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NOMADIC VS. SEDENTARY. GENDER, PRODUCTION AND SOCIAL EVOLUTION IN THE EASTERN EURASIAN STEPPE BETWEEN THE CHALCOLITHIC AND THE BRONZE AGE

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Abstract: In this paper we analyse the data collected from excavations associated with the peoples who inhabited the eastern part of the Eurasian steppe from the 6th to the 1st millennium BC, in order to study the social and cultural changes that may have influenced the emergence of communities that adopted different subsistence modes (nomadic, semi-nomadic or sedentary) despite occupying the same territory at different periods of history. The results seem to indicate that there was no clear and common sequence in which a nomadic way of life would have prevailed initially until reaching a sedentary system as the only consequence of a linear and common development in ancient societies. Instead, successive peoples occupying the same territory over time adopted different modes of production depending on various factors related to climatic and demographic changes, military tensions, migrations, etc. We will also analyse the sedentary societies established in the region of northern China and their influence on the way of life of these steppe groups. Finally, we will try to show that one of the inherent characteristics of nomadic or semi-nomadic production systems was to organise themselves into societies that were more egalitarian than the rest, perhaps as a response to the need to improve control over ever larger groups of individuals and also as a means of coping with possible external threats.

Keywords: *Nomads, Eurasian Steppe, sedentarism, gender, production*.

1. INTRODUCTION

Contacts between Eurasian cultures settled in northern China and their southern neighbours date back to the early Bronze Age, not only through frontier interactions but also via the Silk Road. They spread from China's north-western region of Xinjiang and the Turpan, Dzungarian and Tarim basins across the Taklamakan Desert. All this area was surrounded by several mountain ranges, but this did not hinder communication. The same is true of the Gansu Corridor, the main route between China and Central Asia, which is about 1.000 km long and connects the Yellow River with what is now the Mongolian steppe, and was also used for the development of the Silk Road. Traditionally, the Mongolian steppe has provided vast grazing lands for

numerous nomadic peoples who have settled there since the Chalcolithic period.

Relations between the northern nomads and Chinese agrarian society have long been marked by conflict, as evidenced by the massive walls built from the Zhou period (1.050–250 BC) to contain the 'northern barbarians'. However, this never prevented trade or the transmission of knowledge through constant cultural contacts.

2. WHAT IS NOMADISM?

Nomadism is an economic system of food production based on extensive and mobile (year-round) livestock rearing, with free grazing (without stabling)[1]. We can quickly see that it is easy to distinguish different degrees within this system, since pastoralism does not necessarily imply nomadism, but only when it is more specialised and predominant[2]. In this way, semi-nomadism will be understood as pastoralism that periodically changes the places used for grazing throughout the year, supported by the use of basic agriculture and without both systems continuing to take advantage of complementary hunting, fishing and gathering resources. Each of these systems has been used mainly on the basis of the climatology and characteristics of the region inhabited by these peoples, as well as the possible climatic changes that have occurred throughout history. For example, the increase in pastoralism in Eurasian Bronze Age societies led to the emergence of a greater number of nomadic cultures. Masanov argues that nomadism arose from hunting groups that began to practise animal husbandry[3]; however, this would imply that all pre-agricultural cultures that practised hunting would have passed through a stage of nomadism, which we know was not so widespread.

In northern China, the increased dependence of various cultural groups on animal husbandry led to the development of this type of nomadism, characterised by a reduced or almost non-existent role for agriculture, the specialisation of animal husbandry, the expansion and improvement of the art of horsemanship, the spread of the so-called "animal style" art, the introduction and use of iron and militarisation, which brought the aristocracy to power and, in many cases, more sophisticated forms of social organisation. A type of political and social structure that caused many problems for the evolutionists of the 19th century when they introduced it into their models of human and linear development, and which some later authors branded as necessarily temporary[4], ephemeral and not reflected in history[5].

In the nineteenth century, with the rise of Darwinism and positivist ethnographic currents, the analysis of the emergence of nomadic cultures was associated, within the path towards the appearance of more advanced civilisations, with an evolutionary stage more advanced than the Paleolithic hunter-gatherer societies, but still far from the agricultural ones that were understood to come later[6]. Darwin had no doubts about male superiority and his greater evolutionary capacity[7]. The phenomenon of nomadism can take different forms. Some authors argue that it would have been difficult for any of them to have been manifested without the existence of sedentary[8] and complementary groups that generated the necessary surpluses to feed the population and the animals, although not necessarily. There were sedentary societies which, because of changes in climatic conditions tending towards aridity, had to modify their means of obtaining resources. This led to mixed agro-pastoral economies or even increasingly nomadic economies[9].

The emergence of nomadism did not require permanent settlements for its development; the existence of some kind of temporary or seasonal settlements was sufficient, which did not necessarily imply sedentism as such. Hunter-gatherers were able to introduce animal husbandry without the need for such additional sources of supply, since animals could graze in the vast steppe regions and groups could feed themselves by hunting and gathering, until the development of knowledge of animal husbandry made this practice an important source of production[10]. Be that as it may, although the period 7.500–6.000 BC has been identified as the beginning of animal domestication in the Fertile Crescent and as a food supplement for the first agricultural societies, the difficulties of analysing wild animal remains in Neolithic contexts and distinguishing between those consumed after capture and those consumed after rearing make it difficult to establish an earlier date, although this does not preclude it.

Various authors argue for the emergence of 'extensive' nomadism in the western region of the Eurasian steppe, such as the Yamnaya culture (second half of the 3rd millennium BC[11]. Rudenko, Cernikov or Jettmar affirm that we cannot speak of 'complete' nomadism, as such would not have existed, but of a significant increase in the importance of pastoralism over agriculture in these societies, although they themselves point out that within the same cultural group there could be fully nomadic tribes and other agropastoral or agrarian tribes that would complement each other[12]. However, to say this is the same as saying that there could be fully nomadic cultures that complemented their way of life through contact with other sedentary frontier cultures. While the model you suggest could be associated with the Scythians[13], other groups are known to have been completely nomadic.

