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GERMAN ARCHAEOLOGICAL ACTIVITIES IN TURKMENISTAN

The rich history of Turkmenistan contains historical and cultural monuments from various eras. In modern Turkmenistan, great attention is paid to scientific and educational development. This positive factor attracts the attention of scientists and research centers around the world, particularly Germany and its researchers. From 1905, when famous archaeologist Hubert Schmidt took part in excavations of Anau and Merv, to the German archaeologists following Turkmenistan's independence in 1991, these scholars actively participate in archaeological excavations in Turkmenistan. Noteworthy is the center from the Eurasian Department of the world's oldest German Archaeological Institute (Berlin) and the Institute for Near Eastern Archaeology at the Free University of Berlin. Another good example of German-Turkmen scientific contacts involved an exhibition of Bronze-Age artifacts from Gonur-depe in Berlin, Hamburg, and Mannheim. One of the goals of these exhibitions addressed the large number of potential tourists coming to Turkmenistan to familiarize themselves with the modern country. While, to date, no exhibitions displaying Turkmenistan's overall heritage have been shown abroad, these archaeological exhibitions were an opportunity to portray the historical and artistic achievements of this great civilization for a large audience in Germany.

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IN MODERN Turkmenistan, great attention is paid to scientific and educational development. This positive factor attracts the attention of scientists and research centers from many countries of the world, in particular Germany, which a world leader in its number of research centers (Fig. 1). Some of these centers include the Eurasia Department of the German Archaeological Institute (the world's oldest such institute), and the Institute for Near Eastern Archaeology at the Free University of Berlin.

The First Stratigraphic Excavations in Turkmenistan: Anau and Hubert Schmidt

In the late 19th century, modern Turkmenistan was conquered by the Russian Empire. Between 1903-1904, the archaeological expedition from the Carnegie Institution of Washington (now the Carnegie Institution for Science, Washington, D.C.), under the direction of Raphael Pumpelly (1837-1923), and with permission from the Russian Imperial Archaeological commission (St. Petersburg), conducted an archaeological survey followed by excavations in Anau (northern and southern mounds) and in the Merv region (Erk-kala), thus, being the first archaeological excavations in Turkmenistan during the 20th century.

Pumpelly first tested his "oasis hypothesis" based on data from the northern mound of Anau (Anau North), which was one of the first formal attempts to archaeologically test a theory of social development. He hoped to identify cultural material at the site of Anau which would predate early civilization in Mesopotamia supporting his theory that the oasis setting of Central Asia was the birthplace of agriculture and complex society. He proposed that the Central Asian prehistoric world slowly retreated from the expanding deserts, causing local populations to shift from hunting to herding and eventually from villages to cities (*Pumpelly* 1908: 1-80). Anau North has been used as an example to evaluate the role environment plays in cultural development. This concept was led by Ellsworth Huntington (1876-1947) (*Huntington* 1919) who visited Central Asia as a member of Pumpelly's team and later inspired V. Gordon Childe

Fig. 1. Part of map of Turkmenistan with the archaeological sites mentioned in the article.

(1892-1957) with his oasis hypothesis in the development of civilization (*Childe* 1953).

The archaeological excavations conducted in 1904 at Anau and Merv were supervised by a renowned German archaeologist, Hubert Schmidt (1864-1933), since Pumpelly himself was a geologist. Schmidt was a famous prehistoric scholar, curator at the prehistoric department of the Berlin museums which participated at the excavations of Troy. Schmidt's Turkmenistan excavations (*Schmidt* 1908: 81-210; *Schmidt* 2003: 174-193) employed measurement methods and systematic recording of specific data, and, particularly, he was the first to collect palaeobotanical samples anywhere in the world of archaeology to that point. All this laid the foundation for archaeological practice in modern Turkmenistan.

Fig. 2. Anau mounds. At the front is Anau North, further is Anau South. Photo: Aydogdy Kurbanov

In 1907, Pumpelly again planned to return to the Transcaspian region (Zakaspiyskaya oblast) to continue work in Anau, but due to the uprisings in the Russian Empire from 1905-1907, his request was denied. Nevertheless, the expedition's work was chronicled in *Explorations in Turkestan: Expedition of 1903* (*Pumpelly*, ed., 1905) and the two-volume book *Explorations in Turkestan. Prehistoric Civilizations of Anau*, published in Washington (*Pumpelly* ed., 1908).

