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Article

“Animal-style art,” and special finds at an Iron Age settlement site in Southeastern Kazakhstan: Commodity Production, Trade, and Pathways during the Iron Age

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Abstract: Two Iron Age settlements, Tuzusai and Taldy Bulak 2 (ca. 500 BCE to 1 CE), located in Southeastern Kazakhstan on the Talgar alluvial fan north of the Tian Shan range, have yielded a small collection of bone, antler/horn, bronze, and stone artifacts with affinity to nomadic art of the first millennium BCE. Both settlements date within the period of late Saka culture. Two pieces have decorative ornamentations with zoomorphic imagery: a small carved fragment of a with carved images of a wing and an ear and a perforated bone disk with the carving of three birds' heads. The other artifacts include objects associated with Saka weaponry or nomadic economy such as the two antler/horn *psalia* (cheek pieces) and a bronze amulet. A carnelian bead will also be described as an imported object. These special finds are found on the occupation floors of mud brick houses and pit houses of settlements, not in grave or burial contexts. The objects are placed in stratigraphic sequence in the settlement sites. Then the method for placing these objects within the chronological framework of “animal-style art” is through comparisons with similar objects found throughout Eurasia—a method used in Soviet and Post-Soviet archaeology. The results show that functional and stylistic elements of the six objects indicate that the Talgar settlements were part of a larger world-system of trade and communication along the early Silk Route(s).

Keywords: zoomorphic art; Saka nomadic tradition; horse and weaponry gear; etched carnelian beads; Iron Age agropastoral settlements; world-systems analysis

1. Introduction

The discussion of zoomorphic art is usually confined to the object or artifacts where animals are depicted. In this essay we consider the economic and political significance of long-distance trade and networks at two Iron Age settlements in the Talgar region of Southeastern Kazakhstan at the edge of the Northern Tian Shan Range [1]. Tuzusai, (ca. 400 BCE to 1 CE), and Taldy Bulak 2 (ca 740 BCE to 40 BCE) have been excavated in the years between 1994 and 2018 by the Kazakh American Archaeological Expedition (KAAE). At the Talgar excavations we discovered a small collection of bone, antler, and stone artifacts labelled as special finds. We discuss in detail five of these special finds: (1) an unfinished etched white bead (like etched carnelian beads); (2) a fragment of a bone plate or plaque with carved images of a wing and an ear of the Scytho-Siberian style; 3) a bone disk depicting three carved bird's heads; 4) two cheek pieces fashioned from antler known as *psalia*; and 5) a round bronze

amulet. In addition, we provide a summary of the animal bone remains and domesticated plant remains found at the Talgar settlements in order to provide an economic context. The presence of “animal style” artifacts at the Iron Age settlement of Tuzusai (the first three items: bone plate or plaque, bone disk, and the cheek pieces) were important to the sedentary or semi-sedentary agropastoral population of the Semirech’ye region. The entire collection of special finds reported here indicate the Talgar Iron Age settlements as part of long-distance commodity trade networks tying Central Asia to South Asia, the Pamirs, Northwest China, and Siberia. The Iron Age farmer-herders of Talgar appear to be at the periphery of a larger Iron Age world-system during the first millennium BCE [2]. These contacts with the “Outside World” had not only political and economic importance but were part of the iconic aesthetic tradition of the Eurasian steppe world.

1.1 Theoretical Arguments

We test the hypothesis that semi-sedentary Iron Age settlements of the Talgar region were part of a long-distance trade network that was more than economic in nature, but had a political, religious, and aesthetic impact on peripheral settlements. The term “animal-style art” or zoomorphic art of the Eurasian steppes was coined by Rostovtzeff [3] as an art historical style consisting of the depiction of fantastical beasts, predator-prey scenes, zoomorphic carving and embossing often done in precious metals such as gold, silver and bronze, and frequently found in burial kurgans throughout Eurasia. This zoomorphic art style has only indirectly been addressed as another aspect of the commodity trading routes or as part of a larger Iron Age world-system centered in East Asia [2] (p.8), [4]. A detailed discussion of the Iron Age World-system especially as it pertains to the Eurasian steppe suggests that the spread of an art tradition could also be one more aspect of the increasing spheres of interaction between China, Mongolia, the Near East, and South Asia. In a nutshell, the Eurasian Iron Age World-Systems based on core-periphery economic ties—places like China, the Central Asian desert-oases Kingdoms of Bactria—as the centers and the outlying places throughout the Eurasian steppe and beyond, became the arena for nomadic expansion of such groups like the Scythians, Saka, Wusun and others [2] (pp. 9-10). Therefore, it only stands to reason, that “animal style art,” most often found in nomadic burial inventories, would reflect an underlying economic and political system that had globalizing influences. There may be reasons for why an aesthetic system of depicting animals across the Eurasian steppe has been overlooked as a data source for World Systems Analysis (WSA). First, a stylistic art tradition that features beasts, fighting scenes, and fantastical combinations of griffins and dragons lends itself to religious and ideological interpretations. Second, the mythical transformations of beasts, an art style found in the first millennia BCE, is often traced to earlier belief systems such as shamanism or Mesopotamian religion. Animal style art of the Eurasian steppe has similar elements found in Mesopotamian imagery: deer, horses, trees, and humans, often in fighting or hunting scenes. Third, the simple fact that the gold plaques, jewelry, and iron weapons are found in tumuli of elite individuals in nomadic kurgan burials from Eastern Europe to Mongolia and China in the first millennium BCE lends itself to a discussion of the nomadic aristocracy – clan leaders, warriors, shamans, and clans, not ordinary folk. Portable art such as the buckles, plaques, and jewelry found in the elite burials at sites such as Berel and Eleke Sazy in the Altai region of Kazakhstan has resulted

in detailed studies of source materials of gold and other precious metals and detailed analyses of craftsmanship [5]. Yet, all too little is known about the foundation of nomadic society during the Iron Age. Did the common people also engage in the production, crafting, and trading of ‘animal-style’ art? Perhaps it is not possible to draw such conjectures from such a slim collection of objects, but what we can do, is make chronological and geographic comparisons to other objects across Eurasia. We then may begin to establish a method for placing our collection of special finds at Talgar, in a larger pan-regional framework of trade and outside influence. These networks or pathways establish spheres of interaction between core and periphery areas as well as economic pathways along early Silk Route(s).

