Archaeology

Uruk Migrants in the Caucasus

Konstantine Pitskhelauri

Academy Member; Department of Arts and Sciences, Ilia State University, Tbilisi

ABSTRACT. At the end of the 5th and in the 4th millennia B.C. large masses of Uruk migrants had settled in the South, and later in the North Caucasus. Assimilation of cultures of the newcomers and residents, as a result, caused their "explosive" development paving the way to the formation of the Maikop culture in the North Caucasus and the Kura-Araxes culture in the South Caucasus. © 2012 Bull. Georg. Natl. Acad. Sci.

Key words: Uruk migrants, Uruk culture, Maikop culture, Kura-Araxes culture.

The period between the 4th and 3rd millennia B.C. was the time of great cataclysmic events in the Caucasus; its cultural advances were influenced by changes within its boundaries as well as interactions with the outside world.

The most significant occurrence of this epoch was the appearance of a large number of peoples of Mesopotamian cultural identity who contributed to speeding up the rhythm of its cultural development, adding "explosive" character to its progress.

Researchers have been arguing about the problems of the local culture of this period and many of its aspects are still unresolved. However, a more or less acceptable concept of it has been already formulated. It assumes the existence of two chronologically contiguous and genetically interrelated cultures in the central area of the Southern Caucasus. Those are Sioni Late Neolithic monuments, which are adequate to the contemporaneous similar materials of Western Georgia and Tsopi Late Neolithic culture, which is spread over large territories of Eastern and Southern Georgia as well as of the Northern Caucasus [1-5]. It is hypothesized that there was still another, not yet determined developmental stage between the abovementioned two cultures. It is believed also that there must have been a transitional phase from the culture of Tsopi and the following early Bronze Age of Kura-Araxes culture, since in ceramic artefacts of Tsopi one can see only indications but not well recognizable forms of the latter [6:41; 5: 68].

During this period the South Caucasus experienced two powerful waves of Middle Eastern expansion: the first at the time of Late Neolithic culture of Sioni in the 4th-5th millennia B.C., and the second at the period of Tsopi culture in the Late Neolithic Age, at the end of the 5th and the first half of the 4th millennium B.C., which is known as the Uruk expansion era. Later, in the second half of the 4th and throughout the 3rd millennium B.C., during the Early Bronze Age the Kura-Araxes culture of the Caucasus spread throughout the greater part of the Caucasus, Eastern Anatolia, northern parts of Iran, Middle East and even Europe. In my opinion this was the outcome of mutual absorption and integration of the Uruk and local cultures. During this period the central area of the South Caucasus became a new stage of mostly external influences and is referred to as the Bedenic culture. On the basis of its many characteristic features, it is considered to be of northern origin [7], however, it is a special topic of discussion and will not be touched upon here.

In this paper I would like to discuss only the penetration of large masses of people from the Uruk culture into the Caucasus. I suggest that the advanced traditions of the newcomers played an extremely important role in the formation of the local culture, fundamentally changing its character and directing the economic and social development of the host society along a radically new and progressive path.

Signs of a foreign cultural penetration into the South Caucasus at the end of the 5th and 4th millennia B.C. were noticed in the archaeological finds of the Qvirila gorge, and in the caves of Samertskhle and Samele k'lde (rock). Specifically, imported clay vessels, made on a potter's wheel, are of essentially high quality and differ from local artefacts [8]. Similar items were later identified at the Tsopi settlement of the Aeneolithic Age [9: 28-32, Fig.9]. They were found in the 1950s [5; 10] but this novelty was not yet fully understood and no opinion was formulated about its origin. Later, similar ceramic artefacts were discovered at the well-stratified settlement sites of Berik'ldeebi under the earlier Kura-Araxes cultural layer and they were dated to the end of the 5th and the first half of the 4th millennia B.C.

Material of this kind was known only from the archaeological finds of the Qvirila gorge cave cultural layers which closely resembled the remarkable pottery of Maikop culture. These finds led to the conclusion that it was necessary to review and predate the well-known Maikop culture as belonging to an earlier period [11; 12.] This data became the firm basis for adjusting the chronology frame of archaeological finds of the 4th and 3rd millennia B.C. throughout the Caucasus. By now, we have a specific chronology established by means of more than one radiocarbon analysis, which gave it greater credibility [13; 14: 74,75; 15]. This does not mean, however, that the coexistence of these two cultures should be moved to a later period of their development. There are enough data to support this view (newcomers from Uruk apparently did not leave the South Caucasus).

