Anthropomorphic Bronze Masks from the Timiryazevo-1 Burial Ground

This paper addresses rare funerary artifacts: anthropomorphic bronze masks unearthed in 1973 and 2014 from 5th–8th century AD mounds at Timiryazevo-1, on the Lower Tom River, southwestern Siberia, by an expedition from Tomsk State University. A detailed description of these is provided, and the archaeological context is described. Stylistically and technically, the masks represent a distinct group, termed Timiryazevo and distributed in the Tomsk-Narym region of the Ob basin. In broader terms, they belong to medieval repoussé ritual masks from western Siberia. As we demonstrate, the Timiryazevo specimens were details of funerary dolls made of organic materials and resembling those manufactured by Siberian natives in the recent past. They were meant to provide a temporary abode for one of the deceased person’s souls. The archaeological context suggests that at Timiryazevo-1 cemetery, dolls were buried separately, with their miniature belongings. We also suggest that other types of dolls were buried there, too. Those were made of purely organic materials that did not survive, as evidenced by numerous isolated clusters of miniature objects buried in shallow pits inside burial mounds or between them.

Keywords: Timiryazevo-1, western Siberia, Early Middle Ages, burial mounds, anthropomorphic masks, ritual dolls, miniature models.

Introduction

The Timiryazevo-1 group of burial mounds, dated to the 5th–8th centuries AD, is recognized as a unique medieval site in the archaeology of western Siberia. It is located on the Lower Tom River, on its left bank, opposite the city of Tomsk. Exploratory studies of the burial site were conducted by V.I. Matyushchenko (1957), who excavated two mounds in 1956. The site became well-known to the scientific community after large-scale excavations carried out by L.M. Pletneva, who studied 68 mounds in 1971 and 1973 (Pletneva, 1974, 1984; Belikova, Pletneva, 1983).

The uniqueness of the Timiryazevo-1 cemetery is determined, in particular, by its size. Omitting the part that is already destroyed, its current area is about 19 ha. There are some discrepancies in the data on the quantity of visually recorded burial mounds. 272 mounds were marked on the approximate plan of the site made by Pletneva in 1971 (Belikova, Pletneva, 1983: 7). Furthermore, in common with A.D. Gaman, we suppose that the Timiryazevo-1 and Timiryazevo-2 burial grounds are not two independent sites, but rather parts of a single large Early Medieval cemetery, a considerable portion of which was destroyed some time ago during the construction of Timiryazevo village (Ocherki..., 1994: 236). The Timiryazevo-2 burial ground, according to its researcher R.A. Uraev, contained 110 mounds in 1959 (Ibid.: 23). In 2009, the Tomsk Regional Center for Preservation and Use of Historical and Cultural Heritage recorded more than 800 objects (including excavated mounds) of the Timiryazevo-1 cemetery when determining the border of the Timiryazevo archaeological complex (Berezovskaya, Markov, 2012: 170). We can state that the Timiryazevo burial ground is the largest...
Early Medieval burial complex in western Siberia (Zaitseva et al., 2016: 282).

In 2014, Tomsk State University (TSU) conducted rescue excavations (under the supervision of O.B. Belikova) on the northern periphery of the burial ground, which was damaged during construction of the Snegiri housing complex. For the first time in the history of the study of this site, the excavations were conducted at continuous areas, including the space between mounds, in addition to burial mounds, poorly recordable in relief. The results of the excavations have dramatically changed the earlier ideas about the cemetery, since outside of the burial mounds, flat burials and a number of very interesting funerary objects were also identified. Among the latter, two clusters of miniature metal items were studied, including two anthropomorphic bronze masks (see Figure, 5, 6; collection 7951 of the V.M. Florinsky Museum of Archaeology and Ethnography of Siberia of TSU (MAES)). Four such masks had been discovered by Pletneva in 1973 in mounds 39, 55, 59, 60 (see Figure, 1–4; collection 9004 MAES). Thus, six anthropomorphic bronze masks from the Timiryazevo-1 burial ground are known at the present time. Our publication is devoted to comprehensive analysis of this category of finds. Special attention has been given to the context of discovery of the masks, and to logical interpretation of their function in the funerary rite of the population that had left the Timiryazevo-1 burial ground.

