

Settlement mound Tepecik and the Karaz culture in Eastern Anatolia

Hatice Gönül Yalçın

Institute for Archaeological Sciences, Ruhr University Bochum, Deutsches Bergbaumuseum Bochum, Bochum, DE
goenuel.yalcin@bergbaumuseum.de

ABSTRACT – *The longevity of the Kura-Araxes culture is an archaeological phenomenon in the Caucasus and Near East. Over the course of a millennium, this culture spread from its origins in Eastern Anatolia, the Transcaucasia and northwest Iran to Southeastern Anatolia, northern Syria, Palestine and Israel. Named after the settlement mound Karaz near Erzurum, the Karaz culture is a widely established Turkish term for the Kura-Araxes culture. In Palestine and Israel, this culture is called Khirbet-Kerak. Apart from the striking small finds and special architectural features, it has a special pottery with characteristics that remained almost uniform in its area of distribution. Situated in the Altınova plain in Eastern Anatolia, Tepecik was also home for this significant culture. Today, this settlement mound lies under the waters of the Keban Dam in Elazığ. Yet its strategic location on a tributary of the Euphrates enabled the emergence and development of various cultures. At this settlement, archaeologists documented the Karaz culture that occurred in an almost unbroken cultural sequence from the Late Chalcolithic up to the beginnings of the Middle Bronze Age. Thus, Tepecik is one of the most significant prehistoric settlements within the distribution area of the Kura-Araxes/Karaz/Khirbet Kerak culture in the Near East. This paper presents the Karaz pottery from Tepecik as well as the possible development of the Karaz culture in the course of the Early Bronze Age at this settlement.*

KEY WORDS – *Late Chalcolithic; Early Bronze Age; Kura-Araxes/Karaz/Khirbet Kerak culture; Karaz pottery; Keban Dam Project; Tepecik*

Naselbinska gomila Tepecik in kultura Karaz v vzhodni Anatoliji

IZVLEČEK – *Dolgoživost kulture Kura-Araxes je arheološki fenomen na območju Kavkaza in Bližnjega vzhoda. Skozi tisočletje se je ta kultura razširila od izvornih območij v vzhodni Anatoliji, v Zakavkazju in v severozahodnem Iranu do jugovzhodne Anatolije, severne Sirije, Palestine in Izraela. Kultura Karaz je bila poimenovana po naselbinski gomili Karaz pri Erzurumu in predstavlja dobro uveljavljen turški termin za kulturo Kura-Araxes. V Palestini in Izraelu pa se ta kultura imenuje Khirbet-Kerak. Poleg presenetljivih majhnih najdb in posebnih arhitekturnih značilnosti ima kultura še posebno lončenino z značilnostmi, ki so ostale skoraj nespremenjene na celotnem območju razširjenosti. Najdišče Tepecik, ki se nahaja v nižini Altınova v vzhodni Anatoliji, je prav tako predstavljalo dom tej pomembni kulturi. Danes je celotni najdišče pod vodo za jezom Keban v pokrajini Elazığ. Strateška lega naselbine na pritoku Evfrata je omogočila nastanek in razvoj različnih kultur. Tukaj so arheologi dokumentirali kulturo Karaz, ki se pojavlja v skoraj nepretrgani kulturni sekvenci od poznega halkolitika do začetka srednje bronaste dobe. To postavlja Tepecik na mesto ene bolj pomembnih prazgodovinskih naselbin znotraj območja razširjenosti kulture Kura-Araxes/Karaz/Khirbet Kerak na Bližnjem vzhodu. V članku predstavljamo lončenino tipa Karaz iz Tepecika kot tudi možen razvoj kulture Karaz v času zgodnje bronaste dobe na najdišču.*

KLJUČNE BESEDE – *pozni halkolitik; zgodnja bronasta doba; kultura Kura-Araxes/Karaz/Khirbet Kerak; lončenina tipa Karaz; projekt jeza Keban; Tepecik*

Preface

The present work is a brief and updated summary of the dissertation completed in 2012 at the Philipps University of Marburg (Germany) with the title ‘*The Karaz Pottery of Tepecik in Eastern Anatolia*’, which was published in German in the same year. It is based on the excavation results of the years 1968–1974. The interim reports of these excavations have been brought out in annual Keban Project publications, yet a final evaluation is still pending. For this reason the results presented here, especially the stratigraphic and chronological interpretations, should be regarded as preliminary. However, the Karaz phenomenon has recently become the subject of archaeological investigations again. Thus, there is a need to re-examine the role of Tepecik and its Karaz pottery in an article written in English, in order to make the issues under discussion accessible to a broad scientific research community. This is especially the case when we consider that the final publication of the Tepecik is still pending, though more than fifty years have passed since the last excavations. Since the archaeological data of Tepecik is not completely accessible for researchers, insufficient and sometimes incorrect information circulates in the publications that compare some early material from Tepecik with the finds of other contemporary settlements. When writing this paper, care was taken to consider

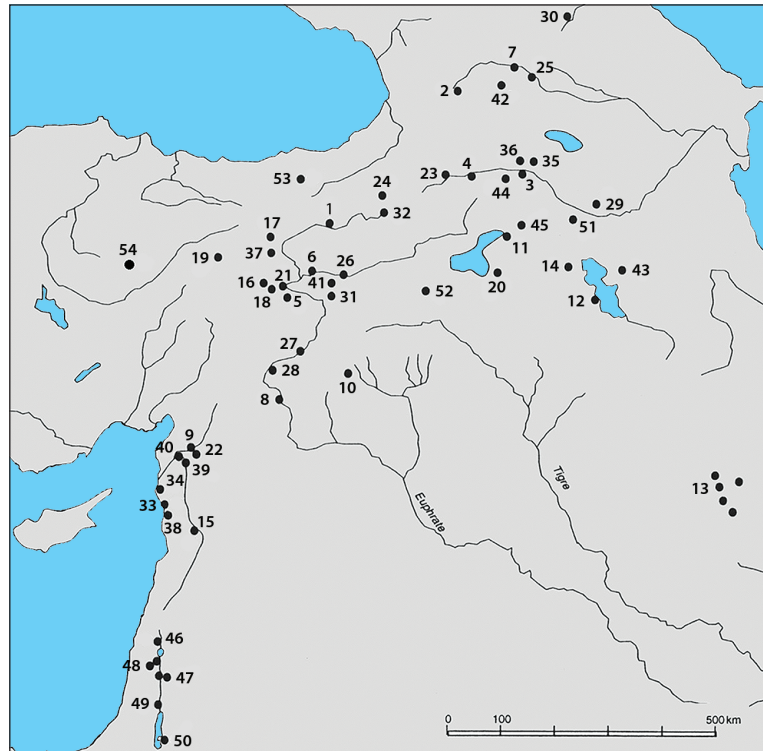
the latest literature as well as the most recent hypotheses regarding the complex interplay among the interregional cultural landscapes where this important prehistoric culture spread.

The paper is dedicated to my teacher and mentor, Ufuk Esin, head of the excavations of Tepecik and one of the most important pioneers of Anatolian archaeology, who left us far too early.

Introduction

The Karaz culture is a widely established Turkish term for the Kura-Araxes culture named after the settlement mound Karaz that is located some 16km western-northwest of Erzurum in Eastern Anatolia (*Koşay, Turfan 1959.349*). However, this Anatolian variant cannot be considered as exactly the same culture as the Kura-Araxes culture of Transcaucasia. It is rather a mixture of different cultural traditions of Anatolia, but also of the southern Caucasia in Late Chalcolithic and the Early Bronze Age (*Palumbi 2017.124–125*). Occurring in Northeastern, Eastern and Southeastern Anatolia, overarching the north central plateau of Anatolia, the Karaz culture represents a long-lived culture that persisted over one millennium (Fig. 1) (*Burney 1958; Koşay 1977; 1979; Yalçın 2012.257–298; Işıklı 201; Steadman et al. 2008; 2015*).

Fig. 1. The distribution area of the Kura-Araxes/Karaz/Khirbet Kherak culture in Transcaucasia and the Near East (Yalçın 2012). 1 Altintepe; 2 Amiranis Gora; 3 Ararat; 4 Armavir Blur; 5 Arslantepe; 6 Aşvan; 7 Beshtasheni and Tetri-Tsaqaro; 8 Kargamış; 9 Çatal Höyük; 10 Tell Chuera; 11 Ernis and Dilka-ya; 12 Goey Tepe; 13 Godin Tepe; 14 Haftavan; 15 Hama; 16 Horsatepe; 17 Hornavil; 18 Horomhan; 19 Değirmende; 20 Iremir; 21 Isaköy; 22 Tell el-Djudeyde; 23 Karakuru; 24 Karaz, Pulur, Güzelova and Sos Höyük; 25 Kiketi, Didube and Kvatzchelebi; 26 Korucutepe; 27 Hayaz Höyük and Hassek Höyük; 28 Kurban Höyük; 29 Kültepe; 30 Lugove; 31 Norşuntepe; 32 Pulur-Sakyol; 33 Kal'at err-Rus; 34 Ras Shamra; 35 Shengavit; 36 Shresh Blur; 37 Sivrikaya; 38 Tell Suqas; 39 Tabar el-Akrad; 40 Tell Tayinat; 41 Tülintepe and Tepecik; 42 Trialeti; 43 Yamk Tepe; 44 Yaycı; 45 Zülfübulak; 46 Tell es-Shuna; 47 Affula; 48 Khirbet Kerak; 49 Jericho; 50 Bad edh-Dahra; 51 Köhne Shahr; 52 Başur Höyük; 53 Alucra-Gavur Kalesi; 54 Çadır Höyük.



The Kura-Araxes/ Khirbet Kerak/ Karaz culture

The history of research, dispersal theories and dating

We owe the discovery of the Kura-Araxes culture to the wealthy archaeology enthusiasts who collected a red-black polished pottery in the Southern Caucasus region during the second half of the 19th century (*Sagona 2014b.23–24*). This pottery was the subject of archaeological research, as Boris Alekseevich Kuftin (*1941*) started to excavate in the Trialeti region and found the same pottery again. After the study of the finds in the Museum of Tbilisi in Georgia as well as the finds from the other excavations such as Beshteshani, Ozni or Shengavit, he suggested a particular dating and circulation area for this pottery (*Sagona 2014a; 2014b*). In Transcaucasia, the culture associated with this typical pottery was called Kura-Araxes, since its settlements were encountered between the rivers Kura and Araxes (*Yalçın 2012.39–42; Sagona 2014b.22–23*).

In the late 1920s, archaeologists became aware of a comparable culture in the Southern Levant, as William F. Albright (*1926*) reported on a red-black, polished pottery with striking shapes and ornaments during his investigations in Khirbet Kerak. Recorded in many Levantine settlements, the culture associated with this pottery was then called Khirbet Kerak (*Sagona 2014b.22–23*). In Southeastern Anatolia, settlements in the Amuq plain and Tabara el-Akrad on the present Turkish-Syrian border also provided similar pottery finds (*Hood 1951; Braidwood, Braidwood 1960.518*). As research progressed, it turned out that the culture and pottery found in Khirbet Kerak differ in details from the Kura-Araxes culture and pottery, as in Anatolia. Yet in this early phase of research, common roots seemed to be reasonable to the archaeologists.

In 1935, following the excavations in Alacahöyük, Hamit Z. Koşay (*1938.170, 173*) recognized similarities between the Early Bronze Age pottery found here and the Kura Araxes pottery, as well as the Khirbet Kerak ceramics, thus identifying cultural relations between Central Anatolia, Transcaucasia and the Levant. Shortly after the surveys of Kılıç Kökten (*1952*) in Northeastern and Eastern Anatolia in the 1940s and 1950s, and the excavations in the settlement mound Karaz, the presence of an Eastern Anatolian culture that showed common features with the Kura Araxes culture became obvious. Thus, for the first time the term ‘Karaz culture’ appeared (*Koşay, Turfan 1959.359, 360*). After Char-

les A. Burney’s survey in 1957 and the publication of the Chalcolithic and Early Bronze Age pottery from this, the ubiquitous presence of the Karaz culture in Eastern Anatolia became more apparent (*Burney 1958*). In 1968, the rescue excavations started at the floodplain of the Keban Dam near Elazığ, in Eastern Anatolia. This rescue project marked a turning point in Anatolian prehistory. During the course of the excavations, Karaz culture, its pottery, small finds and architecture were documented in many settlements in the Elazığ and Altınova plains (*Yalçın 2012.39–55*).

Being aware of this vast cultural distribution, additional archaeological work gave insight on the development stages of the Karaz culture, which was discovered in the Muş plain and around the Van Lake (*Kozbe 1990; Rothman, Kozbe 1997; Sagona 2000*).

The excavations at Arslantepe in the Malatya plain are important milestones of research in Eastern Anatolia. At Arslantepe, investigations into this culture have proceeded from the 1980s onwards (*Frangipane 2001; 2014*). Sos Höyük near Erzurum represents another important site in Northeastern Anatolia (*Sagona 2000; 2014a; 2014b*), which is more related to the original Kura-Araxes culture because of its geographical position. Besides Arslantepe, the excavations at Sos Höyük support the research of the Karaz culture with numerous ¹⁴C dates (*Sagona 2000.333–336; 2014a.39, Tab. 3; Frangipane 2019.73, Tab. 1*). Further investigations attempting to reveal the origins of this culture are continuing in the Erzurum Region (*Işıklı 2015*).

During the rescue excavations at the reservoir of the Karakaya and Karababa dams in Southeastern Anatolia in the last two decades of the 20th century, and further excavations in Southeastern Anatolia, more evidence of the Karaz culture was unearthed. Yet, Karaz pottery did not appear in large quantities at the sites. Special finds were enough to testify to the spread of this culture in Southeastern Anatolia or to regions on the modern Syro-Turkish border. Likewise, these finds suggested the encounter of the Syro-Mesopotamian cultures with the Transcaucasian Kura-Araxes and Karaz culture (*Yalçın 2012.289–293*).