These new ideas concerning the archaeological finds in the South Caucasus were given greater attention after it had been established that there were similarities between metal and ceramic items of the Maikop culture found in the North Caucasus and those found in Mesopotamia [16]. In fact, this has become the starting point for redirecting the studies of archaeological finds in the Caucasus in connection with Mesopotamian civilization and is frequently used today [17-25].

In this context, recent archaeological finds in the Southern and Northeastern Caucasus gave yet another, entirely new nuance to scientific researches into the ancient past of the Caucasus. They made it clear that incursion of these peoples into the Caucasus was not a onetime event, but continued for a significantly long period. Reasoning by the topography of the archaeological finds in Mesopotamia, it becomes clear that large masses of migrant settlers from that area did not move straight along the route to Transcaucasia in order to reach the destination faster. Actually, they settled down in every region of the Caucasus, in the mountains and flatlands, in areas where they could maintain a lifestyle familiar to them.

It seems obvious that from that period on, two cultures of the Caucasus that had been at different stages of development could coexist peacefully on the basis of their mutual participation in metallurgical manufacturing; it was this type of communal economy that gave impetus to a speedy development of the local culture. This is well illustrated by the metallurgical items of the Kura-Araxes culture, which is significantly more advanced in comparison with the pre-Aeneolithic culture.

Presumably, the main purpose of Uruk migrants' exodus from Mesopotamia was the search for resources of metal - copper, gold, silver [26:9; 27: 46]. I personally doubt that this could be the only reason for large masses of people to abandon their established settlement locations and move away across large distances. Most probably, they must have had another, more considerable motive, e.g. problem of overpopulation or something else. However, specific interest in metallurgical manufacturing certainly was not of secondary importance for communities whose lifestyle and cultural development was basically stimulated precisely by this type of economy [26]. Such interest of Mesopotamian communities in the Caucasus, the ancient center of metallurgy [28-32], seems quite natural to me. The archaeological discoveries made in the mountainous region of the western part of the South Caucasus, the central area of North Ossetia, along the Caucasus mountain range and at the high altitude mountainous cave cultural layers of the river Araks, all may support this assumption. The items found there were high quality ceramic vessels, made on the potter's wheel [33-39] and in one case metal artefact as well [8], all bearing characteristic features of Uruk origin. Thus, it cannot be excluded that the migrants were, indeed, metal seekers, or metal workers. Hence, it would be hard to believe that people of such highly developed culture originally belonged to the cave communities.

Initially, it was considered that this wave of Mesopotamian migrants were representatives of the Ubeid culture [40], and for quite some time this was an accepted view among scholars. Today, they are determined, and rightly so, as belonging to a later, Uruk period [21; 26; 27] when the Mesopotamian culture spread wider in the western and north-eastern direction. The data obtained in the Caucasus area confirm movement of migrants in large masses and rather intensively to the north as well.

One can identify two basic routes of Uruk migrants' movements. One started from East Anatolia along the upper reaches of the river Euphrates, crossed Arslan Tepe region initially following the left side of the river Mtkvari (Kura) valley and after Akhaltsikhe-Abastumani went directly to the north. Then via Bagdadi-Kutaisi territory it reached the river Rioni; here it moved along its upper reaches and after traversing the Mamisoni pass reached the main area of Maikop culture distribution - the western part of the North Caucasus. This data is supported by the archaeological material with distinctly Uruk features that we have discovered along the route: Abastumani [41], Orchoshani [42-44], Dzudzuana cave [33; 34], White cave [36; 37], multilayered cave in Darkveti [35], the Sameleklde and Samertskhleklde [8]. The entire material has been already published [45].