Our goal for this essay is to place “the little traditions” of steppe artwork and craftsmanship into a larger narrative of Eurasian animal style art---one that embraces aspects of World Systems Analysis. Nikolai Kradin [6] employs World Systems Analysis (WSA) to discuss in detail the relations that nomadic groups like the Hsiung nu, Mongols, and others had with the outside world. We build upon Khazanov’s [7] thesis about the Eurasian nomadic polities requiring relations with the outside world, not merely for trade in commodities such as grain and silk, nor as predatory empires, but for maintaining the dynamic force of innovation and resilience within their own societies. Therefore, it would seem logical that nomadic polities were at the forefront of adopting outside influences and transforming them into a new synthesis. zoomorphic art, especially could be symbolic of both steppe idiosyncratic and syncretic visual vocabularies [8]. The Talgar settlements are Iron Age sites with pit houses, mudbrick houses, storage pits, ovens, and fireplaces. These hamlets or villages were year-round settlements where ancient people raised sheep, goats, cattle and horses and cultivated wheat, barley, and foxtail and broomcorn millet. The architecture at the settlements is simple; the artifact inventories of handmade household ceramics (bowls, jars, plates, cooking vessels, and storage vessels), copper, iron, and bronze fragments, and bone tools (scrapers, awls, and a rare find of an arrowpoint) suggest that these were the occupation places of common folk---farmers and herders, not the elite buried in the nearby kurgans. So, how did the Talgar folk of the first millennia BC obtain objects with zoomorphic imagery or exotic items such as etched stone beads or bronze amulets? To answer these questions we must develop our own time-space systematics---that is to place our finds in a geographical location and in a chronological sequence.

1.2 Study Area

The Talgar alluvial fan is found to the north of the Zailiisky Alatau group of the western Tian Shan Range. The Talgar River originates in the upper regions of the Peak Talgar (ca. 5000 m asl) and is fed by seasonal glacial melt and rainfall (see Figure 1. Locator Map).



Figure 1. Map of Kazakhstan. Talgar is 25 km east of Almaty.

As the river opens onto the alluvial deposits there is an apron or fan of stream channels branching north toward the desert-steppe. This alluvial fan, along with at least 14 fans formed along the base of the Zailiisky Alatau range form a band of rich arable steppe land on the south side of the Ili River Basin. Tuzusai, a large Iron Age settlement dating from the 590 BCE to 75 CE (the entire range of calibrated radiometric dates) is about 8 to 10 hectares in size. Taldy Bulak 2, is smaller in size, less than 2 hectares in size, and has radiometric dates from 775 BCE to 40 BCE. (See Figure 1, Map of Kazakhstan). Both settlements have 6 to 8 occupation horizons, a description of the finds, is presented in Table 1.

1.3. The Finds

Table 1: List of Special Finds, Context and Feature Association, Measurements

Artifact	Description	Site Excavation, Context	Provenience	Measurement
Etched Stone Bead	Small tubular bead, with geometric etching, drilled on both ends, but drill hole was not completed.	Tuzusai 2008 Excavations, House 4, Floor level 4, Phase 1	Quadrat DZ-3, Level 13, 290 cm below datum. (1.3 m below surface)	1.9 cm in length, 0.7 cm in width.
“Animal-style” bone plate/plaque fragment	Long bone fragment carved on outer convex side with wing and ear image	Tuzusai 2011 Excavations	Quadrat N-2, Level 7, 210 cm below datum (50 cm below surface)	3.8 cm X 2.9 cm X 0.83 cm

		Pithouse 2B, upper occupational floor, Phase 2		
Two Antler/horn Cheek pieces with drilled holes (Psalia—or horse bridle pieces)	Antler/horn pieces with drilled holes, first piece has 2 holes, second piece has 2 holes, but the traces of two additional holes at base, most likely decorative elements	Tuzusai 2013 Excavations Post Mould (Context 56) House 6, Phase 1	Quadrat V-15, Level 15, 290 cm below datum (1.3 m below surface)	One is 10 cm in length, The other is 11.5 cm in length
Bone disk with 3 birds' heads with beaks	Bone disk has center hole, surrounded by carved bird's heads, each head has one eye and a long curved beak	Tuzusai 2010 Excavations Outside edge of Pit house 6 on southern edge, Phase 1	Quadrat E-9, Level 13, 283 cm below datum (1.2 m below surface)	3.7 cm in diameter, max. thickness 0.5 cm. Center hole is 0.8 in diameter.
Bronze amulet	Circular disk with 8 perforations, 5 holes not completely finished	Taldy Bulak 2-2005 Excavations Ditch (Feature 18), Stratum 8, early occupation phase	Quadrat V-3, Stratum 8, 207 cm below datum (60 cm below surface)	2.4 cm in diameter, 0.4 cm in thickness, center hole is 0.24 cm in diameter.

Each Quadrat is a 2 m X 2 m unit. The two sites were dug in arbitrary levels that were converted to natural strata. For the Tuzusai (Map of Kazakhstan and showing the locations of Tuzusai, Taldy Bulak 2, and the Issyk Mounds). For Tuzusai, the stratigraphic designations of Stratum 1-3 belong to Phase 1 (400-200 BCE), and Stratum 4-6 are designated as Phase 2 (100 BCE – 1 CE). For Taldy Bulak 2, earliest phase probably corresponds to Phase 1 at Tuzusai (400 - 200 BCE).

2. Results

In this section each of the five objects described here are compared to similar objects/items found at known archaeological sites, usually from burial or grave inventories. The descriptions include comparisons with a wide range of similar objects and their chronological placement. We draw historical and archaeological interpretations from the results of our comparative analyses.

2.1. Etched Stone Bead (Bleached Carnelian Bead) (Figure 2):

This stone bead has a center hole drilled in each end but the drill hole was never completed. The white stone material has been described as bleached carnelian, usually traced to its original production site in the Indus Valley [9-11]. Recently Brunet [12] has suggested that there were

