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# Insights into Early Iron Age Social Structure in the Eastern Steppes: Excavation Results of the Chinge-Tey Western Chain Kurgan 1

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## ABSTRACT

While the Early Iron Age burial mounds of the highest elite in Tuva have been intensively studied in the past two decades, they represent only a small fraction of the diversity of archaeological monuments in the Siberian Valley of the Kings. In this article, we present the results of an examination of a smaller peripheral mound. The monument's proximity to the elite mound of Chinge-Tey and its similar chronology allow us to expand the social cross-section through Early Iron Age society in southern Siberia. Four graves were excavated and documented in detail. Three out of four burials were found intact, providing rare, complete contexts and offering a glimpse into the cultural change and social hierarchies of the 1st millennium B.C. Not typical for the Aldy-Bel' culture, this mound is built from earth, and the grave goods indicate changes in funerary ritual traditions across social strata.

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## Introduction

Since the excavation of Arzhan 1, the origins of Scythian material culture have been traced back to southern Siberia. The transformations that occurred there at the beginning of the 1st millennium B.C. (often referred to as the Early Scythian Period, 9th–6th century B.C.) changed the image of the Eurasian steppes for many centuries to come. The rise of Scythian-type pastoral societies in central Asia is hypothesized to be related to the increasingly favorable climatic conditions of the early sub-Atlantic period when the bioproductivity of steppe pastures was rising (van Geel et al. 2004; Kulkova and Bokovenko 2018). These changes found their material expression in the Scythian triad, manifested through characteristic weaponry, horse tack, and animal-style art. The Early Iron Age in Tuva is categorized into three stages: the first one pertains to the earliest Scythian (or proto-Scythian) phase (9th–8th century B.C.), represented by the sites of Arzhan 1, Tunnug 1, and Arzhan 5. The second is epitomized by the site of Arzhan 2 and Chinge-Tey 1 and more generally referred to as the Aldy-Bel' culture, during which Scythian material culture is considered fully developed (7th–6th century B.C.). The third is represented by the Uyuk-Sagly culture (6th–2nd century B.C.), where we see increasing Xiongnu influence, leading to the gradual fading of Scythian material culture in Tuva (Savinov 2002, 37–57).

The most significant discoveries shedding light on the genesis of Scythian material culture were made in the Turan-Uyuk Valley, also known as the Siberian “Valley of Kings” (Figure 1): the princely barrows of Arzhan 1 (Griaznov 1980), Arzhan 2 (Chugunov, Parzinger, and Nagler 2017), Tunnug 1 (Caspari et al. 2018; Sadykov, Caspari, and Blochin 2020), and Chinge-Tey 1 (Chugunov 2011a; Chugunov and Zhogova 2019;

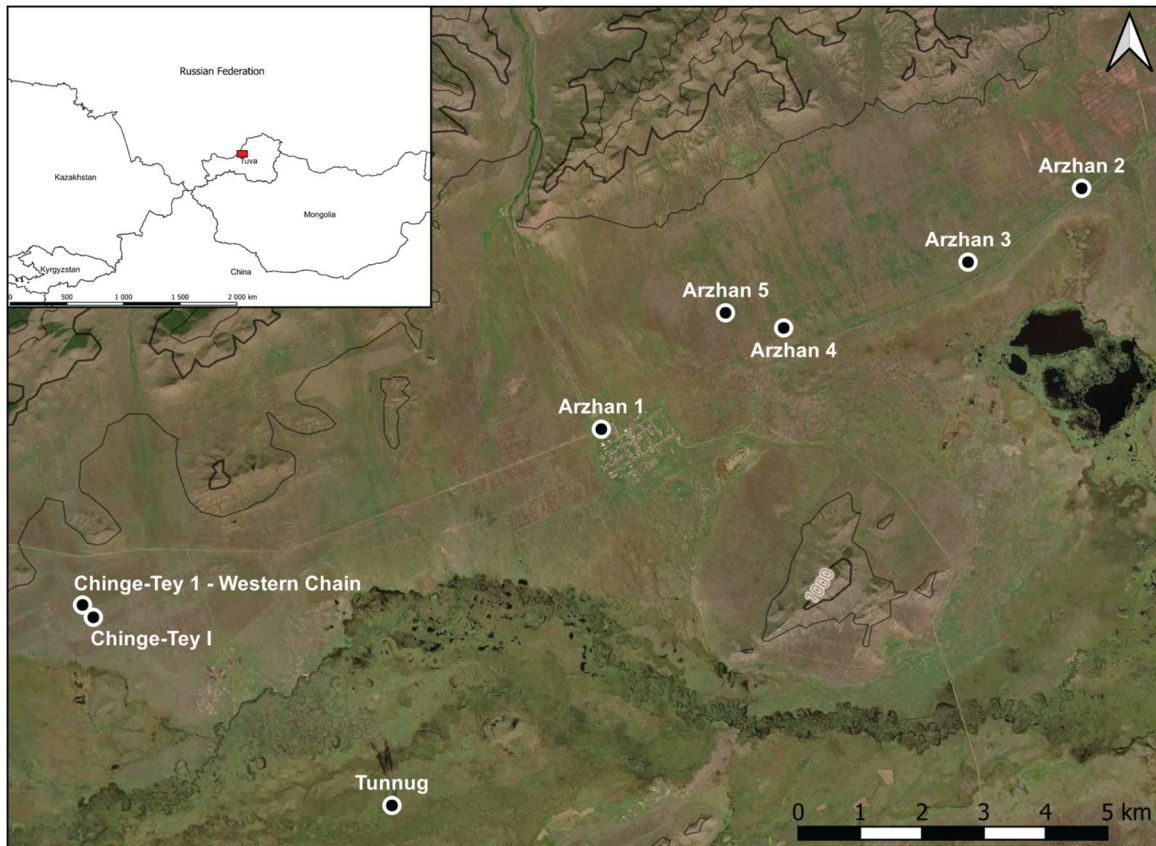
Chugunov and Sutiagina 2022) are the hallmark sites in this landscape. The inventory of Arzhan 1 (Griaznov 1980) is the primary evidence that implies central Asian origins for Scythian-type cultures. Dated to the turn from the 9th to the 8th century B.C. (Alexeev et al. 2005, 67–68), this was the first time a set of components forming the Scythian triad was identified. Another princely tomb from the same time is the Tunnug 1 mound, dated to the 9th century B.C. (Caspari et al. 2019; Sadykov, Caspari, and Blochin 2020). Similar to Arzhan 1, weapons, horse tack, and animal-style items were discovered at Tunnug 1 (Sadykov et al. 2024).

The discovery of the rich princely tomb of Arzhan 2, dating back to the end of the 7th century B.C., was vital for defining the Early Scythian Aldy-Bel' culture, which follows Arzhan 1 and Tunnug 1. The Aldy-Bel' culture is primarily characterized by mounded burials with deep burial chambers containing lavish grave goods, encompassing weapons, tools, animal-style art objects, and gold ornaments. An influx of ideas and people from the west has been proposed as a contributing factor for changes in this period, which might have led to mixing of non-local elites with the local population (Chugunov 2014a). This external influence on the formation of a new group is illustrated by the influx of successive waves of artifacts of western origin from the territory of present-day Kazakhstan (Chugunov 2001, 173–175). Subsequent cultural changes occurred in Tuva around the middle of the 6th century B.C., which led to the formation of the Uyuk-Sagly culture of the classical Scythian period (6th–2nd century B.C.). While the older Aldy-Bel' traditions were still alive in the late 7th and 6th century B.C., there were clear indications that a cultural transformation had started. The processes in this transitional period are not yet fully understood.

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**Figure 1.** Turan-Uyuk Valley in Tuva, central Asia: location of central Asia and placement of the most important kurgans.

The western chain of mounds adjacent to the princely barrow Chinge-Tey 1 offered an opportunity to study the relationship of burial structures of the Aldy-Bel' culture in direct context. One barrow in this western chain was an ideal candidate for study, as it is located just 200 m from the princely tomb of Chinge-Tey 1. Its low profile and

absence of signs of looting pits promised an opportunity to examine an undisturbed mound, which is a rare occurrence, given the widespread looting in the valley (Caspari 2020). In this article, we present the results of excavations of a mound containing burials of individuals of the tribal elite (Figure 2). The analysis of the material remains allows us to provide new



**Figure 2.** View of the western part of the Valley of the Kings in Tuva. Photo taken during the excavation of Chinge-Tey Western Chain 1, Barrow 1.

information concerning Early Iron Age society in southern Siberia during the transition between the Aldy-Bel' culture (7th–mid-6th century B.C.) and the Uyük-Sagaly culture (mid-6th–2nd century B.C.).

## Materials and Methods

The site of Chinge-Tey, located in the western part of the Turan-Uyük Valley, is extensive. The site comprises two large chains of elite barrows, forming two roughly parallel lines up to 4 km long (Figure 3), along with an additional, smaller chain of 10 kurgans in the western section. The Chinge-Tey 1 mound is the largest structure in this ensemble and dates to the 7th–6th century B.C. Excavation on this site has been ongoing since 2008. Chinge-Tey 1 was built soon after ritual activity on Arzhan 2 ceased at the end of the 7th century B.C. This spatial shift may indicate political changes among the local elites. Farther west, a number of mounds form what is known as the Western Chain, situated in the periphery of the Chinge-Tey site. One of the mounds of the Western Chain (Barrow 1) was the subject of this research, which took place in 2019 and 2021. Barrow 1 of the Western Chain and Chinge-Tey 1 have a close spatial relationship, and thus it was hypothesized that the investigation of the former may reveal a connection between the two through archaeological materials.

Barrow 1 was chosen for excavation, as it was situated directly to the northwest of the princely barrow, at a distance of about 200 m. The northwestern direction appears to have held ritual significance for the population of the Aldy-Bel' culture, as evidenced by the orientation of the deceased towards this axis (Savinov 2002, 84). The barrow was first identified by a lidar survey, which revealed a low mound (ca. 0.3 m high), barely perceptible in the high steppe grass (Vavulin et al. 2021). Magnetometry surveys were carried out in the western part of the Chinge-Tey site, including the entire area of the Western Chain (Oleszczak et al. 2020), as well as the surroundings of Chinge-Tey 1. The surveys shed light on the wider landscape, including a rectilinear feature to the north (see Figure 3C–D). They also confirmed the presence of a circular, cut feature around Barrow 1 (Figure 4). The latter anomaly was most clearly visible in the western part of the barrow, as were small mounds of spoil heap from a looting pit cut into the central chamber. The eastern part of the barrow, as well as other features (such as graves 2–4) uncovered during the subsequent excavations, were not discernible in the geophysical survey results (Oleszczak et al. 2020, 346–347, figs. 3, 5).

