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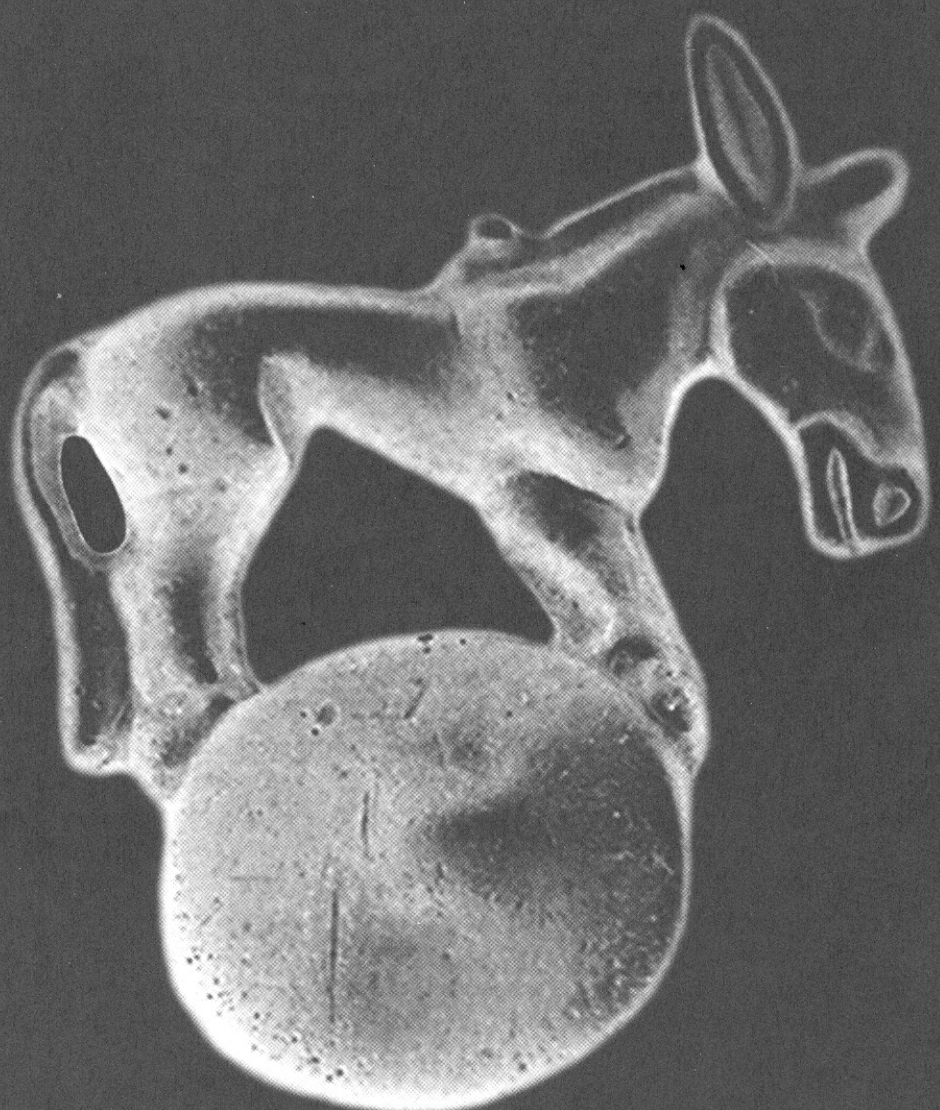

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The emergence of the Tagar culture

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Keywords: Iron Age, Scythians, Siberia, Minusinsk, Tagar culture, horse riding, barrow burial, kurgans, pyramids, mummification

Introduction

The early nomads of Eurasia, whom ancient writers called Scythians and Sakas, occupied the great Eurasian Steppe from the beginning of the first millennium BCE. The Scythian culture is well known from the excavations of numerous rich, elite barrows north of the Black Sea, but their theatre of action actually stretched from Hungary to the Great Wall of China. In the steppe zone of Central Asia a number of cultures of the Scythian-Saka type appeared at this period, for example, the Aldy-Bel', Maiemir, Tasmola and Tagar cultures. The Tagar culture, which succeeded the Karasuk culture in southern Siberia (Legrand, above) belongs to the earliest stages of the Scythian group, and is dated to the ninth-eighth century BCE (Sementsov *et al.* 1998; Vasiliev *et al.* 2002; Bokovenko *et al.* 2002).

This paper studies the sequence of the Tagar culture in the Minusinsk basin in southern Siberia. It is a sequence which shows how mobile horsemen emerged from their Bronze Age background to dominate their region and spread their culture many thousands of miles westwards into Europe.

Early investigations

The earliest archaeological discoveries in southern Siberia dating to the Scythian period are associated with the Russian incursion into the Siberian steppes in the early eighteenth century. The Russian emperor, Peter the Great, sent the first academic expedition headed by D.G. Messerschmidt (1721) to Siberia and ordered the investigation of barrows. In 1722, the first barrow to be scientifically excavated on the Yenisei River belonged to the Tagar culture. Subsequent expeditions, headed by G.F. Miller (1733-1744) and P.S. Pallas (1770) conducted scientific excavations, made artefact collections and described outstanding monuments from different periods.

The nineteenth century was characterised by extensive studies of local enthusiasts such as P.K. Frolov, N.M. Martyanov, D.A. Klementz and others who supplemented the archaeological collections of local museums. In the 1920s, professional archaeologists (S.A. Teploukhov, S.V. Kiselyov, M.P. Gryaznov and so on) explored many more archaeological sites of the Sayan and Altai mountains and elaborated their cultural chronological system (Teploukhov 1929; Kiselev 1951; Gryaznov 1968; 1969; Chlenova 1967; 1992).

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Climate and resources

The Minusinsk Valley is located in the southern area of the Krasnoyarsk district and the Republic of Khakasia (Figure 1). The bottom of the valley, originally covered with bunchgrass steppe vegetation, is at a height of 300–350m and surrounded by the high Sayan mountains. The modern climate is continental with a mean annual temperature of about 0°C.

In 2001/2 a joint expedition by the Institute for the History of Material Culture and Dutch scientists carried out environmental investigations in the region, targeting the lakes of Kutuzhekovo and Shushenskoe in the Minusinsk valley and the two White Lakes in the Uyuk valley in Tuva. They used pollen analysis and geochemical methods to study lake deposits, along with archaeological and radiocarbon data. The results of these investigations testify to climatic development in that region during the first millennium BCE, continuing changes that began in the Bronze Age. A cool phase occurred during the eleventh-ninth centuries BCE, when increasing humidity reached a maximum, followed by a warming trend (Figure 2). Both the pollen record and the geochemical data show a pronounced shift to humid climatic conditions at the start of the early Iron Age (Kulkova 2003). The significant increase in humidity and the slight temperature rise in the steppe that occurred about the first millennium BCE probably became widespread. This has been well traced from western Central Asia to western Siberia (Levina 1996), and probably stimulated movement of some nomads across long distances. This change in climate was progressive, not static, as assumed by Khazanov (1984/1994).

By the end of the second millennium BCE the natural conditions of the steppe-like valleys of the Sayan and Altai mountains in central southern Siberia were most favourable for sheep breeding. Sheep pasturing was limited territorially in the Minusinsk valley as compared to, for example, the Kazakh steppe where people could migrate about 1000km with their cattle. Seasonal migrations in the Sayan and Altai mountain regions were mostly vertical. Just at the beginning of the first millennium BCE, significant progress in horse breeding can be traced (new forms were invented and more reliable types of bronze bridles were made) and became the basis for a society of horsemen (Bokovenko 2000).

The increased resources and opportunities for growth coincided with social stratification, and the emergence of a structured system of authority, as will be seen from the material culture (below).

Chronology

After the excavation of the royal barrow Arzhan 1 in Tuva by M.P. Gryaznov, it became clear that the Scythian period in Central Asia started at least as early as the seventh century BCE (Gryaznov 1984). Dendrochronological and radiocarbon dating now indicate that Arzhan dates to the end ninth- beginning eighth century BCE (Zaitseva *et al.* 1996). The St. Petersburg Radiocarbon Laboratory Database has recently produced about 440 radiocarbon measurements for 105 sites located in Khakasia and Tuva, resulting in the dating of many sites in Asian territories to the pre-Scythian and initial Scythian periods (tenth-eighth century BCE) (Bokovenko *et al.* 2002) (Figure 3).