Nowadays, within the framework of further archaeological investigations, we know that the Karaz culture infiltrated also into the eastern part of Central Anatolia and interacted with the local people of this region. Here we encounter the typical Karaz pottery

near Yıldızeli in Sivas (Ökse 1993). Excavations in Çadırhöyük near Yozgat yielded the characteristic relics of this culture and pinpointed the cultural relations between Central and Eastern Anatolia from the Late Chalcolithic on (Palumbi 2007.46, 47; Steadman et al. 2008.50). According to the latest investigations, we can demonstrate the expansion of the Karaz culture into the Eastern Black-Sea region as well, as the latest excavations near Ordu and Giresun provided the pottery and architecture of this culture (Kaymakçı 2017.28–30, 32). Furthermore, the influences of this culture spread to the easternmost part of Southeastern Anatolia, such as Başur Höyük near Siirt. At the Early Bronze Age I cemetery of this site, dated to 3100–2900 cal BC, typical Karaz pottery and metal finds were found in some cist-graves (Sağlamtimur 2017.10.Fig. 10; Sağlamtimur et al. 2019.205, 211).

Archaeologists were not aware of the presence of the Karaz culture in Anatolia until the mid-1950s. Because of some similarities, Sinclair Hood (1951.116), Ruth Amiran (1952.91) and Winifred Lamb (1954.31) compared the Early Bronze Age pottery of Alacahöyük with the ceramics of the Khirbet-Kerak culture in the Levant. Robert J. Braidwood postulated a common origin for the Khirbet Kerak pottery of the Amuq plain and the Early Bronze Age pottery of Alacahöyük (Braidwood, Braidwood 1960.518; Palumbi 2007.39).

After the excavations in Tabara el-Akrad, Hood (1951.113, 117, 118) stated that the Khirbet Kerak people had brought their pottery tradition from the Kura plain to Syria, thus spreading it to the south. In the 1970s, Ian A. Todd (1973.181–189) and Marilyn Kelly-Buccellati (1974) postulated interregional trade as the cause of this spread. In the 1980s, Amiran (1989.9–10) suggested that the peoples of this culture invaded the south in order to conquer new lands and establish new settlements.

At the beginning of our century, further dispersal theories were developed. Marcella Frangipane (2001.4) saw the reasons for the dispersal of the culture in a short-term power vacuum caused by a political crisis in Eastern Anatolia at the end of the Late Chalcolithic. Already during period VII, and especially VI A, interactions with different groups of people, such as those from Central Anatolia and pastoralists or semi-sedentary people from northern mountainous regions, coming from Northeastern Anatolia and Southern Transcaucasia, existed at Arslantepe. The interests of these populations must have come into

conflict with those of the ruling authorities around 3200 cal BC, as the centralized Late Uruk system of Arslantepe VI A collapsed completely, which led to a regional crisis. After the downfall of the central administrative apparatus in Arslantepe, new transhumant groups, probably with Northeastern Anatolian and Southern Transcaucasian origins settled in Arslantepe VI B1 around 3200–3100 cal BC (Frangipane 2019.86, 87). The newcomers used both a red-black polished, Kura-Araxes like pottery and the wheel-made pottery of the Late Uruk period (Frangipane 2001.4, 8; 2014.176). However, in the following period VI B2 (3100–2800 cal BC), local sedentary agriculturalists founded a rather simple village with the cultural tradition of the Post-Uruk period and regained possession of the settlement (Frangipane 2019.89). Likewise, in this period the inhabitants kept using both the red-black pottery of Transcaucasian origin and the wheel-made pottery of the Late Uruk tradition. In Arslantepe the red-black pottery tradition continued in periods VI C and VI D until the end of the Early Bronze Age.

Pierre de Miroschedji (2000.264) considered that Khirbet-Kerak pottery in the Levant was the product of migratory metalworkers, having arrived there from Anatolia and spreading the knowledge of both metallurgy and their pottery. Being a prestige object, this pottery probably complied with the demands of the regional elites.

Graham Philip (1999.44–45) suggested tracing the presence of the Khirbet Kerak culture in the Levant back to seaborne connections following the coastal eastern Mediterranean routes. Using their original pottery and adopting a conscious sign of class differentiation, Khirbet Kerak people probably took a stand against the local population who had a different cultural style and pottery tradition (Philip 1999.45; Greenberg 2007.267). Recently, Raphael Greenberg supported the conventional diffusion theory from the north to the south, which, in his opinion, took place gradually over centuries. He noted that in Khirbet Kerak this pottery appeared around 2850 cal BC for the first time (Greenberg et al. 2012.100–102) suggesting an arrival around the very beginning of the Early Bronze Age II.

Recent studies have reverted to the diffusion theory via trade routes, indicating that trade in raw materials such as salt, obsidian, metal or livestock favoured the spread of this culture (Breniquet, Michel 2014.1–3; Palumbi 2017). Peoples of the Kura-Araxes culture, those who were trading in wool, prob-

ably met the needs of Mesopotamian textile manufacturers. In this way, their cultural elements may have infiltrated the related societies (*Alizadeh et al. 2018.128*).

Nowadays, new finds are shifting the view concerning the origin and spread of this culture from a unified perception to a dynamic cultural interplay among the Caucasus, Central and Eastern Anatolia, North-eastern Iran, Syro-Mesopotamia, and the Levant. The Kura-Araxes culture is increasingly seen as a collection of processes that were formed over the course of centuries in the context of social, economic and religious interactions (*Batiuk, Rothman 2007.1-9; Sagona 2014a.23-25*).

Until the end of the 20th century, the absolute dates of the Transcaucasian settlements were missing, so that they were mostly dated comparatively. Thus, with only a few ¹⁴C dates the beginning of the Kura-Araxes culture in Transcaucasia and Eastern Anatolia was put to the second half of the 4th millennium BC (*Sagona 2000.332-333; Dschaparidze 2001.95*). For the arrival of this culture in Southeastern Anatolia and the Levant, a date about 2800-2700 cal BC has been accepted (*Braidwood, Braidwood 1960.259 ff.; Maisler et al. 1952.165; De Miroschedji 2000; Greenberg et al. 2012.98; Palumbi, Chataigner 2014.254*). Today there are enough absolute dates from Transcaucasia, North-Central and Eastern Anatolia, Northwestern Iran and the Levant (*Palumbi, Chataigner 2014.248, Fig. 1; Sagona 2014a.37, 39, Tabs. 2, 3; Steadman et al. 2015.90, Tab. 1; Frangipane 2019.73, Tab. 1*). The old non-calibrated ¹⁴C dates from Anatolia were also made available (*Üncü 2010*), while researchers are increasingly working to secure their finds with ¹⁴C dates (*Philip, Millard 2000; Badalyan 2014.78, 79, 83; Sagona 2014a.25-29, 37-39; Steadman et al. 2015.90, Tab. 1; Alizadeh et al. 2018.131*). Thus, according to current knowledge the earliest evidence for this culture in the northern dispersal area has already emerged from about 3500 cal BC onwards, becoming well established by 3300 cal BC (*Palumbi 2008; Sagona 2014a.25*). During the 3rd millennium BC, the culture spread through a vast region in the Near East (*Sagona 2014a.25, 29; Işıklı 2015.242; Palumbi, Chataigner 2014.248, Fig. 1; Alizadeh et al. 2018.464, 474, 475*). This culture disappeared gradually in the Levant, e.g., in Khirbet Kerak from 2400 cal BC onwards (*Greenberg et al. 2012.89, 103*), while its pottery remained in use in Eastern Anatolia until about 1800 cal BC (*Yalçın 2012.23, 358, 364; Sagona 2014a.25*).

The characteristics of the culture

The people of this culture inhabited the fertile and high-elevated plains or valleys. Contrary to earlier views, early communities of this culture, especially during the Early Bronze Age I, seem to be sedentary rather than being highly mobile (*Frangipane 2014; Sagona 2014a.42*). Maintaining agriculture and keeping livestock, they might have been transhumant from time to time. Circular wattle and daub buildings, rectangular mudbrick houses with rounded corners and wooden pillars, and large rectangular house complexes are the typical architectural features in the distribution area of this culture (*Maisler et al. 1952.171-172; Burney 1961.141 ff.; Hauptmann 1976.76, 78; 2000; Yalçın 2012.29; Yakar 2020*) (Fig. 2).

Fire and its symbolism must have played an important role in this culture (*Koşay 1976.27, 28; Takaoglu 2000; Balossi 2015.147; Simonian, Rothman 2015.27-30*), and thus we notice a horseshoe-shaped hearth, sometimes decorated with anthropomorphic depictions that probably have a relation to this symbolism. From this type of hearth the typical portable andirons of the Karaz/Kura-Araxes/Khirbet Kerak culture were developed (*Lamb 1954.23; Hauptmann 1979.70-72; Balossi 2015.140*). The hearths with anthropomorphic depictions on protrusions on both sides, as found in Cinis Höyük near Erzurum and Pulus-Sakyol X near Tunceli in Eastern Anatolia, are the best examples of this type of hearth (*Koşay 1976.Pl. 38; Takaoglu 2000*) (Fig. 3). It is important to note that comparable hearths were also found in Kusura in Western Anatolia (*Lamb 1937.37, Pl. V*), and more recently in Seyitömer Höyük near Kütahya in the levels dated to the Early Bronze Age III and Middle Bronze Age (*Bilgen, Bilgen 2015.77, Fig. 81*). In the 1950s, Lamb (1954.22) pointed out that there might have been cultural relations between the inner part of Western, Central and Eastern Anatolia. She referred to the similarity of pottery and hearths between Kusura, Alacahöyük and Karaz (*Lamb 1954.22, 31-32*). In the light of our current knowledge, Lamb's assumption seems to make more sense, as we are more and more aware of the relationships between North-Central and Eastern Anatolia since the Late Chalcolithic and Early Bronze Age (*Çalışkan Akgül 2012*). According to Mehmet Özdoğan (2000.499), the relations seem to begin already in the Chalcolithic and are reflected in the local black polished pottery at the end of this period. Thus, it may also be appropriate to ask whether certain components, such as this type of hearth, came from Eastern to Western Anatolia, along with some metallur-

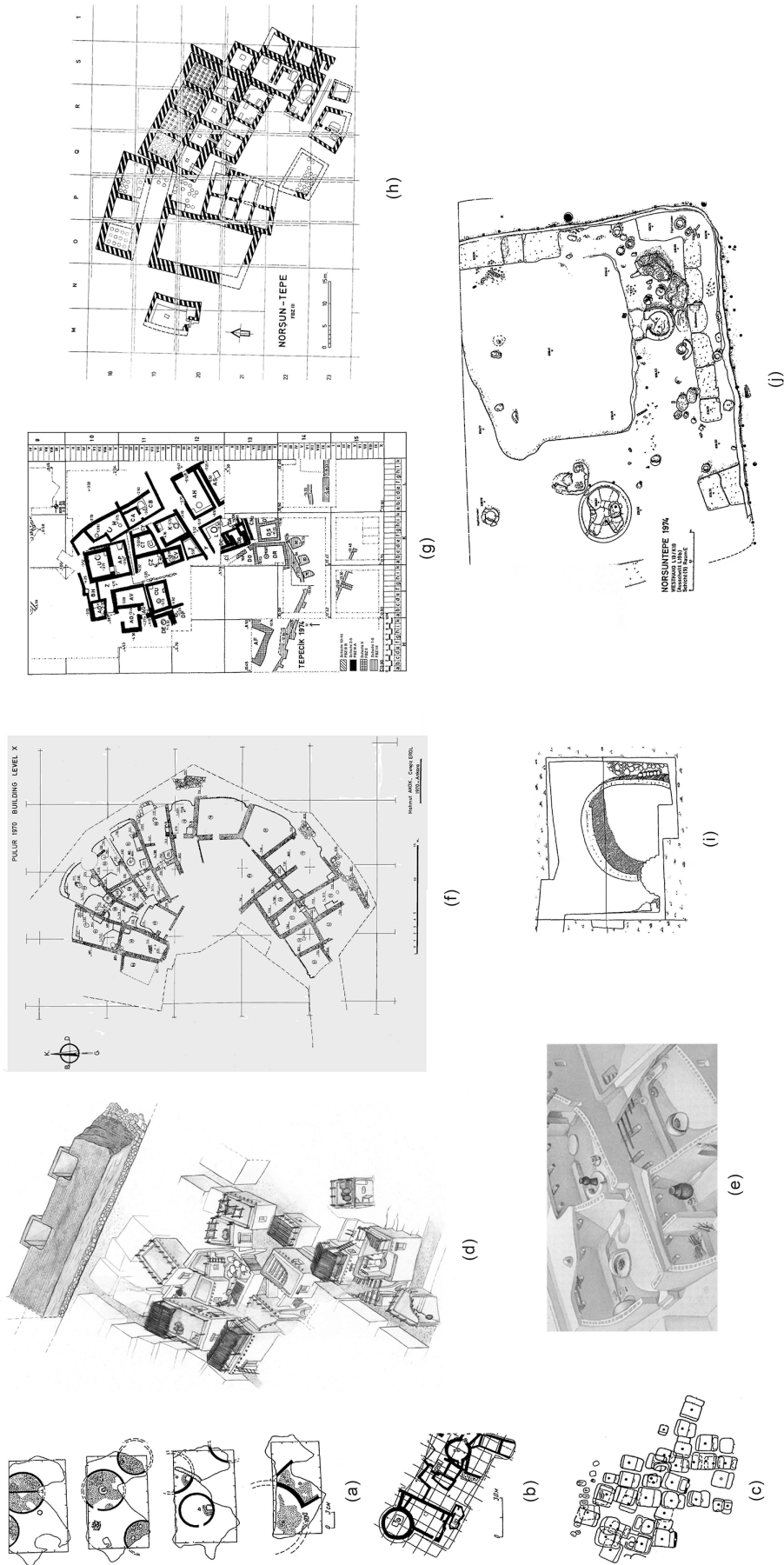


Fig. 2. The typical architectural features of the Kura-Araxes/Karaz/ Khirbet Kherak culture (Yalçın 2011:33, Abb. 1). a Kültepe (near Nakhichevan); b Shengavit (Armenia); c Kvatzkhelebi (Georgia); d Arslantepe VI B2; e Arslantepe VI D; f Pulur-Sakyol; g Tepecik EBA I-III; h Norşuntepe EBA III; i settlements of Amuq valley (EBA II); Tell el-Djudeide; j Norşuntepe EBA II /a-c Parzinger 2000.Abb. 3.1-3.3 (Kültepe, Shengavit, Kvatzkhelebi - early phases); d and e Frangipane 2004. 106, 148, 149 (Arslantepe VI B and VI D); f Koşay 1976.Pl. 120 (Pulur-Sakyol X); g Esin 1982.Pl. 108 (Tepecik EBA I-III); h Hauptmann 1982.Taf. 30 (Norşuntepe EBA III); i Braidwood, Braidwood 1960.261, Fig. 196 (Amuq H); j Hauptmann 1979.Taf. 37 (Norşuntepe EBA II).

gical innovations, as part of a ‘cultural package’, as Antonio Sagona (2014a.26–27) recently claimed (Kelly-Buccellati 1990.119; Fidan et al. 2015.82).

