EARLY BRONZE AGE CULTURAL ENVIRONMENT OF SAMTSKHE HIGHLANDS: ARCHAEOLOGICAL SURVEY IN ADIGENI MUNICIPALITY[1]

ადრე ბრინჯაოს ხანის კულტურული გარემო სამცხის მთიანეთში: არქეოლოგიური დაზვერვები ადიგენის მუნიციპალიტეტში[2]

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Abstract: This article presents the results of an Adigeni archaeological survey project conducted in the River Kvablian gorge of Samtskhe region (southwest Georgia) in the modern territory of the Adigeni municipality. In general, the microregion is less studied archaeologically. Even so, limited data indicate that the area as a frontier zone between different regions served as a cultural crossroads during multiple stages of prehistory. Consequently, it was expected that such cultural interaction continued in the Bronze Age as well and in this region, two Early Bronze Age cultures would coexist: Kura-Araxes and the so-called Western Georgian culture. With the combination of survey methods 12 Kura-Araxes sites were identified in the study area and as a result, no evidence of "western" influence was attested. This suggests that Adigeni was a Kura-Araxes culture dominating area and clearly defines its cultural environment.

Keywords: Samtskhe-Javakheti; South-West Georgia; Archeological survey; Early Bronze Age; Kura-Araxes culture; Chalcolithic;

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აბსტრაქტი: სტატიაში წარმოდგენილია სამცხეში, ქვაბლიანის ხეობაში, თანამედროვე ადიგენის მუნიციპალიტეტის ტერიტორიაზე ჩატარებული დაზვერვების შედეგები. ზოგადად, ეს მიკრორეგიონი არქეოლოგიურად ნაკლებად არის შესწავლილი, თუმცა არსებული მცირე მონაცემები უჩვენებს, რომ ეს არეალი, როგორც სხვადასხვა გეოგრაფიულ რეგიონებთან მოსაზღვრე ზონა, ერთგვარ გზაჯვარედინს წარმოადგენდა პრეისტორიის სხვადასხვა ეტაპზე. შესაბამისად სავარაუდო იყო, რომ ეს ურთიერთკავშირები ბრინჯაოს ხანაშიც გრძელდებოდა და რეგიონში ადრე ბრინჯაოს ხანის მტკვარ-არაქსისა და დასავლეთ საქართველოს ამავე პერიოდის კულტურების თანაარსებობა დადასტურებულიყო. სხვადასხვა მეთოდების კომბინაციით წარმოებული არქეოლოგიური დაზვერვების შედეგად, საკვლევ არეალში, მტკვარ-არაქსის კულტურის 12 ძეგლი აღმოჩნდა, თუმცა დასავლეთ საქართველოს კულტურის გავლენა არ დადასტურებულა, რაც მიუთითებს, რომ ადიგენი იყო მტკვარ-არაქსის გავრცელების არეალი და ნათლად განსაზღვრავს მის კულტურულ გარემოს ადრე ბრინჯაოს ხანაში.

საკვანძო სიტყვები: სამცხე-ჯავახეთი; არქეოლოგიური დაზვერვები; სამხრეთ-დასავლეთ საქართველო; ადრებრინჯაოს ხანა; მტკვარ-არაქსის კულტურა; ხალკოლითი;

Introduction:

Mapping of spatial and temporal distribution of archaeological sites within the certain region, provides significant information regarding the cultural dynamics of ancient societies. It allows us to gain entirely new perspective to understand many aspects of the past. Among others it comprises the lifestyle of population, their social organization or adaptation to the environment.