This type of economy may have been achieved during the Bronze Age through transformations from three basic starting points: hunter-gatherer economies typical of the Neolithic, others based on less specialised pastoralism, and those based on sedentary agriculture due to a process of climatic change that led to a rise in temperatures that made land productivity difficult[14]. However, these environmental

[1] KHAZANOV 1975, 5–15.
[2] CRIBB 1991, 16.
[3] MASANOV 1995, 35.
[4] RADLOFF 1954, 513–517; BARTHOLD 1962, 11–13; LATTIMORE 1992, 521–523.
[5] BARFIELD 1992, 5.
[6] MORGAN 1964, 290.
[7] DARWIN 1946, 726.
[8] VEJNSHTEIN 1984, 127; DI COSMO 2004, 21.
[9] KHAZANOV 1994, 19–25.
[10] LATTIMORE 1992, 63–64, 409–412.
[11] SHISHLINA/HIEBERT 1998, 224–225.
[12] RUDENKO 1952, 22; CERNIKOV 1960, 19; JETTMAR 1966, 4.
[13] SANCHEZ SANZ 2020, 23; SANCHEZ SANZ 2019a, 61.
[14] DOLUKHANOV 1988, 215–217.

changes must have had a greater impact on those cultures that had developed incipient agriculture, as those based on pastoralism or hunting and gathering would not have experienced such a significant change in their way of life. Even in some cases, such as in Central Asia and in regions where river courses permitted, they did not become 'fully' nomadic societies, but modified their agricultural economy into a mixed agro-pastoral one[15], with both nomadic cultures and these mixed societies benefiting from the interactions between the two.

Thus, the best-known exponents of a type of extensive pastoral nomadism must have emerged in the late 2nd millennium BC and are attested from the early 1st millennium BC in the central region of the Eurasian steppe south of Siberia[16], around the Volga[17], or from regions even further east, as part of migrations of Indo-European groups[18], since their origin is not known with certainty. Haloun and Prusek envisage some kind of event that affected the whole of the Eurasian steppe at the beginning of the 1st millennium BC, leading to the emergence of these nomadic groups, and which would link what was happening in the east with the movements of peoples in western Eurasia, although one was not necessarily a consequence of the other[19]. However, it is also possible that it was a slower development that led different societies to adopt this way of life, as they emerged over a wide period of time within the 1st millennium, and some even earlier. The theory of great migrations to explain the emergence of different nomadic groups in so many regions during the Iron Age has been strongly advocated since the early 20th century[20]. It was based on the theory of linguistic analysis of Indo-European into 'centum' and 'satem' languages, which has now been superseded because it does not adequately take into account the diversity of languages that show affinity with Indo-European[21].

Prusek claims that peoples of Indo-European origin would not have had to migrate because they had been settled there since the Chalcolithic, and that the emergence of new cultures was only due to internal development[22], but perhaps we cannot completely rule out such a possibility. Prusek himself points out that the Hsiung-nu culture emerged as a new ethnic element on the eastern steppe from elsewhere, suggesting a possible relationship with the Yuezhi and Sarmatians in terms of the use of similar weapons and warfare tactics originating in Central Asia[23].

3. CULTURES OF THE EAST EURASIAN REGION

Since the Neolithic period, many cultures have been identified on the border between the steppe and northern China (Xinglongwa on the Liao River, the Cishan-Beifudi culture east of the Taihang Mountains, the Houli culture north of the Taiyi Mountains, the Peiligang culture in central and western Henan, or the Laoguantai-Dadiwan culture along the Wei River and the Han Valley), always close to natural resources where incipient agriculture could be practised. The important archaeological remains recovered from more than 100 settlements of the Xinglongwa culture (6.200–5.200 BC) include a large number of female stone figures associated with domestic religious practices, without it being possible to determine whether they were deities or ancestor worship[24].

A characteristic of the Houli and Cishan cultures is the existence of long-term settlements, which do not seem to indicate complete sedentarisation (and in any case in this period always supported by hunting and gathering), but the possibility of a certain mobility in this period, which did not seem to be the case among the Peiligang. The archaeological remains of their tombs show a social differentiation, with men buried with weapons and women with grinding tools, etc. It is also interesting to note that between 5.000–3.000 BC, burial rituals in this border region of China were very similar to those of the steppe peoples, with burials covered by mounds (kurgans)[25]. Over time, many communities became fully agricultural and the population increased exponentially. This situation led to the emergence of more complex social organisations, with chiefdoms taking root from the 4th millennium BC onwards. However, the emergence of a specialised pastoralism gradually gained strength, requiring agricultural products to supplement their diet[26], which they acquired through contact with sedentary frontier cultures, while in return they provided animal products and prestige goods to the sedentary elites. In this way, mutually complementary and beneficial trade relationships were activated and maintained, even as many of these sedentary cultures slowly changed their way of life to agropastoral systems. This shows that, although there may appear to be a logical order based on these nineteenth-century theories of social development, the different possible economic systems (nomadic, sedentary, agropastoral, etc.) were largely chosen by communities on the basis of the conditions of the habitat in which they were located[27].

Groups such as the Yangshao culture (*ca*. 5.000–3.000 BC) in Shaanxi Province have traditionally been associated with matrilineal kinship systems[28], based on the existence of sex-segregated sectors in their burials. There are no differences in social stratification, although there are markers of greater prestige in the form of a greater number of grave goods in the individual and group graves of women[29]. Some of the more prominent ones had knives among other remains. Even the burials of girls were given a burial treatment similar to that of adults, as opposed to the usual placement in large pieces of pottery around the houses[30]. These were probably women who were considered to have a higher status because of their lineage and the superior rights that were attributed

[15] DI COSMO 2004, 23.
[16] JACOBSON 1995, 29–39; SANCHEZ SANZ 2023b, 7; SANCHEZ SANZ 2019b, 662.
[17] JETTMAR 1967, 215.
[18] HEINE-GELDERN 1951, 225.
[19] PRUSEK 1971, 7.
[20] HEINE-GELDEN 1951, 225–255.
[21] PULLEYBLANK 1966, 9–39.
[22] PRUSEK 1971, 70.
[23] PRUSEK 1971, 116.
[24] LIU/CHAN 2012, 132.
[25] *Book of Changes II: The Great Treaty*.
[26] SHAKHANOVA 1989, 111–117; DI COSMO 2004, 22.
[27] TORDAY 1997, 9.
[28] BOWUGUAN/YANJIUSUO/BOWUGUAN 1988, 352–357.
[29] MAISELS 2001, 267–269.
[30] ZHONG-PE 1985, 33; MAISELS 2001, 270.

to them. There are two possible systems within what we can understand as matrilineal succession: weak matrilineality, where the lineage is through the maternal line, but the family property rights are vested in the mother's brothers and they can use them to establish the social regime; and strong matrilineality, where everything is transmitted through the mother[31].

