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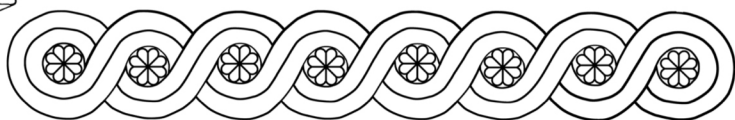
Volume 2

Field Reports

Islamic archaeology



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## Foreword to the Section “Field Reports”

Nicolò Marchetti, Francesca Cavaliere, Claudia D’Orazio, Gabriele Giacosa  
and Eleonora Mariani

Field reports generally represent the largest relative share of papers at the ICAANE. Reassessments of old excavations fall in this category as well. In Bologna, 95 papers were presented in four parallel sessions and 49 of them are published here. They have been simply arranged according to the alphabetic order of first authors (with the exception of course of the keynote paper, opening this section). They attest to a diversity of agencies, methods, perspectives and urgencies which represent a singular asset of our field.

While new digital architectures of knowledge are about to deeply transform the ways of our scientific dissemination, these reports do supply in the meanwhile loads of new information on near eastern sites, as well as on neighbouring areas, which are all too often insufficiently considered in our discussions.

# Field Reports

# Two Seasons of Excavations at the Chalcolithic Site of Tsiteli Gorebi 5 (Lagodekhi Municipality, Georgia)

Elena Rova\* and Davit Kvavadze\*\*<sup>1</sup>

## Abstract

The paper presents the results of the first two seasons (2018 and 2019) of excavations at Tsiteli Gorebi 5, an Early Chalcolithic site in the Kakheti region of Eastern Georgia by the “Georgian-Italian Lagodekhi Archaeological Project” of Ca’ Foscari University of Venice in collaboration with the Municipality and Museum of Lagodekhi. The site consists of a low mounded area of *ca.* 1.60 ha, deeply affected by repeated plowing, which hosted a single-period settlement, <sup>14</sup>C-dated to 5000-4800 BC. Surface collection and excavations carried out in 2018 and 2019 unearthed a homogeneous assemblage of artefacts, mostly potsherds and chipped lithics (almost exclusively obsidian), which shows intermediate features between the ceramic Neolithic Shulaveri-Shomu and the local Chalcolithic “Sioni” assemblages. Analogies in material culture and obsidian provenance studies identify the general cultural orientation and interactions sphere of Tsiteli Gorebi 5 with the region between South-Eastern Georgia, Armenia, the Nakhcivan region and Western Azerbaijan. Furthermore, the excavations provided evidence for ditches and rectilinear architecture, consisting of poorly preserved walls in squarish blocks of clay or compacted clay, which are very rare in the earlier Chalcolithic period in the region. The site’s subsistence economy appears to have been mainly based on the exploitation of animal resources, with a minor component of cereal agriculture and evidence for the use of different wild vegetal resources.

## Introduction

Tsiteli Gorebi 5 (UTM 38N 598828 E 4614070 N) is part of a cluster of Chalcolithic sites in the valley of the Alazani river, in the southern part of the Lagodekhi Municipality (Kakheti province), close to the present border between Georgia and Azerbaijan (Fig. 1), which have been previously investigated by V. Varazashvili in the late 1970s/early 1980s, following a time when intense agricultural exploitation of the territory deeply impacted on the preservation of archaeological remains and brought many previously unknown sites to the light.

Two of these, Kviriatskhali (= Tsiteli Gorebi no. 3) and Damtsvari Gora, were regularly excavated (Varazashvili 1980; 1984; 1992). They were small, low single-period mounds and yielded abundant ceramic, lithic material, and bone objects (notably, also a copper awl, from Kviriatskhali), some storage pits, a few burials, and some enigmatic ditches, but no architectural remains or well-preserved contexts with *in situ* material. Other sites in the Tsitelgori microregion (Tsiteli Gorebi nos. 1, 2, and 4, Shavtskhala, Mtserlebis Mitza, Nadikari, Natsargora) were identified as belonging to the same period and tentatively dated

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1 \*Department of Humanities, Ca’ Foscari University of Venice; \*\*Lagodekhi Museum, Lagodekhi Municipality Culture, Sports and Youth Affairs Development Centre, Lagodekhi.

to the first half of the 4<sup>th</sup> millennium BC, but only cursorily explored. Since then, the area was neglected by archaeological research, until the beginning, in 2018, of the new Georgian-Italian Lagodekhi Archaeological Project of Ca' Foscari University in cooperation with the Lagodekhi Museum (GILAP), jointly directed by the present authors (Rova *et al.* in press; see also Georgian-Italian Lagodekhi Archaeological Project).