Eventually, in archaeological literature, the "Anau culture" became synonymous with the earliest settled cultures of the central Kopet Dag region and the use of the Anau sequence was important for establishing the relative stratigraphy of Central Asia and Iran.

In commemoration of the centennial anniversary of this significant archaeological mission, an international scientific conference was held in Ashgabat on October 22-23, 2004. Many of the world's scholars participated in the conference, including those from Germany. Also, that same year, the proceedings were translated into Turkmen and published as a monograph in Ashgabat under the title "*Türküstandaky derňew işleri.* Änewiň *gadymy* ösüşi" (*Exploration in Turkestan: Prehistoric Civilizations of Anau*) of 1908 (*Pumpelly (ed.)* 2004).

Gonur-depe – The Lost town in the Desert

Approximately 80 km east of present-day Mary and 70 km east of ancient Merv, the UNESCO World Heritage Site, Gonur-depe (Turkmen meaning *Grey Mound*) is situated in the Karakum desert. This important Central Asian Bronze Age settlement is the location archaeologists discovered residential areas, necropolises, and an imposing palace complex located in a well-connected commercial center with complex administrative structures.

This region, known by the historical name, Margush, or, in ancient Greek, Margiana, formed the south Turkmenistan core for the BMAC (Bactria Margiana Archaeological Complex or Culture), also referred to as the "Oxus civilization." It extended from today's Turkmenistan, across southern Uzbekistan all the way to northern Afghanistan. This still largely unknown advanced early civilization, with its urban phase between 2300 and 1600 BCE and a late phase extending until 1200 BCE, was only discovered in the late 1960s in northern Afghanistan and maintained close contact with Iran, Mesopotamia, and the Harappa culture. The first traces of Bronze Age sites in the Karakum Desert emerged as early as the 1950s. However, the systematic exploration of this area began only after the discovery of this new urban civilization in the 1970s. Since then, extensive surveys and excavations have revealed many oases with over 300 large, medium, and small-sized Bronze Age sites. Notably, BMAC sites possessed planned and highly symmetrically arranged architecture in comparison to other proto-urban sites in the piedmont strip of southern Turkmenistan such as Altyn-depe (*Masson* 1981; *Kohl* 2007).

Gonur-depe was the most important of the BMAC ancient settlements, since it produced the longest period of settlement (over 700 years). Furthermore, it has been the focus for the longest history of research. The site is not only the central place of the "Gonur oasis" with its 21 sites, but also is considered the religious and administrative capital for the entire region during that era. Gonur-depe was first investigated in 1972 by the famous Soviet (Russian) archaeologist Viktor I. Sarianidi (1929-2013), who opened initial excavations at the site that year and in 1974. Extensive excavations began in 1988 and continue to the present. Sarianidi called it "the city of kings and gods," reasonably suggesting that such an extremely developed, complex settlement was probably ruled by a priest-king, that is, a leader who combined administrative, military, and spiritual power (*Sarianidi* 2002; *Sarianidi* 2005).

The site consists of three parts: First, a large Middle Bronze Age city (Gonur North), whose center is a huge building inside a so-called "kremlin;" second, an associated Middle Bronze Age necropolis with approximately 3000 burials west of the abovementioned palace; and third, a Late Bronze Age palace complex (Gonur South), called the *temenos*. Gonur North, abandoned by then, served as the Late Bronze Age burial site (*Sarianidi* 1990; *Sarianidi* 2001). Gonur-depe North was probably the economic and political center of Margiana, reaching a size of 40 ha at the end of the third millennium with a form of hierarchy or political administrative dominance. This situation collapsed during the subsequent Late Bronze Age, when the occupation at Gonur-depe South is estimated only at about 5 ha, with no single political administrative center for the area (*Kohl* 2007).

Despite the extensive research and numerous publications by Sarianidi, many detailed questions remain unanswered. For example, the controversial interpretation of some buildings and well-documented sequence layers have not yet been published; and numerous questions concerning daily life (settlement structure, economic basis, long-distance trade, intellectual ideas, etc.) have not yet been totally clarified.

