

# Subartu XXXVIII

At the Northern Frontier of Near Eastern Archaeology

# Subartu

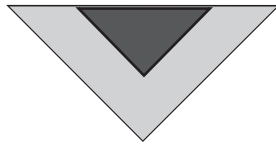
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Subartu — a peer-reviewed series —  
is edited by the European Centre for Upper Mesopotamian Studies

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Manuscripts are to be submitted to:  
Marc Lebeau, ECUMS-Brussels, 41 Boulevard A. Reyers, Bte 6, B-1030 Brussels, Belgium

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Order forms to be mailed to:  
Brepols Publishers, Begijnhof 67, B-2300 Turnhout, Belgium

Elena ROVA & Monica TONUSSI  
(editors)

AT THE NORTHERN FRONTIER OF NEAR EASTERN  
ARCHAEOLOGY  
RECENT RESEARCH ON CAUCASIA AND ANATOLIA IN THE BRONZE AGE  
AN DER NORDGRENZE DER VORDERASIATISCHEN  
ARCHÄOLOGIE  
NEUE FORSCHUNG ÜBER KAUKASIEN UND ANATOLIEN IN DER  
BRONZEZEIT

(Publications of the Georgian-Italian Shida Kartli  
Archaeological Project, 2)

(Proceedings of the international Humboldt-Kolleg Venice,  
January 9<sup>th</sup> -January 12<sup>th</sup>, 2013)



BREPOLS

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**Alexander von Humboldt**  
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Elena Rova & Monica Tonussi (eds)  
At the Northern Frontier of Near Eastern Archaeology  
(=Subartu XXXVIII), Brepols, Turnhout, 2017  
A4, sewn, 8 + 587

Contents: Archaeology, Bronze Age, Caucasus, Anatolia, Metallurgy



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ISBN 978-2-503-54897-5  
D/2017/0095/131

Printed on acid-free paper

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# An Attempt at Dating the Starting Point of the Kura-Araxes Culture on the Background of the ‘Uruk Cultural Phenomenon’

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## Abstract

*Transcaucasia (including its Turkish part) is generally accepted as the core area of the initial formation of the Kura-Araxes culture. As the Late Uruk period is contemporary with the advanced stage of the Kura-Araxes culture, it is impossible to date the archaeological material comparable with the Uruk culture found at the so-called Late Chalcolithic Transcaucasian sites of the ‘pre-Kura-Araxes’ time by the Late (or even Middle) Uruk period. The pre-Kura-Araxes period of Transcaucasia mainly relates to the ‘Northern Uruk’ material, and has nothing to do with the well-known phenomenon of the ‘Late Uruk colonisation’ to the north in the second half of the 4<sup>th</sup> millennium BC. An overview of the relevant chronological data allows us to put the initial date of the Kura-Araxes culture of Transcaucasia sometime in the early part of the 4<sup>th</sup> millennium BC; it thus seems that the very starting point of this culture was a contemporary of the latest part of the Early Uruk period, or of a period immediately after this.*

## Introduction

One of the most important aims of the archaeologists working on problems of Near Eastern archaeology and relying upon recent researches on the Late Chalcolithic-Early Bronze Age in Transcaucasia and Eastern Anatolia is to elaborate a common periodisation and a chronological framework for establishing the links between the cultural and social developments of different regions of the Near East (*i.e.* Southern and Northern Mesopotamia, the Levant, Eastern Anatolia, and Western Iran) and Transcaucasia. The determination of the chronological position of the Caucasian Kura-Araxes culture is of major importance for establishing a common chronological system not only for the Caucasian Early Bronze Age, but also for the Ancient Near East and the neighbouring regions, since this culture spreads simultaneously over a large area<sup>1</sup> where cultural remains are mainly dated by the use of geochronological methods on the one hand, and in some regions in which they are traditionally dated using the historical chronology of the Near East, based on the literary sources of Mesopotamia and Egypt, on the other one.

Chronological conclusions reached by correlating data derived from archaeological materials with those gained through geochronological analyses represent a decisive factor for the formation of relative and absolute chronologies for the Caucasus during the Early Metal Age, and for the determination of their place in the Ancient World’s chronological system. The Transcaucasian groups, bearers of the Kura-Araxes cultural traditions, extensively spread in the Near East. They mainly migrated to the south, west, south-west and south-east, from the Transcaucasian-Northeastern Anatolian homeland of this culture, towards North-western and Central Iran, Central Anatolia and Southern Palestine.<sup>2</sup> However, Transcaucasia (including the Turkish part of it, to the north of Erzurum and east of Bayburt) is generally accepted to represent the *core area* of the initial formation of the Kura-Araxes culture.

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<sup>1</sup> This culture covers a much larger area than the land between the two Transcaucasian rivers, the Kura and the Araxes, from which it takes its name; it actually covers an important part of the Middle East (see below). Therefore it is obvious that the term ‘Kura-Araxes culture’ is not a precise one: it has not a special territorial meaning and is rather symbolic, pointing to the area where this culture was first discovered.

<sup>2</sup> Much later than in Anatolia or Iran, pottery of the Kura-Araxes Eastern Anatolian-Transcaucasian tradition, known as the so-called Red-Black Burnished Ware, is well represented in the Amuq (Phase H-I) region and in Palestine (so-called Khirbet-Kerak culture). The lower limit of the Khirbet Kerak culture, prevalent in Palestine, is dated to the end of period II of the Early Bronze Age of Palestine. It should be noted that in the Amuq area ‘Kura-Araxes’ pottery begins to appear already in the period corresponding to Amuq G layers (Kavtaradze 2006).

## The chronological implications of the Kura-Araxes culture

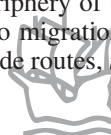
The spread of the bearers of the 'Kura-Araxes culture' is a typical case when archaeological data can bring closer both sides of the *fault line*<sup>3</sup>, or something similar to a chronological gap, which divides the two regions. It goes without saying that the dating of the Transcaucasian archaeological material is in most cases possible by the consideration of the dates of similar materials from well-dated Near Eastern strata. The dates obtained for archaeological materials of the early Kura-Araxes period detected in the context of Near Eastern cultural layers represent an important argument *per se* to demonstrate the necessity of considerably shifting back the traditionally accepted datings of Caucasian cultures, and enabled us to suggest the urgent need for shifting back the chronological scale of the Transcaucasian Kura-Araxes culture, since the latter is earlier than the Near Eastern sites with 'Kura-Araxes' materials; therefore, this could be done even independently from calibrated <sup>14</sup>C dates.

Since the end of the 1970s I have been trying to propose higher absolute dates for the Early Metal Age cultures of Georgia and generally of Transcaucasia not only on the basis of calibrated radiocarbon dates but as well, and perhaps mainly, by the data concerning the relative chronology of the Kura-Araxes culture distribution throughout the Near East, an extremely favorable circumstance, as noted above, from the point of view of chronological studies. At that time my conclusions were mainly obtained from Western Iranian archaeological sites (Geoy Tepe, Godin Tepe *etc.*) (*e.g.* Kavtaradze 1981, 1983).

In the western part of Central Iran, the Late Uruk colony (or an implanted Uruk-related fort within a purely local community) at Godin Tepe V ceased its existence as a result of the invasion of the 'Kura-Araxes' population east of the site, in the Hamadan valley, which cut trade routes to the east. It was observed that 'significant percentages' of recognisable Kura-Araxes wares first appear in the final Godin V levels (Badler 2002: 83, 107, fig. 16; *cf.* Kohl 2009: 253). After a short interval of time, the Godin IV assemblage emerged, which is characterised by material of the Kura-Araxes culture of Yanik Tepe I type. We can thus say that a Late Uruk date for the intrusion of the bearers of the Kura-Araxes culture in the Near East is, quite independently from sites in other parts of the Near East, obtainable from the Western Iranian 'Kura-Araxes' layers.

This phenomenon has a parallel in Eastern Anatolia and Northern Syria. Sherds of the Red-Black ware typical of the Kura-Araxes culture were found at Arslantepe, Kurban Höyük, Samsat, Hassek Höyük and Jebel Aruda (Kavtaradze 1999: 78 f.). The intrusive character of the Kura-Araxes culture in this area became quite clear after the exposure of the stratigraphical sequence documented at Arslantepe, where level VIB1 containing the material of this culture interrupted the preceding (level VIA) and following development (level VIB2) of local horizons characterised by Reserved-Slip pottery. Besides Red-Black ware, the 'Kura-Araxes' character of this level can also be proved by architectural data from the Arslantepe VIB layers, subsequent to Arslantepe VIA: there a double line of post-holes was found, indicating a building technique typical of the Kura-Araxes culture. It is difficult not to agree that the appearance of the VIB1 period hut village upon the razed ruins of Arslantepe VIA epitomises the recession of the Late Uruk world almost contemporary with the expansion of the Transcaucasian groups (Conti, Persiani 1993: 406). Along with Red-Black, hand-made burnished pottery and 'wattle and daub' houses, high-arsenic copper metallurgy, certain types of metal artifacts, typical graves and another strong indicator of this culture – a particular type of hearths – came into sight.

