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Discovery of New Cultures of the Bronze Age in Mongolia

(According to the data obtained by the International

Central Asiatic Archaeological Expedition)

蒙古青铜时期新文化之新发现

(根据国际中亚考古获得的数据)

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Organized by Alexey Kovalev in 1998, since 2001 the International Central-Asiatic Archaeological Expedition of St.-Petersburg State University, the Roerich Family Museum-Institute of St.-Petersburg, together with the Institute of History of the Mongolian Academy of Science and the Ulaanbaatar University conduct 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 under supervision of Alexey Kovalev and Professor, Dean of the Faculty of Human Sciences of Ulaanbaatar State University Diimaajav Erdenebaatar were excavated. The investigations were carried out in accordance with the international standards of methodology; the methods of excavation and documentation of stone constructions traditionally used for excavation of such sites at the Russian part of Central Asia was taken as a basic one. (According Russian tradition the Central Asia includes 萨彦岭 Sayan, Altay 阿尔泰山, and Khangay 杭爱山 mountain systems and also Gobi 戈壁沙漠 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:

- Sites of the Bronze and the Early Iron Ages of Western, Central, and Goby regions excavated by archaeologists were very few.
- The total absence of burial sites of Early and Middle Bronze Age (third and the first half of the

second millennium B.C.) (except of several barrows from Altan sandal and Shatar chuluu¹) among the excavated sites.

- A very poor quality of description of stone burial and ritual constructions, shortage or even absence of reliable drafts (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 comparison with the neighboring areas of Russia, Kazakhstan and even China. (Many thousands of barrows belonged to cattle-breeding tribes of 3-1 millennia B.C. were explored and excavated on those territories up to that time.) This circumstance appeared to be a considerable obstacle for the study of cultural and historical processes in Bronze Age at 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 resultsⁱⁱ:

- barrows belonging to Afanasievo 阿凡纳义沃文化 culture for the first time in the North-West Mongolia (in Bayan-Ulgii 巴彦乌列盖省 aimag) were found; one of them dated back to the first half of the 3rd millennium B.C. had been excavated.

- sites belonging to Chemurchek 切木尔切克文化 culture (2500-1800 years B.C.) at the foothills of Mongolian Altai also for the first time were discovered; 6 barrows in Khovd 科布多省 aimag and 4 ones – in Bayan-Ulgi 巴彦乌列盖省 aimag had been excavated.

- a new culture of Middle Bronze Age (about 1800-1600 years B.C.) named by us “Munkh-Khairkhan 门海尔汗文化 culture” was discovered; the 13 related barrows in Khovd 科布多省, Zavkhan 扎布汗省- and Hovsgol 库苏古尔省-aimags had been excavated.

- 8 burials dated from the Late Bronze Age (about 14-11 centuries B.C.) were excavated in Bulgan 布尔干苏木 sum of Khovd 科布多省 aimag; they belonged to an unknown culture, which was preliminary called a “Baitag 北塔” culture.

- as a result of excavations of burial sites in Gobi Altay 戈壁阿尔泰山 Mountains (Uverkhangai 前杭爱省-, Bayankhongor 巴彦洪戈尔省- and South Gobi 南戈壁省-aimags) a new “Tevsh 特布希文化” culture of Late Bronze Age have been stated (dated from about 14-11 centuries B.C.). Several “figured” tombs, which were formerly investigated by Soviet-Mongolian archaeological

expedition near Tevsh-uul Mountain in Bogd 博格多苏木 sum of Uverkhangai 前杭爱省-aimag also belong to this culture.

- on the base of excavations, 14-C dating and cartography of sites the absolute and relative chronologies of formerly known types of burial constructions of the Late Bronze and the Early Iron Ages (14-3 centuries B.C.) in Mongolian Altai 阿尔泰 have been establishedⁱⁱⁱ.

- for the first time a complete scientific excavations of ritual-burial and ritual sites of “deer stones 鹿石” had been conducted in Khovd 科布多省 aimag (khereksur in Har gov’) and Hovsgol 库苏古尔省 aimag (deer stone complex in Surtiin denj) and accordingly two different traditions of deer stones ritual usage – Western-Mongolian one and Central-Mongolian one were discovered, which simultaneously existed at the neighboring territories^{iv}.

- the area around 200x300 km of Pasyryk culture 巴泽雷克文化 monuments distribution over Mongolian Altai 蒙古国阿尔泰山 in 6-3 centuries B.C. have been ascertained^v.

- the Bayan-Bulag 巴彦布拉克 fortress^{vi} in Nomgon 瑙木冈苏木 sum of South Gobi 南戈壁省 aimag has been attributed: it is Shouxiangcheng 受降城 fortress, which had been built by the order of Wu-di 武帝, the emperor of Chinese Han Dynasty in 105 year B.C.^{vii}.

- with the aid of the results of 14-C analysis the exact data of construction of the so called “Chinggis Khan Wall” in South Gobi aimag^{viii} was ascertained – appearing to be the beginning of 13th century A.C., this wall probably was build by Tanguts 西夏 as defense against Chingghis-han expansion^{ix}.

Present paper is devoted only to our discovery of new Bronze Age cultures in Mongolia.

1. Afanasievo 阿凡纳羨沃文化 culture. A barrow belonging to this culture named Khurgak-Govi (Khurai-Gov’) #1 was excavated by our expedition in 2004 in Ulankhus 乌兰呼斯苏木 sum of Bayan-Ulgii 巴彦乌列盖省 aimag. The barrow was situated at the first terrace of the left bank of Kara-Dzhamat-Gol River. It looked like a flat round stone pavement, 16 meters in diameter, about 1 meter high limited by a stone fence made of vertical stone slabs (this is characteristic feature of Altai Afanasievo 阿尔泰共和国阿凡纳羨沃文化^x). (Fig. 1 - 1). 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 meters deep, in which a man and a child were buried, laid on their backs, with heads eastwards (Fig. 1 - 3). A bottom of a wooden vehicle’s body (Fig. 1 - 2) served as a ceiling for the burial goods were laid on it, including a knife and an

awl made of bronze (Fig. 1 – 6,7), a bone arrowhead (Fig. 1 – 4), an ceramic vessel (Fig. 1 – 10) of elongated proportions, typical for Afanasievo 阿凡纳羨沃文化 culture from Russian Altai 阿尔泰共和国^{xi}, sheep' astragali. The construction of the wooden vehicle's body was typical for Pit-grave (Yamnaya 竖穴墓文化) and Novotitaroskaya cultures of the Early Bronze age of East European grassland^{xii}. The bronze knife is very similar with one found from the barrow near Tarlyshkin River in Tuva 图瓦共和国, where such bronze artifact in assemblage with jasper scepter headed with image of bull's head was discovered^{xiii}.

