THE ROLE OF DOMESTIC ANIMALS IN THE LIFE OF EURASIAN NOMADIC WARRIOR GROUPS IN LIGHT OF RECENT ARCHAEOLOGICAL EVIDENCE

YENİ ARKEOLOJİK ÇALIŞMALARIN IŞIĞINDA AVRASYALI GÖÇEBE/SAVAŞÇI TOPLUMLARIN HAYATINDA EVCİL HAYVANLARIN ROLÜ

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ABSTRACT

A mobile group of stockbreeders who in the 4th millennium BC inhabited the steppes of northern Caspian Sea was apparently forced to undertake far-distance migrations in search of better pastures by the environmental crises of the 2nd millennium BC. These migrations had tremendously significant historical implications and brought about several innovations. With the expansion of nomadic pastoralism, new form of human-animal interaction in virtue of particular physical and behavioral characteristics and capabilities of livestock was developed and began to lay the basis for economic, social and class systems as well as art style of the respective communities. Given the nomadic character of their life, there still remain several questions about the culture of the Eurasian nomadic warrior groups, and the present work, building on case studies, attempts to examine the impacts of the environment and fauna diversity on and the role of animals in the subsistence system and the art as well as the social systems and classes of these groups.

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ÖZET

MÖ 4. binyılda kuzey Hazar denizi çevresinde ki düzlüklerde yerleşmiş olan göçebe hayvan yetiştiricisi insan grupları anlaşıldığı kadarı ile MÖ 2. bin yıldaki yaşanan çevresel felaketlerden kaçmak ve daha iyi otlaklar bulmak amacı ile uzun mesafeli göçler yapmak zorunda kalmışlardır. Bu göçlerin tarihi açıdan olağanüstü niteliktedirler vardır ve bir kaç yeniliği barındırırlar. Pastorik göçebeliğin genişlemesi ile, hayvan-insan etkileşiminde belli bazı değişiklikler olmaya başlamış ve hayvancılığın da gelişmesi ile ilgili kültürlerde ekonomik, sosyal ve klas sistemlerinin temelleri atımış dolayısı ile yeni sanat tarzları gözlenmeye başlamıştır. Hayatlarının göçebe karakteri göz önüne alındığında, Avrasyalı göçebe/savaşçı grupların kültürleri ile hala bazı cevaplanmamış sorular vardır. Bu çalışma, vak'a incelemelerine dayanarak, çevre şartlarının, faunanın ve hayvanların bu kültürlerin geçim sistemleri ve sanat başta olmak üzere sosyal düzen ve klas yapısı üzerinde ki etkilerini incelemeye çalışacaktır.

INTRODUCTION

Archaeological enquiry into the structure of life of the Eurasian nomadic warriors, who had been moving along the Eurasian steppe belt, the Caspian Sea littoral steppe, northern Urals, the Black Sea region, northern/southern Caucasia, and northwest Iran and profoundly affected the ancient East, will demand extensive studies on the economic, social, ritual and cultural aspects of these people by analyzing their remaining material culture.

In light of the results from published studies, one may presume that the subsistence of the Eurasian nomadic warrior communities was strictly contingent on environmental factors in the 4th and 3rd millennia BC but it became predominated by nomadic pastoralism in the 2nd and 1st millennium BC Livestock underpinned their diet, and they also obtained part of their other necessities such as clothing from animal products such as skin, wool, bone and horn. Thus, pastoralism could be regarded as a certain type of economic activity that called for annual migrations and triggered the introduction of a certain lifestyle that involved using horses and portable dwellings.

In such a culture, stocks represented a valuable property and capital for their owners, and the necessity to safeguard them resulted in the development of fighting skills among these tribes. Apart from their material value, animals, particularly horses, were also offered as sacrifices in this culture. The spiritual value of animals for these people hints at a logical relation between animals and their beliefs, a relation which eventually gave rise to an art style where objects were typically represented by stylized animal forms.

GEOGRAPHICAL LOCATION

Geographically speaking, the Eurasian steppe is bordered by the Mongolian plains on the east, the East European forests and the Siberia on the north, Hungry on the west, the Black Sea region and Caucasia on the south, and the Caspian Sea, the Aral Sea and the vast Central Asian deserts on the southeast[1]. The steppe constantly served as a belt and natural corridor in the wave migrations of various nomadic and semi-nomadic tribes[2].

The periodical climatic changes resulted in the population shift and changing borders in the steppe from the 4th millennium BC onwards[3]. Generally featuring a continental climate[4], the steppe splits itself into two climatic sub-zones: the regions to the west of the Ural Mountains with a moderate continental climate, and those to the east of the massif where a continental climate dominates[5]. Great rivers such as Danube, Dnieper, Don, Volga, Ural, Amu Darya, Syr Darya, Ob, Irtysh and Yenisei run across the steppe, forming natural boundaries between various ethnicities[6].

BACKGROUND

The northern steppes of the Caspian Sea, between the Lower Volga and the southern Urals, were apparently home to a mobile group of stockbreeders in the fourth millennium BC 7 who shared cultural and physical characteristics with the populations of the steppes of south Siberia and those of the Altay Mountains[8]. This pastoral group is generally described as the Afanasevo culture. The bearers of this culture were hunters and stockbreeders and used kurgan-type burials[9]. Based on the results from excavation at the Kuyum Kurgan[10], these people are supposed to have been among the first to domesticate horse[11], camel and cattle in the Eurasian steppe[12].