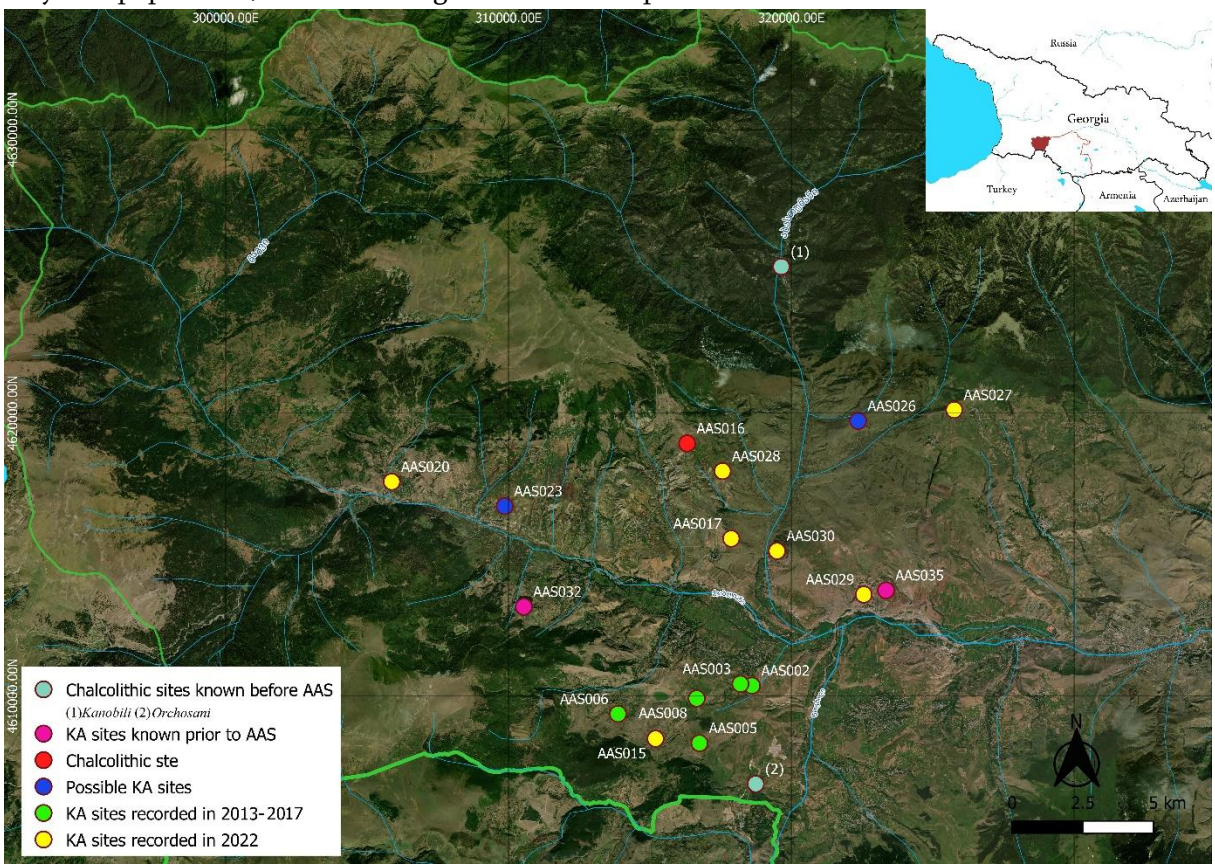


Figure.1 *The map shows the distribution of Kura-Araxes and Chalcolithic sites from the Adigeni area (courtesy of Bing Virtual Earth)*

Mapping the extension of archaeological cultures within the exact borders is one of the most difficult and challenging issues, it is almost impossible to accomplish due to periodically appearing new sites. At the same time, some less-known which were detected by survey in the last century, have been lost because of the poor recording methodology available at the time. Therefore, it is important to relocate and record these lost data using new mapping methodology.

In Georgia, all regions are archaeologically investigated in various degrees. In contrast, some areas are still understudied to this day. In this regard, the Samtskhe-Javakheti region (southwest Georgia) stands apart. Although archaeological investigation in this region has a rich history that began in the last century. These studies were sporadic. Especially it can be said about the Adigeni municipality of the Samtskhe-Javakheti region, where no systematic long-term research was conducted.

An overview of archaeological literature indicates that several archaeological campaigns have been carried out in this region over the years. Instead of following the research history in detail some

significant expeditions can be emphasized. Among them first of all should be mentioned in 1950s the accidental discovery of Colchian hoard in the village of Ude dated to the Late Bronze-Early Iron Age (Javakhishvili, Chubinishvili, 1959: 59-64). This hitherto unknown materials for this region triggered the interest of archaeologists in the Adigeni area. In the same years, T. Chubinishvili and O. Gambashidze conducted a small-scale excavation near the village Benara, at the location called "Zadengora" and found Kura-Araxes materials of the Early Bronze Age, and later period materials dated to the Classical era (Chubinishvili et. al., 1957: 116-127).

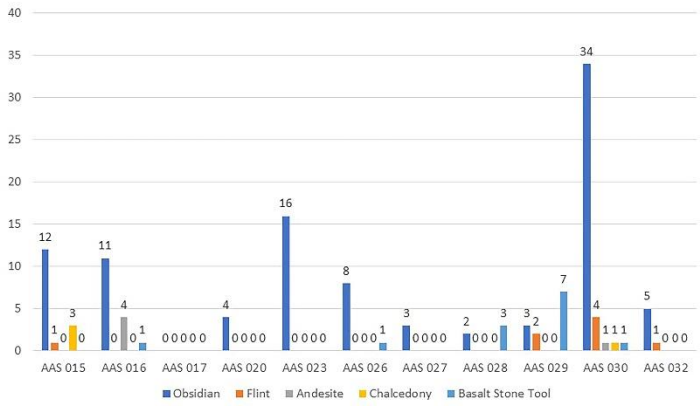


Figure 2. *Quantitative distribution of lithics and stone tools according to sites*

In 1973, K. Kalandadze carried out salvage archaeological excavations in Abastumani, where a Kanobili Chalcolithic settlement was found. Due to the scarcity and uniformity of the materials obtained here, the unambiguous cultural attribution of this settlement could not be achieved. However, some of the materials are clearly related to the Chalcolithic of Western Georgia, and the other part stands close to the Eastern Georgian Chalcolithic, so-called Tsopi group (Kalandadze, 1974: 11-12; Kalandadze, 1976: 371-390). The most significant work was contributed by O. Gambashidze, who led the Meskhet-Javakheti expedition. Gambashidze performed several rescue excavations at different places in the vicinity of Adigeni over the years, as well as initiated archaeological surveys. As a result, a number of archaeological sites of different periods have been found, among them are two Early Bronze Age Kura-Araxes culture settlements: Amkheris Gora and Parekhas Gora (Gambashidze, Kvizhinadze, 1981: 63; Gambashidze, Gambashidze, 1995: 53-54; Gambashidze, Gambashidze, 1997: 47; Orjonikidze, 1983).

In the last decade, the Chalcolithic settlement of Orchosani has been excavated in Adigeni municipality, in the Potskhovi River basin. Based on the authors of excavations the materials from Orchosani show certain affinities with synchronous sites in western and eastern Georgia. It also contains some elements of the Anatolian influence (Gambashidze et. al., 2018: 153,182,194-195,199,201).

Generally speaking, the region has a wide range of archaeological sites across different chronological periods. This includes the Paleolithic, Chalcolithic, Early Bronze, Late Bronze, Early Iron, Classical and Medieval Ages. However, most of those sites are described in field reports, and their actual locations are unknown as they have never been mapped.