The samples of coal, wood and human bones were analyzed in the 14-C laboratory of the Institute for the History of the Material Culture of the Russian Academy of Science (all references below are given according calibrated dates obtained by this laboratory). Seven dates were obtained (see Tabl. 1); all indicated the most possible time of the barrow building to be the end of the first half of the Third millennium B.C.

Two mounds of smaller size also belonging to Afanasievo 阿凡纳羨沃文化 culture with the fences made of vertical slabs were found in the same sum at the first terrace of the left bank of Sogog-Gol river, near another mound, excavated by our expedition, belonged to Chemurchek 切木尔切克文化 culture, named Kumdi-govi (Hundii gov').

2. Chemurchek 切木尔切克文化 culture. As it was ascertained by our expedition, Chemurchek tribes had begun to spread over the territory of Mongolian part of Mongolian Altai from the middle of the third millennium B.C. Formerly the some sites belonging to this culture have been explored only out of the territory of Mongolia^{xiv}. In 2002 D. Erdenebaatar firstly discovered the Chemurchek 切木尔切克文化 culture site 墓地 on the Mongolian territory in Yagshiin Khodoo. After this we excavated six barrows of Chemurchek 切木尔切克文化 culture near the centre of Bulgan 布尔干苏木 sum of Khovd 科布多省 aimag (burial places Yagshiin Khodoo, Kheviin Am, Bural Kharyn Ar) and also four rectangular burial enclosures in Ulanhus 乌兰呼斯苏木 sum of Bayan-Ulgi 巴彦乌列盖省 aimag (Kulala-Ula (Khul-Uul), barrow 1, Kurgak-Govi (Khurai Gov'), barrow 2, Kumdi-Govi (Khundii Gov'), Kara-Tumsik (Khar Khoshuu) (one more barrow of such type of Chemurchek 切木尔切克文化 culture have been discovered on the left bank of Tsagaan-Gol River).

The barrows excavated by our expedition in Bayan-Ul'gi 巴彦乌列盖 looked like rectangular stone enclosures included earth-pits, which were orientated with their longer sides by West-East

(Kulala-Ula – by North-South) (see Fig. 2 – 1,2). Two of four stone-fences were joined by stone pillars (stelae), which were established at the Eastern side of the construction: the stele at the barrow of Kulala-Ula had been established at the Southern side and have been worked up to look like a human body (Fig. 2 – 4). At the barrow of Kara-Tumsik one of such stele stood inside the enclosure at the Eastern side of the tomb and had been colored with red ochre (ruddle) (Fig. 2 – 3).

Sites of Chemurchek 切木尔切克文化 type in Bayan-Ul'gi 巴彦乌列 look like those of namely Chinese Altai 阿勒泰地区 Chemurchek burial constructions^{xv}, which also were rectangular stone enclosures orientated, as the rule, with their longer sides by West-East, and in rare cases – by North-South. At the middle of their Eastern side (or at the Southern side) there was established a stone statue or a stone pillar. Inside the stone fences, along their long sides, there were sepulchers - boxes made of large stone slabs, which contained several burials.

Burial places of Bulgan 布尔干苏木 look like huge stone boxes, oriented by East-West, constructed of massive stone slabs which were situated on the ancient surface or were cut into the soil, and were use as crypt for many burials (till 10 persons). The stone box was reinforced from outside (not covered!) by surrounded stone heaps or by soil cairns covered one another, which were added by rectangular row of light boulders.(see Fig. 3 – 1) At the Eastern side of the barrow Jagshiin Khodoo #3 there was established a typical Chemurchek 切木尔切克文化 statue^{xvi} of a man wearing a helmet, with the face turned to the South, with 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 there was discovered a ritual “entrance” that had been made of thin vertical stone slabs and pavements made of boulders (Fig 3 – 1). The walls of Bulgan 布尔干苏木 stone boxes were decorated in ancient times by the red paint (Fig. 3 – 2). Our observations show that the area of such burial constructions is wide spread, including low basin of Khovd 科布多河 River and Buyant River^{xvii}. Having took after this in 2006 new Chemurchek 切木尔切克文化 boxes with surrounding stone heaps in the low basin of Buyant River near Hovd town 科布多市 by A.Tishkin were discovered^{xviii}. Three of them was excavated by A. Tishkin, Ch. Munhbayar, D. Erdenebaatar, S. Grushin and A. Kovalev in 2007-08^{xix}. The excavations showed that there was a ritual rectangular-shaped pavement with a pillar at the Eastern side of the barrow. The same burial stone boxes, which were connected with stone statues, were discovered in the basin of Ertix 额尔齐斯河 River (A.Kovalev observed such sites in Chemurchek 切木尔切克河 River basin in Altai 新疆阿勒泰县 county)^{xx}. Even more: the

same stone box with two surrounding stone heaps was discovered by S.Grushin and excavated by S.Grushin and A.Kovalev in 2006 in Tretiakovo district of Altai 俄罗斯阿尔泰边疆区 Region (Russia), near the Kazakhstan border. Thus the conclusion can be made that broad territory of Mongolian, Kazakhstan and Russian Altai had been taken under Chemurchek 切木尔切克文化民族 people control in the last centuries of Third millenium B.C.

The findings from Chemurchek 切木尔切克文化 barrows in Mongolia demonstrate wide cultural relations of Mongolian Altai population in the period under review. Earthenware vessels, which in Yagsiin Khodoo 1, 3 barrows were found (Fig. 3 – 9, 10, 11), represent different traditions of ceramic production, including flat-bottom vessel, which was found in the barrow #3 (Fig. 3 – 11), are similar to such vessels of great Elunino culture of the Early Bronze Age of Altai Grassland (Middle Ob’ 鄂毕河 River, Altai Region 俄罗斯阿尔泰边疆区)^{xxi}. The lead earrings from the barrows under review (Fig. 3 – 4,5,6) also are analogous with such earrings of Elunino culture^{xxii}. The stone vessels, discovered in the barrows of Yagshiin Khodoo 2, Kheviin Am 1, and Bural Kharyn Ar (Fig. 3 – 8) are indeed artifacts, typical for Chinese Chemurchek 阿勒泰切木尔切克文化 culture^{xxiii}. The earthenware vessel from the barrow of Kara Tumsik with lines of impints of stamp which uninterruptedly continued from the bottom to side (Fig. 2 – 16) is similar to such vessels of the earliest stage of Okunevo 噢库涅夫文化 culture of Middle Yenisey 叶尼塞河 River ^{xxiv}. 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 噢库涅夫文化, Samus’ and Krotovo (West Siberia) Middle Bronze age complexes^{xxv}. The bone artifacts – implements for processing skin, so called “scutchers”, which we have found in barrows of Kulala Ula 1, Kurgak Govi, and Kumdi Govi (Fig. 2 – 8) are known in mass series from Elunino culture settlements^{xxvi}. Also, above mentioned artifacts, among the findings from Bayan-Ulgi 巴彦乌列盖省 there are two bone arrowheads of original form (Fig. 2 – 10,12), small flintstone tools (incl. arrowhead) (Fig. 2 – 15), bone dagger (Fig. 2 – 11) and one bronze awl (Fig. 2 – 14).