In the Bronze Age, the Yuezhi culture (1.900–1.500 BC) was mainly found in Shandong, eastern Henan and northern Jiangsu. It was descended from the Longshan Culture (3.000–1.900 BC), which practised increasingly specialised agriculture, and from the Hongshan Culture (4.000–3.000 BC), which settled in Dongbei Province in north-eastern China and as far as the Mongolian plateau. Archaeological work there has revealed the existence of a temple dedicated to the Great Goddess at Niuheliang, to which numerous female statues, some of enormous size, were dedicated and where human sacrifices[32] were performed from its foundation in the second quarter of the 4th millennium BC. As a result, it has sometimes been considered a matriarchal society based on a mixed economy combining animal husbandry and agriculture. However, this assertion needs more data to support it, and the burials found in connection with this culture do not show important differentiations, with men and women being buried together or separately and without any notable indicators. This type of statuette has not been found in other Chinese cultures of the period, but has been found in other places such as Anatolia, the Indus Valley or Mesopotamia, among others, from the same period.

However, we cannot rule out the importance of women in this society, nor can we go so far as to call it matriarchal, as there may well have been other temples not yet located, perhaps dedicated to male deities, which would detract from the significance of this discovery. Nevertheless, remains of burials associated with the Neolithic Ang'angxi culture have been found in the western part of nearby Jilin province. These include a single female burial with a spear, several knives and an arrow, associated with female hunters[33]. Nearby, in the Xingjiadian region, as early as the Bronze Age (between 2.200–2.100 BC), several primary female burials in the supine position with their limbs outstretched have been found, together with secondary male burials placed next to the woman's legs, along with a wealth of grave goods including arrowheads and remains of bronze swords[34]. Between 2000 and 1.500 BC, the Zhukaigou culture developed in central and southern Inner Mongolia. Dedicated to nomadic herding, mitochondrial DNA analysis of several of their burials shows a matrilineal genetic structure[35].

The northern regions, in contact with the steppe, were occupied by various groups who, in the 4th millennium BC, developed an incipient agriculture. However, at the end of the 3rd and the beginning of the 2nd millennium BC, some of them changed their way of life towards pastoralism, due to the influence of these northern nomads and other Indo-Iranian groups from Central Asia, such as Andronovo, Afanasievo, Karasuk, etc., which promoted cultural exchanges throughout this region and the whole of Eurasia. Brentjes suggests that they became extensive nomads after an initial agropastoralist period. One of the most controversial elements of these links and exchanges is the highly distinctive bronzework of the Shang Empire[36], which is still debated as to whether it developed there independently or after being established across the steppe in northern China.

Nevertheless, relations between the Shang (1.600–1.046 BC) and later Zhou (1.046–256 BC) empires and the northern 'barbarians' were generally very tense and marked by successive campaigns. As for the status of women in both empires, although both were articulated as patriarchal and patrilocal societies, although in the case of the Zhou the society was stricter in its observance, there were many wives and concubines of the imperial family who played important roles in the political and military spheres, albeit sometimes in a veiled manner. We know of Queen Fu Hao, one of the concubines of Emperor Shang Wu Ding, whom he not only claimed to cherish above all others, but to have honoured posthumously. We know about Queen Fu Hao, one of the consorts of the Emperor Shang Wu Ding, who not only held her in high esteem but also bestowed extraordinary honours on her posthumously. She had an extraordinary trousseau, including 27 knives and 130 bronze weapons[37], acted as a high priestess, and even commanded the imperial armies, leading outstanding campaigns. Even in the Wu Liang Shrine in Shandong, there is a relief depicting a military scene between the troops of King Wu Ding and his northern enemies, the Gui Fang. A large number of the barbarian troops appear to be women[38], which would demonstrate their military participation at the time, although we cannot rule out the possibility that the author's intention was to use the composition as a way of equating this participation with the 'barbarism' of those northern peoples, as opposed to civilised Chinese society[39].

However, the fame that Fu Hao must have enjoyed among later generations could challenge this reading, as such a source would also have misrepresented the Shang empire itself. Furthermore, we know that the Shang oracular texts mention the names of more than a hundred women actively involved in military campaigns, which would reflect a much wider status for women than would be the case in the later Zhou dynasty. In any case, we cannot be sure that all of them belonged to the Shang aristocracy[40], as they may have been recruited as contingents rather than individually, perhaps belonging to a culture that was subordinate to the Shang at the time. This possibility seems to be supported by archaeology, where other tombs of aristocratic women show as a general feature not only a smaller trousseau than the male ones, but also an absence of weapons[41]. This would also suggest that Fu Hao's case was an exception among the royalty, and that the view of women in Shang culture was not as far removed from the later Zhou as it might seem.

[31] SANCHEZ SANZ 2023a, 834.
[32] MILLEDGE NELSON 1995, 13.
[33] MILLEDGE NELSON 1995, 118–119.
[34] MILLEDGE NELSON 1995, 206.
[35] LIU/CHAN 2012, 322.
[36] BRENTJES 1996, 74.
[37] 'HSUEH-PAO 1977, 57–98; RAWSON 2007, 33; CHANG 1988, 97.
[38] SOPER 1954, 55–60.
[39] HINSCH 2010, 101.
[40] BENNETT PETTERSON 2000, 14.
[41] LOEWE/SHAUGHNESSY 1999, 485.

It is interesting to note how the great Chinese states of the Iron Age perceived the nomadic peoples of the north. While we are familiar with the use of the concept of the 'other' in the classical Greek tradition to refer to those foreigners who lived on the fringes of known territory and whose customs were not only defined as contrary to those considered 'civilised', but who served to define them by contrast, something similar occurred in the Far East.

The period for which we have the most information about this Chinese view of their northern neighbours is the Zhou dynasty. While in the immediately preceding period we know that contact between the Shang dynasty and the northern peoples was frequent, marked by cultural exchange but also by clashes, in this period the situation would become even more complicated, leading to the formation and establishment of a vision of the 'other' very similar to that of the West. The texts that serve as a reference in this sense are attributed to Confucius himself, the Spring and Autumn Annals (*Ch'un ch'iu*) and Zuo Qiuming, Commentary of Zuo (*Tso-chuan chu*). These are contemporary works, understood as historical accounts, which recount the events that took place in China between the 7th and 5th centuries BC, and which often refer to the clashes between the two cultures that would mark this conception.