In 2018, while looking for a site to excavate, the team was informed of the existence of another Chalcolithic settlement in the Tsiteli Gorebi area and decided to carry out an intensive survey and explorative soundings there in order to test its potential for larger-scale excavations, which were actually carried out in 2019 (Rova *et al.* in press) and will be completed in 2021<sup>2</sup> with some soundings at the settlement's periphery and a geomagnetic survey of the whole area.

The main aim of the excavation was to answer some general questions that previous research had left unsolved: the relation of the Tsiteli Gorebi sites with the surrounding environment, the reasons for their poor state of preservation, their absolute date and, finally, their position within the still debated sequence of the local Chalcolithic cultures (Sioni, Tsopi, Leylatepe/Berikldeebi, etc.) (Sagona 2018: 182–212).

### The Site

The site (No. LS023 in the Lagodekhi Regional survey<sup>3</sup>) lies at 204 m a.s.l. in the flat plain *ca.* 4 km to the north of the present course of the Alazani River and 4.5 km to the SE of the Tsitelgori village, between a dirt road running NS and the Georgian-Azerbaijani border, which corresponds to the course of the Kviriatskhali river. It is occupied by a large wheat field and consists of a very low mounded area of *ca.* 1.60 hectares, oriented NE-SW (Fig. 2). It is characterised by two low elevations, a larger and a smaller one, separated by a 20 m wide slightly depressed area. A modern drainage channel cuts its southern part. The site has been subjected to repeated plowing, which flattened its top and spread archaeological materials over the surrounding area. Intensive surface collection undertaken over the site's whole surface before the excavation suggested a maximum extension of *ca.* 2 ha. Results of the 2019 intensive transects survey on the surrounding fields highlighted a low-density scatter of contemporary materials over a maximum area of 1200 x 500 m, which includes a separate small mound *ca.* 250 m to the SE (Site LS023) (Fig. 3).

Examination of the area microrelief by G. Boschian put into evidence a scarp, about 2 m high, rather smooth due to agricultural reworking, which probably represents the western bank of the maximum flood area of the river Kviriatskhali. The two sites are topographic maxima of the area west of the scarp (outside the flood area), which is largely flat and sub-horizontal and represents a terrace of the river. A geological trench excavated in the flood area east of the site put to light a sequence of fluvial sediments with a level of grey sand at the base, which reminds rather closely what was observed in deep soundings carried out within site. The grey sand is covered by thick layers of yellowish silty sediments, also of fluvial origin, on which the anthropic layers are based.

2 The 2020 season was unfortunately cancelled due to the Covid-19 sanitary emergency.

3 For the preliminary results of the Lagodekhi regional survey, see Hopper, Rova and Kvavadze in this volume.

### Stratigraphy and Architecture

Excavations on an area of 225 m<sup>2</sup> (Figs. 4-5) confirmed the thinness (60 cm) of the anthropic layers, whose upper part was deeply affected by a combination of post-depositional elements: water stagnation, unfavorable soil conditions, bio-perturbance (animal burrows), and especially modern disturbances. All this caused the irreversible degradation of the architectural structures and the dislocation of artifacts from their original position.

According to local residents, until the 1950s the area was occupied by forest, which was then cleared and drained in order to make place for orchards and other cultivations, and then converted into grain fields, the shape and orientation of which were repeatedly modified in the course of time. To this series of operations we attribute the excavation of several large pits, but especially of a large rectilinear canal, which crosses the whole excavation area in a SW-NE direction. The canal is *ca.* 270-280 cm wide and up to 160 cm deep; it presently exhibits a U-shaped profile, which derives from the partial collapse of its sides. It had obviously been filled during a single operation with sediments deriving from flattening the top of the Chalcolithic layers since, in addition to a few modern items (iron nails, wires, etc.), it contained only Chalcolithic material. The exact date of the canal is unclear, but we are inclined to date it relatively early in Soviet times (1960s?), as it apparently cuts only one Soviet pit, but is cut by several later ones.