The main reason why Adigeni became a target of the research, is its significant geographical location as a frontier zone between western and eastern Georgia as well as its geographical proximity to Anatolia. The location indicates that throughout antiquity the Adigeni area was a cultural crossroads, where different cultures co-existed side by side as it apparent at Orchosani. It should be supposed that this type of cultural interactions continued during Bronze Age as well.

The Adigeni region encompasses the area between the three ridges (Erusheti, Meskheti and Arsiani) and partially covers their plateaus. The landscape is characterized by difficult mountain terrain. The elevation varies from 1100 to 3000 meters above sea level. The most populated area is the Kvalbiani River basin and its tributaries, and sparsely the mountainous areas. Nearly 45% of the area is covered by natural forest. It is difficult to determine if the forest was excised during Early Bronze Age since the paleoenvironment has never been studied in this micro-region. Therefore, it is not determined whether the size of the forest massif has increased or decreased over the millennia and if there is any possibility of finding prehistoric sites within these forests.

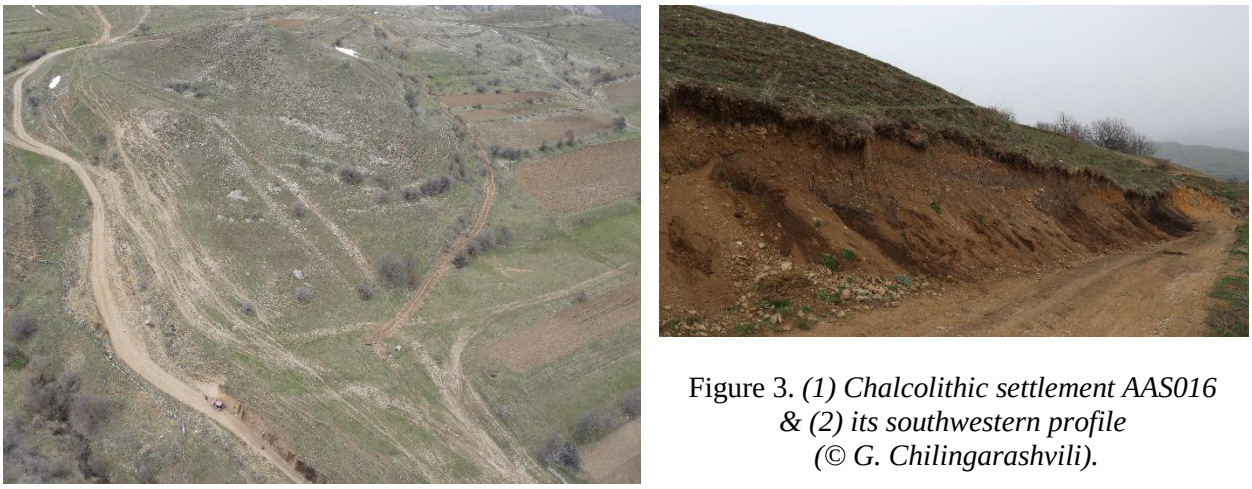


Figure 3. *(1) Chalcolithic settlement AAS016 & (2) its southwestern profile (© G. Chilingarashvili).*

Due to the scarcity of archaeological data in the region, since 2013 the Adigeni Archaeological Survey (AAS) project was initiated, periodically supported by Tbilisi State University (Chilingarashvili, 2021a: 40-97). The aim of the AAS project is not only to collect new data but also to re-examine sites already recorded in Soviet times, besides that several topics can be outlined. The project agenda for the 2022 season includes several aspects: (1) how intensively Kura-Araxes (KA) culture was presented; (2) what are the northernmost and westernmost boundaries of the KA culture (3) and beside KA if western Georgian culture was presented; (4) if post-KA sites were demonstrated in the region; (5) collecting detailed information on KA settlement patterns and topography and more broadly, (6) to observe natural sources of micro-region which could be exploited during Early Bronze Age and (7) understanding the occupational history of the region.

Over the years, the idea has been dominated that the Kura-Araxes community, because of difficult landscape conditions, was less spread to the Adigeni side. The basis for this preposition was the scarcity of sites and the results of a small-scale archaeological survey conducted by O. Japaridze in the 1970s. In contrast to other parts of the region, the expedition in the Adigeni area traced only one site from this period (Japaridze et. al., 1981: 15). However, AAS project revised this theory and evidenced the opposite – twelve Kura-Araxes sites have been discovered during several field campaigns. Among the most notable is the Irmis Rka multi-layer settlement, where excavations since 2020 have attested long-term occupational history through the Bronze Age, including Kura-Araxes and post-Kura-Araxes, i.e., Bedeni culture (Chilingarashvili, 2021b: 252-262).

Methods:

Due to the complexity of the terrain, a combination of different survey methods was used for the AAS project: To find potential archaeological sites, the multi-stage remote sensing method was implemented, which included (1) the deciphering of free-access satellite images (Google Earth and Bing Maps); and (2) the study and integration of topographic maps of Georgia (1:25 000; 1:50 000) into the Geographic Information System.

Afterward, every potential site has been checked using a systematic terrestrial method. The survey was conducted during early spring when vegetation was low and the surface was highly visible. All surveyed locations have been named after the acronym AAS (Adigeni Archaeological Survey), and if the presence of archaeological remains (ruins, a single wall, or more than 10 artifacts such as pottery, lithics, or other) was confirmed, the point had been classified as an archaeological site and assigned a number (e.g., AAS25). If only a little number of samples (less than 10) were attested, the point was defined as an active zone (AAS-A), and if nothing was confirmed, it was considered a sterile zone (AAS-S). Additionally, all active and sterile zones were numbered, mapped using a GPS device, and documented to be excluded for future investigations.