In these works, foreigners are compared to animals without morals or virtue, and are considered inferior to the human race, as opposed to the idealisation of the Chinese state itself as a civilising geographical centre, whose members shared cultural traits in opposition to the (sedentary-nomadic) Chinese. The Chinese felt constantly threatened by nomadic incursions on the northern frontier, which threatened the established order. Part of this perception is also based on their physical appearance, which suggests that they had tattoos on their bodies and shaved their hair. These were clear signs of cultural opposition, which easily remind us of similar customs practised by many nomadic cultures of the Eurasian steppe (also in Thrace and Illyria), and which resemble the Chinese and Greeks in their way of thinking. Even on a philosophical level, both cultures often believed that the 'other' had to be kept in check and never given in to for the sake of the natural or cosmic order, which had to be kept in balance, as they represented evil[42].

Jordanov[43], citing Herodotus[44], states that tattooing among Thracian women was a sign of nobility and ascribed to the cult of the mother goddess; perhaps the same was true among the Scythians and other Eurasian peoples, especially considering that the Enareans belonged to the aristocracy. However, some of these representations of tattooed Thracian women do not refer to the death of Orpheus, but are associated with slaves or wet nurses (the latter being highly regarded by the Greeks), so we might think that they were enslaved Thracian nobles, or that this type of body decoration was more common among the entire Thracian population and therefore known to the ceramic artists[45]. The location of these tattoos on the neck, face and arms would indicate a function beyond mere decoration, since the symbols are usually simple figures (parallel lines, etc.) and were therefore easily visible. It is not so easy to doubt their connection with the religious sphere, as a representation of the Mother Goddess with such tattoos was found on a 4th century BC Thracian kurgan from Mogilanska (in Vratsa, Bulgaria), together with a multitude of weapons[46].

On the other hand, in the patriarchal Han dynasty (206 BC–220 AD) there are many examples of matrilocal marriages[47]. It was during this period that the Chinese historian Sima Qian (1st century BC) wrote the first account of the nomadic peoples who inhabited the northern frontier of China between 900–100 BC. A region known as Inner Asia, comprising Manchuria in the east, Mongolia in the centre, Inner Mongolia with parts of Kansu and northern Shensi, and in the west the modern desert and steppe of Sinkiang, the Minusinsk Basin and the northern part of the Altai Mountains. Among many other events, it recounts the formation of the first nomadic empire in history, the Hsiung-nu, as well as the relations between the Chinese and the 'barbarians' of the steppe, which helped to define and shape their cultural differences through opposition.

This is the same system of description with which we are familiar when it comes to the Western world in relation to the 'other'. On the contrary, the constant cultural, military, commercial, etc. contacts between the peoples who maintain this link allow a greater number of meanings to be assigned to it, many of them with a constantly changing and revised definition. The processes of climatic and cultural change that affected earlier societies practising mixed agro-pastoral nomadism[48], such as the Andronovo, Karasuk, etc., affected most of the Eurasian steppe between the Dnieper in the west, the Yenisey in the east, and the Amu Darya and Syr Darya in the south. This led to the emergence of the first nomadic cultures, let us call them 'extensive or full' for lack of a better definition to distinguish them from transhumant nomadism, in the late Bronze Age or early Iron Age[49]. Probably earlier in the eastern steppe than in the western or central region, since the climatic and geographical conditions favoured the existence of large pastures that allowed the rapid expansion of herds and this tendency towards economic specialisation, although over-exploitation would have led to the beginning of migratory processes towards the west.

4. MIGRATIONS

It seems clear that the available evidence does not point to the possibility of a chain reaction of migrations that would have affected the entire Eurasian steppe, regardless of whether they originated in the Far East or in Central Asia, but it is clear that there were migrations of Indo-Iranian peoples across more or less extensive territories between the late 2nd and early 1st millennium BC. The difficulty of tracing the origin of the Indo-European homeland, which is thought to have been common to many of the peoples who inhabited Asia during the Bronze Age, has also given rise to many theories. This is particularly important because many

[42] *Tso-chuan chu -Hsi* 24-, 425.
[43] JORDANOV 2000, 88.
[44] HERODOTUS, *Historia* 5. 6, 2.
[45] SANCHEZ SANZ 2024a, 5.
[46] VENEDIKOV/GERASSIMOV 1979, 231–232.
[47] HINSCH 2010, 54.
[48] LEBEDYNSKY 2008, 19.
[49] KORYAKOVA/EPIMAKHOV 2007, 209.

of the peoples who migrated as early as the early Iron Age are of Indo-Iranian origin. The Indo-Iranians may have settled north of the Oxos River by the middle of the 2nd millennium BC. The Afanasievo and Andronovo cultures of Central Asia have traditionally been considered Indo-European[50]. Kiselev points out that in the area formed by the Minusinsk basin and the Yenisey valley in southern Siberia, the Tagar culture would replace the Karasuk agro-pastoralist culture[51], also with an agro-pastoralist economy and with a social organisation based on military chieftainship in the style of the peoples we are about to see[52], although we cannot be sure of this relationship. Several groups settled in some of these places and moved westwards in constant waves until they reached the western steppe in the 9th–8th centuries BC. Diakonoff reports movements of Indo-Iranian groups from Central Asia to the Minusink Valley between the end of the 3rd and the beginning of the 2nd millennium BC[53].

However, these theories of great migrations have been refuted by the Russian archaeological tradition, which has argued that the appearance of militarised nomadic peoples in certain places where they later settled was not the result of great movements across the Eurasian steppe. They point out that this type of culture would emerge in different parts of Asia independently, from agropastoral cultures such as the Andronovo and Karasuk, and through processes of slow and constant development[54], both internally, in terms of the discovery of new means of production that would expand their herds, and through contact with neighbouring cultures, whose particularities would influence their appearance at different times, and which would carry out smaller migrations and in a cyclical, not constant, manner[55]. This would rule out assumptions that present climatic changes or internal struggles as the driving force behind these processes[56]. Indeed, the abandonment of a way of life that has been useful for centuries seems unlikely without some kind of necessity driving it.

Lattimore argues that the complete nomadic social system, based on militarisation, would have arisen in response to the superior military capability of the disciplined armies of sedentary peoples[57], using the mobility of the horse and the range of the bow to provide an adequate defence that would otherwise have been impossible, although this was probably a consequence of the development of the nomadic archery cavalry rather than the origin of its emergence. Grjaznov and Ebert explains that their emergence is due to such clashes and the changes they brought about in the military methods of the steppe nomads[58], so that the first culture to change its habits towards full nomadism began to raid its agro-pastoralist or sedentary neighbours without their being able to resist, forcing them to adopt the same way of life as a means of defence, This resulted in constant clashes that would provoke the Bronze Age migrations, although this does not seem likely as such a chain of events would have been endless with more and more fully nomadic peoples harassing other groups who would have had to follow in their footsteps, and many nomads did not abandon their previous agropastoral subsistence systems to become 'fully' nomadic.