The bottom of the Chalcolithic level (Fig. 5) consists of a vast raised area cut by the Soviet canal. This “platform” was undoubtedly of human origin, as it not only was internally stratified and contained a few Chalcolithic artefacts, but also included some clay blocks (pseudo-bricks) with a squarish section, as can be seen from the section of the canal which cut it (Fig. 6). It had been built directly on the virgin soil by accumulating layers of compacted silty sediments of yellowish color.

In the western part of the excavation, nothing was preserved of the Chalcolithic structures once standing on top of the raised area, except for a few traces of plastered surfaces. In the north-eastern part, we discovered a gently curving Chalcolithic ditch, which cut into the raised platform. As preserved, it was 80-90 cm deep, 170 cm wide on the top and 100 cm near the bottom (Fig. 7). The filling was composed of sediments of greyish color with faint traces of internal stratification and contained exclusively Chalcolithic material. Ditches, whose purpose remains unclear, have been found at different Neolithic settlements in Georgia (Arukhlo) and in Azerbaijan (Kamiltepe) (Ioseliani 2017), but also at Kviriatskhali and Damtsvari Gora, only a few km away from our site (Varazashvili 1992: 35; 1980: 18-20; 1992: 34-42, pl. II). We suppose that the main purpose of our ditch was to drain the raised areas of the settlement and protect them from water stagnation from the rainstorms which characterise the region, which must have represented a problem in this depressed part of the river plain. Other remains of Chalcolithic activity in this area were two sack-shaped pits filled with grey soil which had been dug from the platform’s surface into its body and the natural soil.

The only sector of the excavation where clear remains of Chalcolithic architecture could be identified is the south-eastern part, on the continuation of one of the soundings opened in 2018. The walls were not well preserved and their body was very deteriorated and cut by a large number of small pits, but they allowed us to draw the tentative plan of a complete building. This had rectilinear walls between 60 and 90 cm wide, on some of which we observed the limits of rectangular-shaped clay blocks or bricks. It consisted of two main rooms, the second, smaller one (0374) of which was accessed from the first one (0812)



through a sort of corridor (0816) (Fig. 8). Remains of an irregular white-plastered floor were observed in this room, but no *in situ* material was recovered on it. A 1m-wide sounding excavated during the last days of excavation led to the discovery of three walls with associated surfaces belonging to an earlier stage of the Chalcolithic level, which represent the earliest occupation at the site.

Despite its poor preservation, the discovery of rectilinear architecture with walls of significant width is very important, as these are extremely rare in the contemporary cultures of the Southern Caucasus (but see, Kuliyeve and Bakhsaliev 2018: 32, fig. 2).

### The Finds

Materials collected in the course of the excavation are very homogeneous and do not show any obvious chronological development. Pottery sherds (Fig. 9) are in very fragmentary conditions and their surfaces are often considerably damaged. The fabric is mineral-tempered and of very coarse quality: it contains a large number of inclusions of medium or large size. It is important to underscore that no fragments of vegetal-tempered pottery have been recovered on the site, and even accidental organic inclusions are virtually absent. We tentatively distinguished three different wares, but the differences between them are not strong, and they share the same morphological repertoire. Light Brown Orange Ware amounts to almost 70% of the total assemblage and presumably represents the standard production: the fabric is completely oxidised, and the surface is sometimes smoothed and light in colour. Grey ware (18%) is completely reduced; the surface is dark, and only rarely smoothed. Red ware (14%) stands out not only for its bright red colour, but also for the fact that the surface is sometimes covered by a reddish slip and/or slightly burnished, and for the presence of some obsidian inclusions.