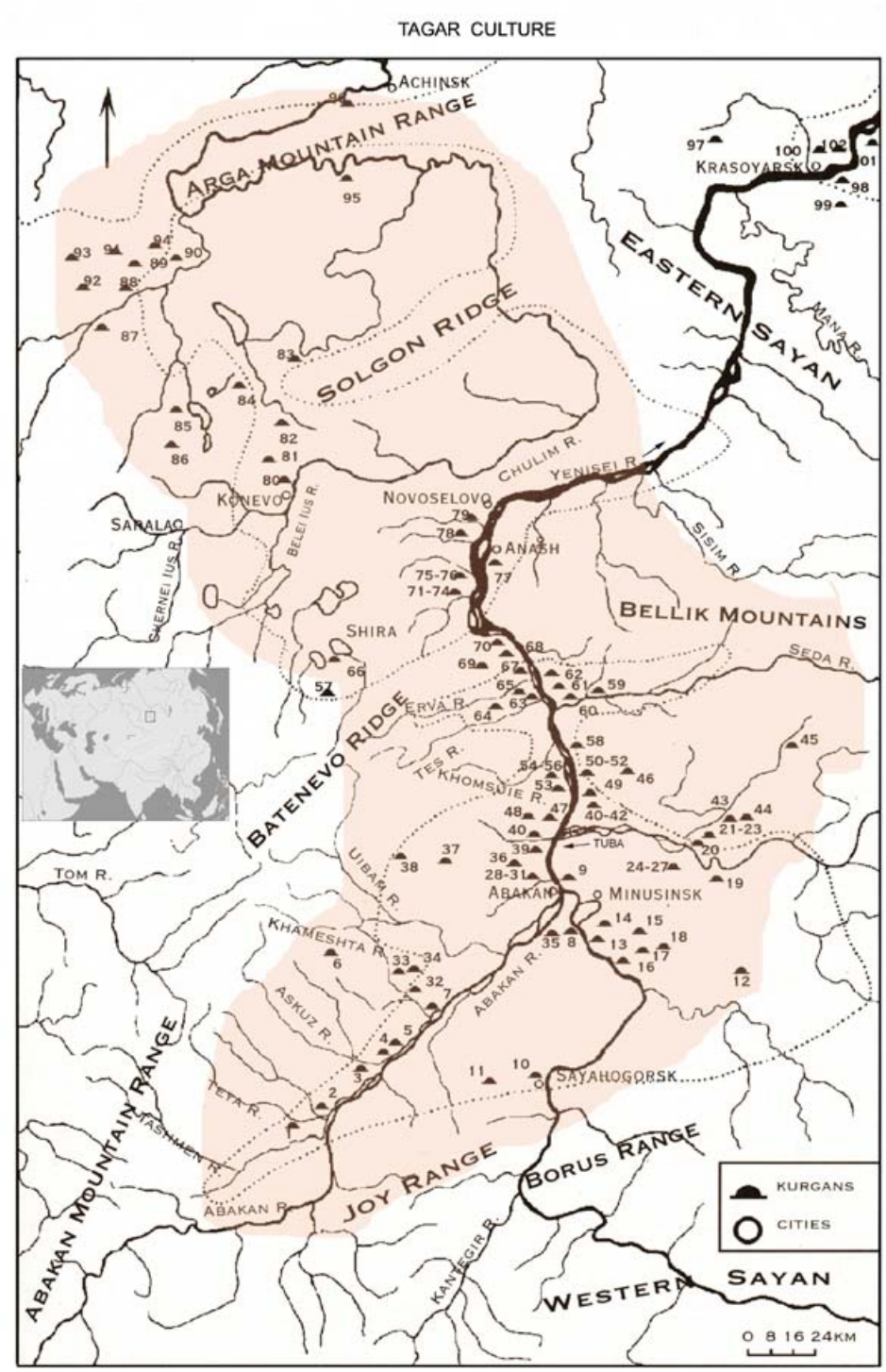


Figure 1. The Minusinsk valley showing the location of Iron Age sites (Tagar culture).

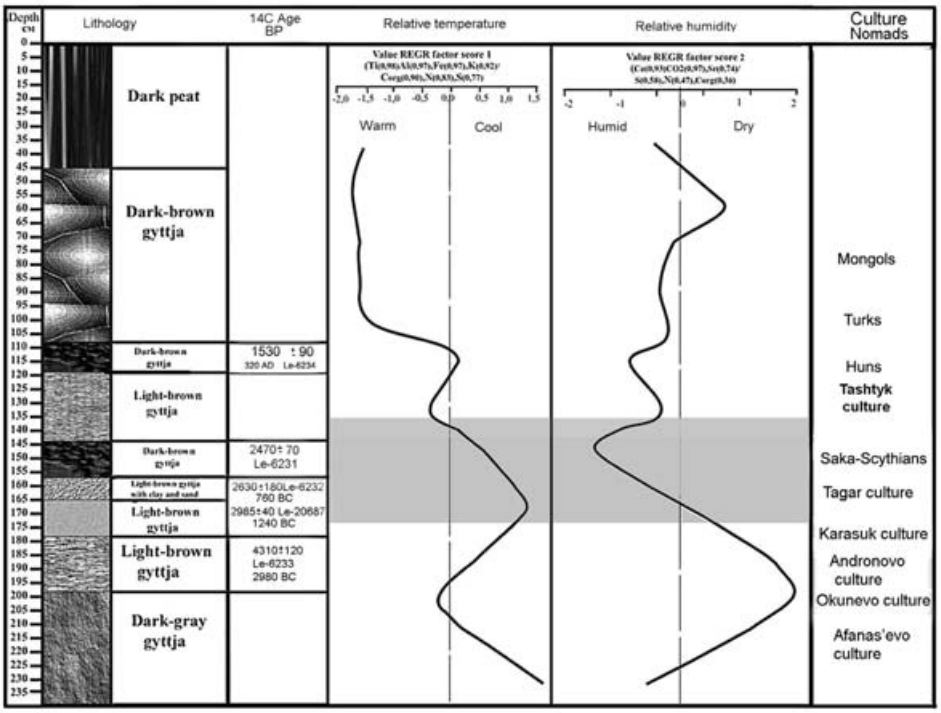


Figure 2. Palaeoclimate geochemical records.

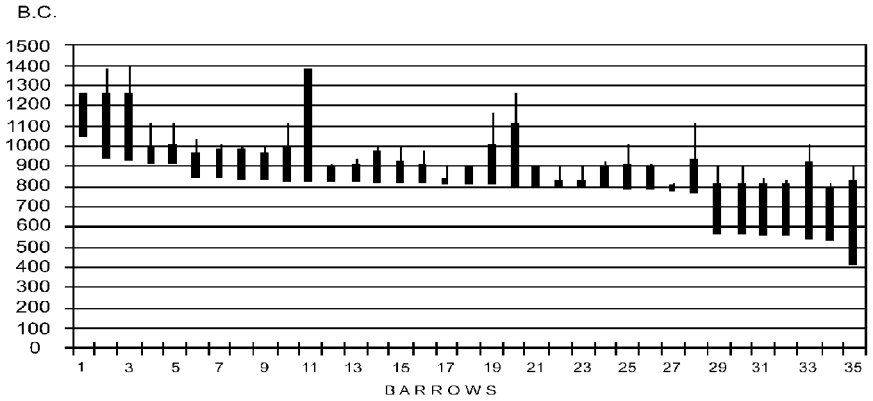
Gryaznov (1968) proposed four phases for the Tagar culture which are still accepted today, but with a new chronology as follows:

Chronological phase	Period
Bainovo	end 10th-8th century BCE
Podgornovo	8th-6th centuries BCE
Saragash	6th-3rd centuries BCE
Tes'	2nd-lst centuries, BCE-lst century CE

These phases are used as a framework to describe the cultural sequence that follows. Currently, most of our information comes from burials.