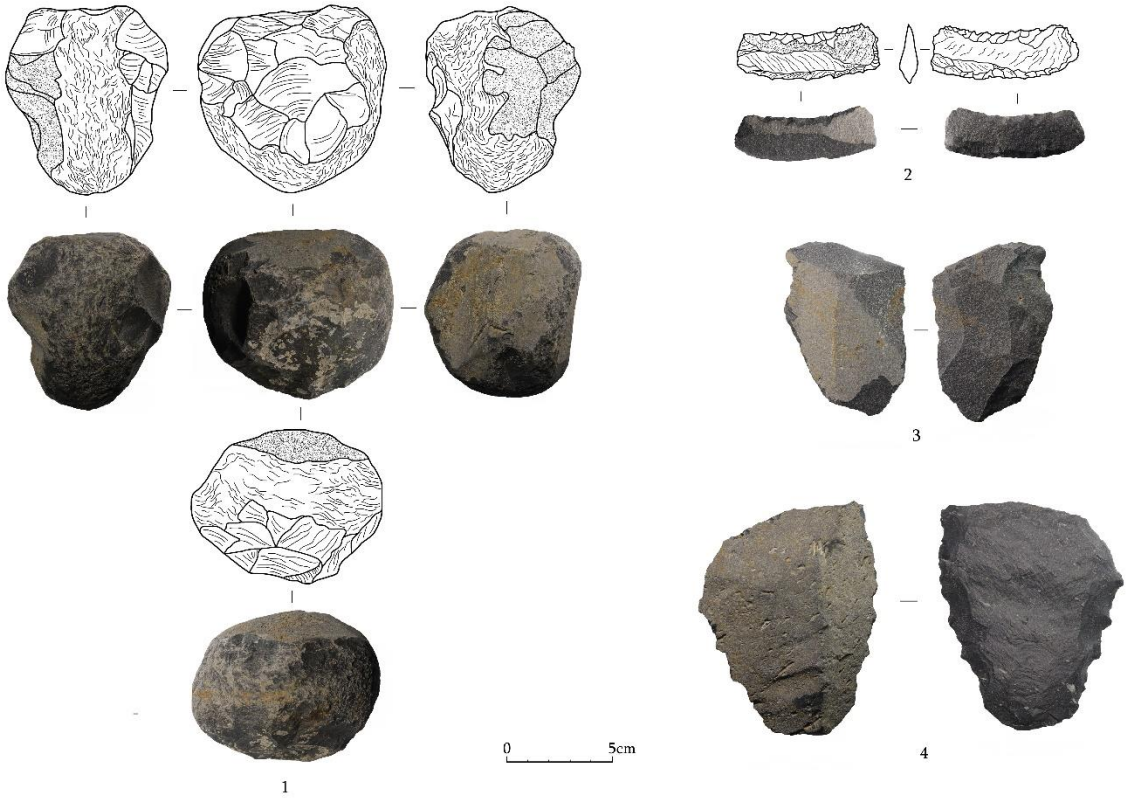


Figure.4 *Andesite stone tools from the Chalcolithic site AAS016 (© Photos by G. Chilingarashvili, drawings by I. Esvanjia)*

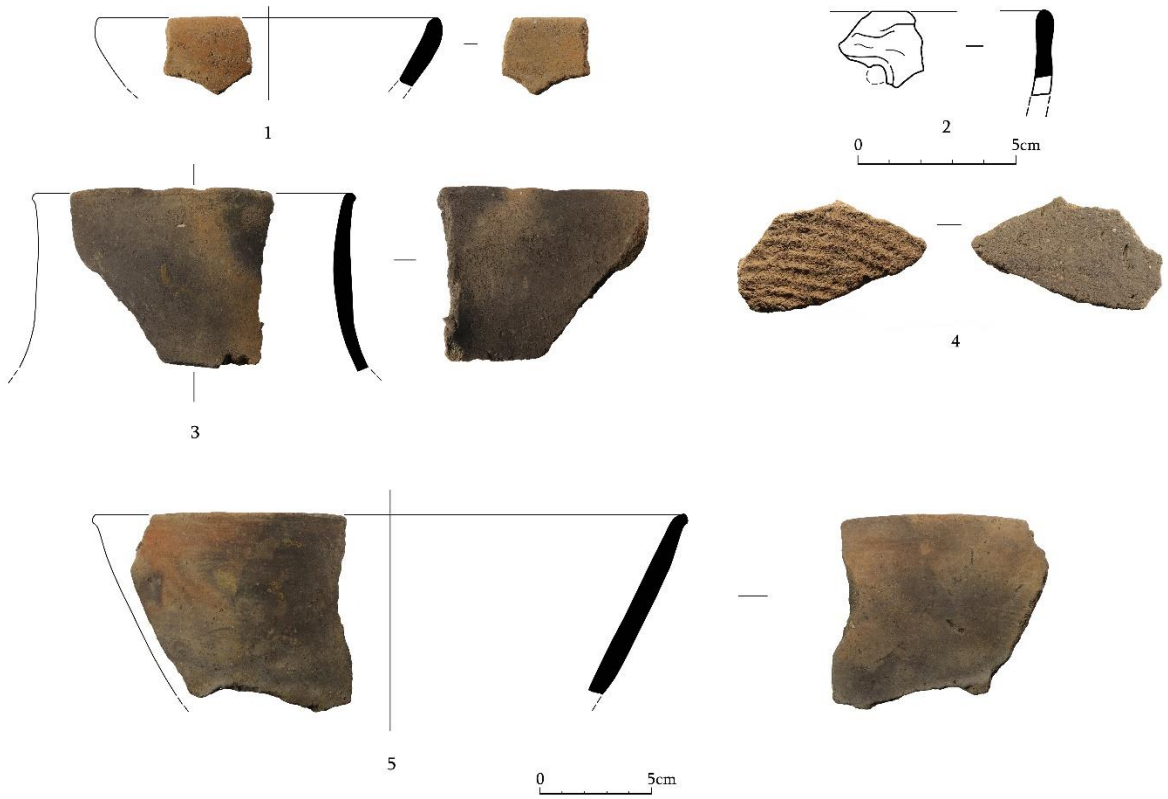
Since most of the surveyed points were located on mountain slopes, extensive methods were used, and an intensive survey was conducted in very few cases. Plowed fields in the vicinity of several sites were checked by transects, and materials were collected accordingly. All materials were bagged and labeled with all the necessary information. For the documentation of each site, special sheets were