**Description of materials**

It seems appropriate to provide detailed descriptions of all six bronze masks and the context of their discovery. **Mask 1** (see Figure, 1; mound 39). Its height is 5.9 cm, its weight 18 g. Single-sided flat casting. There is a defect: run-out of metal on the right side of the item. The general outline of the face image is oval. The eyes are rendered by a fuzzy round outline, the mouth by an oval fillet, and the nose by a narrow straight fillet. On each cheek, two oblique cut-marks, symmetrical relative to the vertical facial axis, are observed. A neck, 2.2 cm long, is distinguished, on which an amorphous oval-shaped figure is designated by a low relief (a representation of “the line of life”?). On the head is, as we suppose, a combat helmet, with a low, round dome; cheek-guards and eye-protection elements are also represented. The lower edge of the dome is shaped by two wavy recesses above the eyes. The above elements of the helmet are rendered by a higher relief relative to the face level. One more detail, a narrow nosepiece passing into the eye-protecting elements is shown, apparently using a similar technique. At the top edge of the item, hardly noticeable cut-marks, likely made to attach the helmet to some base, can be seen.

The mask was found in the northeastern sector of the burial mound, at a depth of 8–9 cm, near its foot. It lay along with a miniature iron knife, under an intact ceramic vessel (Belikova, Pletneva, 1983: 28). This vessel, into which the mask and the knife were probably placed intentionally, shows no traces of household usage. A human burial has been found considerably lower, away from the above finds: at a depth of 0.6 m, in the southwestern sector of the mound, near its floors. The skull of a 25–30-year-old woman, an intact miniature ceramic vessel, a bronze buckle, and two indeterminate iron items were discovered in the grave.

**Mask 2** (see Figure, 2; mound 55). Its height is 4.0 cm, its weight 7 g. Single-sided flat casting. The general outline of the face image is rounded. The brows (or eyebrow ridges?), eyes, mouth, and symmetrical lines on the cheeks are rendered by deepened relief lines, while the nose is shown by a narrow relief fillet. The neck, 1.3 cm long, is clearly shown.

The archaeological context of the mask’s occurrence is extremely interesting (Ibid.: 10). In the southwestern part of the mound, near its floors, at a depth of 0.5 m, two ceramic vessels were recorded. A ceramic vessel, in which the mask under consideration was found along with a set of 16 iron and bronze artifacts, was inserted into another, larger vessel. 12 similar things were discovered in the adjacent ceramic vessel. All three vessels show no traces of household usage and, like the items placed therein, are characterized by their miniature size. No burial was found in mound 55.

**Mask 3** (see Figure, 3; mound 59). Its height is 3.8 cm, its weight 6 g. Single-sided flat casting. The general outline of the face image is rounded; the image is characterized by roughly rendered details. The eyes are shown by rough cut-marks, which form two rhomboids. A cut-mark can be seen on each cheek. The mouth is marked by a deepened suboval contour, and the nose is shown by a protruding narrow relief fillet. On each of the opposite side edges of the mask, at the level of the eyes and a little lower, a recess 1–2 mm deep has been made, probably after casting; and on the nose-bridge, a deep cut-mark. According to Pletneva, these details were used to tie the mask to some base (Ibid.: 87). Two short transverse cut-marks depicting, as suggested by Pletneva, “the line of life” (Ibid.), are observed at the narrow neck, which is 1.2 cm long; though these could have been intended for attachment of the item to the base.

The mask was discovered during removal of the southwestern part of the burial mound, near its floors at a depth of 10–12 cm, along with two fragments of ceramics (Pletneva, 1974: 91, fig. 283). The latter are probably the remains of a vessel that was broken during archaeologization. A burial of a 30–40-year-old man was located at the central part of the mound at a depth of 0.6 m. It contained two ceramic vessels, one of which
was of miniature size, and also iron items: a socketed chisel (?) and a small knife.

*Mask 4* (see Figure, 4; mound 60). Its height is 4.7 cm, its weight 10 g. Single-sided flat casting. The general outline of the face image is oval. The eyes and mouth are rendered using the same technique in the form of oval contours. There are three symmetrical oblique cutmarks on each cheek. Above the forehead, a headdress is depicted, as suggested by Pletneva, by three longitudinal flutes (Belikova, Pletneva, 1983: 17). In the authors’ opinion, these horizontal details in the upper part of the head are intended to show the three-rowed structure of the headdress’s crown, which is, quite possibly, a low combat helmet with a round dome. The neck’s length is 0.9 cm. The edges are not treated.

