

# DISCOVERY OF NEW CULTURES OF THE BRONZE AGE IN MONGOLIA ACCORDING TO THE DATA OBTAINED BY THE INTERNATIONAL CENTRAL ASIAN ARCHAEOLOGICAL EXPEDITION

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Since 2001 the International Central-Asian Archaeological Expedition of St.-Petersburg State University, the Roerich Museum-Institute of St.-Petersburg, the Institute of History of the Mongolian Academy of Science, and Ulaanbaatar University have conducted methodical investigations of Bronze and Early Iron Ages sites on the territory of Outer Mongolia. During seven years of work more than one hundred burial mounds and ritual sites have been excavated under the supervision of Alexei Kovalev, German Archaeological Institute corresponding member, and Diimaazhav Erdenebaatar, Professor and Dean of the Faculty of Human Sciences of Ulaanbaatar State University. The investigations were carried out in accordance with international standards of methodology; the excavation and documentation methods of stone constructions traditionally used for excavation of such sites in the Russian part of Central Asia were taken as the basis. According to Russian tradition Central Asia includes the Saian, Altai, and Khangai Mountain systems and also the Gobi desert.

At the beginning of the expedition working in Mongolia we stated there was a very low level of knowledge of the Bronze Age cultures in Mongolia. The main problems can be summarized as follows:

- Very few sites of the Bronze and the Early Iron Ages of western, central, and Gobi regions had been excavated by archaeologists.
- There is a nearly total absence of burial sites of Early and Middle Bronze Age (third and the first half of the second millennium BC) among the excavated sites, except for several barrows from Altan Sandal and Shatar Chuluu (Novgorodova 1989, 81–86).
- The very poor quality of descriptions of stone burial and ritual constructions, shortage of, or even absence of, reliable drawings (both plans and sections), sometimes no drawings or photographs can be found at all.
- The total absence of reliable radiocarbon dates.

The poor knowledge of the Bronze Age in Mongolia at the end of 20th century appears especially obvious in contrast with the neighbouring areas of Russia, Kazakhstan and even China, where many thousands of barrows belonging to cattle-breeding tribes of the 3rd to the 1st millennium BC have been explored and excavated by this time. This circumstance appeared to be a considerable obstacle for the study of cultural and historical processes in Bronze Age Central and Inner Asia. Thus, the principal task of our project was to improve this situation.

The work of our expedition yielded the following main results<sup>1</sup>:

- Barrows belonging to Afanasievo culture were excavated for the first time in north-west Mongolia (in Baian-Ölgii aimag); one of them dated back to the first half of the 3rd millennium BC.
- Sites belonging to Chemurchek culture (2500–1800 BC) in the foothills of Mongolian Altai also were discovered and excavated for the first time; six barrows in Khovd aimag and four in Baian-Ölgii aimag.
- A new culture of Middle Bronze Age (about 1800–1600 BC) named by us “Mönkhkhairkhan culture” was discovered; the 13 related barrows in Khovd-, Zavkhan- and Khövsgöl-aimags were excavated.
- Eight burials dating from the Late Bronze Age (about 1400–1100 BC) were excavated in Bulgan sum of Khovd aimag; they belonged to an unknown culture, which was preliminary called the “Baitag” culture.
- As a result of excavations of burial sites in Gov’-Altai Mountains (Övörkhangai-, Baiankhongor- and Ömnögov’ aimags) a new “Tevsh” culture of Late Bronze Age was established – dating from about 1400–1100 BC. Several “figure” tombs, which were formerly investigated by a Soviet-Mongolian archaeological expedition near Tevsh Uul in Bogd sum of Övörkhangai aimag also belong to this culture.
- On the basis of excavations, <sup>14</sup>C-dating and mapping of sites, the absolute and relative chronologies of formerly known types of burial constructions of the Late Bronze and the Early Iron Ages (1400–300 BC) in Mongolian Altai have been established (Kovalev / Erdenebaatar 2007a, 83–84).
- For the first time a complete scientific research of ritual-burial and ritual sites of “deer stones” had been conducted in Khovd aimag (the khirigsuur in Khar Gov’) and Khövsgöl aimag (deer stone complex in Surtiin denzh) and accordingly two different traditions of deer stones ritual usage – Western-Mongolian and Central-Mongolian – were discovered, which simultaneously existed at the neighbouring territories (Kovalev / Erdenebaatar 2007a).
- An area of around 200x300 km of Pazyryk culture monuments distributed over Mongolian Altai in 600–300 BC was ascertained (Varenov et al. 2004).
- The Baianbulag fortress in Nomgon sum of Ömnögov’ aimag was newly attributed: it is a Shouxiangcheng fortress, which had been built by the order of Wu-di, the emperor of Chinese Han Dynasty in 105 BC (see Sima Qian 1996, Vol. 9, 2915; Batsaikhan 2002, 46–54), it is not a Xiongnu Zhaoxincheng town.
- With the aid of the results of <sup>14</sup>C analysis the exact time of construction of the so-called “Chingis Khan Wall” in Ömnögov’ aimag<sup>2</sup> was ascertained. It appears to be the end of the 14th (or possibly the beginning of the 15th) century AD; the wall probably was built by the Chinese in the time of the war between the Ming empire of China and the descendants of the last emperor of the Mongolian Yuan dynasty.

The present paper is focused on our discovery of new Bronze Age cultures in Mongolia.

1 Some results of our work were published in: Erdenebaatar / Kovalev 2003a; 2003b; Erdenebaatar / Davaatseren 2004, 6–7; Varenov et al. 2004; Kovalev 2005; Kovalev / Erdenebaatar 2007a; 2007b.

2 This wall was erroneously believed by Chinese archaeologists to Early Han period, to so called “north part of outer Han walls”, see Li Yiyou 2001, 23–24.

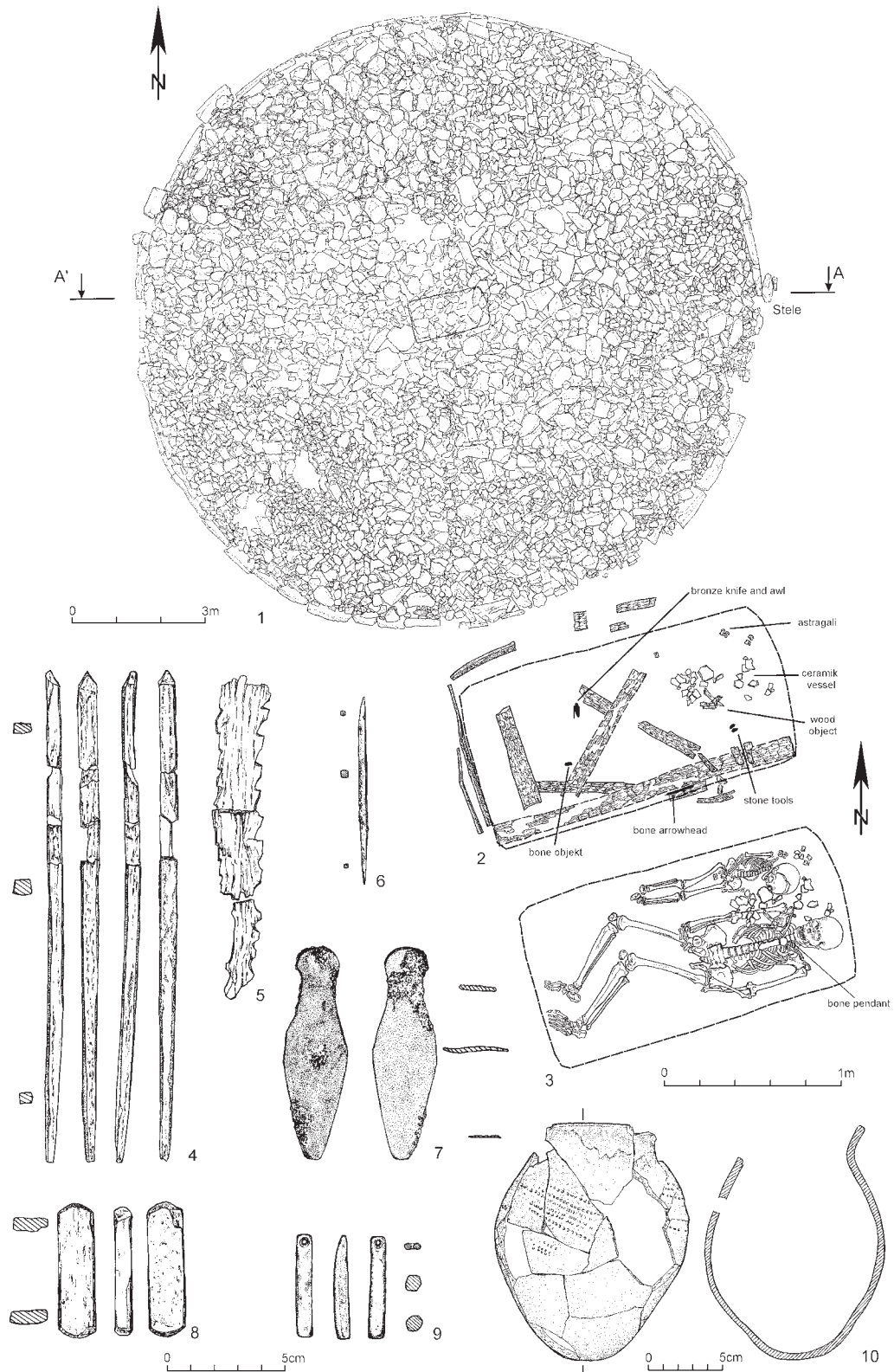


Fig. 1. Afanasievo culture. Barrow 1, Kurgak gobi (Khuurai Gov'), Ulaankhus sum, Baian-Ölgii aimag. 1 plan of barrow; 2 bottom of a wooden vehicle's body with burial goods inside burial pit; 3 plan of the burial; 4 bone arrowhead; 5 wooden object; 6 bronze awl; 7 bronze knife; 8 bone tool; 9 bone pendant; 10 ceramic vessel.