According to conclusions of scientific workers of the Department of anthropology and archaeology of Mongolian National University, all mongolian Chemurchek 切木尔切克文化 skulls (craniums), which are suitable for identification, represent European race.

The results of 14-C dating of bones, coals, and wood from Chemurchek 切木尔切克文化 barrows of Mongolia (29 samples as a whole) (see Tabl. 1) and also 15 items from Kazakhstan

indicated that all these burial constructions had been built between the middle of the Third millennium B.C. and the beginning of the Second millennium B.C. The barrow Kurgak-Govi 2 coupled with the barrow Kurgak-Govi 1 of Afanasievo 阿凡纳羨沃文化 culture to a separat burial place. Two 14-C dates that have been got from the coal found in the earliest (ritual) pit of mentioned Chemurchek 切木尔切克文化 barrow #2 appeared to be in the same period that are four radiocarbon dates from the coal from filling of burial pit of barrow #1 belonging to Afanasievo 阿凡纳羨沃文化 culture. It may indicate that in the earliest period of existence of Chemurchek 切木尔切克文化 culture, its population in Altai region could coexist with population of Afanasievo 阿凡纳羨沃文化 culture. A pillar, erected at the Eastern side of mentioned Afanasievo 阿凡纳羨沃文化 culture barrow #1 (Fig. 1 – 1), as well as finding of bone arrowhead (Fig. 1 – 4), which is similar to such arrowheads from Kulala Ula 1 and Kara Tumsik barrows (Fig. 2 – 10, 12), also confirm this proposition. Also as we know to date typical for Afanasievo 阿凡纳羨沃文化 two censers and one egg shaped vessel in Chinese Chemurchek 切木尔切克文化 stone boxes were unearthed.^{xxvii}

Three round ritual pavements, which were explored by our expedition in 2001 at the high-mountain site Khar Gov' (科布多省门海尔汗苏木 Munkh-Hairkhan sum of Khovd aimag) near later khereksur, should be also attributed to Chemurchek culture. Polished stone tools were found there, which appeared to be analogous to discovered in 1999 at Kazakhstan 哈萨克斯坦 Chemurchek 切木尔切克文化 barrow Aina-Bulak 1/2. Also a stone pillar with marked out diminutive "head" as it had been done with stone pillars of Chemurchek 切木尔切克文化 barrows Kopa 2 (Kazakhstan) (Fig. 2 – 5) and Kulala-Ula (Fig. 2 – 4) had been used for the second time during constructing of this khereksur (Fig. 2 – 6).

Field research of the Early Bronze Age sites in Dzhungaria 准噶尔盆地 and Mongolian Altai 阿尔泰山 started in the first half of 1960-s. Chinese archaeologist Li Zheng was the first to reflect different types of burial constructions in Ertix 额尔齐斯河 basin and to connect neighboring stone statues with them. His field report was firstly published in 1962 ^{xxviii}. After that, in 1963, ten rectangular enclosures with stone boxes in Chemurchek 切木尔切克河(Kermuqi 克尔木齐, Qiemuerqieke) River basin in Altay County 阿勒泰 by Yi Manbai were excavated ^{xxix}. In 1990-s barrows of this type were subject for investigation of Wang Bo and Wang Linshan ^{xxx}. As result of the exploration Wang Bo undertook an attempt to classify and to date the burial constructions as

well as different kinds of stone sculptures ^{xxxii}. In his article of 1996 Wang Bo used the first time the term “Chemurchek culture 切木尔切克文化” for the Bronze Age sites of Northern Xinjiang 北新疆 ^{xxxii}. However most of Chinese investigators dated back the “Keermuqi 克尔木齐墓地 burial ground” to Late Bronze Age, not earlier, and most of scholars disclaimed the cultural unity of the stone enclosures and neighboring statues, many researchers are of the opinion that these statues are from the Turk 突厥 time.

In 1998 during exploration in Chemurchek 切木尔切克河 River basin A.Kovalev found remains of stone burial constructions, which had been excavated by Yi Manbai 易漫白, and established unity of stone enclosure #2 excavated by Yi Manbai 易漫白 with stone statue Kaynarl 喀依纳尔 #2, which had been published by Wang Linshan and Wang Bo in 1996^{xxxiii}. This fact confirmed the conclusion of A.Kovalev about synchronism of the most of stone sculptures from Ertix region with the main burials in stone boxes of Chemurchek (“Keermuqi”) 切木尔切克（克尔木齐）墓地 burial ground, dated to the second half of 3rd millennium – the first half of the 2nd millennium B.C. according analogies in burial goods^{xxxiv}. In his article published in Germany in 2000^{xxxv} A.Kovalev attributed images of bulls with S-shaped horns and the stone vessel from Uglovo, Altay region 俄罗斯阿尔泰边疆区, Russia as belonging to Chemurchek 切木尔切克文化 culture ^{xxxvi}. Also he attributed the statue from Inya village (Russian Republic of Altay 俄罗斯阿尔泰共和国)^{xxxvii} as belonging to Chemurchek culture. That gave opportunity to define the area of Chemurchek population spread.

In 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 National Academy of Science of Kazakhstan and with Altai(Russian) State University 阿尔泰边疆区大学) undertook excavations of 12 rectangular stone enclosures of the Early Bronze Age in Alkabek River basin (Eastern-Kazakh 东哈萨克斯坦州 region) (burial places Akhtuma, Aina-Bulak I, II, Kopa, Bulgartaboty) near Chinese border (3-5 kilometers on west from 新疆哈巴河县 185 团农场). The barrows excavated in Alkabek River basin had rectangular enclosures made of stone slabs; from the middle of eastern side of the enclosure, where an “enrance” marked with huge slabs is placed, to the burial pit led stone corridor (passage) made from small flat slabs. As the rule, the walls of these corridors surrounded the burial pit. In all barrows, without exceptions, burial pits

laid 2 – 5 meters eastwards from the center to the mentioned “entrances”. At the burial place Kopa 1 a stone stele that had been worked up to look like a human body at the eastern side of the enclosure was established (Fig. 2 – 5). 14-C dates that have been got from wood or from human bones prove synchronism of described above sites of Mongolia with those of Kazakhstan.

The results of the described works showed considerable diversity of forms of burial constructions, kinds of burials and of burial goods during this period in Altai 阿尔泰山内外区. At the same time it is possible to assert, that there was definite similarities between material culture of inhabitants of Dzhungaria 准噶尔盆地 and Mongolian Altai 阿尔泰山, which was the result of cultural influence that had been brought to this area by migrants from the Western Europe (France ?) not later than the middle of 3rd millennium B.C.