It seems that Caucasian metallic ores and metallurgical traditions were particularly prevalent in the Near East at that time. It was also emphasised that at the same time copper artefacts with a high arsenical content, cast in open and bivalve moulds, appeared in the Elaziğ region (Yakar 1985: 276). It is quite probable that the economic importance of Late Uruk enclaves, trade *diasporas* or local centres connected with the Uruk networks such as Arslantepe VIA, Hassek Höyük 5, Habuba Kabira-Tell Qannas, Jebel Aruda, and Tepecik 3 was the reason for their violent destruction by the intruders from the north – the bearers of the Kura-Araxes culture<sup>4</sup>. It is clear that the activity of the bearers of this culture can be traced on both – western and eastern – sides of the northern periphery of the Near East. According to M. S. Rothman, the expansion of Transcaucasian peoples, linked to migration waves and changing economic strategies, was well timed to coincide with the activation of trade routes, *i.e.* earlier at Arslantepe, and later at Godin in the Zagros (Rothman 2003, 2011: 829).



<sup>3</sup> This term has been borrowed from the geological *fault line*, when a part of the terrain falls from another and geological layers are moved to form a gap between them.

<sup>4</sup> B. Helwing's observations showed that after the final collapse of the Northern Uruk sites (Syro-Anatolian/Uruk network), which affected most of the sites of the Middle Uruk period along the Upper and Middle Euphrates, the Late Uruk urban centres of Mesopotamia began to flourish and expand, due to a reverse flow of information, population and manpower from Syro-Anatolia back to Mesopotamia (Helwing 2000: 92, 99).

During the last decade, new data have accumulated concerning the absolute and relative chronology of Near Eastern and Transcaucasian cultures and the chronological relationship of archaeological materials of both these regions, too. First of all, we now have a much wider set of <sup>14</sup>C dates; secondly, there are new indications of the overlapping in time of the Kura-Araxes and Uruk cultures, which have been revealed in the course of the last years with greater intensity than earlier, and which not only poses the problem of the relation between these cultures on a new basis, but provides the possibility of reconsidering the character of cultural and social developments between the highly civilised societies of the *core area* of the Near East and its Northern Frontier, and the regions located beyond the latter.

At first glance, all these facts give us a very good opportunity to date contacts of the Transcaucasian population in the Malatya-Elaziğ area of Eastern Anatolia to the Late Uruk period. But the fact is that sherds of the Red-Black, hand-made but of high technological level burnished pottery of 'Kura-Araxes' type were found in the older layers of Arslantepe VII, which belong to the Middle Uruk period. They appear gradually at Arslantepe in the period VII assemblage, which is otherwise composed of typical Amuq F Chaff-Faced buff or red-slipped wares, that are generally linked to the Northern Syrian-Upper Mesopotamian environment. In the opinion of M. Frangipane, this discovery clearly points to the fact that already at the end of period VII at Arslantepe the local population was in contact with communities belonging to the Kura-Araxes cultural traditions (Frangipane 2000: 443 f.), a circumstance which permits us to propose the existence of the bearers of the latter traditions already at that time, *i.e.* during the Middle Uruk period<sup>5</sup>. At the same time, we should keep in mind the chronological significance of the fact that the Red-Black type pottery of the Kura-Araxes culture is a sign not of the earliest, but of the developed stage of this culture (Kavtaradze 2006: 114-117).

The dating of the first obvious signs of the Kura-Araxes culture found *in situ* in the layers of local cultures of the Near East represents the *terminus ante quem* for similar and earlier archaeological artifacts of the Transcaucasian Kura-Araxes culture. Since the date of late Arslantepe VII should be considered as the *terminus ante quem* date for those layers of the Kura-Araxes culture which were characterised by the high quality Red-Black Burnished Ware, and which existed outside of the Malatya-Elaziğ area (supposedly somewhere to the north-east from it), there is a rather high probability to shift the initial date of the Kura-Araxes culture of Transcaucasia to the latest part of Early Uruk period, *i.e.* in the early part of the 4<sup>th</sup> millennium. Thus, the reconsideration of the Near Eastern varieties of the Kura-Araxes culture, combined with the new chronological data of Transcaucasian archaeological material, could offer us an opportunity to revise the starting date of the Transcaucasian Kura-Araxes culture, and put it even earlier than I had it in my previous publications (Kavtaradze 1999, 2004).

Although in the Malatya-Elazığ region of Anatolia, in Syria and Palestine, Red-Black Burnished Ware was locally manufactured, some of the earliest sherds of this ware from Arslantepe VII are distinct from local pots in terms of their production techniques, and appear to have been either imported from another area, or made in a non-specialist context. As pottery samples from specific sites do share mineralogical similarity, these vessels could have Transcaucasian origin (Schwartz *et al.* 2009: 148 f.).

If we take into account the date of the Middle Uruk period, which is placed in the first half of and in the mid-4<sup>th</sup> millennium BC, the necessity of pushing back the traditional low date of the Transcaucasian Kura-Araxes culture becomes even more urgent. As we already know, the Transcaucasian origin of the Kura-Araxes culture and its later spread to the Middle East, where archaeological strata are more accurately dated than in Transcaucasia, gives us a favorable opportunity to determine the starting date of this culture in Transcaucasia. Although, in the opinion of T. Kiguradze and A. Sagona, the idea of producing vessels with lustrous red and black surface may, in fact, have been of the east-Anatolian origin (Kiguradze, Sagona 2003: 93), it seems to us, the question is, what do we mean by the term 'Eastern Anatolia'? In our opinion, it is more preferable to consider the region allegedly involved in the origins of the above mentioned pottery, not as Eastern Anatolia, but as the northeastern part of it; that is, the so-called 'Turkish Transcaucasus', or actually the southwestern part of Transcaucasia.

According to Ph. Kohl, Red-Black Burnished Ware may actually have originated at some sites beyond the Kura-Araxes river basin in northeasternmost Anatolia, and subsequently spread eastwards into Transcaucasia; there seems to have been fairly rapid intra- and inter-cultural communication among these contiguous regions, which relatively quickly led to the emergence of a Kura-Araxes *koiné* (Kohl 2009: 249). G. Palumbi also stresses that the absence in the northernmost regions of Eastern Anatolia of the Chaff-Faced Ware horizon, so common in the southernmost areas, indicates a basic difference between the Chalcolithic

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<sup>5</sup> In C. Marro's view, the Red-Black type pottery from Period VII and VIA may have been produced by semi-nomadic Kura-Araxes groups living in the vicinity of Arslantepe, only occasionally interacting with the Late Chalcolithic villagers, just as at Ovçular Tepesi, where the presence of such pottery constitutes an odd find within an otherwise Late Chalcolithic settlement (Marro 2011: 295).

ceramic traditions of the northern and southern areas, and perhaps points to the existence of different cultural developments and separated networks of interaction. Palumbi supposes that the Northeastern Anatolian Chalcolithic pottery traditions – such as the grit-tempered Black or Dark Burnished wares – contributed to the formation of the Kura-Araxes cultural phenomenon, and that the Red-Black Burnished Ware of this culture may have first developed in these areas (Palumbi 2011: 214-216). S. Batiuk and M. S. Rothman also share the opinion that the Red-Black pottery may have originated in Northeastern Turkey and then extended first into Transcaucasia, and later in southern direction (Batiuk, Rothman 2007: 10).

From the point of view of the historiography of the problem, perhaps it should also be mentioned that already G. Arsebük tried to connect the mica-wash Dark-Faced Burnished ware found at Tepecik and Tülintepe in the Altınova region with the origin of the Karaz (= Kura-Araxes) pottery. He took into account the fact that the mica-wash ware was an integral part of both the Dark-Faced Burnished and the Karaz wares (Arsebük 1979). On the other hand, as recently Marro concluded, Dark-Faced Burnished ware from Tülintepe, which is considered as burnished and grit-tempered, is in reality chaff-tempered and chaff-faced and, in fact, some of the Dark-Faced Burnished ware potsherds from Tülintepe, being fairly light-colored and little burnished, would be perfectly at home within a Transcaucasian Chaff-Faced Ware context (Marro 2010: 50).