## AFANASIEVO CULTURE

A barrow – belonging to this culture – known as Khuurai-Gov' No.1 was excavated by our expedition in Ulaankhus sum, Baian-Ölgii aimag, in 2004. It was situated on the first terrace of the left bank of Khar Dzhamat Gol. The barrow (Fig. 1.1) looked like a flat round stone pavement, 16 metres in diameter and about one metre high defined by a stone fence made of vertical stone slabs, which is a characteristic feature of Altai Afanasievo (Pogozheva et al. 2006, 27–28). One more similar slab stone was erected separately at the eastern side of the mound. In the central part of the construction lay a rectangular tomb pit more than 2 metres deep, in which a man and a child were buried, laid on their backs, with their heads oriented towards the east (Fig. 1.3). The bottom of a wooden vehicle's body (Fig. 1.2) served as a ground for the burial goods which were laid on the bottom, including a knife and an awl made of bronze (Fig. 1.6–7), a bone arrowhead (Fig. 1.4), a ceramic vessel of elongated proportions (Fig. 1.10) – typical for the Afanasievo culture from Russian Altai (Pogozheva et al. 2006, Tab. 28; 37; 40; 48; 57; 62; 64) – and sheep astragali. The construction of the wooden vehicle's body was typical for Pit-grave (Iamnaya) and Novotitaroskaia cultures of the Early Bronze age of east European grassland (Gei 2000, 175–191). The bronze knife is very similar to one found in a barrow near Tarlyshkin River in Tuva, where such bronze artefacts were discovered in assemblage with a jasper sceptre headed with an image of a bull's head (Kyzlasov 1979, 25–26).

Samples of coal, wood and human bones were analyzed in the Radiocarbon-laboratory of the Institute for the History of the Material Culture of the Russian Academy of Sciences (all references below are given according calibrated dates obtained by this laboratory). Seven dates were given (see Tab. 1); all indicated the most possible time of the barrow building to be the end of the first half of the third millennium BC. Two mounds of smaller size also belonging to Afanasievo culture with the fences made of vertical slabs were found in the same county on the first terrace of the left bank of Sogog Gol, near another mound, excavated by our expedition, belonging to Chemurchek culture, named Kumdi gobi (Khundii Gov').

Radiocarbon dates from Afanasievo culture site, Baian-Ölgii aimag, Ulaankhus sum

Site	Sample no.	Material	Uncorrected, Years BP	Calib. 68,2% (1-sig), Years BC	Calib. 95,4% (2-sig), Years BC
Kurgak gobi 1	Le-7219	bone	4180±100	2890–2620	3050–2459
Kurgak gobi 1	Le-7289	charcoal	4110±25	2850–2810 2740–2720 2700–2580	2870–2800 2760–2570
Kurgak gobi 1	Le-7290	charcoal	4025±50	2620–2470	2860–2810 2750–2720 2700–2450
Kurgak gobi 1	Le-7291	charcoal	4140±35	2870–2830 2820–2800 2760–2630	2880–2580
Kurgak gobi 1	Le-7292	charcoal	4130±40	2870–2800 2760–2620	2880–2580
Kurgak gobi 1	Le-7293	wood	4085±30	2840–2810 2670–2570	2860–2800 2760–2720 2700–2560 2530–2490

## Radiocarbon dates from Chemurchek culture sites, Baian-Ölgii aimag, Ulaankhus sum

Site	Sample no.	Material	Uncorrected, Years BP	Calib. 68,2% (1-sig), Years BC	Calib. 95,4% (2-sig), Years BC
Kurgak gobi 2 earliest pit	Le-7294	charcoal	4090±50	2860–2810 2750–2720 2700–2570 2520–2500	2880–2800 2780–2490
Kurgak gobi 2 earliest pit	Le-7295	charcoal	4100±30	2850–2810 2680–2570	2870–2800 2760–2560 2520–2500
Kurgak gobi 2 earliest pit	Le-7296	charcoal	4100±35	2860–2810 2700–2570	2870–2800 2780–2560 2520–2490
Kurgak gobi 2 secondary burial	Le-7215	bone	3825±70	2410–2370 2360–2190 2180–2140	2470–2120 2100–2030
Kumdi gobi earliest pit	Le-7300	charcoal	4050±30	2630–2550 2540–2490	2840–2810 2670–2640 2630–2470
Kumdi gobi earliest pit	Le-7301	charcoal	4110±20	2680–2810 2680–2580	2860–2810 2750–2720 2700–2570
Kumdi gobi secondary burial 2	Le-7212	bone	3900±70	2470–2280 2250–2230	2580–2510 2500–2190 2170–2140
Kumdi gobi secondary burial 1 (the latest)	Le-7221	bone	3340±70	1690–1520	1870–1840 1780–1440
Kulala ula 1 earliest burial pit	Le-7297	charcoal	4470±90	3340–3020	3400–2900
Kulala ula 1 earliest burial pit	Le-7298	charcoal	3950±50	2570–2520 2500–2400 2390–2340	2580–2290
Kulala ula 1 earliest burial pit	Le-7299	wood	4820±30	3650–3630 3580–3570 3560–3530	3660–3620 3600–3520
Kulala ula 1 secondary burial 1	Le-7220	bone	3725±115	2290–1950	2500–1750
Kara tumsik burial pit	Le-7302	charcoal	4025±30	2575–2545 2540–2485	2620–2470
Kara tumsik burial pit	Le-7303	charcoal	4120±20	2860–2810 2700–2620 2610–2600	2870–2800 2760–2720 2710–2580

## Radiocarbon dates from Chemurchek culture sites, Khovd aimag, Bulgan sum

Site	Sample no.	Material	Uncorrected, Years BP	Calib. 68,2% (1-sig), Years BC	Calib. 95,4% (2-sig), Years BC
Iagshiin Khödöö 1	Le-6937	bone	3790±120	2460–2440 2430–2420 2410–2110 2100–2030	2600–1850
Iagshiin Khödöö 1	Le-6938	bone	3720±60	2200–2030 1990–1980	2300–1940
Iagshiin Khödöö 2	Le-6942	bone	3880±100	2480–2190	2650–2000
Iagshiin Khödöö 3, human bones in situ at the bottom	Le-6932	bone	3770±60	2290–2130 2090–2040	2410–2370 2360–2020 2000–1970

Site	Sample no.	Material	Uncorrected, Years BP	Calib. 68,2% (1-sig), Years BC	Calib. 95,4% (2-sig), Years BC
Iagshiin Khödöö 3	Le-6933	bone	4000±80	2830–2820 2660–2650 2630–2400 2380–2350	2900–2200
Iagshiin Khödöö 3	Le-6939	bone	3800±70	2400–2380 2350–2130	2470–2030
Kheviin Am 1	Le-7217	bone	3560±105	2040–1740	2200–1600
Kheviin Am 1	Le-7222	bone	3440±120	1890–1600 1560–1530	2150–1400
Kheviin Am 1	Le-7224	bone	3800±200	2550–1900	2900–1600
Kheviin Am 1	Le-7229	charcoal	3770±60	2290–2130 2090–2040	2410–2370 2360–2020 2000–1970
Kheviin Am 1	Le-7230	wood	4100±200	2950–2300	3400–2000
Kheviin Am 2	Le-7214	bone	3830±120	2470–2130 2080–2070	2650–1900
Kheviin Am 2	Le-7228	charcoal	3720±30	2200–2170 2150–2120 2100–2030	2200–2020 1990–1980
Buural Kharyn Ar	Le-7225	bone	4250±500	3600–2200	4100–1500

## Radiocarbon dates from Mönkhkhairkhan culture sites, Khovd aimag, Mönkhkhairkhan sum

Site	Sample no.	Material	Uncorrected, Years BP	Calib. 68,2% (1-sig), Years BC	Calib. 95,4% (2-sig), Years BC
Ulaan Goviin Üziür 1	Le-6941	bone	3310±90	1730–1720 1700–1490	1880–1840 1780–1410
Ulaan Goviin Üziür 2	Le-6636	bone	3150±70	1510–1370 1340–1310	1610–1260
Khotuu Davaa 1	Le-6935	bone	3270±60	1620–1490 1480–1460	1690–1430
Artua	Le-6934	bone	3480±90	1920–1680	2040–1600 1580–1530

## Radiocarbon dates from Tevsh culture sites, Baiankhongor aimag, Baianlig sum

Site	Sample no.	Material	Uncorrected, Years BP	Calib. 68,2% (1-sig), Years BC	Calib. 95,4% (2-sig), Years BC
Baruun Gyalaat 2	Le-7954	bone	2900±50	1200–1010	1270–970 960–930
Zamyn Buts, secondary burial	Le-7966	bone	2980±110	1380–1330 1320–1050	1450–900

## Radiocarbon dates from Baitag culture site, Khovd aimag, Bulgan sum

Site	Sample no.	Material	Uncorrected, Years BP	Calib. 68,2% (1-sig), Years BC	Calib. 95,4% (2-sig), Years BC
Kheviin Am, secondary burial	Le-7223	bone	2910±90	1260–1230 1220–970 960–940	1400–850

Tab. 1. Radiocarbon dates from the sites excavated by International Central-Asiatic Expedition in Mongolia (data from <sup>14</sup>C-laboratory of the Institute for the History of the Material Culture of the Russian Academy of Science).

## CHEMURCHEK CULTURE

Our expedition ascertained that Chemurchek tribes had begun to spread over the territory of the Mongolian part of Mongolian Altai in the middle of the third millennium BC. Before our research some sites belonging to this culture had been explored only outside of the territory of Mongolia<sup>3</sup>. We excavated six barrows of the Chemurchek culture near the centre of Bulgan sum of Khovd aimag (burial sites Iagshiin Khödöö, Kheviin Am, Buural Kharyn Ar) and also four rectangular burial enclosures in Ulaankhus sum of Baian-Ölgii aimag (Kulala-Ula [Khul-Uul], barrow 1, Kurgak-Govi [Khuurai Gov’], barrow 2, Kumdi-Govi [Khundii Gov’], Kara-Tumsik [Khar Khoshuu]). One more barrow of the same type of the Chemurchek culture has been discovered on the left bank of Tsagaan Gol.