In the early 1990s the German archaeologist Dr. Thomas Götzelt was part of the Margiana expedition (*Götzelt* 1996). Materials of the architecture of Gonur and other settlements of Margiana of the Bronze Age were also analyzed by prof. Dietrich Huff of the Eurasian Department of the DAI (*Huff* 2001). In 2010, his his junior colleague Dr. Nikolaus Boroffka participated in the Gonur-depe excavations. He initially

Fig. 3. Gonur-depe. View from the air. At the front is temenos, further is palace. Photo: Suleyman Charyev

excavated sector 18, identified during the spring field season, with the aim of solving some of the above-mentioned questions. The excavation continued into the spring season of 2012 (*Boroffka* 2014: 15-24; *Sarianidi* et al. 2010: 33-37; *Sarianidi* et al. 2012: 1-17; *Boroffka* 2010: 258-265; *Boroffka* 2012: 64-67; *Sarianidi* et al. 2014: 127-137).

Boroffka also excavated sector 19 (north of the enclosure wall), and extended into the outer settlement, Gonur 20 (located about 1.5-2 km south of the central city); conducting field surveys around the central settlement. Approximately 30 settlement sites were discovered during the survey within a radius of about 10 km from the central urban complex. In sector 19, several looted grave mausoleums were noted by their complex structure containing several chambers. One chamber contained whole animal sacrifices as part of its inventory, including dogs, sheep, and donkeys with precious metal, faience, and ivory finds within the burials. In the outer settlement of Gonur 20, multi-roomed houses and some graves were investigated. Most of the pottery found in this location was wheel-made, however, there was also a significant quantity of handmade vessels. Additionally, some metal tools and seal-amulets were discovered (*Boroffka* 2017: 96-97).

Following the Margiana expedition, the Institute for Archaeological Sciences of the University of Bern (Switzerland) with financial support from the Society for the Exploration of Eurasia (Switzerland) and at the invitation of the Russian Academy of Sciences; an initial joint research project (headed by Dr. Nadezhda Dubova and eventually published as "Urban Development and Land Use in Gonur-depe") was conducted September 15-27, 2014. The joint project under the direction of archaeologist Dr. Sylvia Winkelmann from Germany, examined previously unexcavated areas of Gonur-depe and its immediate surroundings using non-invasive research technology.[1] These methods included remote sensing through evaluating satellite images combined with geophysical surveys (including electromagnetic, magnetic, and ground penetrating radar). These methods allowed for the mapping of structures beneath the earth's surface (e.g. buildings, roads, channels or furrows), in combination with common systematic surveys. The results were compiled in a Geographical Information System (GIS). The geomagnetic sensing was conducted by GGH-Solutions in Geosciences Freiburg (Germany). The results were published in the articles by Dubova and Hübner (*Dubova* et al. 2018: 87-92 and *Hübner et al* 2019: 55-61).

"Household archaeology" and Correlations to the Chronology of Archaeological Periods of Central Asia: The Monjukli Project.

In 2010, scholars from the Institute for Near Eastern Archaeology of the Free University of Berlin (Prof. Reinhard Bernbeck and Prof. Susan Pollock), together with their Turkmen colleagues, began excavations at the Neolithic and Chalcolithic site of Monjukli-depe, located in the Akhal welayat (province) of Turkmenistan.

Fig. 4. Monjukly-depe. Excavation works. Photo courtesy "Monjukly team"

Monjukli-depe refers to sites of the Jeitun culture. This culture flourished in the foothills of the Kopet Dag during the 6th-5th millennia BCE and contributed to the development of the region's early civilizations. The main group of this culture's sites are located between the mountain gorges of the central Kopet Dag and the sands of the Karakum Desert. At this location during this period the earliest settled agriculture in Central Asia was born through the establishment of cattle-breeding farms. The earliest buildings – one-room dwellings – were built from adobe bricks mixed with straw. The most well-known sites, in addition to Jeitun itself, are also Chagylly-depe, Monjukli-depe, Pessedzhik-depe, Togolok-depe, and New Nisa (*Kurbanov* 2021: 505-518).

The joint German-Turkmen archaeological expedition's goals was supposed included investigating both Jeitun (Neolithic) and Anau IA (early Chalcolithic) occupational sequences. This multi-year project sought to address broad issues such as technological change in the region during the Neolithic and Chalcolithic periods; systematic collection of floral and faunal data; the understanding of potential socio-economic distinctions among the inhabitants of Monjukli-depe; and obtaining a reliable chronology. One central goal of the Monjukli research team was to identify different cultural techniques at Monjukli-depe and to analyze their changes and variability both diachronically and synchronically. It focused primarily on the *Kulturtechniken* of pyro-technologies, human-animal relations, construction activities, and burial practices.

