REINDEER HERDING AND DOG BREEDING IN THE MEDIEVAL POPULATION OF THE PERM CIS-URAL REGION (ACCORDING TO THE PARTS OF THE BONE HARNESS)

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The article presents the analysis of the bone harness parts found on the territory of the Perm Cis-Ural region based on archaeological data. The excavations carried out in the recent years at archaeological sites of the area under study allow us to address the issue about the reindeer herding and dog breeding. After analyzing the findings of the bone harness parts in the Perm Cis-Ural region we can argue that reindeer and dogs were used as mounts.

Keywords: reindeer herding, dog breeding, bone harness, middle ages, the Perm Cis-Ural region, trochanters, halter, buckles.

INTRODUCTION

Among animal bones found in the cultural layer of the Perm Cis-Ural settlements, there are bones of dogs and relatively many bones of the reindeer. Reindeer bones comprise a significant percentage among the skeletal remains collected at the settlement monuments of the Perm Cis-Ural region. As a rule, researchers associate the availability of these bones with the hunter's prey. Reindeer herding, as a form of livestock, is not considered independently in the concerned area. However, the findings of the reindeer harness elements provide clear evidence of the existence of reindeer herding. Reindeer herding, based upon the bones found among the cooking remains, was focused on getting lean (along with hides, bones and horns), and the availability of a harness testifies the use of reindeer for transport purposes. In Rozhdestvenskoye settlement, for example, reindeer bones amounted for 13.5% of all found bones, whereas in the Anyushkar settlement, which didn't play a special role in the transit trade, this figure was just 2.2% (Belavin, Krylasova 2008, p.255). Of course, we are not talking about the existence of large reindeer husbandry, as it was practiced in the Northern peoples. It is assumed that the reindeer was used as transport animal for the enjoyment of distant journeys for the purpose of hunting or trade. Dog bones make up a very small percentage of the total amount of osteological material. Their number in the Rozhdestvenskoye settlement amounted to just 1.8%. However, this does not indicate the fact that the number of dogs was small but only the fact that they were not eaten. Dogs were needed for safeguarding settlements, for market hunting, they were used as sledge dogs or possibly shepherd dogs.

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Before describing the parts of the bone harness from the territory of the Perm Cis-Ural region it is necessary to understand what in principle is the system of the reindeer and dog harness.

The deer harness consists of a halter with the leash and straps with cord. Depending on designs halters are divided into two types: simple and complex ones. Simple halter consists of a loop and leash, while a complex halter has a loop made of leather straps and bone plates with two or three holes, connected to each other. Besides, bones artifacts may include fasteners, blocks, plates with ripples, trochanters and buckles (HEAS 1961, p. 22). The latter features are important for comparison with available archaeological material, because the belt parts of halter cannot be preserved under normal conditions.

A dog harness is a leather loop strap with a transverse crosspiece in the middle. A dog's head was poked through the hole so that the crosspiece laid on dog's back while the strap was held on the sides. A long narrow strap was attached to the ends of the shoulder straps and was fixed aside the dog, on the left side for right dog and on the right side for left dog. By means of these straps the dogs were fastened to the central belt rides. This type of harness is called an "oblique" harness. Besides, there was also "straight" harness. It consisted of the same parts, as the "oblique" harness, though had one or even two additional crosspieces and was provided with a strap passing under the dog's belly (HEAS 1961, p. 56). The bone parts that were used in this type of harness included trochanters and plates for leashes.

METHODS

When analyzing the bone harness parts, we used visual inspection and searching for analogies in the ethnographic and archaeological material from territories where such economic activities as reindeer herding and dog breeding were used exactly (for example, Western Siberian peoples). These findings are just preliminary. A more accurate correlation of the bone harness parts, found during the archaeological excavations, with deer and dogs harness parts, will be available after the trace evidence analysis of bone objects that is to be done in further research.

RESULTS AND DISCUSSION

According to A.A. Spitsin, the part of reindeer halter in the form of a curved bone plate, was found at the Kudymkar settlement (Fig. 1.1).

Oborin V.A., in his master's thesis, devoted to the Rodanovskaya archeological culture, was the first who identified some categories of items associated with a dog or a reindeer harness. Later G.T. Lenz, considering bone artifacts of the Anyushkar settlement, noted the availability of harness and sledge parts (Lenz 2002, p. 229, Fig. 7).

Among the reindeer harness parts, found at the Anyushkar settlement, we can distinguish a bone plate with holes around the edges used for tying dogs (Fig.