used which compiled geographical information - coordinates, altitude, location and environment description, quantity of gathered materials, their type and number of images taken for each site; a drone and a standard photo camera were used for photography.

In order to determine the chronology and cultural attribution of the identified sites, collected materials have been analyzed. With regard to pottery assemblages, a comparative method was used. Also, ware types, fabric, stylistic and morphological features were studied.

Results and Discussion:

The primary target in the 2022 season was to identify prehistoric sites, however, during the survey, a variety of sites were documented. In total, 106 locations were marked remotely and surveyed, among which 21 confirmed settlement evidence; 11 were late medieval Islamic cists, 3 were ruins of churches, 15 were active and 56 represented sterile zones. 7 of the 21 sites belong to the Early Bronze Age Kura-Araxes culture (AAS015, AAS017, AAS020, AAS027 AAS028, AAS029, AAS030), which along with 5 sites from the past seasons (AAS002, AAS003, AAS005, AAS006, AAS008) and also previously already known settlements (AAS032, AAS035), provide significant results for discussing the distribution of the Kura-Araxes culture in the micro-geographical region (fig.1).



In some cases, Kura-Araxes is strongly represented by its characteristic pottery repertoire. However, the materials collected from sites AAS015 and AAS028 do not contain diagnostic fragments,

but even body sherds with their recognizable surface treatment and fabric undoubtedly belong to the Kura-Araxes tradition. Additionally, in some cases, such as AAS023 and AAS026, sherds do not provide sufficient signs since their surfaces have been completely damaged (washed). Apart from the pottery there are several indications that suggest these sites could belong to Early Bronze Age. First of all, their topography is noteworthy and also the significant amount of lithics (fig.2). Nevertheless, these two locations are marked on the map as possible Kura-Araxes sites but they are not discussed in the article.

Regardless of the research goals, it is necessary to mention the Late Chalcolithic settlement AAS016 for its scientific significance as evidence of this archaeological period in Georgia is extremely limited. At site, located on the terrace of the mountain slope at an altitude of 1570 m a. s. l, a damaged cut 30 m long and 2 m high in the southwestern part confirmed the presence of Chalcolithic deposits (fig.3). Along the profile, abundant archaeological materials have been collected, including obsidian flakes, andesite tools, grinding stone (fig.4) and a large pottery collection that closely analogs to the materials from Orchosani and clearly defines its cultural context (fig.5) (Gambashidze et. al., 2018). It is also significant that the collected materials consisted of only Chalcolithic artifacts and no other occupational activity was confirmed. The later habitation is visible only on the hilltop where the church stands. This factor and settlement topography (gentle slope) give optimistic possibilities that it can be preserved intact despite some modern operations on the surface - the road, shallow irrigation canals and closeness of plowed fields.