The excavation was conducted using a single-context recording system. Documentation was augmented by three-dimensional photogrammetric modeling of the entire feature and each individual burial chamber. The barrow was divided by two main sections into four sectors (B-A-D and E-A-C) (Figure 5). First, the vegetation and topsoil layer were removed, and then the first layer of the mound was excavated to a depth of ca. 0.3 m from the ground level. Graves 1 and 2 (Figure 6, 7), and the ditch surrounding the burial mound, were discovered after cleaning the surface. After the removal of another mound deposit, the features mentioned above became more visible. The northern half of the barrow was excavated in 2019 and the rest in 2021. While most sections were recorded in the field, due to restrictions and the nature of the excavated features, section lines were reconstructed on several occasions post-excavation.

This was achieved by the integration of three-dimensionally recorded plans of individual deposits. This approach was necessitated by the layers of stone and timber logs present within the grave cuts, which could not be feasibly sectioned. Every cleaned deposit was documented photogrammetrically to produce 3D models of the excavated areas by means of a structure-from-motion approach. All documentation was referenced in the coordinate system created for the site. After each stage of excavation, every excavation unit was documented with an UAV (Mavic Pro) and digital photography. From these sets of photographs, 3D models, elevation models, and orthophotographs of every unit were generated using Quantum GIS. Feature drawings were created in Quantum GIS using data from the 3D models. All artifacts found during excavations (animal bones, ceramic fragments, iron, bronze, bone, and stone items), as well as wood, soil, and bone samples taken for analysis, were recorded using GPS in the coordinate system adopted for the excavation.

## The Results

### Architectural features of the mound construction

The mound was initially circular with an external diameter of 24 m and a low height (ca. 0.3–0.4 m). This was partially caused by ploughing in Soviet times (particularly the 1950s and 1960s). The central mound was surrounded by a circular ditch (see Figures 4, 5), which served the dual purpose of delineating the sacral space and providing material to form the mound (the earth from the ditch was piled up in the center to create the mound). The ditch measured 4 m wide and ca. 1.5 m deep with an external diameter of 24 m. The feature was open from the east, forming a 3 m wide entrance. While entrances to the sacral spaces are a characteristic feature of Scythian burial rituals, the lack of a corresponding passage on the opposite side is unusual.

### Surface features and peripheral structures

Two small (0.51 × 0.39 m, depth 0.04 m; 0.43 × 0.39 m, depth 0.09 m) oval pits with similar dark fill were located inside the ditch (see Figure 4). Their presence and location in the northern part of the barrow might be linked to funerary rituals. Post-funerary ritual activities in the northern periphery are a frequent occurrence in Early Iron Age burial sites in Tuva. The ditch had a relatively shallow profile with a regular flat bottom (see Figure 5). It was filled with two deposits. The inner (and lower from a stratigraphic point of view; see Figure 5, profile B-A and profile A-D) comprised light grey-blue silt, which produced only a handful of finds. However, a near-complete upturned ceramic vessel was found within it near the inner edge of the ditch (Figure 8A). Its form is unusual, featuring a spherical belly and short neck decorated with diagonally corrugated molding beneath the rim. Under the molding, a surrounding “pearl” ornament (*zhemchuzhnik*) is situated. It is unclear if the vessel had a flat or round bottom, since it was destroyed by modern agricultural activity. The outer (upper) fill comprised dark clayey sand with diffused boundaries. It produced a number of finds, mostly animal bones (56) and pottery fragments (23). Cattle bones dominated in the faunal material: out of 56 animal bones found, 22 were assigned a species, of which 14 bones belonged to cattle. Fragmented cattle limb

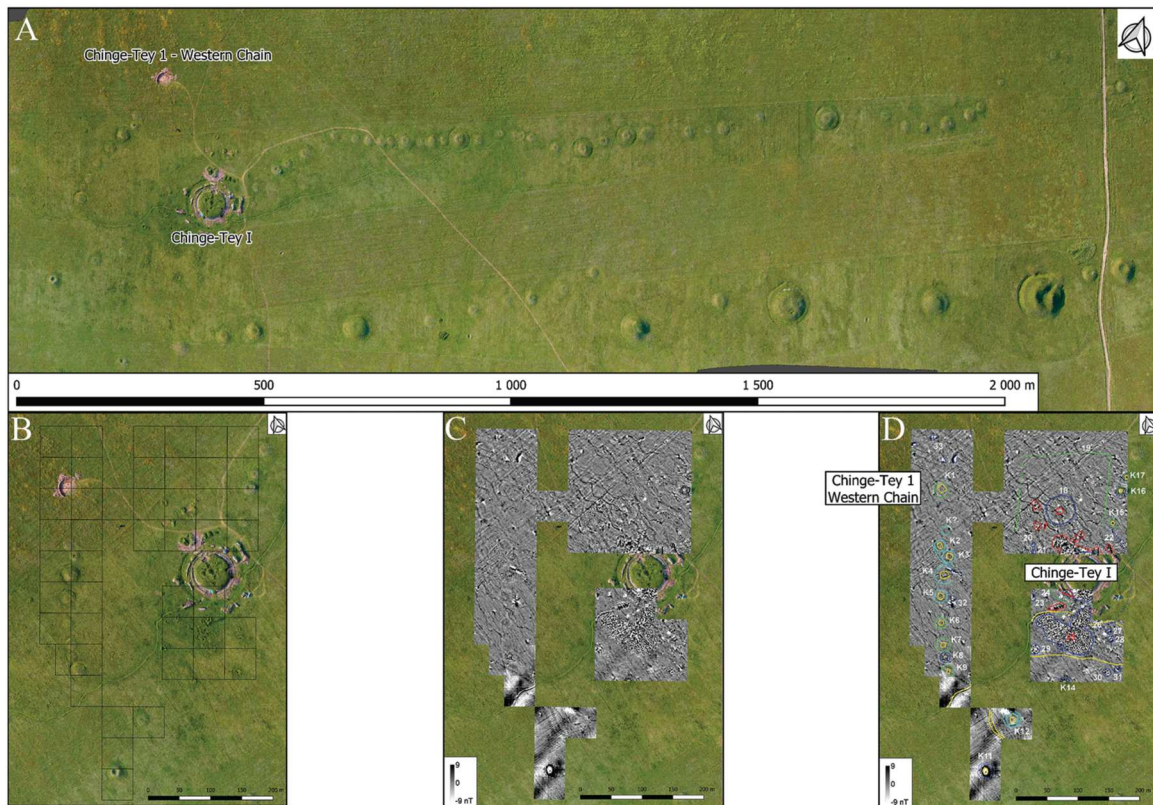


Figure 3. Chinge-Tey kurgan cemetery and the results of the magnetometer survey (Oleszczak et al. 2020).

bones were spread across the fill but seem to have come from a single individual. Osteological material also included canid lower limb bones (tibia, fibula, calcaneus, astragalus,

metatarsals, and phalanges of one individual), equid metapodium, and tarsometatarsus of the great bustard (*Otis tarda*). Pottery fragments derived mostly (perhaps solely) from a