Fig. 5. Monjukly-depe. Prof. R. Bernbeck descends in to the stratigraphic pit. Photo: Khasan Magadov, 2010

Another goal examined "household archaeology" combined with chronology: How did households develop through time (from the Neolithic to Chalcolithic periods) and what were their internal groupings in these villages (i.e. a differentiation between smaller/

larger groupings)? The excavation concluded in 2014 (*Pollock* et al. 2011; *Pollock* et al. 2012: 15-19; *Pollock, Bernbeck* 2019: 33-80). One of the most important results of the Monjukli excavations were that the radiocarbon dates indicated a hiatus of about 800 years between Neolithic Monjukli (6200–5600 cal BCE) and Chalcolithic Monjukli-depe (4800–4350 cal BCE) (*Bernbeck, Pollock* 2016, 69–71; *Pollock, Bernbeck* 2019, Tab. 2.2; *Heit* 2019: 81-106). The upper Chalcolithic layers yielded pottery with different painted motifs and older radiocarbon dates than those known from other sites of the early Chalcolithic Anau IA period. This Chalcolithic phase at Monjukli-depe was attributed to a new period between the Neolithic Jeitun and Anau IA horizons, which was named the "Meana Horizon" (*Bernbeck, Pollock* 2016, 69–71).

Radiocarbon dates for the lower Neolithic Monjukli-depe layers initially suggested a date of c. 6375–5900 cal BCE (Pollock et al. 2011, 174, 183–84), but this was later revised to 6200–5600 cal. BCE (Pollock, Bernbeck 2019, Tab. 2.2). I. Heit analyzed the valid radiocarbon dates (87 in total, except for the lowest Monjukli-depe levels of X-IX) and revised the chronological sequence for the Neolithic and early Chalcolithic periods at the site. Based on these radiocarbon dates, it is possible to date the Jeitun culture between ca. 6200 to ca. 4800 cal. BCE (*Heit* 2019: 20-23; *Heit* 2019: 81-106).

Three chronological periods can be attributed to the Jeitun culture – dubbed early, middle, and late Jeitun – based on changes in pottery forms and motifs as well as the composition of the lithic industry and architecture. They are delineated as follows:

1) Early period: The early Jeitun period was subdivided into two phases; 1A and 1B. Phase 1A includes the lower horizons of the Jeitun site, horizons 1-3 of Chopan-depe, and the lowest horizon of Togolok-depe. Phase 1B includes the upper horizon of Jeitun, horizons 4-5 of Chopan-depe, and the two lower horizons of Togolok-depe.

2) Middle period: This incorporates the sites of Togolok-depe, Chopan-depe, New Nisa, Kantar, Kelata, Naiza-depe, Kepele, Yarty-Gumbez, Bami, Chagylly-depe.

3) Late period: This incorporates the sites at Chakmakly-depe, Pessejik-depe, Chagylly-depe, Bami Gadymi-depe, and Monjukli-depe.

Thus, Bernbeck and Pollock (*Bernbeck, Pollock* 2016: 69–71), when considering the radiocarbon dates from Chagylly-depe (6353–5845 cal BCE) and Monjukli-depe (6200–5600 cal BCE), suggest that the "Middle" and "Late Jeitun" components in the Meana-Çaaça region are nearly contemporaneous with "Early Jeitun" at Jeitun itself. Monjukli-depe belongs to the early period, which was clarified after obtaining the new radiocarbon dates from this site (*Pollock* et al. 2011: 169-237; *Heit* 2019: 81-106; *Heit* 2019: 20-23). A recent publication presents the results of the Monjukli excavations (*Pollock, Bernbeck, Öğüt (*eds.*)* 2019).