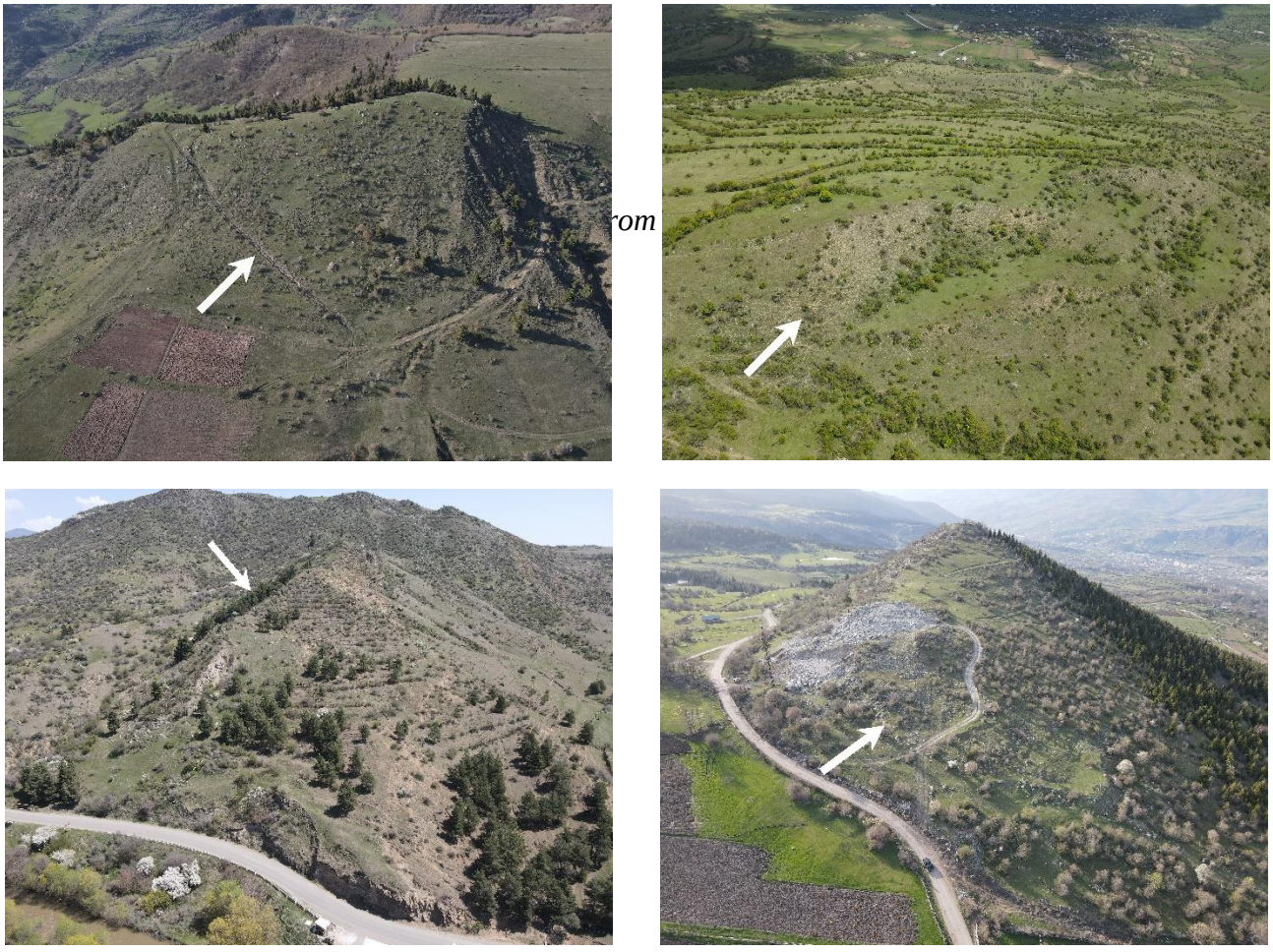


Figure 6. *Some examples of Kura-Araxes hill slope settlements:*

(1) AAS027; (2) AAS028; (3) AAS030; (4) AAS032 (© G. Chilingarashvili).

The settlement's location is also intriguing. It is situated near the alpine pastoral zone known as Persati plateau, which is the region's one of main pastures and economic source. Prior to Soviet time, this was the only natural route to get there. However, several roads were built between the villages and the mountains during the 20th century, but this way is still in use.

Figure.7 *Kura-Araxes settlement mound AAS002 (© G. Chilingarashvili)*

Figure 8. *Kura-Araxes site AAS029; (© G. Chilingarashvili)*

This newly discovered site of the pre-Kura-Araxes period is significant for many reasons not only for the Adigeni area but also for the entire region and suggests that Early Bronze Age had a prior cultural background which, according to C14 dates from Orchosani, chronologically overlaps the Kura-Araxes culture (Gambashidze, 2021: 133-158). Based on survey results, the number of Kura-Araxes sites prevails in the eastern part of the region, specifically, on the right side of the Kvabliani River, part of the Erusheti ridge which is distinguished by a wider space and useful lands for agriculture. It should be mentioned that there are no Early Bronze Age sites on the slopes directly adjacent to the river on the right bank of Kvabliani, and its plateau is mostly inhabited. The reason for this can be explained by simple geographical factors; first of all, this part is a forested area, and at the same time, it is characterized by complex natural features; it is particularly shady during the daylight hours, and snow stays on the surface for a long time in winter. The location of previously known settlements from Samtskhe region shows that this was a significant factor for the Kura-Araxes society in the process of the adaptation to the environment. Only one site, Amkheris Gora (AAS032), has been found in this area, although this one stands out because of its topography in the valley. It stands apart from the rest of the mountain system as a separate hill. In winter, snow does not stay on its south-eastern slope for a long time (fig.6.4). Even today, such places are extensively used as winter pastures; for example, the site AAS002 is also used as a winter pasture, and its original name is Natskhvara - sheep land (fig.7).

There are no confirmed Early Bronze Age sites on the left bank either. In the Soviet period after the so-called collectivization, the area along river banks and also lands that could be easily irrigated were dramatically changed and used for agricultural purposes. For this reason, these fields need further examination to find out if any sites were disturbed by above-mentioned activities in Soviet time.

It is also important to mention the homogenous type of the identified sites. All of them belong to settlements. There was no indication of a cemetery in any of the cases. Most of the documented settlements are located on natural hills or hill slopes at different altitudes, from 1260 at the lowest

Figure 9. *Grinding stones from the Kura-Araxes settlement AAS029 (© G. Chilingarashvili)*

Figure 10. *Kura-Araxes site AAS015 (© G. Chilingarashvili)*

(AAS020) to 1580 at the highest (AAS027) (fig. 6.). Despite the diversity of their orientations, they can presumably be classified as terraced settlements with a few exceptions. AAS002 might be an artificial mound (fig.7). Site AAS029 also shows a different pattern. It is located on rugged terrain and is situated between two small ravines. The site has a flat surface and materials were spread over an area of 2,5 ha (fig.8); among the materials, particularly noteworthy is the abundance of grinding stones (fig.9). Although the site shows some modern disturbance, it is unlikely that it has been significantly changed. On the other hand, different results have been reported for AAS006 and AAS015. Both sites are located in agricultural terraced fields, and it is difficult to determine their original configuration (fig.10).