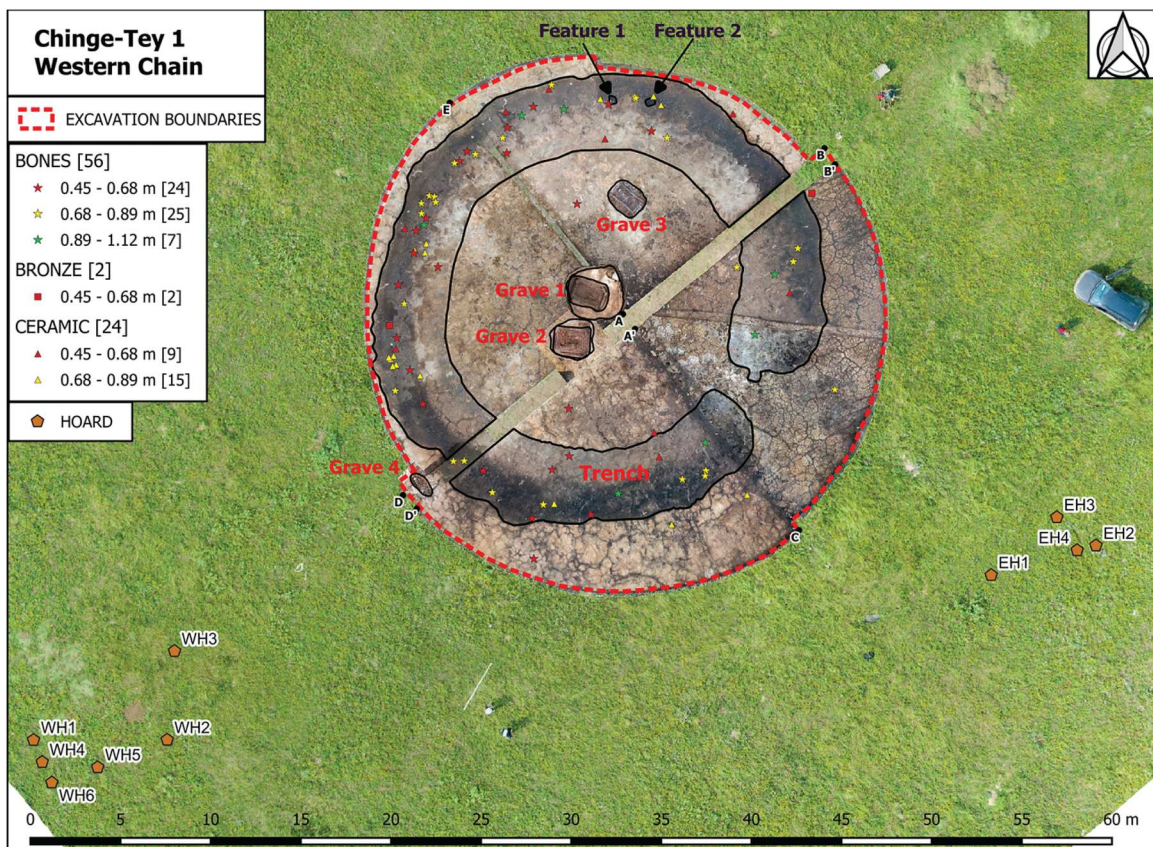
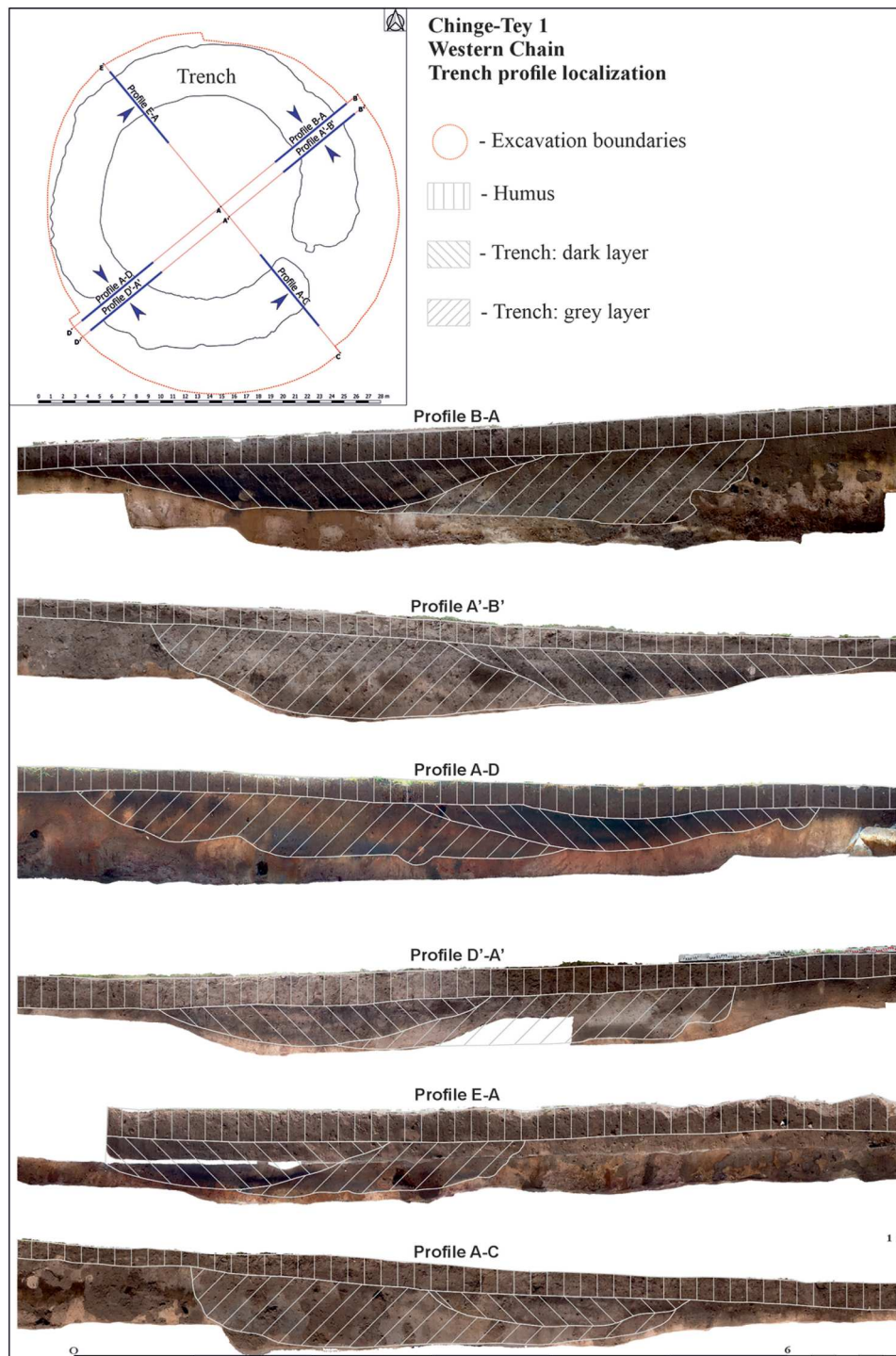


Figure 4. Chinge-Tey Western Chain, Barrow 1. Plan view showing the location of the trench surrounding the central sacred area of the tomb and four graves, distribution of the artifacts in the ditch, and hoards in the vicinity of Barrow 1 (WH = western hoard; EH = eastern hoard).



**Figure 5.** Chinge-Tey Western Chain, Barrow 1, profiles of the barrow.

vessel of spherical shape, decorated with parallel grooves (Figure 8D). There was no practice of placing pottery in burials of the Aldy-Bel' culture; it is therefore difficult to find proper comparative pieces. The excavation of settlements and seasonal camp sites from this period has just started (cf. Zhogova et al. 2023), and therefore few ceramic forms are known. The closest analogies to the excavated vessels can currently be found in neighboring Khakassia among items of the Tagar culture. Vessels decorated with parallel grooves in the upper part occur in the Minusinsk Basin in the Podgornovo phase (Early Scythian period) (Mandelsh-tam 1992, fig. 89:10, 11).

The perimeter ditch appears to have been filled as a result of natural sedimentation rather than intentional backfilling.

Heavy rains regularly occur in the Turan-Uyuk Valley, often more than once a week in the summer, and it was during one such downpour during the excavation that exposed pits and ditches were filled with 0.03–0.04 m of grey sediment. The lower greyish fill is, therefore, likely to have formed with the soil washed from the relatively fresh mound. The infilling process may have been largely completed within several years. The later, darker (upper and outer) fill seems to have been deposited more gradually by slowly decaying organic matter in a depression formed by a partially filled ditch, presumably after the ritual activities associated with the barrow ceased.

The inner space dedicated to burials measured 16.2–16.5 m in diameter. It comprised three burial chambers



**Figure 6.** Chinge-Tey Western Chain, Barrow 1, photos of graves 1–4.

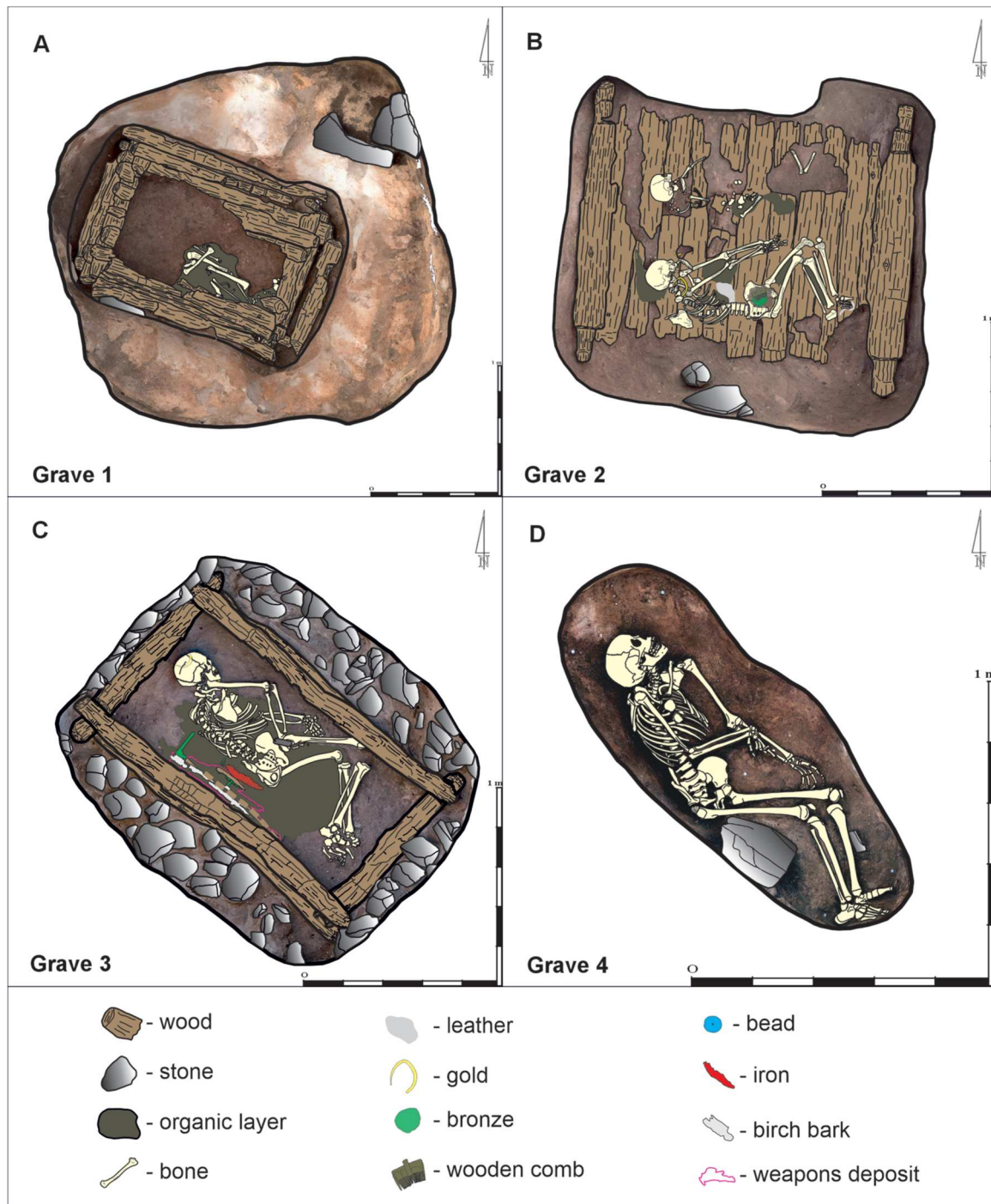
inside the barrow; a fourth burial of a child was located outside the surrounding ditch. Despite the fragmentary nature of the stratigraphic relationship between the burials, a general sequence of the site's use can be reconstructed. Only the central burial (grave 1) was entirely covered by the mound and thus predated its formation, while the other two burial chambers (graves 2 and 3) were dug into a mound that was already in place. The burial of a child (grave 4) was cut into the upper fill of the surrounding ditch, thus post-dating it.