Koryakova and Epimakhov argue for an increase in humidity towards a more extreme continental climate in the region from northern Pontus to the Aral Sea, with different effects in each area[59], but leading to changes in the economic systems of the societies that inhabited them. These conditions would have lasted until the middle of the 1st millennium BC, when a new period of drought began, more pronounced in the eastern part of the steppe, causing new population movements, such as that of the Sarmatians to the west. Moreover, Herodotus himself mentions clashes between the Isedonians[60] and the Arimaspians, which would have triggered the movement of the Scythians, which in turn would have triggered the movement of the Cimmerians[61]. Pointing out that among the Isedonians men and women were of equal rights[62].

Prusek and Cernikov propose an earlier specialisation in nomadic pastoralism by the Karasuk culture[63], which would have influenced the adoption of the same process by the Andronovo culture, leading to a confrontation between the two for control of the pastures, which would have ended up in the hands of the Karasuk with the expulsion of the Andronovo. We cannot be sure that this was the case, but we cannot rule it out.

Horses were also an indispensable element, not only for steppe cultures, although they played a crucial role in these cultures. They were used not only as a means of transport, but also in battle, as food and even in the religious sphere as part of ritual sacrifices and grave goods[64]. The appearance of horse remains, together with more abundant iron weapons and objects decorated in the 'animal style', became characteristic of a type of burial that was recognisable throughout Asia, as were the kurgans, and became a hallmark of the identity of these societies. The search for the origins of these groups, the identity of their possible ancestors or the choice of this way of life has given rise to extensive debates. The main problem lies in the fact that the characteristics of elements such as the technological development of metallurgy, the mastery of horsemanship, economic-productive systems based mainly on animal husbandry, or the importance of the military sphere, were already known in the region from which they supposedly came more than a millennium before the emergence of these cultures, and would continue long after, making them difficult to explain and forcing us to look for determining factors that mark this moment and not another. We know that they were linked to new climatic changes, overpopulation, specialisation, the search for land and prey, pressure from other peoples, etc., possibilities that are not mutually exclusive but which we are still far from being able to identify with certainty.

[50] DEBEC 1948, 83.
[51] KISELEV 1951, 302–303; SANCHEZ SANZ 2024b, 177.
[52] GRYAZNOV 1969, 217.
[53] DIAKONOFF 1981, 123.
[54] PRUSEK 1971, 90–91.
[55] JETMAR 1951, 148.
[56] RUDENKO 1960, 197.
[57] LATTIMORE 1963, 145.
[58] GRJAZNOV 1950, 3; EBERT 1929, 56.
[59] KORYAKOVA/EPIMAKHOV 2007, 10–11.
[60] Parzinger (2009, 26) dismisses this as peaceful peoples.
[61] HERODOTUS, *Historia* 4. 13.
[62] HERODOTUS, *Historia* 4. 26; SANCHEZ SANZ 2021, 22.
[63] PRUSEK 1971, 94; CERNIKOV 1957, 31.
[64] SANCHEZ SANZ 2016, 19.

The most common view is that these 'fully' nomadic peoples originated in earlier agropastoral societies, as an evolution of these societies adapted to the new conditions and specific needs of the time, although, as we have pointed out, this is not necessarily the most probable. Although it is true that most of the steppe cultures that occupied these areas in earlier periods seem to have developed around this type of agropastoral economy, we cannot rule out the existence of other types of societies with a less obvious archaeological record. Through specialisation in husbandry and pastoralism, the increasing dominance of the horse, the power of warrior elites and the possible impact of the threat to their survival from larger and more developed neighbouring frontier cultures may have influenced the development of 'fully' nomadic groups.

Aware of their weakness in a period of constant conflict over resources, control of trade routes, territorial expansion, etc., these groups understood that the only way to prevent their disappearance was to militarise their society, control it through warrior elites and increase its population, which they would later use to occupy new territories. The aim here is not to defend this possibility as the most appropriate, but to show other possible solutions that serve to demonstrate how far we are from understanding this phenomenon in its entirety.

Interestingly, although many innovations and trade contacts were established and spread from the west to the east of the Eurasian steppe, even from Central Asia to Inner Asia, in this case it seems to be proven that these migrations took place in the opposite direction. This fact seems to puzzle some authors, although it is not such a strange process; from the Chalcolithic onwards there were links, exchanges and population movements in both directions throughout the steppe, and even from neighbouring regions to the south. Cultural influences were constant, and many technological advances spread in the same way, taking advantage of trade routes and interactions between neighbouring groups, so this would not be a novel case.

These societies were characterised by the development of greater social stratification than that found in earlier agropastoral societies, and by the establishment of the aforementioned warrior aristocracy at the top. This was structured into clans or lineages, which undertook a process of political centralisation[65] and probably took control of both trade and resources. Constant contact with sedentary or agropastoral frontier societies allowed them not only to obtain the resources necessary to supplement their productive system, but also the prestige goods necessary to establish the distinction between the elite and the rest of the population, thus ensuring their pre-eminent position. Similarly, the developed state structure of sedentary societies would have led to the emergence of chieftainships and a higher level of political organisation in these nomadic societies.

The proponents of this theory did not believe that a purely internal development was possible[66]. We know that such contacts were not always peaceful, that there was tension, though perhaps not latent and constant as has sometimes been suggested[67], and that there was not necessarily domination over them, though we know that this did occur on occasion[68]. The hierarchical development of these nomadic entities may have been a response not only to internal needs for control over ever larger groups of individuals, but also as a means of coping with possible external threats, rather than to the increasing development of neighbouring sedentary communities. Some of its proponents cite the example of the nomadic tribes of the Sahara, which, they argue, did not need major changes in their political structure due to the absence of highly developed and sedentary frontier peoples, but seem to forget the existence of Egypt, the paradigm of state development since the late 4th millennium BC in East Africa, in the face of which such nomadic groups did not seem to need to change their structure.

