



**HAL**  
open science

# Iron Age in Turkmenistan: Ulug depe in the Kopetdagh piedmont

Julio Bendezu-Sarmiento, Johanna Lhuillier

► **To cite this version:**

Julio Bendezu-Sarmiento, Johanna Lhuillier. Iron Age in Turkmenistan: Ulug depe in the Kopetdagh piedmont. M. Mamedow. Historical and Cultural sites of Turkmenistan. Discoveries, Researches and restoration for 20 years of independence, Turkmen state publishing service, 2011. halshs-01111871

**HAL Id: halshs-01111871**

**<https://shs.hal.science/halshs-01111871>**

Submitted on 2 Feb 2015

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



**TÜRKMENISTANYŇ  
TARYHY WE MEDENI  
ÝADYGÄRLIKLERI**

**HISTORICAL AND CULTURAL  
SITES OF TURKMENISTAN**

**ПАМЯТНИКИ ИСТОРИИ И  
КУЛЬТУРЫ ТУРКМЕНИСТАНА**

**TÜRKMENISTANYŇ TARYHY WE MEDENI ÝADYGÄRLIKLERI (Garaşsyzlygyň 20 ýyly içinde edilen ylmy açyşlar, öwreniş we rejeleýiş işleri).** – A.: Türkmen döwlet neşirýat gullugy, 2011.

Bu kitaba Türkmenistanyň çäginde ýerleşýän taryhy-medeni ýadygärliklerde 20 ýylyň (1991–2011) dowamynda amala aşyrylan arheologiya-barlag işlerine we rejeleýiş – abatlaýyş taslamalaryna gatnaşan belli alymlaryň, şeýle hem ýaş hünärmenleriň ylmy makalalary girizildi. Aslynda, bu makalalar zerur bolan suratlary we çyzgylary özünde jemleýän ylmy hasabat bolup, ýerine ýetirilen işleriň we barlaglaryň netijesi barada doly maglumat berýärler. Kitapda Türkmenistanyň maddy medeniýetiniň taryhynyň daş eýýamýndan tä giçki orta asyrlara çenli bolan giň gözýetimi şöhletlendirilýär. Makalalar awtoryň dilinde (türkmen, iňlis ýa-da rus) çap edilip, beýleki iki dillerde bolsa gysga mazmunlary berilýär.

**MONUMENTS OF HISTORY AND CULTURE OF TURKMENISTAN (Discoveries, Researches and Restoration for 20 years of Independence).** – A.: Turkmen state publishing service, 2011.

Articles of the well-known investigators and young specialists who were taking part in archaeological expeditions and the projects on conservation and restoration of historical monuments on territory of Turkmenistan during last 20 years (1991–2011) is included in the book. First of all, this is articles which represent the developed scientific reports with all indispensable illustrations, giving full understanding about character and results of studies. The wide panorama of the history of material culture of Turkmenistan from a neolith before the late Middle Ages is presented. Articles are published in the language of author (Turkmen, English or Russian) and provided with a brief resume in two other languages.

**ПАМЯТНИКИ ИСТОРИИ И КУЛЬТУРЫ ТУРКМЕНИСТАНА (научные открытия, исследовательские и реставрационные работы за 20 лет независимости).** – А.: Туркменская государственная издательская служба, 2011.

В книгу включены статьи как известных ученых, так и молодых специалистов, принимавших участие в археологических экспедициях и проектах по консервации и реставрации историко-культурных памятников на территории Туркменистана за 20 лет (1991–2011). В основном это развернутые научные отчеты со всеми необходимыми иллюстрациями, дающие достаточно полное представление о характере и результатах исследований. Представлена широкая панорама истории материальной культуры Туркменистана от неолита до позднего средневековья. Статьи публикуются на языке автора (туркменском, английском или русском) и снабжены краткими резюме на двух других языках.

# CONTENTS

M.A. MAMEDOV	Research and Preservation of Historical and Cultural Monuments in Turkmenistan .....	69
V.M. MASSON	Formation and blossom of a civilization of ancient oriental type in the south of Turkmenistan .....	74
L.B. KIRCHO	Exploration of Altyn-depe in 1995–2001 .....	99
N.F. SOLOV'eva	Excavation of Ilgynly-depe settlement .....	117
V. SARIANIDI	Archaeology of Gonur and Avesta.....	148
S. SALVATORI	International relations of turkmenistan bronze age civilisation and a survey of the IsIAO arheological activities in the murghab delta .....	171
G. ROSSI-OSMIDA	Activities undertaken by the ligabue study and research centre in turkmenistan from 1996 to 2006.....	185
B.N. UDEMURADOV	Ancient Farming Settlements of Margiana (on the materials of Adji Kui settlements' excavation).....	212
A.T. ORAZOV	A kiln from Adji-Kui .....	218
O. LECOMTE	Ulug-depe: 4000 years of evolution between plain and desert.....	221
J. BENDEZU-SARMIENTO, J. LHUILLIER	Iron Age in Turkmenistan: Ulug-depe in the Kopetdagh piedmont .....	239
F. BRUNET	A clay figurine workshop 6000 years old .....	251
J. CORDOBA	Turkmen-spanish arhaeological mission in Geokchik depe .....	257
V.N. PILIPKO	Excavation of Tower Building in Old Nisa .....	277
G.A. KOSHELENKO, V.A. GAIBOV	Mansur-depe in Parthiana: Construction Features and Destination .....	285
C. LIPPOLIS	Old Nisa the Turkmen-Italian archaeological Project .....	287
B. KAIM	Victorious fire at Mele Hairam .....	303
R.G. MURADOV	Mashad-Ata mosque and khanqah in Medieval Dekhistan .....	335
I.V. VOLKOV	Earthenware from pilgrim inns of Gurganj and a khanqah near the mausoleum of Tekesh .....	347
N.S. BASHIMOVA	Reinforcing and restoration works on the architectural monuments Ak Saray ding and Ysmamut-ata....	355
T. WILLIAMS	The Ancient Merv Project (2001-2003) .....	381
R. JEPBAROV	Conservation works in neighbourhood of Ancient Merv .....	397
M. AMANOV	Decoration in the interior of the Mausoleum of Mukhammed ibn Zcid in Merv.....	404
D.A. DOVLETOV	Astana-baba architectural complex .....	410
A. KHALMYRADOV	Conservation of the Ruins Located in Front of Meana-baba mausoleum.....	415
E.A. MURADOVA	Rock art Bezegli-dere (Chandyr valley).....	423
INFORMATION ABOUT AUTHORS	.....	425
ABBREVIATIONS	.....	427



J. Bendezu-Sarmiento, J. Lhuillier

## IRON AGE IN TURKMENISTAN: ULUG-DEPE IN THE KOPETDAGH PIEDMONT

Since 2001, the Turkmen-French Archaeological Mission, directed by O. Lecomte and M. Mamedov carried out excavations at the site of Ulug-depe, located near Dushak in the Kopetdagh piedmont (Lecomte et al. 2002; Boucharlat, Francfort, Lecomte, 2005; Lecomte, 2007). First excavated by V. I. Sarianidi in the late sixties (1967-1970) (Сарианиди, 1969, 1971, 1972; Сарианиди, Качурис, 1968), the site, by its location, size (13ha) and height (30 m above the level of the piedmont), offers the longest stratigraphy in Central Asia, from the middle Chalcolithic (Namazga II) down to the Achaemenid period (4th century BC). Therefore Ulug-depe is one of the rare sites of Central Asia which presents Bronze levels as well as Iron Age levels. The early Iron Age is of particular importance and the fieldwork done recently by the Turkmen-French Archaeological Mission gives a better understanding of this period in the Kopetdagh region.