Funerary rites

Even today the Tagar burial grounds are quite visible because of the presence of vertical stone slabs around the kerb forming the enclosures or mounds. Graves in the earliest dated cemeteries are not numerous, but, by contrast, cemeteries belonging to the subsequent period contain hundreds of mounds and diverse burial monuments. A characteristic feature of the Tagar burial tradition, as in the Karasuk culture that preceded it, is that the dead were buried in square or rectangular enclosures made of vertically standing stone slabs, covered



№	Lab. index	14C age BP	Error	Cal age, BC 1σ		2σ		Material	Monument	Position of the material in the site	Region
1	Le-5254	2950	30	1252	1080	1258	1040	wood	Khystaglar	barrow 1, fence B, grave 1	Khakasia
2	Le-5256	2950	70	1260	1038	1382	934	wood	Khystaglar	barrow 1, fence A, grave 1	Khakasia
3	Le-5146	2950	90	1264	1016	1392	922	wood	Arzhan	barrow 12, dedro sample D-36, 20-rings	Tuva
4	Le-5257	2840	30	1006	930	1111	908	wood	Khystaglar	barrow 1, fence B, grave 1	Khakasia
5	Le-5133	2840	35	1012	926	1111	908	wood	Bol'shaya Erba	barrow 4, grave 2	Khakasia
6	Le-2444	2810	40	966	908	1038	840	wood	Arzhan	elite barrow, camera 26, 15-35 rings	Tuva
7	Le-2452	2790	40	990	852	1008	834	wood	Arzhan	elite barrow, camera 26, 48-60 rings	Tuva
8	Le-5135a	2780	40	984	846	1000	832	wood	Bol'shaya Erba	barrow 4, grave 2, 20 outside rings	Khakasia
9	Le-1698	2770	40	974	840	992	826	wood	Arzhan	elite barrow, camera 26, 1-250 rings	Tuva
10	Le-2310	2800	50	1000	854	1111	822	wood	Arzhan	elite barrow, camera 26, central rings	Tuva
11	Le-5446	2880	120	1380	1340	1320	820	teeth	Arzhan	elite barrow, camera 26b, horse	Tuva
12	Le-5135в	2730	25	900	832	906	820	wood	Bol'shaya Erba	barrow 4, grave 2, 30 inside rings	Khakasia
13	Le-5195б	2750	30	906	844	928	818	wood	Arzhan	elite barrow, camera 26,18 middle rings	Tuva
14	Le-2311	2770	50	980	836	1006	814	wood	Arzhan	elite barrow, camera 26, middle -rings	Tuva
15	Le-2312	2750	50	920	828	992	810	wood	Arzhan	elite barrow, camera 26, outside rings	Tuva
16	Le-2449	2740	40	904	834	982	810	wood	Arzhan	elite barrow, camera 26, 36-60 rings	Tuva
17	Le-5195a	2700	20	840	814	898	808	wood	Arzhan	elite barrow, camera 26, 12 outside rings	Tuva
18	Le-5192	2700	30	894	810	900	806	wood	Shaman Gora	barrow 1, grave 2, bottom	Khakasia
19	Le-5141	2790	80	1008	832	1158	802	hoof	Arzhan	elite barrow, camera 31	Tuva
20	Le-6393	2820	100	1115	840	1260	800	bone	Kazanovka-3	barrow 2, fence G, grave 2	Khakasia
21	Le-5195в	2680	40	892	802	900	798	wood	Arzhan	elite barrow, camera 26, 20 inside rings	Tuva
22	Le-5184	2670	25	826	806	890	798	wood	Arzhan	elite barrow, camera 26, 30 rings	Tuva
23	Le-5137	2665	30	826	802	894	796	wood	Kazanovka-2	barrow 3, fence A	Khakasia
24	Le-4772	2680	50	896	802	912	792	wood	Arzhan-2	barrow 7	Tuva
25	Le-5255	2710	70	908	806	1008	782	charcoal	Khystaglar	barrow 1, fence A, grave 1	Khakasia
26	Le-5143	2660	50	892	794	906	778	wood	Arzhan-4	barrow 12	Tuva
27	Gin-8425	2610	30	808	790	814	772	wood	Arzhan	elite barrow, camera 26, 10 outside rings	Tuva
28	Le-5390	2720	80	930	802	1113	768	wood	Khystaglar	barrow 1, fence A, grave 1	Khakasia
29	GIN-8618	2620	40	816	784	892	562	wood	Arzhan	elite barrow, camera 26, 20 last rings	Tuva
30	Le-5391	2620	40	816	784	892	562	bone	Kazanovka-3	barrow 2, fence A, sk B	Khakasia
31	Le-4769	2610	40	812	776	836	554	wood	Arzhan-4	barrow 12	Tuva
32	Gin-8619	2600	40	810	770	828	552	wood	Arzhan	elite barrow, camera 26, 10 lag	Tuva
33	Le-5388	2670	80	914	780	1008	536	bone	Kazanovka-2	barrow 1, fence D	Khakasia
34	Le-5194	2570	50	795	777	816	526	wood	Arzhan	elite barrow, camera 26, middle peg	Tuva
35	Le-5144	2590	90	832	532	902	414	wood	Arzhan-4	barrow 12, dend. D-36, 30 rings	Tuva

Figure 3. Radiocarbon dates from early Tagar monuments and the princely mound Arzhan 1. Note: camera = chamber.

with a pyramidal burial mound. Occasionally the stones were arranged in horizontal rows with vertical stones set at the corners of enclosures and along their perimeters.

A general trend in the Tagar burial tradition was that the enclosures and the graves they contained increased in size and depth over time (Figure 4). The stone cists were gradually replaced with timber frames that had strong multi-layered floors. The number of bodies buried in each stone cist also increases through time. In the early period the dead were buried in a supine position with their heads consistently oriented to the south-west, and only occasionally to the north-east. In the case of the collective graves, the orientation varied.

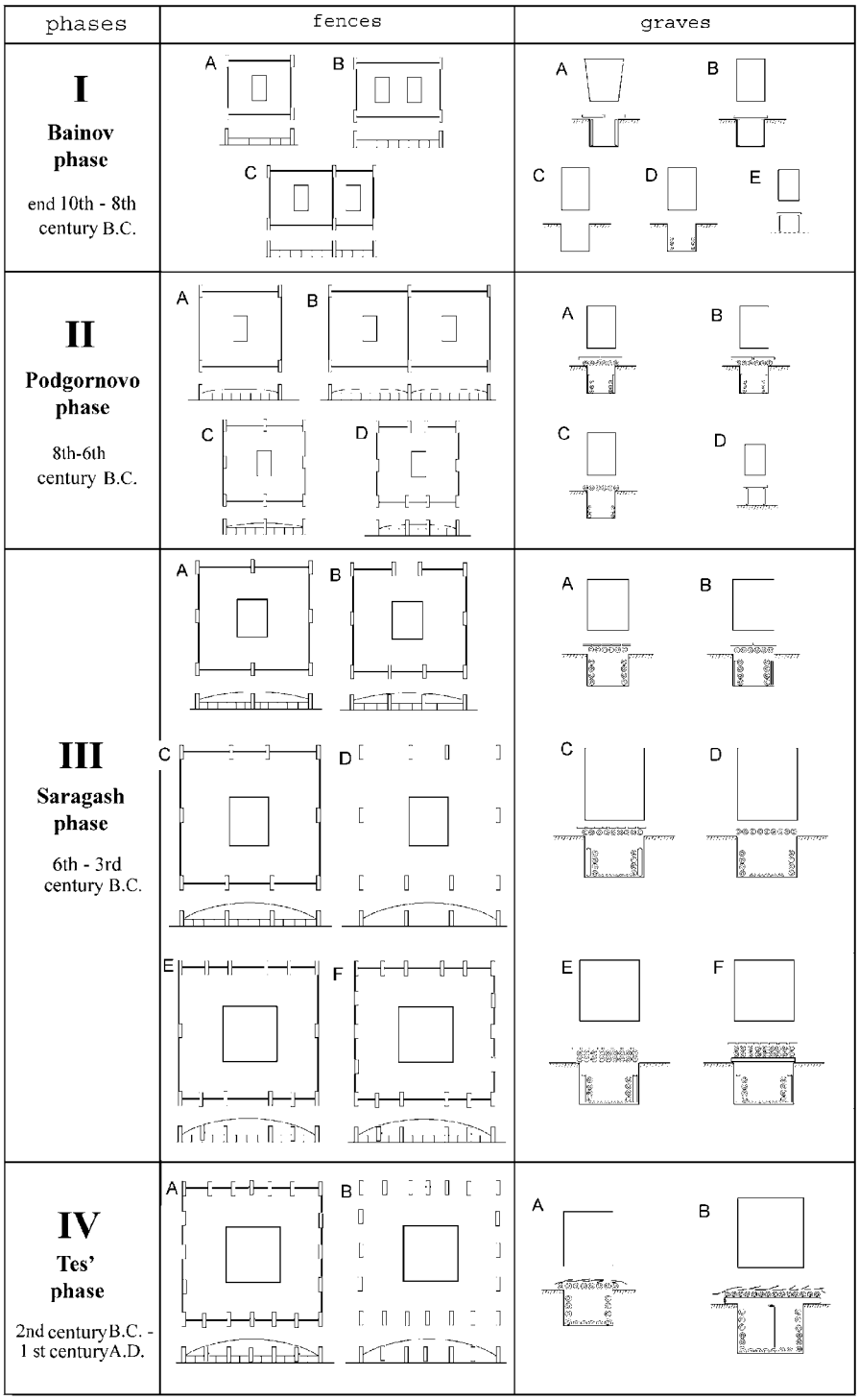


Figure 4. Development of burial structures in the Tagar culture.