In the eastern region of the South Caucasus numerous and impressive archaeological monuments are found pointing to characteristic Uruk style material. On the basis of these finds, one can identify a credible outline of the route along which Uruk migrants moved from the northern part of Iran along the Caspian Sea shore and towards the north-east Caucasus. These are ancient settlement sites of Leilatepe, Beiuk-Kesik, Poilo I and II, Misharchaia, Alikemektepes, Alkhantepe, Chinar tepe, Abdal Aziz Tepe, Shomul Tepe, Adsiz Tepe, Agil Tepe, Khodjasan and others [13; 14; 46-55]; burial mounds in the Absheron peninsula - Uch-Tepe, Soyug-Bulag [56-60]. Material closely resembling artefacts of the Maikop culture [64] is found in Se Girdan burial mound in north-west Iran [27, 61-63; references according to Akhundov, Mahmudova and Narimanov; Akhundov and Aliev]. A whole series of settlement sites and burial mounds have been found throughout Dagestan's mountainous and Caspian shore areas, from Samur all the way to Sulaka: Ginchi, Velikent, Toprak-kale, New Gaptakhm Serzhen-Iurt, Ust Dzegutinsk, Gorodskoe, Beliaevo, Serker, Tepe, Miatl, Miskin Bulak, Diubend, Seidlar and others; they all are a part of the same route (the information is based on the maps attached to the manuscript [55] and articles [27; 65; 66]). It is believed that the influence of the Uruk culture covers the entire North Caucasus

and spreads from the Caspian Sea shore to the west all the way to the area of the Maikop culture [22; 27].

In a discussion concerning the movement of Uruk migrants from the South to the north, it is hardly possible to ignore the variety of data that points at the Jvari Pass as one of the segments of their routes [39; 67-69].

In order to have a clear idea about the settlement of Uruk migrants throughout the Caucasus territory, we should list all the known sites in the central part of the South Caucasus, where material, specific to their culture has been found. Undoubtedly, there must have been many more similar sites, but, as we will demonstrate further down, even the data available today is sufficient for forming a definite opinion concerning the matter. One of the most important among them is a burial mound with a large catacomb-like grave that was discovered on the Iori plateau near Dedoplistsgaro. Although it had been damaged by treasure hunters, it was possible to establish that the site represented a collective grave with ceramic vessels typical for the Kura-Araxes culture [70: 7-24]. The particularly significant item was an oblong stone insignia with circular cross-section, and with an image of an animal's head on one of its sides. Similar items have been found among other typically Uruk style material in the burial mounds around lower parts of the river Mtkvari (Kura) [50: Tabs. 28, 30, 35; 60:78; 71: Fig. 4]. This item was found among the material dug up by grave robbers, but this fact hardly puts under suspicion that it has been a part of the gravesite paraphernalia. A similar insignia was accidentally found also near the village Cheremi, on the Gombori mountain range in the South central Caucasus (it is preserved in the depository of the Georgian National Museum in the city of Gurjaani.)

With regard to Uruk migrants, a particularly noteworthy location is the Tsopi settlement where high quality ceramic vessels of apparently Uruk origin were found *in situ* in the cultural layer among local pottery [72: 55; 5]. One can say the same about the multilayered settlement Berikldeebi that allowed us to determine the chronological relationship of this culture with the local Kura-Araxes culture [11; 12]. It is also important that at this site among the finds of contemporaneous nature there was a quadrangular religious structure, the only one in the Caucasus, that is believed to have had originated in Southwest Asia [73: 34, 35]. Another exceptionally significant site was discovered near the village Kavtiskhevi in the area of the river Mtkvari flatlands; it is a large burial mound containing specifically Uruk style ceramic vessels [74]. It is also remarkable that items of this type were also found at the Tetritsqaro settlement site where fragments of a potter's wheel have been discovered as well [75: 56, 59, 71]. Similar high quality ceramic vessels were found in the western part of Tbilisi, in the cultural layer of the Delisi settlement [76: 31; 77]. We should mention as well the presence of similar material in the Tekhut settlement in the Ararat valley [78] and in the upper horizon of the cultural layer of the cave Areni I near the estuary of the river Araks [38]. These two points represent medial segments connecting Mesopotamia to the Caucasus and therefore they deserve particular attention in studies related to this problem.