The reasons for the collapse of the proto-urban civilization, i.e. the Oxus civilization, and for the end of the Bronze Age (in the second half of the 2nd millennium BC) are still a matter of debate. The question of aryan or indo-iranian migrations remains open. According to recent researches, the 'invasion' of Andronovo nomadic groups from the steppes has caused the decline of the Oxus civilization. Towns were deserted and occupations spread out into the oases (Bendezu-Sarmiento, in press). The late Bronze Age is defined by deterioration in the quality of the craft industry and the disappearance of long distance exchanges. The rise of Iron Age cultures (Yaz I) around 1450-1300 BC emphasizes the appearance of rural settlements scattered over oases. These settlements are characterized by a citadel erected on the top of a mud-brick terrace. The main difference with the previous period is the manufacture of a specific handmade pottery decorated with red geometric designs applied on a bright background. The other main feature is the disappearance of the grave-burying practice (Lhuillier, 2010).

At Ulug-depe the Early Iron Age levels, designated Ulug 3 – period, were excavated in 2004 and in 2008 in trench 16 as well as in 2010 in trench 23. The purpose of these excavations was twofold. First of all, it aimed at identifying the occupation for this period, which is still problematic in Central Asia, and obtaining stratified material in order to define the Yaz I variant in the piedmont. Secondly, it aimed at a better

understanding of the transitional period between the Late Bronze Age and the Early Iron Age, as well as between the Early and the Middle Iron Age, by defining more precisely the material culture.

### The Iron Age

#### *Ulug 3 period (Yaz I)*

In trench 16, several occupation phases have been identified. The oldest one is characterized by a series of pole holes that are suggestive of a wooden superstructure. The second one is defined by a mud brick floor or associated with a mud brick construction, of which, only the foundations are preserved by two perpendicular lines. A floor with in situ potsherds, containing interesting pieces of handmade pottery, is characteristic of a period of abandonment. A third settlement phase is represented by five ovens built over a small surface (about 3 meters square), which may be identified as a domestic, either private or specialized installation. The fourth and last phase of Early Iron Age occupation has been identified through the means of layers containing Yaz I archaeological material but there is no architecture associated with it.

In trench 23, located north of the depe, the occupation is different. The oldest levels consist of layers presenting a western slant following the surface of the site. Several occupation phases can be recognized. In the beginning, several settlements and dump layers (organic and full of ashes) have been identified. Later, the whole area was levelled off by a layer of brick (circa 40cm width) and several low walls were made of rammed clay used as buttresses. Several walls oriented NE-SW and NW-SE were built, with a steep western slant. Various occupations layers are linked to those, especially a floor covered with fired oven fragments. A level of in situ potsherds emphasizes an abandonment state. Shortly after the area was reused and levelled off by the building of structures of pise following an E-W orientation. Then, older walls were covered by blocks of pise. This occupation level is also associated with successive floors and dump layers. Finally a massive construction, for which three walls have been excavated (built with 27 x 52 x 8 cm mud bricks), may be interpreted as a supporting platform for a fortified building. This assumption is also confirmed by the topography of the site and by relationships established with other known sites for

*Ulug-depe.*

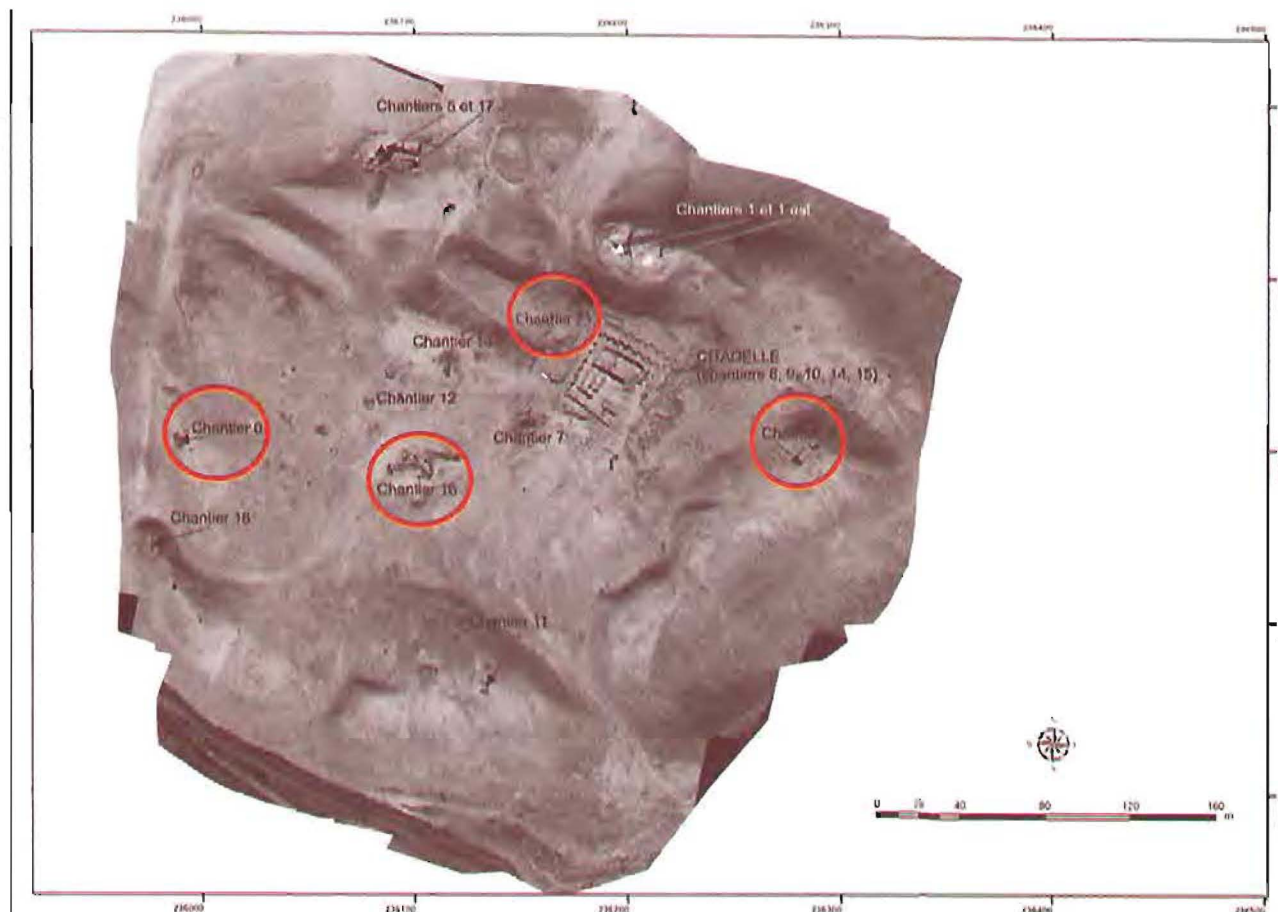
*Gap: dört tarapyndan görnüşü.*

*Ulug-depe.*

*Vase: a view from 4 parties.*

*Yyz-öene.*

*Baza: güd e 4-x empon.*

*Ulugdepinii kartasy.**Map of Ulug-depe.**Вид на Улуг-депе сверху (карта).*

the Yaz I period (Lhuillier, in press), as Yaz-depe, Tillja-depe or Kuchuk-depe.

*The transition between Ulug 3 (Yaz I) and Ulug 2 (Yaz II) periods*

The transition is marked in Trench 23 by a phase of abandonment, then by a reoccupation during the Yaz II period. The walls of the massive construction were reused, levelled off by new brick layers at their top, the empty spaces were filled in with deposit sediment mixed with Yaz II-III potsherds. This layout is part of a new platform linked to the citadel excavated at the top of the site and dated from the Yaz II period by C14 analysis (personal communication from O. Lecomte). Therefore, the foundation trench of the Yaz II platform (built with mud bricks averaging 52 x 30 x 10-12 cm in size) was dug into the Yaz I levels. New levelling layers of pisé were then added onto the slope of the depe.