In the early 2nd millennium BC, the steppe is said to have been inhabited by two ethnic groups, namely Andronovo and Srubna[13], who would gradually dominate the entire steppe between 1500-1300 BC and establish themselves at a dominant position[14].

1 Bashilov / Yablonsky 2000: 9; Bendrey 2011: 2
2 Olkhovskiy 2000: 33
3 Yablonsky 2003: 3
4 Kuzmina 2007: 146
5 Bendrey 2011: 2
6 Yablonsky 2003: 3-4
7 Archaeometric analyses of the finds from Sukhanikha belonging to the Afanasevo culture have suggested a date between 3700-2500 BC for this culture (Svyatko/Mallory/Murphy/Polyakov/Reimer/Schulting, 2009: 24).
8 Yablonsky 2003: 2
9 The kurgan burial tradition consists of burial mounds or barrows with simple pit, stone-pit or chamber tomb graves framed by an embankment beneath the burial mound, and it literally denotes "the protector of burial" (Iravani Ghadim 2011: 191). Some of the characteristics of the kurgan burial type, such as stone embankments, heaps, stone burial and even their distribution continue in the so-called Kromlech graves. Structurally, kurgans fall in the megalithic burial category.
10 Kozshin 1970: 93-189
11 The sites attributed to the Afanasevo culture have yielded horse skeletons with impressions of bits on their jaws, which point at their taming for riding (Kozshin 1970: 93-189).
12 Okladnikov 1990: 80
13 The Srubna culture may be divided into the two sub-phases of Sabotinovka and Belozersk (Khanazor 1982: 55-56).
14 Karlovsky 2002: 64; Kuzmina 2007: 151-220

In the early 2nd millennium BC, the Eurasian steppe[15] for the first time saw innovations in the economy of the Andronovo people[16] that laid the foundations for nomadism and played a major role in the development of nomadic lifestyle there. Digging deep wells to obtain water in deserts, using light and portable houses, widespread application of wheeled vehicles pulled by tamed cattle and horses, invention of durable dairy products such as cheese and kumis, long-distance migrations across the steppe thanks to the enhanced bridles[17], and the invention of animal style art are among the major general traits of this culture.

The Animal Style typifying the Eurasian nomadic warrior groups was developed in the Andronovo culture. It is distinguished by its emphasis on animal motifs. That these motifs remained in use for almost three millennia may logically testify to their link to the lifestyle and belief systems of these tribes. Beyond its decorative aspect, the style conferred a certain meaning on the relevant objects, which could be viewed as an upshot of the way of life marked by hunting, herding and nomadism. Based on the available evidence, bone was presumably the earliest medium for this art[18].

Prompted by the drying up of the steppe and the ensuing environmental crises[19], the early 2nd millennium BC witnessed ample population replacements all over the Eurasian steppe[20], which occasioned the introduction of pastoral nomadism, enhanced transportation, and the beginning of bronze exploitation and bronzeworking. Thus began the first phase of the migrations of Andronovo populations[21]. In the late 2nd millennium BC, a second severe environmental crisis (extreme fall in temperature) in the steppe sparked off even farther migrations in search of affluent grasslands[22]. Results of zooarchaeological analyses on skeletal materials suggest a rise in the population of horses and sheep in this period, a fact that may be related with the ongoing crisis. The nutritional requirements of these animals would obliterate the need for storing fodder during winter[23].

Many archaeologists and physical anthropologists maintain, drawing on the evidence at hand, that the migratory wave of the late 2nd and early 1st millennia BC entailed long drawn out southwards journeys from the steppe to the Central Asia, northern India,

[15] The steppe covers the steep lands to the west of the Urals up to the Yenisei, the Taiga region to the north and the mountainous area of Tian Shin and Pamir up to the wadies and deserts of the Central Asia to the south (Kuzmina 2000: 121; Lambberg-Karlovsky 2002: 66).

[16] Since the adherents of the Indo-European migration theories have failed to reach a consensus on the Indo-Europeans' region of origin, some theorists such as Wahle try to offer southern Russia as a viable alternative (Hakelberg / Wahle 2001: 199–310). Trying to substantiate this stance, M. Gimbutas brought forth the Kurgan Culture hypothesis, claiming that these migrants had their roots in the northern Caspian Sea up to the northern Black Sea Basin and South Russia (Gimbutas 1956: 241). Kuzmina proposes the Volga-Ural Region or, by extension, South Russia in this regard (Qasimov 2013: 182), citing some ethnic and historical evidence to support his proposition of southern Ural as the motherland of the Indo-European people. He maintains that the Indo-European texts such as the Rigveda and Avesta reflect the Andronovo culture. He regards the lack of reference in the Rigveda to the use of potter's wheel as an evidence of the production of the Andronovo ceramics by the Indo-Europeans as they are invariably handmade (Karlovsky 2002: 64). Chernetsov considers the Petrov culture as the earliest component of the Andronovo culture, conferring an Indo-European identity to the Alakul and Fedorovo cultures (Chernetsov 1973: 12). The archaeological evidence however casts a doubt on the above positions in that the distribution of the Andronovo ceramics suggests that South Turkmenistan (the Merv oasis) was the southern extreme of the culture, and no evidence of the latter is hitherto known from Afghanistan, Iran and the Indian Subcontinent. Thus, the southward migrations of the Andronovo culture appears as an unviable assumption. Also, as we will discuss later, in light of the inscription from the Issyk kurgan (Akishev 2001: 389–395; Amanjolov 2003: 218–219) in Kazakhstan, assigned to the Proto-Altaic groups, and the mummified burials attested at Ukok and Pazyryk kurgans (Polosmak 1994: 80–130), the attribution of the kurgan burials to Aryans and Indo-European groups by Gimbutas appears to be inapt, and the association of kurgan burial with these groups is unrealistic. Further, regarding the migrationist theories invocation of the Rigveda and Avesta in linking the Indo-Europeans to the Andronovo culture, it is worthwhile to note that these texts both admit the Indo-European identity as essentially having been built on linguistic and ritual, and not necessarily on ethnic, grounds. People who offered sacrifices in the specified manner and to deities, and recited traditional hymns were regarded Aryans; otherwise they would be called the "Dasyu" (Witzel 1995: 109). Thus, the term Aryan was not an ethnic designation but was of linguistic and religious nature. The Dasyu was the name given to those who disrupted the man-deities cycle. Given the above propositions and because of their use of kurgan burials, horse, chariot, handmade pottery related to the material used by the Eurasian nomads and their use of animal bones to make tools, which finally gave birth to the so-called "animal style," as well as the subsistence economy and the diet diversity underpinned by stockbreeding, in this paper the Andronovo culture is described as a branch of the Eurasian Nomadic Warrior groups.