On the other hand, an extremely high date for the expansion of the Kura-Araxes culture from Transcaucasia to the south was obtained on the basis of recent excavations at Ovçular Tepesi (Nakhchivan, Azerbaijan), where a typical Red-Black Burnished Ware assemblage was found dating back to the end of the 5<sup>th</sup> millennium BC (Marro 2010: 52). This pottery was scattered over the floor of a house dated to the Late Chalcolithic, in an otherwise Chaff-Faced Ware context. According to C. Marro, most of the evidence points to a Transcaucasian origin for the Eastern Anatolian Early Bronze Age since, besides Red Black Burnished Wares, other cultural traits, such as metal artifacts or portable hearths, do have a strong link with Transcaucasia. In Marro's view, the Kura-Araxes culture, which marks a sharp break in almost every field in the material sequence with the previous Late Chalcolithic culture, most probably followed an east to west trajectory, from the Caucasus to Eastern Anatolia, and further into the Northern Levant and also to the southeast, toward Iran (Marro 2011: 291-293, 295). Most recent discoveries at the Areni-1 cave in the Vayots Dzor region of Southern Armenia push the bar even higher, demonstrating that the origin of the distinctive Kura-Araxes cultural artifact assemblage lies within the time-limit of the late 5<sup>th</sup> to early 4<sup>th</sup> millennia (Wilkinson *et al.* 2012: 20). In the opinion of the members of the excavating team, Areni-1 can be placed in the putative hiatus between the Sioni complex and the fully developed Kura-Araxes culture (Wilkinson *et al.* 2012: 30; *cf.* Kohl 2007: 69 f.). The Late Chalcolithic Horizon III of Areni-1 (4300-4000 cal. BC) represents two types of pottery with all the characteristics of the Kura-Araxes culture ware, but different in technological features: one – which is of a high quality and thin-walled, and the other one – which is thick-walled and with a silvery gloss black surface. Both these Kura-Araxes-like ceramics are made of local clay (Zardaryan 2014: 34). D. Zardaryan suggests that this situation is similar to the situation which is observable at the synchronous site of Ovçular Tepesi, where vessels with characteristics of the Kura-Araxes culture ceramics are present in the horizon dated to 4300-4000 cal. BC (Zardaryan 2014: 35).

Due to the fact that the Chalcolithic layers of Nerkin Godedzor (Vorotan river canyon in Syunik, Armenia) and Areni-1 along with the local and imported Chalcolithic painted pottery contain examples close to the Kura-Araxes cultural tradition by morphology and typological attribution, and examples of classical Kura-Araxes pottery, Zardaryan comes to conclusion that such manifestations may confirm the ideas pointing to the local origins of the Kura-Araxes culture coming from the Chalcolithic, even up to placing its early phases within the limits of the Late Chalcolithic (Zardaryan 2014: 32). In her opinion the high-quality samples of Kura-Araxes-like ceramics from the III Horizon of Areni-1 are a product of imitation of the imported high-quality polished and burnished ware also found in the same horizon (Zardaryan 2014: 35).

Some authors have observed that in Eastern Anatolia and Transcaucasia the Kura-Araxes cultural phenomenon exhibits both local aspects, and a widespread presence of uniformly distributed elements that were broadly shared in geographically distant areas with different cultural backgrounds (Palumbi 2011: 217). In the opinion of others, the Kura-Araxes culture emerged in different locations, showing various regional features at approximately the same time, and was characterised by a fairly rapid intra- and intercultural communication among different contiguous regions and leading relatively quickly to the emergence of a recognisable *koine*, or broadly defined 'cultural-historical community' (Kohl, Trifonov 2014: 1580). Once again it ought to be stressed that the northeasternmost part of Anatolia (same Erzurum region or Turkish Transcaucasia), represents the westernmost part of the Kura-Araxes basin and, of course, always had intensive relations with the middle reaches of both these rivers.

If at Ovçular Tepesi typical Red-Black Burnished Ware was found side by side with Chaff-Faced Ware, at Tsopi (in the southernmost part of Central Georgia) a ware similar to the latter, considered as Urukian, coexisted with local pottery genetically related to the previous Sioni culture (Nebieridze, Tskvitinidze 2011).

The so-called 'Sioni culture', or Central Transcaucasian Middle Chalcolithic, mainly belongs to a time later than the Shulaveri-Shomutepe culture, and is more or less contemporary with Southern Transcaucasian sites, such as Kültepe I, Tekhut *etc.*, though its material is quite unknown in Kültepe. In Tetritsqaro (in the southern part of Central Georgia), the lower (A) horizon was characterised only by so-called 'Urukian' (*cf.* Pitskhelauri 2012: 156; 2012b: 450) chaff-tempered orange and greyish-pink pottery with scratched ornamentation, while in the upper (B) horizon the typical dark burnished Kura-Araxes ware appears, decorated with relief spirals (Gobejishvili 1978: 55-82, 111 f.). In the lowest level (Level V) of Berikldeebi in Central Georgia a minor amount of 'proto-Kura-Araxes' pottery was detected together with Chaff-Faced Ware and the mineral-tempered ware of so-called Sioni-derived tradition, although Red-Black Burnished Ware, a hallmark of the Kura-Araxes culture, is not yet represented in this phase, and is still rare even in the following level of Berikldeebi (Palumbi 2008: 34; Rova 2014: 48)<sup>6</sup>.

Apart from that, evidence from some multilayered sites of the Ararat valley (Dzhraovit, Mokhra-Blur, Arevik, Elar *etc.*), which provide the basis for the chronological sequence of the Kura-Araxes culture in Armenia, indicates a presence, among excavated data, of the ceramic assemblage of the early stage of this culture, which is typologically close to the pottery of the Didube-Kiketi group of Central Georgia (*cf.* Kushnareva 1997: 53).

Moreover, it is possible to assume that in Northwestern Iran there were two main streams of Kura-Araxes culture: an earlier type connected with the emergence of Geoy Tepe K culture, and a relatively late one, which obviously relates to the genesis of the Early Bronze Age culture of Yanik Tepe, and reveals the characteristics of the developed stage of the Kura-Araxes culture (*cf.* Kavtaradze 1983: 78). However, pottery resembling that from Uruk (*i.e.* Leylatepe types) coexisted with pottery of the Kura-Araxes culture, but of the early stage of the latter, at a number of sites of the Caspian sea littoral of Northeastern Azerbaijan and in the Derbent area of Daghestan (Munchaev *et al.* 2010: 320; Japaridze 2012: 186)<sup>7</sup>. Therefore, it would be premature to develop far-reaching chronological conclusions on the basis of the above-mentioned stratigraphic data from some individual, isolated settlements.

In spite of all these difficulties, in general, an urgent need to backdate the chronological framework of the Transcaucasian cultures of the Neolithic and Early Metal Age has been quite clear for at least the last thirty years (see Edens 1995: 56; Kohl 2002: 160 f.; 2006: 17), and leaves no doubt presently.<sup>8</sup> As already stressed above, even independently from the results of geochronological studies, relative chronological data have for a long time indicated the need to revise the traditional chronological position of the Transcaucasian Kura-Araxes culture. By this, I mean not only the dates obtained for those Near Eastern layers containing materials belonging to the Kura-Araxes culture, which were pointing at the late Middle/Late Uruk period as the time of the initial appearance of the Kura-Araxes culture, or of the penetration of its bearers into the Near East, but also the proximity between the stages of development of the Georgian Kura-Araxes and Early Kurgan metalworking (and even of some of their specific artifacts) and those belonging to the Late Uruk-Early Dynastic periods in the Near East (*cf.* Kavtaradze 1983: 85-104, 109-115).

At the same time, I cannot agree with the point of view that it is premature to consider the reliability of the calibrated <sup>14</sup>C dates for the Kura-Araxes culture, before receiving a large series of radiocarbon dates from the Georgian and adjacent sites belonging to it (Munchaev 1994: 17; Akhundov 2013: 52).<sup>9</sup> First of all, the 'widely accepted' absolute chronology of the Kura-Araxes culture in the 3<sup>rd</sup> millennium, as well as that of the preceding, so-called Eneolithic culture in the 5<sup>th</sup>-4<sup>th</sup> millennia, and of the subsequent Trialeti culture in the first part of the 2<sup>nd</sup> millennium BC are mainly based on 'traditional' uncalibrated radiocarbon dates (Munchaev 1994: 16; *cf.* Kushnareva, Chubinishvili 1963: 16 f.). This fact brings up the necessity to reconsider the 'widely accepted' chronological framework. Also the proposal to recalculate the <sup>14</sup>C dates by the new period of half-life, which would make dates 200 years older (Munchaev 1994: 16), makes no sense from the chronological point of view because of the variation with time in the concentration of radiocarbon on the earth (*cf.* Kavtaradze 1983: 18 f.). The statement that the calibration curves and tables based on the dendrochronological scales of Californian pine have not received full acknowledgement, and that it is therefore better to refrain from their use (Munchaev 1994: 17), must be considered as completely obsolete after the publication of the calibration curves based on the joint American and European data

<sup>6</sup> According to E. Rova, the 'proto-Kura-Araxes' phase can be probably dated to the first-second quarter of the 4<sup>th</sup> millennium BC (Rova 2014: 55).