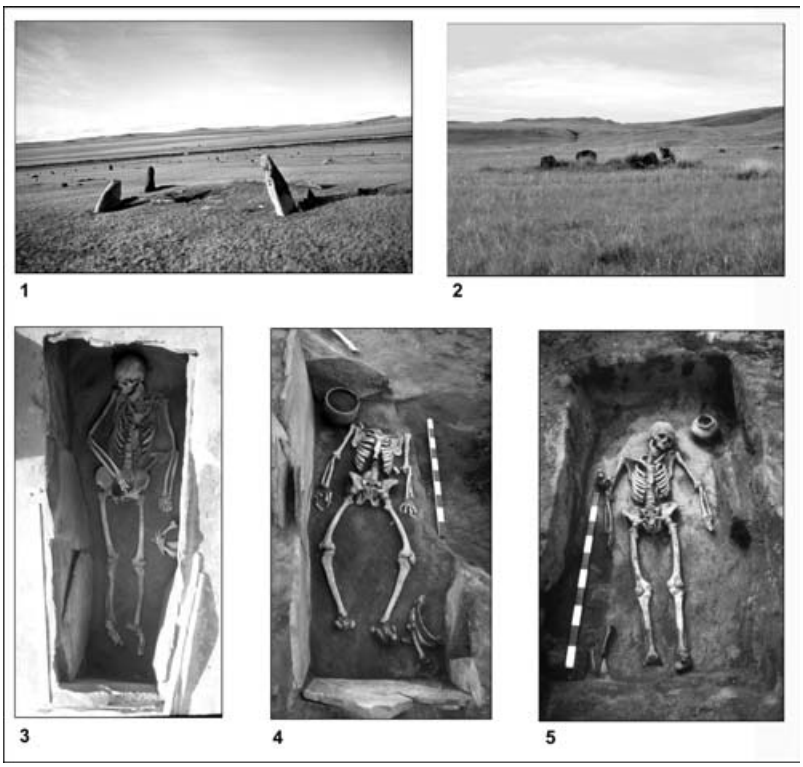


Figure 5. Mounds and graves of the Bainov phase: 1 – Novoselvo, 2 – Khyzyl Khaya (Vibat), 3 – Tepsei VII, 4 – Kazanovka II, 5 – Tumannyi I.

In the Bainov phase the burial enclosure is small, still based on the Karasuk pattern with walls up to 1m high constructed of stone slabs, and sometimes with taller slabs 1 to 2m high at the corners (Figure 5). Each enclosure contains one tomb, also built from slabs of stone, and each tomb contains a single skeleton. As in the earlier period, one or two vessels were placed at the head of the deceased person and the same four pieces of meat (from sheep rather than oxen) were laid at the feet. In the male graves, one or two vessels with liquid were usually set at the head and some pieces of beef or more rarely mutton or horsemeat were left at the feet. In a male burial, a dagger and a battle-axe were usually placed adjacent to the body, a knife on the left side of the belt, and a quiver with arrows placed at the feet (Chlenova 1967: Table 1). A knife or a small bag with toilet articles including a mirror and a comb were attached to women's belts. Women's clothes were decorated with numerous beads and pendants. Complex sets of beads decorated the clothing; headdresses adorn the hair of the deceased.

In the Podgornovo phase, the burial enclosures continue to be small and are frequently attached to each other (Figure 6). They contain 1-2 tombs in the centre. The tomb itself is often a timber chamber rather than a stone cist. Multiple tombs contained two to three deceased, but single burials are more common. From that time on in the Tagar culture, numbers of bodies were successively buried in a tomb, and entrances provided for the purpose.

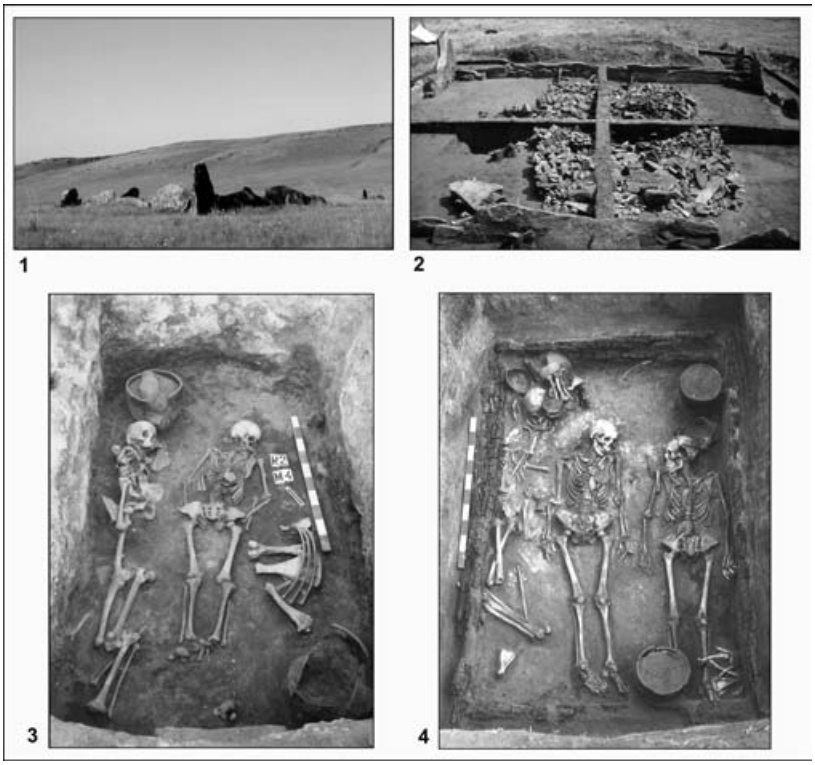


Figure 6. Mounds and graves of the Podgornovo phase: 1 – Khyzyl Khaya, 2 – Esino XVI, 3 – Pechistche (mound 2, grave 4), 4 – Shaman Gora (mound 1, grave 2).

The Saragash phase saw the further elaboration of burial ritual and of the construction of the burial superstructures. Enclosures of 2-300m^2 composed of 8 to 20 stones housed two or more semi-square collective graves (Figure 7). Side by side within the vaults up to 200 people were buried in succession through a special entrance. Some individual graves were built, presumably for men and women of high rank. Children were buried either separately in small stone boxes or in collective graves with the women. Accompanying artefacts are approximately the same as in the earlier stage, except that the pottery, tools, and armament display some changes in form. The general trend was to decrease the size to that of a miniature. At the same time numerous bronze and gold plaques in the shape of stags were sewn on the clothing of the dead. The pottery of this period is usually undecorated.

Social stratification is especially apparent in the burial of this period. Barrows of about 20m in height are located in the Salbyk Valley in the centre of the Minusink basin and exemplify this trend. The pyramidal Bolshoi Salbykskii Mound excavated by S.V. Kiselev had a pyramidal embankment 11m high. The enclosure-sill was constructed from immense stone slabs that were placed vertically. The slabs weighed up to 50 tons each and measured 6m in height. The length of each side was 70m. An entrance made of vertically set stone slabs was placed on the eastern side. The square grave at this site, measuring 5 × 5m in depth, had been completely robbed at the time of the excavation, but the remains of seven skeletons, some fragments of gold foil, and a bronze knife survived. The immensity of the

