

HEARTHES AND OVENS OF THE ADJIKUI OASIS

Annamurad Orazov

(Turkmenistan)

Since 2001, the survey, scientific research and excavation works are carried out systematically on the territory of Karakum desert, "Gorelde" peasant association of Bayramaly district on the base of official agreement between the Ministry of Culture and TV&Radio Broadcasting of Turkmenistan and the Ligabue Study Research Centre (Italy), at the archaeological monuments Adjikui 1 and 9, which are referred to the Bronze Age and located to the north of the Mary town.

So far, the capital excavation, survey and scientific research works have been held at the archaeological monuments of Adjikui 1 and 9. The domestic hearths, constructed inside the living houses, are available among finds discovered and studied during conducted works and remains of architectural monuments. The author took participation in this work and gives in the report an analysis of features of domestic hearths.

According to architectural data, required in life domestic hearths/ovens were built up usually in living houses of monuments of the Bronze Age. There are two types of domestic hearths: first type is domestic hearths/ovens consisting of two parts. The first part is a hearth, where the fire inflaming, the second is contiguous part which destined for cooking. There is a flue inside of contiguous wall of the second part.

The second type consists of one part and represents a hearth in the wall in which fire is inflaming.

Different types of these hearths have been constructed by masters of that epoch with high skill. Domestic hearths were smoothly covered with straw clay. It is succeeded to define that some of them were repaired repeatedly.

The domestic hearths have some peculiarities according to their types, structures and sizes. Information concerned is given in drafts applied to the report (fig. 20-29). In addition, results of special tests and researches on building methods and instruments are described in this article.

THE ARYAN PROBLEM AND THE BMAC (BACTRIA-MARGIANA ARCHAEOLOGICAL COMPLEX)

Asko Parpola

(Finland)

The Aryan problem. The discovery of the BMAC has provided the missing link vital for solving the so-called Aryan problem, which in turn is important for the interpretation of the BMAC itself. But what exactly is the "Aryan problem"? By the

early first millennium BC, Indo-Aryan languages were spoken in Pakistan and Northwest India, while closely related Iranian languages were spoken in Central Asia and Iran. But where did these Aryan or Indo-Iranian languages come from, where was the original Aryan proto-language formed, how did it split into its two main branches, and when and by which way did these Aryan languages reach the areas where they have been spoken since early historical times? The archaeological and linguistic evidence relevant to these questions is complex, and many different solutions have been presented. I must concentrate on the outlines of one that I have been elaborating a long time (cf. Parpola 1974), but I mention here two competing solutions. One places the ultimate origin of the Aryan and other Indo-European speakers in Anatolia, the other places it in India.

Proto-Indo-European. For finding out where Proto-Aryan was spoken it would indeed be very helpful to know where its mother language Proto-Indo-European was spoken. An important chronological criterion is offered by the inherited (not borrowed) vocabulary associated with wheeled vehicles. At least six such words can be reconstructed for the Indo-European proto-language. This dates the disintegration of Proto-Indo-European around 3500 BC, because there were no wheeled vehicles anywhere in the world before that (Anthony 1995). The distribution of the earliest vehicle finds offers additional help in locating the archaeological culture where Proto-Indo-European was spoken. It should be a culture connected, through a chain of genealogically related cultures, with those often widely dispersed areas where the various branches of Indo-European are first attested. These and other criteria have suggested the Srednij Stog culture (c 4500-3350 BC) of Ukraine as the most likely candidate (Mallory 1989). The main successor of the Srednij Stog, the Pit Grave culture (c 3500-2800 BC), extended from the Danube to the Urals. The Pit Grave culture developed later into cultures from which the Greek, Armenian and Aryan branches can be traced. In Central Europe, strong Pit Grave influence created the Corded Ware or Battle Axe culture (c 3300-2800 BC), which quickly spread widely over north-western Europe, from the Netherlands to the shores of the Baltic Sea, that is, to areas where the proto-forms of Italic, Celtic, Germanic and Balto-Slavic languages are traced. Even the archaic Indo-European language Tokharian once spoken in Sinkiang can be linked with the Srednij Stog and Pit Grave cultures through the Afanas'ev culture (c 3500-2200 BC) of southern Siberia.