[17] Kuzmina 2007: 148-155

[18] Schefold 1938: 65-66

[19] Paleogeographic studies suggest the increased drought particularly in the eastern parts of the steppe as one of the reasons responsible for these replacements, following which vast groups began to move so as to find green pastures for their flocks (Bashilov / Yablonsky 2000: 9).

[20] The Catacomb, Koban and Sredny Stog cultures are thought to have been formed as part of westward migrations of the Eurasian nomadic groups. The studies suggest that their subsistence system consisted of agropastoral economy, and the relevant excavated weapons are reminiscent of the migrating Eurasian nomadic culture (Tarhan 1979: 358-364).

[21] Kuzmina 2007: 220

[22] Bashilov/Yablonsky 2000: 9

[23] Vinogradov/Epimakhov 2000: 242; Kuzmina 2000: 121-122; Bokovenko 2005: 21.

Caucasia and northwest Iran[24]. The excavated contemporary bridles testify to the steppe's population ability to ride horse and cover such considerably long distances. Spread of equestrianism in the steppe was a major advance of the 2nd millennium BC that happened thanks to the invention of a new type of snaffle bridle. Widespread use of horses for riding enabled these groups to overcome the crisis by virtue of a new type of economy that relied on stockbreeding through taking flocks to far-lying pasturage, a practice that furnished them with new food resources and contributed to the growth of flocks[25].

Now, the stocks became a sort of property, thus the need to protect them. This pushed the communities towards belligerency, and their subsequent demands called for new, more effective weapons[26].

In the late 2nd and early 1st millennium BC, the nomadic life made the majority of the steppe's population specialized stockbreeders, and the earliest Iron Age in the Eurasian steppe is marked by the boom of stockbreeder communities[27]. The period saw the arrival in the steppe of the Karasuk culture[28], which in turn heralded the appearance of iron use in the region.

At that time, many nomads left their settlements to embark on constant migrations in search of new grazing[29], thus in the 8th and 7th centuries BC the specialized herders would set the course of main historical, political and ethnic developments of the steppe[30].

In this period, the nomads gradually acquainted themselves with the Eurasian steppe and objects made of iron came to common use. In the first stages we witness a rapid growth in the social expansion of nomadic communities, who would finally set up a defined social network. By that time, numerous nomadic cultures, among them Cimmerian, Scythian, Tagar, Massagetae and Sarmatian, had appeared in the region[31]. Increased movements as a result of economic, social and climatic changes precipitated between pastoral nomads and sedentary inhabitants of the steppe's margins intensified clashes, which were majorly for grazing land and seasonal migration trails[32]. As clashes increased, warriors with a high social status emerged so as to safeguard the resources, and they later attained a particularly significant power and status in the communities.

In light of textual evidence and archaeological data, some groups of the Eurasian nomadic warriors had undertaken a westward direction in the course of these punctuated wave migrations. Among these were[33] the Cimmerians[34], the Scythians[35], the Sarmatians and the

[24] Excavation at Kurgan 13 of Tu Ali Sofla in the northwest Iran yielded two (bronze-bone) horse bits with the horse burial attributable to the Early Scythian culture.

[25] Bashilov/Yablinsky 2000: 9; Kuzmina 2007: 358; Iravani Ghadim 2011: 191-192; Iravani Ghadim 2014: 87-88.

[26] The late second millennium BC deposits all over the Eurasian steppe have yielded innumerable kurgans and weapons belonging to the Eurasian nomadic warrior groups (Kuzmia 2007: 358).