In the past centuries, large masses of migrants left a strong positive or negative trace along the path of their movement. Their consequences must definitely be taken into consideration in order to get a clear picture of the indigenous population's past. According to our data the wave of Uruk migrants moving from the south to the north covered the entire territory of the Caucasus in the 4th millennium B.C. It seems that at the very outset, they settled all over the South Caucasus, acclimatized to local conditions, assimilated with the local population and jointly continued their customary activity. Probably in search of predominantly metal works, they gradually got acquainted with the main mountain range of the Caucasus, traversed it to the north Caucasus either through passages across it or along the sea shore strip and spread throughout both its highlands and valleys. It is quite possible that it was they, the bearers of advanced culture of Mesopotamia, who had a deep impact on the development of local cultures of the Caucasus, speeded up its development and gave it "explosive" character. It is believed that precisely this integration of indigenous and incoming cultures made possible the emergence of the so-called magnificent Maikop culture in the north-western part of the Caucasus. It is possible that a similar process was simultaneously developing in the South Caucasus as well, where it left a noticeable trace. The transformation was so significant that it is reasonable to presume that Uruk migrants together with the local population participated in the creation of the powerful Kura-Araxes culture in the South Caucasus of the Early Bronze Age.

There are differing views concerning the direction of the routes along which large masses of migrants moved on the territory of the South Caucasus in the 4th-3rd millennia B.C., and accordingly, we have different interpretations of the relevant transformative processes.

Some scholars do not deny the fact of Uruk migration to the north across the South Caucasus. In their opinion, these migrants traversed the Greater Caucasus range to the north and contributed to the formation of the magnificent Maikop culture. Later, however, some of them, already naturalized Maikop inhabitants, returned to the South Caucasus and finally settled in the area of the lower reaches of the river Mtkvari [52; 55; 71]. In support of the theory about the southbound movement of the migrants back from the north, the authors point at a single proof, the burial mounds containing Uruk artefact that have been discovered in the South Caucasus. They consider that Uruk migrants had learned in the north how to build this type of burial mounds and brought the acquired tradition back to the South Caucasus.

There are other opinions concerning the routes of Uruk migrants' entry into the Caucasus and their movements through the territory. For example, some believe that one group of these migrants entering the

Caucasus from Anatolia, moved along the upper stream of the Mtkvari, then followed the river Rioni to the north towards the Kuban area. The second group crossed Shida Kartli from the basin of the rivers Rioni and Qvirila and settled in the eastern part of the Kvemo Kartli valley [79: 182-186]. It is not clear to me, why those researchers did not choose eastern track of Uruk migrants which started from Northern Iran, passed through the eastern side of the South Caucasus and the west coast of the Caspian Sea, and crossed the North Caucasus [80: 341]. This route is more real and better confirmed with finds. However, it looks like even in this case they do not exclude the possibility of the reverse movement of the integrated migrant population after the formation of the Maikop culture since in their opinion the Maikop artefact reached the south across the Greater Caucasus passes [79:190,191]. It is possible that both these views have accepted a priori the idea concerning the north-south interaction and the tradition of the specific structure of the burial mounds was brought from the north; they particularly stress the superior influence of the northern steppe traditions in the South Caucasus. Up to now these views were believed to be an indisputable truth. Understandably, the scientists had enough ground to formulate their conviction. From the start they supported this assumption by the fact that the burial mounds were typical of the ancient pit-grave culture and already present throughout the northern steppe zone in the 4th millennium B.C., whereas there were no mounds of such construction in Southwest Asia. This was why they assumed that even the magnificent Maikop culture absorbed the technique of building this type of burial mounds as a result of its contacts with the steppe area cultures [81:75].

At present the situation has changed drastically. On the basis of a whole series of radiocarbon analyses, it has been proved [15; 82] that burial mounds of the ancient pit-grave culture are of a significantly later period in comparison with Maikop archaeological sites. This allows scholars to assume that the tradition of

Konstantine Pitskhelauri

building this type of burial mounds emerged precisely in the Maikop culture. Its ties with Levant and Mesopotamian antiquities point to its earlier origin [15: 97]. At the same time, a whole range of chronological data obtained with radiocarbon analysis has established that the settlements and burial mounds of the South Caucasus containing Uruk artefact are coexistent with the Maikop culture [13: 149-153] and, accordingly, the ancient pit-grave culture and its burial mounds belong to a later period. Therefore, today we cannot possibly ascribe the emergence of this kind of burial mounds in the Maikop culture as well as similar contemporaneous sites in the South Caucasus to the influence of the steppe zone cultures. Moreover, there were no adverse conditions that would have prevented emergence of this type of burial mounds in the Caucasus itself.