<sup>7</sup> It should also be borne in mind that Velikent, the site of Kura-Araxes culture on the Caspian Plain of Southern Daghestan which does not belong to the initial area of this culture, had been inhabited since rather early times – c. 3600–3500 BC (Kohl 2009: 246, 255).

<sup>8</sup>  *Cf., e.g.,* Trifonov 2001: 71-82; Potts 2012: 676; Sagona 2014: 26 f.; and Palumbi 2008: 13 f. for discussions about this subject.

<sup>9</sup> See also M. Andreeva's review on my book, published in 1983 (Andreeva 1987) and my reply (Kavtaradze 2000b).

(which witness the simultaneous fluctuation of the content of carbon-14 in the Northern Hemisphere). During the last forty/fourty-five years, the different calibration curves were officially recommended for the correction of <sup>14</sup>C dates. It is sufficient to say that already in 1981 at the symposium in Groningen (Netherlands), the use of the available calibration curves for the preliminary correction of the <sup>14</sup>C dates was officially suggested (Burleigh 1982: 139).

The particularly wide diffusion of the Kura-Araxes culture in the Near East, mainly dated to the first half and the mid-3<sup>rd</sup> millennium, appears to be contemporary with the following period of cultural development of the Caucasus – the era of the local ‘early’ kurgan tradition (kurgans of the Martqopi and Bedeni groups). Such an early date for the Early Bronze Age kurgans of Central Transcaucasia is substantiated by the typological parallels between metalwork finds of this phase (*e.g.* Kavtaradze 1999: 80-85).

However, recently excavated kurgans at Soyuq Bulaq in Western Azerbaijan and at Kavtiskhevi in Central Georgia are dated to the pre-Kura-Araxes period and this is a real puzzle. These kurgans belong to the so-called Transcaucasian Chalcolithic culture of Leylatepe (Ağdam district of the republic of Azerbaijan), which is considered to be connected with the Uruk tradition. It therefore seems that this type of burial construction in Transcaucasia started nearly 1000-1500 years earlier than it was traditionally thought.<sup>10</sup> As stated by Sh. Amirov, the Early Kurgan culture in Transcaucasia occupied an ecological niche of the Leylatepe culture, though, despite the chronological proximity, undoubted traces of their co-existence have not yet been found. In this author’s opinion, the bearers of kurgan-type burial rite were settled intensively in Transcaucasia at the later stage of existence of the Leylatepe culture, or after it had ceased to exist (Amirov 2014: 14)<sup>11</sup>.

### The chronological implications of the Leylatepe culture

If we intend to date the starting point of the Kura-Araxes culture and to establish the chronological place of the earliest Chalcolithic kurgan burials in the Caucasus at the same time, one of the first tasks should be the determination of the end of the preceding Chalcolithic Caucasian culture with Chaff-Faced Ware assemblage, since the earliest kurgans are more or less contemporary with the latest part of this. The decline of the Chaff-Faced Ware culture, which started in each region at a different time throughout the 4<sup>th</sup> millennium BC, was connected, in the opinion of some experts, with the development of the Kura-Araxes phenomenon (Marro 2010: 52).

Already in the mid-1970s Russian archaeologists (R. Munchaev, M. Andreeva) had noticed similarities between Mesopotamian artifacts of the 4<sup>th</sup> millennium, and those, especially ceramics, of the early Maikop period, and had suggested that the formation of the Maikop culture in the Northwestern Caucasus was a consequence of the infiltration of Near Eastern/Mesopotamian groups of population relating to the Amuq F – Gawra cultural complex into the Northern Caucasus (Munchaev 1975: 328-334, 375-377; Andreeva 1977: 56).

Still others tend to connect to the migration of Mesopotamian populations not only the emergence of the Maikop culture, but also the Transcaucasian Late Chalcolithic culture, which would have subsequently spread from there into the Northern Caucasus. In their opinion, the tribes of the Leylatepe culture in the mid-4<sup>th</sup> millennium BC penetrated the Northern Caucasus in large masses and rather intensively, and played an important part in the rise of the Maikop culture of the Northern Caucasus, thus covering the entire territory of the Caucasus (*e.g.* Museyibli 2008: 22; *cf.* Munchaev, Amirov 2012). Some archaeologists believe that Uruk migrants had learnt in the north how to build this type of burial mound and brought the acquired tradition back to the Southern Caucasus (*e.g.* Akhundov 2010). Currently, some archaeologists share the opinion that the early Maikop pottery finds quite close parallels in Transcaucasian, Anatolian, Syrian and North Mesopotamian sites (Leylatepe, Berikldeebi, Hacinebi, Amuq F, Tepe Gawra XII-IX) (Kohl, Trifonov 2014: 1578). On the other hand, in the opinion of Marro, the Maikop repertoire as a whole could barely be compared with any of the Upper Mesopotamian assemblages: except for a series of large *pithoi*, most of the Maikop pottery retrieved from archaeological excavations in the Northwestern Caucasus is neither chaff-tempered nor chaff-faced (Marro 2010: 40). According to M. Ivanova, the attempts to correlate Maikop with the Uruk culture generally proved inconclusive. Genuine Uruk pottery, comparable to finds from Lower Mesopotamia, Syria and Eastern Anatolia (or even its imitations) – mass-produced bevelled rim bowls, conical cups with string-cut bases, tall water bottles with bent spout, grey ware, red-slipped pottery,

<sup>10</sup> Archaeologists came to the conclusion that the practice of kurgan burial was already well established in Transcaucasia during the Late Chalcolithic, since the pottery from these burials shows affiliation with Late Chalcolithic 2-3 pottery from Northern Mesopotamia (Lyonnet *et al.* 2008; Museyibli 2008: 22).

<sup>11</sup> A later date for the Maikop Culture (approximately during the time-span of the Middle and Late Uruk period in Mesopotamia and Eastern Anatolia 3500 BC or the second half of the 4<sup>th</sup> millennium) was proposed by S. Hansen (Hansen 2010: 301).

reserved-slip ware – are absent (Ivanova 2007: 17). However, there are certain similarities between the Chaff-Faced Ware and the pottery of the later, Novosvobodnaya stage of the Maikop culture.

The very complex and controversial issue of the origin and spread of the tradition of burial mounds or kurgans requires a full and comprehensive study of the archaeological data from the vast areas of the Eurasian steppes. The kurgans as burial markers are so inherent, and even dictated by local topography, that it is rather difficult to imagine how they could have originated in any other type of environment. This issue needs a much broader scope of research than what we have at our disposal today. Undoubtedly, future research will take a substantial step beyond previous studies together with the accumulation of new archaeological data not only in the Near East and the Caucasus, but in the common Circumpontic area as well.

To the pre-Kura-Araxes period belongs the still unsolved problem of the interrelations between Mesopotamian and Transcaucasian Chalcolithic cultures. Basing themselves on G. Algaze's theory about the underdevelopment of the northern societies and their dominance by southern city-states that obtained the desired goods from the periphery through a kind of economic colonial system (Algaze 1993), various archaeological publications have appeared which hypothesised an expansion of South Mesopotamian merchants looking for the raw materials of the northern regions (timber, metal ores, and semi-precious stones). These merchants would have established a whole range of trading outposts along the routes leading to the Zagros and Taurus mountains and, beyond the latter, into the Caucasus. As it could be expected, the fact that the founders of the Leylatepe culture were migrants from Mesopotamia is considered beyond doubts by some scholars, and the problem lies only in managing to define more precisely the time of this migration (Almamedov 2008: 21 f.).