[27] Bashilov/Yablonsky 2000: 9

[28] Grakov 1971: 43-45

[29] Kent Hanks 2003: 57

[30] Bashilov/Yablonsky 2000: 9

[31] Bokovenko 2005: 22

[32] Kent Hanks 2003: 77

[33] Bokovenko 2005: 31

[34] Cimmerians were one of the Eurasian nomadic warrior tribes who were attacked by the Scythians when the environmental crisis arose in the steppes because of their rich pastures, and they were shooed away to the northern flanks of the Caucasian mountains. Thus, the Cimmerians intruded into southern Caucasus, northwest Iran and Anatolia. At the same time, the Scythians also moved southwards and penetrated northwest Iran (Bokovenko 1996: 98). In 714 BC they went beyond the Urartian borders to occupy Kummuh, Meluddu, Tabal, Subria and Hubusna. Mita, ruler of Musku, united the Assyrian king Sargon II due to the arisen unrests. In the wake of this alliance, Sargon II engaged in a battle in 705 BC in favor of Musku in the Tabal region, in which he was killed, and no mention of Musku was made in later written sources. This triumph took the Cimmerians to the Black Sea littorals and the Sinop region. They then launched campaigns lead by Dugdamme against the Phyrugians and pillaged Sard after Gyges was assassinated. The successors of Gyges entered into alliance with Assyria after the Cimmerians attacked them anew, but the Cimmerians again occupied Sard in 638 BC With the death of Dugdamme in wars against Cilicia, the Cimmerian power began to decline. In 500 BC, some of the Cimmerians colonized the Antandros region and the remaining were divided in two groups. The first group settled Hungry and the second the Crimean Peninsula. In light of the available historical evidence, the tribes were recorded as Gimirai in the Assyrian sources, Gimiraya in the Torah, and Kymmerio in the ancient Greek (Macgueen 1996: 173).

[35] In 774 BC, Argishti I claims in his annals that he has extended his political borders up to Iskigulu. On a stone inscription of Argishti I located near the Kanlica village on the Arpa Cay river, the Scythians are described as "the rider tribes" (Çilingiroğlu 1994: 72-73). In Asarhadon's annals of 679 BC, the Assyrian king defeats the Scythian ruler Ispakai in western Iran (Luckenbill 1968: 517; Çilingiroğlu: 1994: 104). Based on the regional developments, the Urartian king Rusa II (685-645 BC) as part of a political decision permits Sagastara, ruler of Iskigulu, to use the Urartian territory in his way to the Mannaean kingdom. This would have been both to remain safe from the Scythian despoil and to build an alliance between Mana and the Scythians against the common enemy, Assyria (Luckenbill 1968: 517; Tarhan 1979:335-369). To secure the region against the Scythian threat, Rusa II commenced construction projects of which one may refer to Qala Siyah, Qala Dokhtar, Danalu, Oghlan Qala and Songhor in Iran and Ayanis, Adel Cavaz and

Massagetae[36], who may be considered as the inheritors and successors of the Andronovo tribes[37].

These groups shared a similar lifestyle and have come to known as the Eurasian nomadic warriors of the late 2nd and early 1st millennium BC[38]

THE ROLE OF ANIMALS IN THE LIFE OF EURASIAN NOMADIC WARRIOR GROUPS

In the late 2nd millennium BC, in response to the harsh environmental and climatic disaster and temperature downfall, nomadic pastoralism emerged in an attempt to protect the flocks. The new system quickly spread across the steppe. The subsistence of these nomads depended in any aspect on animals, in particular stocks, as animal products including milk, meat and cheese represented the primary, and in certain circumstances, perhaps the only food resource for them[39]. Animals and related products such as skin, bone and horn also supplied their other necessities, among them being clothing. In light of the archaeological works within the Black Sea cultural sphere, the steppes on the Caspian Sea littoral, northern Urals and northern Caucasia, and based on the garment and textile remains excavated from settlement and burial sites in the region, wool fibers were in use in the steppe by the latter half of the 3rd millennium, and wool became the major fiber for textile production there from then on[40]. Thus, textile production is identified as one of the economic activities of the Eurasian nomadic groups. Spinning and textile manufacturing served to produce not only daily life supplies but also artworks. Textiles manufactured of sheep wool were found in Pazyryk Kurgans 4 and 5 in Altay and the Noyon Uul Kurgan[41] in Mongolia. Judging by the knot type, the use of carmine pigment[42] in dying, the tattoos on the mummies rendered in the animal style attributed to the Eurasian nomads, and analysis of the assemblage of small finds from the graves of the Kurgans 4 and 5 in Pazyryk as well as the suggested date of 300 BC, the carpets excavated from the latter graves may be safely attributed[43] to the Scythians[44].

Also, the Andronovo people employed fur, animal skin and wool in making their clothes, and farm animals in particular horses used in transportation and migration played a significant role in annual migrations, people transportation and controlling flocks on horseback as was required by the need to guard herds in the course of migration.

In the late second and early first millennium BC, the human-animal interaction took a new form. Now, animals, besides their contribution to everyday life, came to represent emblems of power, fame and ethnic and cultural identity of the community or the tribe[45]. At the time, alongside cultural, social and ideological transformations, we witness the prevalence of certain animal patterns in artworks, which have come to known as the Scythian art[46].

Kef Kalasi in the Lake Van Basin (Çilingiroğlu 1994: 105-107). In 673 BC, Iskarpai, the ruler of Iskigulu, dies. His successor, his son Partatu, proposed marriage to Asarhadon's daughter. No written sources have thus far corroborated the intermarriage, but Partatu's attack to the Median tribes who were enemies of Assyria lends support to it (Olmstead 1964: 424). However, the alliance of the Scythians and the Medians in 645 BC forced Sarduri III to enter into a military alliance with the Assyrian Assurbanipal in 640 BC (Çilingiroğlu 1994: 104). Drawing on the excavated evidence, the Scythians were responsible for the fires and destruction that occurred at Toprak Qala and Cavus Tepe in the reign of Rusa II. The confederation formed of the Medians, Babylonians and Scythians brought about the fall of Assyria and the conquest of Ninava. These tribes are called Asguzai and Iskuzai in the Assyrian sources, Skythai in the ancient greek sources (Diakonof 1985: 96), Isguzulu in the Urartian sources (Çilingiroğlu 1994: 72-73, 105), Askeaz in Torah (Tarhan 1969: 145) and Saka in the Achaemenian sources. In the inscription of Darius the Great, these tribes are described under three deferent titles of "Saka tigrakhauda, " "Saka tiay para daray, " and "Saka haumavaraga" in three different geographies (Herrman: 1993: 158).