In trench 16, the transition between Yaz I and Yaz II is also characterized by a continuous stratigraphy. Above the Yaz I level are several Yaz II dump layers (about 40 cm width) and occurs a collapsed mud brick construction, whose function remains obscure. Above this construction a large building (oriented NNE-SSW) was erected with 30-31 x 24 x 9 cm mud bricks. After an abandonment period, this building and the whole area surrounding were levelled off in order to construct a platform (1,20 m in height) using both architectural structures (walls, columns)

and filling material. A large building was erected on the platform. Because of its size, its proximity to the citadel and to the contemporary buildings identified by the geomagnetic survey carried out in 2003, this building is interpreted as an administrative center.

*The transition between the Early Iron Age and the Bronze Age (Ulug 4 period)*

A stratigraphic continuity between Middle-Late Bronze Age and Iron Age levels was found only in trench 23. The Yaz I layers are directly settled upon those of the Bronze Age. There is no evidence of a period of abandonment. Some layers, averaging 50 cm width, present an assemblage of NMG V-Yaz I pottery showing that the transition was gradual. It appears clearly only in the pottery types, as V.I. Samanidi already documented it at Ulug-depe in the 1960's. No hiatus can be observed in the stratigraphy. The direct superimposition of a number of structures is accentuated by the steep slope of the tepe. For example, an Iron Age wall was built directly on a Bronze Age oven. This recent discovery strengthens the hypothesis of a non violent, progressive and short lived transition, between the end of the Bronze Age and the beginning of the Iron Age.

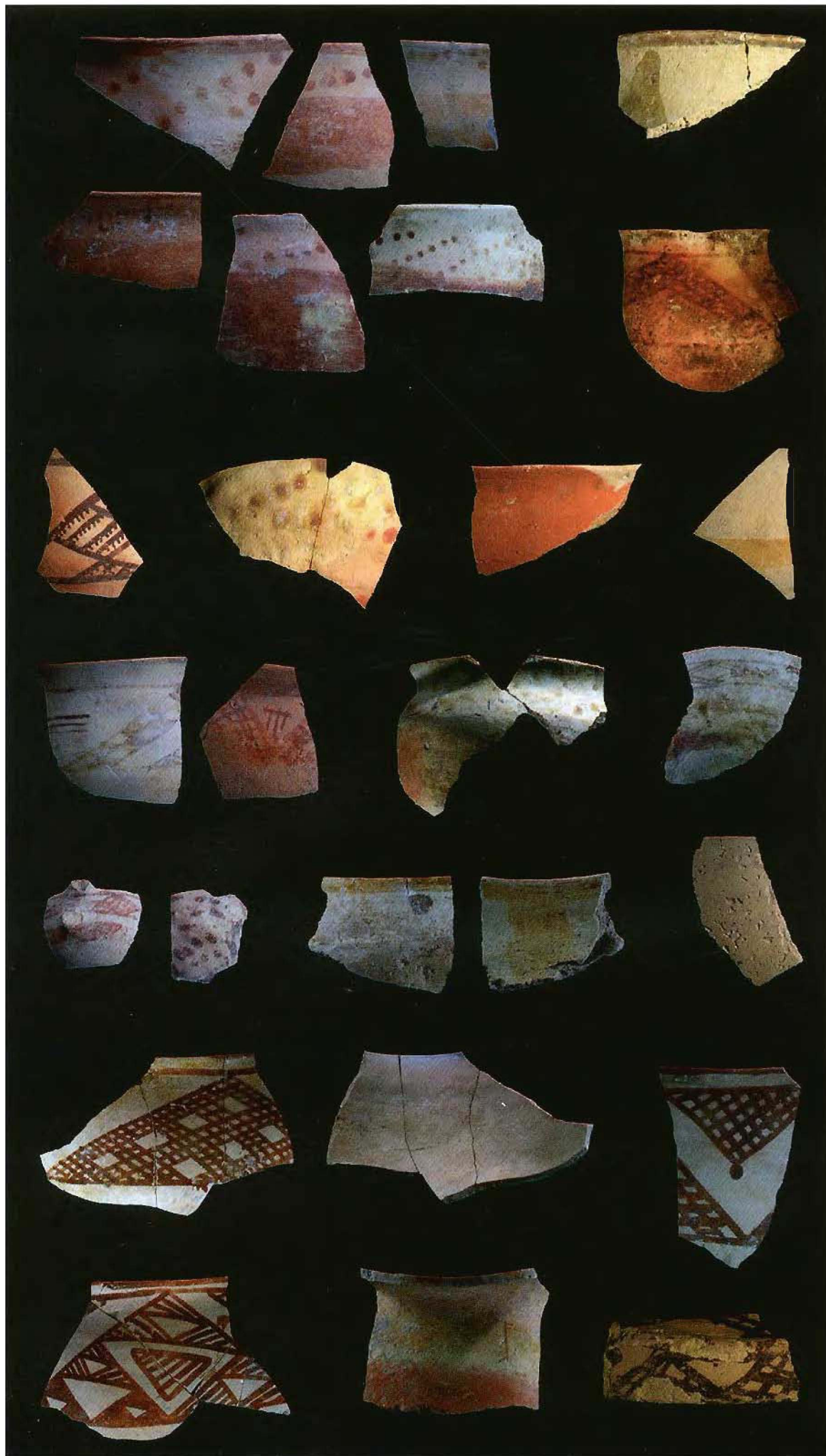
**The ceramic complex**

The Ulug 3 layers of trench 16 has provided in 2008 about 1500 potsherds, and also several hun-