This assemblage is very similar to that published by Varazashvili in the 1980s-1990s. The repertoire of shapes is limited and includes large deep bowls with plain rims, wide-mouthed pots with slightly out-turned or vertical rims, hole-mouth jars, and trays with a line of holes in the upper part of the wall (known in the literature as *mangal*; cf. Fig. 9, top right). Bases are flat or flattened: some show mats impressions on their lower surface. Some rims show elongated oval-shaped lug-like protrusions. Decorations are rare, and mostly consist of small circular knobs in relief. A few sherds show relief patterns reminiscent of those characteristics of the Neolithic Shulaveri-Shomu culture or bands of notch-like impressions between the shoulder and the neck, and some rims have notches or nail impressions on the top.

Except for the complete absence of vegetal tempering, this pottery assemblage looks similar to that from Period II at Mentesh Tepe in Azerbaijan, which a few <sup>14</sup>C dates would situate in the second quarter of the 5<sup>th</sup> millennium BC (Lyonnet 2017: 145-146; 2018: 554-557). Some similarities can also be pointed out with pottery from recently excavated Early/Middle Chalcolithic sites from Armenia (Getahovit-2 cave, Chataigner *et al.* 2020), Southern Georgia (Bavra Ablari rock shelter, Varoutsikos *et al.* 2018) and the Nakhchivan region of Azerbaijan (Uçan Ağıl and C. Marro, personal communication).

In fact, the apparent continuity (both in fabrics and in decorations) with the Ceramic Neolithic production suggests a date in the early 5<sup>th</sup> millennium BC. for Tseli Gorebi 5, which has now been confirmed by three <sup>14</sup>C dates provided by Elisabetta Boaretto (Weizmann Institute of Science, Rehovot), all of which fall in the range between 5000 and 4800 BC (Rova *et al.* in press).

The lithic assemblage includes nearly 2000 items, almost exclusively (98.5%) in obsidian. *Ca.* 200 of them are tools, mostly on blades, while the rest was classified as debitage (Rova *et al.* in press). They are discussed in a separate communication presented at the Bologna ICAANE (Amato in press). Preliminary analyses by Bernard Gratuze (IRAMAT Centre Ernest-Babelon, CNRS Orléans) on the 2018 material highlighted a multisource scenario for obsidian procurement, with most of the samples coming from Gegham and other Armenian sources and minor components from Chikiani in Georgia and NE-Anatolian sources (see now Gratuze and Rova 2022).

Small objects are very few; worth mentioning among them are 11 awls, obtained from the long bones of animals like *Ovis/Capra*. Their surfaces are well preserved and some technological traces are visible on them already with a lower magnification microscope. In particular, on the surfaces of the active part it is possible to see some abrasion traces, probably aimed at giving a more pointed shape to the active part. On the proximal part, instead, it is possible to see scraping traces made with a flint blade, which were made before the abrasion, probably in order to clean the bone from organic material. According to preliminary results of functional trace analysis carried out by Sara Stellacci (LTFAPA Laboratory of Sapienza University of Rome), they were used for perforating leather as well as in basketry.

Geo-archaeological research and the preliminary analysis of ecofacts yielded some preliminary information about the natural environment and the ancient economy of the site (Rova *et al.* in press). The analysis of satellite images put into evidence the presence of numerous palaeo-channels and abandoned meanders crossing the river plain, suggesting the presence of old watercourses. Faunal remains (Table 1) were abundant (more than 2100 processed samples) but very fragmentary. The analysis of the identified portions of bone clearly indicates that the assemblage is mainly composed of meal remains. Almost all the samples (85% but up to 96.3% if only species of economic interest – “big-game” – are considered) belong to domestic species: among them, caprines, with sheep far exceeding goats, are the most frequent taxon (57%), followed by cattle (39.5%), while pigs (2.4%) are unexpectedly rare. The presence of dogs likely testifies their use as shepherd dogs. Wild species include big game such as aurochs, red deer, wild sheep and goats, and a single tooth of a bear. This well corresponds to an environment of open woods interspersed with denser forests, probably in correspondence with the water courses that crossed the Alazani River plain, but also shows the proximity of the mountain slopes.