Finno-Ugrian loanwords. Important linguistic indications for the location of Proto-Indo-European and Proto-Aryan are the loanwords borrowed from these languages into Proto-Finno-Ugrian. In all likelihood, Proto-Finno-Ugrian was spoken in the successive Lyalovo (c 5000-3650 BC) and Volosovo (c 3650-1900 BC) cultures of central Russia. The Lyalovo culture (characterized by Pitted Ware) expanded around 3900 BC to Karelia, Finland and the Baltic (the ceramic developed into Combed Ware in these regions); in the southwest, on the upper Don, the Lyalovo culture was in contact with the Srednij Stog culture. Around 2300 BC, the southern part of the Volosovo culture was overlaid by the Abashevo culture (c 2800-1900 BC), which was one of the successors of the Pit Grave culture. As a result of this development, several Proto-Finno-Ugrian speaking communities seem to have had a Proto-Aryan speaking elite minority, whose later absorption into the majority left about one hundred Aryan loanwords in early Finno-Ugrian. A number of these words reflect a stage of

linguistic development midway between Proto-Indo-European and the late form of Proto-Aryan which can be reconstructed by comparing Indo-Aryan and Iranian. (Carpelan and Parpola 2001)

Horse-drawn chariot and its Aryan deities. In the southern Urals, the Abashevo culture gave rise to the Sintashta-Arkaim culture (c 2200-1800 BC), the graves of which contain the earliest known horse-drawn chariots (c 2000 BC). The Eurasian steppe is the natural habitat of the horse, and thus the most likely place for yoking the horse to the chariot. The Sintashta-Arkaim culture is the source of the Andronovo cultural complex, which spread widely in southern Siberia and Central Asia between 1800 and 1300 BC. The greatest number of chariot finds is from this area and period. (Epimachov and Korjakova 2004) The Ural river remained until c 1300 the border between the Andronovo cultures in the east and the related Timber Grave cultures of the Volga steppes in the west, leading to differentiation of the Indo-Aryan and Iranian branches.

In the Sintashta-Arkaim culture, aristocratic men were buried with their horses and chariots. The Nasatyas or Ashvins, as the deified two-man team of the chariot warrior and his charioteer, seem to have become the leading deities of the Proto-Aryan pantheon at this time. The distribution and typology of the cheek plates of chariot horses has suggested that the Mycenaean Greeks got their horse chariot via south-eastern Europe from the southern Urals. Together with this new showpiece of power the Greeks seem to have received the associated mythology of the two divine horsemen, the Dioskouroi. The Baltic religion also had "sons of the (Sky) God" associated with horses, and they wooed the solar maid (the dawn), as did their Aryan and Greek counterparts. The Dioskouroi were associated with the dual kingship of Sparta, and were worshipped there as the greatest gods. This dual kingship seems to be of Proto-Aryan origin; in Vedic India it manifested itself in the close collaboration of the king and the high priest, who is said to have acted as the king's charioteer in ancient times. (Parpola 2005.)

Andronovo culture in southern Central Asia. Thus the homeland of the Aryan or Indo-Iranian languages was in the steppes of South Russia and northern Central Asia. Yet they have been spoken in South Asia and in Greater Iran since at least 1000 BC. The Indo-Aryan speakers, who created the Rig-Vedic hymns, could not have come to Pakistan and India before 2000 BC, for they had horses and chariots, and the domesticated horse is not attested anywhere in South Asia before 2000 BC. This implies a southward movement from northern Central Asia through southern Central Asia (Turkmenistan, Uzbekistan, Tajikistan and Afghanistan) in the second millennium BC. Southern Central Asia was in the control of the BMAC c 2500-1300 BC.