*Ulugdepeden  
(3-nji gazuw çukuryndan)  
çykan keramika  
nusgalary.*

*Some examples  
of the Ulug 3 pottery complex.*

*Образцы керамики  
с Улуг-депе 3.*

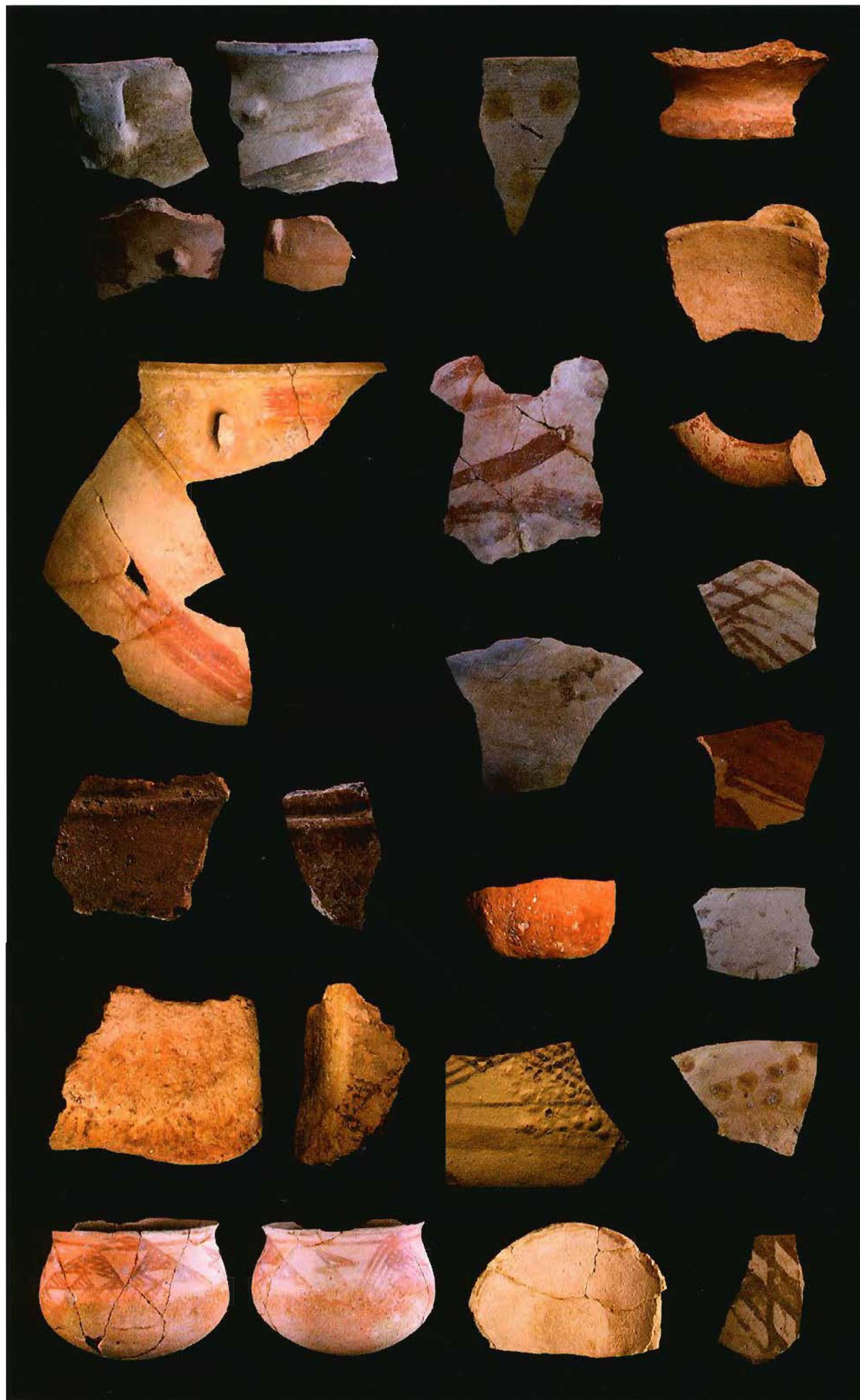


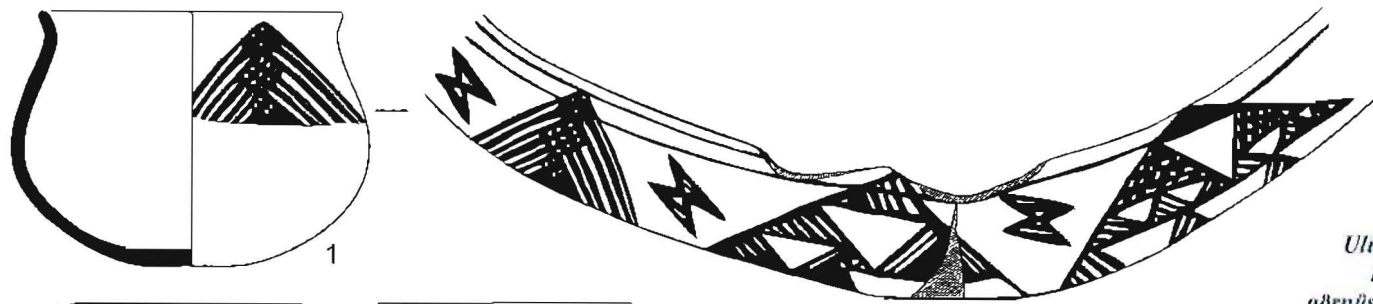


*Ulugdepeden  
(3-nji gazuw çukuryndan)  
çykan keramika  
nusgalary.*

*Some examples  
of the Ulug 3 pottery complex.*

*Образцы керамики  
с Улуг-депе 3.*

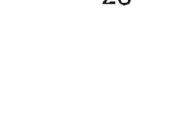
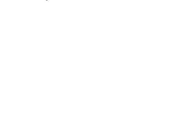
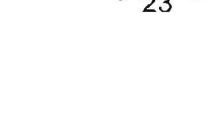
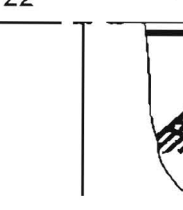
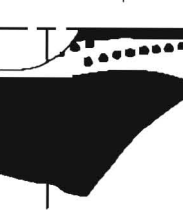
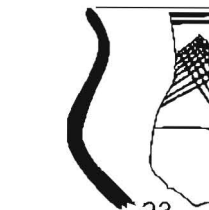
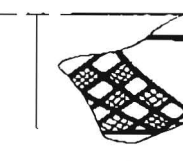
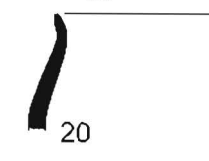
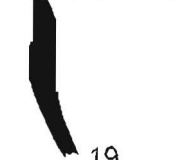
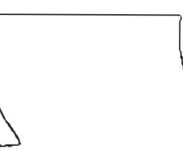
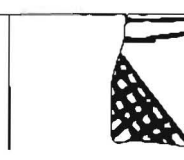
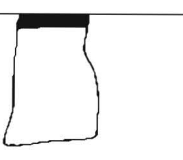
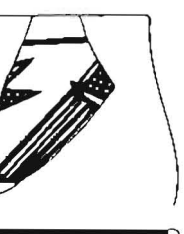
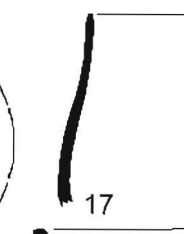
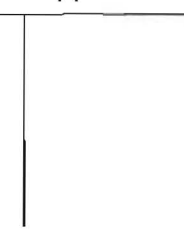
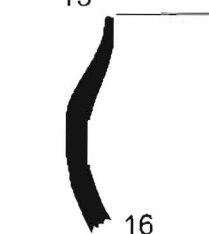
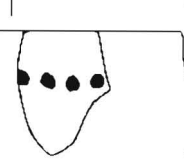
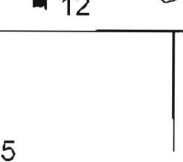
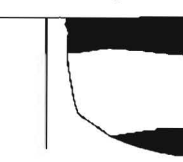
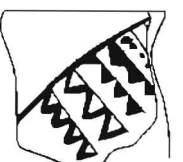
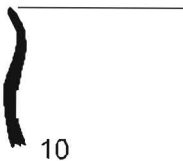
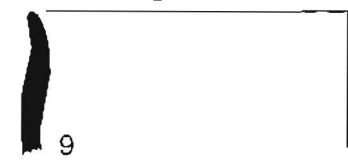
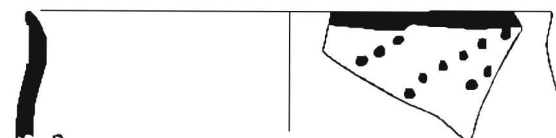
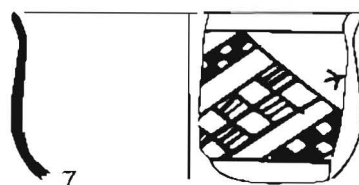
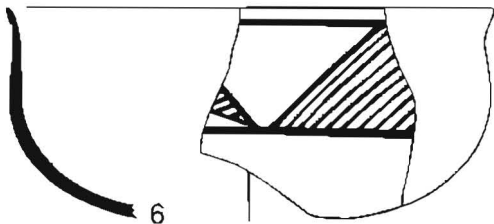
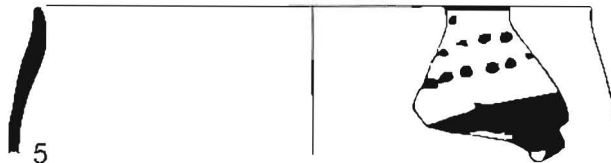
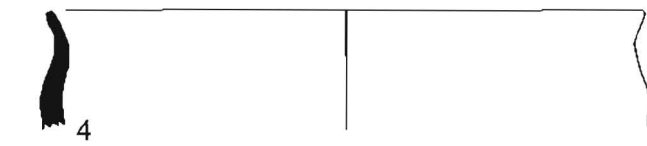
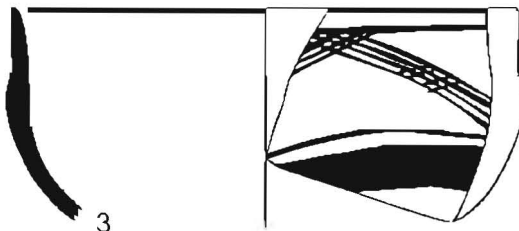
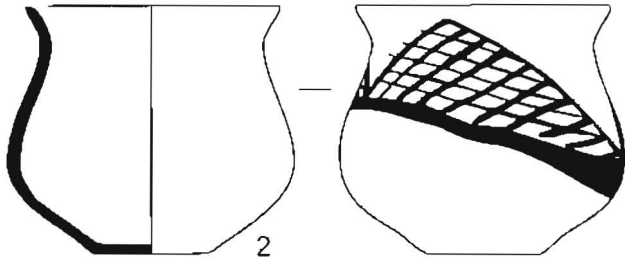