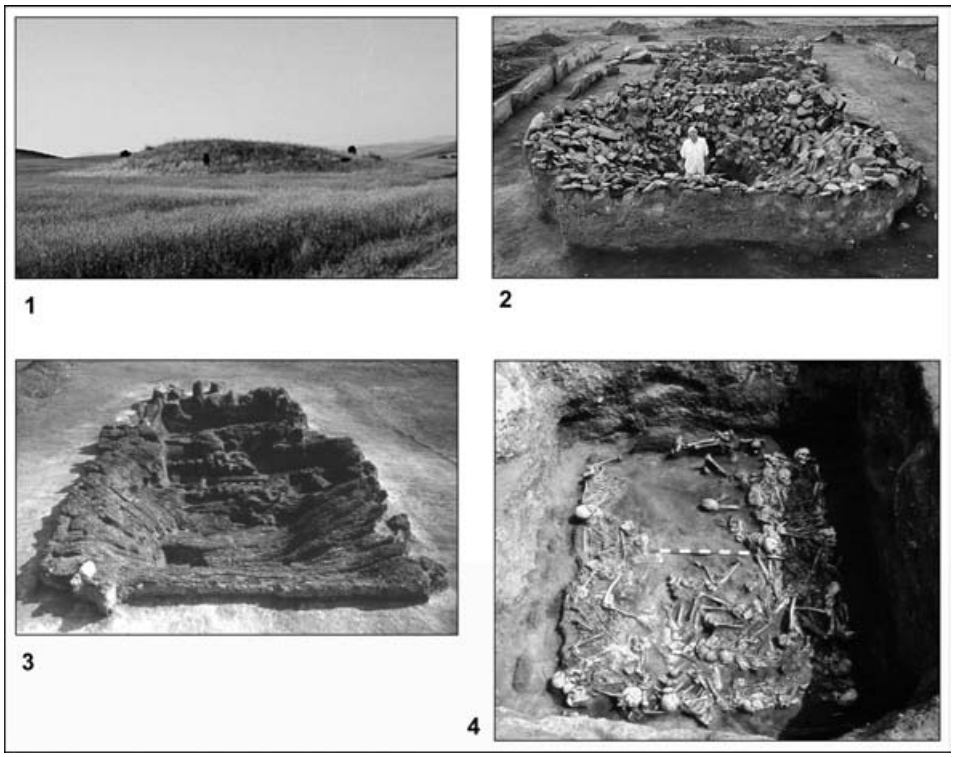


Figure 7. Mounds and graves of the Saragash phase: 1 – Sul'fatnoe, 2 – Shalginov II, 3 – Medvedka I, 4 – Dal'ni.

mound and the labour expended to construct the stone slab sill implies that an elite person, a chief of the confederation of Tagar tribes was buried there (Kiselev 1951: 189; Gryaznov 1968: 191; Vadetskaya 1986: 95).

The tombs of the Tes' phase show considerable variety, but it is possible to define several types of funeral rite (Figure 8). The burials are generally covered by huge kurgans with monumental enclosure-kerbs built of stone. In the centre lies a large tomb, 30 to 50m^2 in plan and up to 3m deep. The tomb has an elaborate timber structure of two storeys, roofed with logs and a thick layer of birch-bark. The chamber might contain the remains of several dozen bodies (Kuzmin 1987). Skulls are trepanned, evidently in order to remove the brain (Figure 9: D). In all cases the tombs had been set on fire (Gryaznov 1969).

It is evident that these pyramid burials also involved the mummification of the body. The process of mummification can be reconstructed (Figure 9; B). The skeletal remains (skulls and separated bones), were exposed for some period of time then were buried in crypts (Tagarski Ostrov, Malaya Inya, Buzunovo, Kop'evo etc.). An attempt was then made to recombine the parts of the body, not always successfully (Tepsei VIII). The spine, hands and vertebrae were fastened with thin rods, to reconstitute the shape of the body (Medvedka II, Mayak, Sabinka etc.). Meanwhile the head was modelled in clay and fastened to the reconstituted body. The whole mannequin was then painted, clothed and provided with a mask (Kuzmin & Varlamov 1988). Similarly complex operations are found in burials in the Altai (at Bashadar, Pazyryk, and Ukok) (Grjaznov 1950; Rudenko 1960; Polos'mak 2001)

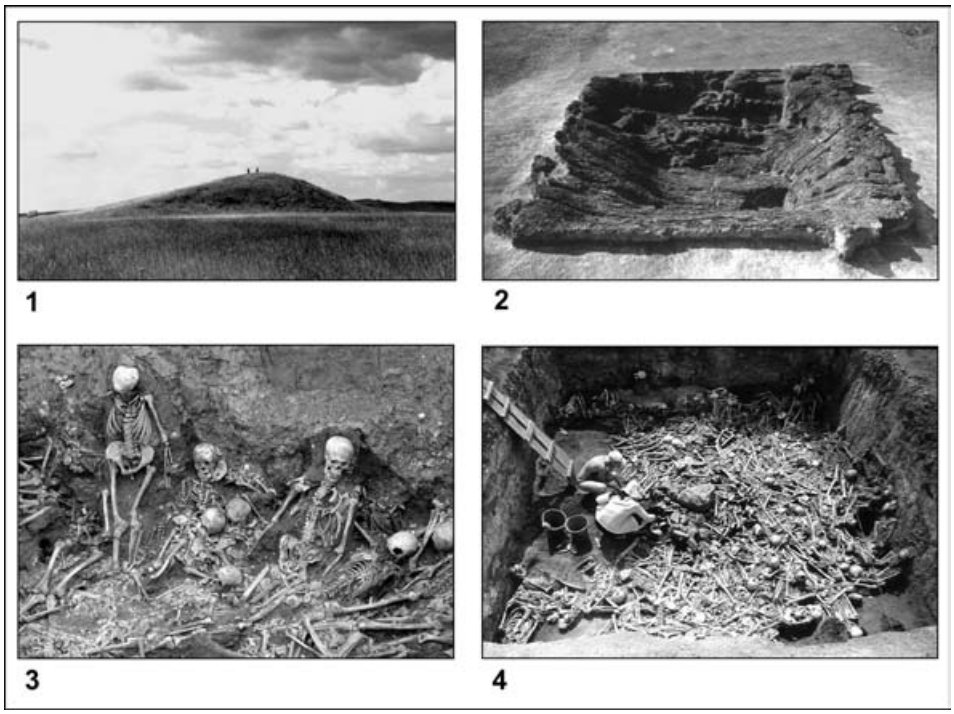


Figure 8. Mounds and graves of the Tes' phase: 1 – Moskovskoe, 2 – Lisii, 3 – Belyi Yar, 4 – Stepnovka.

and in Tuva (at Urbjun, Balgazin etc.) (Grach 1980). Although the mummies themselves did not always survive, traces of mummification have been discovered in various mounds in south Siberia dating from the first millennium BCE.

By the end of the first millennium BCE the ritual did not include the burial of mummies, but rather of dolls, filled with grass that are traced especially to the Tashtyk culture. They were dressed in clothing; their heads were covered with the painted masks; and a small sack containing burnt bones was put inside the body (Vadezkaya 1999). Smaller tombs constructed in the same way stand one against the other, each containing a single tomb constructed of slabs. There are also many tombs, particularly children's graves, which are located within various sections of the barrows.

If we compare the tombs belonging to the successive phases of the Tagar culture we can readily observe the close affinities between them in tomb structure, grave furnishings and funerary ritual. This implies the development of an indigenous cultural group over a period of ten centuries during which there were no abrupt changes in the economic, domestic or social patterns and no sudden displacements of large numbers of people. However, penetration of small groups of the population is not excluded.

Grave goods

The material culture of the Tagar Period is extremely varied with thousands of bronze artefacts of very fine quality placed in the burials. These artefacts testify to a highly developed bronze-casting industry stemming from very old traditions. Weapons are represented by

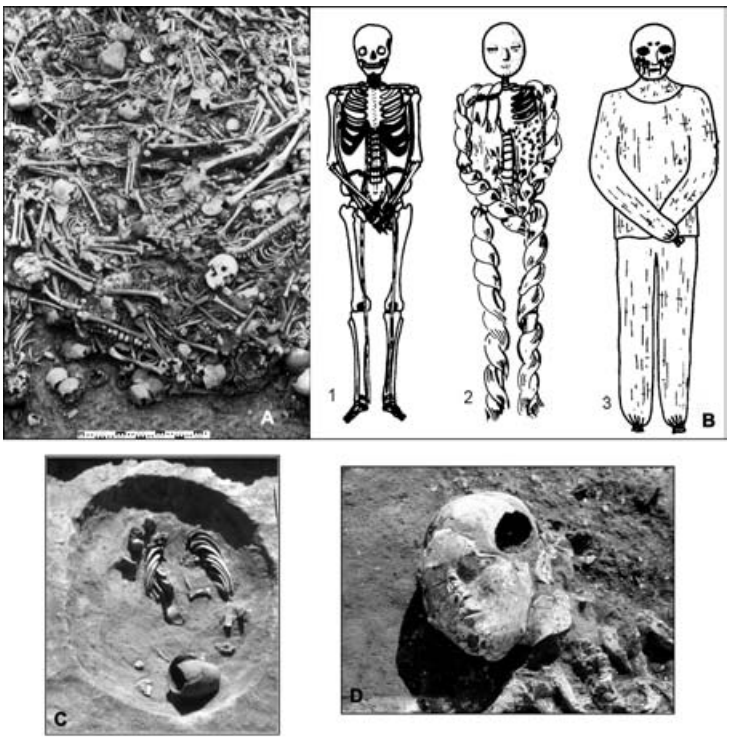


Figure 9. Mummification of the Tes' phase: A – Stepnovka, B – steps of mummification, C – a small grave with the separate bones from skeletons (Novye Mochagi), D – mask (Novye Mochagi).