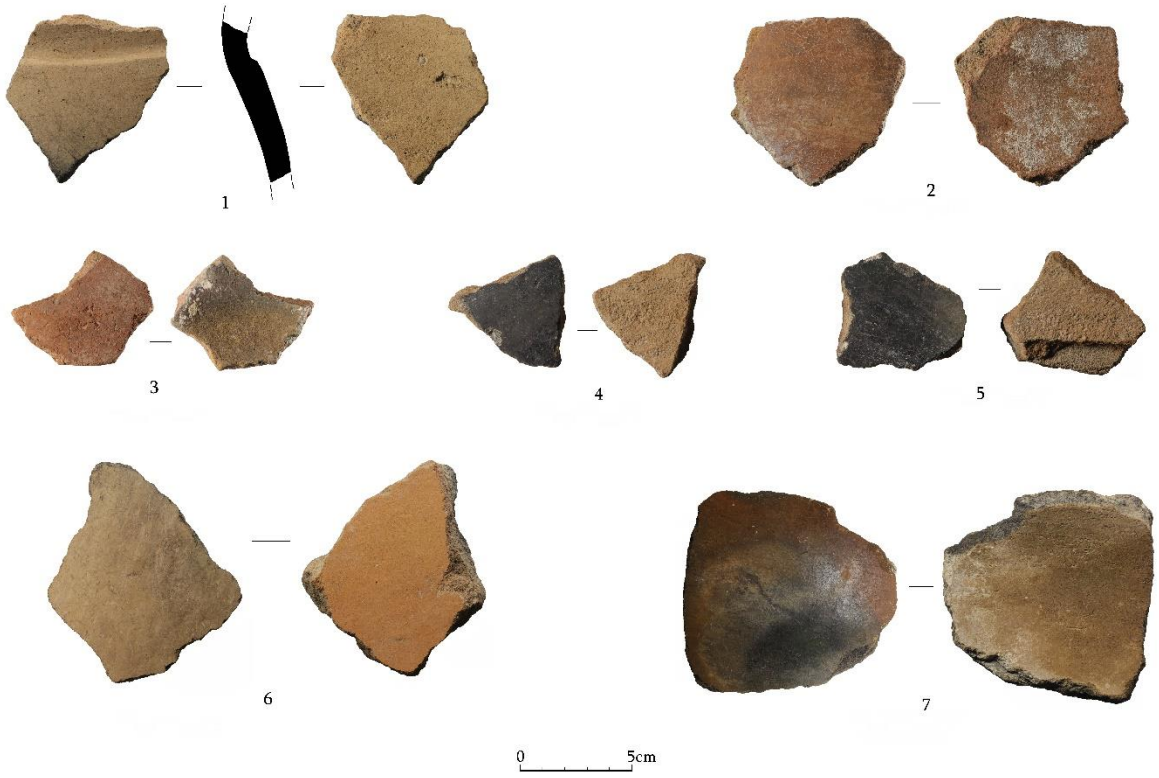


Figure 11. *Kura-Araxes pottery collection from Site AAS017 (© G. Chilingarashvili)*

The density of the surveyed sites is also noteworthy. Sometimes the distance between the sites is as short as 300-400 meters and only a small stream or ravine separates them as AAS002-AAS003 and AAS029-AAS035. In the case of AAS006 and AAS0015 there are no distinct geographical boundaries between them. Thus, the nature of these sites makes it difficult to determine whether they should be considered different archaeological points or if they are different areas of one settlement.

It is interesting to note that almost all sites are visible from one another. Due to natural conditions, it is not possible to view all of them from a single location. However, different sites face each other so that they create the idea of a communication network. This network (or visual connection) covers not only Adigeni territory, but also the entire Samtskhe-Javakheti region and possibly beyond. In different periods this type of network of fortified sites was accepted in practice as a defensive mechanism. We should not exclude that it was the same concept in the case of Early Bronze Age as well.

More commonly, the archaeological materials collected on most of the sites represent different periods and demonstrate long-term occupation, while some sites only have evidence of Early Bronze Age samples (fig.11-13). It is noteworthy that the presence of western Georgia Early Bronze Age culture elements, or even its small minority, was not confirmed in either case. All identified sites belong to the Kura-Araxes culture. Based on the pottery assemblage, it is difficult to estimate the chronological phases of those sites precisely. Nevertheless, according to different chronological table, all these sites

probably correspond to the second and late stages of the Kura-Araxes culture (KA2 and KA3), the first half of the 3rd millennium BC. (Palumbi, Chataigner, 2014: 247-260). As for the sites of post-Kura-Araxes or early Kurgan period, they have not been found during the survey and only AAS005 (Irmis Rka) is the settlement that contains evidence of post-Kura-Araxes occupation in the surveyed region.