[36] According to Heredotus, the Massagetae were nomadic tribes whose subsistence system mainly hinged on herding but they also practiced fishing on the Araxes banks (Heredotus 1998: 216).

[37] Kuzmina 2007: 206

[38] Olkhovskiy 2000: 36

[39] There is no doubt that in the late Bronze Age the Anderenovo populations used dairy products and were familiar with their processing. Remains of cheese have been identified within a vessel at the Kipel settlement site. Cheese represented a major and necessary invention for the nomadic tribes and the mountainous herding economy when they had no access to their herds for a long while, and by then they had learned how to make kumis (Kuzmina 2007: 147-149).

[40] Shishlina et al. 2000: 109-110

[41] Minyaev 2010: 182-186

[42] The crimson color in the large carpet and the felt from Pazyryk Kurgan 5 was dyed using Scleranthus perennis L. or Perennial knawel, a pigment deriving from Polish cochineal that is an insect living as a sessile parasite on the roots of Scleranthus perennis L. The region of origin of this pigment is Ukraine and eastern Poland (Böhmer/Thompson 1991: 30-36; Balakina 2006: 54-60), and it is said that the Scythians presumably learned the dying technique from the Ukrainian culture and transferred it to Eurasia.

[43] Artamonov 1969: 232-241; Dalley 1991: 118; Shishlina/ Golikov/ Orfinskaya, 2000: 109-110.

[44] Surveys and excavations by the Finnish archeologists, and the comparison of the Pazyryk, Ukok, Berel, Katandar, Tuva, Bike, Basadar and Tuekta kurgans attest to the Scythian sovereignty over the region from 2000 BC to 800 BC (Bourgeois/Bourgeois/ Cammaert/Decleir/Langohr/Mikkelsen/Huele 1999: 309-311).

[45] Kent Hanks 2003: 60

[46] Stylized animal motifs, apart from their decorative aspect, reflected the ideology of the nomadic tribes. However, since the respective art style was developed in the late second and early first millennium BC by the Scythian people in the western Eurasian

Thus, given the vital role of animals and the particular lifestyle of these groups that involved hunting, herding and nomadism, animals also entered the religious ideology[47] and beliefs of the Eurasian nomads, with the majority of the excavated kurgans yielding animal remains—either as complete or partial skeleton—as sacrifices. Ritual burial of animals in separate graves was a common practice among the regional population. In earlier periods, animals were buried complete, a fact that attested to their importance for those communities[48]; later on, however, apparently for economic reasons, the tradition of sacrificing animals together with human body came to the fore[49]. The major offered animals were horses, sheep, goats and bulls.

HORSE

Horse was such an immensely influential factor in the ancient world that the theories dealing with its domestication have even oriented themselves towards politics and nationalism. The earliest positions were advanced by European and Russian linguists and ethnoarchaeologists, who aimed at propagating Indo-European tribes as the first people to domesticate horse by building their arguments on linguistic theories.

In the same vain, German linguists, such as Victor Hehn (Deichgraber/Hen, 1969: 236-238), Agust Schleicher, Wilhelm Koppers, Sigmund Feist, Otto Schrader[50] and E. Wahle[51], have reckoned the Indo-Europeans to be the first horse tamers. Repeating the same position, Gordon Childe sees the horse as the characteristic animal of the Indo-European tribes[52]. However, the theorists of this school have not yet reached a consensus on the motherland of these tribes. While Gustaf Kossinna regards the central Europe as their region of origin, E. Wahle considers it to be the southern Russia[53]. Endorsing E. Wahle's view, Marija Gimbutas presents the Kurgan Culture theory in 1956, claiming that the northern Caspian Sea Basin up to the northern Black Sea region and the southern Russia were the original land of the Indo-Europeans. She goes on to make out a case that the Indo-Europeans were the first to domesticate horse by attributing the Kurgan culture and the horse burial tradition in kurgans to these tribes[54], a view also shared by the Irish historian James Patrick Mallory[55]. On the other hand, other theorists, among them being V. V. İvanov and T. V. Gamkrelidze, hold that the Indo-Europeans and the Aryans had their roots in the Asia Minor comprising the southeastern Anatolia, North Syria, northwest Iraq and the northern Fertile Crescent. In this context, V. Sarianidi suggests that the original land of the Indo-European tribes was the ancient East, and that the horse was firs domesticated in the Minor Asia and Syria. Whereas, Kuzmina is of the opinion that the Volga and Ural regions or, in a more general terms, the southern Russia was the homeland of the Indo-Europeans, in particular their eastern branch who first domesticated horse[56].

After describing the language and homeland of the Indo-European groups as horse tamers, particular cases were presented by the scholars of this school to complement the theory. Thus, Qamkrelidze, Zaybert and İvanov raved about the excavated instances from Botay in Kazakhstan as the earliest known skeletons of the domesticated horse while ascribing the site to the Indo-Europeans.