The custom of constructing such burial mounds continued even in a later period. Researchers discern two groups of burial mounds in the 3rd millennium B.C. [83]. The first group is represented by large, individual burial mounds containing items belonging to the final phase of the purely Kura-Araxes culture [84: 29; 31], while artefacts typical of the north are seldom found [84: 31]. The second group of burial mounds of the same period is represented by grave sites of the so-called Bedenic culture containing material distinctly different from that of the South Caucasus. In the central and eastern part of the South Caucasus the type of burial mounds remained of traditional form even in the first half of the 2nd millennium B.C. and became quite rare in the later periods.

In connection with the given issue, we should set apart one particular group of mounds from those of the 3rd millennium B.C. These are especially rich burial mounds of the Kura-Araxes culture in its final stage of development known as the Martqopi period. Among them large burial mounds on the left bank of the river Alazani merit particular attention. Their remarkably strong stone armour mounds are often 20-25 meter high and 200-300 meter in diameter. They contain especially rich artefacts, among them gold and silver jewelry [28: 235; 85].

I believe, this was the final stage of the integration of the Uruk migrants into the Kura-Araxes culture when their social and economic development reached its zenith. It is natural that such thoroughly settled migrants influenced the languages of the communities living in the Caucasus [86: 38-155; 87: 22-26; 88: 29-39].

It needs to be clarified why Uruk migrants left their distinct imprint on the Maikop culture, while we do not see similar signs in the Kura-Araxes culture. I suggest that the main reason of it is the fact that so far the problem of fusion of Uruk migrants in the culture of the South Caucasus has not been sufficiently studied. It should be also taken into consideration that the inhabitants of the Kura-Araxes area did not lose their already well defined cultural identity thanks to their powerful energy of inherent development. Nevertheless, the consequences of their interaction are well discernible in the "explosive" nature of the development of the Kura-Araxes culture in its final phase.

Thus, we offered here a model of development of the Kura-Araxes culture in its final, "explosive" phase and participation of Uruk migrants in this process. However, this is only a tentatively posited scientific problem. In order to arrive at a final conclusion it is necessary to make a thorough study and every detail from various aspects, which goes beyond the framework of the present article. არქეოლოგია

ურუქელი მიგრანტები კავკასიაში

კ. ფიცხელაური

აკადემიკოსი; ილიას სახელმწიფო უნივერსიტეტი, მეცნიერებათა და ხელოვნების ფაკულტეტი, თბილისი

ძვ. წ. V ათასწლეულის მიწურულსა ღა ძვ.წ. IV ათასწლეულში, ჯერ სამხრეთ, შემღეგ ჩრღილოეთ კავკასიაში კომპაქტურად სახლღება ურუქელ მიგრანტთა ღიღი მასები. უცხო ღა ღამხვდური მოსახლეობის კულტურების შერწყმის შეღეგად განსაკუთრებით წინაურღება ბრინჯაოს მეტალურგია, რაც "ფეთქებაღი" განვითარების საფუძველი ხღება. შეღეგად, ჩრღილოეთ კავკასიაში ყალიბღება მაიკოპის, ხოლო სამხრეთ კავკასიაში – მტკვარი-არაქსის კულტურა.