Finding a Prehistoric Settlement: Excavations in Dashly-depe

In May 2011, a brief joint survey by N. Boroffka (Eurasia Department of the German Archaeological Institute, Berlin) and A. Kurbanov, at that time head of the archaeological department of the Institute of Archaeology and Ethnography of the Academy of Sciences of Turkmenistan, examined several sites around Ashgabat for archaeological reconnaissance. These included Ovlia-depe (Parthian settlement), Shor-depe (Sasanian period fortress), and they (re-)identified Dashly-depe as a prehistoric site. The surface pottery form this site dated to the early Chalcolithic (Anau IA/Namazga I), while early Iron Age pottery (Yaz I type) was not found at all. Rather, wheel-made pottery with a light beige color was revealed which is quite typical of Bronze Age (Namazga V-VI) and well known throughout most of Turkmenistan, especially from such sites as Altyn-depe, Gonur-depe or Togolok (*Masson* 1981; *Sarianidi* 1990).

Dashly-depe lies in the center of Yzgant in the Akhal welayat (province) of Turkmenistan. It is situated on the floodplain north of the Kopet Dag Mountains, about 35 km northwest of Ashgabat, today's capital of Turkmenistan. The mound visible today measures ca. 100×150 m, is oval-shaped with a north-south direction and a preserved height of approximately 3 m. The upper layers have been damaged by various works during modern times, and parts of the mound have been disturbed due to exploitation of the clay for building material. It is very likely that the mound is, in fact, considerably larger with much of it buried by alluvial sediments which cover the entire plain.

The site is seldom mentioned in older archaeological literature: (*Khlopin* 1960: 134-224; *Khlopin* 1963; *Lisitsyna* 1978; *Kohl* 1984: 16, 213). Researchers dated it to the Anau IA – Namazga I period (earliest Chalcolithic) and to the Anau IV period (earliest Iron Age, now mostly called Yaz I).

The subsequent excavations (2012-2013) confirmed that this site was probably much bigger and more important than initially thought and was last settled during the Bronze Age. However, the upper levels were mostly destroyed. Below this is a long sequence of Chalcolithic layers with hand-made pottery sometimes containing painted ornaments. It also has architectural remains built from mud brick. Initial radiocarbon dates from these cultural layers,