All described kinds of burial constructions did preserve the main features of passage graves of the Western Europe. The “Kazakhstan” enclosures do have corridors, walls of which laid together from some layers of stones, surrounding burial chambers, and asymmetric locations of the sepulchers (the similar construction may be observed at West France^{xxxviii}). Elongated proportions of “Bayan-Ulgi 巴彦乌列盖省” and Chinese 阿勒泰 Chemurchek 切木尔切克文化 stone enclosures, as well as ritual “entrances”, may be considered as derivative of mentioned burial corridor.

The design of burial boxes as well, as of several heaps (cairns) along perimeters of the central stone cist covering one another (see Fig. 3 – 1), is also analogous with this of Neolithic sites of France (for instance: le 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^{xxxix}). The Eastern orientation of “entrances” and tradition of establishing of statues or pillars at the same side are common for both Altai’s and Western European’s megalithic sites. The iconography of presently known Chemurchek 切木尔切克文化石人 sculptures (see Fig. 3 – 3) can have origins only in iconography traditions of European Neolithic – Chalcolithic, as it was demonstrated by A.Kovalev already in 1998. The most similar stone statues have been discovered in Languedoc (for instance, Mas de l’Aveugle, Collorgues)^{xl}. Forms and ornamentation of Chemurchek 切木尔切克文化 stone (see Fig. 3 – 8) and partly – of earthenware vessels, as well as of stone polished tools probably also have the West European origin^{xli}. The

painting of the walls of stone boxes at 科布多省 Yagshiin hodoo 1, 3 made with red paint has analogies in painting and pictures on walls of megalithic tombs dated to 3th millenium BC of East Europe (Kemi-Oba culture, Nalchik tomb, early Yamnaya 竖穴墓文化 culture of Dnepr region and so on^{xliii}). Painsstaking visual exploration of slabs at Yagshiin hodoo 3 gave 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 it is actually so, then there is analogous to barrow #28 of burial place Klady of Novosvobodnaya (Maikop 迈科普文化) culture and with the megalithic tomb at Leine-Helich (Germany)^{xliiii}.

3. Munh-Khairkhan 门海尔汗文化 culture. The Middle Bronze Age at Western and Central Mongolia is represented by Munh-Khairkhan culture 门海尔汗文化. Sites of this culture were firstly discovered by A. Kovalev in 2003 on the territory of Munh-Khairkhan 门海尔汗苏木 sum of Khovd 科布多省 aimag. Barrows of the culture looks from outside like absolutely flat stone heaps round or square in shape, made, as a rule, of one layer of stones. (Fig. 4 – 1,2,3) In the center of a barrow lay oval burial pit, 1.3 by 1 meter in size (regular), oriented in latitude direction. The buried human body was placed in extremely curved position on the left side. The head was directed to the East. (Fig. 4 – 6) The burial pit was filled with not processed stone blocks (pieces) and slabs that formed in ancient time something like vault from one or two layers of stones (Fig. 4 – 4,5).

Regular barrows in Altai 阿尔泰山 region are round in shape, about 3 meters in diameter (see Fig 4 -1). Our expedition excavated four such barrows on banks of Dund Tsenkher gol River, which preserved bones of buried adult people in situ: Khotuu davaa 1, Artua, Ulaan Goviin uzuur 1 and 2. Near barrow of Ulaan Goviin uzuur 2 are situated supposedly children's barrows #3 and #4, but no bones had been preserved. Samples of bones from each adult's burials were selected for 14-C analysis. The four dates with high probability keep within framework of 1800 – 1600 years B.C. (See Tabl. 1) In barrow Khotuu davaa 1 there were found a piece of bronze pin (?) with round shaped head. In barrow Ulaan Goviin uzuur 1 there were found bronze awl (Fig. 4 – 12, 13), bronze one-blade knife triangular in cross-section having no separate handle (Fig. 4 – 14,15), and dipper made of bone (Fig. 4 – 16). Three more barrows of such type were discovered by our expedition during exploration to the North from Munh-Khairkhan 门海尔汗苏木 sum.

In 2006 our expedition excavated sites of Munh-Khairkhan 门海尔汗文化 culture on the

territory of Burentogtokh sum 布拉托戈托赫苏木 of Hovsgol 库苏古尔省 aimag. There, in contrast to Western Mongolia, regular barrows were square in shape. We excavated two regular barrows. Nacre disc-shaped stripes for decoration of clothes in one of the barrows were found (Fig. 4 – 9). At the same region (库苏古尔省) in Arbulak sum 阿尔布拉克苏木 there was excavated by our expedition an elite Munh-Khairkhan 门海尔汗文化墓地 burial place Galbagiin uzuur discovered by D. Erdenebaatar, which included a flat stone barrow made from one layer of stones, 30 meters in diameter; square stone barrow and also two rectangular stone pavements. The disk-shaped heap of large barrow was put together from two kinds of stones: black shale and rose granite that formed a kind of mosaic. In view from upside there appeared a black paw of bird of prey with four claws on the rose background. The bird's paw looked like grabbing the burial pit. In rectangular barrow a bronze knife with its end drawn off and triangular in cross-section blade having no separate handle (Fig. 4 – 11) and bronze awl (Fig. 4 – 10) were found.

One more elite burial place of Munh-Khairkhan 门海尔汗文化 culture is located probably at the upper part of Hovd 科布多河 River on the territory of Tsengel 臣格勒 sum of Bayan-Ulgi aimag 巴彦乌列盖省. There A.Kovalev and A.Varenov during exploration in 2003 discovered a flat stone heap made of one layer of stones 30 meters in diameter.

During field season of 2007 in Bayan-Tes 巴彦台斯苏木 sum of Zavhan 扎布汗省 aimag we explored two single barrows of Munh-Khairkhan 门海尔汗文化 culture 5 – 7 meters in diameter and burial-ritual place Khuh-Khushony-Bom 1, which 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 findings it is necessary to mention two bronze awls, three bone conical-cylindrical arrowheads 15 centimeters in length with splintered haft, and also compound necklace-torque rectangular in shape, which was put together from square bone beads with cuts (Fig. 4 – 8).

The origins and connections of Munh-Khairkhan 门海尔汗文化 culture are still not clear. Probably, the metal industry of this culture had its origins in the Middle Asia or Kazakhstan, where findings of bronze knives looking like mentioned above (Fig. 4 – 11, 15) took place^{xliv}. The exactly same knife was found on the Qijia 齐家 culture site of Zongzhai 总寨 (Qinghai 青海) and very similar item on Qijia site of Linjia 林家 (Gansu 甘肃)^{xlv}. Probably same knives was found in one of the burials from Tianshanbeilu 天山北路墓地 (哈密 Hami)^{xlvi} and in the site Xintala 新塔

拉遗址 (Heshuo 和硕县)^{xlvii}, but the published pictures is not clear. Also same knife in Verkhnyaya Mulga hoard (叶尼塞河 Minusinsk basin) was found; this hoard contained also bronze celt and spearhead of Seima-Turbino 塞伊马-土尔宾诺文化 culture^{xlviii}. These typical Seima-Turbino 塞伊马-土尔宾诺文化 metal objects dated on first half of second millenium BC. Forms and material of the nacre ornaments (Fig. 4 – 9) presents continuation of traditions of East Mongolian Neolith^{xlix}, the same nacre discs recently were found in Russian Altai. Unique bone turque made from rectangular beads with cuts (Fig. 4 – 8) was origin from two tausend years earlier chalkolithic cultures of Ukraina^l.