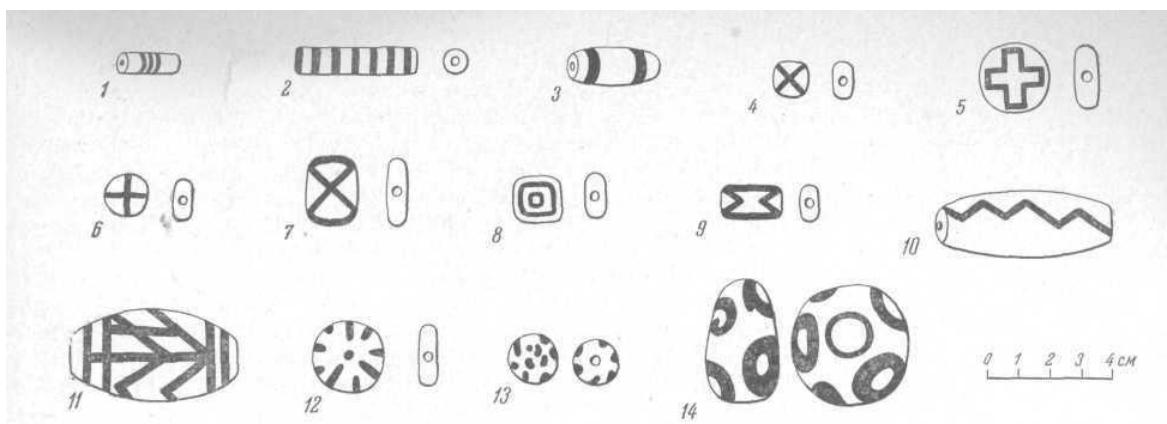
separate centers of carnelian production in Armenia and United Arab Emirates as far back as the Bronze Age. Zhao [11] (p. 177) has found carnelian beads in Xinjiang with geometric designs and dots that he labels as Type B quite similar to this bead. Specific examples were found from Grave M69 at Lijiasan Cemetery, Jiangchuan.



Figure 2. Etched Stone Bead from Tuzusai.

2.1.2. Carnelian bead with Indian origin, Saka burial, Pamir, V-III cc. BC.

Литвинский Б.А. Древние кочевники «крыши мира». Moscow, 1972. P. 71, 78-82, Tab. 28, 11 [13].

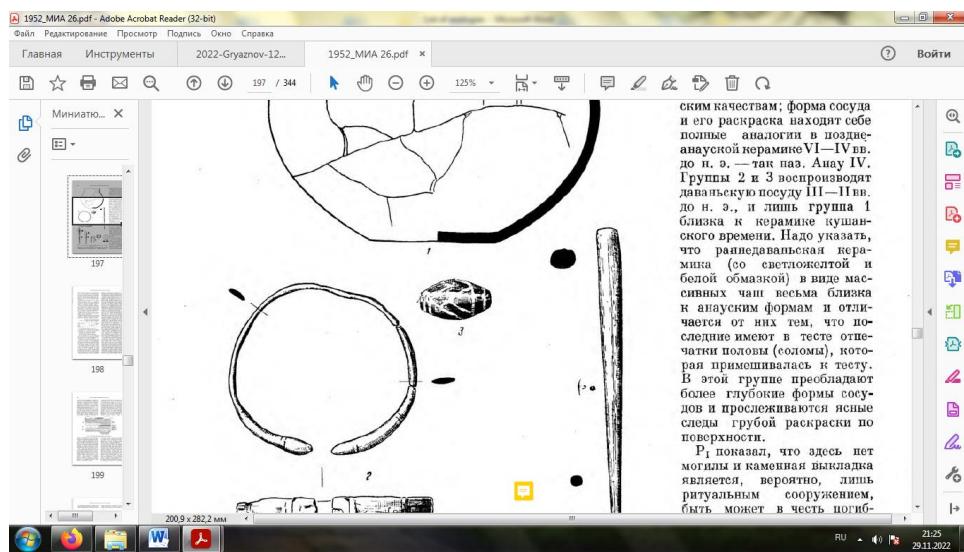


Litvinsky [13] (p. 80) states that “H. Beck initially distinguished two types of [carnelian] beads with an induced ornament: the first type — white lines on a red or black background (the natural color of the stone), the second type — the surface is artificially made white, a black pattern is applied to it”.

The important question is: Did the Talgar IA craftsmen copy the patterns of real carnelian beads or is this an actual example of a bleached cornelian bead described by Kenoyer [10], Zhao [11] and earlier by Beck [9], [15] (p.80).

2.1.2 Carnelian bead with Indian origin, Daraut-Kurgan settlement, Alai (northern part of Pamir-Alai mountain system), III-II cc. BC. (perhaps earlier).

Бернштам А.Н. Историко-археологические очерки Центрального Тянь-Шаня и Памиро-Алая. Москва-Ленинград, 1952. pp. 193-197, Fig. 79, 3. [14]



We have decided to exercise a cautious interpretation of the etched white stone that looks like a good analogy to the Indus Valley carnelian beads. If the occupants of Talgar, or their craftsmen did produce a copy, it still suggests that the Talgar IA people had some contact with Indus Valley trade items. Also the fact that etched beads also appear in Northwest China and date to the first millennium BCE, we can posit a network from the Indus Valley to the Pamirs and further east to Semirech'ye (Talgar region) and then into Xinjiang. It is important also to note that the Soviet literature shows that the Soviet archaeologists recorded carnelian beads in the Central Tian Shan and in the Pamirs dating from about 5th century to 2nd century BCE [14]. This corresponds to Phase 1 at Tuzusai. Therefore, the chronological contexts of the comparative materials found in kurgan burials and at settlements (Daraut-Kurgan settlement) and at the Saka burial in the Pamirs [13,14] and then at the Xinjiang cemetery [11] are indicative of a network from the Indian subcontinent through the Pamirs, Central and Northern Tian Shan into Xinjiang.

We leave the question as to whether the Talgar etched stone bead is a copy or a real carnelian bead to future material analysis of the stone and the etching process.

2.2. Animal Style Bone Plaque Fragment (Figure 3)



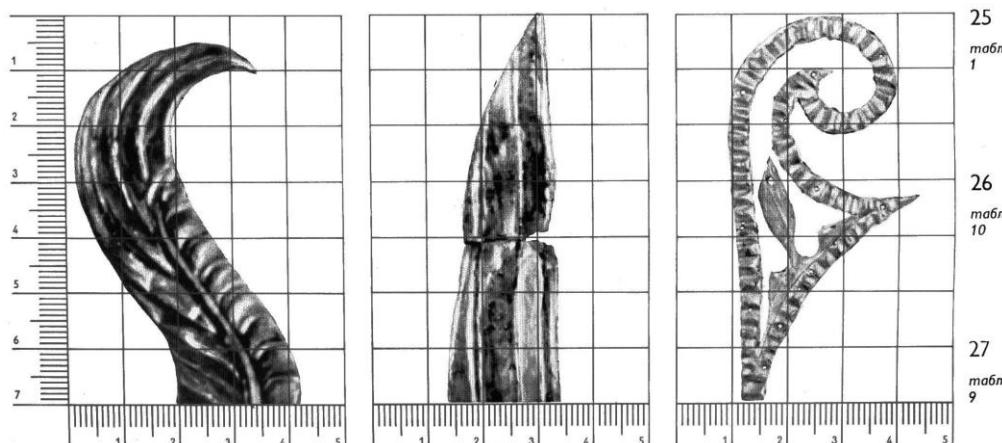
Figure 3. Animal Style Bone Plaque from Tuzusai.