In this respect, closer examinations have made it clear that in these ascriptions, based whether on linguistics, migration theory or site attribution, the archaeological approach has practically been disregarded because of their failure to make use of archaeological and archaeometric findings. However, the proponents of this school still attempt to corroborate the theory in terms of linguistics and migration theory; thus, Kuzmina sees the presence of some horse-related terminology in Rigveda as the main evidence in favor of the claim that the Indo-Europeans first managed to domesticate horse. However, one should note that the picture provided from the Aryans in Rigveda is specific to the geographical region of Pakistan, India and the surrounding areas and not their homeland. In addition, no terminology related with horse taming has so far been identified in Rigveda and the existing terms only deal with the physical appearance of horses[57]. Kuzmina's theory may be rejected by the works carried out by the Canadian linguist Kathrin Susanne Krell. She believes that no terminology connected with horse domestication is as yet known in the Aryan language. So, it follows that crediting Aryans with the domestication of horse drawing on linguistic theories was not logical. It is noteworthy that according to the inscription excavated from Issyk Kurgan[58] in Kazakhstan that was attributed to the Proto-

steppe, it is generally designated as the Scythian art (Bashilov/Yablonsky 2000: 10).

47 According to Herodotus, the Massagetae offered horse sacrifices to the sun god (Herodotus 1998: 216).

48 Of the best examples of complete animal burials in the Bronze Age are the complete horse bodies at Sintahsta and Utyovka 6 where animals were buried separately (Popova 2009: 310).

49 Bley 2000: 130

50 Qasımov 2013: 180.

51 Hakelberg/Wahle 2001: 199-310.

52 Chile 192: 221.

53 Hakelberg/Wahle, 2001: 199-310.

54 Gimbutas 1956: 241.

55 Qasimov: 2013: 182.

56 Qasimov: 2013: 182.

57 Qasimov: 2011: 35-46.

58 Akishev: 2001: 389-395; Amanjolov: 2003: 218-219.

Altay tribes and the identification of mummified bodies at Ukok and Pazyryk kurgans[59] that can by no means be related to the Indo-Europeans, attributing kurgan burials to the Indo-European groups by Marija Gimbutas appears to be unacceptable, as well. Also, ascription of the Botai culture by Qamkrelidze, Zaybert and İvanov to the Indo-Europeans was rejected by Asko Parpola, who on the basis of his investigations claims that the Botai population and culture cannot be related with any known language family[60]. Anthony David works suggest that the Botai culture was developed from the Afanasevo culture[61]. Similarly, A. V. Dybo contends that in the Altaic languages several terms dealing with horse riding, domestication and raising are found, while the Indo-European language family simply includes words about the physical characteristics of horses[62]. Through pursuing Dybo's investigations, Diger concludes that the homeland of the Proto-Altay groups was plains and that of the Indo-Europeans was mountains, pointing out that the trouser and kneecaps identified in the graves attributed to the Proto-Altaic tribes were suitable for horse raising an riding, while no related items have yet been identified among the Indo-Europeans, though they are found even in the Iron Age North Europe[63]. Note that A. Y. Şetenko's works suggest that horse was never used by the Indo-Europeans and Aryans in ritual services and no archaeological data attest to such usage, and the inferences made by Y. Y. Kuzmina, T. V. Qamkrelidze and V. V. İvanov from hymns 162 and 163 of Rigveda 1 were products of intentional false translation of the text by Western translators. Also, A. Y. Şetenko maintains that the Indo-Europeans that entered India were not mounted. M. Dyakonov argues that the population of the ancient East used horse before the arrival there of the Aryans and the latter migrated from Asia to Europe without horses[64]. Archaeological, archaeometric and ethnographic studies have led Mario Alinei to the belief that horse domestication and the kurgan burial form that was generally widespread in Eurasia (northern Caspian Sea and northern Black Sea basins), northwest Iran and Caucasia belonged to the nomadic warrior groups of Eurasia, a branch of which includes the Proto-Altaic tribes with their agglutinative language[65]. The inscription found in the Issyk kurgan in Kazakhstan lends support to this claim[66]. Of the earliest evidences of human-animal relations one may refer to the oil residual found within the ceramic vessels from Botay, which demonstrates the use of horse milk[67]. Also, fragments of horse bits made of zygomatic bone were idnetifed by D. Teleginin in Dereivka kurgans and attributed to the Sredniy Stog and the Archaic Scythian culture in terms of archaeometric analyses and radiocarbon determinations[68].

However, they would have gained a far better insight into the problem by adopting an approach that involved: 1) analyzing the changes in the skeleton and teeth of domesticated horse, 2) establishing the geographical distribution of tamed horse in regions where no wild horse has so far been recognized, and 3) studying the archaeological sites with indications of relationship between human and horse.

Osteological studies suggest that horse was for the first time domesticated in the fourth millennium BC in the southern plains of Russia and the Eurasian steppes by the Eurasians, and that the practice of breeding and using horse was dissipated from this to other regions[69]. The finds from the two sites of Botai in Kazakhstan and Dereivka in Ukraine, both dating from the forth millennium BC, corroborate the claim[70]. What laid the foundations for horse breeding[71] were the presence of wild horses, the knowledge required for its taming, and the need for food; and horse was allegedly primarily used as a food resource. To Bökönyi, the first stage of horse taming involved its use as food resource to provide meat and milk, and the slaughtered horse remains deriving from several sites attest to the claim[72].

Horse, as stated above, was used first for food in the fourth millennium BC, for pulling carts in the early third millennium BC, for riding in the late third and early second millennium BC, and finally in battles in the first millennium BC[73]

In the second millennium BC, horse was the animal of choice for the Eurasian population[74]. Mares were used for reproduction and obtaining milk, while stallions afforded labor and meat[75]. By the late second millennium BC, horse represented a major factor, a status symbol and an exceptionally significant emblem of power or prestige display for cavalrymen and social groups[76].