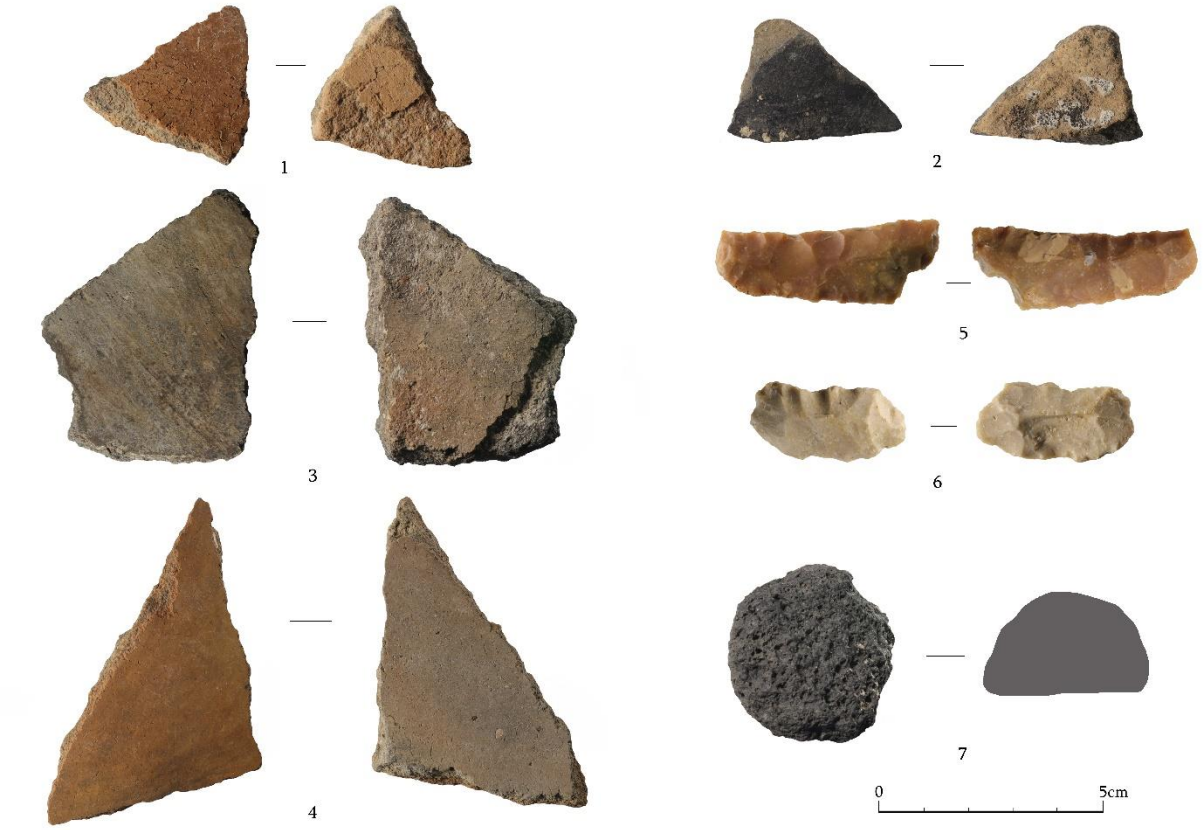


Figure 12. *Kura-Araxes artefacts from site AAS030 (© G. Chilingarashvili)*

At this stage, it is difficult to define the boundaries of Kura-Araxes culture in this region with accuracy. However, according to the map of distribution, we can preliminarily assume that at the moment, the westernmost limit of the culture is AAS020. The determination the northern border is even more difficult, but we can consider AAS027.

One of the research targets to observe natural sources, of micro-region, still in progress and requires further investigation. An important focus area of the previous season was the Ghaghvi River valley, which archaeologically is a completely unstudied. It is a long valley with many small tributaries. There is a mountain with the same name (Ghaghvi mountain) near the headwater of Ghagvi River. According to geological data, this mountain is an extension of the Gujareti ore deposit that contains polymetallic evidence (Dzamistarishvili, 2017). Also, it is known that on the mountain there is a geological tunnel made in Soviet times. The chemical composition of the ore was determined, however specific details or reports are inaccessible.

The main question regarding this issue is if this source was exploited throughout any archaeological period especially during Early Bronze Age. If some sites were exposed in the valley and in the vicinity of Ghaghvi mountain, this may yield interesting information on this subject. The plan was to survey this area from the valley up to the mountain, but due to snow and the overflow of the river, the survey could not proceed. It was only possible to reach the beginning of the valley, where several obsidian fragments were found which is positive for further field research.

Conclusions:

To summarize the results, prior to AAS project little was known about the region's archaeological context especially in relation to the Early Bronze Age. The results present the unknown issues associated with Kura-Araxes culture diffusion. Demonstrates its ability to adapt to a variety of natural environments and optimal use of the landscape.

Newly obtained data shed new light on the Early Bronze Age cultural environment in the micro zone. A total absence of western Georgian cultural elements suggests that Adigeni was a Kura-Araxes culture dominating area. Theoretically, this conclusion does not exclude cultural networks between those regions during the Early Bronze Age, but this is not archeologically evident either by AAS survey or excavations on Irmis Rka (AAS005). These connections were more reflected in the pre-Kura-Araxes period and even more apparent towards the end of the II millennium BC.

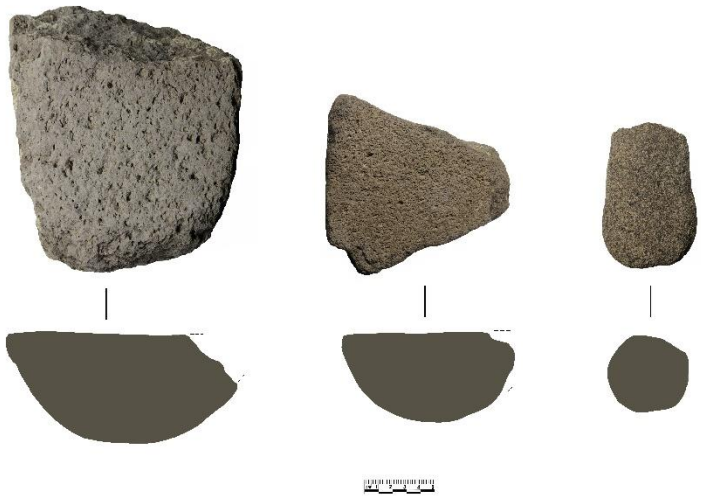


Figure 13. *(1) (2) Grinding stones and (3) pestle from site AAS028 (© G. Chilingarashvili)*

Despite several years of work and significant results, many unanswered questions still remain regarding the use of landscape and natural sources. It is important to conduct research in the alpine part of the region as well which is difficult to reach due to the climate and is only accessible for a limited period of time. All of these indicate future research targets and strategies.

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