The burials of the Karaz/Kura-Araxes culture are either single or collective inhumations. There are also burials in kurgans (Kushnareva 1997; Palumbi, Chataigner 2014.249; Sağlamtimur 2019). Taking numerous sites found during the archaeological investigations into account, in Eastern Anatolia there is only limited evidence for simple inhumations consisting of pits and stone-cist graves, but not for kurgans (Altunkaynak et al. 2018.80–84). On this point, the cist grave from Arslantepe VI B1 is worth noting. A rather young man of high social rank was buried here, surrounded by rich grave goods. Obviously, his loyalties accompanied him in the afterlife. According to the rich grave goods composed of pottery, metal weapons and other metal objects, this grave testifies to an encounter with a culture influenced by Kura-Araxes people and the local Late Uruk culture at the end of Late Chalcolithic and beginning of the Early Bronze Age I, respectively (Frangipane 2000.450, 469; 2019). Seven spearheads and a short sword belonging to the hoard from Tülintepe in the Altunova plain may also have originally come from a cist grave. This hoard seems to be approximately contemporary with the metal finds from the cist grave of Arslantepe that was recently dated to 3100–3000 cal BC by Frangipane (2019.87), and presented evidence of profound metallurgical knowledge with regard to dealing with different metals, such as arsenical copper and tinned copper surfaces (Yalçın, Yalçın 2009.127). Using arsenical copper in order to achieve glittering metal surfaces or tin for decorative purposes are thus important features of the Karaz-/Kura-Araxes culture (Yalçın, Yalçın 2009; Greenberg et al. 2012.101). The latest excavations in Başur Höyük yielded seventeen burials in a cemetery that consists of stone cist graves and simple earthen pits, which are dated between 3100–2900 cal BC (Sağlamtimur et al. 2019. 205). Unlike the single burial inside the cist grave from Arslantepe, multiple burials have been found in the majority of the graves at Başur Höyük. Some of the various metal objects and pottery found inside the graves can be compared with the finds from the ‘Royal Tomb’ of Arslantepe VI B1.

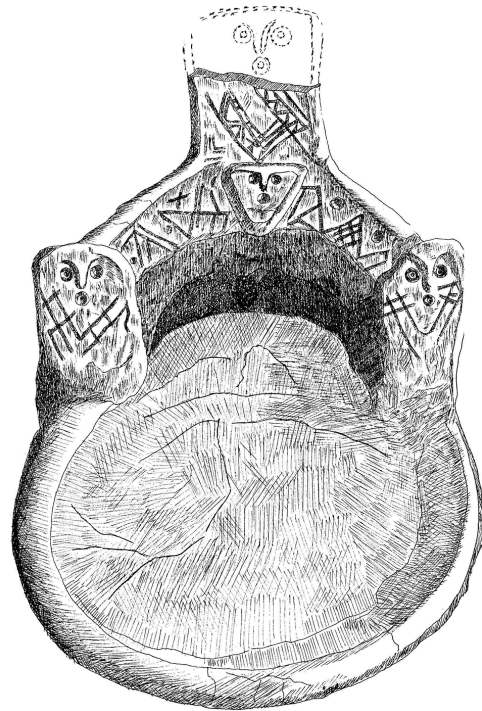


Fig. 3. Hearth with anthropomorphic depictions of Karaz culture from Pulur Sakyol X (Tunceli), Eastern Anatolia (Koşay 1976.Pl. 38).

A handmade, initially black, dark or buff, and in the subsequent periods rather red-black polished pottery with typical forms is the most significant feature of this culture. Having formerly defined the Kura Araxes culture by this red-black polished pottery, scholars today increasingly tend to distinguish between older, dark monochrome ceramics and red-black polished pottery of the following phases in Transcaucasia and Eastern Anatolia. Nevertheless,



Fig. 4. Some examples for the Kura-Araxes/Karaz/Chirbet Kerak pottery. a Pulur-Sakyol XI; b Arslantepe VI B1; c Alaybeyi Höyük; d Pulur-Sakyol XI; e Chirbet Kerak; f Kvatzkhelebi; g Amuk H (a Yalçın 2012.30, Abb. 5c; b, d, f Yalçın 2011.35, Abb. 6 a-c; c Altunkaynak et al. 2018.88, Fig. 11; e Greenberg et al. 2013.100, Fig. 19; g Braidwood, Braidwood 1960.Pl. 34/2).



Fig. 5. Metal finds from the so-called Royal Tomb of Arslantepe VI B1 (Yalçın 2011.34, Abb. 4b; after Frangipane 2001).

considering the common shapes in these regions there seems to have been a consensus in styling the pottery during the Early Bronze Age when this culture was flourishing (Sagona 2014a.30–32) (Fig. 4).

The relief decoration characteristic of this pottery consists mostly of double spirals, stylized animal depictions, bold concentric circles and knobs, as well as grooves and dimples (Sagona 1984; Yalçın 2012.239–240). In the Late Chalcolithic and the Early Bronze Age I, this relief decoration was used rather sporadically and strikingly on the surfaces of the vessels, being elaborated in the Early Bronze Age III, especially in Eastern Anatolia (Sagona 2014a.32). Incised decoration in geometric patterns also appears. In Eastern Anatolia and Northwestern Iran, the incisions were filled with white encrustation in the Late Chalcolithic and the Early Bronze Age I (Yalçın 2012.131, 132). Graphite slip is another decoration technique that we observe on the vessels of Transcaucasia and Eastern Anatolia from the beginning of the Early Bronze Age (Sagona 2000.336; Yalçın 2012.138–140). Globular bowls, jugs, pots, drinking cups, and storage vessels with tall straight necks, rail rim vessels, baking plates and trays, cylindrical potstands, sieves, lids and special handles called Nakhichevan

lugs are among the shapes and attachments of this pottery. At the same time, the pottery shapes point to the dietary practices of this culture, which were probably based on animal and dairy products on the one hand, and agricultural products like cereals on the other (Alizadeh et al. 2018.128).

The special small finds include clay animal figurines and plastically decorated clay stamps, combs made from bone, convex-based arrowheads made of obsidian and flint, as well as metal finds. Among the finds there are also metal jewellery or weapons like double spiral headed needles, diadems and spearheads (Yalçın, Yalçın 2009; Yalçın 2012.31) (Fig. 5). Crucibles, moulds and tuyères that are occasionally found at the settlements indicate the metallurgical

activities that were practiced by the people of the Kura-Araxes/Karaz culture (Alizadeh et al. 2018.131–133, Figs. 4–6).

Tepecik, an Eastern Anatolian settlement mound of the Karaz culture

Tepecik was located 31km east of the Elazığ province in the Altınova plain in Eastern Anatolia. Today it is under the water of the Keban Dam (Fig. 6). The settlement mound with an extension of about



Fig. 6. Keban Dam reservoir area and archaeological sites excavated in the Altınova plain (Yalçın 2012.32, Karte 5).

200 to 300m rose almost 17m above the plain (Esin 1974; Yalçın 2012.33). It was excavated between 1968–1974 (Esin 1970. 159, 160; Yalçın 2012.67) (Fig. 7).

Stratigraphy and architecture

Despite the extensive excavations, the stratigraphy of Tepecik is rather challenging (Erim 1982; Yalçın 2012). The final publication of the excavations is still pending, and an adjustment of the stratigraphy from different trenches has not yet been accomplished. According to the preliminary reports and unpublished masters and PhD theses, a cultural sequence from the Late Neolithic to the Medieval Ages was brought out that consists of 29 levels (Yener 1974; Bıçakçı 1982; Erim 1982; Yalçın 2012.68) (Fig. 8).

Two deep soundings provided information on the older periods from the Late Neolithic to the Early Bronze Age I-II. In the ‘deep trench 8 O’ at the northeastern slope of the settlement mound, the Chalcolithic Period, the Early Bronze Age I and the transition to the Early Bronze Age II were encountered above a thin layer of the Late Neolithic. At the southwestern slope of the settlement mound, another ‘deep trench’ called ‘15 K’ was opened, where the transitional periods from the Late Chalcolithic to the Early Bronze Age I and from the Early Bronze Age I to II were documented. The architectural finds were poor in both ‘8 O’ and ‘15 K’, yet the pottery finds abundant (Yalçın 2012. 68, 71, 73, 74). At the southern slope of Tepecik, parts of a fortification wall dated to the Early Bronze Ages I and II were excavated. Inside the fortress walls, with jagged protrusions, the remains of some rectangular buildings came to light (Esin 1972.156; 1974.133; Yalçın 2012.75). A corresponding steatite seal from Tarsus Gözlükule in Southern Anatolia dated the fortification wall to the Early Bronze Age II (Esin 1972.145). In the course of the Early Bronze Age, the settlement expanded to the north and reached its final extent in the Early Bronze Age III (Fig. 9).

In the Early Bronze Age III, the rectangular architectural plan prevailed in Tepecik. Agglutinating mud-brick houses were built on narrow streets that sometimes had two floors (Yalçın 2012.74–85). The buildings consisted of several rooms with hearth installations and rectangular clay benches in front of the walls. Some rooms in larger buildings were probably used as workshops, storage rooms, to prepare meals,

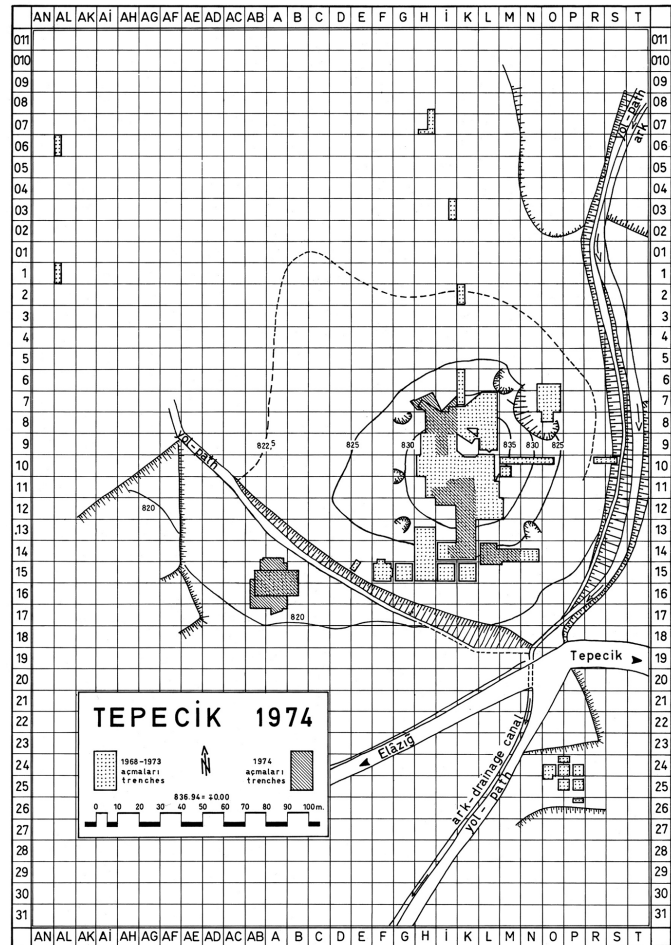


Fig. 7. Trench location plan of Tepecik (Yalçın 2012.71, Lageplan 1).

and as dining rooms for common meals (Esin 1974; Yalçın 2012.353–354). Pottery, grinding stones, obsidian, flint and bone instruments, copper and stone beads, metal needles, cereal stamps and animal figurines are among the finds. The settlement of the Early Bronze Age III suffered several fire disasters on different architectural levels, and there is no indication of martial attacks that would have caused these (Esin 1982; Yalçın 2012.83).

In the Middle and Late Bronze Ages, the inhabitants resettled the settlement of the Early Bronze Age III. On the northwestern slope and on the west of the settlement mound there was a thorough stratigraphy of these periods (Esin 1982; Yalçın 2012.68, 70). The most recent settlement phase was on top of Tepecik at the western and southwestern part, where an Iron Age settlement and a medieval cemetery were excavated.

The Uruk sector was located to the west of the settlement mound (Fig. 10). Here, the Late Chalcolithic, the transition from Late Chalcolithic to the Early

Bronze Age I and the Early Bronze Age I were excavated in five archaeological layers. In 'level 3', the excavations revealed a typical tripartite building of the Late Uruk Period, which was destroyed by a devastating fire as in Arslantepe VI A (Yalçın 2012.86–87) (Fig. 10). In this building complex, at the corner of a larger room, the remains of a hearth as well as copper ore and leftovers of slags were found (Esin 1982.109, Pl. 62/1–3). According to Ufuk Esin (1982) and the research of the author of the current paper, the early occurrence of the Karaz pottery was also documented in 'level 3'. This pottery was found together with the Late Uruk and Central Anatolian type pottery that can be compared with the contemporary finds from Arslantepe VI A. Besides the settlement in Arslantepe VI A, the Late Chalcolithic settlement in the Uruk sector of Tepecik offers important evidence dated to the Late Uruk Period in Anatolia, bearing both the wheel-made Late Uruk pottery and Central Anatolian type pottery, and the early Karaz pottery (Frangipane 2012.238; Palumbi 2017.124). In the poorly preserved layer 2, several pits came to light. The content of one pit testified to metallurgical activities at the transition from Late Chalcolithic to Early Bronze Age I. Dated to the Early Bronze Age I, layer 1 displayed a stone foundation in the east-west direction. Several rectangular rooms bordered this foundation. Karaz sherds, as well as chaff-faced and light-coloured pottery of the Late Uruk period, were exposed together on the floors. (Yalçın 2012.86). Thus, we can probably conclude that this was a new settlement with simple houses of light construction, as in Arslantepe VI B1 (Palumbi 2017.120). This could indicate the arrival of new settlers, perhaps pastoralists, who benefited from the decline of the Late Uruk inhabitants.