At some point in antiquity (before grave 2 was dug), the central chamber of grave 1 was looted. It is possible that the act was connected with the intentional profanation of the corpse, because skeleton parts were scattered and the skull was missing. Soon after, or perhaps at the same time, the burial chamber of grave 2 was excavated through the

upcast from the robber trench. Grave 3, located ca. 6 m northwest of the central chamber, was dug through the existing mound just as grave 2 was, but there is no further stratigraphic data to determine its relationship with the latter. Radiocarbon dating and typological analysis of the finds from the grave inventories indicate that all three burials were probably formed within a relatively short time. The scattered bones from grave 1 suggest that the body had already decomposed by the time it was looted, indicating that at least 10–20 years had passed between the burials in grave 1 and 2 (and possibly 3).

#### **Grave 1**

Among four excavated graves (see [Figures 6, 7](#)), three (graves 1–3) had rich grave chambers located within the

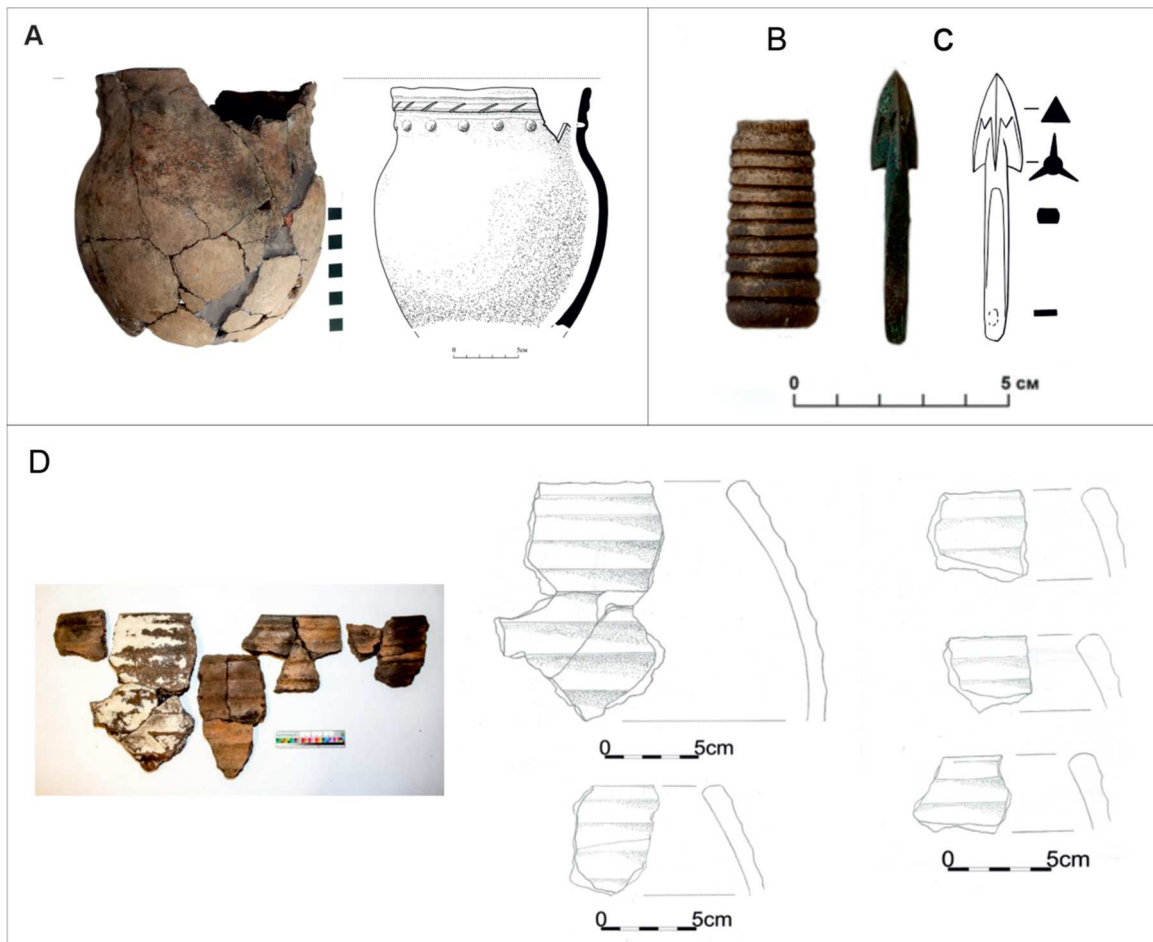


**Figure 7.** Chinge-Tey Western Chain, Barrow 1, graves 1–4 in plan after excavation of the chamber fill.

ditch enclosure surrounding the barrow. Grave 4 was situated outside the ditch and was devoid of burial goods. The central burial (grave 1) was looted in antiquity. The sub-rectangular robber trench measured  $2.8 \times 3$  m and was cut into a smaller rectangular grave chamber measuring  $2.3 \times 1.55$  m. The grave was 1.28 m deep (measured from the level of the prehistoric ground). In the upper part of the grave pit, there were stones and scattered bones thrown out of the grave during the looting. The ceiling of the corner-notched log chamber was destroyed, but the walls were well preserved. They were made of solid larch logs laid in four layers. A skeleton of an adult male individual was preserved fragmentarily within; as mentioned before, bones were scattered, and the skull was missing. Only two artifacts missed by the looters

were found. One of them was a tanged trilobate (i.e., three-bladed) barbed arrowhead (Figure 8C). The other was an antler sleeve handle with transverse surrounding notches belonging to an undefined tool (Figure 8B). The preserved fragment, measuring approximately 4.5 cm long and 2–1.5 cm wide, was recorded in the basal fill of the robber cut. Its initial location within the grave is impossible to reconstruct. Similar bone sleeves were recorded at the Chinge-Tey 1 barrow mound in graves 5 and 7. One of them (from grave 7), discovered in situ, constituted a whip handle (Chugunov 2019, figs. 14, 16). Some items of similar shape were published as needle cases (Savieliov et al. 1981; Molodin and Borodovskiy 1989; Borodovskiy 1997, 49). However, needles have never been found inside such bone sleeves. It is possible





**Figure 8.** A) Ceramic vessel found within the grey layer of the ditch; B–C) grave 1 contents, B) bone and C) bronze; and, D) pieces of the ceramic vessel found within the dark layer of the ditch.

that the bone handle recovered from grave 1 was a whip handle of a type similar to that found in grave 7 of Chinge-Tey 1.

### Grave 2

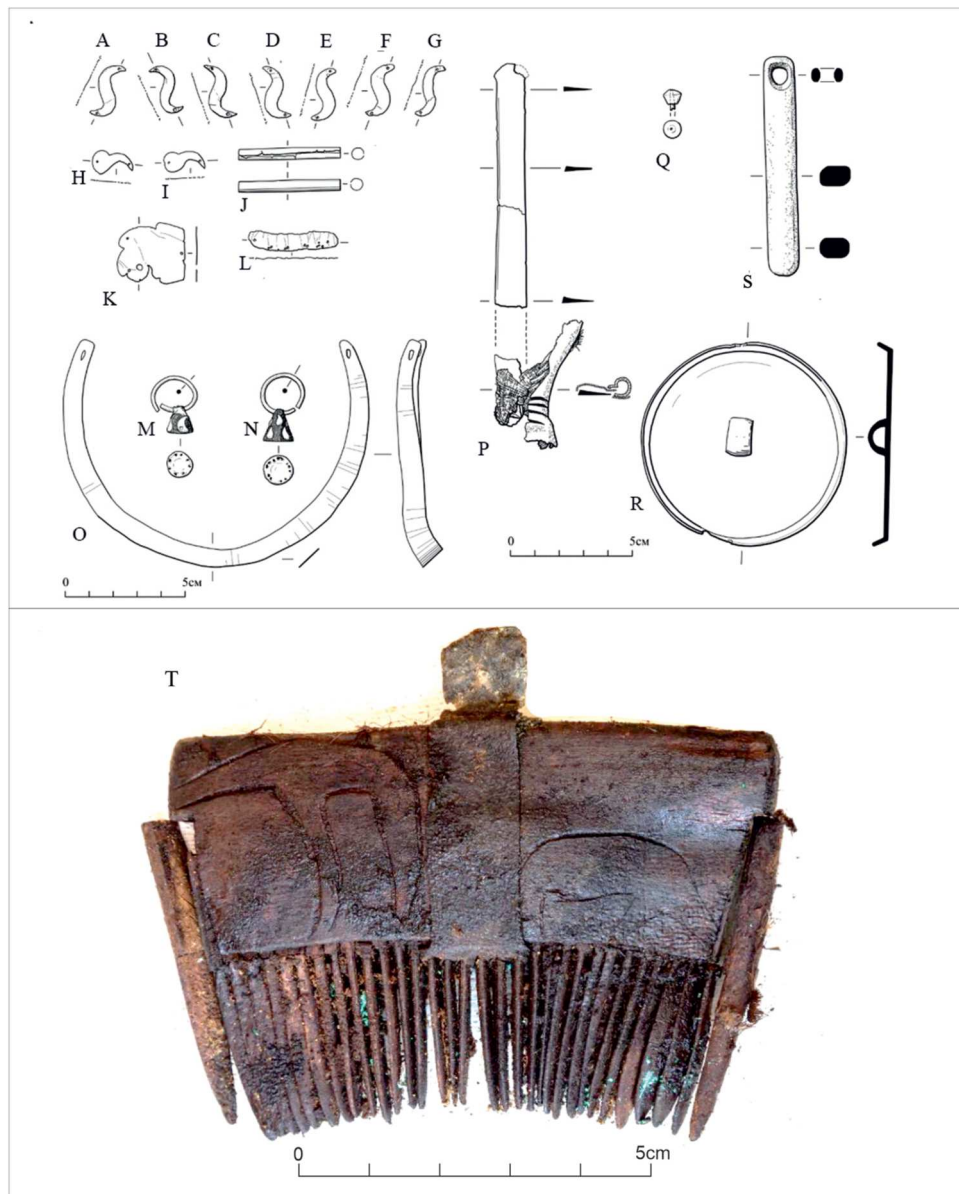
Grave 2 produced the remains of an adult female buried with a child. A specific feature of this grave was the occurrence of three layers of larch logs placed on top of the notched log chamber. Log layers covering grave chambers occur in Scythian-type cultures in, e.g. princely graves in Pazyryk (Altai) (Rudenko 1949; Griaznov 1992, tables 60:2, 60:7) or Kosh-Pey in the Turan-Uyuk Valley (Semenov 1999); however, grave 2 is the only such example in the Early Scythian Tuva. Each layer consisted of seven–nine logs placed longitudinally within the grave cut, with the bottom layer laid directly on the grave chamber ceiling. The chamber itself was made of solid notched larch logs placed in four layers. On the bottom of the chamber was a wooden floor made of planks. It is a unique and interesting detail of the grave architecture. Preserved grave floors occur very rarely, and if they do, planks are instead laid longitudinally. Such examples have been observed in graves of the Early Scythian Aldy-Bel' culture, e.g. Arzhan 2 (Chugunov, Parzinger, and Nagler 2017, fig. 37), and the Uyuk-Sagly culture, e.g. Sagly-Bazhi (Grach 1980, fig. 21). The burial chamber measured  $2.58 \times 1.78$  m with a depth of 1.4 m. The floor of grave 2 was probably initially covered with some kind of a mat (a small amount of organic substance was recorded on

the planks). Two bodies were lying on the floor: an adult female more than 50 years old and a 2–3 year old child.