The barrows excavated by our expedition in Baian-Ölgii looked like rectangular stone enclosures including earth-pits, which were orientated with their longer sides West-East (Kulala-Ula: North-South) (see Fig. 2.1–2). Two of four stone-fences were joined by stone pillars (stelae), which were placed at the eastern side of the construction: the stele at the barrow of Kulala-Ula had been placed at the southern side and had been worked to look like a human body (Fig. 2.4). At the barrow of Kara-Tumsik such a stele stood inside the enclosure at the eastern side of the tomb and had been coloured with red ochre (Fig. 2.3).

Sites of the Chemurchek type in Baian-Ölgii look mainly like Chinese Chemurchek burial constructions (Yi Manbai / Wang Mingzhe 1981), which also were rectangular stone enclosures orientated, as the rule, with their longer sides west–east, and in rare cases north–south. At the middle of their eastern side (or at the southern side) there was placed a stone statue or a stone pillar. Inside the stone fences, along their long sides, there were sepulchres – boxes made of large stone slabs, which contained several burials.

The burial places in Bulgan look like huge stone boxes, orientated east–west, constructed of massive stone slabs which were situated on the ancient surface or were cut into the soil, and were used as a crypt for many burials (up to ten persons). The stone box was reinforced from outside (but not covered!) by surrounding stone heaps or by soil mounds, to which were added a rectangular row of light boulders (see Fig. 3.1). At the eastern side of the barrow Iagshiin Khödöö No. 3 a typical Chemurchek statue<sup>4</sup> of a man wearing a helmet was placed, with the face turned to the south, uncovered chest, and with a “crook” and a bow in his hands (Fig. 3.3). At the eastern side of the barrow Kheviin Am 1 a ritual “entrance” was discovered that had been made of thin vertical stone slabs and pavements made of boulders (Fig. 3.1). The walls of Bulgan stone boxes were decorated in red paint in ancient times (Fig. 3.2). Our observations show that such burial constructions are regionally widespread, including the low basins of Khovd Gol and Buiant Gol (Kovalev 2005, 180). Having determined this in 2006, new Chemurchek boxes with surrounding stone heaps were discovered by A. Tishkin in the low basin of Buiant Gol (Tishkin et al. 2006, 111). One of them (Ulaan Khudag I-1) was excavated by A. Tishkin, Ch. Munkhbaiar, D. Erdenebaatar, S. Grushin and A. Kovalev in 2007 (Tishkin / Erdenebaatar 2007, 166). The excavations showed that there was a ritual rectangular-shaped pavement with a pillar at the eastern side of the barrow. The same stone burial boxes, which were connected with stone statues,

3 Kovalev 1998; 2000; 2005; 2007.

4 See Wang Bo / Qi Xiaoshan 1996, statues No. Ea 1–7, 14, 16–18, 20, 22–23, 26–28, 30–31, 34, 38, 41–46, 49, 50; Kovalev 2000, Tab. 3–8.

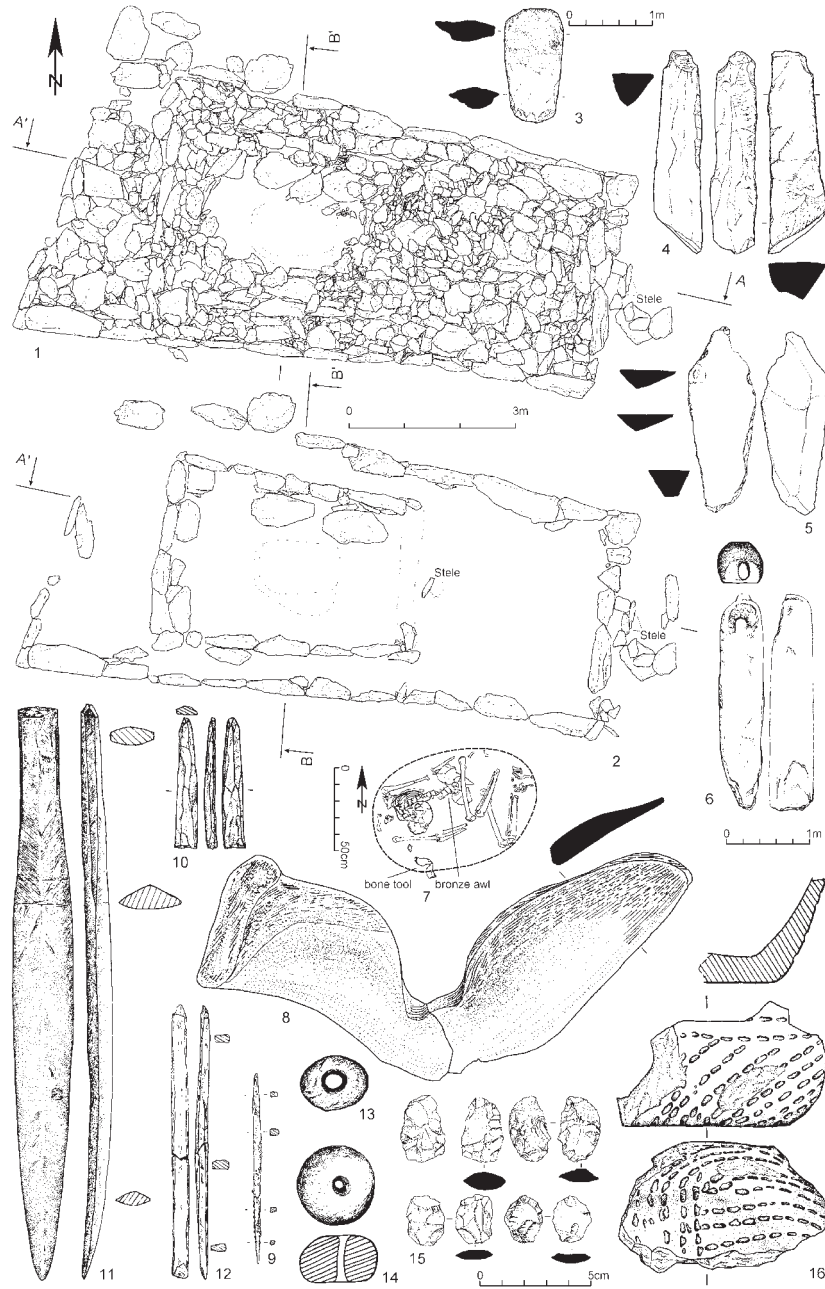


Fig. 2. Chemurchek culture. Ulaankhus sum, Baian-Ölgii aimag and analogies. – 1 Plan of the Kara tumsik (Khar Khoshuu) barrow; 2 Kara tumsik (Khar Khoshuu) barrow, plan of the stone fence; 3 Kara tumsik (Khar Khoshuu) barrow, ochre-covered stele erected on the eastern side of the tomb; 4 Kulala ula (Khul Uul) barrow 1, stele erected on the eastern side of the barrow; 5 Kopa 2 barrow, Kurchum distrikt, Eastern Kazakhstan, stele erected on the eastern side of the barrow; 6 Khar Gov', Mönkhkhairkhan sum, Khovd aimag, anthropomorphic stele secondary used in khirigsuur; 7 Kumdi gobi (Khundii Gov') barrow, plan of the earliest secondary burial; 8 Kumdi gobi (Khundii Gov') barrow, earliest secondary burial, bone "scutcher"; 9 Kumdi gobi (Khundii Gov') barrow, earliest secondary burial, bronze awl; 10 Kulala ula (Khul Uul) 1 barrow, part of bone arrowhead; 11 Kulala ula (Khul Uul) 1 barrow, bone dagger; 12 Kara tumsik (Khar Khoshuu) barrow, bone arrowhead; 13 Kulala ula (Khul Uul) 1 barrow, limestone ball; 14 Kumdi gobi (Khundii Gov') barrow, marble ball from the earliest pit; 15 Kurgak gobi (Khuurai Gov') 2 barrow, secondary burial, stone tools; 16 Kara tumsik (Khar Khoshuu) barrow, crock of ceramic vessel.