This bone plaque is engraved on a long bone. It appears to have the outline of an ear on one side and the wings of a bird on the other. Therefore, it is a fantastical beast [8]. The Issyk Golden Warrior kurgan excavated in 1969 is only 25 km from the Tuzusai where this bone plaque is found.

2.2.1 Bone plate with fantastic beast, motive of wing

1. Gold plate in the shape a small birds wing, Issyk kurgan, IV-III cc. BC

Акишев К.А. Курган Иссык. Искусство саков Казахстана. Москва, 1978. Tab 25, 1 [15]



2.2.2. Plate with winged tiger, kurgan Isssyk

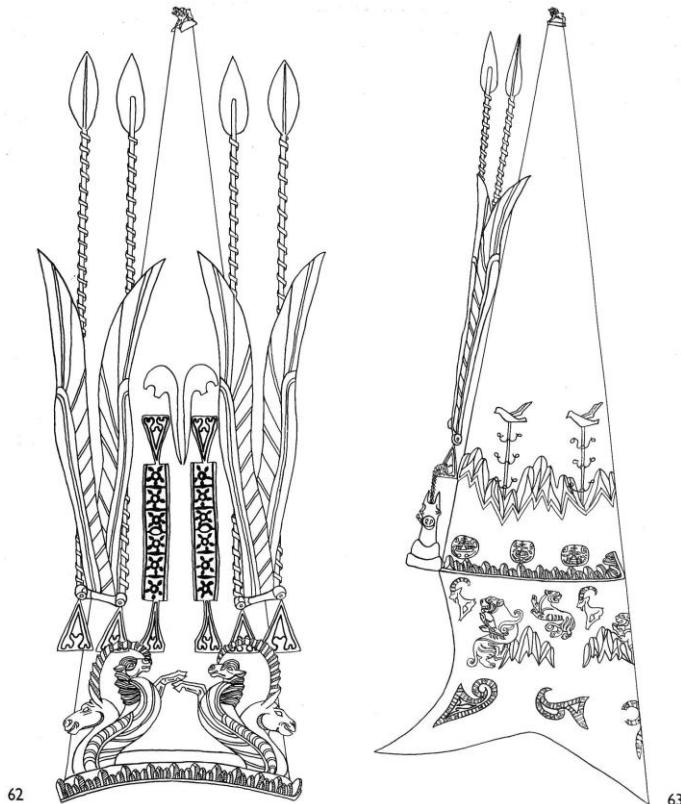
The same type of wing



2.2.3. Plates in the shape of winged goats, kurgan Isssyk

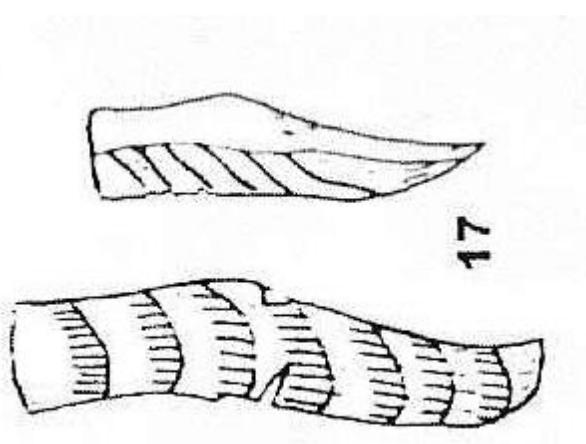
The same type of wings

Акишев К.А. Курган Иссык. Искусство саков Казахстана. Москва, 1978. Tab 62 [15].



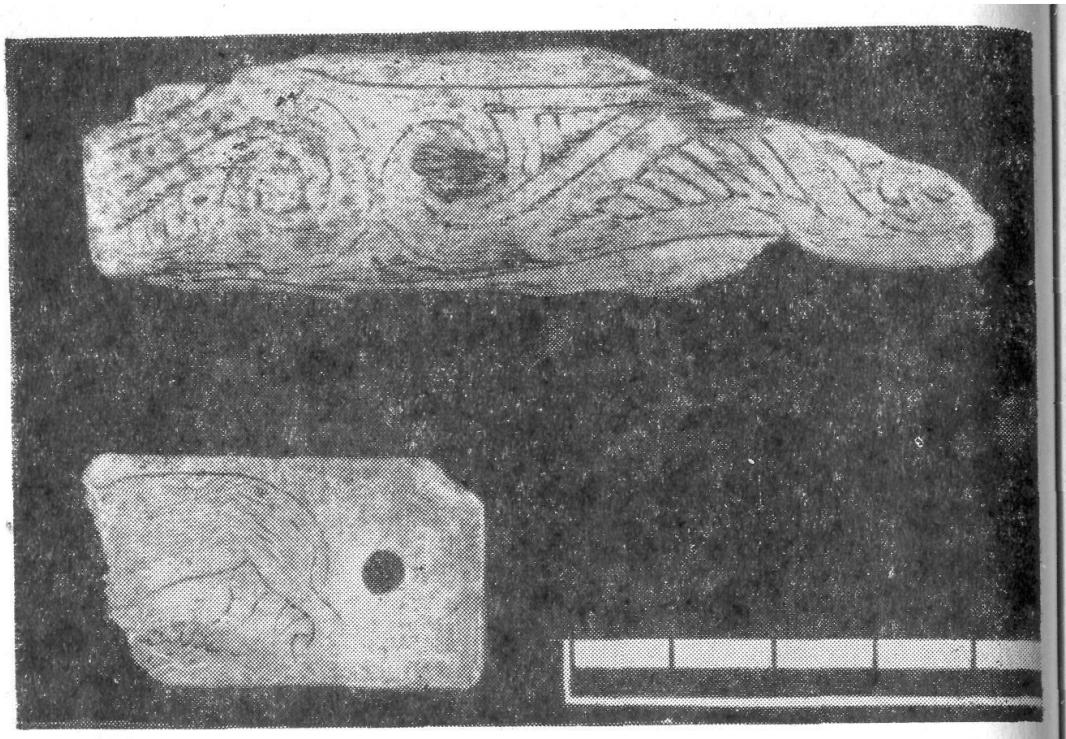
2.2.4. Foil plates in a shape of wing, Saka burials of Ketmen-Tyube valley, Western Tien Shan, V-III BC

Ташбаева К.И. Культура ранних кочевников Тянь-Шаня и Алая в I тыс. до н.э. Бишкек, 2011. Р. 77, Fig. 71, 17 [16].