The female body was laid on its left side with the head oriented to the west, bent legs, and straight arms in front of the torso. The child's skeleton was damaged by rodents, but the undisturbed part of the skeleton implies that it was placed in the same way, with its back to the woman. No artifacts were found near the child's skeleton, but the woman was buried with a rich inventory consisting of golden ornaments located around the head, such as earrings, golden plaques (appliques) originally sewn onto a head covering or temple band, a pectoral necklace, and glass beads. Near the pelvis and hips of the woman were a whetstone, an iron knife, and hygiene items placed in a leather pouch—a bronze mirror and a wooden decorated comb connected with a leather thong.

Some ornaments found at the female's head once adorned a cap or headband. They consisted of seven gold S-shaped plaques (Figure 9A–G), two gold bird-shaped plaques, and turquoise beads (Figure 9H–I). Nearby, two more golden plaques (Figure 9K–L) and a small golden tube (Figure 9J) were also recorded. There were also two conical earrings decorated with inlays (Figure 9M–N) of a typically Early Scythian form (cf. artifacts from Arzhan 2; Chugunov, Parzinger, and Nagler 2017, fig. 72:1). Under the chin of the deceased woman was a sickle-shaped gold pectoral (Figure 9O). Such artifacts are particularly important for interpreting the social status of the deceased (see discussion below).

The set of hygiene items, discovered in the leather pouch, is typical of a female grave inventory and consisted of: a



**Figure 9.** Grave 2 grave goods: A–O) gold; P) organic materials; Q) glass and iron; R) bronze; S) stone; and, T) wooden comb.

wooden comb (Figure 9T), a bronze mirror (Figure 9R), and an iron knife. Next to the knife was an asymmetrical two-cone glass bead with an iron shaft (Figure 9Q). This was a handle of an awl typical of Aldy-Bel' culture forms. The wooden comb is adorned with zoomorphic ornamentation crossing from one side to the other. The comb is composed of three wooden plates, of which the middle is fitted with 33 tines for brushing. Two tines located on the edges are significantly more solid, and they could have been extendable, as in the case of comparable finds from Xinjiang (Zhogova 2014, 125). The comb found in grave 2 matches type II in the typology of composite combs created by N. A. Zhogova (Zhogova 2014, 125). Combs of a similar construction were also discovered in Arzhan 2 (Chugunov, Parzinger, and Nagler 2017, tables 89:6, 93:4) and the Chinge-Tey 1 (Chugunov 2010, fig. 87) kurgans.

A copper-alloy mirror with a raised edge and central loop handle was attached to the comb with a leather thong (see Figure 9R). Such items are the most typical elements of Early Scythian grave inventories. This type of mirror occurs at other sites in Tuva, e.g. Den-Terek (Mannay-Ool 1970, fig. 7:9). It is also worth mentioning similar finds from other,

more remote regions of the Scythian culture such as Altai (Zadnieprovskiy 1992, fig. 61:24), southern Kazakhstan (Tagisken, barrow 66; after Zadnieprovskiy 1992, fig. 64:36), eastern Europe, or the northern Caucasus (Makhortykh 2016, figs. 1, 2:28). Mannay-Ool assigns them to phase I of the Uyuk culture development (according to his periodization, which is contemporary with the Aldy-Bel' culture), and as such they are dated to the 7th–6th century B.C. (Mannay-Ool 1970, 78). Such artifacts appear in the inventories of other Scythian-type cultures in the 7th and beginning of the 6th century B.C. (Makhortykh 2016, 118). Mirrors with a rim and a central loop-handle are characteristic of the Early Scythian period in Tuva, while inventories of the later Uyuk-Sagly culture contain specimens with a lateral handle (Chugunov 2022, 131).

The backfill of grave 2 produced an *ex situ* whetstone with a hole for slinging (Figure 9S). Its precise original location in the grave is unknown, but typically such artifacts were found in the vicinity of the deceased person's hips. Whetstones with holes for slinging are typical elements of grave inventories, and they often occur together with weaponry. Most commonly, they occur in male graves. They were sometimes

thought to have magical meanings. M. P. Gryaznov considered them to be amulets (Griaznov 1961, 142), while other researchers saw them as attributes of a god of storms and sky (Burghardt 2010, 135). M. H. Mannay-Ool, describing the whetstones from the Scythian sites in Tuva, also suggested their possible magical function (Mannay-Ool 1970, 59). A symbolic interpretation is supported by the fact that, very often, whetstones do not bear usewear traces, while at the same time, the holes for slinging have visible traces of long-lasting use (Griaznov 1961, 142). According to some researchers, whetstones are indicators of graves belonging to a particular social group which consisted mostly of warriors (Burghardt 2010, 135). Such items occur across the entire area occupied by Scythian-type cultures. In eastern Europe, they occur in the Late Bronze Age, but their popularity significantly grows in the Early Iron Age in connection with the emergence of nomadic groups of eastern origin. Rectangular whetstones dominate in the Scythian culture (Burghardt 2010, 133), similar to the finds from Chinge-Tey (another whetstone was also a part of the grave 3 inventory; see below).

### Grave 3

The excavation of grave 3 resulted in the discovery of an unlooted burial containing the remains of a young male accompanied by a set of weaponry. The grave cut, measuring  $1.91 \times 1.58$  m and 1.42 m deep, comprised a notched log chamber under a wooden log ceiling made of eight logs placed longitudinally, covered in turn by a layer of rocks. The chamber was constructed out of larch logs laid in four layers, creating sloping walls. The wooden structure was remarkably well preserved. It contained the remains of a young, approximately 20–25 year old male. The burial fully matched the typical Aldy-Bel' rite—the young man was laid on the wooden notched log floor on his left side with his head pointing northwest. The male was interred with a complete set of weapons (including preserved wooden arrow shafts, a shaft-hole axe, fragments of a leather quiver, and a belt), tools (a whetstone and a knife), and gold ornaments (a pectoral, a bead, and a spiral hair ornament) (Figure 10). Importantly, the artifacts are dated to the 6th century B.C. (confirmed by radiocarbon dates), including objects typical of the transition period in Tuva between the Early Scythian and Scythian periods (Oleszczak and Chugunov 2020).

The weaponry was attached to a sumptuous belt with well-preserved, artistically decorated fittings (see Figure 10B–D). Ornamented belts with metal fittings at the overhanging end are a characteristic attribute of Aldy-Bel' material culture (Chugunov 2016). However, in the excavated example, the belt has a trapezoidal (see Figure 10C), not a horseshoe-shaped, fastening buckle, which is characteristic of the classic Aldy-Bel' culture of the 7th century B.C. Research on the morphological development of artifacts shows that the appearance of the horseshoe-shaped fittings in Tuva in the first half or even in the middle of the 6th century B.C. developed under western influence (Chugunov 2016, 353–356, fig. 176).

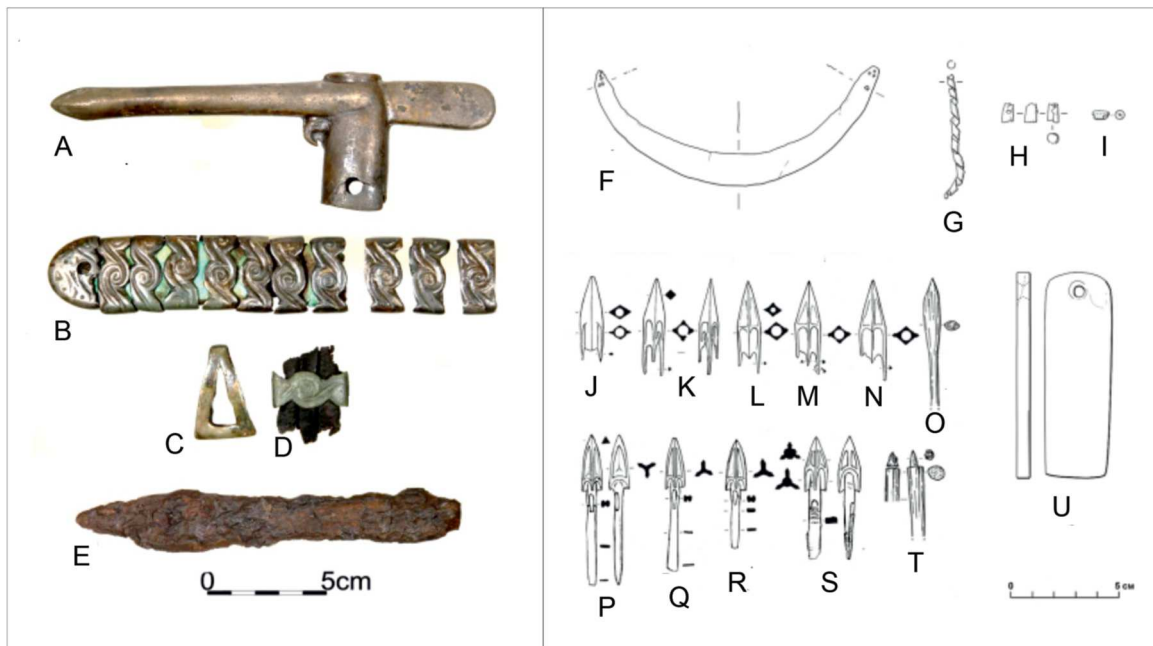
The excavated quiver contained preserved remains of 11 arrows, one of which had no arrowhead—it was a sharpened shaft with a widened end (see Figure 10O)—and in one case, the tip was missing (see Figure 10T). The remaining arrows

were tipped with four socketed four-sided arrowheads with arched-shape cavities at the blades (see Figure 10K–N), three tanged trilobate bladed stemmed arrowheads (see Figure 10P–R), one socketed four-sided cross-section bilobate arrowhead with the shaft piece preserved (see Figure 10J), and one three-bladed arrowhead with a tang which occupies half the length of the head: this had paired notches on its edges, forming a vertical line from the base to the tip in the middle of the blade and blades that create an arched base for the head from the base of the tang (see Figure 10S).