Seeds and other vegetal remains were virtually absent, and pollen grains were also scanty and rather badly preserved. This situation is primarily due to the very basic nature of the soil and its modern perturbation. Although ongoing trace analysis of chipped lithic finds (LTFAPA Laboratory of Sapienza University of Rome) put into evidence the presence of some sickle elements used to reap cereals, the scarcity of heavy stone tools such as grinding stones, pestles, etc., does not suggest that cereal agriculture played an important role in the settlement's economy. On the other hand, multiple hints (trace analysis, impressions on pottery, etc.) suggest the use of other vegetal materials, such as wood, reeds, and rush.

## Conclusions

Despite the poor preservation of the site, the new Georgian-Italian excavations at Tsiteli Gorebi 5 allowed to identify a previously unknown chronological phase, to be dated in the first centuries of the 5<sup>th</sup> millennium BC, between the Ceramic Neolithic and the still elusive

“Sioni Culture”. They proved the presence, for the first time in the region, of the rectilinear architecture of the earlier Chalcolithic period, which indicates a stably occupied village rather than a temporary occupation by mobile groups, although the possibility of periodic abandonments and reoccupations cannot be excluded. The settlement’s subsistence economy appears to be mainly based on the exploitation of animal resources.

The site is characterised by a coherent assemblage of artefacts, though unfortunately not *in situ* and therefore not useful for any contextual analysis. This assemblage is very similar to those from the other sites of the Tsiteli Gorebi cluster, which are consequently probably all roughly contemporary with each other. This may indicate a pattern of occupation, as previously suggested for different Ceramic Neolithic cultures from Upper Mesopotamia to the Caucasus, where the same community occupies a small territory by settling in small, ephemeral, and frequently shifting settlements.

Recovered artifacts mainly consist of pottery sherds which show intermediate features between the Neolithic and the local Chalcolithic “Sioni” tradition and abundant obsidian industry, whose raw material was traced back to several sources in Armenia, southern Georgia, and eastern Turkey. Analogies in material culture identify the general cultural orientation and interactions sphere of Tsiteli Gorebi 5 with the region between South-Eastern Georgia, Armenia, the Nakhcivan region, and Western Azerbaijan and confirm the site’s position at the beginning of the Chalcolithic, as some of them show strong elements of continuity with the Ceramic Neolithic tradition, whereas some others rather prelude to the later “Sioni” tradition.

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## Online References

Georgian-Italian Lagodekhi Archaeological Project

<https://mizar.unive.it/erovaweb/lagodekhi/LagodekhiProject.html> (accessed 25/6/2021)

<b>TSITSELI GOREBI 5</b>	<b>NISP</b>	<b>%</b>	<b>% dom.</b>
Cattle	463	21,7%	39,5%
Sheep	35	3,0%	
Goat	5	0,4%	
Sheep/goat	629	29,5%	53,6%
Caprines tot	669	31,3%	57,0%
Pig	28	1,3%	2,4%
Dog	13	0,6%	1,1%
<b>TOTAL DOMESTIC</b>	<b>1173</b>	<b>% dom.</b>	<b>85,6%</b>
Equus sp.	1	0,0%	2,0%
Aurochs	29	1,4%	58,0%
Wild sheep	1	0,0%	2,0%
Wild goat	1	0,0%	2,0%
Wild caprine	2	0,1%	4,0%
Cervus elaphus	8	0,4%	16,0%
Lepus capensis L.	8	0,4%	16,0%
Big game	50	% big game	3,65%
<b>SUBTOTAL</b>	<b>1224</b>	<b>% dom.</b>	<b>96,3%</b>
Fox	6	0,3%	6,2%
Weasel	1	0,0%	1,0%
Badger	28	1,3%	28,9%
Polecat	1	0,0%	1,0%
Bear	1	0,0%	1,0%
Rodents	8	0,4%	8,2%
AVES	11	0,5%	11,3%
Testudo	17	0,8%	17,5%
Toad/frog	2	0,1%	2,1%
Molluscs	20	0,9%	20,6%
Pisces	2	0,1%	2,1%
Wild game	97	4,5%	7,08%
<b>TOTAL WILD</b>	<b>147</b>	<b>6,9%</b>	<b>10,73%</b>
<b>TOTAL IDENTIFIED BONES</b>	<b>1370</b>	<b>64,2%</b>	
Small mammals unid.	18		
Large ungulates unid.	293		
Medium ungulates unid.	489		
Unidentified	15		
Total unidentified	815	38,2%	
<b>TOTAL</b>	<b>2135</b>		