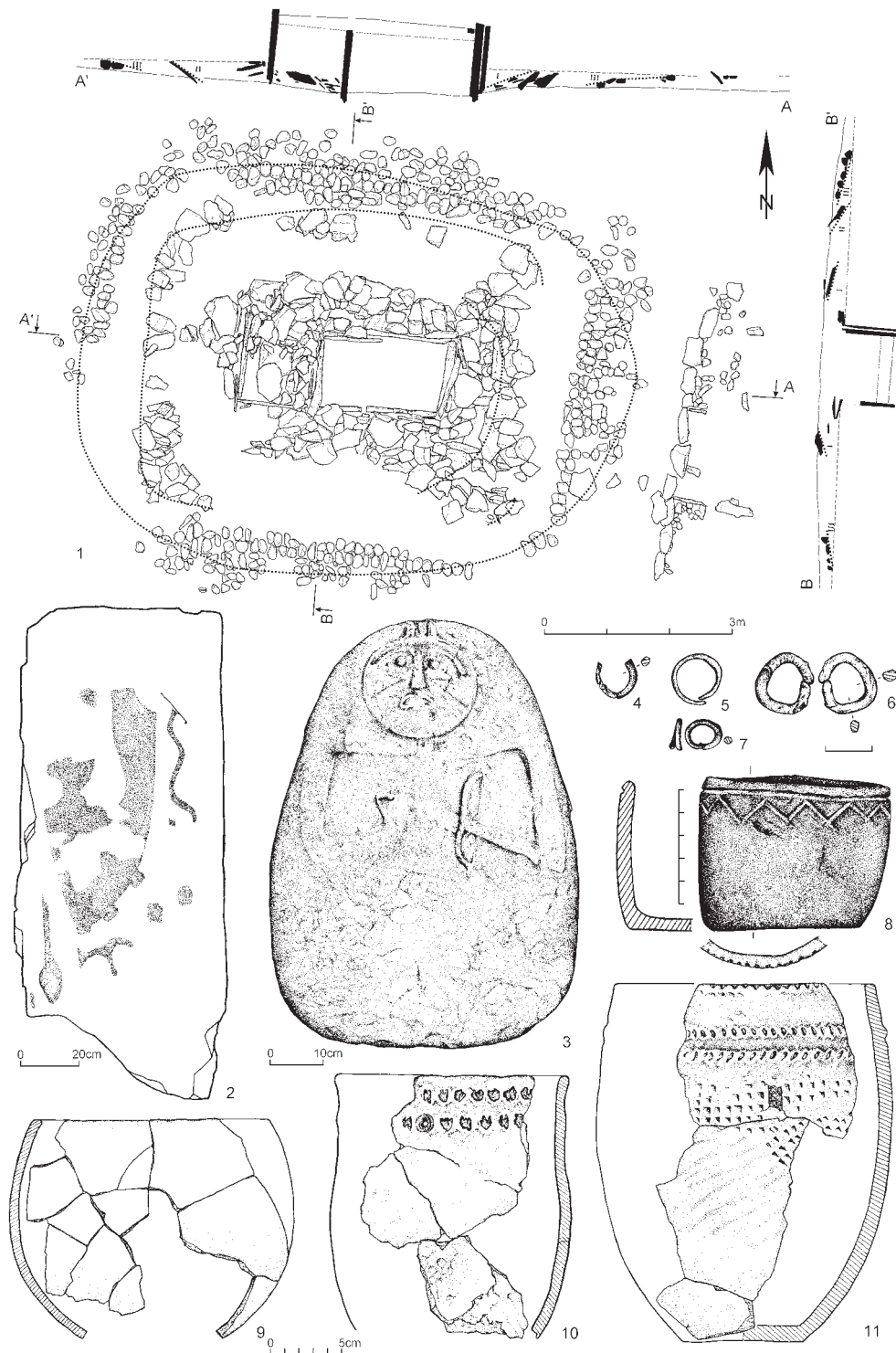


Fig. 3. Chemurcek culture. Bulgan sum, Khovd aimag. – 1 Kheviin Am 1 barrow, plan and sections (I, II, III – soil cairns covered with stones); 2 lagshiin Khödöö 3 barrow, stone slab with picture (from western wall of the stone box); 3 lagshiin Khödöö 3 barrow, stone sculpture erected at the eastern side of the barrow; 4 lagshiin Khödöö 1 barrow, lead ring; 5 lagshiin Khödöö 1 barrow, lead ring; 6 lagshiin Khödöö 3 barrow, lead ring; 7 lagshiin Khödöö 1 barrow, bronze ring; 8 Bural Kharyn Ar barrow, stone vessel; 9 lagshiin Khödöö 1 barrow, ceramic vessel; 10 lagshiin Khödöö 1 barrow, ceramic vessel; 11 lagshiin Khödöö 3 barrow, ceramic vessel.

were discovered in the basin of the Ertix (Irtysh) River. A. Kovalev observed such sites in the Chemurchek (Qiermu'erqieke) River basin (Wang Linshan/Wang Bo 1996, 47 Tab. 100–101; Kovalev 2000, 145). Furthermore, a similar stone box with two surrounding stone heaps was discovered by S. Grushin, and excavated by him and A. Kovalev in 2006 in Tret'iakovskii raion of Altai Region (Russia), near the Kazakhstan border. Thus, the conclusion can be made that broad territories of the Mongolian, Kazakhstan and Russian Altai had been taken under control of the Chemurchek people in the last centuries of the third millennium BC.

The discoveries from Chemurchek barrows in Mongolia demonstrate the wide cultural relations of the Mongolian Altai population in the period under review. Earthenware vessels, which were found in three barrows at Iagshiin Khödöö (Fig. 3.9–11), represent different traditions of ceramic production. This includes a flat-bottom vessel, which was found in barrow No.3 (Fig. 3.11), and is analogous to vessels of the great Elunino culture of the Early Bronze Age of the Altai Grassland (Middle Ob' River) (Kiriushin 2002, 48–51). The lead earrings from the same barrows (Fig. 3.4–6) are also analogous to earrings of the Elunino culture (Kiriushin/Tishkin 2000). The stone vessels, discovered in the barrows of Iagshiin Khödöö 2, Kheviin Am 1, and Buural Kharyn Ar (Fig. 3.8) are indeed artefacts, typical of the Chinese Chemurchek culture (Kovalev 2000, Tab. 13, 15). The earthenware vessel from the barrow of Kara Tumsik with lines of stamped impressions uninterrupted from bottom to rim (Fig. 2.16) is analogous to vessels of the earliest stage of the Okunevo culture of the Minusinsk Basin (Lazaretov 1997, 31–36; Leont'ev 2006). The stone balls with holes, which we have found in barrows of Kulala Ula 1 and Kumdi Govi (Fig. 2.13–14), are specific for Okunevo, Samus' and Krotovo complexes (Semenov 1997, 157–158). The bone artefacts – implements for processing skin, so called “scrutchers” – which we have found in barrows of Kulala Ula 1, Kurgak govi, and Kumdi govi (Fig. 2.8) are known in large numbers from Elunino culture settlements (Kiriushin et al. 2005, 195–199; Kungurova 2005). Also, among the above mentioned artefacts from Baian-Ölgii, there are two bone arrowheads of original form (Fig. 2.10,12), small flint tools (including arrowheads) (Fig. 2.15), a bone dagger (Fig. 2.11), and one bronze awl (Fig. 2.9).

According to conclusions of researchers of the Department of anthropology and archaeology of the Mongolian National University, all Mongolian Chemurchek skulls (*crania*), which are suitable for identification, represent the European race.

The results of <sup>14</sup>C-dating of bones, charcoal, and wood from Chemurchek barrows of Mongolia (27 samples as a whole; see Tab. 1) indicate that all these burial constructions had been built between the middle of the third millennium BC and the beginning of the second millennium BC. The barrow at Kurgak govi 2 linked the barrow at Kurgak govi 1 of the Afanasievo culture to a separate burial place. Two <sup>14</sup>C-dates that have come from the charcoal found in the earliest (ritual) pit of Chemurchek barrow No.2 appeared to be in the same period as the four radiocarbon dates from the charcoal in the filling of the burial pit of barrow No.1 that belongs to the Afanasievo culture. It may indicate that during the earliest period of existence of the Chemurchek culture, its population in the Altai region maybe coexisted with population of the Afanasievo culture. A pillar, erected at the eastern side of an Afanasievo culture barrow (Fig. 1.1), as well as the finding of a bone arrowhead (Fig. 1.4), which is similar to arrowheads from Kulala Ula 1 and Kara Tumsik barrows (Fig. 2.10,12), also confirm this proposition. Also, we know the date for two Afanasievo censers and one egg shaped vessel in Chinese Chemurchek stone boxes (Kovalev 2000, 163; Zhang Yuzhong 2005). Three round ritual pavements, which were explored by our expedition at the high-mountain site Khar Gov' (Mönkhkhairkhan sum of Khovd aimag) near a later khirigsuur in 2001, can also be attributed

to the Chemurchek culture. Polished stone tools were found there, which appear to be analogous to some specimens discovered in 1999 at the Kazakh Chemurchek barrow Aina-Bulak 1/2. Also a stone pillar with a diminutive “head” as seen on stone pillars of the Chemurchek barrows Kopa 2 (Kazakhstan) (Fig. 2.5) and Kulala-Ula (Fig. 2.4) had been re-used in the construction of this khirigsuur (Fig. 2.6).

Field research on the Early Bronze Age sites in Dzhungaria and the Mongolian Altai started in the first half of the 1960s. Chinese archaeologist Li Zheng was the first to examine different types of burial constructions in the Ertix (Irtysh) River basin and to connect neighbouring stone statues with them. His field report was published in 1962 (Li Zheng 1962; see also 1983). After that, in 1963, ten rectangular enclosures with stone boxes in the Chemurchek (Qiermu'erqieke) River basin in Altai County were excavated by Yi Manbai (Yi Manbai/Wang Mingzhe 1981). In the 1990s, barrows of this type were subject to investigation by Wang Bo and Wang Linshan (Wang Linshan/Wang Bo 1996). As the result of their exploration Wang Bo undertook an attempt to classify and to date the burial constructions as well as different kinds of stone sculptures (Wang Bo/Qi Xiaoshan 1996, 153–215). In a second article Wang Bo used for the first time the term “Chemurchek culture” for the Bronze Age sites of Northern Xinjiang (Wang Bo 1996). However, most of the Chinese investigators dated the Qiermu'erqieke burial ground to Late Bronze Age, not earlier. Most of the scholars disputed the cultural unity of the stone enclosures and neighbouring statues, many researchers are of the opinion that the statues are from Turk times.

In 1998, during exploration in the Chemurchek River basin A. Kovalev found the remains of stone burial constructions which had been excavated by Yi Manbai, and established unity of stone enclosure No.2 excavated by Yi Manbai with stone statue Kaynarl 2 No.2, which had been published by Wang Linshan and Wang Bo in 1996 (Kovalev 2000, 140–141). This fact confirmed the conclusion of A. Kovalev about synchronism of most of the stone sculptures from Ertix region with the main burials in stone boxes of Chemurchek (Qiermu'erqieke) burial ground. The sites are dated between the second half of the 3rd millennium and the first half of the 2nd millennium BC according similarities of burial goods (Kovalev 2000, 160). In his article published in Germany (Kovalev 2000, 150; 152; 157; 167), A. Kovalev attributed images of bulls with S-shaped horns and stone vessels from Uglovskii raion, Altai, Russia, to the Chemurchek culture (Kiriushin/Simonov 1997; Kiriushin 2002, 58–59). Also, he attributed the statue from Inia village, Russian Republic of Altai (Kubarev 1979, 8–10; 1988, 88–90) as belonging to the Chemurchek culture. These results gave opportunity to define the spatial distribution of the Chemurchek population.

From 1998–2000, the International Central Asian archaeological expedition, organized by A. Kovalev (the Russian-Kazakh team of the expedition had been established by St.-Petersburg State University in cooperation with the Institute of Archaeology of the National Academy of Sciences of Kazakhstan and with Altai State University) undertook excavations of twelve rectangular stone enclosures of the Early Bronze Age in the Alkabek River basin, Kurchum district, Eastern Kazakhstan (Akhtuma, Aina-Bulak I, II, Kopa, Bulgartaboty). The barrows excavated in the Alkabek River basin had rectangular enclosures made of stone slabs; from the middle of the eastern side of the enclosure, where an “entrance” marked with huge slabs is placed, to the burial pit is a stone corridor (passage) made of small flat slabs. As a rule, the walls of these corridors surrounded the burial pit. In all barrows, without exception, burial pits lay 2–5 metres eastwards from the centre to the “entrances”. At the Kopa 2 burial locality, a stone stele that had been worked to look like a human body was found at the eastern side of

the enclosure (Fig. 2.5). Radiocarbon dates that have been taken from wood or from human bones prove the contemporaneity of these sites in Mongolia with those of Kazakhstan.