The excavated arrows are typical of Aldy-Bel' culture; similar specimens are known from the latest complexes of Arzhan 2 (Chugunov 2011b; Chugunov, Parzinger, and Nagler 2017). They are also analogical to the arrows found in the quivers of the warrior's grave discovered at Chinge-Tey 1 (Chugunov 2011a). The ends of the shafts were colored red. It helped to choose a particular arrow from the quiver—the color at the end of the shaft allowed for the quick identification of an arrow with a specific type of arrowhead from the quiver. It would also have helped to find a lost arrow in the high steppe grass.

One of the typical elements of a Scythian warrior's weaponry found in grave 3 was a shaft-hole axe deposited behind the man's back (see Figure 10A). This is socketed with a round cross-section spike and rounded blunt end (flat oval cross-section). The central section is ornamented with a stylized head of a predatory bird. The socket is relatively short and flattened at the top, with a hole for a rivet at the base. The shaft contained a preserved upper part of the wooden haft affixed with a wooden dowel. Shaft-hole socketed axes with a predatory bird's head occur on Early Scythian sites in southern Siberia. Geographically and morphologically, the closest analogy comes from the Arzhan 2 kurgan. A similar discovery was also made at Ust'-Khadynnyg, an Aldy-Bel' culture site in Tuva (Vinogradov 1976, 194). The only discernible difference lies in the treatment of the blunt end, which appears roundish in cross-section, unlike the flat oval shape of the axe's blunt from Chinge-Tey. Similar shaft-hole axes are also known from Khakassia (Podgornovskoye Oziero), eastern Kazakhstan (Akchiy) (Trifonov and Bokovenko 1998, 150), and Altai (Elikmonar, Gorbunowo) (Kocheev 2001, 111). Similar forms, decorated with a bird's head between the spike and the blunt end, also occur in Uygarak in southern Kazakhstan (Vishnevskaya 1973, table XX:1) and in eastern Europe, e.g. in Tatarstan at Ananinskiy Mogil'nik (Kuzminykh 1983, table LVI:10, 12). Such artifacts are dated to the 8th–7th century B.C. (Vinogradov 1976, 194; Zavitukhina 1983, 83, figs. 238–240; Trifonov and Bokovenko 1998, 150). It is, however, worth noticing that both mentioned analogies from Tuva (Ust'-Khadynnyg and Arzhan 2) occurred in the burials dated to the 7th century B.C., with the morphologically-closest analogy from Arzhan 2, dated to the second half of the 7th century B.C. As a hand-to-hand combat weapon, shaft-hole axes occurred in the Early Scythian period and became a popular weapon, very typical for the Scythian culture.

The socketed shaft-hole axe found in grave 3 of the Chinge-Tey 1, Western Chain, Barrow 1 combines features indicating a later chronology within the Aldy-Bel' culture (7th–6th century B.C.). In Tuva, socketed shaft-hole axes appear in the inventory of mound Arzhan 1 (Griaznov 1980, fig. 11). Its form persists until the end of the Early



**Figure 10.** Grave 3 grave goods: A) bronze (axe); B–C) belt fragments (lead, bronze); D) iron (knife), F–I) gold; J–N) bronze; O) wood; P–S) bronze; T) wood; and U) stone.

Scythian period, demonstrating a similar distribution in various regions of the Scythian-Siberian world. Notably, in Altai, socketed shaft-hole axes gradually gave way to sleeveless warpicks by the 6th century B.C., marking the onset of the classic Scythian period (Kocheev 2001, 111).

#### Grave 4

Grave 4 was cut into the outer edge of the perimeter ditch of Barrow 1. It was shallow, reaching 0.43 m below ground surface, and measured 0.75 × 0.43 m. The inhumation comprised the remains of a ca. 12 year old individual laid slightly flexed with the head pointing northwest, the left arm extended, and the right arm bent at the elbow. The burial was partly surrounded by a stone construction behind the back and around the legs. Child burials located on the edges of mounds are a typical feature of the Early Scythian culture in Tuva (Savinov 2002, 84). It seems that the individual in question was expelled from the ritual sacred space of the mound. In this context, the imposition of eight large stones on the upper part of the body, mainly on the chest area of the deceased, may also have some ritual significance.

#### Bronze hoards

A metal detector survey was conducted in the immediate vicinity of Barrow 1, leading to the unearthing of 10 bronze artifacts. The chronology of the discovered artifacts aligns with the grave goods excavated in graves 1–3. One particularly interesting find was a bronze shaft-hole axe, almost identical to one found in grave 3. The metal-detected artifacts were found in two distinct clusters, likely remnants of separate deposits that were later scattered by ploughing.

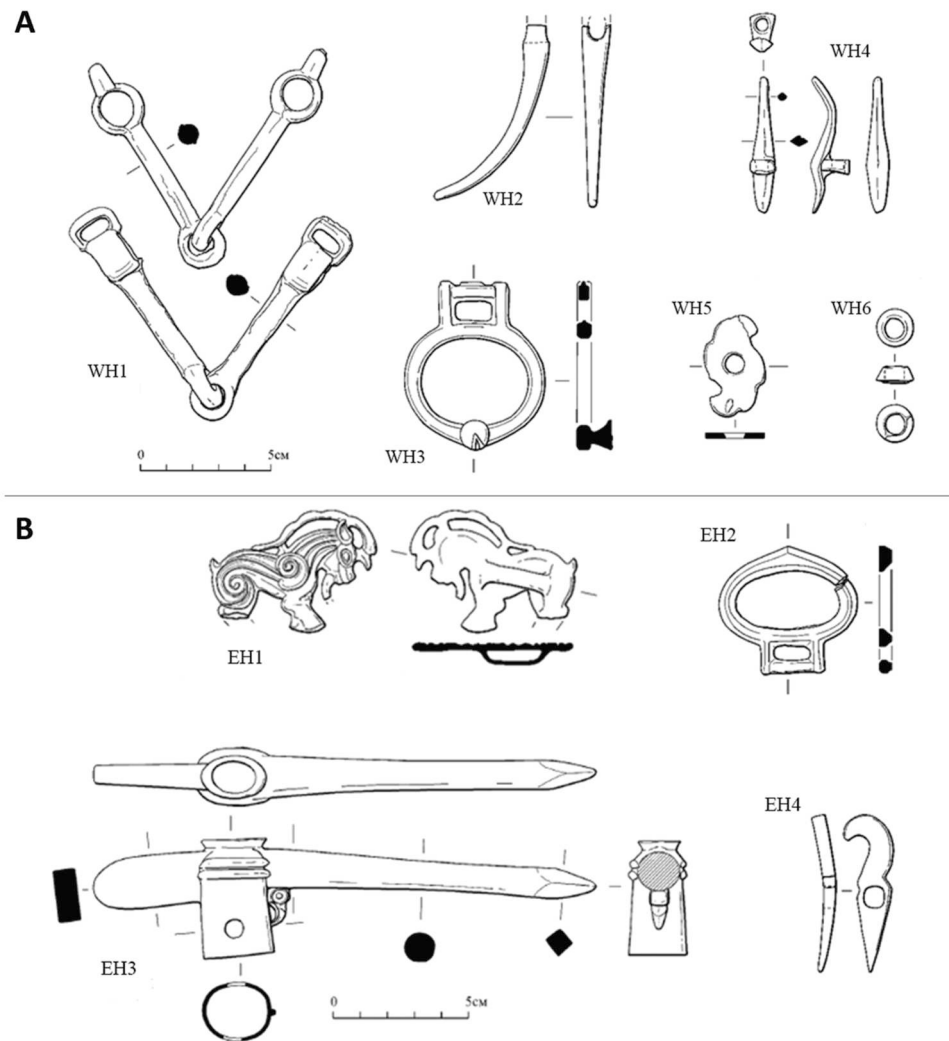
One deposit found to the southwest of Barrow 1 (Western Hoard—WH) contained bridle bits with sockets for the cheekpiece (*psalium*), positioned perpendicular to rectangular ends (Figure 11, WH1), a fragment of a *psalium* (Figure

11, WH2), a sub-spring buckle with a pin in the form of a horse hoof (Figure 11, WH3), a part of horse tack for threading straps (*proniz*) in the shape of a curved plate with a rectangular loop (Figure 11, WH4), an S-shaped plate (Figure 11, WH5), and a harness ring—a round object, part of horse tack used for pulling straps, known as *vorvorka* (Figure 11, WH6).

The other deposit, found east of Barrow 1 (Eastern Hoard—EH) contained a flat mount for a bridle (Figure 11, EH4) and a sub-spring block (Figure 11, EH2), as well as the aforementioned socketed shaft-hole axe (Figure 11, EH3) and an ornamental plaque depicting a stylized figure of a goat (Figure 11, EH1). This last artifact has virtually no close analogies in the Scythian world; one similar object is only known from the Yanglang culture in China (Shulga and Shulga 2020, fig. 6:15) but is dated to a period nearly three centuries later (3rd century B.C.).