2.2.5. Bone plate with carved depiction with wings, Saka culture, Issyk-Kul, V-III cc. BC

Мокрынин В.П., Гаврюшенко П.П. Курганы саксокго времени долины р. Тон // Археологические памятники Прииссыккулья. Фрунзе, 1975. р. 78, fig. 29 [17].



2.2.6. The Siberian collection of Peter the Great, Late Scythian period

Руденко С.И. Сибирская коллекция Петра I. САИ Д3-9. Москва-Ленинград, 1962. Рр. 17-18, Tab. XI, 1,2 [18].

САИ ДЗ—9 С. И. РУДЕНКО. СИБИРСКАЯ КОЛЛЕКЦИЯ ПЕТРА I.

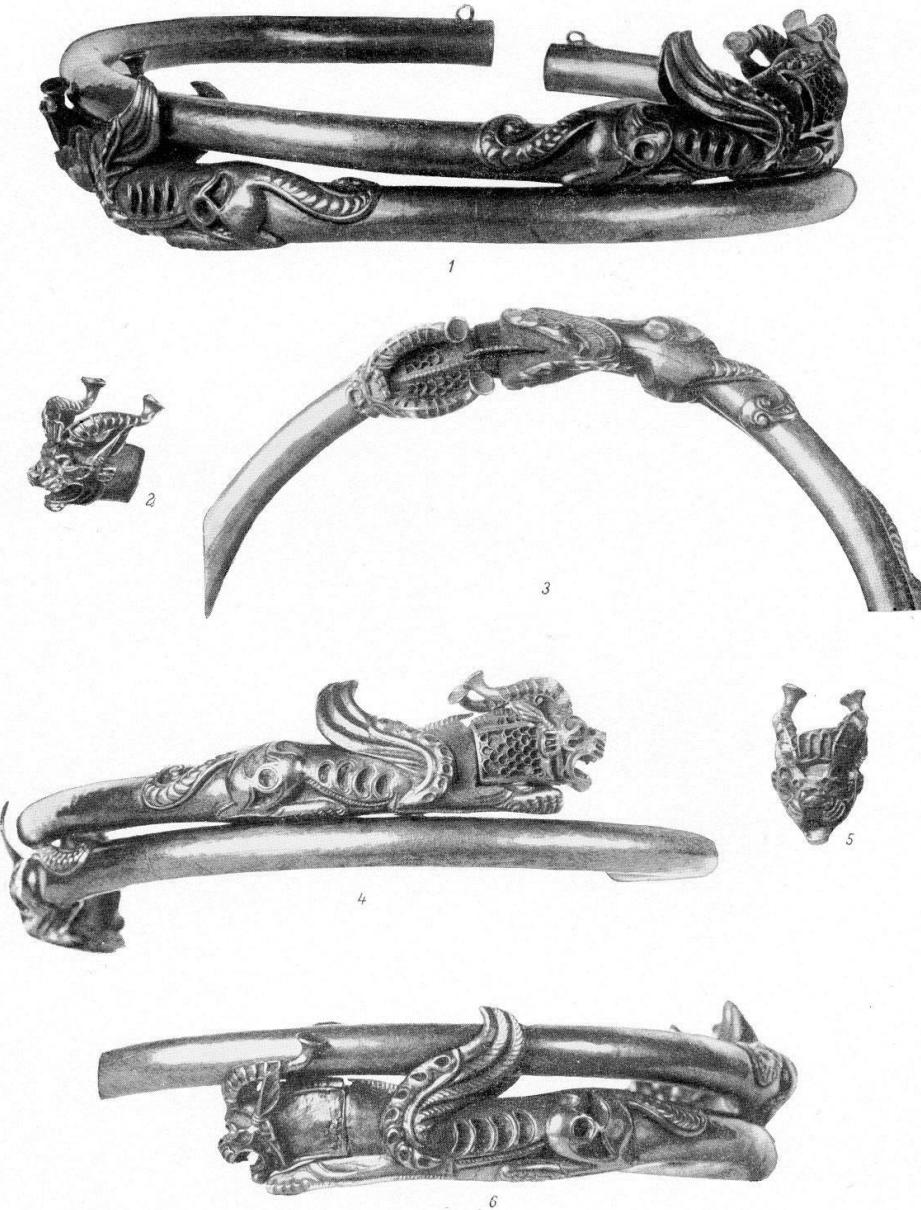


2.2.7. The Siberian collection of Peter the Great, VI-IV BC

Руденко С.И. Сибирская коллекция Петра I. САИ ДЗ-9. Москва-Ленинград, 1962. Р. 17-18, Tab. XVII [18].

Probably this suggests the influence of Achaemenid art.

САИ ДЗ-9 С. И. РУДЕНКО. СИБИРСКАЯ КОЛЛЕКЦИЯ ПЕТРА I.

ТАБЛИЦА XVII. $\frac{7}{8}$ nat. vel.

This fragmentary plaque is of considerable interest because like the Issyk Golden Warrior inventory, the wing element along with a mammal's ear indicates influences to the north to the Pazyryk finds [18], and to the south, apparent from engraved wings on a bone plate in the Ketman-Tyube burial in the Western Tian Shan [16] (p. 77), and in a kurgan burial along the River Ton [17]. Also the Achaemenid stylistic wing comes from the west. The comparative material from the Issyk kurgan is in the same period of time as the Tuzusai bone plaque, placed in Phase 2 (100 BCE to 1 CE). Here the chronology may not be exact, but at least the winged bone plaque fits within the spread of the finds cited here, between the 6th to 3rd centuries. It could also be possible that the Tuzusai bone plaque found in Stratum 3 could be closer to Phase 1 (400 – 200 BCE). There are important remarks to be made: (1) this small bone plate fragment must be part of a larger visual vocabulary of a fantastical beast; (2) the influence from Achaemenid art and the Siberian collections of Peter the Great. According to Petya Andreeva [19] there are visual similarities to Pazyryk material. The visual similarities in the Western and Central Tian Shan also suggest a widespread, pan-regional attention to winged beasts, so apparent in the Issyk burial materials where there are winged tigers, winged goats, and simple gold wing plates [17].

