Wiesbaden: F.A. Brockhaus, 1972), pp. 47f.

<sup>34</sup> Okladnikow, *Der Hirsch mit dem goldenen Geweih* (1972), p. 100.

<sup>35</sup> <https://www.thespruce.com/uses-of-a-straight-bar-snaffle-1886082> (accessed 17 July 2024). The earliest safely dated snaffles date to the early Bronze Age around 2000 BCE.

<sup>36</sup> Devlet, Ekaterina and Marianna, 'Siberian shamanistic rock art', in: Andrzej Rozwadowski and Maria M. Koško, *Spirits and Stones: Shamanism and Rock Art in Central Asia and Siberia* (Poznań: Instytut Wschodni UAM, 2002), pp. 125-9. Lewis-Williams, J. David, 'Rock art and shamanism', in: Jo McDonald and Peter A. Veth, *Companion to Rock Art* (Chichester: Blackwell, 2012), pp. 17-22. Shvets, *Studien zur Felsbildkunst Kasachstans* (2012), p. 118.

<sup>37</sup> For a critical assessment of this hypothesis see: Rozwadowski, Andrzej, 'Shamanism in indigenous context: Understanding Siberian rock art', in: McDonald and Veth, *Companion to Rock Art* (2012), pp. 454-71.

<sup>38</sup> Martynov et al., *Gravures rupestres* (1992), p. 35.

<sup>39</sup> The same information is given by Davis-Kimball, J. and Martynov, A.: 'Solar rock art and cultures of central Asia', in: Madanjeet Singh (ed.) *The Sun: Symbol of Power and Life* (New York: Abrams, 1993), p. 215.

<sup>40</sup> Martynov et al., *Gravures rupestres* (1992), pp. 25f.

<sup>41</sup> Lhuillier, Johanna, 'Intercultural interactions of the Sine Sepulchro cultural community (Handmade Painted Ware cultures) of the Early Iron Age with the neighbouring cultures of Asia and the Near East', in Baumer, Christoph, Novák Mirko and Rutishauser, Susanne (eds.), *Cultures in Contact. Central Asia as Focus of Trade, Cultural Exchange and Knowledge Transmission*, (Wiesbaden: Harrassowitz, 2022), pp. 140-142.

<sup>42</sup> Masson, V.M. and Ploskikh, V.M., По следам памятников истории и культуры Киргизстана = *On the Track of Memorials to the History and Culture of Kyrgyzstan* (Frunze: Ilim, 1982), pp. 22f. Sher, Yakov, Петроглифы средней и центральной Азии = *Petroglyphs of Middle and Central Asia* (Moscow: NAUK, 1980), p. 205. Shvets, *Studien zur Felsbildkunst Kasachstans* (2012), pp. 25, 137.

<sup>43</sup> Tashbayeva, K., 'Petroglyphs of Kyrgyzstan', (2001), p. 22.

<sup>44</sup> The gender of people is often difficult to recognise in petroglyphs. Distinctive features are breasts and vulvas for women, penises for men and, in the case of children, a relatively small stature. As for the activities depicted, fighting and hunting are more likely to suggest men. It remains an open question whether figures without gender characteristics deliberately represent non-gendered persons, women or unarmed men. Concerning the interpretation of gender in rock art, see for example the three essays of Kelly Hays-Gilpin, Jo McDonald, and Joakim Goldhahn & Ingrid Fuglestvedt in: McDonald, Jo and Veth, Peter, A. (eds.), *Companion to Rock Art* (Chichester: Wiley-Blackwell, 2012), pp. 199-260.

<sup>45</sup> Gaponenko, V.M., 'Naskalnie izobrazheniya Talasskoï doliny', in: *Arkheologitscheskie pamyatniki Talasskoï doliny = 'Rock art in the Talas Valley'*, in: *Archaeological monuments of the Talas Valley*, (Frunze: 1963), pp. 101-110. As the author noticed in 2017 from dated graffiti, the site had been visited several times before the alleged rediscovery by Gaponenko in 1956, namely in 1939, 1946, 20 July 1947, 24 August 1949 and 24 August 1950.

<sup>46</sup> Tashbayeva et al., *Petroglyphs of Central Asia* (2002), pp. 53-60. Tashbayeva, K. and Francfort, H.-P. 'Studies of the Jaltyrak-Tash petroglyphs', in: *Bulletin of IICAS*, vol. 1 (Samarkand: International Institute for Central Asian Studies, 2005), pp. 14f.

<sup>47</sup> Jacobson-Tepfer and Novozhenov, *Rock Art Chronicles of Golden Steppe*, vol. 2: *From Karatau to Altai* (Almaty: UNESCO Centre for the Rapprochement of Cultures, 2020), p. 68, figs 23-4; p. 236, fig. 24. Molodin, V.I. and Cheremisin, D.V. et al., 'Chronology of Rock Art of the Russian and Mongolian Altai', in *Archaeology, Ethnology and Anthropology of Eurasia*, vol. 51, no. 4 (2023), p. 72, fig. 5.

<sup>48</sup> Tashbayeva, *Petroglyphs of Central Asia* (2002), p. 201, fig. 87.

<sup>49</sup> The plates of Orlat date from the late fourth century CE and were manufactured in a Sogdian cultural environment. Baumer, Christoph, *The History of Central Asia*, vol. 2: *The Age of the Silk Roads* (London: I.B. Tauris, 2014), p. 96, fig. 74. Tashbayeva et al., *Petroglyphs of Central Asia* (2002), pp. 199f.