#### Chronology

The site's chronology was determined using AMS radiocarbon dating (Figure 12, Table 1), which supplemented archaeological methods based on the typology of artifacts, in particular arrowheads, belt sets, mirrors, and shaft-hole axes, which serve as reliable indicators for dating. Samples for radiocarbon dating were taken from the bones of all five deceased individuals buried in Barrow 1. The radiocarbon probability ranges fall within the Hallstatt plateau period and, consequently, are quite wide, covering the period from the 8th–mid-6th century B.C. Despite such a wide range, <sup>14</sup>C analysis produced some important results allowing the establishment of a specific terminus ante quem, which falls in the middle of the 6th century B.C. Most samples indicate that a later period is highly unlikely. With a probability of 95.4%, individuals whose bones were analyzed did not die later than 537 B.C. (grave 1), 540 B.C. (grave 3), and 546 B.C. (grave 4). There is also a 92.9% probability that the adult female from grave 2 died no later than 534 B.C. Only in the

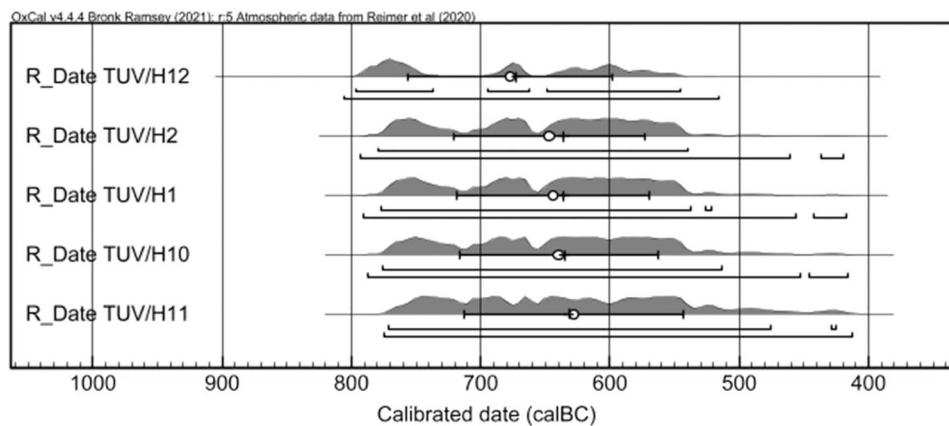


**Figure 11.** Western hoard (WH) and eastern hoard (EH) from the vicinity of Barrow 1; bronze.

case of the child from grave 2, the probability range of 94.5% covers the 5th century B.C., but these results could have been affected by the poor condition of the infant’s bones. In light of these findings, it can be assumed that Barrow 1 could not have been constructed later than the mid-6th century B.C.

It is much more difficult to determine the lower chronological limit for the barrow’s construction based on radiocarbon dating. Although the highest probability of the burials falls in the period between the second half of the 7th century

B.C. and the beginning of the 6th century B.C., the possibility of them dating back even to the 8th century B.C. is notable. This difficulty, typical for radiocarbon dating of remains from the early Iron Age, can be overcome by relying on dating artifacts in relation to analogies from other sites. The discovery of a single arrowhead (missed by robbers) in grave 1, as well as nine arrowheads in grave 3, indicates the use of arrows characteristic of the late stage of the Aldy-Bel’ culture, which allows for dating the complex to the turn of the 7th



**Figure 12.** Results of radiocarbon analyses.

**Table 1.** Radiocarbon data and chronology of the Chinge-Tey Western Chain, Barrow 1, Tuva Republic, Russia (all samples were extracted from human bones).

Lab code	Burial	<sup>14</sup> C dating (B.P.)	68.2% probability range (B.C.)	95.4% probability range (B.C.)
Ua-65156	1	2501 ± 30	776–551	778–522
Ua-65157	3	2506 ± 30	768–553	780–540
Ua-71103	2, skeleton 1	2494 ± 30	758–547	776–515
Ua-71104	2, skeleton 2	2479 ± 30	753–543	772–429
Ua-71105	4	2539 ± 30	788–590	797–649

and 6th centuries B.C. and the first half of the 6th century B.C. The trapezoidal buckle fastening (instead of a horseshoe-shaped buckle) is characteristic of sites in Tuva dated to the mid-6th century B.C. Mirrors with a rim and a central loop are dated to the 7th and 6th centuries B.C. The shaft-hole axe decorated with a bird head could be dated to the second half of the 7th century B.C., and although its dating is congruent with the remaining artifacts, it can be considered a slightly archaic object in this context. In summary, in the light of both radiocarbon data and typological dating, the chronology of Barrow 1 discussed in this article can be assigned to the first half of the 6th century B.C., with the earliest possible date at the turn of the 7th and 6th centuries B.C., and the terminus ante quem in the mid-6th century B.C.

## Discussion

As evidenced by the data presented above, the Siberian Valley of the Kings is undoubtedly one of the most significant locations for the study of the earliest aspects of Scythian material culture. The valley had a supra-regional importance that extended far beyond Tuva. In the neighboring regions of southern Siberia, there are no such monumental structures from the Early Scythian period. Only in the later classical period (5th–3rd century B.C.) does one see a regional spread of monumental architecture. Later burial mounds, like Pazyryk, Tuekta, Bashadar, Berel (Altai), and Bugry (steppes of the Ob River Basin), imply the existence of regional power centers where political authority was concentrated in the hands of prominent individuals in other parts of southern Siberia at a time when monumental burial mounds were no longer constructed in Tuva. A slightly different case is the territory of Khakassia, where the princely barrow Borsuchyi Log dates back to the classical Scythian period (Parzinger 2017, 342–345), but on the other hand, Salbyk, the largest tomb from this territory, located in the Khakassian Valley of Kings, has a broad range of dates from the 8th–5th centuries B.C. (Alexeev et al. 2005, 175).

In general, three burials excavated within the barrow described in this article should be considered rich and belonging to the well-situated upper stratum of society. However, in terms of status, they diverge significantly from the princely graves from Tuva, such as those known from Arzhan 2, Chinge-Tey 1, or from the Scythian rulers' tombs in other regions of southern Siberia. Nevertheless, they can be safely interpreted as tombs of individuals who perhaps were not rulers but undoubtedly played important roles in their society. The special status of Barrow 1 is also emphasized by its location in the immediate vicinity of the princely tomb of Chinge-Tey 1, which contained, inter alia, the burial of a ruler equipped with numerous gold artifacts and a glass vessel of Middle Eastern provenance (Chugunov and Sutiagina 2022). What draws attention is the position of the mound precisely to the northwest of the ruler's tomb—

this has been interpreted as an important cardinal direction for the Aldy-Bel' culture (Savinov 2002).

Given the particular significance of Barrow 1 as the only excavated funerary monument located in the immediate vicinity of the princely mound (Chinge-Tey 1), it is also worth considering its specific characteristics in relation to other mounds of the Aldy-Bel' culture. This culture is known for its rich mounds containing numerous artifacts. This led to the hypothesis that they were associated with a group of people who played a distinct and dominant role in Early Scythian Tuva. Contemporaneously, there existed a community that descended from the Late Bronze Age Mogun-Taiga population (Chugunov 2020, 138), whose representatives were buried in much poorer tombs, often without any goods. The persistence of Mogun-Taiga traditions into the Iron Age, perhaps even into the Uyk-Sagly culture, is also supported by anthropological research (Chikisheva 2008, 135–137). Despite the relatively rich grave goods in the Aldy-Bel' mounds from sites such as Kopto (Chugunov 2005), Hut (Mongush and Dongak 2018), or Demig-Sur (Mongush and Mongush 2019), they cannot compare to Barrow 1 in terms of wealth, as represented, for instance, by the presence of golden pectorals or conical earrings adorned with inlays. On the other hand, there are few examples of burial sites outside the princely necropolis with graves comparably rich to the one discussed in this article. The Saryg Bulun site in central Tuva, for example, comprised tombs containing large quantities of weapons, including in a child's grave (of a girl), as well as ornaments and wooden arrow shafts decorated with carvings (Kilunovskaya et al. 2023). Furthermore, several examples of golden pectorals are known from the Aly-Bel' tombs (Chugunov 2014b). In summary, the graves from the Chinge-Tey Western Chain Barrow 1 mound represent some of the richest known burials of the Aldy-Bel' culture, with the closest analogies found in the graves placed beneath the mound of the princely Chinge-Tey 1 (Chugunov 2019). This highlights the elite status of individuals directly connected to the ruler's entourage.

Individuals interred in graves 1, 2, and 3 in Barrow 1 were buried with significant effort using a large number of logs. Attention should be given to the three layers of larch logs, laid on top of one another, above the grave 2 chamber. It is clear that the accumulation of wood in such quantities involved much effort, and it presented economic value as a raw material itself. All three grave chambers in Barrow 1 were made out of solid logs, expertly notched and laid in several carefully fitted layers. A further aspect indicating the high status of the deceased individuals was the abundant grave inventory. Although ancient looters had removed nearly all items from grave 1, its central position and even more solid notched log chamber than the one excavated in grave 3 indicate its high status.

The undisturbed graves 2 and 3 contained numerous everyday items of high quality and aesthetic value. In the

case of the young male (grave 3), these are the weaponry set (arrows, bow, shaft-hole axe, and quiver fragments), richly decorated belt and gold jewelry (i.e., pectoral necklace). The mature female (grave 2) was buried with a pectoral necklace, golden earrings, and a leather pouch containing a wooden decorated comb and bronze mirror. Both graves contained iron knives and whetstones. The presence of gold jewelry indicates the prestige and wealth of the deceased individuals.

Among the grave goods from grave 2, the golden pectoral sickle-shaped necklace deserves further discussion (see [Figure 9O](#)). An almost identical item was found in the nearby grave of the young warrior (grave 3, see [Figure 10F](#)). While such artifacts are known from the Early Scythian barrows in Tuva and other regions of the Scythian-Siberian world (e.g. Ob River Basin or northern China), they so far only occur in male graves ([Chugunov 2014b](#)). The only female grave with a sickle-shaped necklace has been recorded at the Ekki-Ottug site in central Tuva (Kilunovskaya and Semenov 2013, figs. 27, 32:7). Early Scythian pectoral necklaces from southern Siberia are mostly of a simple sickle-shaped form (also called moon-shaped pectoral necklaces). Most of them are not decorated, but there are a few exceptional examples richly ornamented in Scythian animal style, e.g. from Arzhan 2 ([Chugunov, Parzinger, and Nagler 2017](#), fig. 65) or Chinge-Tey 1 ([Chugunov and Sutiagina 2022](#), fig. 5). In Tuva, such artifacts are mostly characteristic of the Aldy-Bel' culture, although they occur in early Uyuk-Sagly contexts (Dogee-Baary II and Chkalovka) ([Chugunov 2014b](#)). Such pectoral necklaces have generally been thought to be associated with males: thus far, all early Scythian examples discovered in situ have been found in male graves, e.g. grave 8 of Arzhan 2, where a tin pectoral necklace was found ([Chugunov, Parzinger, and Nagler 2017](#)). These artifacts also occur in Early Scythian culture sites outside of Tuva, though less frequently. These include an example known from the steppes of the River Ob found at Bystrianka, southern Khakassia, from Transbaikal (Oloviannaya), dated to the beginning of the 6th century B.C. ([Chugunov 2014b](#)). A few others have been found in northern China ([Shulga 2010](#)), and three sickle-shaped pectoral necklaces, dated to the 8th–6th century B.C., were discovered at Yuhangmiao. Sickle-shaped pectoral necklaces are undoubtedly meaningful, and their presence in the grave inventory emphasizes the status of the deceased. This type of necklace occurs not only in rich but also in common graves, and apart from examples made of gold, there are also known artifacts made from bronze and tin. Therefore, it seems that the elite status conferred by pectoral necklaces was not confined to the material value of the item. Such artifacts were probably an attribute confirming the owner's belonging to a specific group or caste, religion or ideology, or social group. In the context of two finds from graves 2 and 3 in Barrow 1, special attention should be drawn to the first, because it is the first known example of the occurrence of the pectoral necklace in a female grave in the Early Scythian period. This uniqueness emphasizes the special position the woman buried in grave 2 must have held in her society. It also raises some intriguing questions about the social and cultural roles of women in Early Iron Age societies. It appears that women could attain positions allowing them to be members of a caste of individuals deemed worthy of being equipped with pectorals. Of course, this latter statement is somewhat