REFERENCES

- 1. *T. Kiguradze* (1976), Periodization of the Early Agricultural Culture of Eastern Trans-Caucasia. Tbilisi, 176 p., 60 tab. (in Georgian).
- 2. *T. Kiguradze* (1986), Neolithische Siedlungen von Kvemo-Kartli, Georgien. Materialien zur Allgemeinen und Vergleichenden Archäologie, Band 29. München, 116 p., 4 tabs.
- 3. M. Menabde, T. Kiguradze (1981), Sioni Archaeological Monuments. Tbilisi, 122 p., 19 tabs. (in Georgian).
- 4. L. Nebieridze (2001), Settlement Sioni A Late Aeneolithic Monument of Eastern Georgia. Dziebani. Journal of the Georgian Archaeology/Georgian National Museum, 7: 5-13. Tbilisi (in Georgian).
- 5. L. Nebieridze (2010), Tsopi Aeneolithic Culture. Tbilisi, 256p. (in Georgian).
- 6. T.N. Chubinishvili (1971), K drevnei istorii Iuzhnogo Kavkaza. Tbilisi, 169p., Tab.1(in Russian).
- 7. K.K. Pitskhelauri (2012), In: Problems of History and Archaeology of Georgia and the Caucasus. Tbilisi (in Georgian).
- 8. L.Glonti, A.Javakhishvili, G.Javakhishvili, et al. (1968), Vestnik Gosudarstvennogo Muzeia Gruzii, XXV-B: 3-14, Tbilisi (in Russian).
- 9. K.Kh. Kushnareva, T.N. Chubinishvili (1970), Drevnie Kul'tury Iuzhnogo Kavkaza (V-III tys.do n.e.), Leningrad, 187 p. (in Russian).
- 10. L. Nebieridze, N. Tskvitinidze (2011), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 178-180, Tbilisi (in Russian).
- 11. L. Glonti, A. Javakhishvili (1987), Kratkie Soobshcheniya Instituta Arkheologii, 192: 80-86. M. (in Russian).
- A. Žavaxišvili (1998), Ausgrabungen in Berikldeebi (Šida Kartli), "Georgica". Zeitschrift f
 ür Kultur, Sprache und Geschichte Georgiens und Kaukasiens. Heft N 21: 7-20. Konstanz.
- 13. N. Museibli (2007), Chalcolitic settlement Beyuk-Kesik, Baku, 227 p. (in Russian and English).
- 14. N. Aliev, I. Narimanov (2001), Kul'tura severnogo Azerbaidzhana v pozdnem Eneolite. Baku, 142 p. (in Russian).
- 15. E.N. Chernykh, L.B. Orlovskaya (2004), Rossiiskaia Arkheologiia, 1: 80-99. M. (in Russian).
- 16. M.V. Andreeva (1977), Sovetskaia Arkheologiia, 1: 39-56, M. (in Russian).
- 17. V.A. Trifonov (1987), Kratkie Soobshcheniia Instituta Arkheologii, 192: 18-26. M. (in Russian).
- 18. I.M. Miziev (1990), Sovetskaya Arkheologiya, 4: 131-137. M. (in Russian).
- R.M. Munchaev (1994), Maikopskaia Kultura, Arkhaeologiia. Ranniaia i Sredniaia Bronza Kavkaza,158-225.
 M. (in Russian).