The mask was discovered during removal of the central part of the burial mound, at a depth of 12–15 cm. It was found in a small vessel that contained another three iron artifacts: a knife, a buckle and a miniature model of an adze. According to the report, the burial was located at a depth of 0.60–0.75 m (Pletneva, 1974: 91–92, fig. 287, 288), in a pit arranged in the bedrock layer. The vessel with the mask was located above the northern edge of this flat burial. It contained the remains of a 30–40-year-old man and a 16–20-year-old woman, and abundant grave goods.

*Mask 5* (see Figure, 5; excavation area 2, 2014). An item with an ornithomorphic top. Its total height is 5.6 cm, its weight 6.8 g. The casting is single-sided, and the shape of the artifact on the back side deeply concave. There are signs of a high relief, which renders the image of a bird. The general outline of the human face is oval. The eyes are shown by arc-shaped deepened lines forming ovals. Two pairs of slightly curved horizontal lines extending across the nose, which is designated by a narrow relief fillet, are marked symmetrically on the cheeks. A similar line is used to render the mouth. The chin is clearly modeled. Below is a subsquare relief projection, possibly depicting some face detail (a beard?). The length of the subrectangular neck is 1.8 cm. A subtriangular figure, probably symbolizing “the line of life”, is drawn on it.

A sitting bird with drooping wings is represented full-face on the head of an anthropomorphic character. It adjoins the human head tightly, and seems to be set on it at the middle of the forehead. This ornithomorphic figure is interpreted as a peculiar headdress or headgear. In the opinion of S.S. Moskvitin, a zoologist of the TSU, the bird-outline corresponds, most probably, to a representative of Falconiformes, or diurnal birds of prey.
Mask 6 (see Figure, 6; excavation area 2, 2014). An item with a zoomorphic top. Its total height is 4.7 cm, its weight 11.3 g. Single-sided flat casting. The general outline of the human face is subrectangular. The eyes are shown by a circular contour, the eyebrows and three pairs of symmetrical cut-marks on the cheeks are rendered by straight deepened lines, and the nose by a fillet, on which a cut-mark is made at the location of the mouth. The neck’s length is 0.5 cm; a convex subtriangular figure (“the line of life”) is seen on it. The image of an animal facing left is separated from the human face by a horizontal line. The animal’s eye is rendered using the same technique as the human eyes, i.e. by a deepened contour, which, however, has an oval shape. The top is interpreted as a representation of a headdress in the form of an animal. A zoomorphic creature is rendered symbolically; therefore its species cannot be determined unambiguously.

Masks 5 and 6 were found during excavations in 2014, and are related to the same flat burial that contained remains of two children. The burial pit, 1.11 × 0.46 m in size and 0.32 deep, is oriented along the NE–SW line. The first individual is represented by the crown of a deciduous molar, the age of his/her death is 6 ± 3 months; the second one has permanent teeth, the age of his/her death is 5 years ± 16 months*.

Mask 5 was found at the very bottom of the burial pit, near its northeastern wall, in a cluster of objects including a small iron buckle, a bronze buckle of normal size, a bronze image of a bear’s head, and small iron items, barely identifiable. Also, two iron three-bladed arrowheads and fragments of a ceramic vessel were found in the grave.

Mask 6 was discovered at a distance of about 1 m from mask 5, near the southwestern upper edge of the burial pit, i.e. at the ancient daylight surface level, also in a cluster of iron objects: a small knife with the remains of sheath, a small buckle, and a fragment of plate.

Analysis of materials

The stylistic unity of all six anthropomorphic masks from the Timiryazevo-1 burial ground is undoubted: the finds are unified by several common features.

The masks were made by single-sided flat casting. They have no loops or holes for fastening. The masks are similar in size (their length varies from 3.8 to 5.9 cm) and weight (from 6 to 18 g).

There are deepened stripes and lines in the middle sections of the faces of all the anthropomorphic creatures. In general, 1–3 oblique strokes are applied on the cheeks; these are symmetrical relative to the vertical facial axis. On one image, two slightly curved horizontal lines are drawn through the nose across the face (see Figure, 5). All these flutes, taking into account their direction and specific locations, are interpreted as peculiar paintings or tattoos rather than nasolabial or other natural wrinkles.