The archaeological record indeed shows that between 1800 and 1300 BC, pastoralist Andronovo tribes of the northern steppes have come to southern Central Asia in increasing numbers, until their campsites surrounded almost every BMAC settlement (Gubaev et al 1998). This is likely to have taken place within the framework of their seasonal migrations and involved also barter of goods with the agricultural population of the south. Such exchanges continued for centuries and must have involved bilingualism. This is suggested also by the fact that mixed communities blending pastoralist (Andronovo) and agricultural

(BMAC) traditions came into being in southern Central Asia, such as the Vakhsh and Bishkent cultures of Tajikistan.

Linguistic Aryanization of the BMAC. Undoubtedly the BMAC originally was non-Indo-European in its language, as it owed its birth and magnificence to cultures of southern Turkmenistan, Elam, Iran and Baluchistan. Nevertheless it is logical to assume that the BMAC became linguistically Aryanized, at least on the elite level. For although the Andronovo culture came from the northern steppes to the region of the BMAC, it did not proceed further to India and Iran and thus did not transport the Indo-Iranian languages there. The BMAC, on the other hand, did spread both to Iran and to South Asia. (Parpola 1988; cf. also Hiebert 1998; and Mallory 1998: "Kulturkugel".) It is true that there is little in the BMAC which compels one to assume the presence of Aryan speakers (Francfort 2005). In the Hurrian-speaking kingdom of Mitanni in the Near East (Syria), the Indo-Aryan speaking rulers adopted in its entirety the local culture where they had seized the power. If their personal names and names of their Aryan gods were not known from cuneiform documents, nobody could ever have suspected their presence. In Mitanni, the incoming minority language was cut off its roots and eventually absorbed, but in the case of the BMAC, the Aryan speech was constantly around.

Furthermore, a disturbed aristocratic grave at Zardcha Khalifa in Tajikistan has recently shown that the elite of the BMAC possessed the horse-drawn chariot with cheek plates of the Sintashta-Arkaim culture (Bobomulloev 1997). The horse also appears as a new art motif in the weapons and cylinder seals of the BMAC. The burial of a headless colt in the necropolis of Gonur suggests practice of the Aryan horse sacrifice.

Mitanni Aryans and the BMAC. A cylinder seal from Tepe Hissar IIIb shows the horse-drawn chariot. It belongs to the early phase of the BMAC occupation of northern Iran characterized by the Gorgan Grey Ware (c 1800-1600 BC). This ceramic is considered to be the basis of the intrusive Early West Iranian Grey Ware that suddenly appeared in great quantities all along the Elburz mountains, in Azerbaijan and around Lake Urmia c 1500 BC (Young 1985). It is at this time that power in the Mitanni kingdom of Syria was taken over by Proto-Indo-Aryan speakers. The Proto-Indo-Aryans of Mitanni (c 1500-1300 BC) introduced to the Near East the term for chariot warrior (Hurrian *maria-*nnu**, from Indo-Aryan *marya-* 'young man, warrior'). They also taught chariotry to the Hittites: the Mitannian Kikkuli wrote a handbook for training chariot horses in Hittite, but its technical terms are of Indo-Aryan origin. Ghirshman (1977) derived the Indo-Aryans of Mitanni from Gorgan, linking also the BMAC trumpets with the trumpet signalling used in chariot warfare. The archaeological parallels between the BMAC and Syria (Sarianidi) point to lively connections initiated not later than the 20th century BC with the tin trade that the Assyrian merchants had with Central Asia.