4. The Tevsh 特布希文化 culture. Our investigations of 2005 -2007 shows that Southern part of contemporary Mongolia in 13 – 11th centuries B.C. was a part of area of specific archaeological culture of the Late Bronze Age that we proposed to name the Tevsh 特布希文化 culture. Barrows of this culture had been already excavated in Bogd 博格多苏木 sum of Uverkhangai 前杭爱省 aimag (not far from Tevsh uul 特布希乌拉山 mountain) by V.Volkov: two barrows were excavated in 1964^{li} and three barrows were excavated in 1971^{lii}, nevertheless a most of scholars belong these barrows to the Slab grave culture^{liii}.

We have excavated four barrows in Bayanlig 巴彦勒格苏木 sum of Bayankhongor 巴彦洪戈尔省 aimag (Baruun gyalat 1, 2, 3, Zamyn butz), four barrows in Bogd 博格多苏木 sum of Uverkhangai 前杭爱省 aimag (Khar uzuur I - 1, Khar uzuur II -1,2, Shar tolgoi), and also two barrows in Nomgon 瑙木冈苏木 sum of South Gobi 南戈壁省 aimag (Khurmen tsagaan uul I – 3, 4); during explorations a lot of barrows of such type in Gobi Altai 戈壁阿尔泰山 Mountains and in Transaltai Gobi 阿尔泰山南方戈壁沙漠 were discovered. As a result we came to following conclusions.

All excavated barrows were of the similar construction (Fig. 5 – 1,2). Each of them consists of stone fence enclosing an area filled by stones to make up a flat platform. Eastern and Western walls of fence were constructed of vertical stone slabs. Southern and Northern walls were constructed of stone blocks laid in horizontal position in several layers (which is very significant). In the middle of the construction narrow burial pit have been arranged, where a dead body was placed in prone (“face down”) position with head directed to the East (Fig. 5 – 1, 3). The pit with the dead body after burial ceremony was filled with ground.

There are two different forms of fences:

- a fence widened to the East having concave sides (looking like “figured” tombs) (see Fig. 5 – 1)

- a fence in almost semicircular shape having convex Northern and Southern sides, and direct Eastern and Western sides: Eastern side is wide, Western is narrow (see Fig. 5 – 2)

Judging by the similarity of construction, of burial rite, and of location of the similar barrows in the same sites, the barrows of both forms are simultaneous and belong to the same culture. As burials in prone position, semicircular fences and fences made of stone blocks lying in horizontal position in several layers were never discovered in Slab 石板文化墓 graves (Slab graves are surrounded with fences made of vertical slabs), we do attribute all mentioned above barrows as belonging to specific Tevsh 特布希文化 culture. Appearance of fences with concave sides among Slab 石板文化墓 graves of Transbaikalia 外贝加尔 and of the Central Mongolia may be explained by cultural influence of the Tevsh 特布希文化 culture on the Northern region.

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

All barrows of this culture that was excavated by our expedition were robbed in ancient times, and usually the top parts of skeletons were absent. In barrows Baruun gyalat 2, 3 we found necklace made of cornelian (Fig. 5 – 4,5), lazurite, and many small limestone beads on the neck of buried person (in barrow Baruun gyalat 3 there was also a golden ring in the necklace), also there were rows of limestone beads in barrow Zamyn Butz (Fig. 5 – 3), which probably were stitched together to clothes of buried person. The only one burial of such type that has not been robbed was excavated by V.Volkov in 1971 near Tevsh Mountain. The assemblage of burial goods included golden hair ornaments, headed with images of sheep heads (Fig. 5 – 6)^{liv}. They were published many times. According their design they are similar to analogous items of North China nomadic culture of Shang-Yin 商殷 period (14 – 12 centuries B.C.); A.Kovalev proposed to name this culture Chaodaogou 抄道沟^{lv}. Knives, ornaments, daggers and scoops designed in same style have well established dates, as they were found many times in complexes of the Chinese Central Plane. Thus the Tevsh culture may be dated back to 14 – 12 centuries B.C. The first radiocarbon dates (see Tabl. 1), which we got from 14-C laboratory of the Institute for History of Material

Culture of the Russian Academy of Science, confirm this dating (soon results of radiocarbon analysis of samples from each grave will be ready).

According to published materials, a barrow that had been excavated by A.W.Pond in 1928 near “Tairum Nor” Lake in the Inner Mongolia (乌兰察布盟) belongs to the same culture^{lvi}. A burial of a human being placed in prone (“face down”) position with head directed to the East was discovered there; his clothes decorated by more than 5000 beads. Burial constructions of Tevsh culture with concave sides were fixed by J.Maringer from the south side of modern Mongolian-Chinese border, near “Beili-miao”(内蒙古白云鄂博)^{lvii}. For solving problem of genesis of 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 (“face down”) position can have origin in Neolithic and Early Bronze age cultures of Northern China.

5. Baitag 北塔文化 culture. During our investigations in Bulgan 布尔干苏木 sum of Hovd 科布多省 aimag near Uliastain-gol River in Baitag-Bogdo 北塔山 Mountains in one kilometer from Chinese border in 2005 the burial place Uliastain gol III had been discovered. It consisted of seven stone rings about 1.7 – 2.7 meters in diameter, which were made of one layer small flat stone slabs. In the center of such ring there was an oval burial pit oriented according West-East line not more than 1.2 meters long. (Fig. 5 – 7) In spite of ancient robbing it was possible to define the position of 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 – 7,8,9). The artifacts discovered in the tomb included: beads made of thin leafs of bronze (Fig. 5 – 12), small limestone beads, two cast bronze salient buttons (Fig. 5 – 14,15), bronze temple ring of 1.5 turns (Fig. 5 – 13). All these artifacts give backgrounds for dating of this burial place back to the Late Bronze period beginning from 14 century B.C. Bronze ornaments of all mentioned types are well known from Nanwan 南湾 cemetery in neighbouring Chinese Balikun 巴里坤县 county^{lviii}, similar objects were found among the materials of the Late Bronze Age of Karasuk 卡拉苏克文化 culture^{lix}, Qinghai 青海 Zongri 宗日 M122^{lx} and of Siba 四坝 culture in Gansu 甘肃^{lxi}.