The Early Bronze Age stratigraphy of Tepecik is based on ceramic comparisons with the settlements of the Elazığ and Malatya plains. As is usually the case with many old excavations, there is a lack of absolute dates in Tepecik. In the Uruk sector, the ¹⁴C samples of 'level 3' yielded a calibrated age of 3644–3376 cal BC (Esin 1985). We can thus put the end of the Late Chalcolithic Period at approx. 3300

Period	Sector A New Mound / N	Deep Trenches 8 O 15 K (NE + SE)	Sector B Old Mound (NE + SE)	Sector C (West)	
Medieval Age	1 a	Mixed Range 1-3	Mixed Range 1		
Iron Age	1 b-c				
Early Iron Age	2 a _{1,2}				
EIA / LBA	2 a ₃				
Late Bronze Age	2 b _{1,3}				
End of MBA	3 a-c				
Middle Bronze Age	4-7				
MBA / EBA	8-10				
Early Bronze Age IIIB	11-14				2 a _{1,3}
Early Bronze Age IIIA	15				2 b _{1,3} , 3 a-c, 4, 5 a-c
Early Bronze Age III/II		6 a			
Early Bronze Age II		1-4	6 b		
Early Bronze Age II/I		4-6	5-6	7 a	
Early Bronze Age I		7-8	7-8	7 b-8	
Late Chalcolithic/ Early Bronze Age I		9-13	9-14	9-14	1-3
Late Chalcolithic Age		14-20			4-5
Early Chalcolithic Age		21-26			
Late Neolithic Age		27-29			

Fig. 8. Table showing the cultural sequence in different excavation areas in Tepecik (Yalçın 2012.70).

cal BC. There are only two calibrated ¹⁴C dates from the settlement mound, which came from 'level 4' of 'trench 12 K'. These dates are 4119±62 cal BP (2880–2490 cal BC) and 3980±70 cal BP (2850–2200 cal BC). Thus, this level is dated to the Early Bronze Age I/Early Bronze Age II and the Early Bronze Age III (Esin 1985; Üncü 2010.269).

Furthermore, the ¹⁴C dates of Arslantepe were applied to the settlements in the Elazığ and Malatya plains, as was the case in Tepecik, putting them into a certain time range. According to Frangipane (2019.73, Tab. 1) the following calibrated ¹⁴C dates are in use for the time being: Arslantepe VII (Late Chalcolithic 3–4) 3900–3400 cal BC, VI A (Late Chalcolithic 5) 3400–3200 cal BC, VI B1–VI B2 (Early Bronze Age I) 3200–2800 cal BC, VI C (Early Bronze Age II) 2750–2500 cal BC, and VI D (Early Bronze Age III) 2500–2200 cal BC.

The prehistoric pottery of Tepecik

In Tepecik there are different groups of prehistoric ceramics, including the dark faced burnished ware of the Late Neolithic or pottery groups of the Chalcolithic Period, such as the Halaf, Obeid and Uruk ceramics (Esin 1982.115). The fabrics of the Early

Bronze Age account for most of the items in the entire pottery assemblage of the settlement mound. The Uruk pottery, the Central Anatolian type wares and the early Karaz pottery are among the pottery groups of Late Chalcolithic and the beginning of the Early Bronze Age. There are wheel-made Mesopotamian wares such as simple ware, reserved slip ware and metallic ware that remained in use in the course of the Early Bronze Age. Both simple ware and reserved slip ware appear in Tepecik from the Late Chalcolithic onwards. They continued to an increasingly lesser extent until the end of the Early Bronze Age III. About the end of the Early Bronze Age II, the Syro-Mesopotamian metallic ware arrived at Tepecik (Yalçın 2012.73, 75, 77, 85). From the Early

Bronze Age II on a local painted ware appeared in Tepecik, which was native to the Elazığ and Malatya plains (Marro 2000).

On the origins of the Karaz pottery in Tepecik

Tepecik is the only settlement in the Altınova plain, where the apparently continuous development of Karaz pottery (Fig. 11) was detected based on the stratigraphy, though we also have some evidence for an early stage in the neighbouring settlements Norşuntepe and Korucutepe (Hauptmann 1982. 54; Yalçın 2012.265–270).

In the deep ‘trench 8 O’, excavations yielded dark faced burnished ware from the ‘29th level’ onwards, which has, according to some scholars, its origins in the Neolithic of Anatolia (Braidwood, Braidwood 1960; Mellaart 1967; Esin 1993). This is a medium-fine ware predominantly tempered with sand and chaff that has dark surfaces, but also on the exterior reddish-brown and on the interior black polished surfaces. Starting in the Late Neolithic the production of this ware had its peak in the Early Chalcolithic Period, and it lasted until the beginning of Early Bronze Age I in Tepecik, likewise in Tülintepe (Özdoğan 2020).

According to Güven Arsebük (1979), a local ware of the Early Chalcolithic Period, called mica-slip ware, appeared together with the dark faced burnished ware in layer 25 of the deep ‘trench 8 O’. It is also tempered with chaff and sand, and likewise was present in Altınova in both Norşuntepe and Tülintepe at the same period (Arsebük 1979.85; Yalçın 2012.249). Together with the dark faced burnished ware, it existed in small quantities until the end of the Early Chalcolithic. The fabric is of a light reddish or reddish brown colour. Mica was added to the water-diluted clay intentionally in order to produce a shiny micaceous slip that looks like a polish (Arsebük 1979. 85, 90, Fig. 3, Pl. 47). The shapes are almost identical to those of the dark faced burnished ware. At this point, it is important to note that Sagona

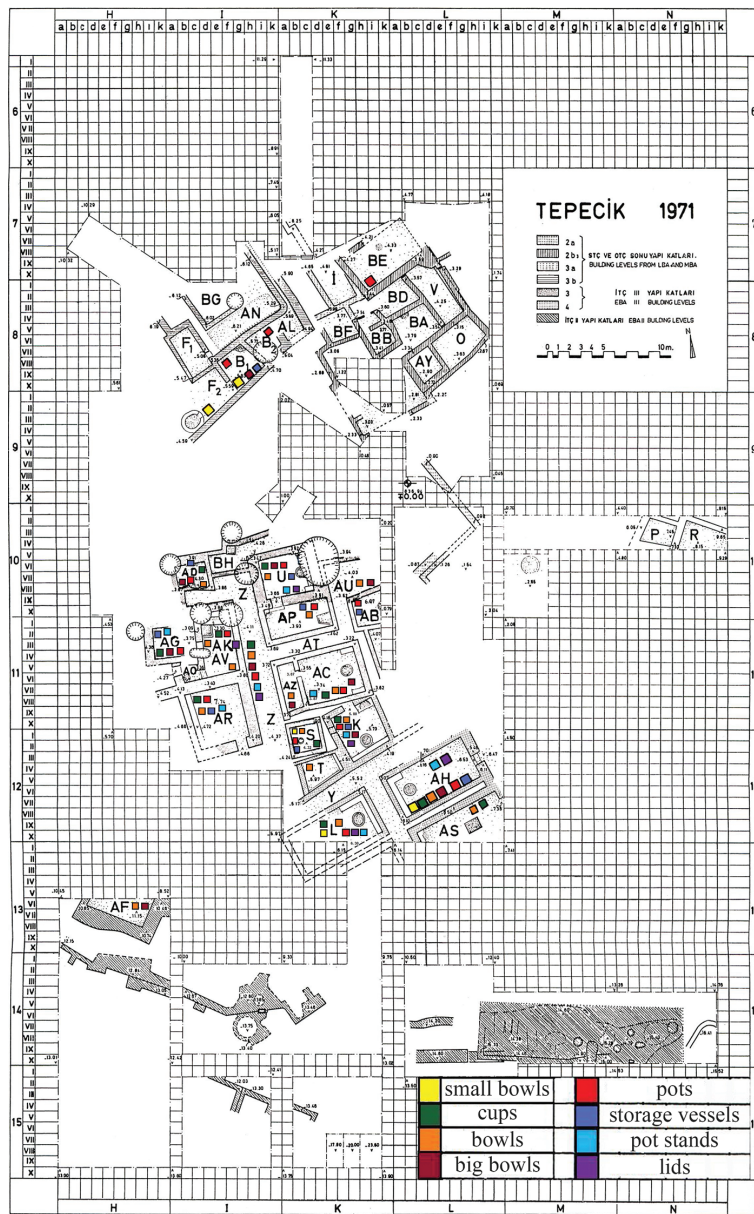


Fig. 9. Schematic plan of Tepecik. Buildings of the 2nd and 3rd millennium BC (Yalçın 2012.84).

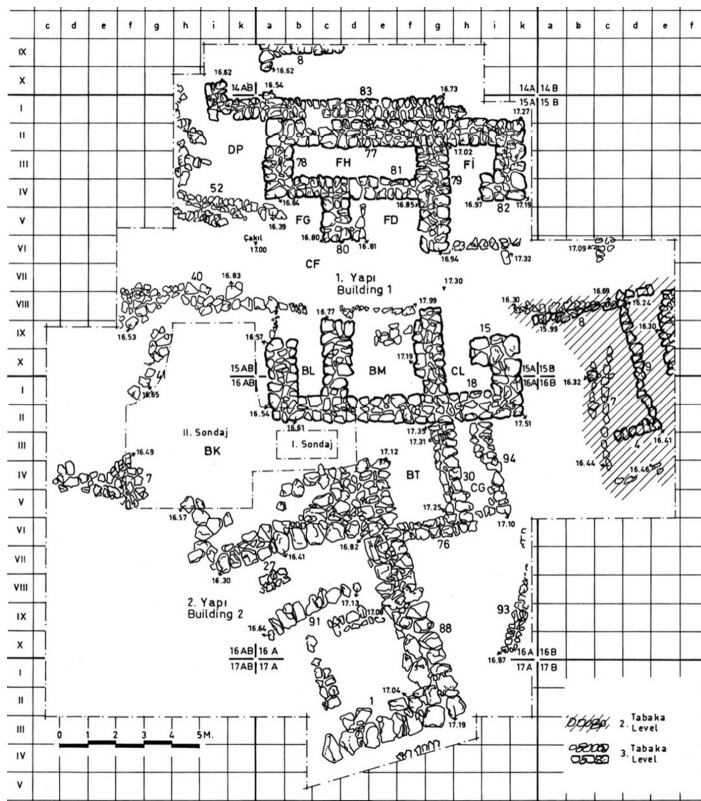


Fig. 10. Schematic plan of the Uruk sector in Tepecik. The tripartite Late Uruk building and the distribution of the pottery (Yalçın 2012.80).

(2014a.30) describes similar features for Late Sioni ware in Transcaucasia towards the end of the 4th millennium BC that also occurs in Ağrı. The features mentioned by Sagona also seem to conform to the mica-slipped ware from the Altınova plain. However, the probable relationship between these wares has not yet been studied.

According to Arsebük (1979.85–86), at the end of the Late Chalcolithic, besides these two aforementioned wares, early Karaz ware appeared in layer 21 of the deep ‘trench 8 O’, which has the same manufacturing features and similar shapes. The surface colours of the sherds vary between light or dark brown, pale pink, buff and black. Red colour on the exterior and black on the interior surface is rather rare. However, the key difference of Karaz pottery lies in the highly polished surfaces resembling the shimmering surfaces of the mica-slipped ware.

Arsebük (1979.87, Fig. 6) stated that the quantity of the dark faced burnished ware decreased significantly after the disappearance of the mica-slipped ware in the Late Chalcolithic layers 20–14. Then it completely disappeared in layers 13–9 during the transition from Late Chalcolithic to the Early Bronze

Age I. The Karaz pottery was the only ceramic group available in the Early Bronze Age I and II in the deep ‘trench 8 O’ in ‘level 8’.

The similarity between these wares led Arsebük (1979.88–90) to the assumption that the early Karaz ware evolved from the dark face burnished ware in Tepecik. According to the thesis of Arsebük (1979.88), the mica-slipped ware was probably a connecting link between these two ceramic groups. Based on his observations, he emphasized that the Altınova plain must have been one of the original homelands of Karaz pottery (Figs. 12, 13).

Sagona (2000.332, 333) drew attention to the possible coexistence of a Sioni-like pottery and the early Kura-Araxes pottery based on the Late Chalcolithic ceramics coming from Sos Höyük Va (3500/3300–3000 cal BC). Found side-by-side with the coarse Transcaucasian Sioni pottery, there is evidence for an early form of Kura-Araxes pottery that is either drab, or sometimes blackened on the exterior. Sagona emphasized this one-to-one resemblance between the Late Sioni and Early Kura-Araxes pottery either in the Erzurum region or in Georgia, which bears conceptual similarities to the theory raised by Arsebük (1979) about the possible connections between dark face burnished ware and early Karaz pottery in the Altınova (Sagona 2000.333).

According to Özdoğan (2020.83, 84) the dark face burnished pottery was found in the context of Late Chalcolithic layers in Tepecik, as well as in the early layers of the nearby settlement mound Tülintepe. He claimed that Arsebük (1979) mistook the dark faced burnished ware and mica-slipped ware for the ancestral variants of the early Karaz pottery. Özdoğan (2020.84) stated that during the early years of the Keban Project the cultural sequence of this region was rather nebulous, and thus this approach seemed to be reasonable then. Yutaka Miyake (1996) reworked the dark face burnished pottery both from Tülintepe and from Tepecik. He found out that there has to have been a break between the traditions of the dark face burnished ware and the Karaz pottery.

If we compare the early shapes and fabrics of the pottery groups described above, we still see common characteristics and similarities. Thus, we should

not neglect the idea of a common origin for Kura-Araxes/Karaz pottery either in Transcaucasia or in Eastern Anatolia based on the foregoing local pottery groups like Sioni ware in Georgia, and the dark face burnished ware and micaceous ware in the Eastern Anatolian Altnova. This similarity might have come from a common taste and knowledge of the same pottery techniques, both in Eastern Anatolia and Southern Transcaucasia.

Evidence for the Early Karaz pottery at the end of the Late Chalcolithic and Early Bronze Age I-II levels in Tepecik

In Tepecik, the lower 'levels 21-14' of the deep 'trench 8 O' yielded the pottery of the Late Chalcolithic Period. In the same trench, 'levels 9-13' correspond to the transition from the Late Chalcolithic to the Early Bronze Age I. Further down, in the deep 'trench 15 K' in 'levels 9-14' we observe the transition from the Late Chalcolithic to the Early Bronze Age I. 'Levels 7-8' of the same deep trench reach the Early Bronze Age I (Erim 1982). Through all these levels, the early Karaz pottery appeared in relatively large amounts along with the wares influenced by the Central Anatolian Late Chalcolithic cultures.