Does this visual imagery also follow a similar path to the route of carnelian bead trade, along a southern route? The Achaemenid imagery is so important for demonstrating the direct relationship between the Saka contingent in the Achaemenid Empire and their distant nomadic polities in the Inner and Northern Tian Shan ranges. The fact that this bone plaque fragment is found in an upper occupation level in Pit house 2B at Tuzusai indicates that ordinary dwellers of the Iron Age settlement had access to artistic items usually restricted to elite burials.

2.3. Antler/Horn Cheek Pieces (*psalia*) (Figure 4)

These two *psalia* were found in situ lying side by side in the 2013 Tuzusai excavations right next to a post mould from House 6.



Figure 4. Antler Cheek pieces from Tuzusai.

2.3.1. Cheek pieces made from horn or antler represent an archaic use-material. Most Iron Age *psalia* are fashioned of iron and bronze (see Besetayeva and Kariyev [20](pp. 74-75). At the Burial mound no. 31 at the Gerasimovka cemetery (Gerasimovka, Ulan District, Eastern Kazakhstan) cylindrical pieces of bronze cheek pieces (bridle parts that hold the harness) have 3 holes dating to the 8th to 6th centuries BCE, if compared with other three-hole cheek pieces in Kazakhstan, Altai, and Tuva [20](p.74). The horn/antler cheek pieces found at Tuzusai have two holes and according to Baurzhan Besetayev [21] they fit into the Classic Saka period of 5th century BCE. Yet the use of bone cheek pieces is archaic, so we wonder whether the fact that Tuzusai is a settlement site explains why the occupants used utilitarian materials like antler/horn rather than iron or bronze cheek pieces. Stratigraphically these cheek pieces fit into the earliest occupational levels at Tuzusai.

2.4.. Bone Disk with three Birds' heads with beaks (Figure 5)

This artifact was found at Tuzusai in 2010. It was found on the outside edge of Pit house 6 in the southern most baulk wall of the Tuzusai excavation unit. The bone disk was probably used as a decorative piece for weaponry.

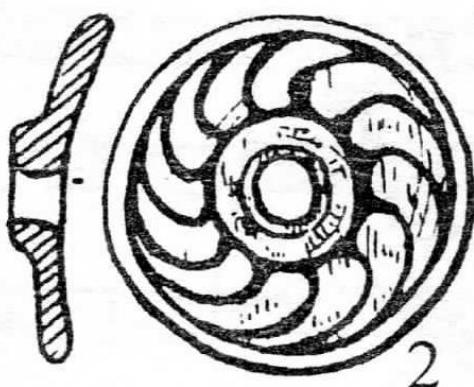


Figure 5. Bone Disk with Carved Bird Heads each with eye dot in larger rounded part.

2.4.1. Bone disc with patterns in a shape of bird heads, Tuva (Suglug Khem burial ground), IV-II BC

Семенов Вл. А. Суглуг-Хем и Хайыракан – могильники скуифского времени в Центрально-Тувинской котловине. Санкт-Петербург, 2003. Р.42, Таб. 60, 2 [22].

It is often found as an ornamental feature of warriors' belts or as part of a small belt for attaching quivers.



Such objects were used as a part of quiver.

2.4.2. For example, a very similar iron disc was found in kurgan 25 of Bes-shatyr in Semirech'e

Акишев К.А., Кушаев Г.А. Культура саков и усуней долины реки Или. Алма-Ата, 1963 Fig. 65 [23].

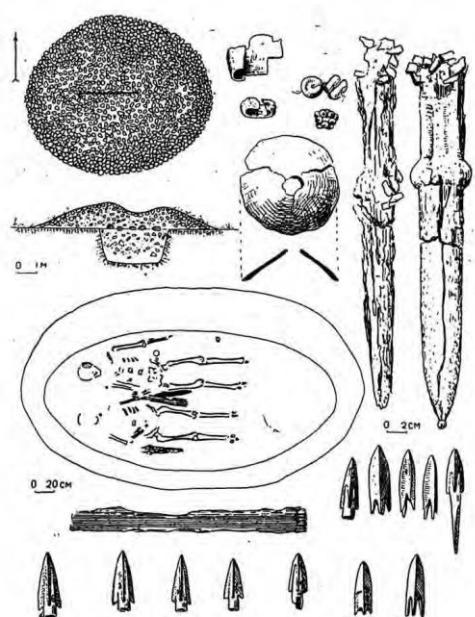


Рис. 65. План, разрез насыпя и могильной ямы, инвентарь кургана 25

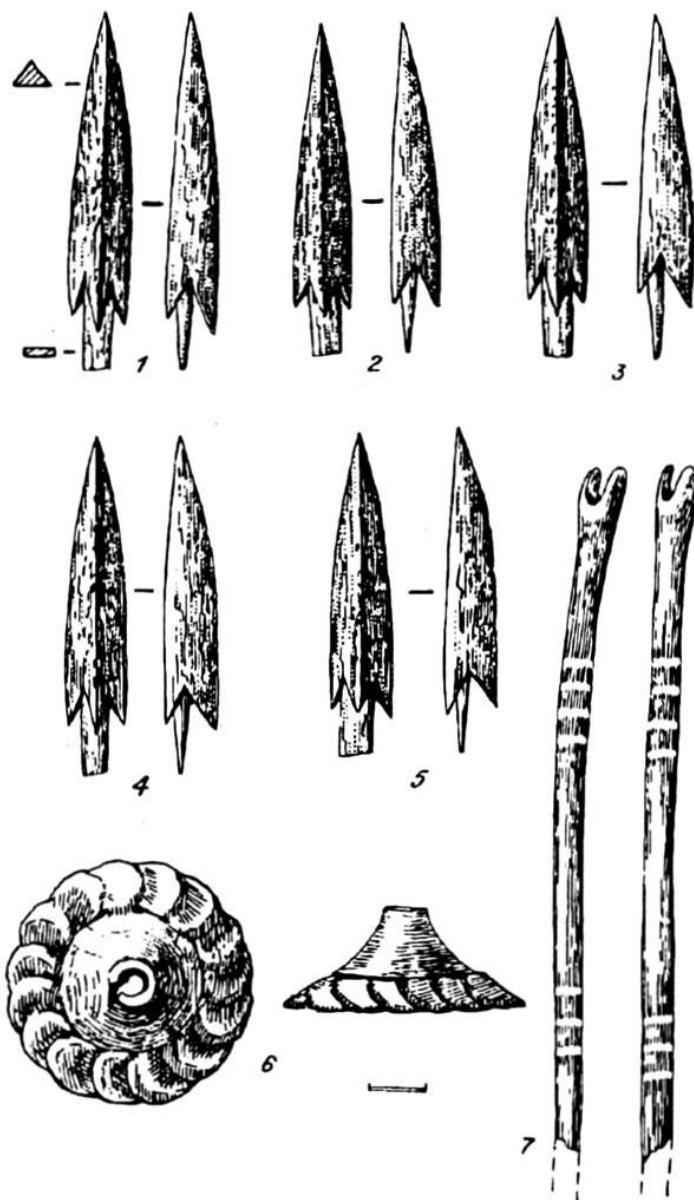


Рис. 20. Костяные наконечники стрел (1—5), деревянная бляха для крепления колчана к поясу (6) и части древков (7) из погр. 1 кург. 1 могильника Ак-Алаха I.