Also the same burial traditions were discovered in a secondary burial of a woman in the filling ground of the stone box of earlier Chemurchek 切木尔切克文化 barrow Kheviin am 1 in 200 kilometers to the North from Baitag 北塔山(Fig. 5 – 10). Small part of knife’s tip was found there

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(Fig. 5 – 11), like in Karasuk 卡拉苏克文化 burials. According 14-C dating of buried bones this grave is dated back (with probability 95.4%) to 1400-850 years B.C. (See Tabl. 1) (soon results of radiocarbon analysis of samples from some graves from Baitag 北塔文化 will be ready).

Skulls from the barrow Uliastain gol III-7 and from secondary burial of the barrow Kheviin am have extremely displayed features of European race. The burial traditions of Baitag graves (small stone circles without heaps, position of body, eastern orientation) reflect continuation of Chalkolithic traditions of Ukraine and Russia^{lxii}.

The Southern part of Khovd 科布多省 aimag in Mongolia, where we worked, probably was the Northern periphery of the area of this culture, Nanwan 南湾 cemetery was the site of southern neighbours of this culture. Namely from this culture “Karasuk 卡拉苏克文化” type of artifacts had originated, which by Chinese archaeologists in burial places of agricultural peoples of some oases of Xinjiang were discovered. It is possible to wait for new discoveries, if Chinese archaeologists will pay attention to small stone rings North from Tianshan 天山 Mountains, particularly between Barkul 巴里坤湖 Lake and Baitag 北塔山 mountains.

Table 1.

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

Radiocarbon dates from Afanasievo 阿凡纳溪沃文化 culture site, Bayan Ulgii aimag 巴彦乌列盖省, Ulaankhus sum 乌兰呼斯苏木

Site	Sample no.	material	Uncorrected, Years BP	Calib 68,2% (1-sig), Years BC	Calib 95,4% (2-sig), Years BC
Kurgak gobi 1, burial pit	Le-7219	human bone	4180±100	2890-2620	3050-2459
Kurgak gobi 1, burial pit	Le-7289	charcoal	4110±25	2850-2810 2740-2720 2700-2580	2870-2800 2760-2570
Kurgak gobi 1, burial pit	Le-7290	charkoal	4025±50	2620-2470	2860-2810 2750-2720 2700-2450

Kurgak govi 1, burial pit	Le-7291	charcoal	4140±35	2870-2830 2820-2800 2760-2630	2880-2580
Kurgak govi 1. burial pit	Le-7292	charcoal	4130±40	2870-2800 2760-2620	2880-2580
Kurgak govi 1, burial pit	Le-7293	wood	4085±30	2840-2810 2670-2570	2860-2800 2760-2720 2700-2560 2530-2490

Radiocarbon dates from Chemurchek 切木尔切克文化 culture sites, Bayan ulgii aimag 巴彦乌列盖省, Ulaankhus sum 乌兰呼斯苏木

Site	Sample no.	material	Uncorrected, Years BP	Calib 68,2% (1-sig), Years BC	Calib 95,4% (2-sig), Years BC
Kurgak govi 2 earliest pit	Le-7294	charcoal	4090±50	2860-2810 2750-2720 2700-2570 2520-2500	2880-2800 2780-2490
Kurgak govi 2 earliest pit	Le-7295	charcoal	4100±30	2850-2810 2680-2570	2870-2800 2760-2560 2520-2500
Kurgak govi 2 earliest pit	Le-7296	charcoal	4100±35	2860-2810 2700-2570	2870-2800 2780-2560 2520-2490
Kurgak govi 2 secondary burial	Le-7215	human bone	3825±70	2410-2370 2360-2190 2180-2140	2470-2120 2100-2030
Kumdi govi earliest pit	Le-7300	charcoal	4050±30	2630-2550 2540-2490	2840-2810 2670-2640 2630-2470
Kumdi govi earliest pit	Le-7301	charcoal	4110±20	2680-2810 2680-2580	2860-2810 2750-2720 2700-2570
Kumdi govi secondary burial 2	Le-7212	human bone	3900±70	2470-2280 2250-2230	2580-2510 2500-2190 2170-2140
Kumdi govi secondary burial 1 (the latest)	Le-7221	human 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	human 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 切木尔切克文化 culture sites, Khovd 科布多省 aimag, Bulgan sum 布尔干苏木

Site	Sample no.	material	Uncorrected, Years BP	Calib 68,2% (1-sig), Years BC	Calib 95,4% (2-sig), Years BC
Yagshiin khodoo 1, burial chamber	Le-6937	human bone	3790±120	2460-2440 2430-2420 2410-2110 2100-2030	2600-1850
Yagshiin khodoo 1, burial chamber	Le-6938	human bone	3720±60	2200-2030 1990-1980	2300-1940
Yagshiin khodoo 1 human bones in situ at the bottom of burial chamber	Le-7578	human bone	3720±70	2270-2250 2210-2020 2000-1980	2340-1910
Yagshiin khodoo 2, burial chamber	Le-6942	human bone	3880±100	2480-2190	2650-2000
Yagshiin khodoo 3, human bones in situ at the bottom of burial chamber	Le-6932	human bone	3770±60	2290-2130 2090-2040	2410-2370 2360-2020 2000-1970

Yagshiin khodoo 3, burial chamber	Le-6933	human bone	4000±80	2830-2820 2660-2650 2630-2400 2380-2350	2900-2200
Yagshiin khodoo 3	Le-6939	human bone	3800±70	2400-2380 2350-2130	2470-2030
Kheviin am 1, burial chamber	Le-7217	human bone	3560±105	2040-1740	2200-1600
Kheviin am 1, burial chamber	Le-7222	human bone	3440±120	1890-1600 1560-1530	2150-1400
Kheviin am 1, burial chamber	Le-7224	human bone	3800±200	2550-1900	2900-1600
Kheviin am 1 burial 1 (in the fill of stone cist)	Le-7975	human bone	3520±100	2010-2000 1980-1730 1720-1690	2150-1500
Kheviin am 1, burial chamber	Le-7229	charcoal	3770±60	2290-2130 2090-2040	2410-2370 2360-2020 2000-1970
Kheviin am 1, burial chamber	Le-7230	wood	4100±200	2950-2300	3400-2000
Kheviin am 2, burial chamber	Le-7214	human bone	3830±120	2470-2130 2080-2070	2650-1900
Kheviin am 2? burial chamber	Le-7228	charcoal	3720±30	2200-2170 2150-2120 2100-2030	2200-2020 1990-1980
Buural kharyn ar, burial chamber	Le-7225	human bone	4250±500	3600-2200	4100-1500

Radiocarbon dates from Munh-Khairhan 门海尔汗文化 culture sites, Khovd aimag 科布多省,

Munh-Khairhan sum 门海尔汗苏木

Site	Sample no.	material	Uncorrected, Years BP	Calib 68,2% (1-sig), Years BC	Calib 95,4% (2-sig), Years BC
Ulaan goviin uzuur 1, burial pit	Le-6941	human bone	3310±90	1730-1720 1700-1490	1880-1840 1780-1410