The early Karaz pottery was also found in the Uruk Sector of Tepecik. Here it appeared towards the end of the Late Chalcolithic Period in 'level 3', and at the transition from the Late Chalcolithic to the Early Bronze Age I in 'levels 1-2'. It shows the same manufacturing techniques and similar shapes that appear in '8 O' and '15 K' in Tepecik (Yalçın 2012.70, 86). According to Esin (1982.112, 113) in 'layers 1-3', besides the Karaz pottery, hand-made and wheel-made Late Uruk wares as well as the Central Anatolian type wares occur. The shapes of these ceramics and those of the early Karaz pottery are almost the same (Yalçın 2012.157, 236, 237). Hence, we may assume that the Late Chalcolithic Central Anatolian pottery also influenced the shapes and fabrics of the Karaz pottery at Tepecik. Compared to the coexisting pottery in Alacahöyük, Alishar and Çadır Höyük in Central Anatolia and Central Anatolian type pottery found in Tepecik, the early Karaz ware has some distinctive differences, especially in the fabrics. The latter is always tempered with chaff and some fine sand. At the very end of the Late Chalcolithic Period, the amount of straw temper in the paste of the Karaz ware decreases while that of sand temper increases. In contrast, the paste of the Central Anatolian type of pottery contains a large amount of sand, some fine grit and a small portion of mica and some fine organic temper. This is also case in the Late Chal-

colithic settlements of Central Anatolia and in Arslantepe towards the end of VII and during VIA (Palumbi 2007.43). While the surfaces of the early Karaz pottery from Tepecik are of a black, dark brown, buff, pale pink and sometimes black and red colour, those of the Central Anatolian type pottery are red and black or blackish-grey in the Uruk Sector of Tepecik. Black and blackish-grey variations can be affiliated with the early Karaz pottery. Furthermore, the early Karaz pottery bears a self-slip and is always burnished. The Central Anatolian type of pottery is either colour-slipped or without slip and sometimes burnished (Esin 1982.112, 113).

Among the shapes of Central Anatolian type pottery, the so-called fruit stands and large funnel-shaped incised bowls are worth noting. This peculiar shape probably served special ceremonial functions, with burning incense a subject of some debate in this regard. It is a firm component of the Central Anatolian Late Chalcolithic culture and as well as the Late Uruk pottery of Mesopotamia. In Central Anatolia, some rare fragments of this shape were found in the Chalcolithic levels of Alishar, Alacahöyük and Çadır Höyük (Orthmann 1963; Palumbi 2007). In 'level 3' of the Uruk Sector, fragments of similar fruit stands with triangular apertures were found that show a closer resemblance to the fruit stands of Alacahöyük (Esin 1976.115).

The light brown, buff or brownish grey polished examples of the funnel-shaped bowls typify the early Karaz ware, while the grey or blackish-grey surface colours of the same shape are examples of the Central Anatolian type wares. The Karaz variants of these bowls were mostly found in the 3rd and 2nd layers of the Uruk Sector (Fig. 14). They were decorated with geometric patterns consisting of intersecting

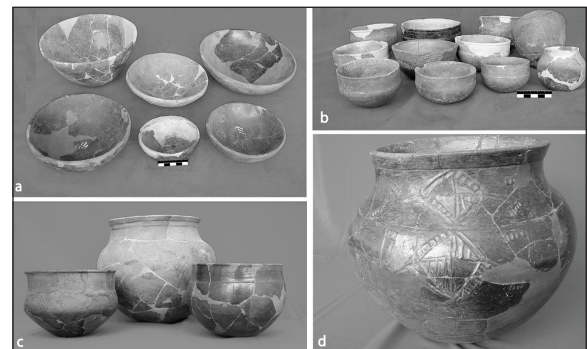


Fig. 11. Selected Karaz Pottery from Tepecik, EBA I-III: a bowls, b rail rim bowls and small pots, c rail rim pots and holemouth jar, d rail rim storage vessel with relief decoration (photographs by Ünsal Yalçın, author's archive).

quadrilaterals placed between two incised bands. Generally, the quadrilaterals bear a white encrustation (Yalçın 2012:88). Similar incised decoration can be seen on the sherds of Alacahöyük, Alişar and Çadırhöyük in Central Anatolia, while the incised patterns from Büyükgüllücek seem to be composed rather differently, probably indicating an early stage of the Chalcolithic Period (Esin 1976:115; Yalçın 2011; 2012:301–306).

A similar influence of the Late Chalcolithic Central Anatolian wares is visible in Arslantepe VII-VIA, as researchers have recognized resemblances between the Central Anatolian shapes like conical bowls, single-handled jugs and fruit stands, the shapes from Tepecik 3-2 in the Uruk Sector and the ones found in Arslantepe VI A (Frangipane 2000; 2014; Palumbi 2017).

The development of Karaz pottery in Tepecik in the Early Bronze Age I-III

A wide range of Karaz sherds were found in the 'deep soundings 8 O' and '15 K' in 'levels 7-8', in the 'trenches 14 H-I-K-L-M-N' in 'layers 9-7' and in '13-14 K' in 'layers 7-8'. Belonging to the Early Bronze Age I, these sherds are less chaff tempered and rather compact. We may thus presume the on-

going influence of the Central Anatolian type wares on the Karaz pottery found at the settlement mound. Here, the Early Bronze Age I Karaz pottery shows, although very rare, relief decoration on rather large vessels, as well as incised sherds with white encrustation. However, the latter type of decoration disappears over time in Tepecik. On some sherds the graphite slip is also present. In addition to Karaz ceramics, the pottery assemblage of this period includes wheel-made simple and reserved slip wares of Northern Syria and Mesopotamia. Compared to the Karaz pottery, these wares are dominant in the Early Bronze Age I and are found in a ratio of 1:2 in the pottery assemblage of Tepecik (Yalçın 2012:252). Shapes include flat or conical bowls with divergent lugs, rail-rim bowls with high straight necks, round bellied holemouth pots and jars with rail rims and tall necks, flat lids with incised decoration (see Fig. 14). The surface colours consist of pale pink, buff, black, greyish black or dark brown, with black predominating, however. The well-polished surfaces of the vessels that are black on the outside and red on the inside are rather sporadic. The surface colours of red on the outside and black on the inside are a rarity in the repertory of Karaz pottery throughout the entire Early Bronze Age.

There is a transitional period between the Early Bronze Age I and the Early Bronze Age II in Tepecik, in both of the 'deep trenches 8 O' and '15 K' and in the 'trenches 13-14 K', in 'levels 4-6'. In this period, the Karaz pottery frequently has black surfaces, while black on the outside and red on the inside is still rare. Yet, from this time forward the occurrence of light surface colours like buff, pale pink and light brown diminishes. The Nakhichevan-lugs appear in Tepecik for the first time. In this transition, the co-existence of wheel-made, plain, simple and reserved slip pottery of Syro-Mesopotamia and Karaz pottery is a distinguishing feature. However, the wheel-made pottery constitutes about 60 percent of the total pottery assemblage. Thus, the presence of the Karaz pottery is rather weak. The influence of Central Anatolian pottery can still be discerned, as funnel-shaped bowls are present in the pottery assemblage of this period. Logically considered, the relations between the Karaz culture of Tepecik, Central Anatolian and Syro-Mesopotamian cultures seem to be quite consistent in this transitional period.

The Early Bronze Age II was brought to light in the 'sounding 15 K' in 'layers 1-4' and in 'trenches 13-14 K' in 'layer 6'. Yet it is noticeable that the amount of wheel-made Syro-Mesopotamian pottery drops to

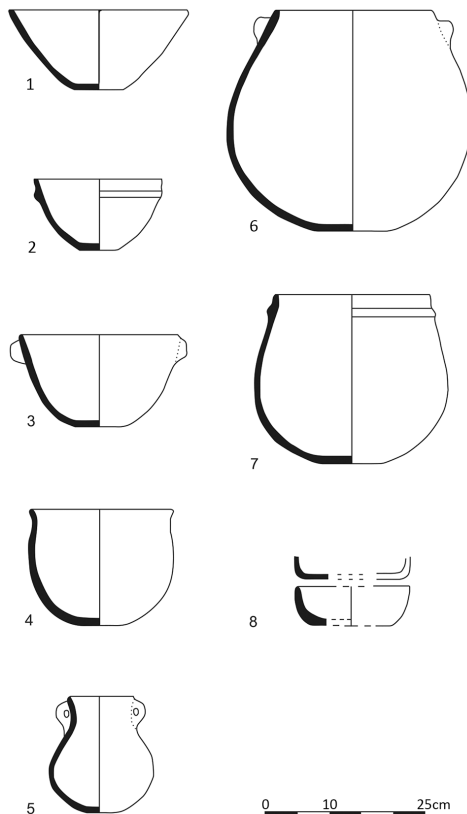


Fig. 12. Pottery shapes of the dark faced burnished ware after Arsebük 1979.

about 25 percent. The Karaz pottery has a predominant share of about 70 percent (Yalçın 2012.253) (Fig. 15). Apart from these two groups of pottery, the local painted pottery of the Altınova plain appears in Tepecik for the first time. Among the Karaz vessels there are certain shapes, like the globular pots with angled rims and linear incised decoration patterns that occur in Shengawit in Armenia and in Yaniktepe in Northwestern Iran in the Early Bronze Age II. By contrast, in Tepecik we do not see other typical shapes of this period, like the triphore. This liquid storage vessel with three horizontal lugs occurs in 'level 23' in Norşuntepe, in the Early Bronze Age II. This shape is also present in Pular and Güzelova in Northeastern Anatolia, and in some settlements of Georgia (Hauptmann 1982.55, Pl. 46/7). In this period Tepecik seems instead to have had a tie to the Kura-Araxes culture of Armenia and Northwest Iran that probably ran along overland routes following the vast plains of Eastern Anatolia. A globular holemouth pot with opposing nose-shaped lugs is found in addition to the prevailing shapes. We find similar pots in Arslantepe VIC dated to the Early Bronze Age II that also confirm the periodization at Tepecik (Conti, Persiani 1993.372, Fig. 8/6, 10). Pots and bowls with high straight necks that show multiple horizontal grooves as well as Nakhichevan lugs are the striking features of Karaz pottery in this period. The number of globular rail rim vessels with high straight necks, as well as of vessels with black exteriors and red or reddish brown interiors, increases. Yet the black polished surfaces dominate. On the rims of some bowls a red stripe appears. Occasionally, there is a relief decoration on the exterior surfaces of the vessels. The graphite polish is still present, yet not common.

In the Early Bronze Age III, certain shapes like rail rim bowls and simple conical bowls of the Karaz pottery seem to have been mass-produced in Tepecik. Plenty of vessels that were found in the buildings of this period give clues about the utilization and function of the Karaz pottery in Tepecik. In contrast to the preceding periods, the Karaz vessels are mostly chaff tempered. The dense paste of the Early Bronze Age I and II rarely appears. Instead, due to chaff temper the texture of the sherds is rather loose. The vessels are usually well polished and fired. Black exteriors and red interiors are present. Red, brown or reddish-brown surface colours predominate. On the rims of the vessels, narrow, red or brown coloured stripes occur from time to time. The relief ornamentation with stylized animal depictions is in vogue and usually present on the large rail-rim

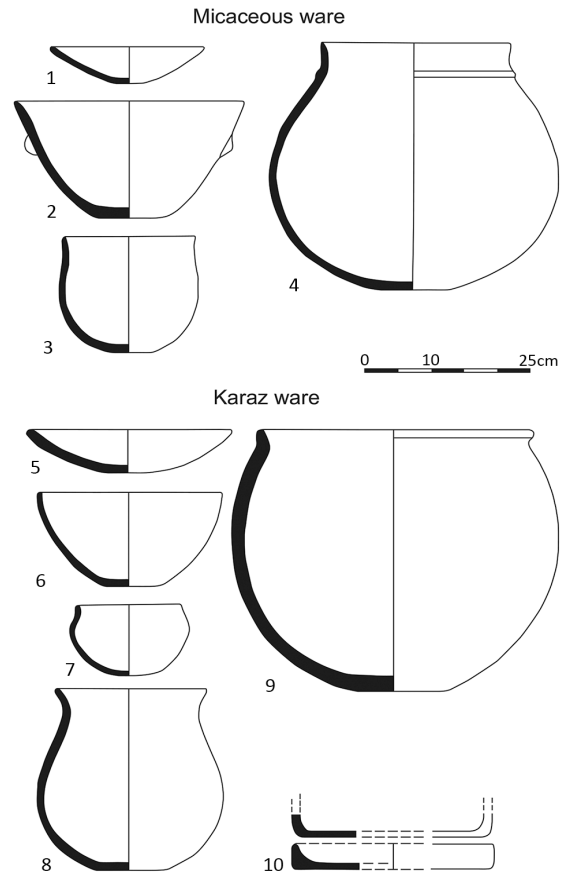


Fig. 13. Pottery shapes of the micaceous ware and the early Karaz pottery in Tepecik and Tülintepe after Arsebük 1979.

storage vessels. Another decoration technique is grooving, which is applied to the large pots or storage vessels in Tepecik or in Norşuntepe and Korucutepe (Hauptmann 1982, Pl. 52/2; Yalçın 2012). A novelty is the incised decoration after firing, which we can also observe on some small pots in Sos Höyük during this period (Sagona 2000). The incised decoration after firing seems to have a long tradition in southern Transcaucasia, as it appears here from the Early Bronze Age I on (Palumbi 2007; 2008). The wheel-made simple, reserved slip and metallic wares continue in Tepecik, although the rate of these wares fall back to 10 percent and more than 80 percent of the entire pottery assemblage consists of Karaz ceramics (Yalçın 2012.256). The local painted Altınova ware is still a part of the pottery assemblage. Mass-produced conical bowls, globular holemouth cooking pots with tabs, rail rim pots and storage vessels with tall necks are common (Fig. 16). We record rail rim bowls with downwardly tapering bottoms that were probably used either for food intake or as measuring vessels for distributing food rations (Yalçın 2012.352). Among the other vessels there are bowls, jars, pots, convex low pot stands, flat lids and bak-

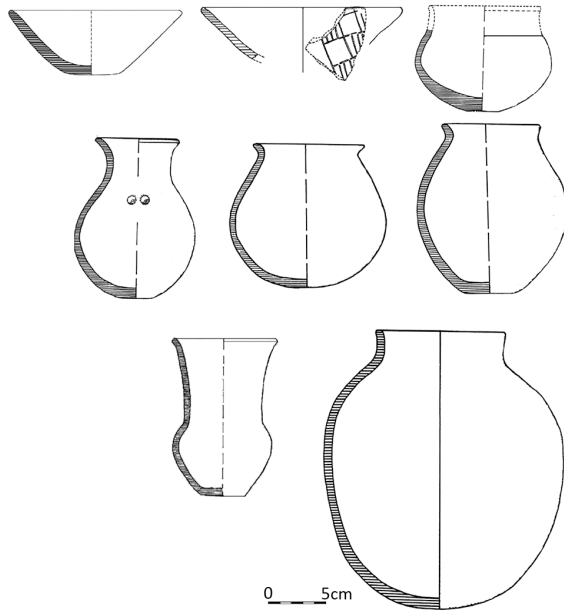


Fig. 14. Shapes of Karaz pottery from Tepecik, Late Chalcolithic - Early Bronze Age I (Yalçın 2011. Abb. 21).

ing trays in the rooms that indicate food storage, preparation and consumption at the settlement of the Early Bronze Age III. A couple of zoomorphic high pedestal bowls that probably depict ducks, and especially the increasingly occurring vessels with a red surface colour, indicate the resumption of relations with Central Anatolia (Schmidt 2000; Yalçın 2012.347). In this period, we can also assert a resemblance of the pottery shapes of the Early Bronze Age III from Alacahöyük and Arslantepe VI D (Conti, Persiani 1993.385–387; Yalçın 2012.282, 304).