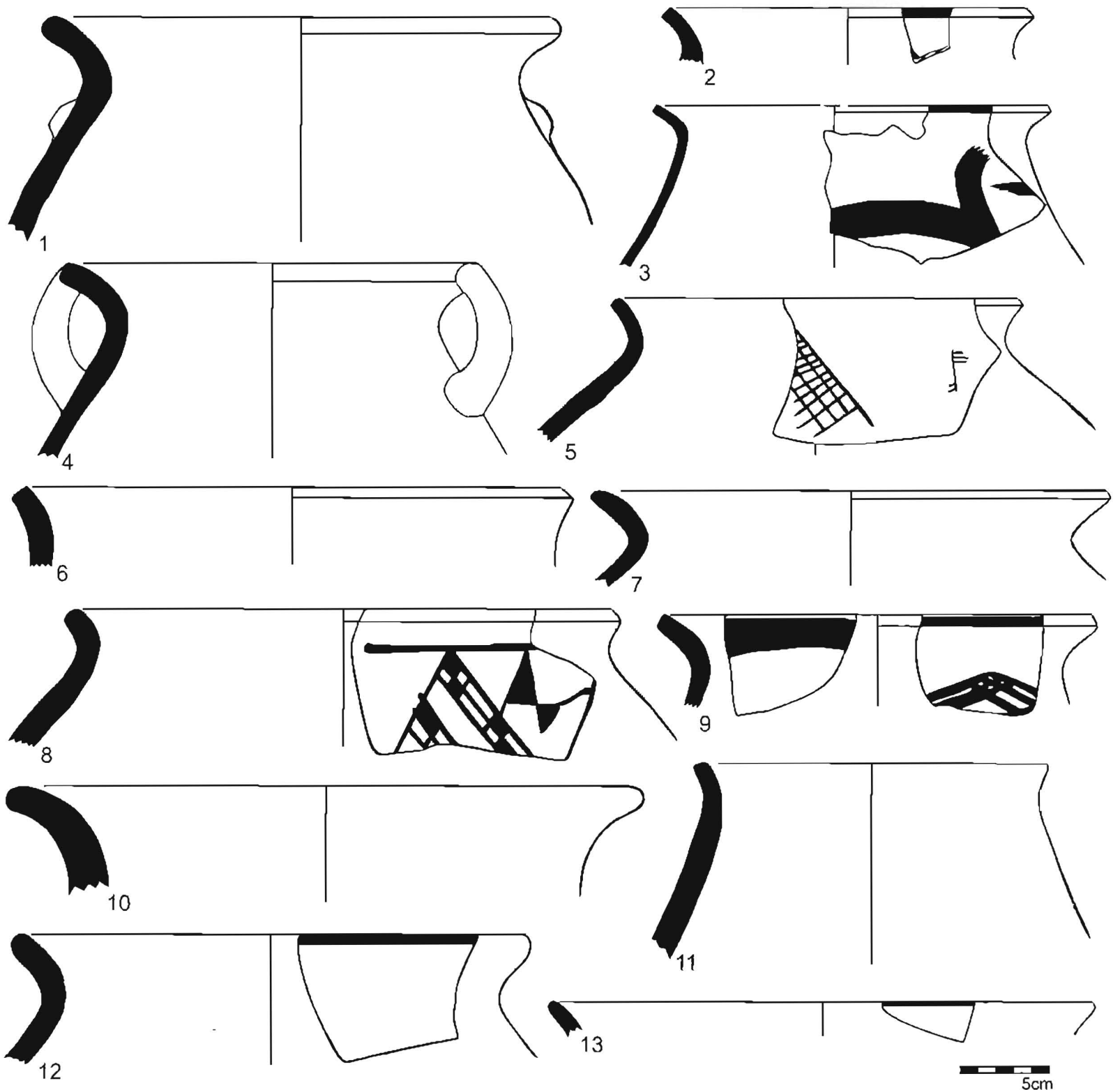
*Ulugdepeden tapylan  
keramiki guplaryň  
görnüşleriniň nusgalary.*

*Some examples of the shapes  
of Ulug 3 pottery complex.*

*Образцы форм керамической  
посуды с Улуг-депе 3.*



5cm



*Ulugdepeden tapylan keramiki gaplaryň görnüşleriniň nusgalary.*

*Some examples of the shapes of Ulug 3 pottery complex.*

*Образцы форм керамической посуды с Улуг-депе 3*

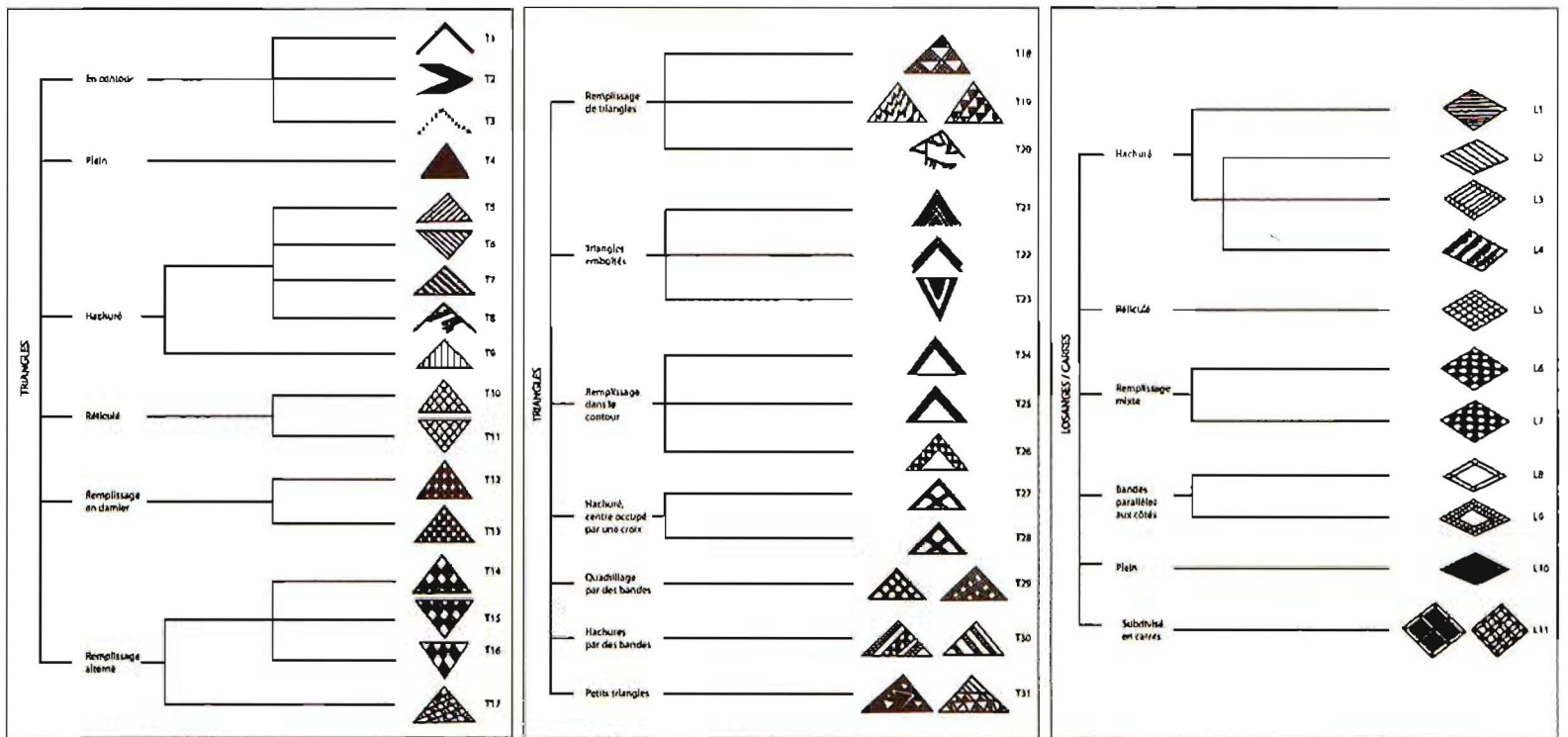
dreds of potsherds for the Yaz II-III levels. A total of 395 diagnostic potsherds or complete pots from all the different MAFTur trenches (the majority coming from the trench 16), have been studied, and the shape of 312 potsherds was recognized. It constitutes 79 % of the corpus.