three main categories: daggers, battle-axes and arrowheads (Figure 10). Daggers may have guards at right angles to the blade and roller-shaped handles, or butterfly-shaped guards and pommels in a variety of forms such as roller-shaped, ring-shaped, or zoomorphic. By the end of the Tagar Culture the form of the guards had degenerated. The earliest battle-axes have a head, are round in section, and contain a polyhedral or mushroom-shaped butt on a long sleeve. Later, the sleeve became shorter and the butt was often made in the form of an animal figurine such as a goat or a stag. Sometimes the sleeves were decorated with a rather fine depiction of an animal (Chlenova 1967: Table 8: 10-11; Bokovenko 1995: 304). The earliest arrowheads have two points on a hollow shaft, often with a tenon. The later arrowheads, dating to the sixth-fourth centuries BCE, are tetrahedral or trilobed, and stemmed. Variations in form are achieved through modifying the shape of the fins and the impact point of the arrowhead. The classification of arrowheads has been elaborated in much detail (Chlenova 1967: Table 12: 12). Bone arrowheads are trilobed or tetrahedral and occasionally bullet-shaped but generally of the simpler standard forms that were already well developed during the Neolithic and the Bronze Age.

Utilitarian implements are numerous and versatile. The blades of practically all Tagar knives are the same, and the differences are manifest mainly in the shape of their handles. The handles may be ring-shaped, with an arch, with small or large holes, openwork, loop-shaped, insert-type. They have zoomorphic forms and can be decorated with various incised

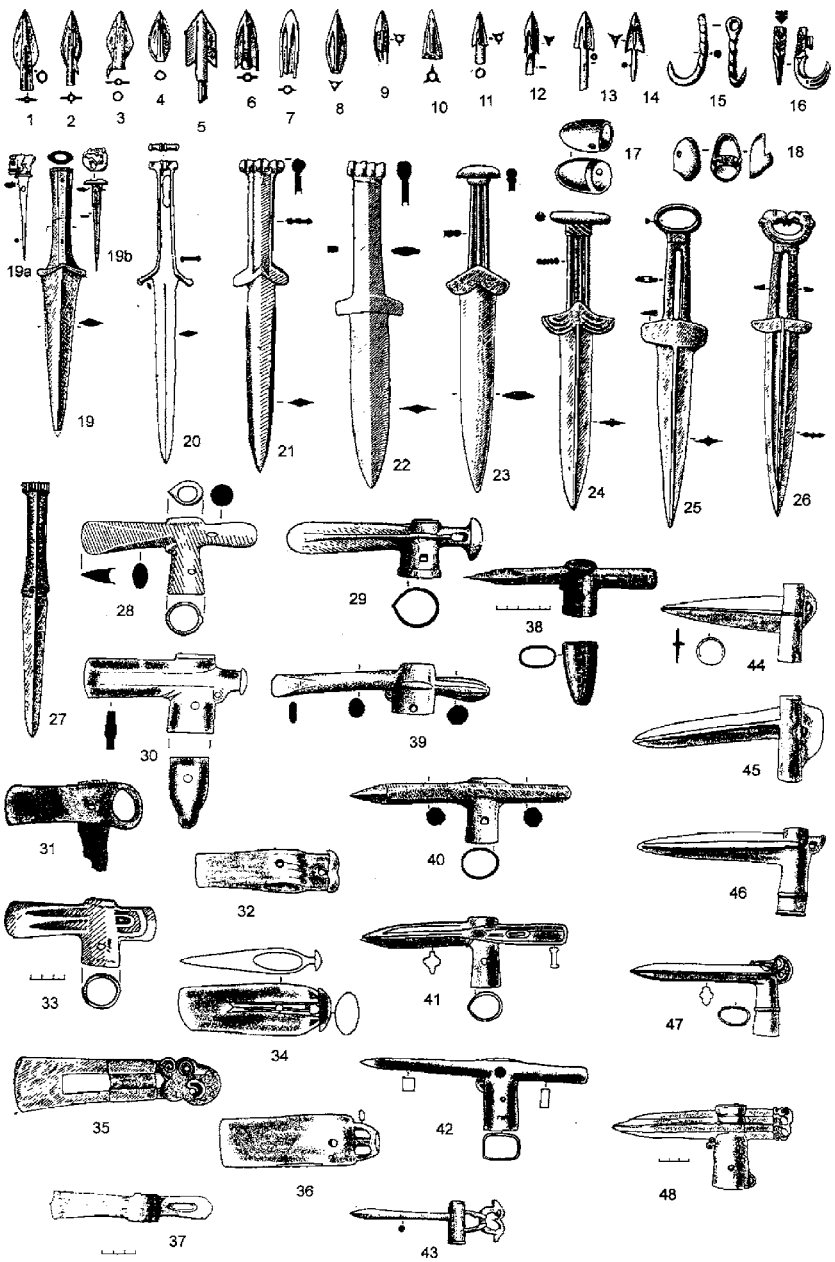


Figure 10. Armaments: arrowheads (1-14), daggers (19-27) and battle-axes (28-48).

motifs (Bokovenko 1995: 306, 313). Artefacts related to the bronze casting industry are represented mainly by bi-valve stone and clay moulds (Grjaznov 1969). Numerous devices such as clamps, nozzles, and pouring gates used in casting as well as technologically complex and highly artistic bronze artefacts such as bridles, cauldrons and art works indicate a highly specialised and developed bronze industry.

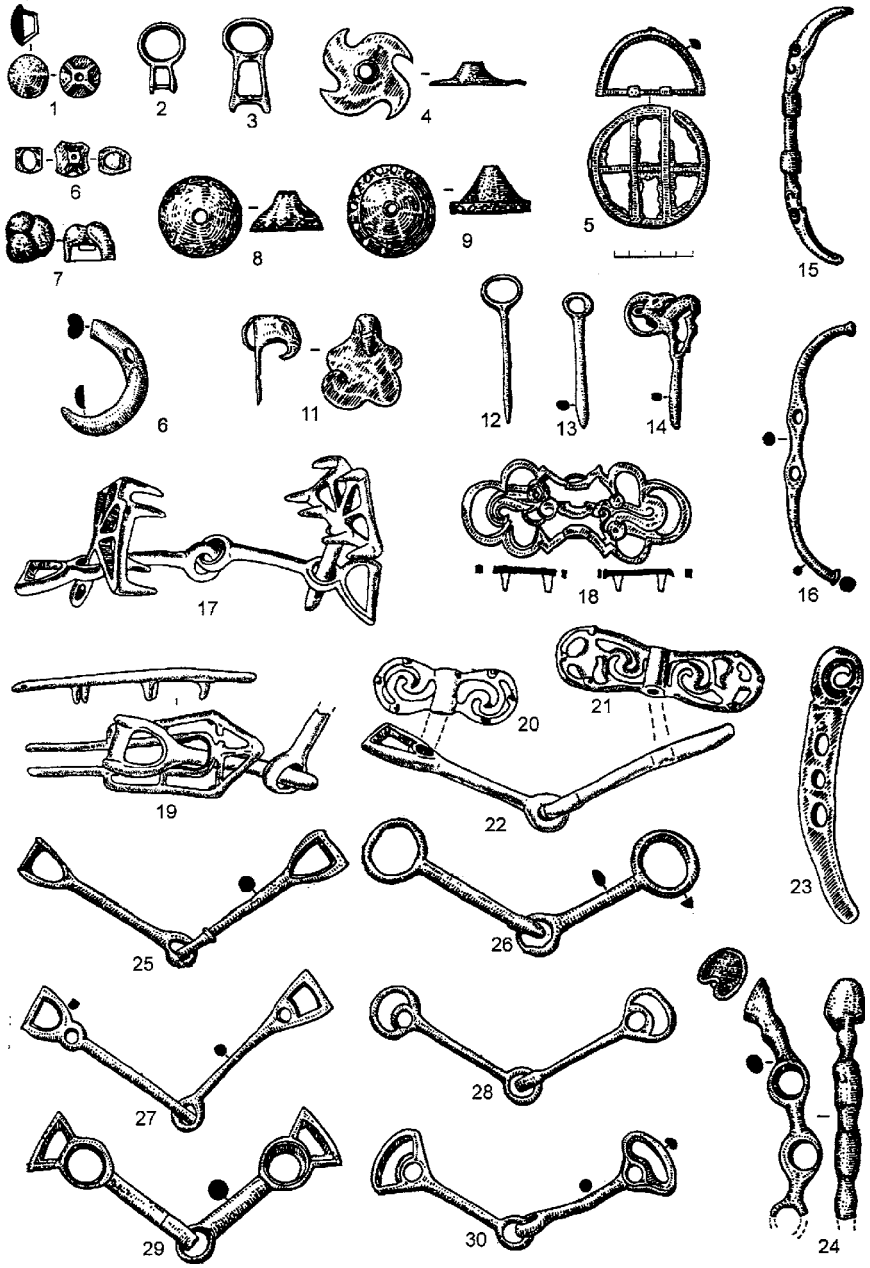


Figure 11. Horse harness: pendants (1-14), and cheek-pieces and bits (15-30).