2.4.3. A wooden disc from quiver, Ak-Alakha, kurgan 1 (Gorny Altai, Ukok plateau)

Late IV – III centuries BC

This wooden disk is from the famous permafrost kurgan of the Ukok princess of Pazyryk culture excavated and described by N. Polosmak [24] (pp. 29-30). Later DNA analysis showed that it was prince, not princess). However, this disc is from another older male buried near the ex-princess pp. 29-30, Fig. 20, 6 [24]. Polosmak [24] (p.30) writes about the disk: “From the quivers only wooden plates-frames have been preserved. A leather case and wooden plaques in the form of a truncated cone with a hole through the center were sewn to them (sic: *through special holes*), with the help of which the quiver was attached to the belt (*translated from the Russian*).”

In summary we suggest that this ornamental piece was most likely part of a belt, a quiver, or other dress elements: it could have been associated with warriors or bow and arrow equipment, typical for Saka culture of

the 5th to 2nd centuries BCE. Comparative material from the Pazyryk culture as well as material from Tuva, and the nearby Bes Shatyr kurgans also suggests that this ornamental bone disk demonstrates similar aesthetic trends to material items of the broader Scytho-Saka-Siberian complex (Siberia, Tuva, and the Northern Tian Shan region). This leads us to consider the larger question of why pan-regional aesthetic traditions like zoomorphic imagery and ornamentation on belts and fastenings were wide-spread throughout the nomadic world of the first millennia? Was this simply a factor of an artistic horizon, or was it more specifically related to the broad economic and political interactions of steppe culture and tradition in this important period?

2.5. Bronze Amulet (Figure 6)

The Bronze Amulet is in the bottom of a large ditch found at Taldy Bulak 2, an Iron Age settlement about 5.5 km to the southeast from Tuzusai settlement. This Bronze amulet was unfinished, of the eight perforations surrounding the central hole, only three were complete.

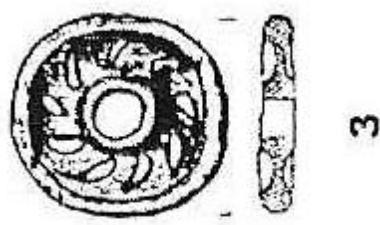


Figure 6. Bronze amulet from Taldy Bulak 2.

2.5.1. Round solar amulet

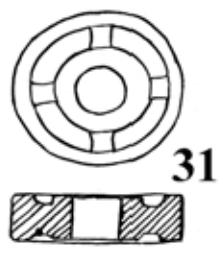
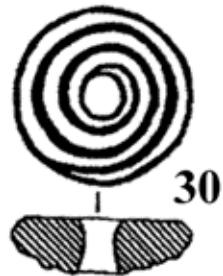
This disk was found at the Saka burials of Ketmen-Tyube valley, Western Tien Shan, V-III BC.

Ташбаева К.И. Культура ранних кочевников Тянь-Шаня и Алая в I тыс. до н.э. Бишкек, 2011. Р. 73, Fig. 70, 3 [16]

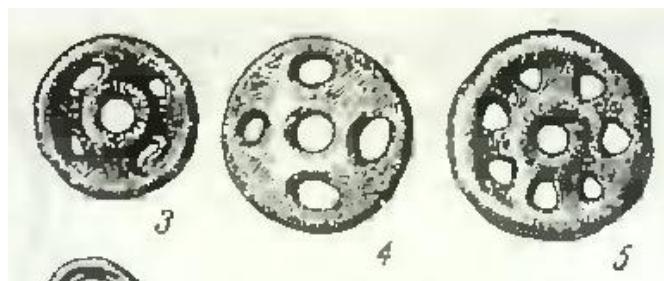


2.5.2. Ancient nomads of Xinjiang, VII-VI BC

2010. Fig. 81 [25].

2.5.3. Sauromats, South Ural, VI- beginning 5th century BC,Смирнов К.Ф. Савроматы, Moscow, 1964. Fig. 11A, 8 [26].

2.5.4. Sauromats, South Ural, VI-IV BC

Смирнов К.Ф. Савроматы, Moscow, 1964. p. 64, Fig. 71, 3-5 [26].

K. Smirnov [26] wrote: «Подобные амулеты типичны для погребений савроматской культуры и редко встречаются в более поздних памятниках» (Such amulets are typical for burials of the Sauromat culture and are rarely found in later monuments).

He thought that such solar amulets were associated with quivers as a talisman or protection for the owner of the quiver. These amulets were typical for VI-IV centuries BC.

2.5.5. Forrest-Steppe Altai, V-III BC

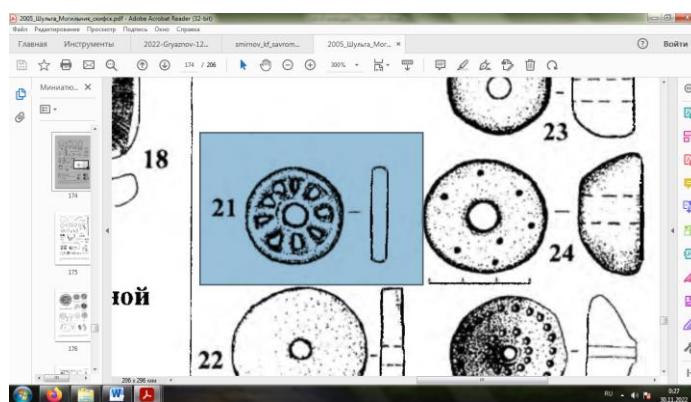
Могильников В.А. Население Верхнего Приобья в середине – второй половине I тыс. до н.э. Москва, 1997. Р. 87, Fig. 55a, 42 [27].

These were identified as amulets.