5. CONCLUSION

While it is true that we have some data on the Late Bronze and Early Iron Age nomadic cultures of the western Eurasian steppe, including some earlier cultures in Central Asia, the situation in the eastern steppe regions is equally complex when trying to unravel the circumstances that led to the emergence of 'extensive' nomadic groups there once again. Among the possible causes, once again, the usual climatic changes have been alluded to, where aridification would have forced many previous agropastoralist cultures to change their habits towards specialised nomadism[69], or an increase in the influence on these peoples of pre-existing 'extensive' nomadic cultures located in more northerly regions[70]. Both options are possible, even compatible. Nor can we rule out internal developments resulting from greater adaptation to the environment and/or technological advances, coupled with more complex and stratified social developments. These would have been favoured by the cultural and commercial contacts that spread relatively quickly across the Eurasian steppe, giving rise to these cultures, which, on the other hand, retain common features such as those mentioned above, without losing some of their individualising and defining features, marked by the environment and the influence of the border cultures.

Shelach proposes a similar, though essentially different[71], picture, where the emergence of these extensive nomadic societies was a direct cause of the existence of large agricultural cultures in China, which provided them with the grain resources necessary to complete an economy. As a result of this and the steppe environment in which they developed, they were able to specialise in this way of life. Their emergence would thus be an indirect consequence of another type of specialisation, agricultural specialisation[72], carried out by neighbouring groups, which other authors dispute on the premise that it was too costly for these nomadic societies to obtain agricultural resources in neighbouring regions, but far enough away that they could obtain them themselves by

[65] KOSHELENKO 1988, 171–172.
[66] IRONS 1979, 362; BARFIELD 1992, 7.
[67] DI COSMO 2004, 38.
[68] PETRENKO 1995, 5–22.
[69] HSIAO-CH'IN 1992, 21–25.
[70] DI COSMO 2004, 56.
[71] SHELACH 1994, 282.
[72] HINGE 2003, 68.

cultivating their own crops. However, such an action would not necessarily imply a high cost, especially considering that these were nomadic cultures used to travelling and that they had a sufficiently developed infrastructure of vehicles (wagons) to do so.

Other nomadic cultures in Central Asia or Western Eurasia would have had the same difficulties with neighbouring agricultural societies. Nor should we forget that the steppe regions were not, for the most part, as suitable for intensive agriculture as China. However, the Scythian groups that settled on the western edge of the Eurasian steppe chose to practise sedentary agriculture in areas that allowed it, while other Scythian groups that settled further east did not. This hypothesis might be sufficient to explain this process in the Far East, but not for the whole of Eurasia, which, as we can see, adopted different solutions depending on the particular climatic, intercultural, etc. conditions. Moreover, the necessary internal development that these nomadic societies had to undergo in order to reach this degree of pastoral specialisation is forgotten. Lattimore and Barfield go even further, suggesting that their protagonists were earlier sedentary and hunter-gatherer cultures living on the fringes or, more accurately, in the regions of the Eurasian steppe, who, with the domestication of the horse, abandoned their traditional modes of production and became 'extensive' nomads, thanks to the possibility offered by this animal of making full use of the resources of the steppe[73]; however, the domestication of the horse did not lead all steppe or frontier economies in this area to 'complete' nomadism.

In this region, such cultures are thought to have arisen ca. 12th[74]–11th[75] c. BC, such as the Hsia-chia-tien (between the 11th – 4th c. BC and settled between the Sira Mören basin, the Khingan mountains, the Luan river to the south and the Yen and Ch'i-lao-t'u mountains), or even much earlier, such as the K'a-yüeh culture (settled in the Kansu and Ch'ing-hai regions), which would show primary characteristics of this type of 'extensive' nomadism, but which would evolve from an initial agropastoral social and economic organisation. These groups had already fully developed these common characteristics by the 6th century BC, as in the central region of Inner Asia with the T'ao-hung-pa-la and Mao-ch'ing-kou cultures, or in the northwest with the Ku-yüan culture in Ning-hsia and Ch'ing-yüan in Kansu, and would be maintained for centuries, as evidenced by successor cultures such as the Hsiung-nu (3rd–1st century BC), Lin Huang-nu (3rd–1st century BC), Lin Huang-kou (3rd–1st century BC) and Ch'ing-yüan in Kansu (3rd–1st century BC). III–I BC), Lin Hu, Tung Hu on the northeastern border of China, Lou-fan or Yuezhi on the northwestern border of China.

As with the western nomadic Scythians and Sarmatians, these groups would have begun to spread by forming larger political units, often by merging several groups and using their militarised structure to convert neighbouring villages that retained their agro-pastoral or fully agrarian organisation into subordinate tributaries. Other victims of this process included nearby nomadic tribes such as the Yuezhi, some of whom left their territory for Central Asia under pressure from the Hsiung-un[76]. Rostovtzeff points to this event as the beginning of a new wave of migrations along the Eurasian steppe from the east, which would first affect the Sakas (especially those Iranian tribes that settled between the Aral Sea and the Caspian Sea at this time[77], which we know as the Saka Paradraya-Scythians[78]) -Saka Tigrajauda and the Saka Haumavarga, settled between Bactria and Kandahar (they were called Masagetes by the Greeks, although they all had a Scythian component) and later by the Sarmatians (sometimes associated with the Meotes), who must therefore have moved from Bactria[79] into Scythian territory, first reaching the Volga region and the southern Urals. They are all related to the Maiemir and Tagar cultures of the Sayan-Altai region, with very similar common features[80].

[73] *LATTIMORE 1992, 521–523; BARFIELD* 1992, 29–30.
[74] JETTMAR 1964, 215.
[75] LOEWE/SHAUGHNESSY 1999, 221.
[76] *BARFIELD* 1992, 39.
[77] COOK 1985, 253–255.
[78] TORDAY 1997, 257.
[79] ROSTOVTZEFF 2000, 45.
[80] PRUSEK 1971, 97.

REFERENCES

BARFIELD 1992
Barfield, T. J., *The Perilous Frontier. Nomadic empires and China* (London: Blackwell).

BARTHOLD 1962
Barthold, W., *Zwolf Vorlesungen uber die Geschichte der Turken Mittelasiens* (Hildesheim: Olm).

BENNETT PETERSON 2000
Bennett Peterson, B., *Notable women of China. Shang Dynasty to the Early Twentieth Century* (London: Routledge).

BRENTJES 1996
Brentjes, B., *Arms of the Sakas and other tribes of the Central Asian steppes* (Hanumanpet: Rishi).

CERNIKOV 1957
Cernikov, S., *Rol' andronovskoj kul'tury v istorii Srednej Azii i Kazachstana* (Kratkie soobädenija Instituta etnografii, XXVI).

CERNIKOV 1960
Cernikov, S., *O termine, rannije kocevniki* (Kratkie soobshchenija Instituta istorii material'noj kul'tury, 80).