Items of horse harness are extremely numerous as well. Although almost all of them are accidental finds, their diversity and the high quality of production point to the great value that the Tagar society placed on this category of object (Figure 11). Around the ninth-eighth century BCE, bronze bridle bits replaced the three-holed bridle bit, carved from horn and used at an earlier date. These bits were cast with a stirrup-shaped end where an additional

Figure 12. Utensils: wooden dishes, little tables and scoops (1-4, 16-17), clay vessels (5-15) and bronze cauldrons (18-21).

hole into the strict frame-shaped cheek pieces was cast. These were used to break horses. In the sixth-fifth centuries BCE, stirrup-shaped bits were replaced with those that had a single ring into which the two-holed cheek pieces were inserted (Bokovenko 1986: 18; Chlenova 1992: 215; Bokovenko 2000: 309). The total bridle system including the various strap connecting pieces, pendants, and cheek pieces continued to be refined. The abundance and diversity of horse-harness items and the numerous petroglyphs illustrating horses are evidence of the great role that horse breeding played in the Tagar society.

Vessels were made of clay, carved from wood, or were cast from bronze (Figure 12). As wooden objects withstand time poorly, they are found only rarely, but include small tables,

round, ellipsoid, and square wooden trays, cauldron-shaped vessels, and scoops. The colour of pottery was dependent upon the firing methods. The predominance of greyish-yellow shades indicates that the vessels were unevenly fired in an open fire without a special oxygen supply. At the end of the Tagar Period vessels with ring-shaped bases and cauldron-shaped vessels were predominant. A great number of bronze cauldrons on conical bases have also been found in the Minusinsk Basin. They vary in size from small, containing up to five litres in capacity, to extremely large ones that have a capacity of several hundred litres. Classification of the cauldrons is based on the typology of the handle (Bokovenko 1981: 42-52). Herodotus mentions cauldrons in connection with sacrifices (Herodotus IV: 60-61), but these containers were probably poly-functional.

Toilet articles were stored either in small leather bags or in wooden chests (Figure 13). Numerous carved and figured combs made of bone are known. Some wooden combs survived in the Dalnii Mound. A particularly interesting item used for combing hair is decorated with a compass ornament and a zoomorphic figure on one of the ends. Bronze awls and beads from glass, carnelian, and paste are typical finds. Headdresses and the clothing worn by the deceased were decorated with semi-spherical bronze plaques sometimes covered with gold foil. Breastplates, diadems, and pendants with zoomorphic heads and other ornaments were included in the burial. Mirrors of three types were used (Bokovenko 1995: 312). One type had a rim around the edge, the second was disc-shaped manufactured in different sizes, and the third had a side handle often decorated with a beautiful animal figurine.

Art

Artefacts made in the animal style are widely represented in the Yenisei River region. Miniature sculptures are made in the form of numerous and diverse animals including deer, feline beasts of prey, goats, griffins, horses and boar (Figure 14). Animal art is represented in engravings, in cast bas-relief figures, and in three-dimensional hollow sculptures. All of them are executed at a high technological level indicating high aesthetic standards in the Tagar Culture (Zavitukhina 1983: 35).

Petroglyphs of the Scythian Period are found on practically all the rocks and stones that form the Tagar mound enclosure kerbs. The motifs depict either single themes or complex compositions referring to scenes of everyday life, ritual, and hunting (Bokovenko 1998). The Scythian-Siberian style spread across vast territories from India to China (Francfort *et al.* 1990). On the whole, the works of art from the Minusinsk Basin provide convincing evidence that the content and mode of execution was superior to those found on objects of arts of the neighbouring areas.

The symbolic images on objects and petroglyphs on stone slabs of tombs reflects the existence of a widespread religious system (Figure 15). The rock cut images of the Scythian period from the Yenisei region testify to shamanistic rituals, where the people with characteristic attributes of the shaman are shown. (Khyzyl-Khaja, Bojary etc.) (Kilunovskaja 1998). But the archaeological evidence also indicates the influence of other religious practices. Okunevo, Pazyryk and Tagar cultural material is infused with Buddhist ideas, while including shamanistic funeral ceremonies such as at Pazyryk (Sorokin 1978; Kuzmin

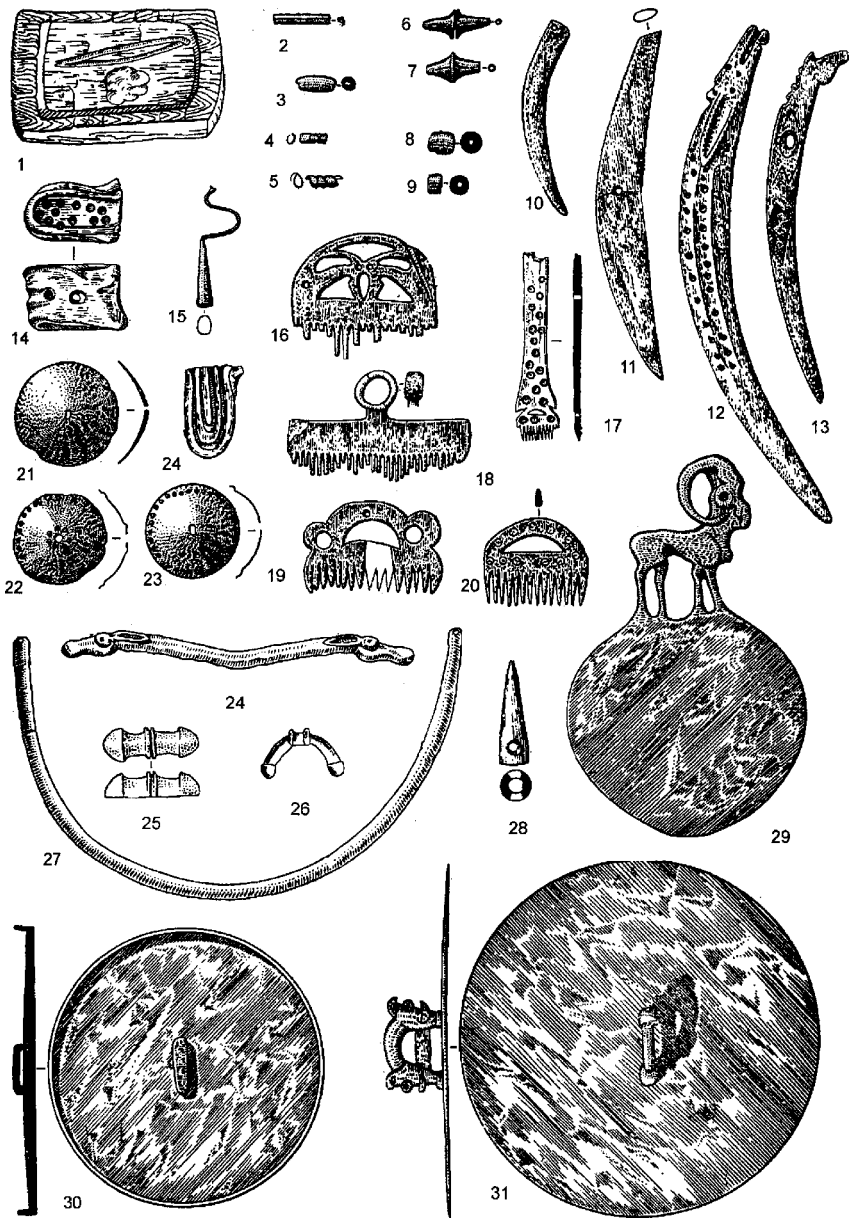


Figure 13. Toilet articles: wooden chest (1); bronze awls and beads of glass, carnelian, and paste (2-9); bone knives (10-13); combs (16-20); plaques, diadems, and pendants (14-15, 21-28); mirrors (29-31).