In all masks, the nose is designated by a straight fillet, and eyes by deepened contours. In general, the anthropomorphic images show realistic parts of the face. Each mask has a “neck”, shown by a straight process 0.8–2.2 cm long. The necks of some characters contains various details such as those called “the line of life”.

The main differences between the Timiryazevo-1 masks are related to depiction of the upper part. In this zone, two masks show figures of animals (see Figure, 5, 6), interpreted as zoomorphic headdresses in the form of birds. Two other masks have representations of other types of headdress: a combat helmet with a low round dome (see Figure, 1), and some headdress with a crown composed of three horizontal rows (see Figure, 4). In the parietal region of the two other masks, no additional elements are designated.

Common regularities can also be identified in the context of discovery of all six masks. The first was earlier noted by Pletneva with respect to the materials of the 1970s: the masks were found in clusters of objects including miniature models (2010: 181). The second: these clusters almost always contained a ceramic vessel and/or an iron knife. In half of the cases, masks and other miniature objects were placed inside a vessel. The third is that said clusters of objects with masks were located outside of burials, usually at a very small depth from the surface. An exception is the cluster with mask 5, which was recorded immediately in the grave.

Dating and analogs

The presented anthropomorphic images from the Timiryazevo-1 cemetery have been found in complexes dated to the 5th–8th centuries (Belikova, Pletneva, 1983: 16–19). Arguably, bronze masks were used in the ritual of this site throughout the entire period. Two objects from mounds 55 and 60 (see Figure, 2, 4) are dated to the 5th–6th centuries, judging from the associated clusters of miniature models and other things typical of the Tashtyk culture. Two other masks from mounds 39 and 59 (see Figure, 1, 3) are assigned to the 6th–8th centuries (Ibid.: 16–19, 95). When determining the upper date of occurrence of anthropomorphic images, we should consider the opinion of Pletneva that these were not encountered in the Tomsk region of the Ob after the 9th century (2010: 182). Judging from stylistic analogs of

*Anthropological definitions have been made by the junior researcher of the Laboratory of Anthropology and Ethnology of the Institute of the Problems of Northern Development of SB RAS, E.O. Svyatova (2015: 16–17).
the Timiryazevo-1 masks, the distribution of such images was limited to the Tomsk-Narym region of the Ob.

The artifacts closest to those considered in this article are available in the collection of the Novosibirsk State Museum of Local History and Nature, which is composed of objects discovered, according to A.V. Shapovalov, in the Tomsk region of the Ob. This collection includes five bronze masks made in the same artistic style as the finds from the Timiryazevo-1 burial ground. Unfortunately, the archaeological context of the artifacts stored in the Novosibirsk Museum is unknown. They are assigned to the 6th–8th centuries with reference to similar materials from the dated cemeteries of Timiryazevo-1 and Relka (Shapovalov, 1995: 40, fig. 1, l–5).

Among the masks found in the Narym region of the Ob, located north of the Tomsk region of the Ob, the only complete analog of Timiryazevo items is the bronze find from the Relka burial ground of the 6th–9th centuries (Chindina, 1971: Fig. 2, 2; 1977: Fig. 34, 17; 1991: 67). Other anthropomorphic images discovered in the burials and clusters of objects in the Relka mounds (Chindina, 1977: 34) are considerably different stylistically from the Timiryazevo masks.

In other Siberian regions, no analogs of the discussed artifacts from Timiryazevo-1 have been recorded; in particular, in the Novosibirsk region of the Ob, the Kuznetsk Depression, Baraba, and the Omsk region of the Irtysh (see (Baraba…, 1988; Troitskaya, Novikov, 1998; Konikov, 2007; Bobrov, Vasyutin, Onishchenko, 2010; Illyushin, 2012; and others)).

Bronze and wooden masks (15 spec.) that were studied in detail and defined as “images of doll faces” by K.G. Karacharov (2002) may be mentioned as indirect analogs of the Timiryazevo finds. These are from funeral and settlement assemblages of the Surgut region of the Ob, and are assigned to the second half of the first millennium AD, primarily the 8th–9th centuries. Like the masks from the Timiryazevo-1 cemetery, they are small in size, flattened, with marked “necks”, and made in a realistic and laconic manner of rendering the facial details (their noses are rendered by straight fillets). Another common feature is the depiction of a headdress. The main distinction of the Surgut anthropomorphic characters is the absence of lines designating, probably, tattoos.