Thirty years ago it was believed that the Leylatepe culture emerged as a result of the migration into Transcaucasia of new ethno-cultural elements – the tribes of the Ubaid culture from Mesopotamia, and this view was generally accepted (*e.g.* Narimanov 1991: 32; Aliev, Narimanov 2001: 75). Unlike their predecessors, the new generation of archaeologists does not consider anymore the founders of the Leylatepe culture of Transcaucasia as the bearers of the Ubaid culture, but those of the Uruk tradition. In other words, waves of Mesopotamian migrants which were earlier attributed to the representatives of the Ubaid culture are now mainly identified as belonging to a later (*i.e.* the Uruk) period, when Mesopotamian culture showed a wide expansion in northwestern and northeastern direction. Scholars already began to speak about a penetration of large masses of people – the bearers of the Mesopotamian, Uruk tradition – who around the mid-4<sup>th</sup> millennium would have settled down in every region of the Caucasus, both in the mountains and in the plains, thereby fundamentally changing the character of the area and directing the economic and social development of the host society along a radically new and progressive path. As we already mentioned, in Transcaucasia they would have allegedly developed the Late Chalcolithic Leylatepe culture (Munchaev 2005, 2007: 8; Munchaev, Amirov 2009: 41; Japaridze 2012: 184-186; Pitskhelauri 2012: 154-156; 2012a, 2012b). The fact that the Transcaucasian Late Chalcolithic belongs to the Uruk world is considered doubtless so much so that, *e.g.*, K. Pitskhelauri, while offering a model of the development of the Kura-Araxes culture in its final, 'explosive' phase, suggests the simultaneous participation of Uruk migrants of the Southern Caucasus even in this chronologically later process (Pitskhelauri 2012: 153, 157 f.; 2012b: 443, 451, 454 f.).

However, scholars representing similar viewpoints base their concepts on the results of recent archaeological research in Transcaucasia, where, especially in the Araxes and Kura basins, the existence of several Late Chalcolithic sites of the Leylatepe culture, characterised by Chaff-Faced Ware of Amuq E-F type (Tekhut, Berikldeebi, Leylatepe, Böyük Kesik, Soyuq Bulaq, Poylu *etc.*) has been discovered. This type of pottery follows the same process of development (or impoverishment) of morphological repertoires and decoration characteristic of pottery production of the final phases of the Ubaid period<sup>12</sup> throughout the vast area of Northern Mesopotamia, Syria, and Southeastern Anatolia.<sup>13</sup> At a number of sites of Eastern Anatolia (Tepecik, Samsat, Kurban Höyük, Hacinebi *etc.*), the presence of this ware is usually associated with the Uruk culture, and occurs in a context of incipient urbanisation and administrative development; hence, it is assumed that this type of pottery played a role in the rise of early complex societies (*cf.* Marro 2010: 36). According to the prevailing opinion, after the formation of the Uruk cultural community ('the Uruk civilisation'), *i.e.* within the context of the Uruk cultural phenomenon, which in addition to Upper Mesopotamia, Northern Syria, Eastern Anatolia, and Western Iran, included Southern Transcaucasia as well<sup>14</sup>, intensive

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<sup>12</sup> According to Palumbi's opinion, this process appears to be related to the transformation of the role, function, and meaning of ceramics, reflected in the extreme simplification of decorative motifs and the increasing standardisation of the formal repertoires, which tend toward a greater specialisation (Palumbi 2011: 212).

<sup>13</sup> It stretches from the Mediterranean coast to the west to Transcaucasia to the north and into the northern Zagros Mountain range to the east, and includes, in southern direction, the North Mesopotamian urban centers of the Jazirah (the river plain of Upper Mesopotamia) and the eastern Tigris region (Helwing 2012: 204).

<sup>14</sup> In the opinion of Rova, the origins of the Chaff-Faced Ware ceramic tradition most probably lie in the late 5<sup>th</sup> millennium developments of the final Ubaid period, and it appears to represent an intrusive element which, in Georgia at least, co-exists with the local Sioni mineral-tempered ceramic tradition, during its latest part (Rova: 2014: 48 f.).

cultural impulses coming from the more advanced South reached the latter. However, the date of the above-mentioned Caucasian parallels of the Chaff-Faced Ware of Amuq E-F type is determined by experts around the final quarter of the 5<sup>th</sup> and the first quarter of the 4<sup>th</sup> millennium BC (*cf.* Palumbi 2011: 211).<sup>15</sup> Thus, there is an obvious discrepancy of chronological character.

Still other scholars speak about the Ubaid-Uruk period, which of course means the time of the Ubaid/Uruk transition, the cultural period during which S. Lloyd has seen the crucial indicator of a new era in Northern Mesopotamia: the unprecedented increase of metal objects (Lloyd 1978: 75). If until recently it was thought that Uruk levels at Arslantepe VII directly followed the Ubaid period, nowadays the existence of a new, intermediate cultural period is without any doubt. The research carried out at Arslantepe over the last two decades has shown that the Amuq F horizon probably developed at an earlier date than it was thought before, at least from the beginning of the 4<sup>th</sup> millennium onwards, thus embracing part of the Late Chalcolithic 2 period as well (Frangipane 2002: 123; Marro 2010: 36). Excavations at Oylum Höyük (South-eastern Anatolia, to the west of the Euphrates) and Arslantepe VIII revealed this yet unknown horizon (Özgen *et al.* 1999; Balossi-Restelli 2012).

The belief that the Ubaid period was the immediate predecessor of the Uruk horizon was recently proved wrong by the new <sup>14</sup>C dates as well (Marro 2012: 31). In recent years, a growing body of archaeological data of this type shows that between the Ubaid and the Uruk periods there was a time-span, the so-called 'post-Ubaid', covering the Late Chalcolithic 1 and 2 (or 'Terminal Ubaid' and early 'Northern Uruk' periods, for which see below), during which significant social shifts and cultural changes took place. In both periods, Chaff-Faced Ware represents a major component of the ceramic assemblage (Marro 2010: 48). However, there does exist a certain continuity between these two periods. The Arslantepe VIII-VII sequence provides evidence for a continuous development of the Chaff-Faced Ware tradition out of an earlier, final Ubaid-related tradition of mass-produced chaff-tempered bowls (Trufelli 1997; *cf.* Helwing 2012: 204). This wide highland zone within the boundaries of the Chaff-Faced Ware horizon, in the opinion of some researchers, should be called 'Northern Uruk' (Oates 2002; Helwing 2012: 204).

It is interesting that the earliest ceramic assemblages of Oylum Höyük and Arslantepe VIII (together with other similar east Anatolian assemblages including Chaff-Faced Ware) find technological, morphological and decorative parallels in the material from Ovçular Tepesi (Marro 2010: 52), pointing to the fact that the emergence of this culture takes place simultaneously within a vast area of the northern Highlands. In Marro's opinion, an ancestor to the later Amuq F/Leylatepe repertoire could be the Chaff-Faced Ware from Ovçular Tepesi of Nakhichevan and thus the overall Chaff-Faced Ware assemblage should be divided into an early (Ovçular) and late (Amuq F/Leylatepe) components (Marro 2010: 46).

Such a division of the Chaff-Faced Ware assemblage into two types – an early and a late one – gives us however a favorable possibility to suppose a spread of the Chaff-Faced Ware during the earliest stages of its evolution (in the late part of the 5<sup>th</sup> millennium BC) from the regions located north of the Oriental Taurus range in a southern direction, *i.e.* towards an area that at that time was still under the strong influence of the Ubaid world (*cf.* Marro 2010: 51).

## The problem of Mesopotamian-Caucasian interrelations

Nowadays more and more scholars believe that lowland Mesopotamians did not dominate the people of distant peripheries. If Algaze's theory, based on the supposed unbalanced relations between a centre (Southern Mesopotamia with its city-states) and a less developed periphery (Upper Mesopotamia, Iran, Anatolia and the regions beyond the latter), had led to the creation of the popular viewpoint about the Late Uruk economic colonial system and its simultaneous expansion (see above), already B. Peasnell and M. S. Rothman, after carefully studying the Tepe Gawra excavation reports and the finds in the University of Pennsylvania Museum, found reasons to challenge Algaze's theory, and proved that economic and political complexity in the North was developing there before intensified interaction with the South (Peasnell, Rothman 2003: 38). It is hard to disagree with the viewpoint that time has finally come for the formation of a new and more balanced view on the problem of the relationship between the South and the North.<sup>16</sup> In fact, Algaze now admits that recent archaeological work in the Upper Khabur basin (at Tell Brak and Khirbat al-Fakhar), leaves no doubt that parallel and quite comparable trajectories toward urban-scale societies

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<sup>15</sup> Though the Late Chalcolithic Chaff-Faced Ware in both Transcaucasia and Upper Mesopotamia developed from a local cultural genesis, most parallels between the Transcaucasian and Syro-Mesopotamian ceramic assemblages are related to the Amuq F repertoire (*cf.* Marro 2010: 39, 42).