Ulaan goviin uzuur 2, burial pit	Le-6936	human bone	3150±70	1510-1370 1340-1310	1610-1260
Hotuu davaa 1, burial pit	Le-6935	human bone	3270±60	1620-1490 1480-1430	1690-1430
Artua, burial pit	Le-6934	human bone	3480±90	1920-1680	2040-1600 1580-1530

Radiocarbon dates from Tevsh 特布希文化 culture sites, Bayankhongor aimag 巴彦洪戈尔省, Bayanlig sum 巴彦勒格苏木

Site	Sample no.	material	Uncorrected, Years BP	Calib 68,2% (1-sig), Years BC	Calib 95,4% (2-sig), Years BC
Baruun gyalaat 2, burial pit	Le-7954	human bone	2900±50	1200-1010	1270-970 960-930
Zamyn butz, burial pit	Le-7971	human bone	2990±70	1380-1330 1320-1120	1410-1010
Zamyn butz, secondary burial	Le-7966	human bone	2980±110	1380-1330 1320-1050	1450-900

Radiocarbon dates from Baitag 北塔文化 culture site, Hovd 科布多省 aimag, Bulgan sum 布尔干苏木

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	human bone	2910±90	1260-1230 1220-970 960-940	1400-850

FIGURES

Figure 1

Afanasiovo 阿凡纳茨沃文化 culture. Barrow 1, Kurgak govi (Khuurai gov') (Ulaanhus sum, Bayan-Ul'gi aimag 巴彦乌列盖省 乌兰呼斯苏木).

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- wood object
- 6- bronze awl
- 7- bronze knife
- 8- bone tool
- 9- bone pendant
- 10- ceramic vessel

Figure 2

Chemurchek 切木尔切克文化 culture. 巴彦乌列盖省 乌兰呼斯苏木 Ulaanhus sum, Bayan-Ul'gi 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- Eastern Kazakhstan 东哈萨克斯坦州, Kurchum district, barrow Kopa 2, stele erected on the eastern side of the barrow.
- 6- Mongolia, Khovd aimag, Munhkhairkhan 科布多省门海尔汗苏木 sum, anthropomorphic stele secondary used in khereksur Har gov'
- 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

Figure 3

Chemurchek culture 切木尔切克文化. Khovd 科布多省 aimag, Bulgan 布尔干苏木 sum.

- 1- Kheviin am 1 barrow, plan and sections (I, II, III – soil cairns covering with stones)
- 2- Yagshiin khodoo 3 barrow, stone slab with picture (from western wall of the stone box)
- 3- Yagshiin khodoo 3 barrow, stone sculpture erected from the eastern side of the barrow
- 4- Yagshiin khodoo 1 barrow, lead ring
- 5- Yagshiin khodoo 1 barrow, lead ring
- 6- Yagshiin khodoo 3 barrow, lead ring
- 7- Yagshiin khodoo 1 barrow, bronze ring
- 8- Buural kharyn ar barrow, stone vessel
- 9- Yagshiin khodoo 1 barrow, ceramic vessel
- 10- Yagshiin khodoo 1 barrow, ceramic vessel
- 11- Yagshiin khodoo 3 barrow, ceramic vessel

Figure 4

Munh-Khairkhan 门海尔汗文化 culture. Khovd 科布多省, Zavhan 扎布汗省 and Hovsgol 库苏古尔省 aimags.

- 1- Ulaan gobiin uzuur 1 barrow (Khovd, Munhkhairkhan sum), plan of barrow
- 2- Ulaan gobiin uzuur 1 barrow (Khovd, Munhkhairkhan sum), section B-B'
- 3- Ulaan gobiin uzuur 1 barrow (Khovd, Munhkhairkhan sum), section C-C'
- 4- Ulaan gobiin uzuur 1 barrow (Khovd, Munhkhairkhan sum), grave, plan of the stone vault (level 1)
- 5- Ulaan gobiin uzuur 1 barrow (Khovd, Munhkhairkhan sum), grave, plan of the stone vault (level 2)
- 6- Ulaan gobiin uzuur 1 barrow (Khovd, Munhkhairkhan sum), plan of the burial
- 7- Ulaan gobiin uzuur 1 barrow (Khovd, Munhkhairkhan sum), grave, section D-D'
- 8- Burial ground Khuh-Khushony-Bom I barrow 1, one of bone beads from rectangular “torque”

- 9- Tsagan uushig 3 barrow (Burentogtokh sum, Hovsgol aimag), nacre disc-shaped stripes for decoration of clothes
- 10- Galbagiin uzuur 2 barrow (Burentogtokh sum, Hovsgol aimag), bronze awl
- 11- Galbagiin uzuur 2 barrow (Burentogtokh sum, Hovsgol aimag), bronze knife
- 12- Ulaan goviin uzuur 1 barrow (Khovd, Munhkhairkhan sum), wood handle from bronze awl with wood objects
- 13- Ulaan goviin uzuur 1 barrow (Khovd, Munhkhairkhan sum), bronze awl
- 14- Ulaan goviin uzuur 1 barrow (Khovd, Munhkhairkhan sum), wood handle from bronze knife with wood objects
- 15- Ulaan goviin uzuur 1 barrow (Khovd, Munhkhairkhan sum), bone scoop

Figure 5

Tevsh 特布希文化 culture (1-6), Baitag 北塔文化 culture (7-15)

- 1- Baruun gyalat 2 barrow (“figured tomb”) (Bayanlig sum 巴彦勒格苏木, Bayankhongor 巴彦洪戈尔省 aimag), plan of the stone fence after disassembling of stone cairn
- 2- Baruun gyalat 1 barrow (“semicircular” tomb) (Bayanlig sum, Bayankhongor aimag), plan
- 3- Zamyn buts barrow (“semicircular” tomb) (Bayanlig sum, Bayankhongor aimag), plan of the burial
- 4- Baruun gyalat 2 barrow (Bayanlig sum, Bayankhongor aimag), cornelian bones
- 5- Baruun gyalat 2 barrow (Bayanlig sum, Bayankhongor aimag), cornelian bone
- 6- Tevsh uul 特布希乌拉山 (Bogd 博格多苏木 sum, Uverkhangai 前杭爱省 aimag), golg head ornaments excavated by V.Volkov in a “figured tomb” (by Tsybiktarov, 1998, Fig. 55)
- 7- Burial ground Uliastain gol III, barrow 2 (Baitag bogdo uul 北塔山, Bulgan 布尔干苏木 sum, Khovd 科布多省 aimag), plan
- 8- Burial ground Uliastain gol III, barrow 7 (Baitag bogdo uul, Bulgan sum, Khovd aimag), plan of the burial pit
- 9- Burial ground Uliastain gol III, barrow 4 (Baitag bogdo uul, Bulgan sum, Khovd aimag), plan of the burial pit