The results of analysis of the collection of anthropomorphic images from the Timiryazevo-1 cemetery (6 spec.) and a search for their analogs are indicative of a specific Timiryazevo group of masks distributed in the Tomsk region of the Ob in the 5th–8th centuries. Taking into account the abovementioned artifacts from the Novosibirsk State Museum of Local History and Nature (5 spec.) and from the Relka burial ground (1 spec.), this group currently comprises 12 specimens. These artifacts belong to the same iconographic type known from the materials of medieval repoussé ritual masks from western Siberia.

The Timiryazevo masks differ from the anthropomorphic images of the previous Kulai time, though they maintain a certain continuity in very notion of, and the general features of, image-rendering. L.A. Chindina rightly points out that Early Medieval metal figurines represent a typologically new casting, differing from the Kulai technique by a total absence of open-work details; and by realism in the creation of images, the polishing of the front surface of masks, and some other features (1991: 62).

Anthropomorphic masks
in the funerary rite of Timiryazevo-1

Earlier, analyzing the ritual of the Timiryazevo-1 burial ground, Pletneva proposed to consider the objects from the mound as elements intended to “supply” the deceased person “not only during the funeral, but also later, during the funeral feast”. She also suggested that the mask from mound 59 was applied “to some base, probably to a wooden or rag doll”. On the basis of ethnographic materials related to Siberian peoples, she interpreted this doll as “an abode for one of the deceased person’s souls” (Belikova, Pletneva, 1983: 107, 111–112). A hypothesis that bronze masks from the Timiryazevo-1 burial ground were details of dolls, other parts of which were made from non-persistent organic materials, is now supplemented by new arguments.

1. All six Timiryazevo masks shown elongated necks. In our opinion, such a neck is a structural member that was used to fasten an artifact to an organic base.

2. Unique dolls of the 8th–9th centuries have been discovered in the neighboring Surgut region of the Ob. In ten cases, it was reliably recorded that masks “were details of dolls having soft bases with flat frames of twigs” (Karacharov, 2002: 27). The masks were bronze or wooden.

The use of small dolls with metal masks, which served as their “faces”, is well known in the ritual practice of Siberian peoples. Such dolls probably represented both familiar spirits and deceased relatives (Alekseenko, 1971; Sokolova, 1995; Baulo, 2004; and others). The masks could be very similar in appearance, so it was not possible to determine whom exactly they represented without the help of tradition-bearers as informants. Karacharov studied the dolls found at settlements and burial grounds in the Surgut region of the Ob, and pointed out that it was impossible to determine their function unambiguously (2002: 49). The archaeological context of the masks, and their comparison with the ethnographic data, allow the Timiryazevo dolls to be interpreted as ritual doubles of the deceased persons.
There are many publications about various peoples of Siberia that describe the rite of manufacturing a temporary funerary substitute by the deceased person’s kindred; so it is impossible to provide even a quick overview. Dozens of different variants of this rite are recorded among the Ugric, Samoyedic and Turkic peoples, and also among the Kets (Aleksenko, 1971; Pelikh, 1972: 73–78; Shishlo, 1975; Gemuev, 1990: 206–208; Sokolova, 1995; and others). Therefore, ethnic interpretations of the archaeological materials that confirm the existence of the rite under consideration seem inappropriate. This tradition is best described and studied for the Ob Ugrians (Chernetsov, 1959; Sokolova, 1995, 2001, 2007, 2009; Fedorova, 2007, 2010; Zolotareva, 2011; and others), since in their culture the practice of making dolls as temporary abodes for one of the deceased’s souls was recorded in a number of places even at the turn of the 20th–21st centuries (Sokolova, 2009: 638; Fedorova, 2010: 316).