<sup>16</sup> Even the most Mesopotamian among all artefacts, cylinder seals, may have appeared earlier in Northern Mesopotamia and only later in the South (Matthews, Fazel 2004: 61).



existed in both Southern and Northern Mesopotamia for much of the first half of the 4<sup>th</sup> millennium BC (Algaze 2012: 69).

The recent discoveries made in Upper Mesopotamia at Brak and Hamoukar, together with those made long ago at Tepe Gawra, showed that the region was far more developed than expected already at the beginning of the 4<sup>th</sup> millennium. The local Middle Chalcolithic saw a pace of development comparable with that of the South (Stein 1994: 35-46; Lyonnet 2010: 358 f.). The comparisons of local and 'Southern Uruk' contexts show that the interaction between them, which lasted for 300-400 years, seems to have mainly been in the form of peaceful symmetric economic and political relations rather than of colonialist dominance (Stein 2002: 903-916).

The 'distance-parity' interaction model characteristic of the Uruk colonies proposed by G. Stein (Stein 1998: 220-255) better explains the organisation and long-term effects of cultural contact between complex societies and less developed neighbouring polities than the hegemonic control by the *core area* as postulated in the alternative 'world system' theory by Algaze.<sup>17</sup> According to Stein, the levelling effects of distance give rise to a highly variable social landscape in which the smaller, less complex polities at the 'periphery' of the Uruk world could, and did play an active role in structuring networks of inter-regional interaction (Stein 1998: 220, 246 f.). If with increasing distance it becomes difficult for Mesopotamians to dominate local communities, *e.g.* in Southeastern Anatolia *etc.*, and retaining economic autonomy in the Uruk enclaves there (Stein 1998), it would be even more difficult, of course, to maintain such dominance in the Late Chalcolithic Caucasus.

The appropriate remark was made by Ph. Kohl, that the well-known Uruk expansion has its predecessor, although this left far less footprints of its presence in the Caucasus, and therefore 'no Habuba Kabira has been uncovered in the Caucasus region, and its discovery would be most unlikely' (Kohl 2007: 168). But who was this predecessor? We ought to take into account here the facts concerning the discovery of Kura-Araxes pottery of the advanced stage in the layers of the late Middle Uruk and Late Uruk colonies along the Upper Euphrates (see above). It is now clear that the later stage of the Middle Uruk and the Late Uruk period are contemporary with the Kura-Araxes culture of the advanced stage, and that it is therefore impossible to date to the Late Uruk period the archaeological materials comparable with the Uruk culture which were found at the so-called Caucasian Chalcolithic sites of the pre-Kura-Araxes time. These facts are clear indications of a discrepancy of chronological character. Therefore, it is quite impossible to imagine that the 'resettlement' of Uruk colonists in the Caucasus, reliably assigned to pre-Kura-Araxes times, took place in the Late (or even Middle) Uruk period. There can be only one conclusion: the aforementioned parallels of the pre-Kura-Araxes period relate mainly to the Early Uruk or, better said, to the pre-Uruk/Ubaïd period. It is not very difficult to guess that the evidence of some Transcaucasian sites with imports or imitations of Ubaïd pottery are quite impossible to fit, from the chronological point of view, with the era of the Uruk culture expansion outside its Mesopotamian homeland.

According to Kohl and V. A. Trifonov, there were two intrusions of South Mesopotamian immigrants in northern direction: later, the so-called 'Uruk expansion' along the upper Euphrates, the end of which roughly corresponds to the initial dispersal of Kura-Araxes people in the south and the south-west, and an earlier intrusion, the so-called 'North Mesopotamian Leyla-depe-related intrusion' into the Southern Caucasus, the earliest appearance of which dates from the second quarter to the mid-4<sup>th</sup> millennium, or during the transitional period between Late Ubaïd and Early Uruk times, and is more or less simultaneous with the emergence in the Northern Caucasus of the Majkop culture (Kohl, Trifonov 2014: 1577, 1579).

Although terms such as 'post-Ubaïd' or 'pre-Uruk' make the perception of the cultural transition from one period to another smoother and softer, in general, there is a gradual replacement of one important cultural era – the Ubaïd – with another one – the Uruk. There is, however, one more important point: the term 'pre-Uruk' distinguishes this transition period from the period of the Late Uruk expansion towards the Upper Euphrates area, which, as so often pointed out above, could not be used to explain, even for purely chronological reasons, the Mesopotamian-Caucasian connections. This is actually quite obvious: the Late Uruk expansion is in fact a much later phenomenon than the Caucasian connections of Mesopotamian archaeological materials.

Therefore, it is quite logical that most recently more and more archaeologists are rejecting the idea of the expansion of the Uruk colonists to Transcaucasia. In their opinion, it would be wrong to attribute the emergence of the Chaff-Faced Ware horizon in the Caucasus to the 'Uruk expansion'. They are considering this horizon as a vast *Keramik-Provinz*, which was encompassing Upper Mesopotamia and the Highlands to the north and

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<sup>17</sup> In Algaze's opinion, a synthesis of Uruk-related work in core and peripheral areas is still not easily accomplished (Algaze 2008: 163).

north-east of it, and they are sure that there is no substantive evidence that the Caucasus in the second quarter of the 4<sup>th</sup> millennium was involved in the network of the 'Uruk expansion' (e.g. Ivanova 2012: 22 f.).

Marro comes to the conclusion that the discovery of ceramic assemblages related to the 'Mesopotamian' Chaff-Faced Ware of Amuq F type in the so-called Leylatepe culture of Transcaucasia does not result, contrary to a recently widespread opinion, from the migration of Mesopotamian groups into Transcaucasia, and should not be considered as foreign within its Caucasian environment. Rather, this ware is certainly rooted in the local substratum and developed there from a local evolution dating back at least to 4500 BC; thus the cultural influence and technological innovations actually came from the opposite direction, i.e. from the north (Marro 2010: 35, 46; 2012: 30). This of course reduces the plausibility of the hypothesis of a south-northwards migration. This scholar locates the centre of gravity of this type of pottery somewhere in the northern Highlands between the Upper Euphrates and the Kura basins, but not in the Fertile Crescent (Marro 2010: 52).<sup>18</sup> According to Marro, there are increasing hints suggesting that, at that time, major changes were taking place in the Highlands and that this newly formed entity was creating some kind of new, polymorphous cultural *oikoumene*, developed as a mixture of Ubaid-related features (e.g. occasional tripartite buildings) with cultural elements that are more at home in the northern Highlands. Such new cultural elements were, e.g. the so-called Canaanian blades and the Chaff-Faced Ware, since the presence of the latter was confirmed at Aknashen-Khatunarkh (in the plain of Ararat, Armenia) already by the end of the 6<sup>th</sup> millennium BC (Horizon III) (Marro 2010: 35 f., 51 f.; 2012: 28 ff.).

In connection with the problem of Mesopotamian-Caucasian interrelations, B. Lyonnet's observations are also stimulating. Lyonnet places the Caucasus within the 'pre-Uruk' expansion phenomenon, the nature of which, in her words, is still to be understood and which now needs to be placed earlier (beginning of the Uruk period) and farther north (the Caucasus). She emphasises the importance of the Caucasus in the formation of the Uruk culture of Mesopotamia. The 'centre and periphery' explanation is regarded by her as a far too simple solution: these influences were actually reciprocal and more suggestive of relations of 'equal' type between both areas, with each of them borrowing something from the other one (Lyonnet 2007, 2010: 358 f., 363). In her opinion, it is difficult to consider Transcaucasia only as a periphery which provided raw materials, and such an opinion does not fit well with the level of development reached by this area during the Neolithic, with the complexity of burials and their wealth during the Chalcolithic period, and with what is known about metal production there. Even more, several innovations that appear at that time in Mesopotamia seem to have been borrowed from the Caucasus area because of their long tradition there, for instance the use of firing in a reducing atmosphere, polishing on ceramics, combed decoration, the so-called 'Canaanian' blades, or the introduction of sheep-breeding for wool production (Lyonnet 2007, 2010: 362 f.).