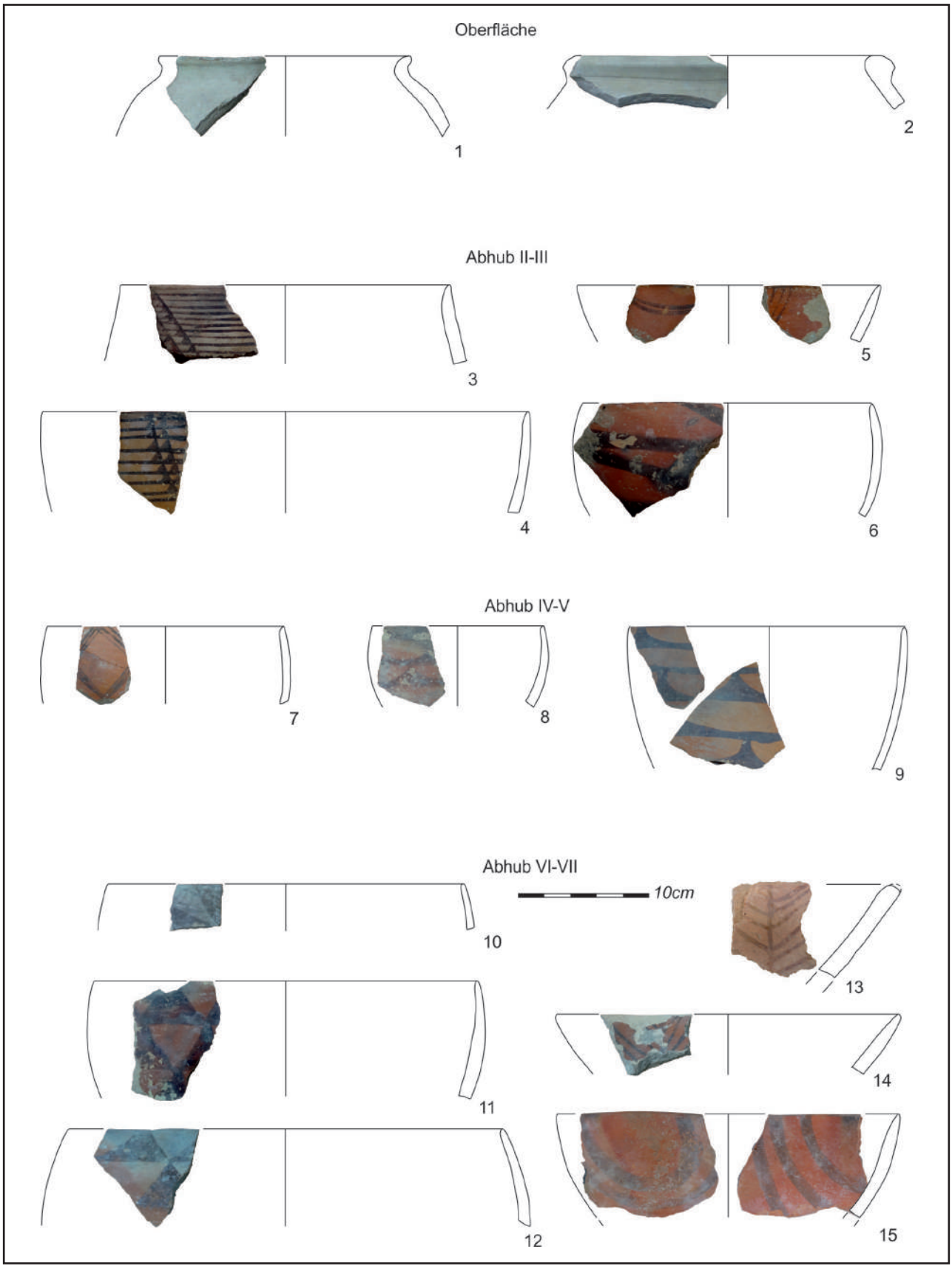

Fig. 6. Dashly-depe. Pottery selection according to excavation slice (Roman numerals, top to bottom). Drawings and figure composition by R. Boroffka.

Fig. 7. Dashly-depe seen from the north. Photo: Aydogdy Kurbanov

analyzed in the Poznan Laboratory (Poland) with assistance from the Eurasia Department of the German Archaeological Institute (Berlin) provide very similar dates: 5120±40 BP (Poz-64424), 5155±35 BP (Poz-53460) and 5120±40BP (Poz-64425). These dates, once calibrated, yielded calendar dates of 3991-3797 BCE, 4043-3936 BCE and 3991-3797 BCE. The results confirmed these layers of the site as being from the Chalcolithic Age (*Kurbanov, Boroffka* 2019: 50-53; *Kurbanov, Boroffka* 2022: 31-33). Since these samples do not come from the deepest cultural layers and the sterile ground beneath has yet to be reached by excavation, the beginnings of this settlement must lie even earlier, presumably back to the Neolithic. Presently, the area of excavation is too small for additional information.

Dashly-depe is an important site, which seems to span the Neolithic-Chalcolithic transition in the piedmont of the central Kopet Dag. The radiocarbon dates provide important new data and emphasize the likelihood that this site probably began during the Neolithic (Jeitun) period, either simultaneously or possibly before the sequence at Anau North. The layers excavated thus far chronologically overlap with all the early periods of Anau (late 5th – 4th millennia BCE). In the Chalcolithic periods (Namazga I-II), life appears to have continued without any visible major interruption from the older layers and, therefore, this transition phase studied at Dashly-depe reveals a very rare situation in Central Asia (*Boroffka, Kurbanov* 2015: 38-55; *Kurbanov, Boroffka* 2022: 21-34; *Kurbanov, Yagshymyradov* 2015: 40-43).

Dashly-depe, during the early Chalcolithic period (Namazga culture), was a large settlement and promises to provide new information about agriculture and stockbreeding, along with handicrafts, along with the daily and spiritual life of the people from that period. It could also provide information concerning contacts with the contemporaneous cultures from the Sumbar region in western Turkmenistan.

During the 2018 excavation season, pottery like the material from the Yaz II period was discovered in a trench at the top of the mound. After several seasons, Dashly-depe, a unique site in this region, demonstrates a chronological sequence from the Chalcolithic period up to the Early Iron Age (*Kurbanov, Boroffka* 2019: 26-28; *Kurbanov, Boroffka* 2022: 33). If larger surface areas are opened, new information on architecture and settlement planning will also become available.