Table 1: Tsiteli Gorebi 5, 2018–2019, taxonomic distribution of animal remains



Fig. 1: Satellite view of the Lagodekhi Municipality with the location of Tsiteli Gorebi 5 (modified from Google Earth)

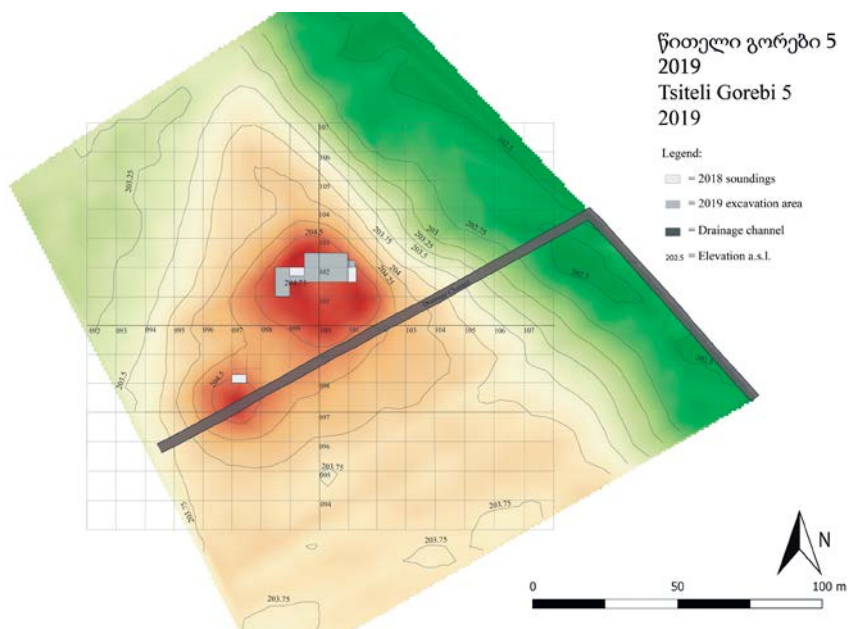


Fig. 2: Contour map and Digital Elevation Model (DEM) of Tsiteli Gorebi 5 with the location of the 2018–2019 excavation areas