- 20. R.M.Munchaev (1996), in: Mezhdu Aziei i Evropoi. Kavkaz v IV-I tys. do n.e. Materialy konferentsii posviashchennoi 100-letiiu so dnia rozhdeniia A.A.Iessena. 37-38, SPb. (in Russian).
- 21. R.M. Munchaev (2005), Rossiiskaia Arkheologiia, 1: 13-24. M. (in Russian).
- 22. R.M. Munchaev, Sh.N. Amirov, R.G. Magomedov (2010), in: Issledovaniia pervobytnoi arkheologii Evrazii. 316-334. M. (in Russian).
- 23. S.N. Korenevskii (1993), Drevneishee osedloe poselenie na srednem Tereke. M. 167p. (in Russian).
- 24. S.N. Korenevskii (2004), Drevneishie zemledel'tsy i skotovody Predkavkaz'ia. 113 p. 122 figs. 19 tabs. M. (in Russian).
- 25. S.N. Korenevskii (2007), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 58-59. Makhachkala (in Russian).
- 26. R.M. Munchaev (2007), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 89. Makhachkala (in Russian).
- 27. R.M. Munchaev, Sh.N.Amirov (2009), in: Kavkaz Arkheologiia, Etnologiia. Materialy Internatsional'noi Konferentsii, 41-52. Baku (in Russian).
- 28. I. Gambashidze, G. Mindiashvili, G. Gogochuri, K. Kakhiani, I. Japaridze (2010), Ancient Metallurgy and Mining in Georgia at 6th-3rd Millennia B.C. Tbilisi, 592 p. (in Georgian).
- 29. G. Inanishvili, B. Maisuradze, G. Gobejishvili (2010), Mining and Metallurgical Activity in Ancient Georgia (3rd-1st millennia B.C.), Tbilisi , 224 p. (in Georgian).
- 30. Ts. Abesadze (2011), Towards the History of the Metallurgy in Georgia. Tbilisi, 398 p. (in Georgian).
- 31. A.Ts. Gevorkyan (1980), Iz istorii drevneishei metallurgii Armianskogo nagor'ia. Yerevan, 127 p. (in Russian).
- 32. K. Picchelauri (1997), Waffen der Bronzezeit aus Ost-Georgien. Archäeologie Eurasien, Band 4, 87 p. 116 tabs., Berlin.
- 33. D. Tushabramishvili (1971), Archaeological Research in Georgia in 1969. 5-7. Tbilisi (in Georgian).
- 34. D. Tushabramishvili (1972), Archaeological Research in Georgia in 1971. 4-5. Tbilisi (in Georgian).
- 35. L. Nebieridze (1978), Darkveti Multilayer Rockshelter. Tbilisi, 105 p. 12 tab. (in Georgian).
- 36. A. Kalandadze, K. Kalandadze, A. Ioseliani, et al. (1976), Polevye Arkheologicheskie Issledovaniia v 1974. 7-10. Tbilisi (in Russian).
- A. Kalandadze, K. Kalandadze, M. Gabunia, et al. (1979), Polevye Arkheologicheskie Issledovaniia v 1975. 8 9. Tbilisi (in Russian).
- 38. D. Zardaryan (2011), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza. 123-124. Tbilisi (in Russian).
- N.I. Gijrati, D.F. Rostunov (1993), in: Kavkaz i tsivilizatsiia Vostoka v drevnosti i srednevekov'e. 75-99. Vladikavkaz (in Russian).
- 40. *I. Narimanov* (1985), Vsesoiuznaia Arkheologicheskaia Konferentsiia "Dostizheniia Sovetskoi Arkheologii v XI Piatiletke". Tezisy dokladov, 71-72. Baku (in Russian).
- 41. K. Kalandadze (1974), Polevye Arkheologicheskie Issledovaniia v 1973. 11-12. Tbilisi (in Russian).
- 42. L. Jibladze (2005), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 100-101. Baku (in Russian).
- 43. A. Orjonikidze (2005), Dziebani. Journal of the Georgian Archaeology/Georgian National Museum, 15-16, 69-73. Tbilisi (in Georgian).
- 44. G. Pkhakadze (2009), In: Annals, 5: 222-241. Tbilisi (in Georgian).
- 45. G.G. Pkhakadze (1988), Sovetskaia Arkheologiia, 2: 43-57. M. (in Russian).
- 46. A. Agalarzade (2009), in: Kavkaz Arkheologiia i Etnologiia. Materialy Internatsional'noi Nauchnoi Konferentsii. Shamkir, 2008. 83-88. Baku (in Russian).
- 47. *Kh. Almamedov* (2009), in: Kavkaz Arkheologiia i Etnologiia. Materialy Internatsional'noi Nauchnoi Konferentsii. Shamkir, 2008. 89-95. Baku (in Russian).
- 48. T. Akhundov (2001), Severno-Zapadnyi Azerbaidzhan v Epokhu Eneolita i Bronzy. Baku. 331 p. (in Russian).
- 49. T. Akhundov (2005), in: Archaeologiia, Etnologiia, Folkloristika Kavkaza. 52-53. Baku (in Russian).
- 50. *T. Akhundov, V. Mahmudova* (2008), Iuzhnyi Kavkaz v kavkazsko-peredneaziatskikh etnokulturnykh processakh v IV tys.do n.e. Baku , 197 p. (in Russian).
- 51. T. Akhundov (2007), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 61-64. Makhachkala (in Russian).
- 52. T. Akhundov (2010), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, Tbilisi (in Russian).
- 53. F. Guliyev (2005), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 82, Baku (in Russian).
- 54. N. Museibli (2010), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 208-211. Tbilisi (in Russian).
- 55. I. Narimanov, T. Akhundov, N. Aliev (2007), Leilatepe (Poselenie, traditsiia, etap v etnokul'turnoi istorii Iuzhnogo Kavkaza). Baku, 128 p. (in Russian).
- 56. N.G. Aliev (2005), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 34, Baku (in Russian).
- 57. A.A. Yessen (1965), Materialy po Arkheologii SSSR, 125: 153-194, M.-L. (in Russian).
- 58. N. Museibli (2005), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 135-138. Baku (in Russian).
- 59. N. Museibli (2005), in: Kavkaz Arkheologiia i Etnologiia. Materialy Internatsional'noi Nauchnoi Konferentsii. Shamkir, 2008, 53-63. Baku (in Russian).
- 60. B. Lyonnet (2009), in: Kavkaz Arkheologiia i Etnologiia. Materialy Internatsional'noi Nauchnoi Konferentsii. Shamkir, 2008, 69-78. Baku (in Russian).