The results of the work described here shows considerable diversity of forms of burial construction, types of burials and of burial goods during this period in Altai. At the same time it is possible to assert that there were definite similarities between the material culture of the inhabitants of Dzhungaria and the Mongolian Altai. This was the result of cultural influence that had been brought to this area by migrants from Western Europe (France?) not later than the middle of the 3rd millennium BC. All the described types of burial constructions show the main features of the passage graves of Western Europe. The “Kazakhstan” enclosures have corridors, the walls of which are built from some layers of stones, surrounding burial chambers, and asymmetric locations of the sepulchres (the similar construction may be observed at West France<sup>5</sup>). Elongated proportions of “Baian-Ölgii” and “Chinese Chemurcek” stone enclosures, as well as ritual “entrances”, can be considered as derivatives of these burial corridors. The design of burial boxes as well as of several heaps (cairns) along perimeters of the central stone cist and overlapping one another (see Fig. 3.1), is also analogous with that of Neolithic sites in France (for instance: Petit-Mont [Arzon], Champ-Châlon, Tumulus E of Bougon, Lisquis I, III, La Table des Marchands, Barnenez II, Plouézoc’h, Croix-Saint-Pierre, Dissignac, Larcuste I, Tumulus des Mousseaux, Deux-Sèvres, La Ciste des Cous, Ernes, Colombiers-sus-Seulles, Condé-sur-Ifs, Vierville<sup>6</sup>). The eastern orientation of “entrances” and the tradition of establishing statues or pillars at the same side are common in both Altai and Western European megalithic sites. It was demonstrated by A. Kovalev in 1998 that the iconography of known Chemurcek sculptures (see Fig. 3.3) can have its origins only in iconographic traditions of European Neolithic and Chalcolithic cultures. The most similar stone statues have been discovered in Languedoc (for instance Mas de l’Aveugle, Collorgues) (Landau 1977, Pl. 4–6). Forms and ornamentation of Chemurcek stone (see Fig. 3.8) and partly of earthenware vessels as well as of stone polished tools are probably also of West European origin (Kovalev 2005, 181). The painting on the walls of stone boxes at Iagshiin Khödöö 1, 3 made with red paint has analogies to painting and pictures on the walls of tombs of Kemi-oba culture, of Nal’chik tomb, of Dnepr region (Chechenov 1973, 12–16, 23–28; Formozov 1969, 150–172). Painstaking visual exploration of slabs at Iagshiin Khödöö 3 provided the opportunity to discover an image that may be interpreted as composition of a spear, oval shield with protuberances, and a bow (Fig. 3.2). If this is the case, then this complex is similar to barrow No.28 of the Klady cemetery of the Novosvobodnaya culture and to the megalithic tomb at Leine-Helich, Germany (see Rezepkin 1987, 29; also Rezepkin 2000).

## MÖNKHKHAIRKHAN CULTURE

The Middle Bronze Age of Western and Central Mongolia is represented by the Mönkhkhairkhan culture. Sites of this culture were first discovered by our expedition in 2003 on the territory of Mönkhkhairkhan sum of Khovd aimag. Barrows of the culture look from outside like

5 L’Helgouac’h 1979; 1995a–c; Boujot/Leclerc 1995.

6 L’Helgouac’h 1979; Lecornec 1995; Joussaume 1995; Ferrer-Joly 1995, 146–147; Le Roux 1995;

L’Helgouac’h 1995a, 177–178; Giot 1995; Briard 1995; L’Helgouac’h 1995b; Le Roux 1998; L’Helgouac’h 1998; Billard/Chancerel 1998; Gutherz 1998.

absolutely flat stone heaps, round or square in shape, made, as a rule, of one layer of stones (Fig. 4.1–3). In the centre of a barrow is an oval burial pit, 1.3 by 1 m in size (regular), orientated in an east–west direction. The buried human body was placed in extremely flexed position on the left side. The head was directed to the East (Fig. 4.6). The burial pit was filled with rough stone blocks and slabs and formed in ancient times something like a vault of one or two layers of stones (Fig. 4.4–5).

Regular barrows in the Altai region are round in shape and about 3 metres in diameter (see Fig. 4.1). Our expedition excavated four such barrows on banks of the Dund-Tsenkher River, which contained the bones of buried adults in situ: Khotuu Davaa 1, Artua, Ulaan Goviin Üzüür 1 and 2. Near the barrow of Ulaan Goviin Üzüür 2 two supposedly children's barrows, No.3 and No.4, are situated but no bones had been preserved. Samples of bones from each adult burial were selected for <sup>14</sup>C analysis. The four dates cluster in the range between 1800–1600 BC (see Tab. 1). In barrow Khotuu Davaa 1 were found a piece of a bronze pin (?) with a round shaped head. In barrow Ulaan Goviin Üzüür 1 there were found a bronze awl (Fig. 4.12–13), a bronze one-blade knife with a triangular cross-section and no separate handle (Fig. 4.14–15), and a dipper made of bone (Fig. 4.16). Three more barrows of such type were discovered by our expedition during exploration to the north from Mönkhkhairkhan sum.

In 2006, our expedition discovered sites of the Mönkhkhairkhan culture on the territory of Khövsgöl aimag. There, in contrast to Western Mongolia, the regular barrows are square in shape. We excavated two regular barrows. Shell disc-shaped pieces for decoration of clothes were found in one of the barrows (Fig. 4.9). In the same region an elite Mönkhkhairkhan burial place, Galbagiin Üzüür, was excavated which included a flat stone barrow made from one layer of stones (30 metres in diameter), a square stone barrow and also two rectangular stone pavements. The circular heap of the large barrow was put together from two kinds of stones: black shale and rose granite that formed a kind of mosaic. Viewed from above there seems to be a black claw of a bird of prey with four claws on a rose background. The bird's claw seems to be grabbing the burial pit. In the rectangular barrow a bronze knife with its end broken off and triangular cross-section blade with no separate handle (Fig. 4.11), and a bronze awl (Fig. 4.10) were found. One more elite burial place of the Mönkhkhairkhan culture is probably located at the upper part of Khovd Gol on the territory of Tsengel sum of Baian-Ölgii aimag. There, A. Kovalev and A. Varenov discovered during exploration in 2003 a flat stone heap made of one layer of stones 30 metres in diameter. During the 2007 field season in Baiantes sum of Zavkhan aimag we explored two single barrows of the Mönkhkhairkhan culture, each 5–7 metres in diameter. The burial/ritual zone of Khukh-Khushony-Bom 1 included two round barrows, one square barrow, and also two rectangular stone pavements, two vertical stone stelae and a circle made of twelve small stone pillars with semicircular stone pavement inside. Among the notable finds are two bronze awls, three bone conical-cylindrical arrowheads (15 centimetres in length) with splintered shaft, and also a compound necklace or torque of rectangular shape, which was put together from square bone beads with cuts (Fig. 4.8).

The origins and connections of the Mönkhkhairkhan culture are still not clear. Probably, the metal technology of this culture had its origins in Middle Asia or in Kazakhstan, where bronze knives mentioned above (Fig. 4.11,15) were found (Kuz'mina 1966, Tab. IX–X ). Two such knives were found on the Qijia culture sites of Zongzhai and Linjia (Bai Yunxiang 2002, Fig. 3.4–5). Forms and material of the shell ornaments (Fig. 4.9) present a continuation of traditions of the eastern Mongolian Neolithic (Novgorodova 1989, 78–81); the same shell discs were recently found in the Russian Altai. A unique bone necklace made from rectangular beads