Scientific investigations on the Karaz pottery from Tepecik

The systematic and serial scientific analyses of Karaz pottery from Tepecik were missing until now. However, analyses carried out on 11 samples provide important information regarding the choice of raw material and the production and firing techniques (Yalçın, Yalçın 2003). Mainly calcareous clays were used when producing Karaz pottery, though in the Late Chalcolithic potters probably preferred calcareous clays. In contrast, in the Early Bronze Age rather low-calcareous clays were used (Yalçın, Yalçın 2003.37). The examined sherds were inorganically tempered with crushed minerals like quartz and grit, as well as organically with chaff.

The large proportion of chaff in paste helped to increase the porosity of the Karaz vessels, giving them better isolating properties. The vessels were generally fired in a reducing atmosphere, with tempera-

tures hardly exceeding 800°C. A graphite slip/coating could be detected on some vessels (Fig. 17). This method or technique was particularly common in Southeastern Europe in the Balkans, but also in Anatolia from the Late Neolithic Period onwards until the end of the Early Bronze Age. It gave the ceramic vessels a silvery shine, which was a way to imitate metal vessels and made them more attractive (Martino 2017.3–9). Some of the Karaz-sherds from Tepecik dated to the Chalcolithic have a graphite slip applied in a way that can be compared with the grainy graphite used in Southern Bulgaria and Northern Greece in the Late Neolithic (Martino 2017.9).

Interpretation of the results

During the Late Chalcolithic Period, transhumant or semi-sedentary groups linked with the Kura-Araxes culture might have displayed more presence in the Altınova and Malatya plains. Probably interfering with the indigenous population, they might have frequented the settlements, perhaps even on a seasonal basis. We can clearly observe an encounter of different societies and change in the settlement patterns at Arslantepe VI A-B1 in the Malatya plain at the end of the Late Chalcolithic Period (Frangipane 2014.171). Yet we cannot prove the same situation for the settlement mound of Tepecik, since there are not enough architectural remains associated with the early Karaz culture of this period. However, the

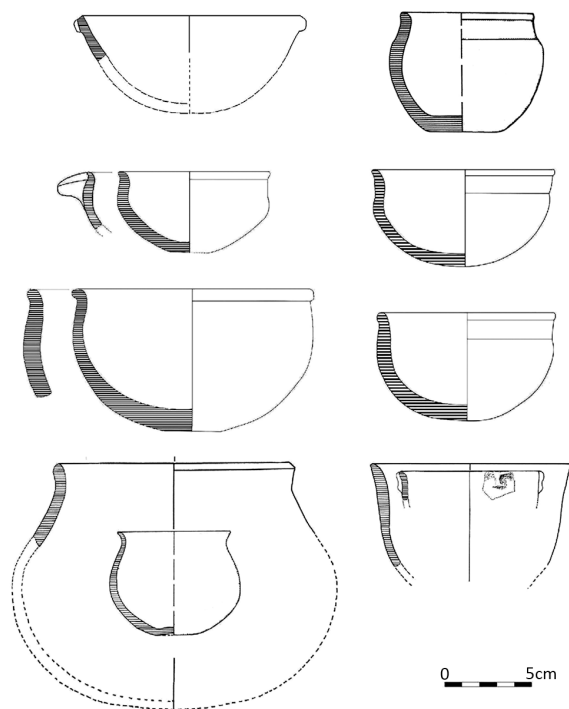


Fig. 15. Shapes of Karaz pottery from Tepecik, Early Bronze Age II (Yalçın 2011.44, Abb. 231).

simultaneous presence of the early Karaz pottery in the well-established Uruk sector in Tepecik dated towards the end of the Late Chalcolithic and in the lower layers of the settlement mound in 'trenches 8 O' and '15 K' would be a conceivable argument for different populations living side by side, at least periodically. It is likely that the Late Uruk community at the Uruk sector made use of the services of the Karaz people (pastoral societies with transhumant features) with connections to the Kura-Araxes culture. At the same period, these transhumant or semi sedentary people were probably also in contact with the Late Chalcolithic cultures of Central Anatolia. We found therefore in the tripartite building of the Late Uruk Period in Tepecik, as well as after the destruction of this building, a mix of the pottery of the Late Uruk culture, Central Anatolian type pottery and the early Karaz pottery. Besides animal husbandry, these people probably had some knowledge of metallurgy. An understanding of Eastern and Central Anatolian metal ores, like the native copper in Derekutuğun near Çorum (Yalçın, İpek 2016), that were essential to produce the metal objects for the elitist demands of this period, was probably an important part of the services such people offered. The Karaz people (Yakar 2020) might also have supplied other raw materials, such as obsidian, salt and wool. Wool was especially highly sought after by the Mesopotamian communities that specialized in manufacturing woollen textiles.

Besides Central Anatolian and Mesopotamian pottery, Karaz pottery was also present in Tepecik during the Early Bronze Age I. As in the previous periods, the inhabitants of the settlement mound seem to have continued to maintain contact with Central Anatolia as well with the cultures of Syro-Mesopotamia, as both ceramics and other small finds from these cultures were sufficiently present in Tepecik to suggest this. However, the Karaz pottery was represented rather weakly here. After the abandonment of the Late Uruk settlement people lived in simple dwellings in Tepecik, at least for a short while at the beginning of the Early Bronze Age I. A threat from outside or existing conflicts among the different population groups might possibly have occurred, because there were fortification walls at the settlement mound of Tepecik, as well as in other major settlements in Altınova, Malatya and almost in the entirety of Anatolia (Frangipane 2001).

In the previous period and the Early Bronze Age I, the surface colours of the early Karaz pottery found in Tepecik are predominantly black, grey, dark

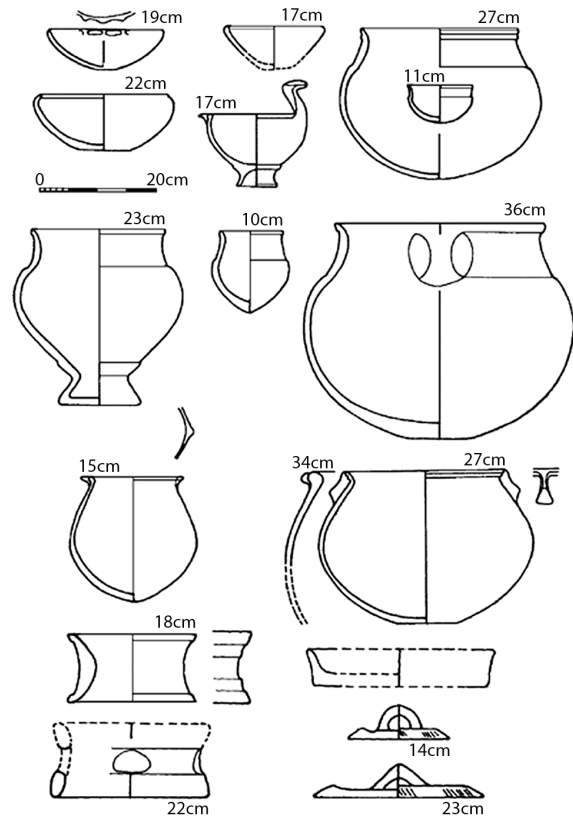


Fig. 16. Shapes of Karaz pottery from Tepecik, Early Bronze Age III (Yalçın 2012.47, Abb. 29a).

brown, buff and pale pink. Black exteriors and red interiors are rather rare. Yet this colour scheme is a typical feature that distinguishes the Central Anatolian influenced pottery with its dark surface colours from the Karaz ceramics that we find either in the Uruk sector or in the lower levels of the deep trenches at Tepecik. Resembling Central Anatolian-type wares, the paste of the early Karaz pottery in Tepecik is tempered with fine grit and rather moderately with fine chaff. The firing indicates reducing conditions during firing and low temperatures. In that initial period, the early Karaz pottery shows little decoration, but when ornamentation is present it consists only of simple reliefs and small knobs. We can compare the large funnel-shaped bowls with white encrusted incisions with the similar shapes of Central Anatolian Late Chalcolithic pottery. However, most of the funnel-shaped bowls from Central Anatolia are dark faced and not decorated. In Tepecik, graphite polishing is present on some vessels, yet not widely used.

In the Early Bronze Age II, the settlement mound was still fortified. It is conceivable that in this period a major wave of migration from Northeastern Anatolia, maybe also from Transcaucasia and Northwestern Iran, arrived in the Elaziğ and Altınova

plains. The typical wattle and daub architecture at some settlements like Taşkun Mevkii, Değirmentepe or Norşuntepe shows a stronger connection to the Transcaucasian Kura-Araxes culture (Yalçın 2012.49, 50, 53, 55). The absence of this typical architecture at Tepecik is probably due to the insufficient excavations at the southwestern section of the settlement mound, where we observe fragments of the fortification in the Early Bronze Age I and II. Some special shapes and ornamental features that we know from the Kura-Araxes pottery of Georgia, Armenia and Northwestern Iran appear frequently in the pottery assemblages of Elaziğ and the Altınova plains in that period. In comparison to Taşkun Mevkii and Norşuntepe, Tepecik shows more attachment to the Shengavit and Yanık cultures in the Early Bronze Age II, which might have come directly from the Eastern Anatolian plains and Northwestern Iran (Yalçın 2012.319, 320, 327, 328). A new ware, called the local painted ware of Altınova, appears (Marro 2000). Esin (1976) stressed the possible influence of the west Iranian painted pottery tradition. This new pottery indicates a growing cultural synthesis, as it shows both the shapes and certain decorations of Karaz culture infiltrating and merging with different pottery traditions.

In the Early Bronze Age II, we see skilfully produced vessels and elaborated forms in the Karaz pottery, such as angled rims or rail rims with high collar necks. The fabrics are increasingly tempered with fine chaff rather than with fine grit. In rare cases, we observe incised geometric patterns on the exterior of the small pots and bowls. The vessels are usually well polished. Graphite polish is present more often on the small bowls than on large vessels. The number of vessels with black exteriors and red interiors increases, indicating a controlled fire, probably in the pottery kilns. The knowledge of the method underlying this change in colour must be part



Fig. 17. Graphite coated Karaz-sherds from Tepecik (photographs by Ünsal Yalçın, author's archive).

of the technological achievements and the tradition of the Karaz culture, and is probably based on an ancient traditions of Anatolia. We observe high cylindrical necks on the bowls or drinking vessels, as well as at the small pots that also occur in the adjacent settlement mounds, like at Norşuntepe. This typological feature is a significant indication for determining the periodization, as the necks of these rail rim vessels tend to become shorter in the following Early Bronze Age III (Yalçın 2012).

The Early Bronze Age III was a period of population growth, new social orientation and cultural synthesis at several settlements in the Elaziğ and Malatya plains, as in Norşuntepe, Korucutepe, Tepecik and Arslantepe, but also in Sos Höyük in Northeastern Anatolia (Sagona 2000; 2014a). In the Altınova, a social hierarchy emerged on the model of Norşuntepe, whereby according to the finds there is no indication of an elitist worldview in the society. Rather, a surplus at the storeroom of a palace-like complex on the citadel mound of Norsuntepe points to a central administration system in the Altınova plain, which might have supplied the adjacent smaller settlements in times of need (Hauptmann 2000). According to this idea, the semi-sedentary living style of the Karaz people might have faded away. During this period, Tepecik was one of the relatively large settlements of Altınova, with a regular settlement structure and building complexes on streets. As in Arslantepe VI D, Tepecik was probably surrounded by a fortification wall (Harmankaya, Erdoğan 2002; Yalçın 2012.60). We can presume that Tepecik was subordinated to Norşuntepe and had a close relationship with this settlement mound, as we find the same shapes and decoration patterns on the Karaz pottery of both settlements. During the Early Bronze Age III, Tepecik probably re-established contacts with Central Anatolia. Some elements of the Central Anatolian pottery seem to have influenced the finish of the Karaz vessels. Simple bowls on the convex shaped stands, zoomorphic vessels, groove decoration on the exterior of the large pots, and surface colours such as red or reddish brown were probably due to the interregional cultural relations between Central Anatolia and the Altınova plain (Yalçın 2012). These elements were applied to Karaz pottery though it had still its own characteristics, such as typical forms, alternating surface colours or stylized relief decoration depicting animals. Wheel-made simple ware and metallic ware were still present in the pottery assemblages, which were found only in very small quantities either in Tepecik or in Norşuntepe (Yalçın 2012).