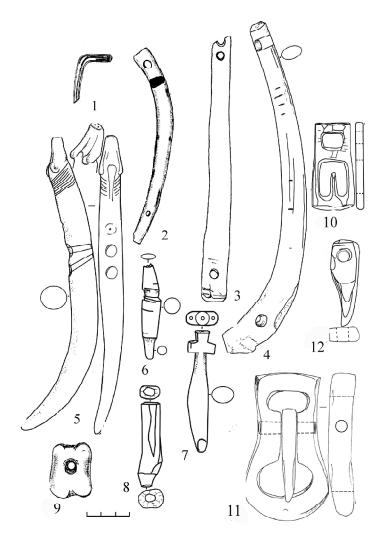


Figure 1: Bone parts of a harness: 1 – Kudymkar settlement; 2, 9 – Anyushkar settlement; 3 – Lavryatskoye settlement; 4-8, 10-12 – Kuprosskoye settlement

1.2.). These plates replaced the chain and don't allow the dog to rip the strap, which becomes unattainable. A similar plate was found in 1992 at the Lavryatsky settlement (Fig. 1.3.) (Belavin 2011, p. 84).

A set of bone artifacts related to the harness parts was excavated in 2010 at the Kuprosskoye village settlement (excavations by A.N. Sarapulov) in erection #1 and next to it. One of the items of this set represents the bear's feather with through holes at the ends (Fig. 1.4.), drilled in different planes. This item could also be used as a dog-lead. Though, the use of such curved bone rods with holes at the

ends is known also with regard to reindeer halters, where they were usually placed on the belt in the area of the frontal part of the deer's neck. For example, similar part is available in the halter from the collection of Olenek historical-ethnographic museum of the peoples of the North (www.russianmuseums.info/M1290).

The most expressive items among the findings from Kuprosskove village settlement is the psalia made from reindeer horn (Fig. 1.5). Its one end is featheredged while another one is cut in the form of bear's head with fur on the neck shown by horizontal lines. Two through holes are drilled in the middle, another one is just traced nearby, though not drilled through. The intended use of psalia still remains unclear. During the existence of settlements considered, the use of bone psalia in a horse harness was not noted. The design of dog and reindeer harnesses does not provide for the use of psalia. An interesting version about the possible use of the psalia with the bear's head, noted in the materials of early iron age, was suggested by L.I. Lipina and E.M. Chernykh. According to them this item could be used in devices like muzzle, collar or harness designed for keeping in captivity the bear (Lipina, Chernykh 2011, p. 134, Fig.1). Although this version still seems somewhat fantastic, it is not denied the right to exist. On the other hand, the item under consideration could be used not exactly as psalia, but as the clasp, like crutch fasteners, widely found in medieval materials. Such fasteners in the form of a rod with a hole in the center were used in some designs of simple reindeer halters (HEAS 1961, PL. II/5).

The set of items from the 1st structure of Kuprosskoye village settlement includes also trochanter bone rods (Fig.1.6-8), which were used in reindeer and dog harnesses to prevent straps twisting. Another trochanter part, made from sheep anklebone, was found at the Anyushkar settlement (Fig. 1.9).

In addition, the complex structure #1 of Kuprosskoye village settlement is characterized by availability of bone buckles. One of them is relatively small elongated rectangular item with a fixed pull (Fig.1.10). The second buckle is a large 8-type item with a massive pull, which is joined to the buckle by the pin (Fig. 1.11). There is also another similar pull among the findings, which is preserved separately from the buckle (Fig.1.12). Buckle with similar design was found at Rozhdestvenskove (Fig. 2.1) and Salamatovskove settlements (Fig.2.2). Bone buckles are known as artifacts found in the medieval materials in Eastern Europe, though they occur relatively rarely. Among the materials of the processed collections of the Perm Territory, such buckles were found only at three described sites (Kuprosskoye, Rozhdestvenskoye and Salamatovskoye settlements). They are usually associated with the horse outfit and are interpreted as supporting (Bilyar Culture 1985, p. 202), though, probably, they could be used not only in a horse harness. Given their availability in combination with other items at Kuprosskoye village settlement, we can assume their use, for example, in the reindeer's harness.

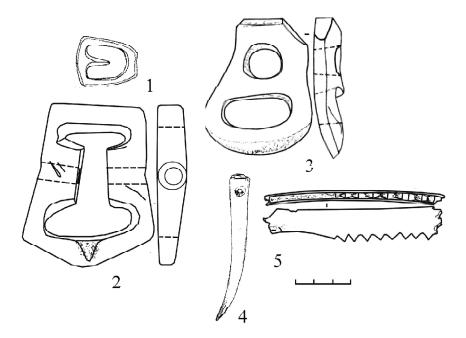


Figure 2: Bone parts of a harness: 1, 3, 5 – Rozhdestvenskoye settlement; 2 – Salamatovskoye settlement; 4–Anyushkar settlement.