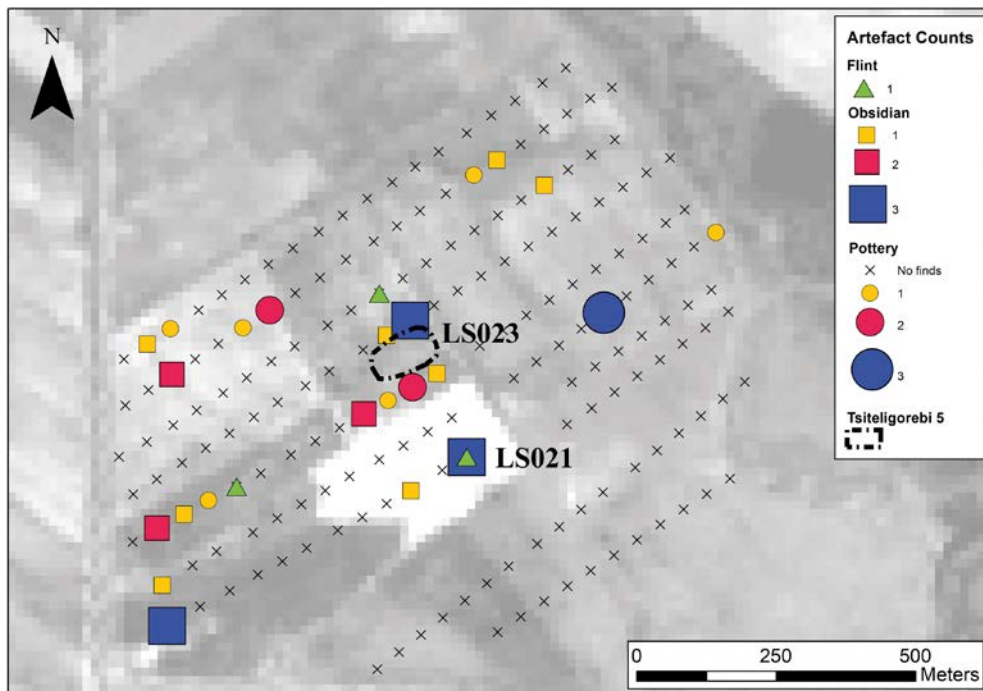


Fig. 3: Distribution of pottery and lithics in the vicinity of Tsetli Gorebi 5 (LS021). Artifacts were collected in 50 x 80 m collection areas. Imagery Landsat 8 (available from the USGS) (data by K. Hopper)



Fig. 4: Drone photo of the excavation area at the end of the 2019 excavation season (photo by Beka Peradze)



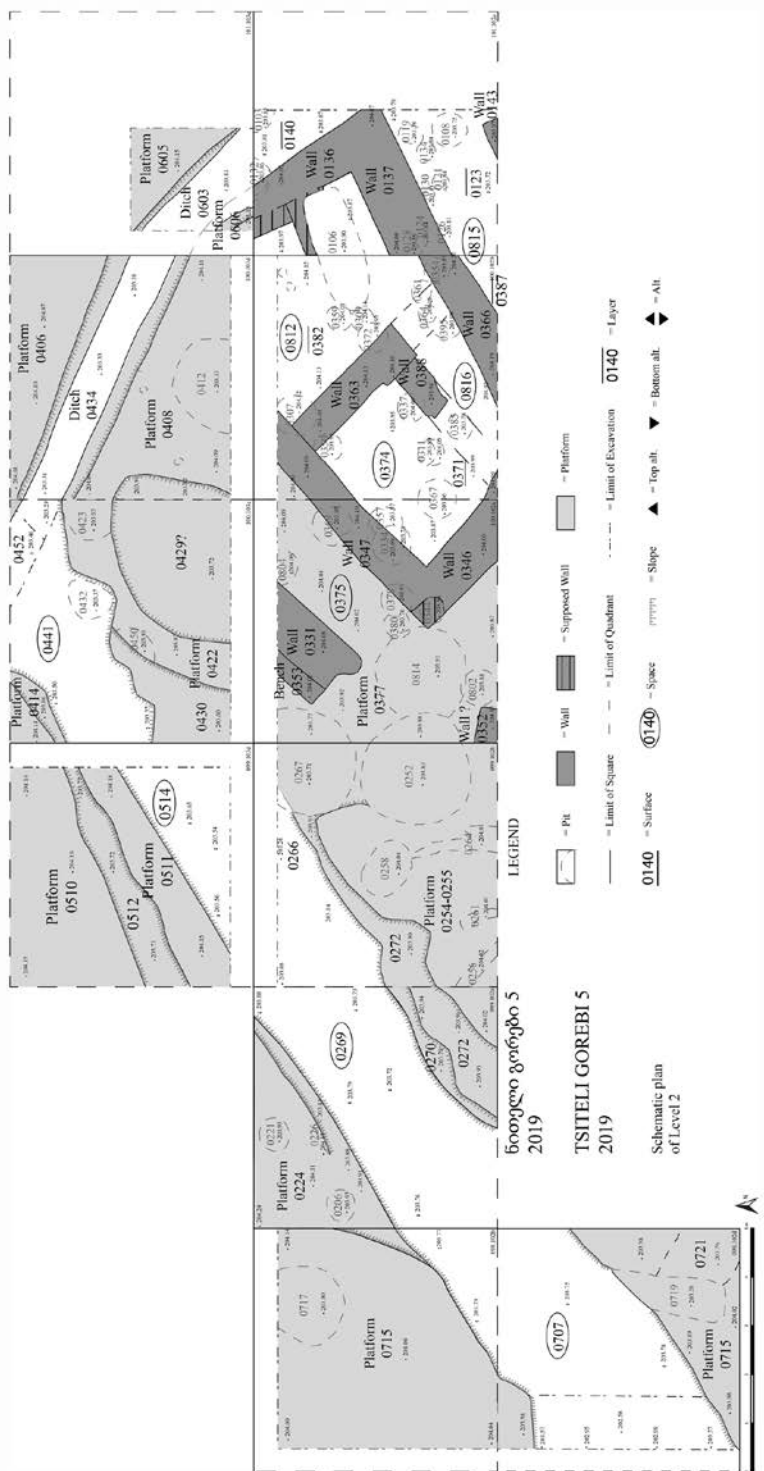


Fig. 5: Tsiteli Gorebi 5 2019. General plan of the Chalcolithic level





Fig. 6: Detail of pseudo mudbricks inside the “platform” in the section of the modern canal, from S