[59] Polosmak: 1994: 80-130.
[60] Asko, 2012: 287-298.
[61] David: 2007: 264-265.
[62] Dybo: 2013: 69-92.
[63] Qasimov: 2013: 182.
[64] Qasimov: 2013: 182.
[65] Alinei: 2003: 12-17.
[66] Akishev: 2001: 389-395; Amanjolov: 2003: 218-219.
[67] Travis: 2008: 38.
[68] David: 2007: 213-215.
[69] Kuzmina 2010: 118
[70] Levine 2005: 7
[71] Horse raising was represented on a silver amphorae from Chertomlyk kurgan (Artamonov 1966: 226-229).
[72] Kuzmina 2000: 118
[73] Kent Hanks 2003: 41, 245, 246
[74] Bley 2000: 136
[75] Žukauskaite 2009: 34
[76] Kent Hanks 2003: 100

In the first millennium BC the Scythians held such reverence for horse that the latter became part of their identity in that a stone inscription of the Urartian king Argishti I near Kanlica refers to the Scythians as "horse riding tribes[77]."

In the Afanasevo and, later, Anderenovo[78] cultures, horse skeletons with imprint of bridle on their jaws have been recorded, indicating their use in equestrian purposes[79].

In the late 4th and early 3rd millennia BC Eurasia, human bodies were buried alongside a series of sacrificed animals, and on the whole complete horse skeletons are quite rare in the contemporaneous burials. Since the late third millennium BC, horses were usually buried with chariots and in the late second[80] and early first millennia BC they tended to be deposited as complete animals[81] in harness alongside human bodies in kurgans[82] after they were killed by a blow on forehead.

The horses recorded in kurgans are said to generally range from 170 to 185 cm in stature. They had a slender body and narrow feet and were for the first time identified in 1897 excavations in Ukraine and, subsequently, in Russia, Turkmenistan, Kazakhstan and northwest Iran[83].

GOAT

Among the nomadic warrior Eurasian tribes, goat was one of the common animal offerings, and the Altayans offered goats to powerful sprits[84]. Goats are stronger and more agile when compared to sheep. In the second millennium BC, the Andronovo raised goats[85]. The evidence from kurgans proves goat raising as a main characteristic of the nomadic warrior groups of Eurasia, and goat has been attested among the sacrificed animals[86] in kurgans.

SHEEP

Sheep can handle harsh winters and the paucity of grass in desert steppes. Long travels not only do not harm it but also may improve its health. Sheep is of utmost importance to herders because it can be exploited once it is two years old. In addition, it may find grazing in snow covered fields, as is the case with horse. Though sheep breeding is attested as far back as the fourth millennium BC in the Afanasiro culture, the Eurasian nomadic warriors began to base their subsistence pattern in the late second millennium BC on stockbreeding[87], and the new system revolved mainly around herding sheep as it did not require fodder storing for winter. In the late second millennium BC, along with the herding economy based on annual migrations, we encounter a rise in sheep population together with horses in the flocks of the nomadic communities[88]. Sheep burials are known from all kurgans belonging to these nomads, and the animal is regarded as an integral part of their subsistence economy[89].

BULL

Bull can breed all year round and is not affected by the change of seasons. In the ancient East, it epitomized power and strength. Remains from kurgans have proved bull raising as a main feature of the Eurasian nomadic warrior group's culture and also the bull itself as a sacrifice in kurgans[90].

[77] Çilingiroğlu 1994: 72-73

[78] In the Sintashta kurgan that belongs to the Andrenovo culture horse burial was identified (Kuzmina 2000:118-125).

[79] Kozshin, 1970: 93-189

[80] In Kurgan 13 of Tu Ali Sofla a rare instance of sacrificed horse skeleton lacking skull was identified dating from this period.

[81] Levine/Bailey/Whitwell/Jeffcott 2000: 126; Levine 2005: 7

[82] In the kurgans of Kuyum and Kurot (Kozshin 1970: 93-189), Nartan (Kerefov 1986: 33), Kirgi (Esaian 1976: 101; Brentjes: 2000: 322-324), Trialeti (Gogadze 1972: 103), Aruch (Areshian/Kafadarian/Simonian/Tiratsian/Kalantarian: 1977: 77-93), Sapar-Kharaba (Narimanishvili 2010: 320), Shamkirchai (Museyibli 2008: 6-7), Lchashen (Kushnareva 1997: Fig 66; Sagona 2013: 282), Ryzhanovka (Chochorowski 2000: 41-46), Pazyryk (Artamonov 1969: 232-241; Dalley 1991: 118; Shishlina/Golikov/Orfinskaya 2000: 109-110), Arzhan (Čugunov/Parzinger/Nagler 2003: 113–162), Kostromskaya (Artamonov 1966: 18-22; Galanina 1980: 26), Tsatsa (Bley 2000: 129), Elizavetovskaya (Galanina 1980: 26), Ulsky (Yablonsky 2010: 129), Berel 11 (Bourova 2005: 1; Yablonsky 2010: 129) and Tu Ali Sofla (Iravani Ghadim 2014: 86-93) horse skeletal remains as sacrifice animal have been recorded.

[83] Based on the remaining bones, the horse recorded in Kurgan 13 of Tu Ali Sofla in northwest Iran had a stature of ca. 178-180 cm, with its feet measuring 110 cm.