As we can see, more and more facts contradict the assumption of the existence of Urukian colonists in Transcaucasia. If Uruk colonies, as a rule, are distinguishable from the indigenous settlements around them by a complex of material culture – pottery and other artifacts, architecture and graves –, the situation we have in the Caucasus is quite different. It was already stressed above that an increasing amount of sites belonging to the culture of Leylatepe are detected every year in Southern Transcaucasia and therefore to speak about some mere outposts of Uruk colonists became quite inappropriate. It should be noted that Transcaucasian Chaff-Faced Ware of the Amuq F type, widely distributed at Northern Syrian and Upper Mesopotamian sites, is not characteristic at all for the 'genuine' Uruk pottery assemblages. Moreover, Chaff-Faced Ware is considered as typical of the 'indigenous' Late Chalcolithic *facies* in contrast to 'foreign' Uruk pottery assemblages (cf. Marro 2010: 36). The fact that very few remains clearly identifiable with the Uruk culture are found north of the Upper Euphrates basin (Marro 2010: 52) actually makes the assumption about an Uruk colonisation of the Caucasus completely unfounded. Although, after the emergence of the cultural community of the Uruk type, cultural impulses coming from the more advanced South reached the North with intensity, there was no more such uniformity as before. According to Sagona, the reason that large-scale economic transactions generated in the Late Uruk period by the 'Uruk civilisation' did not penetrate into the Caucasus to the same extent as before was the existence of an extensive Kura-Araxes 'cultural province' there (Sagona 2011: 693).

The dynamics of social and technological change in the highland zone were as much a stimulus towards the evolution of early social complexity as were developments in the, far better known, lowland societies.

<sup>18</sup> Marro offers two possible scenarios of explanation in relation to the problem under discussion: either the Chaff-Faced Ware originated somewhere in the highlands and afterwards spread into Upper Mesopotamia; or the Chaff-Faced Ware cultural province developed simultaneously over both the highlands and the lowlands, considered by her as a single, large territory (Marro 2010: 47). She gives her preference to the second scenario, which is implemented in her theory of the *Standardized ware oikoumene*, or of the cultural horizon characterised by the 'Mesopotamian' Chaff-Faced Ware of Amuq F type, which developed from a local evolution during the second part of the 5<sup>th</sup> millennium BC and spread on the vast area including Upper Mesopotamia, Eastern Anatolia, Transcaucasia and probably the northern Urmiah area as well.

According to some experts, for instance, the relations between Iran and Mesopotamia in the 4<sup>th</sup> millennium rather than being characterised by the *core-periphery* model, were also those between two sophisticated and highly unstable political units, which had something to offer and to gain from mutual interactions.<sup>19</sup>

The interaction of the South- and Southeastern Transcaucasian areas with the Northern Ubaid world is of special importance, and the impact of the Ubaid culture in the development of local Transcaucasian Chalcolithic societies is hard to overestimate. A whole range of Southern Transcaucasian sites reveal signs of the Ubaid culture. Sherds of the Dalma painted ware of the Solduz valley of Northwestern Iran, which is contemporary with Ubaid 3, were found in the lower levels of Kültepe I together with Halafian imports (Munchaev 1975: 128 f.; Voigt 1992: 158, 175).<sup>20</sup> Thus, the lower levels of Kültepe I must be dated to the period when the end of the Halaf culture slightly overlapped with the earliest Northern Ubaid, that means to the second half of the 6<sup>th</sup> and the early 5<sup>th</sup> millennium. Recently Munchaev and Amirov proposed the idea that the Halaf culture of Mesopotamia was shaped by cultural influences coming from Transcaucasia (Munchaev, Amirov 2009: 45). On the other hand, according to the more plausible viewpoint of O. Japaridze, the fact that at the time of the Shulaveri-Shomutepe early farming culture mudbrick architecture dominated in Transcaucasia, which is very rich in stone and wood, should testify in favour of this tradition coming from the Near East (Japaridze 2012: 179). It has to be considered, however, that in Transcaucasia (except for Kültepe I, Artashen and Verin Khatunarkh in the Ararat plain) only isolated findings of Halaf ceramics are attested, which are more likely to be the result of occasional and mediated interactions with the Halaf world.<sup>21</sup>

Drastic changes in the ceramic assemblage and architecture of the Central Transcaucasian sites, *e.g.*, at Mentesh-tepe (Tovuz region, Northwestern Azerbaijan) are observable during the transitional phase from the Middle to the Late Chalcolithic period, sometime in the second half of the 5<sup>th</sup> millennium. Even though local features are still visible, these changes clearly point to influences, especially in pottery production, from Upper Mesopotamia during the Terminal Ubaid and the transitional phase to the Late Chalcolithic (Lyonnet *et al.* 2012: 177 f.; Lyonnet, Guliyev 2012). Some designs of the painted pottery of Areni-1 cave reveal similarities with this material of Mesopotamian type from Mentesh-tepe (Zardaryan, Gasparian 2012: 48). At Nerkin Godedzor (Vorotan river canyon in Syunik, Armenia) a large quantity of painted pottery of the Ubaid culture has been recovered together with Chaff-Faced Ware. Godedzor probably represents one of the northernmost settlements discovered so far, which indicate a clear Northern Ubaid-related ceramic horizon. This site helps more precisely defining the northern borders of the Ubaid-related communities of Iranian Azerbaijan. The origins of the communities that settled at Godedzor should be sought in the region of Lake Urmia<sup>22</sup>; they seem to belong to one of the Ubaid-related communities that developed during the 5<sup>th</sup> millennium at the periphery of the Syro-Mesopotamian world (*e.g.* Chataigner *et al.* 2010: 379, 391). Pottery of the Northern Ubaid type was found at Tekhut (on the Ararat plain) as well (Munchaev 1975: 120).

From the viewpoint of stratigraphy, Alikemektepesi in the steppe of Mughan (Azerbaijan) is an especially interesting settlement, since pottery of the Northern Ubaid type was discovered in its upper levels, and material comparable to Kültepe I in Nakhchevan (in the Araxes valley) in its lower levels. This fact has a certain value for defining a common Transcaucasian chronology, because in the upper levels of Alikemektepesi, aside from pottery of Northern Ubaid type, sherds with combed surface and burnished interior similar to the Sioni complex of the southern part of Central Georgia, which belongs to the post-Shulaveri-Shomu Tepe period, were found. The Sioni complex was developing at a totally different and autonomous pace and its material is quite unknown in Kültepe I (see above). Pottery from the second horizon of the Areni-1 cave displays the co-existence of sites of the Areni cultural tradition with the sites of Leylatepe – Tekhut – Berikdeebi group, on the one hand, and with Tilkitepe I, which is synchronous with the final phases of the Northern Ubaid and with the Sioni complex of Georgia, on the other one (Palumbi 2011: 212). Therefore, the Sioni group could be considered as synchronous with the Northern Ubaid period (*cf.* Kavtaradze 1983: 58). Since painted designs on the pottery of sites of the Mughan steppe of Azerbaijan

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<sup>19</sup> It seems that the communities of the Iranian plateau were in control of a large-scale copper production industry long before 3500 BC, and that the probable products of that industry were integrated within the social structure of the sophisticated neighbouring lowland communities, such as Susa in the Late Ubaid period (Matthews, Fazel 2004: 61-63, 73).

<sup>20</sup> Just as the typical painted pottery of the lower levels of Dalma Tepe provides a chronological link to the Mil-Karabagh sites and Kültepe I, the characteristic Impressed Wares of Late Dalma, found at Ilanlytepe and at the sites of Misharchai and Guru Dere I in the steppe of Mughan, Azerbaijan, do the same for a later stage (Munchaev 1975: 128-130; *cf.* Schachner 2001: 274-277). The layers of Dalma Tepe and contemporary Transcaucasian sites containing Early and Late Dalma ware can be dated to the first half and mid-5<sup>th</sup> millennium.

<sup>21</sup> Tilkitepe Level III (in Eastern Anatolia, near the Van Lake) is actually, perhaps, the northernmost site providing evidence of the proper Halaf culture, which certainly differs from the above-mentioned occasional findings (Palumbi 2011: 209).

<sup>22</sup> Based on data from Godedzor, located at an altitude of 1800 m, some experts suggest the existence of small single-period sites in the highlands interacting with sedentary settlements in the low plains (Marro 2010: 51 f.).

(Alikemektepe *etc.*) are more roughly made, technologically inferior and look like an imitation of the Northern Ubaid painted pottery tradition, some experts suppose that there is no need to explain the appearance of this pottery in Southeastern Transcaucasia if the migration of a population bearing an Ubaid cultural tradition (Almamedov 2008: 19 f.). At Abdalaziztepe (in the Agdam district of the republic of Azerbaijan), the layers with material of Ilanlitepe-Alikemektepe type overlapped with those with material characteristic for the sites of the Leylatepe group (Aliev, Narimanov 2001).