- 61. O.W. Muscarella (1969), The Tumuli at Segirdan. A Preliminary Report. Metropolitan Museum Journal 1969, II.
- 62. O.W. Muscarella (1971), The Tumuli at Segirdan: Second Report. Metropolitan Museum Journal 1971, IV. 63. O.W. Muscarella (2003), The Chronology and Culture of Segirdan. Ancient Civilizations from Scythia o
- Siberia.
- 64. V.A. Trifonov (2000), Kurgany Maikopskogo tipa v Severno-zapadnom Irane. 244-264, S.-Pb (in Russian).
- 65. M. Gajiyev (1966), Kratkie soobshcheniia Instituta Arkheologii, 108, M. (in Russian).
- 66. R.G. Magomedov (207), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, Makhachkala (in Russian).
- 67. G. Gogochuri, V. Rostunov, G. Chikovani (1996),. International Conference "The Caucasus in the Context of World History", Abstracts of Papers. Tbilisi.
- 68. V. Rostunov (2005), in: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, Baku (in Russian).
- 69. S. Korenevskiy (1996). New settlement Redant near Vladikavkaz. Abstracts of Papers of the International conference "The Caucasus in the Context of World History", Tbilisi.
- 70.V. Varazashvili (208), "Amirani" Bulletin of the International Caucasological Research Institute, XIX: 7-24. Tbilisi-Montreal (in Georgian).
- 71. T. Akhundov, K. Almamedov (2009), South Caucasia in the Neolithic to Early Bronze Age (Central and Eastern Regions). ALBEW. TKTD "FG" IS.
- 72. Archaeology of Georgia, II, (1992), Tbilisi, 124-151. (in Georgian).
- 73. G. Kipiani (1997), Bulletin of the Georgian State Museum, XLII-B, 13-57. Tbilisi (in Georgian).
- 74. Z. Makharadze (2007), In: B.Lyonnet (ed.), Les cultures du Caucase (VI^e-III^e millénaires avant notre ère). Leurs relations arec le Proche-Orient. Paris, pp.123-131.
- 75. G. Gobejishvili (1978), Settlement Tetritskaro, Tbilisi, 118 p. (in Georgian).
- 76. R. Abramishvili (1978), Settlement Delisi. Collection of Works, I, 28-33, Tbilisi (in Georgian).
- 77. E. Gogadze (2003), Dziebani. Journal of the Georgian Archaeology/Georgian National Museum, Additions, X, 27-29, Tbilisi (in Georgian).
- 78. R. Torosyan (1976), Early Agricultural Settlement Tekhuta. Yerevan, 142 p. (in Armenian).
- 79. O. Japaridze (2011), Researches in Archaeology of Georgia, 20, 178-196, Tbilisi (in Georgian).
- 80. R.M. Munchaev, N.Ya. Merpert, Sh.A. Amirov (2010), Research of Primitive Archaeology of Eurasia, 335-343, Makhachkala (in Russian).
- 81. A.D. Rezepkin (1991), International Symposium-Colloquium "Caucasus in the System of Palaeometal Cultures of Eurasia", 72-79, Tbilisi (in Russian).
- E.N. Chernykh, L.B. Orlovskaya (2007), In: Arkheologiia, Etnologiia, Fol'kloristika Kavkaza, 10-28, Makhachkala (in Russian).
- 83. Z. Makharadze, A. Orjonikidze (207). Archaeology, Ethnology, Folklore of Caucasus, 83-84, Makhachkala (in Russian).
- 84. O. Japaridze (1988), Proc. Georg. Acad. Sci. Ser. Archeology, Ethnography and History of Arts, 4, Tbilisi (in Georgian).
- 85. K. Picxelauri, W. Orthmann, D. Qvavadze (1994). Neue archäologische Funde in Kachetien. in: Georgica, Heft 17: 9-13, Konstanz.
- 86. R. Gordeziani (2007), Mediterranea Kartvelica, I, Origins, Tbilisi, 209 p. (in Georgian).
- 87. N. Khazaradze, K. Topuria (2000), In: Issues of the International Symposium on the Development of Natural and Engineering Sciences, 22-26, Tbilisi (in Georgian).
- 88. G. Giorgadze, N. Khazaradze (2002), In: Ethnogenesis of the Georgians. 29-39, Tbilisi (in Georgian).

Received May, 2012