As in the previous periods, in the Early Bronze Age III the potters in Tepecik produced according to the conventional finishing methods, such coiling or using clay plates. There is no evidence of pottery kilns or well-organized pottery workshops. Perhaps a seasonal production can be assumed, which may have been in the hands of women because of the ornaments and traditional designs used (Yalçın 2012, 346, 349–351). In the Early Bronze Age III, chaff is the main temper added to the paste of the Karaz pottery. The vessels have contrasting surface colours, black and red, but they remain in the minority of items found. However, the proportion of vessels with red or reddish surface colours increases. Incised linear decoration after firing is distinctive in this period. The amount of large storage vessels increases, which probably indicates that they were used for storing cereals (Yalçın 2012).

Unfortunately, the Karaz pottery of Tepecik has still not been sufficiently published and evaluated. This is to be regretted, as this pottery deserves our attention, because archaeologists have increasingly debated the issue of the Eastern Anatolian Karaz culture, as the results of recent research are gradually becoming available from Eastern and Southeastern Anatolia. Tepecik played an important part during the expan-

sion and the heyday of this culture. Due to its strategic location not far from the Euphrates and on the trade routes from Eastern Anatolia to Central and Southern Anatolia, and to Northern Iran, Syria and Mesopotamia, this settlement mound in the Altınova plain was of particular importance, and was conceivably intermediating between different cultural landscapes. On one hand, the importance of Tepecik was probably related to the trade in raw materials such as metals, both on the river route and the inland routes (Bıçakçı 1982). On the other hand, the knowledge of the processing and refining of metals was a strength of the people who settled down either here or at the other sites of the Altınova, like in Norşuntepe (Hauptmann 2000). Over the course of one millennium, a population emerged in Altınova based on intermingling with the indigenous ethnic groups and a probably semi-sedentary people who gradually settled down here, commuting between Central and Northeastern Anatolia, Transcaucasia and Northwestern Iran. The settlers of this plain created an Anatolian cultural synthesis based on an originally pastoral culture covering a large area from Transcaucasia, Northwestern Iran, Eastern, Southeastern Anatolia and the North-Central Anatolia, Northwestern Syria and the Levant.

ACKNOWLEDGEMENTS

The present work is a brief and updated summary of the dissertation completed in 2012 at the Philipps University of Marburg (Germany) with the title “The Karaz Pottery of Tepecik in Eastern Anatolia”, which was published in German in the same year. It is based on the excavation results of the years 1968–1974. The interim reports of these excavations have been brought out in annual Keban Project publications, yet a final evaluation is still pending. For this reason the results presented here, especially the stratigraphic and chronological interpretations, should be regarded as preliminary. However, the Karaz phenomenon has recently become the subject of archaeological investigations again. Thus, there is a need to re-examine the role of Tepecik and its Karaz pottery in an article written in English, in order to make the issues under discussion accessible to a broad scientific research community. This is especially the case when we consider that the final publication of the Tepecik is still pending, though more than fifty years have passed since the last excavations. Since the archaeological data of Tepecik is not completely accessible for researchers, insufficient and sometimes incorrect information circulates in the publications that compare some early material from Tepecik with the finds of other contemporary settlements.

When writing this paper, care was taken to consider the latest literature as well as the most recent hypotheses regarding the complex interplay among the interregional cultural landscapes where this important prehistoric culture spread.

The paper is dedicated to my teacher and mentor, Ufuk Esin, head of the excavations of Tepecik and one of the most important pioneers of Anatolian archaeology, who left us far too early.

I am particularly grateful to my friend Prof. Dr. Kathleen James Chakraborty from the School of Art History & Cultural Policy of University College Dublin for proofreading the English of this paper.

References

- Albright W. F. 1926. The Jordan Valley in the Bronze Age. *Annual of the American Schools of Oriental Research* 6: 13-74.
- Alizadeh K., Sameib S., Mohammadkhanic K., Heidarid R., and Tykote R. H. 2018. Craft Production at Köhne Shahar, a Kura-Araxes Settlement in Iranian Azerbaijan. *Journal of Anthropological Archaeology* 51: 127-143. <https://doi.org/10.1016/j.jaa.2018.06.006>
- Altunkaynak G., Işıklı M., and Erkmén M. 2018. In the Light of New Evidence from the Erzurum: An Overview of Kura-Araxes Funerary Practices in Eastern Anatolia. Erzurum Ovası'ndan Yeni Kanıtlar Işığında Doğu Anadolu'daki Kura-Aras Ölü Gömme Uygulamalarına Genel Bir Bakış. *Türkiye Bilimler Akademisi Arkeoloji Dergisi* 1: 73-93. <http://tubaar.tuba.gov.tr/index.php/tubaar/article/view/424/442>
- Amiran R. 1952. Connections between Anatolia and Palestine in the Early Bronze Age. *Israel Exploration Journal* 2: 89-103.
1989. A Note on two Items of the Khirbet Kerak Ware Culture. In K. Emre, B. Hroudá, M. Mellink, and N. Özgüç (eds.), *Anatolia and the Ancient Near East. Studies in Honour of Tahsin Özgüç*. Türk Tarih Kurumu Basımevi. Ankara: 9-10.
- Arsebük G. 1979. Altınova'da (Elazığ) Koyu Yüzlü Açıklı ve Karaz Türü Çanak Çömlek Arasındaki İlişkiler. VIII. Türk Tarih Kongresi, Ankara 11-15 Ekim 1976. *Kongre-ye Sunulan Bildiriler* 1: 81-92.
- Badalyan R. S. 2014. New Data on the Periodization and Chronology of the Kura-Araxes Culture of Armenia. *Paléorient* 40(2): 71-92. https://www.persee.fr/doc/paleo_0153-9345_2014_num_40_2_5636
- Balossi Restelli F. 2015. Hearth and Home. Interpreting Fire Installations at Arslantepe, Eastern Turkey, from the Fourth to the Beginning of the Second Millennium BCE. *Paleorient* 41(1): 127-151. <https://doi.org/10.3406/paleo.2015.5659>
- Batiuk S., Rothman M. S. 2007. Early Transcaucasian Cultures and Their Neighbors. Penn Museum. *Expedition* 49(1): 1-9.
- Bıçakçı E. 1982. *Tepecik Höyüğü'nde Kalkolitik Çağ Mimarisini*. Unpublished MA thesis. University of Istanbul.
- Bilgen A. N., Bilgen Z. 2015. Orta Tunç Çağ Yerleşimi (IV. Tabaka). Middle Bronze Age Settlement (Layer IV). In A. N. Bilgen (ed.), *Seyitömer Höyük I. Arkeoloji ve Sanat Yayınları*. Istanbul: 61-118.
- Braidwood R. J., Braidwood L. S. 1960. *Excavations in the Plain of Antioch I. The Earliest Assemblages A-J. Volume LXI*. The University of Chicago Oriental Institute Publications. Chicago.
- Breniquet C., Michel C. (eds.) 2014. *Wool Economy in the Ancient Near East and the Aegean: From the Beginnings of Sheep Husbandry to Institutional Textile Industry*. Oxbow Books. Oxford.
- Burney C. A. 1958. Eastern Anatolia in the Chalcolithic and Early Bronze Age. *Anatolian Studies* VIII: 157-209.
1961. Excavations at Yaniktepe, North-West Iran. *Iraq* XXIII: 138-153.
- Conti M., Persiani C. 1993. In M. Frangipane, M. Mellink, M. Liverani, P. Matthiae, and H. Hauptmann (eds.), *When World Collides. Cultural Developments in Eastern Anatolia in the Early Bronze Age. Between the Rivers and over the Mountains*. Archaeologica Anatolica et Mesopotamica Alba Palmieri dedicata. Roma: 361-413.
- Çalışkan Akgül H. 2012. Looking to the west: the Late Chalcolithic Red-Black Ware of the Upper Euphrates Region. *Origini* XXXIV: 97-109.
- Dschaparidze O. 2001. Zur frühen Metallurgie Georgiens vom 3. bis zum 1. Jahrtausend v. Chr. in Georgien. In I. Gambaschidze, A. Hauptmann, R. Slotta, and Ü. Yalçın (eds.), *Schätze aus dem Land des Goldenen Vlies*. Katalog der Ausstellung des Deutschen Bergbau-Museums Bochum in Verbindung mit dem Zentrum für Archäologische Forschungen der Georgischen Akademie der Wissenschaften. Tbilisi. Bochum: 92-119.
- Erim A. 1982. *Tepecik Höyüğü'nde İlk Tunç Çağı Kerpiç Mimarisini*. Unpublished MA thesis. University of Istanbul. Istanbul.
- Esin U. 1970. Tepecik Excavations 1968 Campaign, Preliminary Report. In METU Keban Dam Area Salvage Project Executive Committee (ed.), *1968 Sommer Work*. Middle East Technical University Keban Project Publications. Serial I. No. 1. Türk Tarih Kurumu Basımevi. Ankara: 159-179.
1972. Tepecik Excavations, 1970. In METU Keban Dam Area Salvage Project Executive Committee (ed.), *Keban Project 1970 Activities*. Middle East Technical University Keban Project Publications, Series I. No.3. Türk Tarih Kurumu Basımevi. Ankara: 149-158, Pl. 99-120.
1974. Tepecik Excavations 1971. In METU Keban Dam Area Salvage Project Executive Committee (ed.), *Keban Project 1971 Activities*. Middle East Technical University

- sity Keban Project Publications, Series I. No.4. Türk Tarih Kurumu Basımevi. Ankara: 123-136, Pl. 97-111.
1976. Tepecik Excavations 1972. In METU Keban Dam Area Salvage Project Executive Committee (ed.), *Keban Project 1972 Activities*. Middle East Technical University Keban Project Publications, Series I. No. 5. Türk Tarih Kurumu Basımevi. Ankara: 109-147.
1982. Tepecik Excavations, 1974. In METU Keban Dam Area Salvage Project Executive Committee (ed.), *Keban Project 1974-1975 Activities*. Middle East Technical University Keban Project Publications, Series I. No.7. Türk Tarih Kurumu Basımevi. Ankara: 95-127. Pl. 53-78.
1985. Tepecik ve Tülin-tepe Kazılarında Ait Arkeometrik Araştırmaların Arkeolojik Açısından Değerlendirilmesi. *Tübitak - Arutob II: 157-182*.
1993. The relief decoration on the prehistoric pottery of Tülin-tepe. Between the Rivers and over the Mountains. In M. Frangipane, H. Hauptmann, M. Liverani, P. Matthiae, and M. Mellink (eds.), *Between the Rivers and over the Mountains. Archaeologica Anatolica et Mesopotamica Alba Palmieri dedicata*. Università di Roma "La Sapienza". Roma: 105-119.
- Fidan E, Sarı D., and Türkteki M. 2015. An Overview of the Western Anatolian Early Bronze Age. *European Journal of Archaeology 18(1): 60-89*. <https://doi.org/10.1179/1461957114Y.0000000070>
- Frangipane M. 2000. The Late Chalcolithic/EB I Sequence at Arslantepe. Chronological and Cultural Remarks from a Frontier-Site. In C. Marro, H. Hauptmann (eds.), *Chronologie des Pays du Caucase et de l'Euphrate aux IVe-IIIe Millénaires*. Varia Anatolica XI. De Boccard. Paris: 439-472.
2001. The Transition between two Opposing Forms of Power at Arslantepe (Malatya) at the Beginning of the 3rd Millennium. *Türkiye Bilimler Akademisi Arkeoloji Dergisi 4: 1-24*.
2004. La crisi del Sistema palatino e il tramonto del consenso. Il nuovo potere politico-militare agli inizi del III millennio 'Alle origini del potere. In M. Frangipane (ed.), *Arslantepe, a collina del Leoni*. Milano: 103-113.
2012. The Collapse of the 4th Millennium Centralised System at Arslantepe and the Far-Reaching Changes in 3rd Millennium Societies. *Origini XXXIV: 237-260*.
2014. After Collapse: Continuity and Disruption in the Settlement by Kura-Araxes-linked Pastoral Groups at Arslantepe-Malatya (Turkey). New Data. *Paléorient 40 (2): 169-182*. <https://doi.org/10.3406/paleo.2014.5641>
2019. Arslantepe. The Rise and Development of a Political Centre: From Temple to Palace to a Fortified Citadel Arslantepe. Siyasi Merkezin Yükselişi ve Düşüşü: Tapınaktan Saraya Saraydan Surla Çevrili Bir Kente. In N. Durak, M. Frangipane (eds.), *Arslantepe*. Proceedings of the 1. International Archaeological Symposium. 1. Uluslararası Arkeoloji Sempozyumu Bildirileri. İnönü Üniversitesi Yayınları/Inönü University Press 71. Malatya: 71-104.
- Frangipane M., Di Nocera G. M., Hauptmann A., Morbidelli P., Palmieri A., Sadori L., Schultz M., and Schmidt-Schultz T. 2001. New symbols of a new power in a 'royal' tomb from 3000 BC Arslantepe, Malatya (Turkey). *Paléorient 27(2): 105-139*. <https://doi.org/10.3406/paleo.2001.4733>
- Greenberg R. 2007. Transcaucasian Colors: Khirbet Kerak Ware at Khirbet Kerak (Tel Bet Yerah). In B. Lyonnet (ed.), *Les Cultures du Caucase*. CNRS Editions. Paris: 257-268.
- Greenberg R., Paz S., Wengrow D., and Iserlis M. 2012. Tel Beth Yerah: Hub of the Early Bronze Age Levant. *Near Eastern Archaeology 75(2): 88-107*. <https://doi.org/10.5615/neareastarch.75.2.0088>
- Harmankaya S., Erdoğu B. 2002. *Türkiye Arkeolojik Yerleşmeleri. 4a, 4b (İlk Tunç Çağı)*. Task Yayınları. İstanbul.
- Hauptmann H. 1976. Die Grabungen auf dem Norşun-Tepe, 1972. In METU Keban Dam Area Salvage Project Executive Committee (ed.), *Keban Project 1972 Activities*. Middle East Technical University Keban Project Publications, Series I. No.5. Türk Tarih Kurumu Basımevi. Ankara: 71-109, Pl. 29-62.
1979. Die Grabungen auf dem Norşun-Tepe, 1973. In METU Keban Dam Area Salvage Project Executive Committee (ed.), *Keban Project 1973 Activities*. Middle East Technical University Keban Project Publications, Series I. No.6. Türk Tarih Kurumu Basımevi. Ankara: 61-78, Pl. 26-45.
1982. Die Grabungen auf dem Norşun-Tepe, 1974. In METU Keban Dam Area Salvage Project Executive Committee (ed.), *Keban Project 1974-75 Activities*. Middle East Technical University Keban Project Publications, Series I. No. 7. Ankara: 41-70, Pl. 13-52.
2000. Zur Chronologie des 3. Jahrtausends v. Chr. In C. Marro, H. Hauptmann (eds.), *Chronologie des Pays du Caucase et de l'Euphrate aux IVe - IIIe Millénaires*. Varia Anatolica XI. De Boccard. Paris: 419-425.
- Hood S. 1951. Excavations at Tabara el-Akrad, 1948-49. *Anatolian Studies I: 113-147*.