Opening Heritage to the World: The First Exhibitions of Archaeological Artifacts of Turkmenistan Shown Abroad

Another good example of German-Turkmen scientific contact was an exhibition in Berlin, Hamburg, and Mannheim of Bronze Age artifacts from Gonur-depe. One of the exhibition's goals addressed the possibility of large numbers of future tourists coming to Turkmenistan and to familiarize Germany with modern-day Turkmenistan. Although to date, no exhibitions concerning Turkmenistan's modern heritage have been shown abroad; this archaeological

exhibit provided an opportunity to portray the historical and artistic achievements of a great ancient civilization for a large audience in Germany.

The 250 archaeological objects from Margiana, or the BMAC culture in general—all on loan from Turkmenistan museums—are impressive in and of themselves and remain largely unknown to the western world. Several seem almost timeless, beautiful items that included such artifacts as hand mirrors, cosmetic vessels, gold and silver jewelry, or items made of lapis lazuli. Others appear strange and touching, such as the countless small animal and human figurines with their expressive faces, as well as historical water pipes used in irrigation systems through which water was distributed for irrigation and drinking. The Gonur-depe elite were buried in so-called "royal" tombs comprised of large underground houses made of adobe brick. Inside the tombs magnificent grave goods were found, including finely worked mosaics, gold and silver vessels, and the remains of four-wheeled wagons.

For the first time outside Turkmenistan, Margiana's archaeological evidence was accessible to the general public at a large-scale exhibition, entitled "Margiana. Ein Königreich der Bronzezeit in Turkmenistan" in the Neues Museum, Berlin (April 25-October 10, 2018); the Archaeological Museum, Hamburg (November 2, 2018-February 17, 2019); and the Reiss-Engelhorn-Museums, Mannheim (March 10-June 16, 2019); in cooperation with the Turkmenistan Ministry of Culture. Funding was provided by the Federal Government Commissioner for Culture and Media, Deutsche Bank AG, and Siemens AG.

In addition to a detailed catalog section for all exhibits, the accompanying book *Margiana. Ein Königreich der Bronzezeit in Turkmenistan* (*Wemhoff et al.* 2018) contained contributions from international scholars on the archaeology of Turkmenistan with summaries in the Turkmen language and accompanying photographs by the well-known photographer Herlinde Koelbl. She traveled with German museum

Fig. 8. "Margiana. Ein Königreich der Bronzezeit in Turkmenistan" exhibition poster. Neues Museum Berlin. Photo: Aydogdy Kurbanov

employees and the German Archaeological Institute in January 2018 to Turkmenistan. The result was a fascinating set of photographs of the country and its inhabitants, impressive natural landscapes, as well as photographs of archaeological and historical monuments.

Conclusion

Within the past few years, conferences discussing recent research and the archaeological heritage of Turkmenistan were organized in Ashgabat and Mary. Archaeologists from the German Archaeological Institute in Berlin and the Institute of Archaeology of the Near East of the Free University of Berlin gave presentations on the most important prehistoric sites in Turkmenistan. They also held two seminars in Berlin in 2012 and 2014 on the most ancient periods of Turkmenistan's history and Central Asia as a whole. It seems apparent that presentations to a larger worldwide audience of the country's cultural heritage would strongly spur interest in Turkmen culture and Turkmenistan as a whole.

In 2013, scientists from the Eurasian department of the German Archaeological Institute (Berlin), headed by the director Prof. Svend Hansen, visited Turkmenistan to get closer acquainted with the ancient archaeological sites of Turkmenistan. In addition, prospects for further cooperation were discussed. The result was the signing of a memorandum of cooperation between the scientific centres of Turkmenistan and the Eurasian department of the German Archaeological Institute.

It should be noted that the results of archaeological research have been published in well-known scientific journals in Germany, Turkmenistan, as well as in a number of European countries. All this undoubtedly contributes to a broader understanding of the history of Turkmenistan. Within the framework of the agreement, it is also planned to train scientists of Turkmenistan in German research institutes, where they will provide opportunities to familiarize themselves with the latest methods of excavations and conservation of sites.

In general, cooperation between Turkmen and German scientists provides an invaluable contribution to the study of the rich historical and cultural heritage of Turkmenistan, opening new, hitherto unknown pages.

Fig. 9. "Margiana. Ein Königreich der Bronzezeit in Turkmenistan" exhibition poster. Archaeological Museum Hamburg. Photo: Aydogdy Kurbanov

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