Lenz G.T. notes that halter fasteners, dog harness fasteners (5 items) and adapters for mounting the sledge were also found at the ancient settlement of Anyushkar (Lenz 2002, p. 229). Besides, G.T. Lenz distinguishes special category of bone items such as facility for unbinding knots in dog harness, representing bone rods with pointed and curved working end. Such an item was found, for example, at the ancient settlement of Anyushkar (Fig. 2.4). Similar items made of metacarpal bones and called fids were noted by V.I. Moshinskaya among artifacts found at Ust-Poluy) (Moshinskaya 1953, p. 84). Such fids are widely used by Northern peoples for unbinding knots.

Another two items that can be interpreted as the possible parts of the reindeer harness were discovered in excavations VII at Rozhdestvenskoye settlement (excavations by N. B. Krylasova). The first item is a bone block (Fig. 2.3), which was used in block connection to stretch ganglines for fastening with sledge. Vasilevich, G.M. and M.G. Levin noted that the use of such blocks is typical for all Samoyedic peoples as well as for the Khantys, Mansis, Kets, Dolgans and separate groups of Yakuts and Evenks (Vasilevich, Lewin 1951, p. 68) who borrowed team from Samoyedic peoples.

Another item that was found at Rozhdestvenskoye settlement was originally interpreted as ornamenter for ceramics (Abdulova, Krylasova, Sarapulov 2012,

p.15) (Fig. 2.5). It was made of a piece of cattle rib and had cut triangular toothing at the edges. Since the toothing was quite large and rare, it produced rare and deep grooving when making ornament, though the ornament toothing of the vessel walls found at Kama River area was quite dense. Therefore, there is some reason to believe that this product might have been not ornament but part of reindeer harness. The knuckles with differently bended toothing and orifices at the ends are often used in complex halters. The item found at Rozhdestvenskoye settlement is similar to other items, though it is fragmented, but the ends having orifices perhaps were broken. The purpose of these items was to press the sensitive spots to force deer to walk smoothly and safely. These items were used by the Chukchis, Koryaks, Evens, and Evenks (HEAS 1961, p. 22). Items similar to those found at Rozhdestvenskoye settlement were used also by Dolgans (Shramko, 1988, Fig. 3.3). Complex halters involving plates with prongs were used for training the reindeer, to harness the trace deer and while hunting for wild deer with a bait reindeer. There is the following description of hunting with bait reindeer among the Tungus: "Bait - male or shedeer - should have a color like a wild deer. When a hunter encounters a herd of wild deers, he lets the bait towards them against the wind. The bait is constantly kept on a hunter's leash, and a hunter is crawling behind him. Hunter manages the bait, using the belt, forcing him to stop, to lie down, to go in one direction or another. A good hunter with skillfully trained bait can kill a lot of deers from the herd before the rest of the wild deers will find him. In this case hunters usually use bows rather than guns" (Moshinskava, 1953, p.79-80). This hunting technique with bait was quite common in other Northern peoples.

CONCLUSION

Thus, having analyzed the findings of the bone parts of the harness in the Perm Cis-Ural region it can be argued that reindeers were used as mounts, and, for example, could be used when hunting on wild reindeers with the help of bait reindeer. This is quite logical, given that the reindeer meat was eaten, while the bone and horn of reindeer were one of the main materials used in the manufacture of various bone items. It is worth mentioning that in any case it is not about large reindeer husbandry, like in the Northern peoples. Despite the fact that the reindeer inhabits the extreme North-West of the Perm Territory, the climatic conditions do not allow to keep the deer herd in the winter, because the snow cover reaches 1.5 m and this circumstance, of course, does not allow the deer to feed with moss (Nazarov, Sharygin, 1999, pp. 48, 79). Therefore the only possible form of use of domesticated reindeer in the Perm Cis-Ural region during the middle age was episodic use of these animals as mounts as well as in hunting on their wild relatives.

As for the dog breeding, there is no doubt that dogs were used in the middle ages as sledge animals that is proved by available written records. The Persian writer Aufi, when describing the Bulgars trip to the land of Ugra, based on X

century Arabic sources, reports that "Bulgars travel to their country and bring clothes, salt and other things that are their goods. As a means of transportation of those goods they designed the devices like small wagons harnessed by the dogs, as there was a lot of snow and any other animals were unable to cross this land." Even in the XVII century, according to reports of Herberstein, in Great Perm people continued to ride on the dogs (Belavin, Danich 2010, p. 143).

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