CHANG 1988
Chang, K. C., *Art, Myth and Ritual. The Path to Political Authority in Ancient China* (Harvard: University Press).

COOK 1985
Cook, J. M., The Rise of the Achaemenids and Establishment of Their Empire. In: Gershevitch, I. (ed.), *The Cambridge History of Iran*, Volume 2, (Cambridge: University Press), 200–291.

CRIBB 1991
Cribb, R., *Nomads in Archaeology* (Cambridge: Univ. Press).

DARWIN 1946
Darwin, Ch., *The descent of man* (Watts).

DEBEC 1948
Debec, G. F., *Paleoantropologija SSSR* (Moskva: Nauka).

DI COSMO 2004
Di Cosmo, N., *Ancient China and Its Enemies. The Rise of Nomadic Power in East Asian History* (Cambridge: University Press).

DIAKONOFF 1981
Diakonoff, I. M., *The Cimmerians* (London: Brill).

DOLUKHANOV 1988
Dolukhanov, P. M., *Paléoécologie de l'Asie centrale aux ages de la pierre et du bronze*. L'Asie centrale et ses rapports avec les civilisations orientales, des origines à l'age du fer. Mémoires

de la Mission Archéologique Française en Asie Centrale (Paris: Diffusion de Boccard, 1988).
EBERT 1929
Ebert, M., *Südrussland: Skytho-Sarmatische Periode* (Berlin: De Gruyter).
GRIMAL 1992
Grimal, N. C., *A History of Ancient Egypt* (London: Blackwell Books).
GRJAZNOV 1950
Grjaznov, M. P., *Pervyj Pazyrykskij kurgan* (Leningrad: Gosudarstvennyj Ermitazh).
GRYAZNOV 1969
Gryaznov, M. P., *The ancient civilization of ancient Siberia* (New York: Cowles Book Co).
HEINE-GELDERN 1951
Heine-Geldern, R., Das Tocharenproblem und die Pontische Wanderung, *Saeculum* 2, 225–255.
HERODOTUS, *HISTORIA*
Schrader, C. (transl.), *Heródoto, Historia. Libros IV–V*, Textos Clásicos 39 (Madrid: Ed. Gredos).
HINGE 2003
Hinge, G., Scythian and Spartan Analogies in Herodotos' Representation: Rites of Initiation and Kinship Groups. In: Højte, J. M., Stolba, V. F., Bilde, P. G. (eds.), *The Cauldron of Ariantas* (Aarhus: University Press), 55–74
HINSCH 2010
Hinsch, B., *Women in Early Imperial China* (Maryland: Rowman & Littlefield).
HSIAO-CH'IN 1992
Hsiao-Ch'in, Ch., Kuan-yü pei-fang yu-mu wen-hua ch'i-yüan te t'an-t'ao, *Nei Meng-ku wen-wu k'ao-ku* 1–2, 21–25.
HSUEH-PAO 1977
Hsueh-Pao, K., The excavation of Tomb, No. Five at Yin-hsu, An-yang (in Chinese), *K'ao-ku Hsueh- pao* 2, 57–98.
IRONS 1979
Irons, W. G., Political Stratification among Pastoral Nomads. In: *Pastoral production and society: proceedings of the international meeting on nomadic pastoralism. Equipe Ecologie et Anthropologie des Societes Pastorales* (Cambridge: University Press).
JACOBSON 1995
Jacobson, E., *The art of the Scythians: the interpenetration of cultures at the edge of the Hellenic world* (London: E. J. Brill, 1995).
JETMAR 1951
Jetmar, J., *The Altai before the turks* (Stockholm: Museum of Far Eastern Antiquities Bulletin 23).
JETTMAR 1964
Jettmar, K., *Die frühen Steppenvölker. Der eurasiatische Tierstil Entstehung und sozialer Hintergrund* (Baden-Baden: Nomso Verlag).
JETTMAR 1966
Jettmar, K., Mittelasien und Sibirien in vorturkischer Zeit. In: Handbuch der Orientalistik, i Abt. V, Bd. 5, 1–105.
JETTMAR 1967
Jettmar, K., *Art of the Steppes* (London: Crown Publishers).
JORDANOV/FOL 2000
Jordanov, K./Fol, A., *Ancient Thrace; Thrace and the Aegean: Proceedings of the Eighth Int. Congress of Thracology* (Sofia: Yambol).
KHAZANOV 1975
Khazanov, A. M., *Sotsianaya istoriya skifov: Osnovnye problemy razvitiya drevnikh kochevnikov Evrazi- iskikh stepei* (Moskva: Nauka).
KHAZANOV 1994
Khazanov, A. M., *Nomads and the Outside World* (Wisconsin: Univ. of Wisconsin Press).
KISELEV 1951
Kiselev, S. V., *Drevniaia istoriia IUzhnoi Sibiri; Institut Istorii Material'noi Kul'tury* (Moscva, 1951).
KORYAKOVA/EPIMAKHOV 2014
Koryakova, L. N./Epimakhov, A. V., *The Urals and Western Siberia in the Bronze and Iron Ages* (Cambridge: University Press, 2014).
KOSHELENKO 1988
Koshelenko, G. A., L'Asie Central au début de l'age du fer: le problème des relations extérieures. *L'Asie centrale et ses rapports avec les civilisations orientales des origines à l'âge du Fer. Mémoires de la Mission Archéologique Française en Asie centrale, 1*.
LATTIMORE 1962
Lattimore, O., *Studies in Frontier History* (Oxford: Oxford Univ. Press).
LATTIMORE 1991
Lattimore, O., *Inner Asian frontiers of China* (Oxford: Oxford Univ. Press).
LEBEDYNSKY 2008
Lebedynsky, I., *De L´epee scythe au sabre mongol. Les armes blandes des nómades de la steppe. IXe siècle avant J.-C.–XIXe siècle après J.-C.* (Paris: Errance).
LIU, L./CHAN 2012
Liu, L./Chan, X., *The Archaeology of China. From the Late Paleolithic to the Early Bronze Age* (Cambridge: Cambridge Univ. Press, 2012).
LOEWE/SHAUGHNESSY 1999
Loewe, M./Shaughnessy, N., *The Cambridge History of Ancient China* (Cambridge: Cambridge Univ. Press).
MAISELS 2001
Maisels, C. K., *Early Civilizations of the Old World. The Formative Histories of Egypt, The Levant, Mesopotamia, India and China* (London: Routledge).
MASANOV 1995
Masanov, N. E., *Kochevaya tsivilizatsiya kazakhov: osnovy zhiznedeyatelnosti nomadnogo obshchestva* (Sotsinvest-Gorizont).
MILLEDGE NELSON 1995
Milledge Nelson, S., *The Archaeology of Northeast China. Beyond the Great Wall* (London: Routledge).
MORGAN 1964
Morgan, L. H., *Ancient Society* (Harvard: Univ. Press).
PARZINGER 2009
Parzinger, H., *Die Skythen* (London: C. H. Beck).
PETRENKO 1995
Petrenko, V., Scythian Culture in the North Caucasus. In: Davis-Kimball, J., Bashilov, V. A., Yablonski, L. T. (eds.), *Nomads of the Eurasian steppes in the early Iron Age* (Tucson: Zinat Press), 5–22.
PULLEYBLANK 2011
Pulleyblank, E. G., Chinese and indoeuropeans, *Journal of the Royal Asiatic Society of Great Britain & Ireland* 98, 1, 9–39.
PRUSEK 1971
Prusek, J., *Chinese statelets and the Northern barbarians in the periodo 1400–300 BC* (Dordrecht: Reidel).
RADLOFF 1954
Radloff, W., *Sibirya'dan = Aus Siberien* (Maarif Basımevi).
RAWSON 2007
Rawson, J., *The British Museum book of Chinese art* (London: British Museum Press).
ROSTOVTZEFF 2000
Rostovtzeff, M., *The animal style in South Russia and China* (Rome: L'Erma di Bretschneider).
RUDENKO 1952
Rudenko, S. I., *Gornoaltajskije nachodki i skify* (Moskva-Leningrad: Nauka).
RUDENKO 1960
Rudenko, S. I., *Kul'tura naselenija Tsentral'nogo Altaja v skq'skoe*