speculative ([Chugunov 2014b](#)). The patriarchal nature of this community has been previously proposed ([Tishkin and Dashkovskiy 2019](#), 75). According to some researchers, elements of burial rites also indicate prevailing patrilocality ([Surazakov 1992](#), 52–53, 55). The latter thesis seems to be confirmed by the results of isotopic studies of individuals buried in the Arzhan 2 barrow, which demonstrated the local origins of a male ruler interred in grave 5 and the non-local origins of a female buried alongside him ([Lokhov et al. 2007](#)).

Further planned studies of strontium isotopes and DNA extracted from the bones of individuals buried in the Chinge-Tey Western Chain Barrow 1 are expected to shed more light on this issue. So far, nitrogen and carbon isotope analysis ( $\delta^{13}\text{C}/\delta^{15}\text{N}$ ) has been conducted to determine the diet of the deceased buried in the barrow. Samples taken from bones found in the princely barrow of Chinge-Tey 1 were also included in the analysis. Isotopic analysis of the Chinge-Tey barrows suggest that members of the elite may have adhered to distinct dietary customs. Those interred in the Chinge-Tey barrows likely consumed lamb, mutton, and dairy, supplemented by  $\text{C}_3$  plant staples to a lesser extent. Such dietary habits align with a typical pastoral lifestyle. A broader examination of isotopic evidence reveals that while the diet of the Aldy Bel' elite may have varied in quantity rather than quality compared to tribal groups, its overall nutritional profile remained consistent ([Oleszczak et al. 2023](#)).

The child buried with the mature woman did not have any grave goods. Both deceased were placed in the chamber at the same time—there is no evidence that the grave was reopened. The child's burial in a shallow grave on the outer edge of the barrow (grave 4) constitutes a separate case. The lack of goods or a chamber implies that the individual was of low social status. Considering the presence of the child's burial in grave 2, we know that the young age itself did not preclude burial within a barrow or in a chamber construction. However, an element of the burial ritual, where children are buried on the periphery of a burial mound, is commonly found in the Early Scythian culture in Tuva ([Savinov 2002](#)).

The Chinge-Tey Western Chain Barrow 1 is a well-preserved and rich sepulchral structure through the prism of which we can observe the dynamics of change within the local Early Iron Age society. The research hypothesis assumed strict relations between the princely barrow mound (Chinge-Tey 1) and the chosen excavation target. We are referring to cultural relationships, manifested in the spatial organization of the site and the consistent chronology of the structures. It is difficult to assume a different interpretation of the construction of a burial mound in close proximity to the princely tomb of Chinge-Tey 1, which occurred at the same time. The arguments presented in this article, as well as those resulting from K. V. Chugunov's multi-year research on the Chinge-Tey 1 kurgan, indicate that neither of these funerary structures arose from a single ritual act associated with one burial but rather functioned for some time as a spatial continuity of ritual practice. This further increases the likelihood of their partially contemporary usage.

Our investigations showed that Barrow 1 of the Western Chain Chinge-Tey cemetery was constructed during the period of cultural transformation that occurred between the Early Scythian period (Aldy-Bel' culture) and the classical

Scythian period (Uyuk-Sagly culture). It bears the hallmarks of the Aldy-Bel' culture, which are evidenced particularly well by the warrior's burial (grave 3): apart from the arrangement of the deceased, this is evidenced by the location of the weapon set behind his back and the Early Scythian features of the inventory (pectoral, arrowheads with sockets, and a shaft-hole axe decorated with a bird's head). At the same time, however, we see the variety of arrowhead types typical of the transitional period, where only about half comprised tanged arrowheads, which are more typical for the classical Scythian period. Rhomboid arrowheads, which are the most characteristic form of arrowheads of the Early Scythian period, do not occur in this context. Such artifacts still appear in the Arzhan 2 burial mound (Chugunov, Parzinger, and Nagler 2017) dated to the second half of the 7th century B.C. (Alexeev et al. 2005, 86–88), while in the entire Chinge-Tey complex, both in the princely barrow Chinge-Tey 1 and Western Chain Barrow 1, there are no longer any elements of this type of weaponry. Moreover, the trapezoidal form of the belt fittings found in grave 3 also suggests a late chronological position of Barrow 1 within the Aldy-Bel' culture.

The rich female burial (grave 2) contained golden ornaments characteristic of the Early Scythian period (conical earrings inlaid with turquoise), as well as a mirror with a rim and central loop and a comb typical for this period. On the other hand, according to the presence of a sickle-shaped pectoral, the only analogous discovery in a female grave (Eki Ottug) dates to the classical Scythian period (5th–3rd century B.C.). The construction of the burial mound is also noteworthy in this case. It was built of earth, rather than stone like other burial mounds of the Aldy-Bel' culture. The abundance of stone in the area rules out the possibility that this was due to a lack of resources. The nearby monumental Chinge-Tey 1 kurgan was built using vast quantities of stones, and numerous smaller stone structures, both visible to the naked eye and identified through geomagnetic surveys, were found in its immediate vicinity. Notably, the remaining barrows from the Western Chain also took the form of earthen mounds, constructed without the use of stone, as indicated by magnetic surveys (Oleszczak et al. 2020).

An important aspect of the presented research is the chronological position of Chinge-Tey Western Chain Barrow 1. It dates to the late period of Aldy-Bel' culture, when elements of material culture characteristic of the classical Scythian period (second half of the 6th–2nd century B.C., corresponding to the Uyuk-Sagly culture) began to appear in Tuva. One of the most distinctive features of the discussed burial mound is its exclusively earthen construction, with the conspicuous absence of stone, which is highly unusual for Aldy-Bel' culture. However, such construction is typical of the subsequent Uyuk-Sagly period. This observation particularly applies to northern Tuva, where the site discussed in this article is located, whereas in the south, stone-earth mounds appear during this time (Savinov 2002, 106). A good example is the nearby Kosh-Pey burial ground, located in the same Turan-Uyuk Valley, to the east of the Arzhan 1 mound, where Uyuk-Sagly culture burial mounds are entirely earth-built, constructed without the use of stone. There are also burials here that are almost completely devoid of mounds. Moreover, some Kosh-Pey burials include wooden beam overlays above the burial chamber, analogous to those uncovered at grave 2 at Chinge-Tey Western Chain

Barrow 1. The typological characteristics of artifacts such as weapons and mirrors found at Kosh-Pey are typically Sagly-Uyuk (Semenov 1999).

There was a transformation of burial customs, likely associated with ideologies and beliefs, that caused a departure from the use of stone as a building material for tombs. In the discussed Barrow 1, the burial chambers were moreover made exclusively of wooden logs, whereas in the Early Scythian period, burials in stone boxes were ubiquitous throughout Siberia and inner Asia (e.g. Borodovskiy and Oleszczak 2016), and they also occur (alongside wooden chambers) in the princely burial mound of Chinge-Tey 1 (Chugunov 2011a). In Early Scythian Tuva emerges a pattern of development of sacral objects: separate graves were built, each with its own individual structure, and then, after some time, they were covered with a common mound of the kurgan (Chugunov 2022, 135). It can be assumed that not only did the great princely kurgans function for some time as sanctuaries but that this could also apply to smaller barrows. Finds such as burnt remains, animal bones, and ceramic fragments in the surrounding ditch of Barrow 1 seem to be traces of ritual activities.

## Conclusions

The chronological position of Barrow 1 is highly significant in the context of the cultural transformations that took place in Tuva at the end of the 7th and in the 6th century B.C. towards the transition from the Aldy-Bel' culture to the Uyuk-Sagly culture. The Chinge-Tey Western Chain Barrow 1 provides evidence of this in the mound's architecture, constructed from soil rather than stones, a layer of logs over the burial chamber, and the artifact inventory. The mound was used over an extended period of time and reused multiple times for additional burials, mirroring ritual practices established at the larger princely tombs in the valley.

The Chinge-Tey Western Chain Barrow 1 provides insights into the Early Iron Age society of southern Siberia, specifically during the transitional period between the Early Scythian period (Aldy-Bel' culture) and the classical Scythian period (Uyuk-Sagly culture). The proximity and chronological alignment of this burial mound with the princely tomb of Chinge-Tey 1 suggest a direct connection, highlighting a broader sepulchral-ritual complex. Three richly equipped graves illustrate the status of individuals who likely held significant roles in this Early Iron Age pastoralist society. The elaborate construction of these graves, the use of valuable materials, and the sophisticated craftsmanship underscore the high status of the buried individuals. Particularly noteworthy is the inclusion of both male and female individuals with prestigious grave goods. The presence of a pectoral necklace in a female grave challenges previous assumptions about gender-specific burial practices and opens a path for an exploration of the role of women in Scythian society beyond current paradigms. Radiocarbon dating and typological analysis of artifacts place the construction of the Barrow 1 monument in the first half of the 6th century B.C., aligning it with the cultural transformations of the period. The use of wood and earth for construction, instead of stone, marks a significant departure from earlier practices, potentially reflecting ideological and ritual changes within the community. Chinge-Tey Western Chain Barrow 1 enriches our knowledge of the dynamics within Early Iron Age societies in southern Siberia, providing



important data on the cultural and social shifts that characterized this transformative period.

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## Disclosure Statement

The authors report there are no competing interests to declare.

## Notes on Contributors

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