[84] Lymer: 2000 312.

[85] Goat was recorded in the Hripunovo and Chistolebyazh burials of the Andrenovo culture (Kuzmina 2007: 148).

[86] Bones of goats offered in sacrifice are known from Kurgan 1 in Shamkirchai (Museyibli 2008: 9), Chernaya (Kent Hanks 2000: 24), Kurgans 1, 4, 7, 8, 9, 13 at Tu Ali Sofla and Jafar Abad (Iravani Ghadim 2011: 191-197).

[87] Masson/Merpert 1982: 238

[88] Bökönyi 1974: 21

[89] Sheep skeletal remains as offerings come from the kurgan of Sapar-Kharaba (Narimanishvili 2010: 320), Shamkirchai Kurgans 1 and 2 (Museyibli 2008: 9), Tgemlara Kurgan 9 (Shatbrashvili/Nikolaishvili 210: 198), Chernaya (Kent Hanks 2000: 24), the kurgans in Tu Ali Sofla and Jafar Abad (Iravani Ghadim 2015: 92-93; Iravani Ghadim 2013: 217-234) and Elizavetovskaya (Galanina 1980: 26).

[90] Cow skeletal material as sacrifice were identified in the kurgans of Kuyum and Kurot (Kozshin 1970: 93-189), Trialeti (Gogadze 1972: 103), Kirgi (Esaian 1976: 101; Brentjes 2000: 322-324),

CAMEL

In the eastern Eurasian steppe there are arid regions such as Karakum, Kizil Kum, Talki Makan, and Gobi deserts, where breeding camel as a strategic animal was vital. While horse endowed movement to the Eurasian culture, camel is the symbol of tranquility in the culture. It is supposed that the Amu Darya and Syr Darya Basins, western Kazakhstan and southern Urals were the main camel habitats of Eurasia, and that camel arrived in the western Volga and northern Black Sea basin in the first millennium BC through the Sarmatian migrations[91]. Studies have identified camel among the sacrificed animals in kurgans[92].

CONCLUSIONS

The nomadic stockbreeders who in the fourth millennium BC occupied the northern steppes of the Caspian Sea, between the Lower Volga river and southern Ural Mountains, underwent population shifts due to environmental crises culminating in famine and were forced to undertake even longer migrations in the second millennium BC in search of greener pastures as a result of extreme temperature drop. These movements had tremendously significant impacts, enabling the culture to promptly expand throughout the steppe from the Ural ranges up to Altay. The process of shifting to nomadism was not consistent across the steppe. Though in the Eurasian steppe and the neighboring regions these mobile nomads are variedly tagged as Afanasevo, Andronovo, Catacomb, Karasuk, Tagar and Tashtyk, Sredny Stog, Srubna, Scythian, Cimmerian, Sarmatian, Massagetae, and Koban from the late fourth millennium BC through the late first millennium BC, they share considerable similarities in racial, social, economic, ritual and cultural aspects.

In the second millennium BC, the Eurasian steppe witnessed innovations in the Andronovo culture's economy that played a crucial role in the formation of nomadic lifestyle in the steppe. Many archaeologists and physical anthropologists, in light of the major elements of the remaining material cultural such as snaffle horse bits as a hallmark of this culture, maintain that equestrianism started a growing trend in this period and long-distance southwards travels in search of grazing to the Central Asia, northern India and northwest Iran happened. In the earliest Iron Age, the steppe experienced a boom in the number of herder communities, who were migrating in a specialized manner to find fresh pastuRes. With the expansion of the mobile communities, innumerable cultures, among them being the Cimmerians and Scythians, emerged in the Central Asian steppes. The rise in horse and sheep populations and enhanced skills in handling horse while riding, as was required by taking care of the herd in the course of migration, turned the population of the Eurasian steppe to nomadic and quasi-nomadic warriors. In the first millennium BC, increased migrations caused by several reasons triggered intensified clashes between the nomadic tribes from the one hand and the pedantry groups inhabiting the margins of the steppe from the other. Archaeological data from kurgans testifies to this view.

Small finds from the kurgans as the architectural structures of these nomadic tribes have shed some light on their social, economic, ritual and cultural sophistication. Osteological-faunal data and objects made from these materials as a main component of the dataset excavated from these burials, beyond unveiling aspects of the subsistence economy and diverse dietary patterns of these tribes, attest to their awareness of the surrounding environment and their understanding of the significance of animals beyond their mere economic value, an understanding that eventually culminated in the development of animal style art.

Presence of horse and, in general, raising animals such as sheep, goat and cattle, enhanced horse bridles, building kurgan burials furnished with sacrifices, and occasional horse burials and chariots in the graves are but some of the major general traits of the Eurasian nomadic tribe's culture. Deposition of animal skulls in graves is another burial pattern of this culture. The high diversity of animal skulls ritually deposited in kurgan burial contexts is widely known.

Aruch (Areshian/Kafadarian/Simonian/Tiratsian/Kalantarian:1997: 77-93), Sapar-Kharaba (Narimanishvili 2010: 320), Shamkirchai (Museyibli 2008: 6-7), Lchashen (Kushnareva 1997: Fig 66), Chernaya (Kent Hanks 2000: 24) and Tu Ali Sofla (Iravani Ghadim 2011: 191-192).

[91] Moon Ja 2006: 38-51

[92] Camel as offering is reported from the kurgan of Shumaevo (Morgunova/Khohlova 2006: 315).

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