2.7.7. Forest-Steppe Altai, V-III BC

Уманский А.П., Шамшин А.Б., Шульга П.И. Могильник скифского времени Рогозиха-1 на левобережье Оби. Барнаул , 2005. Р.26, Fig. 52, 21[28].



The bronze amulet was put on the stone altar.

The bronze amulet has chronological similarities with other amulets from the 7th century to the 3rd centuries BCE in the Western Tian Shan, Xinjiang, the Forest Steppe of the Altai. Shulga [25] and Smirnov [26] are of the opinion that these amulets are Sauromatian objects, however they are also found in the forest-steppe, northwest China (Xinjiang), and in the western Tian Shan. For our purposes, it is important to note that this bronze amulet found at Taldy Bulak 2 in the bottom of a long narrow ancient ditch separating the storage areas from the two pit houses. It is also important to note that the amulet is found from the earliest cultural levels at the settlement. Some radiometric dates from the earliest layers include one radiometric date (B-163095) cal. 780-370 BCE [1](p.33). This fits roughly within the time range of the comparative analogies for the bronze amulets found elsewhere. The bronze amulets in burial contexts has possible connections to solar imagery and could be associated with the protection of warriors if found with quivers or part of ritual practices (on a stone altar)[28]. At any case, the discovery of such an object at a settlement site, where most finds consisted of animal bone fragments and ceramic sherds, is of considerable note.

3. Discussion

In summary these six items found on the occupational surfaces of pit houses, houses, or in a ditch at the Tuzusai and Taldy Bulak settlements of Talgar are part of a pan-regional nomadic culture that is not restricted to grave or burial contexts. In our opinion this indicates that “animal style objects” and such visual imagery was also part of the lives of ordinary folk as well as the aristocratic elite. Also the presence of the copy or original carnelian bead is indicative of long-distance trade and interactions between South Asia, Central Asia, and the steppe regions of Eurasia. We wish now to consider the Talgar settlements of the mid to late Saka period as part of these commodity trade routes. From a methodological standpoint, the careful work done by S. Ivanov on using comparative analogies for establishing similarities between our special finds and the broader corpus of Scytho-Saka-Siberian material of the first millennia show an exceptional congruence between radiometric dating of our stratigraphic sequences and the method of comparative analogy, often employed by Soviet and Post-Soviet archaeologists. This is indeed heartening news for art historians who also work with establishing chronological collections of objects, visual imagery, and artistic style horizons through comparisons across the Eurasian region [8].

This style represented not only a repertoire of shared iconography, but was functional, associated with commodity production, trade practices, and socio-economic functions of the nomadic Saka living in the Talgar region. The Saka, who practice both agriculture and animal herding and were sedentary or semi-sedentary, engaged in a broader cultural tradition that included the importance of zoomorphic imagery, horse-riding (the *psalia*), and an attention to items associated with costume decoration and warrior cults. Also we argue that zoomorphic “animal style” artistic traditions can be used to discuss the interaction spheres between core-states and periphery areas [2]. No doubt that Talgar was a periphery area, on the edge of the northern Tian Shan mountains, near the Issyk cemetery, but distant from the centers of the Achaemenid Empire, the Greco-Bactrian Kingdoms, and later the Chinese Chou and Han Dynasties. And Talgar was an integral part of the Nomadic Saka cultural tradition. In the future we hope to explore these spheres of interaction between core-states and outlying peripheral nomadic confederacies and states.

4. Materials and Methods

4.1 Chronological Sequences

All these artifacts except the animal style bone plaque fall within a mid to late Saka context (500 – 200 BCE). The bone plaque is found in Tuzusai, Stratum 3-- a transitional occupational level between the upper and lower levels. Here we consider each bit of information: chronological placement by stratigraphy, site depositional factors such as pit fill, edges or outside of house features. The chronological placement of the objects is then examined in relationship to artifact finds from other regions as a separate line of evidence for the chronological dating of the objects. None of these artifacts, in and of themselves have been dated by radiometric dating, nor have the occupational surfaces where they were situated have been dated except by stratigraphic associations. Despite this, our ability to place these objects within the larger context of archaeological excavations conducted at two Iron Age sites makes this information extremely valuable for others desiring to draw comparisons with our material.

4.2 Comparative analogies

In Soviet and Post-Soviet methodology objects from graves, kurgans, and other contexts are often placed in chronological frameworks based on descriptive traits [9,10] dated according to typological and descriptive characteristics of objects such as metal arrowheads, bridle parts, zoomorphic plaques, and other artifacts. This method of seeking comparisons to other artifacts requires researchers to have vast knowledge and access to material items to descriptions often found in literature of the Soviet and Post-Soviet periods, mainly written in Russian language publications. Here we have retained the original bibliographic references to the Russian language sources so other researchers can more easily trace our source material. In the References section, the Russian publications have been transliterated and translated into English. We have used this method of descriptive analogies in examining the six objects found at the Talgar settlements.

5. Conclusions

The fantastical beasts and the zoomorphic imagery found on two of the objects from the Talgar settlement are indicative of the quotidian nature of an aesthetic style often presumed to be associated mainly with elite burials. Also, the congruence of the comparative analogies with other finds that range from the Classic Scytho-Saka-Siberian period to its later phase is of great importance. By the 5th century BCE animal style art reaching its zenith, had also penetrated into peripheral places such as the Talgar settlements. Any pan-region art horizon like this, thus presumes that there was a visual repertoire, perhaps tied to shamanic or other cultic beliefs that held the imagination of both settled and nomadic peoples of the first millennia BCE. From an economic and sociopolitical viewpoint, we can also see that these widespread influences were part of commodity trade and defined the impact of steppe polities in the globalized world-economy of the Eurasian Iron Age.

6. Patents

This section is not mandatory but may be added if there are patents resulting from the work reported in this manuscript.

Supplementary Materials: The following supporting information can be downloaded at: www.mdpi.com/xxx/s1, Figure S1: title; Table S1: title; Video S1: title.

Author Contributions: For research articles with several authors, a short paragraph specifying their individual contributions must be provided. The following statements should be used “Conceptualization, C.Chang and S.Ivanov; methodology, C.Chang and S.Ivanov; validation, C.Chang, S.Ivanov; formal analysis S.Ivanov.; investigation, C.Chang.; resources, C.Chang.; data curation, C.C. and S.I.; writing—original draft preparation, C.C.; writing—review and editing, C.C and S.I.; visualization, C.C. and S.I.; supervision, C.C.; project administration, C.C.; funding acquisition, C.C. . All authors have read and agreed to the published version of the manuscript.”

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