- 10- Kheviin am 1 (Bulgan sum, Khovd aimag), secondary burial, plan
- 11- Kheviin am 1 (Bulgan sum, Khovd aimag), secondary burial, tip of bronze knife
- 12- Burial ground Uliastain gol III (Baitag bogdo uul, Bulgan sum, Khovd aimag), bronze beads from barrow 7 (above) and from barrow 3 (below)
- 13- Burial ground Uliastain gol III (Baitag bogdo uul, Bulgan sum, Khovd aimag), barrow 7, bronze rong
- 14- Burial ground Uliastain gol III (Baitag bogdo uul, Bulgan sum, Khovd aimag), barrow 7, bronze button
- 15- Burial ground Uliastain gol III (Baitag bogdo uul, Bulgan sum, Khovd aimag), barrow 7, bronze button

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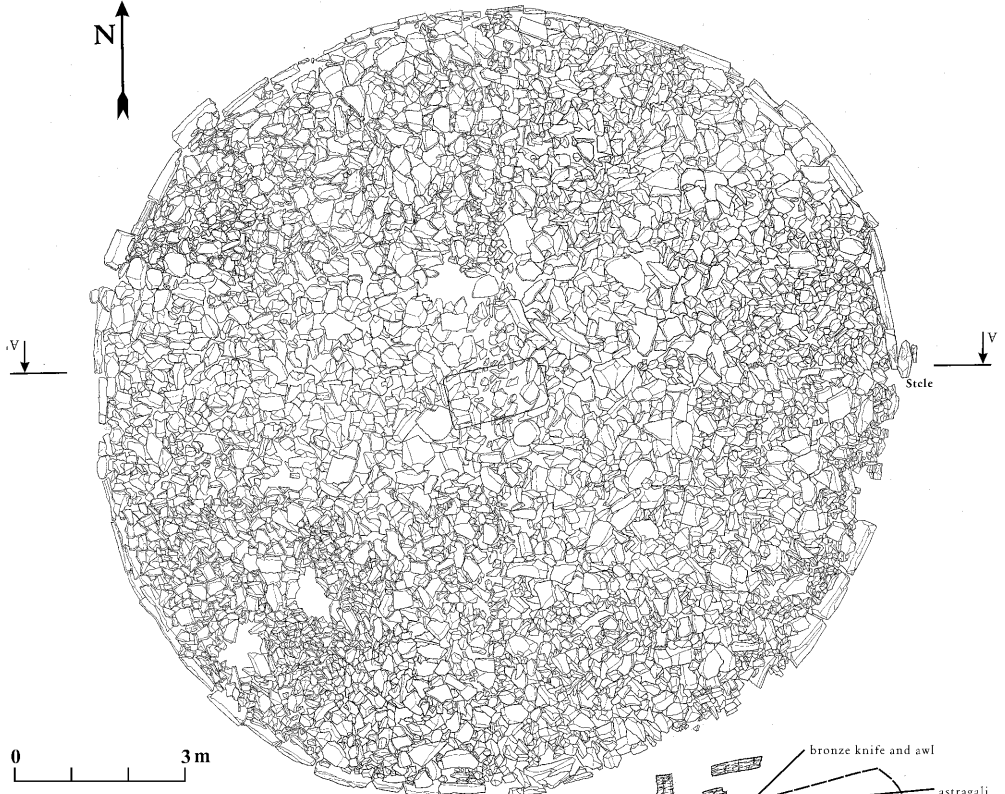
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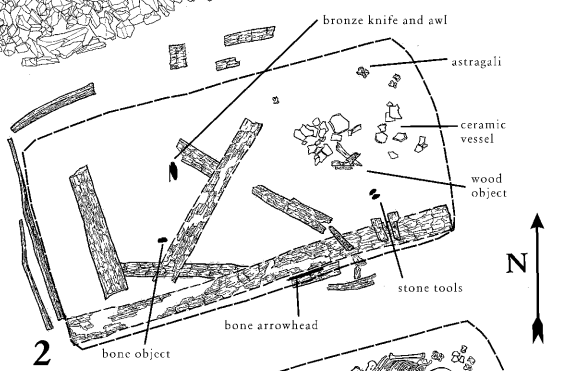
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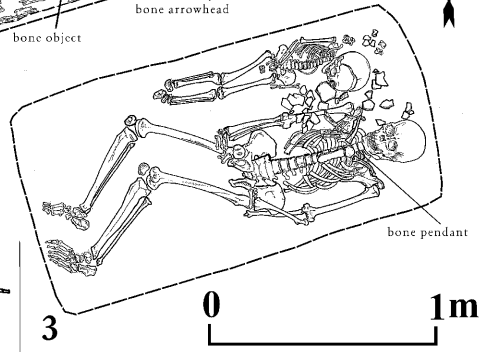
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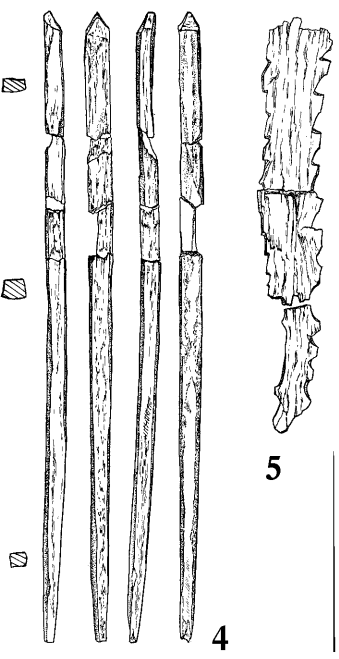
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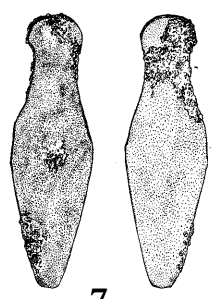
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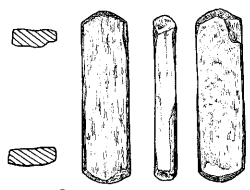
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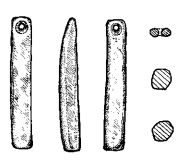


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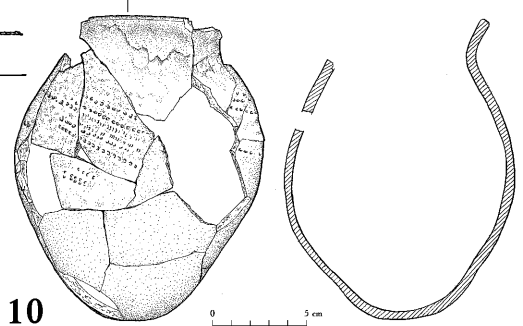


8

0 5 cm



9



10

0 5 cm