Iranian speakers and Yaz I-II. The BMAC was succeeded by the Yaz I culture (c 1300-1000 BC) characterized by handmade painted pottery widely spread in southern Central Asia. The total absence of graves during this and the following Yaz II period suggests exposure funeral characteristic of the Zarathushtran religion (Francfort 1989). A small percentage of the pottery is plain ware decorated with applied clay rollers, assumed to go back to the North Pontic Babino culture (Chernykh). It seems

that the Iranian languages spread to Asia from south-eastern Europe along with stirrup riding, which antiquated chariotry and gave the Iranian speakers an edge over the Indo-Aryans. The Medes and the Persians probably moved to Iran from Central Asia in Yaz II times.

Two waves of Vedic Aryans. It is possible that the coming of Iranians to southern Central Asia made Rig-Vedic Aryans move to South Asia around 1300 BC. This main wave of immigrants composed the oldest hymns, the so-called family books (RV II-VII). These hymns know the bronze, *ayas*, but not yet iron, which is mentioned as "black *ayas*" in the slightly later Atharva-Veda (c 1000 BC). In South Asia this wave was preceded by an earlier wave of Indo-Aryans, whose traditions are reflected in the later collected hymn books mainly composed by the Kanva and Angirasa poets (RV I, VIII-X and the AV). These hymns are the only ones to attest personal names of the type 'One having the god X as his guest', known from Mitanni. The cult of the Ashvins, the chariot deities, is also prominent in them. In Rig-Vedic times, the Ashvin cult prevailed especially among the Kanva and Atri families residing in Gandhara. (Parpola 2002a; 2005.) The Gandhara Grave culture (c 1600-600 BC) is among the earliest in South Asia to possess the domesticated horse (there are two horse burials), and its material culture (including pottery and burial by inhumation or cremation) is considered to derive from the late phase of the BMAC (Silvi Antonini; Stacul; Sarianidi).

Dasas and the early phase of the BMAC. The Proto-Indo-Aryan speakers of Sintashta-Arkaim and Andronovo origin seem to have been preceded as the aristocratic elite of the BMAC by early 'Iranian' speakers. These may have come from the Poltavka culture that succeeded the Pit Grave culture in the Volga steppes (cf. "Afnas'ev" finds at Sarazm IV, 2300 BC), not having the horse-chariot, but a bull-chariot (depicted on a BMAC silver beaker). Moving to South Asia in Late Harappan times (Sibri, Chanhu-Daro, Gilund, Copper Hoards), they introduced the "Tantric" worship of the (originally Near Eastern) goddess of fertility and victory worshipped in the BMAC (the layout of the Dashly-3 palace is a prototype of the Tantric mandala). In the Indo-Iranian borderlands, probably in eastern Afghanistan (which still has BMAC-like qala manors and Nuristani languages with Proto-Iranian features), the Rig-Vedic Aryans conquered many citadels with multiple walls that belonged to inimical Dasas. The ethnic name of the war-captives, Dasa, came to mean 'slave' in Indo-Aryan; it corresponds to the word for 'man, human being' in the East Iranian languages Wakhi and Khotanese. (Parpola 1988; 2002b.)

BIBLIOGRAPHY

Carpelan, Christian, and Asko Parpola 2001. Emergence, contacts and dispersal of Proto-Indo-European, Proto-Uralic and Proto-Aryan in archaeological perspective. Pp. 55-150 in: C. Carpelan, A. Parpola and P. Koskikallio (ed.), *Early contacts between Uralic and Indo-European: Linguistic and archaeological considerations*. Helsinki.

Parpola, Asko 2002a. From the dialects of Old Indo-Aryan to Proto-Indo-Aryan and Proto-Iranian. Pp. 43-102 in: N. Sims-Williams (ed.), *Indo-Iranian languages and peoples*. Oxford.

Parpola, Asko 2002b. Pre-Proto-Iranians of Afghanistan as initiators of Sakta Tantrism. *Iranica Antiqua* 37: pp. 233-324.

Parpola, Asko 2005. The Nasatyas, the chariot and Proto-Aryan religion. *Journal of Indological Studies* (Kyoto) 16 & 17 (2004-2005): pp. 1-63.