- Işık M. 2015. The Kura-Araxes Culture in the Erzurum Region: The Process of its Development. Kura-Aras Kültürü'nün Erzurum Bölgesi'ndeki Gelişim Süreci. *Türkiye Bilimler Akademisi Arkeoloji Dergisi* 18: 51-69.
- Kaymakçı S. 2017. Doğu Karadeniz Bölgesi'nde Karaz-Erken Transkafkasya Kültürü'ne Ait Yeni Bir Yerleşim: Alurca-Gavur Kalesi, Giresun. A New Settlement Belonging to Karaz-Early Transcaucasian Culture in Eastern Black Sea Region. Alurca-Gavur Kalesi, Giresun. *Türkiye Bilimler Akademisi Arkeoloji Dergisi* 21: 25-34.
- Kelly-Buccellati M. 1974. *The Early Transcaucasian Culture: Geographical and Chronological Interaction*. Unpublished PhD Dissertation. University of Chicago. Chicago.
1990. Trade in Metals in the Third Millennium: North-eastern Syria and Eastern Anatolia. In P. Matthiae, M. v. Loon, and H. Weiss (eds.), *Resurrecting the Past. A Joint Tribute to Adnan Bounni*. Netherlands Archaeological Institute. Istanbul: 117-133.
- Koşay H. Z. 1938. *Türk Tarih Kurumu Tarafından Yapılan Alaca Höyük Hafriyatı, 1936'da Yapılan Çalışmalar ve Keşiflere Ait İlk Rapor*. Türk Tarih Kurumu Yayınları V. Seri, No. 2. Türk Tarih Kurumu Basımevi. Ankara.
1976. *Keban Projesi Pulur Kazısı 1968-1970. Keban Project Pulur Excavations*. Orta Doğu Teknik Üniversitesi Keban Projesi Yayınları. Seri III, No. 1. Türk Tarih Kurumu Basımevi. Ankara.
1977. *Pulur (Sakyol) Etnografya ve Folklor Araştırmaları*. Orta Doğu Teknik Üniversitesi Keban Projesi Yayınları. Seri 2. No. 2. Ankara.
1979. Keban'ın Pulur (Sakyol) Höyüğü Kazısı'ndaki Kutusal Ocaklar. *VIII. Türk Tarih Kongresi. Kongreye Sunulan Bildiriler I*. Türk Tarih Kurumu Basımevi. Ankara: 77-80. Pl. 41-44.
- Koşay H. Z., Turfan K. 1959. Erzurum Karaz Kazısı Raporu. *Belleten XXIII(91)*: 349-413.
- Kozbe G. 1990. Van-Dilkaya Höyüğü Erken Transkafkasya Keramiği. *VII. Araştırma Sonuçları Toplantısı*. Türk Tarih Kurumu Basımevi. Ankara: 533-554.
- Kökten I. K. 1952. Anadolu'da Prehistorik Yerleşme Yerleri ve 1944-48 Yıllarında Yapılan Tarih Öncesi Araştırmaları. *IV. Türk Tarih Kongresi. Kongreye Sunulan Tebliğler*. Türk Tarih Kurumu Basımevi. Ankara: 194-204.
- Kushnareva K. 1997. *The Southern Caucasus in Prehistory. Stages of Cultural and Socioeconomic Development from the Eighth to the Second Millennium BC*. The University Museum. University of Philadelphia. Philadelphia.
- Kuftin B. A. 1941. *Arkheologicheskie raskopki v Trialeti*. Izdatel'stvo Akademii Nauk Gruzinskoi SSR. Tiflis.
- Lamb W. 1937. Excavations at Kusura near Afyon Karahisar I. *Archaeologia LXXXVI*: 1-64.
1954. The Culture of North-East Anatolia and Its Neighbours. *Anatolian Studies IV*: 21-32.
- Maisler B., Stekelis M., and A-Yonah M. 1952. The Excavations at Beth Yerah (Khirbet el-Kerak) 1944-1946. *Israel Exploration Journal* 2: 165-173.
- Marro C. 2000. Vers une chronologie comparée des Pays du Caucase et de l'Euphrate aux IVème-IIIème millénaires. In C. Marro, H. Hauptmann (eds.), *Chronologies des Pays du Caucase et de l'Euphrate aux IVème-IIIème millénaires*. Varia Anatolica XI. De Boccard. Paris: 473-494.
- Martino S. 2017. Graphite-Treated Pottery in the Northeastern Mediterranean from the Chalcolithic to the Bronze Age. *Near Eastern Archaeology* 80(1): 3-13. <https://doi.org/10.5615/neareastarch.80.1.0003>
- Mellaart J. 1967. *The Earliest Settlements in Western Asia. From the Ninth to the Fifth Millennium BC*. Cambridge University Press. Cambridge.
- Miyake Y. 1996. *Doğu Anadolu'da Koyu Yüzlü Açık Çanak Çömlek. The Dark Face Burnished Ware in Eastern Anatolia*. Unpublished PhD thesis. University of Istanbul. Istanbul.
- De Miroshedji P. 2000. La Ceramique de Khirbet Kerak en Syro-Palestine: Etat de la Question. In C. Marro, H. Hauptmann (eds.), *Chronologies des Pays du Caucase et de l'Euphrate aux IVème-IIIème millénaires*. Varia Anatolica XI. De Boccard. Paris: 255-279.
- Orthmann W. 1963. *Die Keramik der Frühbronzezeit aus Inneranatolien*. Verlag Geb. Mann. Berlin.
- Ökse T. 1993. Verbreitung der transkaukasischen Kultur in der Sivas-Region. *Istanbul Mitteilungen* 43: 133-146.
- Özdoğan M. 2000. An Overview from Anatolia and Prospects for Future Research. In C. Marro, H. Hauptmann (eds.), *Chronologie des Pays du Caucase et de l'Euphrate aux IVe - IIIe Millénaires*. Varia Anatolica XI. De Boccard. Paris: 497-501.
2020. Tülintepe Revisited. In H. G. Yalçın, O. Stegmeier (eds.), *Metallurgica Anatolica. Festschrift für Ünsal Yalçın anlässlich seines 65. Geburtstags*. Ünsal

- Yalçın 65. *Yaşgünü Armağan Kitabı*. Ege Yayınları. İstanbul: 77–85.
- Parzinger H. 2000. Transkaukasien, Ostanatolien und westlicher Iran im 3. Vorchristlichen Jahrtausend. Das Problem der Kura-Araxes Kultur. In R. Dittmann, B. Hrouda, U. Löw, P. Matthiea, R. Mayer-Opificius, and S. Thürwächter (eds.), *Variatio Delectat. Iran und der Westen. Gedenkschrift für Peter Calmeyer*. Alter Orient und Altes Testament 272. Münster: 539–565.
- Palumbi G. 2007. Mid-Fourth Millennium Red-Black Burnished Wares from Anatolia: A Cross-Comparison. *Anes* 27: 39–58.
2008. *The Red and Black. Social and Cultural Interaction between the Upper Euphrates and Southern Caucasus Communities in the Fourth and Third millennium B.C.* Università di Roma “La Sapienza” (Studi di Preistoria Orientale 2). Roma.
2017. Push and Pull Factors? The Kura-Araxes ‘Expansion’ from a Different Perspective: The Upper Euphrates Valley. In E. Rova, M. Tonussi (eds.), *At the Northern Frontier of Near Eastern Archaeology. Recent Research on Caucasia and Anatolia in the Bronze Age*. Proceedings of the International Humboldt-Kolleg Venice, 9th January–12th January 2013. Subartu XXXVIII. Brepols. Thurnhout: 113–133.
2019. The expansion of the Kura-Araxes culture in Iran: what role for the Uruk? In J. W. Meyer, E. Vila, M. Mashkour, and R. Vallet (eds.), *The Iranian Plateau during the Bronze Age. Development of Urbanisation, Production and Trade*. MOM Éditions. Lyon: 29–50.
- Palumbi G., Chataigner Ch. 2014. The Kura-Araxes Culture from the Caucasus to Iran, Anatolia and the Levant: Between Unity and Diversity. A Synthesis. *Paléorient* 40 (2): 247–260. <https://doi.org/10.3406/paleo.2014.5645>
- Philip G. 1999. Complexity and Diversity in the Southern Levant during the Third Millennium B.C: The Evidence of Khirbet Kerak Ware. *Journal of Mediterranean Archaeology* 12: 26–57. <https://doi.org/10.1558/jmea.v12i1.26>
- Philip G., Millard A. R. 2000. Khirbet Kerak Ware in the Levant: The Implications of Radiocarbon Chronology and Spatial Distribution. In C. Marro, H. Hauptmann (eds.), *Chronologie des Pays du Caucase et de l’Euphrate aux IVe–IIIe Millenaires*. Varia Anatolica XI. De Boccard. Paris: 279–296.
- Rothman M., Kozbe G. 1997. Muş in the Early Bronze Age. *Anatolian Studies* 47: 105–126.
- Sagona A. 1984. *The Caucasian Region in the Early Bronze Age. Vol. I-III*. British Archaeological Records IS 214 (i). Archaeopress. Oxford.
2000. Sos Höyük and the Erzurum Region in Late Prehistory: A Provisional Chronology for Northeast Anatolia. In C. Marro, H. Hauptmann (eds.), *Chronologie des Pays du Caucase et de l’Euphrate aux IVe–IIIe Millenaires*. Varia Anatolica XI. De Boccard. Paris: 329–373.
- 2014a. Rethinking the Kura-Araxes Genesis. *Paléorient* 40(2): 23–46. https://www.persee.fr/doc/paleo_0153-9345_2014_num_40_2_5634
- 2014b. The Kura-Araxes Culture Complex: A History of Early Research. In A. Özfirat (ed.), *Arkeolojile Geçen Bir Yaşam İçin Yazılar. Veli Sevin’e Armağan. Scripta. Essays in Honour of Veli Sevin. A Life Immersed in Archaeology*. Ege Yayınları. İstanbul: 21–32.
- Sağlantımur H. 2017. Siirt-Başur Höyük Erken Tunç Çağı I Mezarları: Ön rapor (Early Bronze Age I Cemetery in Siirt-Başur Höyük: Preliminary Report). *Ege Üniversitesi Arkeoloji Dergisi XXII: 1–18*.
- Sağlantımur H., Batuhan M., and Aydoğan İ. 2019. Başur Höyük & Arslantepe the Role of Metal Wealth in Funerary Customs at the Beginning of the Early Bronze Age. In N. Durak, M. Frangipane (eds.), *Arslantepe*. Proceedings of the 1. International Archaeological Symposium. 1. Uluslararası Arkeoloji Sempozyumu Bildirileri. İnönü Üniversitesi Yayınları/İNÖNÜ University Press. Malatya: 203–215.
- Simonian H., Rothman M. 2015. Regarding Ritual Behaviour in Shengavit, Armenia. *Ancient Near Eastern Studies* 52: 1–46.
- Steadman S. R., Ross J. C., McMahon G., and Gorny R. L. 2008. Excavations on the north-central plateau: The Chalcolithic and Early Bronze Age occupation at Çadır Höyük. *Anatolian Studies* 58: 47–86.
- Steadman S. R., McMahon G., Ross J. C., Cassis M., Emre Şerifoğlu T., Arbuckle B. S., Adcock S. E., Alpaslan Roodenberg S., von Baeyer M., and Lauricella A. J. 2015. The 2013 and 2014 Excavation Seasons at Çadır Höyük on the Anatolian North Central Plateau. *Anatolica* XLI: 87–124.
- Takaoğlu T. 2000. Hearth structures in the religious pattern of Early Bronze Age northeast Anatolia. *Anatolian Studies* 50: 11–16.
- Todd A. I. 1973. Anatolia and the Khirbet Kerak Problem. In H. A. Hoffner Jr. (ed.), *Orient and Occident, Essays presented to Cyrus H. Gordon on the Occasion of his sixty-fifth Birthday*. Alter Orient und Altes Testament 22. Neukirchener Verlag. Neukirchen-Vluyn: 181–206.

Yakar J. 2020. Assessing the LBA-EIA Ethno-Cultural Continuity in Eastern Anatolia. In H. G. Yalçın, O. Stegmeier (eds.), *Metallurgica Anatolica. Festschrift für Ünsal Yalçın anlässlich seines 65. Geburtstags. Ünsal Yalçın 65. Yaşgünü Armağan Kitabı*. Ege Yayınları. Istanbul: 197–207.

Yalçın H. G. 2011. Die Karaz-Kultur in Ostanatolien. In Ü. Yalçın (ed.), *Anatolian Metal V*. Der Anschnitt. Beiheft 24. Bochum: 31–53.

2012. *Die Karaz Keramik von Tepecik in Ostanatolien*. Ege Yayınları. Istanbul.

Yalçın Ü. 2003. Metallurgie in Anatolien. In Th. Stöllner, G. Körlin, G. Steffens, and J. Cierny (eds.), *Man and Mining: Studies in Honour of Gerd Weisgerber on occasion*

of his 65th Birthday. Der Anschnitt. Beiheft 16. Bochum: 527–536.

Yalçın Ü., İpek Ö. 2016. *Prähistorische Kupfergewinnung in Derekutuğun, Anatolien. Band I: Montanarchäologische Forschungen in den Jahren 2009–2011. Ein Vorbericht*. Der Anschnitt. Beiheft 30. Bochum.

Yalçın Ü., Yalçın H. G. 2003. Zur Karaz-Keramik von Tepecik – Ostanatolien. In M. Özbaşaran, O. Tanındı, and A. Boratav (eds.), *Archaeological Essays in Honour of Homo Amatus: Güven Arsebük*. Ege Yayınları. Istanbul: 321–342.

2009. Evidence for Early Use of Tin at Tülintepe in Eastern Anatolia. *Türkiye Bilimler Akademisi Arkeoloji Dergisi* 12: 123–142.