The whole Early Iron Age pottery is handmade. There are very few complete shapes, but we can assume that most of the pottery has a flat or slightly concave, bottom. 27 types techno-morphological have been identified.

More than 40 % of the shapes are open. They include bowls with straight or opened wall and sharp-

ned, flattened or everted rim. Some carinated vessels also occur in the assemblage. Straight-sided wall vessels with straight or everted rim are also well represented. For the bowls, profiles with an «S» rim predominate (16,70 % of the corpus). Other open shapes, with convex walls and different types of rim are much less frequent. Some miniature open vessels also occur in the complex. They are often bowls with convex and vertical walls or with opened wall.

Closed profiles are less morphologically various but represent 54,5 % of the corpus. Most of the jars (24 % of the total) have an everted rounded, or more frequently, flat lip (Fig. 6). Fine wall pots with an S



rim constitute the most abounding form of the Ulug 3 complex, that is 30% of the corpus.

Coarse ware, modeled more roughly, has generally a storage function. They are quite rare and represent only 4,80% of the studied material. Only few cooking pots have been identified in the corpus. They show vertical walls and a flat or rounded rim. Vessels bearing lugs may belong to this pottery type. Flat lids

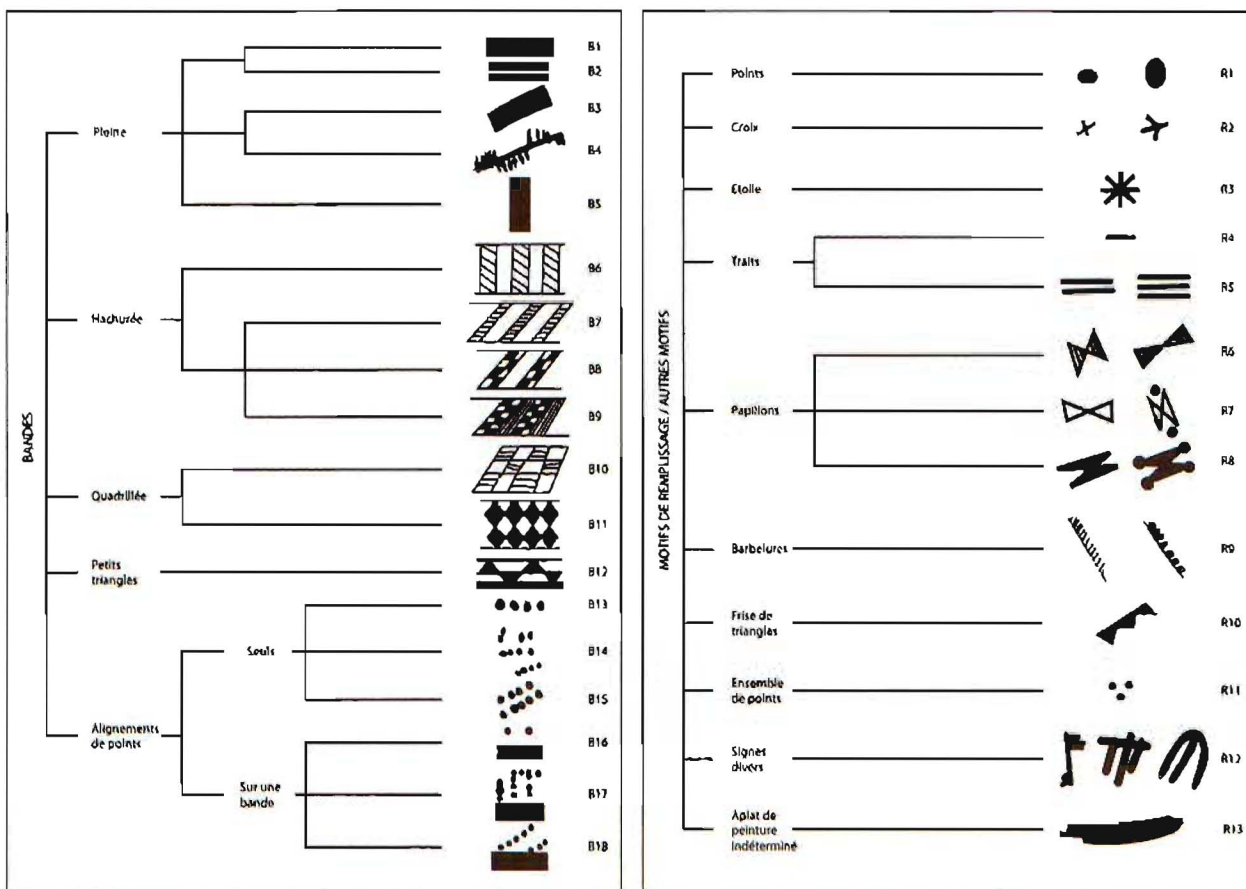
can also have a handle or a lug in the centre. Pans, characterized by a flat bottom with straight walls, are smoothed and blackened by fire in the inside part.

Other shapes are very few represented (less than 1% of the corpus). Ring-shaped base was discovered in Ulug 3 levels, but the complete shape of the vessel remains unknown, nevertheless this type could correspond both to open and closed profiles with an S rim,

*Ulugdepeden tapylan keramika önümleriniñ yüzündäki nagıslaryñ görnüşleri.*

*The typology of Ulug 3 painted pottery decoration.*

*Типология орнаментальных мотивов с росписной керамики Улуг-дене 3.*



*Ulugdepeden tapylan keramika önümleriniñ yüzündäki nagıslaryñ görnüşleri.*

*The typology of Ulug 3 painted pottery decoration.*

*Типология орнаментальных мотивов с росписной керамики Улуг-дене 3.*



*Ulug-depe.  
Gadymy mazarçylygyn  
görnüşi.*

*Ulug-depe.  
The dug out burials.*

*Улуг-депе.  
Раскопаные погребения.*

as already known in Jashilly-depe (Gutlyev, Zadneprovskiy, 1985, fig. 2, 1) and in Yaz-depe (Masson, 1959, pl. XXV).

Furthermore, three main paste groups, correlated with determined shapes can be distinguished in handmade vessels (Lhuillier and Frankfurt, *in press*).

The first group includes vases with a compact, very fine and light paste, containing or not a very fine mineral temper. Vessels of this type are almost systematically those with an S rim, which constitute about 47 % of the corpus. The morphological features of this group show very few variability, only marked by light variations in the diameter or the incline of the rim. It may be indicate a kind of standardization of the production. The thickness of the wall is generally very well regularized (3 – 6 mm).

Fine horizontal streaks on the internal and sometimes on the external surface point out the use of combined coil-building and wheel-throwing techniques in order to regularize the walls. A more precised technological study led by A. Dupont-Delaleuf (Dupont-Delaleuf 2010) on 386 potsherds from Ulug 3 period shows that rotation is used in two cases: 1. the preforming of the vase is manufactured without rotation and the finishing is made by rotation, 2. preforming and finishing both with rotation. Both faces are often polished. Paste is always of a clear color, beige or pinkish beige. There are few firing marks, but some potsherds have a greenish color and a black-painted color which indicate an overfiring of the vessel. The greenish beige shade, as well as the thinness of paste, made some potsherds of this group technologically close to the Middle and Late Bronze Age «wheeled-made» ware.