It can be noticed that while the Uruk expansion was a case of real colonisation, the spread of the Ubaid culture outside of its *core area* into the neighboring regions reflects the gradual, peaceful spread of an ideological system that was selectively appropriated by the communities located there and transformed into a variety of different local cultural schemes, thus forming in these outlying areas what are, in fact, new, hybrid social identities. Even though the external forms of Ubaid cultural features (architecture, ceramic material) were more or less identical in both the heartland and the highlands, the ways they were used in the local practice reveal profound cultural differences within this *oikoumene*. The distinctive elements of this culture were transformed and used in ways that were fundamentally different from those found on the more or less similar sites of the Ubaid culture in Southern Mesopotamia. These local, or regional identities persisted in parallel with the 5<sup>th</sup> millennium Ubaid identity, but seem to have been expressed in different social and cultural contexts (Stein, Ozbal 2007: 342; Stein 2010).

Apparently, the simplification of the Ubaid cultural heritage and its local transformation in the relatively backward northern Highlands gave rise to cultural innovations, which revealed a tendency towards change in the direction of increasing standardisation and concern for efficiency. This became the decisive factor in the emergence of the cultural identity of the 'Northern Uruk' type, referred to by some scholars as the Chaff-Faced Ware cultural entity or *oikoumene*, which was one of the main components of creating the Uruk civilisation.

Although the Uruk culture (or Uruk civilisation) was distributed over a wide area from the Levant to Central Iran by local traders and colonists, and caused the emergence of new colonies within the local economies, the problem of its origin is still controversial. We should also take into account that initially H. Frankfort connected it to migratory movements from the westernmost part of Anatolia, since he had noticed certain peculiarities in the culture of Uruk for which he could not find prototypes in the preceding Ubaid culture. These supposedly Anatolian characteristics were the use of clays of purposely different compositions to obtain a red colour, muffled firing to obtain a grey colour, the use of a slip, the vertical piercing of the lugs, and the occurrence of stone vases (Frankfort 1932; *cf.* Hutchinson 1935). Later on, this became a popular concept, expressed *e.g.* by A. J. Tobler, the Braidwoods *etc.*, according to which the Tepe Gawra XIA cultural complex belonged to newcomers in Upper Mesopotamia (Tobler 1950: 24-26; Braidwood, Braidwood 1960: 513).

From a historiographical point of view, perhaps, it should also be mentioned that in my books published already at the beginning of the 1980s, I tried to determine the date of Tekhut on the basis of the date of the Amuq F/Tepe Gawra XIA cultural complex, paying some attention to the problem of the origins of the latter. This cultural complex had shown some hereditary ties, though perhaps not direct, with typical Tekhut traits. Though, at that time, nearly all important cultural innovations in the Caucasus were attributed to the impulses coming from the Near East, in spite of that, I therefore considered this cultural complex as intrusive at Tepe Gawra and in the Amuq valley from the north (Kavtaradze 1981: 46 f., pl. III, IV; 1983: 56 f.).

It was observed long ago that a study of ceramic changes in the Ubaid and Uruk periods of Mesopotamia illustrated how the alleged 'degeneration' of pottery styles could be correlated with the development of complex societies in the region. An obvious and sudden change in pottery is visible between the Ubaid and Uruk layers: fabric becomes 'decidedly inferior', shapes – crude, profiles – irregular; almost all distinctive Late Ubaid forms disappear; painting ceases and no other ornamentation takes its place until painted pottery regains popularity in the latest Uruk/early Jemdet Nasr levels. In spite of the fact that in stratum XIA at Tepe Gawra the *tournette* is less often used than in stratum XII, the emergence of the 'Uruk civilisation' is seen as the result of a gradual transition from painted pottery domestically produced on the slow wheel to unpainted pottery, mass-produced by craftsmen on a fast wheel (*cf.* Falconer 1981: 54, 59 f.). Suffice it to say that now even the wide distribution of the Ubaid-like pottery is connected, in the experts' opinion, with the introduction of the *tournette* or 'slow-wheel' used in pottery manufacture (Nissen 1988: 46). But is the development of complex societies only responsible for such changes and are these changes always the result of natural, local developments, without an intervention, or stimulus, from the outside world?

As we saw above, the data concerning archaeological material from Transcaucasia and the northern Highlands in general contradict the viewpoint of a purely technological explanation for the derivation of Uruk pottery and its subsequent distribution from Mesopotamia to the Caucasus. At the time, I believed that the admixture of a new population could be the main reason for the change in culture revealed by material

of Tepe Gawra XIA type (Kavtaradze 1983: 56).<sup>23</sup> Some similarities can be observed between pottery and figurines of Tepe Gawra XIA and Tekhut. At the same time, it should be noted that a sharp contrast is noticeable between the pottery of levels XII and XIA at Tepe Gawra (Perkins 1949: 165-167; Porada 1965: 146). In these levels the transformation, or change, from the Ubaid more 'sophisticated' ceramic assemblage to the externally 'primitive' Uruk pottery is relatively well visible. With regard to architecture, if rectangular houses were typical of Tepe Gawra XII, round houses, which were characteristic of the early farming communities of Transcaucasia, appeared in the next level, Tepe Gawra XIA (*cf.* Tobler 1950: pl. VI, VIII). It is also interesting that the population of Tepe Gawra XII and XIA used different types of copper ores: copper of the later level differs from that of the earlier one in its high content of arsenic (Tobler 1950: 212; Kavtaradze 1983: 56, n.144).

The choice of Tepe Gawra for these observations has a certain value, since the site is located in Upper Mesopotamia, on the outskirts of the civilised South and immediately south of the eastern part of the mountain range of the Taurus, where Chaff-Faced Ware of the relatively underdeveloped northern Highlands extended. Hence, the signs of a mixture of these two worlds are most easily detectable there.

If on the basis of what was discussed above we assume that the cultural component of Upper Mesopotamia and of the northern Highlands in general had a role in shaping the Mesopotamian Uruk culture, then an influx of Caucasian origin should not be excluded. At that time, the population of Transcaucasia certainly stood at a lower level of cultural and social development compared to the population of Upper Mesopotamia, but they already had enough human and economic potential to participate in the processes that took place in the northern Highlands.

What was the cause of the spread of the northern type of culture in the more advanced South? I think that, as always in history, backward but more warlike people were trying to overcome more advanced communities. It is the fate of every civilisation, after being in existence for centuries, to eventually get into the hands of 'barbarians'. Yet, in this case, there is another side of the coin: the newcomers gave to the natives new energy and impetus for further development; new generations, the mix of newcomers and natives, coming out of the ruins of the destroyed civilisation and charged with a renewed entrepreneurial spirit, created a new civilisation on the ruins of the old one.<sup>24</sup>

## Conclusions

It seems that the earliest archaeological materials from Tekhut and other Late Chalcolithic sites of the Leylatepe culture of the pre-Kura-Araxes period of Southern Transcaucasia are an integral part of the 'Northern Uruk' cultural complex of Upper Mesopotamia. This fact makes it impossible to date this Transcaucasian materials to the Late (or even Middle) Uruk period. Suffice it to say, that the later stage of Middle Uruk and the Late Uruk period are contemporary with the Kura-Araxes culture of the advanced stage. Hence, archaeological material comparable with the Uruk culture found at the pre-Kura-Araxes Transcaucasian sites of the Leylatepe culture has nothing to do with the well-known phenomenon of the 'Late Uruk colonisation' to the north in the middle and second half of the 4<sup>th</sup> millennium BC. On the grounds of the aforementioned parallels of this culture, its dating within the late 5<sup>th</sup> and the early 4<sup>th</sup> millennia should be entirely fitting.

The higher date of the Leylatepe culture already raises the possibility of a high dating for the beginning of the subsequent Kura-Araxes culture. An overview of the relevant chronological data, the above-mentioned facts of the Transcaucasian (including its Turkish part) origin of the Kura-Araxes culture, and its spreading from the *core area* of its initial formation to the Near East, where archaeological strata were more accurately dated than in Transcaucasia, are giving us a favorable opportunity to determine the starting date of this culture in Transcaucasia sometime in the early 4<sup>th</sup> millennium BC; to sum up, most likely the initial time of this culture was more or less contemporary with the latest part of the Early Uruk period or to a period immediately after it.

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<sup>23</sup> If nowadays the existence of a new cultural period between the Ubaid and the Uruk eras is without any doubt (see above), the dating of the Gawra XI-IX periods still remain problematic (Balossi-Restelli 2008: 21).

<sup>24</sup> The main cause of the conflict was not so much the rivalry between nomads and sedentary farmers, as that between the 'haves' and 'have nots'. Conflicts were thus economically motivated: one group trying to improve its living conditions at the expense of the other one (*cf.* Kavtaradze 2000a: 179, 225).

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