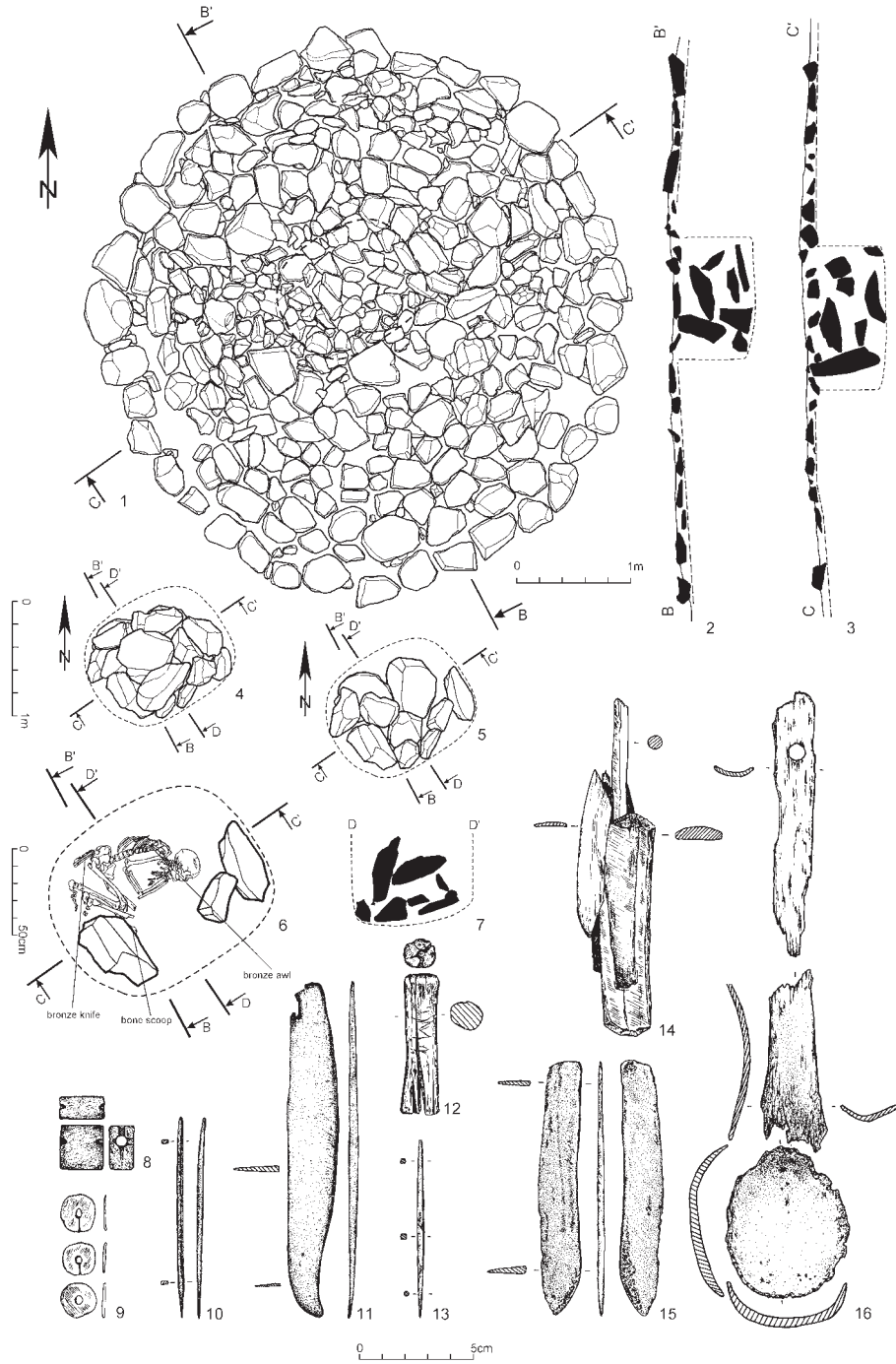


Fig. 4. Mönkhkhairkhan culture. Khovd, Zavkhan and Khövsgöl aimags. – 1–7, 12–16 Ulaan Goviin Üzүүр 1 barrow (Mönkhkhairkhan sum, Khovd aimag). 1 Plan of barrow; 2 section B-B'; 3 section C-C'; 4 grave, plan of the stone vault (level 1); 5 grave, plan of the stone vault (level 2); 6 plan of the burial; 7 grave, section D-D'; 12 wooden handle from bronze awl with wood objects; 13 bronze awl; 14 wooden handle from bronze knife with wood objects; 15 bronze knife; 16 bone scoop. – 8 Burial ground Khukh-Khushony-Bom I barrow 1, one of the bone beads from rectangular "torque". – 9 Tsagaan Uushig 3 barrow (Bүrentogtokh sum, Khövsgöl aimag), nacre disc-shaped stripes for decoration of clothes. – 10–11 Galbagiin Üзүүр 2 barrow (Bүrentogtokh sum, Khövsgöl aimag). 10 Bronze awl; 11 bronze knife.

with cuts (Fig. 4.8) was originally from two thousand years earlier in the chalcolithic cultures of the Ukraine (see Rassamakin 2004, 74–75, Fig. 59.1–5).

## THE TEVSH CULTURE

Our investigations of the years 2005–2007 show that the southern part of contemporary Mongolia in the 13th to 11th centuries BC was part of an area of a specific archaeological culture of the Late Bronze Age that we propose to name the Tevsh culture. Barrows of this culture had been already excavated by V. Volkov in Bogd sum of Övörkhongai aimag (not far from Tevsh Uul, near the former administrative centre of Khovd sum); two barrows were excavated in 1964 (Volkov 1967, 37) and three barrows in 1971 (Volkov 1972, 555–556). Nevertheless a majority of scholars place these barrows in the Slab grave culture (Tsybiktarov 1998, 126–128).

We have excavated four barrows in Baianlig sum of Baiankhongor aimag (Baruun Gyalat 1, 2, 3, Zamyn Buts), four barrows in Bogd sum of Övörkhongai aimag (Khar Üzüür I – 1, Khar Üzüür II – 1, 2, Shar Tolgoi), and also two barrows in Nomgon sum of Ömnögov’ aimag (Khurmen Tsagaan Uul I – 3, 4). During explorations many barrows of this type were discovered in Gov’-Altai Mountains and in Trans-Altai Gobi, and as a result we came to following conclusions: All excavated barrows were of similar construction (Fig. 5.1–2). Each of them consists of a stone fence enclosing an area filled by stones to make up a flat platform. The eastern and western walls of the fence were constructed of vertical stone slabs. Southern and northern walls were consisted of stone blocks laid in horizontal position in several layers (which is very significant). In the middle of the structure a narrow burial pit was arranged, where a dead body was placed in prone (“face down”) position with the head towards the east (Fig. 5.1, 3). After the burial ceremony the pit with the dead body was filled with earth. There are two different forms of fences: A fence widened to the East having concave sides (which looks like “figure” tombs) (see Fig. 5.1), and a fence in almost semicircular shape having convex northern and southern sides, and straight eastern and western sides; the eastern side is wide, the western is narrow (see Fig. 5.2).

Judging by the similarity of construction, of burial rite, and of location of the similar barrows at the same sites, the barrows of both forms are contemporary and belong to the same culture. Because burials in a face down position, semicircular fences and fences built of stone blocks laying in several horizontal courses have never been discovered in Slab graves<sup>7</sup>, we do attribute all above mentioned barrows to the specific Tevsh culture. The appearance of fences with concave sides among the Slab graves of Transbaikalia and of Central Mongolia may be explained by cultural influence of the Tevsh culture on the northern region.

It is obvious that it was impossible to come to such conclusions before because excavations of “figure” tombs near Tevsh Uul were conducted without cleaning of stone constructions, but by excavating limited squares inside the barrows. This became clear after our observation of areas previously excavated by V. Volkov.

7 Slab graves are surrounded with fences made of vertical slabs.

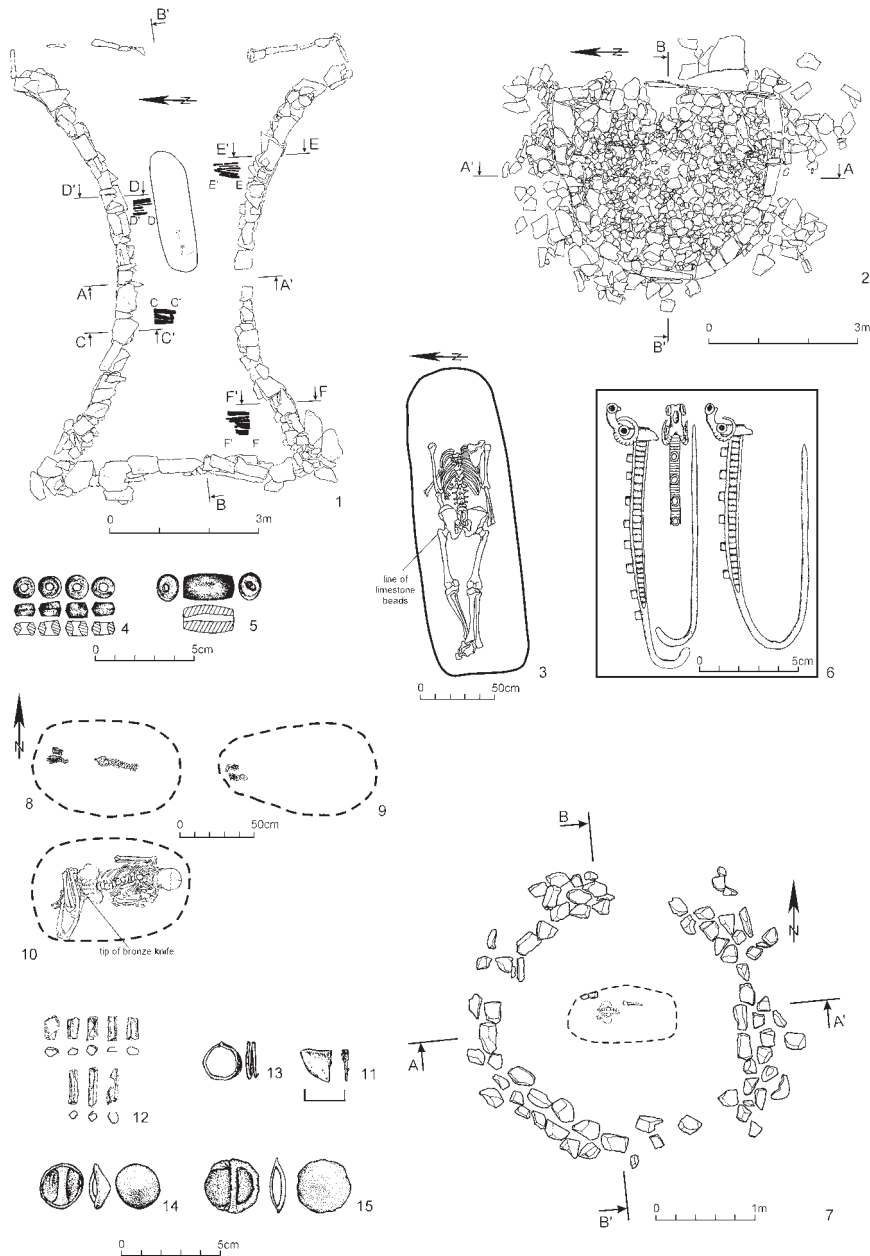


Fig. 5. Tevsh culture (1–6), Baitag culture (7–15). – 1 Baruun Gyalat 2 barrow (“figured tomb”) (Baianlig sum, Baiankhongor aimag), plan of the stone fence after disassembling of stone cairn; 2 Baruun Gyalat 1 barrow (“semicircular” tomb), plan; 3 Zamyn Buts barrow (“semicircular” tomb) (Baianlig sum, Baiankhongor aimag), plan of the burial; 4 Baruun Gyalat 2 barrow (Baianlig sum, Baiankhongor aimag), cornelian bones; 5 Baruun Gyalat 2 barrow, cornelian bone; 6 Tevsh Uul (near former center of Khovd sum, Bogd sum, Övörkhongai aimag), gold head ornaments excavated by V. Volkov in a “figured tomb” (after Tsybiktarov 1998, Fig. 55); 7 burial ground Uliastain Gol III, barrow 2 (Baitag Bogd Uul, Bulgan sum, Khovd aimag), plan; 8 burial ground Uliastain Gol III, barrow 7, plan of the burial pit; 9 burial ground Uliastain Gol III, barrow 4, plan of the burial pit; 10 Kheviin Am 1 (Bulgan sum, Khovd aimag), secondary burial, plan; 11 Kheviin Am 1, secondary burial, tip of bronze knife; 12 burial ground Uliastain Gol III (Baitag Bogd Uul, Bulgan sum, Khovd aimag), bronze beads from barrow 7 (above) and from barrow 3 (below); 13 burial ground Uliastain Gol III, barrow 7, bronze ring; 14 burial ground Uliastain Gol III, barrow 7, bronze button; 15 burial ground Uliastain Gol III, barrow 7, bronze button.