vremja [The culture of the population of the Altai in the scythian Era] (Moscow: USRR Ac. Science).

SANCHEZ SANZ 2016
Sanchez Sanz, A., La relación con los dioses a través de los ritos ecuestres en la Hispania pre-romana, *Latomus* 75, 1–26.

SANCHEZ SANZ 2019a
Sanchez Sanz, A., Héroes y grifos. El góritos escita y el arte griego en la estepa euroasiática, *Journal of Intercultural and Interdisciplinary Archaeology* 3, 61–74.

SANCHEZ SANZ 2019b
Sanchez Sanz, A., *Ars Amazonica. Estudio de fuentes y análisis comparativo* (Madrid: Complutense University of Madrid).

SANCHEZ SANZ 2020
Sanchez Sanz, A., Los góritos escitas. Armas suntuarias en la estepa euroasiática. In: *Actas del VII congreso de la Sociedad Española de Iranología (SEI)*, 23–41.

SANCHEZ SANZ 2021
Sanchez Sanz, A., Cimerios, amazonas y el arte griego, *Studia Histórica. Historia Antigua* 39, 5–26.

SANCHEZ SANZ 2022
Sanchez Sanz, A., The "first" Amazons. Development of genre in Eurasian bronce. In: *Proceedings of the 10th Congress of the Spanish Society of Iranology (SEI)*. Tbilisi (20–21 October), 173–203.

SANCHEZ SANZ 2023a
Sanchez Sanz, A., Identidad y género en el Bronce Griego. In: Druille, P., Perez, L. (eds.), Libertad, Opresión y Confinamiento. Del Mundo Antiguo a nuestros días (Santa Rosa: Universidad Nacional de la Pampa), 827–836.

SANCHEZ SANZ 2023b
Sanchez Sanz, A., Scythian Amazons. Female burials in northern Pontus, *Erga-Logoi. Rivista di storia, letteratura, diritto e culture dell'antichità* 11, 7–27.

SANCHEZ SANZ 2024a
Sanchez Sanz, A., Enlightened Bodies. The Symbology of Tattooing in Ancient Thrace, *Journal of Ancient History and Archeology* 11, 3–19.

SANCHEZ SANZ 2024b
Sanchez Sanz, A., The "first" Amazons. Development of genre in Eurasian bronce. In: *Actas del X Congreso de la Sociedad Española de Iranología (SEI)*, Tbilisi (Georgia), 20–21 de octubre de 2022 (Tbilisi: Ivane Javakhishvili Tbilisi State University Press), 173–203.

SHAKHANOVA 2004
Shakhanova, N., The System of Nourishment among the Eurasian Nomads: The Kazakh Example. In: Seaman, G. (ed.), *Ecology and Empire. Nomads in the Cultural Evolution of the Old World* (Ethnographics/USC), 111–117.

SHELACH 1994
Shelach, G., Social Complexity in North China during the Early Bronze Age: A Comparative Study of the Erlitou and Lower Xiajiadian Cultures, *Asian Perspectives* 33, 2.

SHISHLINA/HIEBERT 1998
Shishlina, N./Hiebert, F. T., The Steppe and the Sown: Interaction between Bronze Age Eurasian Nomads and Agriculturalists. In: Mair, V. (ed.), The Bronze Age and Early Iron Age Peoples of Eastern Central Asia (Washington, DC: Institute for the Study of Man), 222–237.

SOPER 1954
Soper, A., King Wu Ting's Victory over the Realm of Demons, *Artibus Asiae* 17, 55–60.

TORDAY 1997
Torday, L., *Mounted archers: the beginnings of Central Asian history* (Durham: The Durham Academic Press).

VEJNSHTEIN 1984
Vejnshtein, S. I., The Problem of Origin and Formation of the Economic- Cultural Type of Pastoral Nomads in the Moderate Belt of Eurasia. In: Weissleder, W. (ed.), *The Nomadic Alternative* (Berlin: Mouton), 127–133.

VENEDIKOV/GERASSIMOV 1979
Venedikov, J./Gerassimov, T., *Thracian Art Treasures* (Sofia: Bulgarian Painters).

WALEY 1954
Waley, A., *The book of songs* (Crows Nest: George Allen and Unwin, 1954).

XI'AN BANPO/SHAANXISHENG KAOGU/LINTONGXIAN 1988
Xi'an Banpo, B./Shaanxisheng Kaogu, Y./Lintongxian, B., *Jiangzhai–Xinshiqi Shidai Yizhi Fajue Baogao* (Wenwu, Beijing: Chubanshe).

ZHONG-PEI 1985
Zhong-Pei, Z., The social structure reflected in the Yuanjunmiao cemetery, *Journal of Anthropological Archaeology* 4, 19–33.