Vessels of the second group have a coarser paste, with a few mineral (limestone) temper or sometimes chaff. Its size does not exceed 3 mm and

the inclusions sometimes punctuate the surface by forming small vacuoles. This paste group includes all the open profiles except those with an S rim and all the jars. This group, which is the more important one, constitutes about 48 % of the corpus. The thickness of the wall is about 1,3 – 1,5 cm maximum. Sometimes, we can observe that the walls are regularized by a careful polishing, but usually we can observe a lack of preparation of the paste, marked by micro-fissures, occurring during the drying, and by the variability of thickness. Paste is usually beige or pinkish beige, with sometimes red spots resulting from firing.

The vessels of the last group show a very coarse paste. The main shapes are cooking pots, lids and pans, which represent less than 5 % of the corpus. Their paste is prepared with mineral temper (limestone), chamotte (3-5 mm) and sometimes also with vegetal temper. Some micro-fissures are visible on the surface. Nevertheless, no cooking pots shows traces of tallow and coarse ware can be painted.

In Ulug-depe, 24,40 % of pottery from Ulug 3 context is decorated (Fig. 3-6). The majority of decoration is composed by painted ware, but we also collected a sherd with an incised decoration (triangle) and two sherds with applied cordons (horizontal line). In this complex, almost half of these painted ornaments appear on undetermined potsherds. 32,30 % of the decoration occur on the vessels of the first group; 22,40 % on the vessels of the second group; and only 1,90 % on the vessels of the last group. Therefore, for the pottery of the second group, which is equivalent in proportion to vessel of the first, the investment in the decoration is not the same. However, almost all types of vessels of Ulug 3 complex can be painted, even the coarse ware. The painted decoration is almost systematically located in the upper part of the vessels. The organization of the decoration usually shows the main motives organized in friezes, delimited by horizontal lines, and separated by secondary motives. Motives are in general brown-red, but they can become darker or lighter, according to the firing process.

large variety of painted motives are recognized for this period in Ulug-depe, from which 73 have been identified, often only by single potsherd (Fig. 7-8). Thirty-one different motives of triangles are identified. They constitute 31,60 % of painted motives, and it is the most important type of motives, but also the most manifold. Eleven types of rhombs appear on the potteries of Ulug-depe, representing 5,90 % of the painted decors. Bands constitute 30,20 % of decors, with eighteen motives. The most frequent motive of the corpus (10,50 %) is that of range of points, alone or up a horizontal band. The filling motives, which fit

between main motives, are frequent, with thirteen different types, constituting more than 11 % of motives. Shapeless brushwork are also frequent.

The transition between Ulug 2 and Ulug 3 periods is marked by the appearance of Yaz II-III type wheel-made pottery. The main ceramic shapes include open bowls with a truncated base or bowls with a straight-sided wall, as well as flat rim jars. But we can also observe after the pottery from the trench 16 that the pottery with a lot of temper is still present in the Ulug 2 layers, in quite important quantity. Cooking pots, usually with handles and coarse tempered vessels are always discovered in Ulug 2 levels. On the contrary, we already mentioned the low proportion of coarse ware in the Early Iron Age complex Ulug 3, and particularly of some characteristic Yaz I shapes, we can't systematically correlate the coarse handmade vessels to the Ulug 3 period. Besides, those shapes are unknown in the Ulug 3 level, characterized by a good quality ceramic.

To conclude, since the 2008 campaign on the trench 16, which allowed us to characterize the Ulug 3 assemblage, the 2010 campaign on the trench 23 since gave new shapes and new decorations, which enlarge significantly the typology. It is particularly interesting to notice that these vessels present indisputable parallels with those of Yaz-depe pottery and also from other sites of Margiane and from the Turkmen piedmont. But the best parallels can be done with Tillja-tepe (Sarianidi, 1972b, 1989), providing comparable bowls, pots with an S rim and also more classical shapes, as bowls with convex walls. Moreover, the decoration is also close. Indeed, we can find there associations of several motives within the same frieze, surprisingly close to painted decorations of Ulug-depe ceramic.

### Funeral practices

During the Early Iron Age, burials disappear in the sedentary populations of Central Asia, perhaps under the influence of mazdean religion (Lhuillier 2010). However in Ulug-depe, some discoveries dating from the Iron age (Yaz I-III) were made.

Human «scattered» rests (isolated bones or teeth), belonging to about fifteen individuals were found associated with potsherds and animal bones in the occupation layers. Are they evidence of decarnised bodies resulting from zoroastrian practices? It is difficult to be categorist, but it is very probable, because among these bones, a left humerus presents obvious traces of decarnisation (Bendezu-Sarmiento 2006).

Several graves were also excavated, in particular one of child-grave coming from a context dated from the Middle-Late Iron age (Yaz II – III). Very few graves of this period are known in Central Asia. In our case, this grave belong to a 2-4 years old child (according to the dental study) inhumated inside a silo, near houses of trench 3. The position of the body is special, because he was in ventral decubitus in the upper part, with arms bent against the thorax and the lower part brought back behind, in a position far from being natural (feet almost touch the skull). It is obvious that this child has received an unusual treatment, as it was the case for two other contemporary burials found in 2004 on the site, and for others excavated during the 2010 campaign. These two 2004 graves show that the bodies had been buried without specific position or any significant ritual.

Such practices remain obscure, because they do not fit with «proto-zoroastrian» rituals of decarnisation. So how can we explain these tombs? For the moment, the question is still unsolved.

### Discussion

The excavations of Yaz I levels therefore allowed us to identify several stages of occupation and to bring to light a new corpus. The ceramic from these levels is characteristic of the painted ware cultures of the Early Iron Age in Central Asia. But it constitutes one of the most refined variants, in which an important part of vessels are painted. In the same time half of the vessels are made by wheel-throwing technique, which points out that the use of the potter-wheel or the turn-table do not completely disappeared at the end of the Bronze age. Besides, coarse vessels remain very few, until the transition of Yaz II – III period where they become frequent. At the same time, the handmade painted pottery disappeared and replaced by the wheelmade pottery. As well for the beginning of the period as for the end, this progressive change of technique is the only indicator of the transition from the Bronze Age to the Early Iron Age, then from the Early Iron Age to the Middle Iron Age. Besides, in both cases stratigraphy shows the absence of abandonment layers of and a gradual but comparatively quick transformation of the material assemblage, confirming the absence of chronological gap. Future works will be focused further on the Iron Age levels, but we can already say that Ulug-depe is one of the key sites of Central Asia to understand the sociocultural and economic mechanisms of the period.