All barrows of this culture that were excavated by our expedition were robbed in ancient times, and usually the top parts of skeletons were absent. In barrow Baruun Gyalat 2 we found a necklace made of carnelian (Fig. 5.4–5), lazurite, and many small limestone beads<sup>8</sup> on the neck of the buried person. Also there were rows of limestone beads in barrow Zamyn Buts (Fig. 5.3), which probably were stitched onto the clothes of the buried person. The only burial of this type that had not been robbed was excavated by V. Volkov in 1971 near Tevsh Uul. The assemblage of burial goods included golden hair ornaments topped with images of sheep heads<sup>9</sup> (Fig. 5.6), which have been published many times. According to their design they are similar to items of the north Chinese nomadic culture of Shang-Yin period (1400–1200 BC). A. Kovalev proposed to name this culture Chaodaogou (Kovalev 1992, 48–62; 2004). Knives, ornaments, daggers and scoops designed in the same style are of well established dates, as they have been found many times in complexes in the Chinese Central Plane. Thus the Tevsh culture may be dated back to 1400–1200 BC. The first radiocarbon dates (see Tab. 1), which we got from the <sup>14</sup>C laboratory of the Institute for History of Material Culture of the Russian Academy of Sciences, confirm this dating (the results of radiocarbon analysis of samples from each grave will soon be ready).

According to published materials, a barrow that had been excavated by A. W. Pond in 1928 near Lake Tairum in the eastern part of Inner Mongolia belongs to the same culture (Fairservis 1993, 166–167). A burial of a human being placed in prone (“face down”) position with the head directed to the east was discovered there; the clothes were decorated by more than 5000 beads. To solve the problem of the genesis of the Tevsh culture it is necessary to investigate such sites in the central part of Inner Mongolia because the tradition of making complicated stone constructions and of burying in prone position could have its origin in Neolithic cultures of Northern China.

## BAITAG CULTURE

During our 2005 investigations in Bulgan sum of Khovd aimag near Uliastain Gol in Baitag-Bogd Mountains within one kilometre of the Chinese border the burial place Uliastain Gol III was discovered. It consisted of seven stone rings about 1.7–2.7 metres in diameter, which were made of one layer of small flat stone slabs. In the centre of each ring there was an oval burial pit orientated on a west–east line not more than 1.2 metres long (Fig. 5.7). In spite of ancient robbing it was possible to define the position of the buried body by preserved bones: the bodies were laid on their backs with the heads directed to the east and with bent knees upwards (Fig. 5.7–9). The artefacts discovered in the tombs included: beads made of thin leafs of bronze (Fig. 5.12), small limestone beads, two cast bronze salient buttons (Fig. 5.14–15), and a bronze temple ring of 1.5 turns (Fig. 5.13). All these artefacts hint at a dating of this burial place to the Late Bronze period beginning after the 14th century BC. Analogous artefacts are well known in materials of the Karasuk culture (Poliakov 2006) as well as in materials of the Late Bronze Age of neighbouring Hami region and of the Siba culture in Gansu. The same

8 In barrow Baruun Gyalat 3 there was also a golden ring in the necklace.

9 Volkov 1972, 555–556; Nowgorodowa 1980, 69–70, Fig. 40–41; 1989, 138.

burial traditions were also discovered in the secondary burial of a woman within the fill of a stone box of an earlier Chemurchek barrow in Kheviin Am 1,200 kilometres to the north of Baitag (Fig. 5.10). A small part of a knife's tip was found there (Fig. 5.11), as in Karasuk burials. According to Radiocarbon-dating of the buried bones this grave is dated with a probability of 95.4% to 1400–850 years BC (see Tab. 1) (results of radiocarbon analysis of samples from some graves from Baitag will soon be ready).

Skulls from the barrow of Uliastain Gol III-7 and from the secondary burial in the barrow at Kheviin Am have extremely pronounced features of the European race. The burial traditions of Baitag graves – small stone circles without mounds, the position of body, the eastern orientation – reflect continuation of Chalcolithic traditions of Ukraine and Russia (see Rassamakin 2004, 39–52). The southern part of Khovd aimag in Mongolia, where we worked, probably was the northern periphery of the area of this culture. From this culture “Karasuk” type of artefacts originated, which were discovered by Chinese archaeologists in burial places of agricultural peoples of the oases of Xinjiang. It is possible to expect new discoveries, if Chinese archaeologists will pay attention to small stone rings to the north of the Tianshan Mountains, particularly between Lake Barkul and Baitag Mountains.

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CURRENT  
ARCHAEOLOGICAL  
RESEARCH  
IN MONGOLIA

Bonn Contributions to Asian Archaeology

Volume 4

Edited by  
Jan Bemann

CURRENT  
ARCHAEOLOGICAL  
RESEARCH  
IN MONGOLIA

Papers from the First International Conference  
on “Archaeological Research in Mongolia”  
held in Ulaanbaatar, August 19th–23rd, 2007

Edited by  
Jan Bemann, Hermann Parzinger,  
Ernst Pohl, Damdinsüren Tseveendorzh

2009  
Vor- und Frühgeschichtliche Archäologie  
Rheinische Friedrich-Wilhelms-Universität Bonn



616 pages, 361 figures, 21 tables

The conference and the publication were generously financed by  
Gerda Henkel Stiftung

Ein Titelsatz ist bei der Deutschen Bibliothek erhältlich  
(<http://www.ddb.de>)

Desktop Publishing and Design: Matthias Weis  
Translations: Authors and Emily Schalk  
English language editors: Joshua Wright, Susanne Reichert  
Image editing: Gisela Höhn  
Final editing: Ute Arents, Güde Bemann, Ursula Brosseder  
Printing and binding:  
AALEXX GmbH – Großburgwedel  
Printed in Germany

Cover illustration: Elisabeth Heinrich

ISBN 978-3-936490-31-2  
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## PREFACE

Since Mongolia's political opening in the early 1990s, the number of archaeological expeditions under bi- and trilateral direction has increased considerably. Scholars from the United States, Japan, Korea, China, Russia, Kazakhstan, Turkey, Hungary, Germany, Italy, Monaco, Switzerland, France as well as from other countries are engaged in cooperative projects with the Archaeological Institute of the Mongolian Academy of Sciences, the National Museum of History or one of the archaeological university institutes in Mongolia. These various research projects (cp. the compilation by Tsogtbaatar and Batbold 2005<sup>1</sup> and the contribution of Tseveendorzh in this volume) confirm impressively the hospitality and openness of the Mongolian people towards new approaches in research as well as the extraordinarily favourable working conditions in the country.

The impetus for organising an international conference in Mongolia was ultimately supplied by the reorientation of our research which so far has focused on Karakorum. This induced us to make a first assessment not only of our own projects (contributions by H.-G. Hüttel and E. Pohl), but furthermore to gain information about the state of research that has been achieved in the meantime. We intended both to document retrospectively the increase of knowledge and, at the same time, to look ahead.

In recent years there have been colloquia in Ulaanbaatar or in the respective partner countries, mostly arranged in the context of the numerous cooperation agreements, although these were rather like workshops attended by colleagues who knew each other well. Yet a comprehensive conference that included all teams working in Mongolia still remained a desideratum. Accordingly, our first enquiries and circulars regarding such a conference received positive response. The main concern of the conference was to improve the international network of research groups in Mongolia and to initiate a first exchange of experiences. The aim was to gain an overview of the work being conducted, share experiences in project management and draw Mongolian as well as foreign colleagues together into discussions. Firstly, research deficits would become more apparent, while, secondly, the opportunity would be presented to coordinate future research projects and to cooperate more closely in the field of basic research. Through the various national and international research projects almost the entire time span from the Palaeolithic until the early modern era is covered. Moreover, all source categories are represented, and the expeditions have reached the many diverse regions and natural environments of the country.

Thanks to the very generous funding by the Gerda Henkel Stiftung, from 19th to 23rd August, 2007, the results of what had been achieved so far could be presented for the first time after almost two decades of intensive field research in a conference entitled "Archaeological Research in Mongolia".

<sup>1</sup> Tsogtbaatar/Batbold 2005: B. Tsogtbaatar/N. Batbold, *Archaeological Cooperations in Mongolia*.

Bulletin of Japanese Association for Mongolian Studies 35, 2005, 109–126.

Up to 100 colleagues from home and abroad as well as students of archaeological disciplines at different Mongolian universities in Ulaanbaatar attended the 41 presentations, which were organised in seven sections. The conference was opened on the evening of 19 August with a reception given by the Mongolian Academy of Sciences at the National Museum of History, in rooms kindly provided by the museum director, Prof. Dr. A. Ochir. The actual conference began on the following morning at the State and Government “Elite” Centre with a welcome address by the President of the Academy of Sciences, Prof. Dr. B. Chadraa, followed by messages of greeting by Prof. Dr. D. Tseveendorzh (Institute of Archaeology of the Academy of Sciences), Prof. Dr. H. Parzinger (German Archaeological Institute) and Prof. Dr. J. Bemmann (University of Bonn). O. Mironciuc M.A. gave an informative account about the activities of the Gerda Henkel Stiftung, particularly in the context of the special program on Central Asia.

The individual sections began with introductory papers on the state of research and current questions. The program on 20 August comprised papers on the subject areas of the “Stone Age”, “Rock Art” and the “Bronze Age and Early Iron Age”. The last mentioned section was continued on the next day, 21 August, followed by papers on the “Late Iron Age/Xiongnu Period”. On 21 August, H. Parzinger together with the German Ambassador P. Fischer inaugurated the newly established research centre of the German Archaeological Institute in Ulaanbaatar. In the evening H. Parzinger gave a lecture on “New Results on the Archaeology of the Scythian Period in South Siberia and Northern Mongolia” at a reception at the Embassy of the Federal Republic of Germany.