1992). It is possible to assume that the system of religious art amongst the peoples of Central Asia in the Scythian period reflected in rock art represented a synthesis of shamanism and a northern variant of Dualism, as well as an eastern variant of Zoroastrism (Boyce 1979). All this can be termed the 'Sajano-Altay' religious system (Bokovenko 1996).

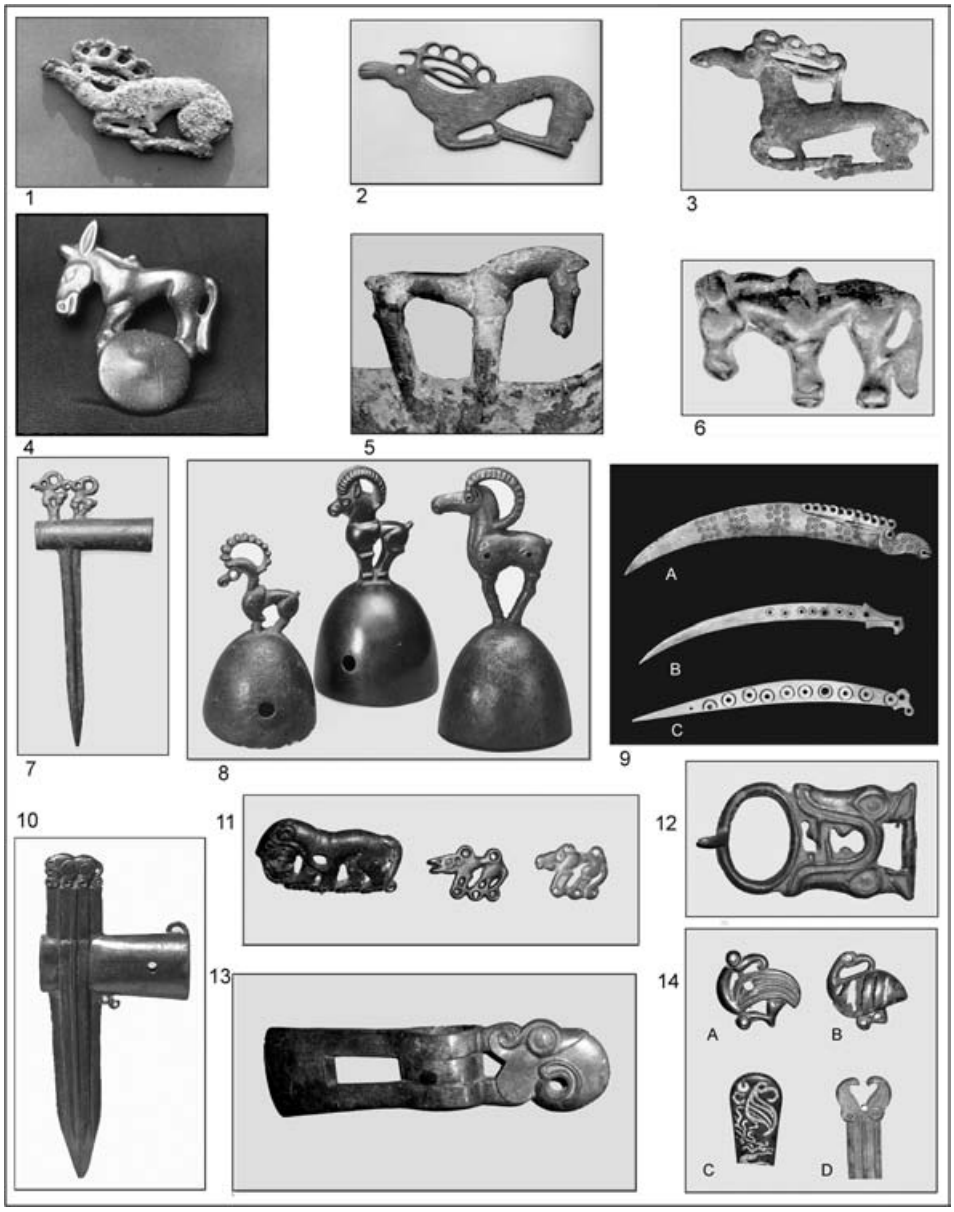


Figure 14. The animal style of the Tagar culture: 1 – Kobyak, mound 5, grave 2; 2 – Bateni; 3 – Cheremshino, mound 1, grave 2; 4 – Minusinsk Basin (after Zavitukhina 1983); 5 – Tigrizskoe; 6 – Dal'ni, mound 1, grave 1; 7 – Barsuchikha I, Bolshoi kurgan, grave 2 (after M. Zavitukhina 1983); 8 – Minusinsk Basin (after Zavitukhina 1983); 9 – (A – Prigorsk I, mound 1, grave 1; B – Kolok, mound 9, grave 1; Kolok, mound 10, grave 1); 10 – Pit (Gryaznov 1969); 11 – Krasnoyarsk area, Bellyk, Minusinsk Basin; 12 – Trifonova; 13 – Iudina; 14 – Minusinsk Basin.

Discussion

Continuing the traditions of the Karasuk culture, the Tagar peoples still practised a mobile pastoralism associated with the movement of animal on winter pastures. The large

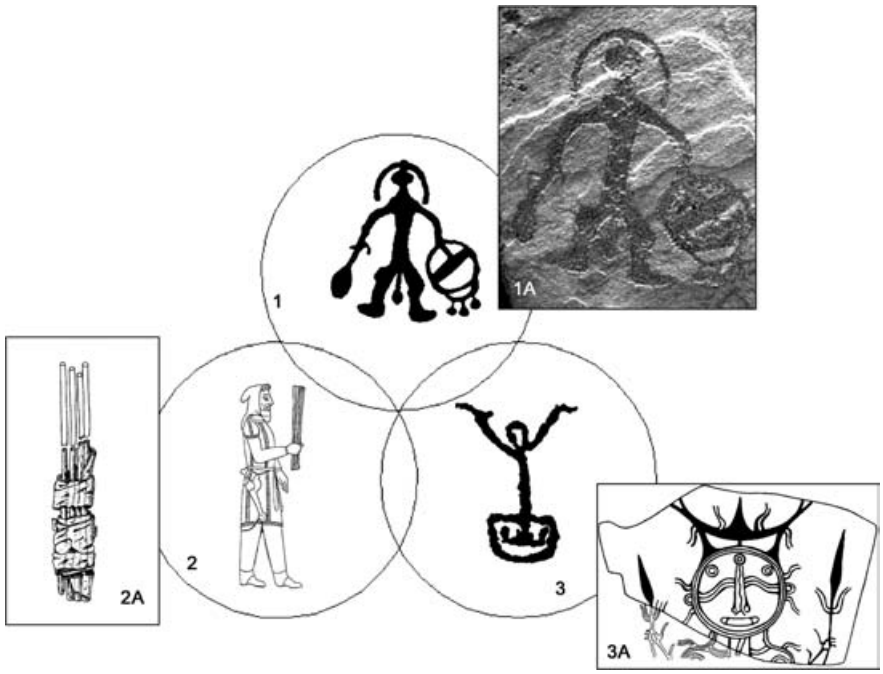


Figure 15. The religious systems of nomads of the Tagar culture: 1 – shamanism (1A – petroglyphs from the Georgievskaya rock of the Tagar time), 2 – eastern variant Zoroastrism (2A – sacred sticks from the Medvedka II cemetery, mound 1, grave 1 of the Tagar time), 3 – northern variant of Proto–Buddhism, the petroglyphs from the Boyaru rock of the Tagar time (3A – images from Bronze Age grave, Chernovaya VIII).

number of bronze sickles, which were used to mow wild cereals, indicates that agriculture played some part in the economy. However, the emphasis was now on sheep rather than cattle.

The continuity of culture from the preceding Karasuk period and throughout the first millennium BCE implies that the people of the Minusinsk basin were undergoing development of their own rather than pressure from immigrants. The increasing size and complexity of the burials implies social changes.

Burial rites and art reflects contact over a wide region of Eurasia, and China. Although this society was highly mobile, as it used mobile troops – horsemen, it also had deep and enduring roots in its own region.

In conclusion, it is possible to say that the Tagar culture, which developed out of the traditions of previous Bronze Age cultures, created a unique culture with a complex local development and a long reach. In the first millennium BCE its separate elements penetrated nearby regions and on into China, and even further into Europe.

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