## BIBLIOGRAPHY

- Гутлыев, Заднепровский, 1985.  
Г.Гутлыев, Ю.А. Заднепровский. Яшилдепе – эталонный памятник раннежелезного века на территории Северной Парфии, Известия Академии наук Туркменской ССР, серия обществ. наук, 1985, № 4.
- Массон, 1959.  
В.М.Массон. Древнеземледельческая культура Маргианы. – М., 1959.
- Сарианиди, 1969.  
В.И.Сарианиди. Продолжение работ на Улуг-депе, АО 1968 года. – М., 1969.
- Сарианиди, 1971.  
В.И.Сарианиди. Исследование слоев раннежелезного века на Улуг-депе, АО 1970 года. – М., 1971.
- Сарианиди, 1972.  
В.И.Сарианиди. Раскопки 1970 г. на Улуг-депе, Успехи Среднеазиатской Археологии, № 1. – Л., 1972.
- Сарианиди, 1972.  
В.И.Сарианиди. Раскопки Тилля-тепе в Северном Афганистане. – М., 1972.
- Сарианиди, 1989.  
В.И.Сарианиди. Храм и некрополь Тилля-тепе. – М., 1989.
- Сарианиди, Качурис, 1968.  
В.И.Сарианиди, К.А.Качурис. Раскопки на Улуг-депе, АО 1967 года. – М., 1968.
- Bendezu-Sarmiento, 2006.  
J. Bendezu-Sarmiento. «Pratiques funéraires à Ulug-depe», Dossiers d'Archaeologie, Turkménistan, un berceau culturel en Asie centrale, n° 317.
- Bendezu-Sarmiento in press.  
J.Bendezu-Sarmiento. «La morfología y la evolución de los centros urbanos del Asia Central a la edad de Bronce (III-II milenio a.d.C.). Las primeras ocupaciones del territorio de la Bactriana y la Margiana», in W. Sanders, A. Garcia Cook, R. Cobean & E. Taladoire (dir.), Urbanism in Mesoamerica, Pennsylvania State University.
- Boucharlat, Francfort, Lecomte, 2005.  
R.Boucharlat, H.-P.Francfort & O.Lecomte, 2005. «The Citadel of Ulug-depe and the Iron Age Archaeological Sequence in Southern Central Asia», Iranica Antiqua, vol. XL.
- Dupont-Delaleuf, 2010.  
A.Dupont, Delaleuf. «Les chaînes opératoires de la céramique d'Ulug-dépé (Turkménistan) du Chalcolithique moyen à la période achéménide», Les nouvelles de l'Archéologie, n° 119.
- Lecomte, 2007.  
O.Lecomte. «Entre Iran et Touran, recherches archéologiques au Turkménistan méridional (2001-2006)», Comptes rendus des séances de l'année 2007, Académie des Inscriptions et Belles-Lettres, Paris: Diffusion de Boccard.
- Lecomte, Francfort, Boucharlat, Mamedov.  
O.Lecomte, H.-P.Francfort, R.Boucharlat & M.Mamedov. «Recherches archéologiques récentes à Ulug Dépé (Turkménistan)», Paléorient, vol. 28/2.
- Lhuillier, 2010  
J.Lhuillier. Le phénomène des «cultures à céramique modelée peinte» en Asie centrale dans l'évolution et la transformation des sociétés de la fin de l'âge du Bronze et du début de l'âge du Fer (IIe-Ier millénaire avant n.è.). Une synthèse comparative et régionale de la culture matérielle, PhD, Université Paris I Panthéon-Sorbonne.
- Lhuillier in press.  
J.Lhuillier. «L'habitat peut-il caractériser une hiérarchie sociale? Un exemple polémique : Les cultures du début de l'âge du Fer en Asie centrale», in O. Brunet & Ch.-E. Sauvin (dir.), Les marqueurs du pouvoir, Actes de la quatrième journée doctorale d'Archaeologie de Paris I, Archaeo.doct n° 3, Presses Universitaires de la Sorbonne.
- Lhuillier & Francfort in press.  
J.Lhuillier & H.-P.Francfort. «La céramique de l'âge du Fer ancien (Yaz I) à Ulug-depe», in O. Lecomte (dir.) Les huit premières campagnes de fouille de la MAFTur à Ulug-depe.

**Ulugdepäniň  
konserwirlenen bölegi**

*Ulug-depe.  
Citadel after preservation of  
the opened walls*

*Цитадель Улуг-депе после  
консервации раскопок*



H. Bendezu-Sarmýento, J. Luillir

### **Türkmenistan demir asyrynda: Köpetdag etegindäki Ulugdepe ýadygärligi**

Türkmen-fransuz arheologik topary 2001-nji ýyldan bäri Köpetdag eteginde Duşak obasynyň golaýynda ýerleşýän Ulugdepe ýadygärliginde gazuw-agtaryş işlerini amala aşyryp gelýär. Ulugdepe Merkezi Aziýanyň çäginde ýerleşýän ýadygärlikleriň içinde bürünç we demir asyrlaryň gatnaklaryny jemleýän seýrek duş gelýän ýadygärlikleriň biridir. Irki demir asyry aýratyn wajyplyga eýedir. Türkmen-fransuz arheologik toparynyň soňky ýyllarda geçiren meýdan barlaglary Köpetdag etek sebitlerine degişli bolan irki demir asyryň medeniýetine düşünmäge ýardam berer.

Şäherlerden öňki siwilizasiýanyň (ýagny, Oks siwilizasiýasy) bürünç asyryň soňunda (b.e. öňki II müňýyllygyň ikinji ýarımı) weýran bolmagynyň sebäpleri henize çenli jedelli meseleleriň biri bolup galýar. Ariýleriň ýa-da hindi-ariýleriň migrasiýasyna degişli bolan soraglar açyklygyna galýar. Soňky ylmy-barlaglaryň beren netijelerine laýyklykda andron çarwa taýpalarynyň çölden gelip bu ýerleri eýelemegi, Oks siwilizasiýasynyň weýranlygyna

getirdi. Şäherler ilat tarapyndan taşlanyldy, täze oazisler özleşdirilip başlanýar. Giçki bürünç asyry senetçiligiň we daşky söwda gatnaşyklarynyň pese düşmegi bilen häsiýetlenýär. Biziň eýýamymyzdan öňki 1450–1300-nji ýyllar töweregi (Ýaz. I) demir asyryň medeniýetiniň ösüşi oazislerde oba ýerleriň aýaga galmagy bilen häsiýetlidir. Bu oturymly ýerlere kerpiç terrasanyň üstünde gala gurmak mahsusdyr. Öňki döwrüň medeniýetinden esasy tapawudy – ak reňkli fonuň ýüzünde gyzyl geometrik nagyşlar bilen bezelen, elde ýasalan keramikanyň ýaýramagydyr. Ikinji häsiýetli aýratynlygy – mazarlarda jaýlamak däbiniň ýitip gitmegidir.

Ulugdepede irki demir asyryň gatnaklary 2004-nji we 2008-nji ýyllarda ýüze çykarylpydy. Ekspedisiýanyň geljekki ylmy-barlag işleri demir asyryň gatnaklarynyň öwrenilmegine gönükdiriler. Ulugdepaniň Merkezi Aziýa ýadygärlikleriniň içinde demir asyryda bolup geçen sosial-medeni we ykdysadyýet özgerişliklerine düşünmek üçin iň wajyp obýektleriň biridigi jedelsizdir.

X. Бендезу-Сармьенто, Дж. Луиллир

### **Железный век в Туркменистане: городище Улуг-депе в предгорьях Копетдага**

Туркмено-французская археологическая экспедиция с 2001 г. осуществляет раскопки на городище Улуг-депе, расположенном у поселка Душак в предгорьях Копетдага. Улуг-депе – это одно из редких городищ Центральной Азии, на котором представлены как слои бронзового, так и железного века. Ранний железный век имеет особое значение, и полевые исследования, выполненные туркмено-французской экспедицией за последнее время, способствуют лучшему пониманию этого периода в прикопетдагском регионе.

Причины краха прото-городской цивилизации (т.е. цивилизации Окса) и конца бронзового века (во втор.пол. II тыс.до н.э.) – все еще спорная проблема. Вопрос о миграциях арийцев или индо-арийцев остается открытым. Согласно недавним исследованиям, «вторжение» кочевых групп андроновцев из степей вызвало упадок цивилизации Окса. Города обезлюдели, стали обживаться оазисы. Поздний бронзовый век определяется ухуд-

шением качества ремесленного производства и исчезновением торговли на длинные расстояния. Подъем же культур железного века (Яз I) приблизительно в 1450–1300 гг. до н.э. выражается в появлении сельских поселений, разбросанных по оазисам. Эти поселения характеризуются цитаделью, возводимой наверху кирпичной террасы. Главное отличие от предыдущего периода – изготовление особой керамики ручной работы, украшенной красными геометрическими узорами по светлому фону. Другая характерная особенность – исчезновение традиции погребения в могилах.

Слои раннего железного века были выявлены на Улуг-депе в 2004 и 2008 гг.

Будущие работы экспедиции будут сфокусированы на слоях железного века, но уже сейчас можно говорить о том, что Улуг-депе является одним из ключевых центральноазиатских городищ для понимания социо-культурных и экономических механизмов этого исторического периода.