On 22 August the conference was continued with papers in the section on “Early Historical Periods”. In the afternoon of the same day an excursion to Noyon Uul, the world-renowned cemetery of the Xiongnu period, was on the program. We are very grateful to Dr. N. Polos'mak and her colleague Dr. E. Bogdanov for their elucidative tour of the excavation site, including the impressive findings from tomb 20, which was excavated in 2006 and 2007. Papers in the sections “Medieval Period” and “Natural Sciences” completed the program on 23 August, and the conference concluded in the evening with a reception at the Embassy of the French Republic.

Our thanks go to all of the colleagues who described their project at the conference and submitted a manuscript for print. Some authors included a bibliography of their project as a service to the readers. As not all papers were submitted for print, contributions of other colleagues could be accepted. The present volume bears witness to the abundance of archaeological monuments and the diversity of scientific approaches.

The contributions present a snapshot, an interim report on research in action, much of which will likely be expanded and complemented, some of it even corrected, in the future. Besides spectacular discoveries and excavation successes (see contributions by Parzinger, Molodin and Tseveendorzh; Desroches and André; Tseveendorzh; Amartüvshin and Gerelbadrakh), it is particularly the long-term and systematic studies in the individual regions (contribution by Jacobson-Tepfer) and comprehensive analyses (contribution by Rogers and Cioffi-Revilla) that add considerably to a greater understanding. Some periods already look back upon a long tradition in research, which provides the results of numerous expeditions and corresponding publications. This applies, for example, to the Stone Age periods, which met with lively interest, particularly of the Russian scholars, and to the Xiongnu epoch, which since the excavations of Kozlov in Noyon Uul in 1925 drew great international attention. The picture that can now be drawn of this archaeological culture is accordingly differentiated. By contrast, investigations on the Old Turkic period are marked rather by linguistic studies. The various groups of monuments likewise reflect a different state of research. Upright stones, some dis-

playing anthropomorphic features, of the Late Bronze to the early Iron Age, the Old Turkic and Mongolian periods as well as tombs were in the centre of research. Excavations in urban areas and settlements have been carried out on a larger scale only during the past decades. They have changed our perception of the cultures of nomadic pastoralism to a great extent. The antiquarian analysis of entire subject groups, their firm positioning in time and space are in many cases still in the beginning stages, mainly due to the availability of source material and publications. Our present knowledge about the sequence of cultures shows a very static picture: individual, scarcely structured blocks of cultures follow one another, sometimes separated by gaps of several hundred years. The transition from one epoch to the next or from one tribe to the next that is attested by written sources as well as queries as to the reasons for the respective changes in culture have not yet received sufficient attention. Migrations and wars are often taken as seemingly self-explanatory reasons for the disappearance or emergence of cultures, without discussing and questioning the archaeological sources independently. Cooperation with disciplines in the natural sciences has been conducted only to a very limited degree so far. Particularly palaeo-environmental data could be of great relevance for studies on cultural change, economic strategies and the emergence of nomadic polities.

If one attempts to assess achievements in the archaeological investigation of Mongolia that have been made thus far, a retrospective is recommendable. Individual stages are evident in the summarising studies by Sergei Kiselev<sup>2</sup> and Eleonora Novgorodova<sup>3</sup>; see also Jettmar 1983<sup>4</sup>. It is worthwhile to compare the articles in the volumes accompanying the exhibitions “Die Mongolen und ihr Weltreich” in Hildesheim and Munich in 1989<sup>5</sup> and “Dschingis Khan und seine Erben” in Bonn, Munich, Vienna, Istanbul and Budapest in 2005<sup>6</sup>. The apparent increase in knowledge is striking. This should not conceal the fact that in many cases the foundations must still be laid. Building upon past achievements is the task of the younger generation of archaeologists in Mongolia, who are distinguished by their multilingualism and international experience, as well as of their partners abroad.

The organisers hope that with this conference an international dialogue of knowledge about archaeology in Mongolia has been initiated, which should be continued during the next years with thematically more narrowly defined activities. In this respect it is gratifying that already in 2008 a second larger international conference took place in Ulaanbaatar, organised by Dr. Ursula Brosseder, University of Bonn, and Dr. Bryan K. Miller, University of Pennsylvania, financed by the Silk Road Foundation.

Without the considerable financial resources that were provided by different institutions, such a conference would not have been possible. First and foremost, the Gerda Henkel Stiftung must be mentioned, whose generous funding not only covered a major part of the conference expenses, but which also provided the funds for printing the present publication. We would like to express our gratitude to the representatives of the foundation for their interest in the subject, the generous support and the friendly mentorship of the project.

2 S. Kiselev, *Mongoliiia v drevnosti*. *Izvestiia Akademii Nauk SSSR, Otdel istorii i filosofii* IV, 4 (Moskva 1947).

3 E. Novgorodova, *Alte Kunst der Mongolei* (Leipzig 1980); E. Novgorodova, *Drevniaia Mongoliiia: nekotorye problemy khronologii i etnokul'turnoi istorii* (Moskva 1989).

4 K. Jettmar, *Geschichte der Archäologie in Sibirien und im Asiatischen Steppenraum*. *Beiträge zur Allgemeinen und Vergleichenden Archäologie* 5, 1983, 187–226, esp. 218 et seq.

5 A. Eggebrecht (ed.), *Die Mongolen und ihr Weltreich* (Mainz 1989).

6 *Dschingis Khan und seine Erben. Das Weltreich der Mongolen* (München 2005).

The German Academic Exchange Service (Deutscher Akademischer Austauschdienst) has financed the journeys of the German participants by appropriating funds for travel expenses through the scientific exchange program. Hereby our thanks go to Prof. Dr. D. Regdel, Mongolian Academy of Sciences, as well as to Dr. Klaus Birk and Gabriele Buchmann-Schmitz of the DAAD. Fortunately, many participants could cover their travel costs with their own resources, which eased the pressure on our budget considerably.

In Ulaanbaatar the diplomatic missions of the French Republic and the Federal Republic of Germany have held receptions in the rooms of the respective embassies, thus emphasising the close cultural ties between both countries and Mongolia. For this, the editors express their sincere gratitude to the Ambassador of the French Republic, His Eminence Monsieur Patrick Chrismant, and to the consul, Monsieur Didier Guilbert, as well as to the Ambassador Extraordinary and Plenipotentiary of the Federal Republic of Germany, His Eminence Mr Pius Fischer, and the Secretary in charge of language and cultural affairs at the embassy, Mr Michael Rossbach.

Our colleague of many years, Dr. Kh. Ariunchimeg, contributed significantly through her collaboration in the organisational work to the success of the conference. She was supported by Ts. Egiimaa M.A. and Lk. Mönkhbaiar M.A., members of the staff at the National Museum of Mongolian History respectively at the Archaeological Institute of the Mongolian Academy of Sciences. As English was chosen as conference language, the need for interpreters was limited. We are very grateful to Prof. Tsoros Tse. Jonong and Dr. U. Brosseder for the translation of Mongolian and Russian speeches and lectures.

For correcting the English texts penned by second-language speakers, we could engage our friend and colleague, Dr. Joshua Wright, University of Stanford, who edited all texts of non-native speakers during the past months. A final linguistic revision was carried out by Susanne Reichert, University of Bonn. No less considerable problems were posed by the standardisation of the bibliographical references, as the authors – according to their country of origin and publication traditions – used differing quotation and transliteration systems. Despite a considerable amount of research work, a uniformity with the rules of the Library of Congress was not achieved in all cases. Unification of the bibliography and transliteration, final editing and compilation of an index of geographical names were done by Dr. Ute Arents, Dr. Güde Bemann, and Dr. Ursula Brosseder. The image edition was carried out by Gisela Höhn, University of Bonn. Sincere thanks are extended to all persons mentioned for their commitment to the preparation of this publication. Typesetting, layout work and printing supervision were in the hands of Weiß-Freiburg GmbH – Graphik & Buchgestaltung.

Mongolia lends a great fascination for guests and scholars who are engaged in work there. Almost no one leaves the country unaffected, the vastness and magnificence of the country, its wealth in monuments and the greatness of its tradition inspires respect, awe and affection. One always departs with the wish to return as soon as possible, to continue what was begun and to give an impetus for new undertakings. May this book impart to the reader an impression of the pleasure and enthusiasm felt by the international community of scholars who are working in this country.

Jan Bemann, Hermann Parzinger,  
Ernst Pohl, Damdinsüren Tseveendorzh

Summer 2009

## CURRENT ARCHAEOLOGICAL STUDIES IN MONGOLIA

Damdinsüren Tseveendorzh

The Institute of Archaeology of the Mongolian Academy of Sciences, the leading organization in archaeological studies on the territory of Mongolia, aims at investigating the main problems in the studies of Mongolian prehistory and history through modern archaeology of an international standard.

Since the year 1990 the institute has organized over 70 expeditions. Between 2001 and 2007 the institute implemented joint projects in collaboration with universities and scientific organizations of many countries including Russia, The United States, Japan, Germany, France, Hungary, Turkey, Belgium, Italy, Monaco and Kazakhstan. As a result, large amounts of archaeological evidence were gathered that make a significant contribution to the interpretation of key questions in the studies of ancient history and culture of the nomads.

### THE STONE AGE

The oldest tools found by research in the south-western and western parts of our country in recent years date as far back as the pre-Acheulian period (approximately 750,000–800,000 years ago), and can possibly be dated earlier once further, more detailed investigations are carried out.

In the last three years researchers have focused their efforts mostly on the study of the two to archaeologists relatively unknown regions: Khövsgöl aimag and Bulgan aimag. Excavations were conducted at two important cave sites in Baiankhongor aimag, the Lower Paleolithic Tsagaan Agui (750,000–800,000 years ago) in Baianlig sum and the Mesolithic Chikhen Agui in Baian-Öndör sum in cooperation with the Institute of Archaeology and Ethnology of the Siberian Branch of the Russian Academy of Sciences and the University of Arizona. This cooperation resulted in the identification of dozens of new settlements dating back to the Stone Age in Trans-Altai Gobi regions and other desert regions, the most outstanding of which is Tsakhiurt Valley.