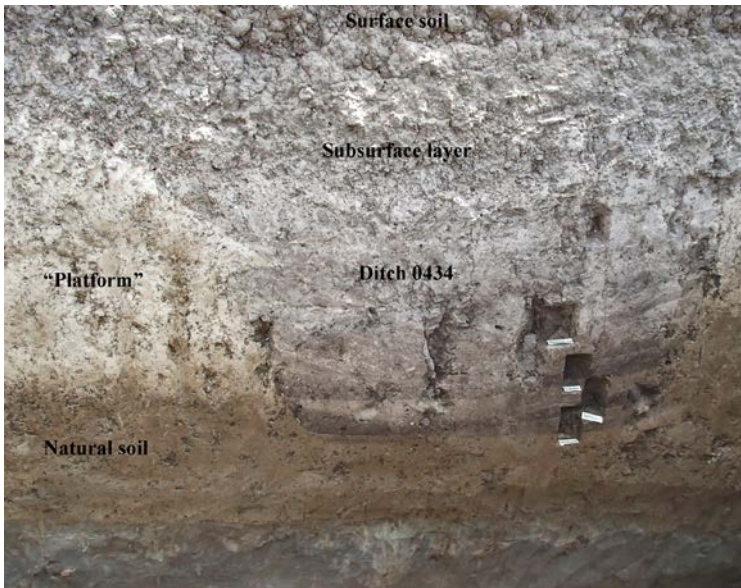


Fig. 7: Detail of the E section of the excavation, with the sequence of fillings of Chalcolithic ditch 0434



Fig. 8: View of room 0374 from SE with corridor 0816 in the foreground and room 0812 to the right

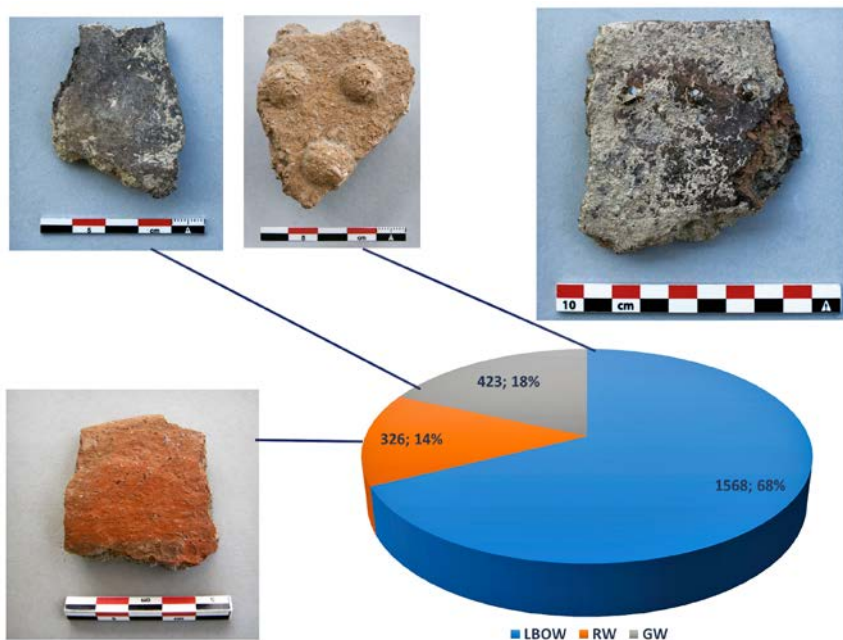


Fig. 9: Pottery from Tseteli Gorebi 5. Distribution of different wares (left) and example of *mangal* (top right)