In general, this tradition provided for manufacturing a small doll as an abode to be temporarily taken up by one of the deceased person’s souls. The doll was treated as a living person: it was “fed”, “put to sleep”, and provided with specially sewn clothes—miniature copies of clothes for living people. After a certain time, this “soul” of the deceased “settled” in a newborn child of the same clan. Interpretation of the archaeological context of Timiryazevo masks requires ethnographic descriptions of subsequent actions with the dolls. For example, the following variants have been recorded among territorial groups of the Khanty and Mansi (see (Gemuev, 1990: 179; Sokolova, 2009: 624–625, 630; Fedorova, 2007: 209–210)): dolls were taken to a sanctuary or simply to a forest, where they were left or buried; carried over from the house to the attic where they were to be stored; burnt; brought to a cemetery, and placed into a grave structure, or put (“sub-buried”) into the grave of the person for whom this doll was made; buried in the earth near the cemetery or at the cemetery itself; representations of the oldest or most honored people of the clan were stored at home and passed down through the generations.

It is clear that not all the above methods of handling the images of the deceased can be traced via archaeological materials. Noteworthy also is the following practice recorded only archaeologically: according to Karacharov, concealment of dolls also took place at abandoned, already “archaeologized” settlements (2002: 28).

In the Timiryazevo-1 ritual, an intentional burial of dolls in the site area is reliably reconstructed. Most commonly, they were sub-buried at a small depth in the burial mound. In a double burial of children (excavation area 2, 2014), one doll (see Figure, 5) was placed directly in the grave, while another (see Figure, 6) was left at its edge. The dolls were buried along with “their belongings”: miniature copies of real tools of trade, weapons, adornments, and ware. Interestingly, the set of these models generally coincides with the composition of grave goods from burials with real human remains. Moreover, the reduced iron models repeat the shape of regular items such as adzes, knives, and arrows. Metal buckles often found in the clusters of things astonish by their diminutiveness, and their manufacture must have required real pinpoint precision.

From ethnographic materials, it is known that dolls representing the deceased had their “belongings”: as adornments, ware, and knives. They were accompanied by various “additions” such as tobacco, gunpowder, coins, and even banknotes (Sokolova, 2007: 66–68; 2009: 618–619). Only miniature clothes were specially sewn for the dolls, while other items designated for them were common everyday objects. No tradition of intended manufacture of other small items for dolls has been recorded by ethnographic studies. Notably, in the Timiryazevo-1 burial ground, along with miniature models, full-size objects have also been found, i.e. real objects could have been placed together with a doll.

From our point of view, the context of discovery of the Timiryazevo masks is a key to understanding another specific feature of the ritual: the presence of dozens of clusters of miniature metal objects without obvious traces of practical use, often placed in small ceramic vessels, outside of burials. This raises the question, why were only six masks (structural parts of dolls representing deceased people) found during the excavations of the tremendous Timiryazevo-1 cemetery? Most probably, they reflect only one type of the similar dolls that were used in the postfuneral practice of the medieval population in the Tomsk region of the Ob. This assumption is based on the fact that the use of dolls made of organic materials only is known from archaeological and ethnographic materials of Siberia. In such cases, only grave goods that accompany dolls can be recorded archaeologically. In Timiryazevo-1, these goods include primarily miniature models (metal objects, ceramic vessels), and also full-size items. About 30 such accumulations of objects have been reliably recorded from the site study materials.

The dolls could have been made on the basis of anthropomorphic bronze figurines that were cast “at full height”. Only one such artifact was found in Timiryazevo-1, mound 15 (Belikova, Pletneva, 1983: Fig. 26: 161). Regrettably, the archaeological context of this find is unclear, since the mound was looted, and the figurine was found in the discharge (Ibid.: 23).

Conclusions

The comprehensive study of these six anthropomorphic bronze masks from the Timiryazevo-1 burial ground has resulted in a conclusion about distribution of Timiryazevo masks, belonging to the same iconographic type of
western Siberian medieval masks, in the Tomsk region of the Ob in the 5th–8th centuries. Analysis of the context of their discovery has revealed the ritual of manufacture, from organic materials, of deceased persons’ images in the form of dolls, whose faces were represented by these masks. The dolls were used in the postfuneral rites, following which they were sub-buried in mounds, placed in graves, or left nearby.

It is conceivable that dolls of other types, made from purely organic materials that did not survive to the time of excavations, were also buried at Timiryazevo–1. This is evidenced by numerous isolated clusters of miniature objects buried in shallow pits inside burial mounds or between them.

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