

Proceedings of the 8th International Congress
on the Archaeology of the Ancient Near East
Volume 2

Proceedings
of the 8th International Congress
on the Archaeology
of the Ancient Near East

30 April – 4 May 2012,
University of Warsaw

Volume 2
Excavation and Progress Reports
Posters

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2014
Harrassowitz Verlag · Wiesbaden

Cover illustration: Impression of a third millennium BC cylinder seal from Tell Arbid in Syria combined with the depiction of a mermaid – a motif from Warsaw's coat of arms. Designed by Łukasz Rutkowski.

Bibliografische Information der Deutschen Nationalbibliothek
Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <http://dnb.dnb.de> abrufbar.

Bibliographic information published by the Deutsche Nationalbibliothek
The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the internet at <http://dnb.dnb.de>.

For further information about our publishing program consult our website <http://www.harrassowitz-verlag.de>

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Printed on permanent/durable paper.

Printing and binding: Memminger MedienCentrum AG

Printed in Germany

ISBN 978-3-447-10174-5

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NEW RESEARCH ON THE 3RD MILLENNIUM BC CULTURES OF THE SOUTHERN CAUCASUS: THE 2010 AND 2011 FIELD CAMPAIGNS OF THE GEORGIAN-ITALIAN SHIDA KARTLI ARCHAEOLOGICAL PROJECT

ELENA ROVA, ZURAB MAKHARADZE,
MARINA PUTURIDZE

ABSTRACT

The 2010-2011 activities of the Shida Kartli archaeological project by Ca' Foscari University of Venice in collaboration with the Georgian National Museum included excavation, the study of unpublished material, and a remote-sensing-assisted geomorphological survey. Two kurgans of the EBA (Bedeni) and LB period were excavated at Okherakhevi. At Natsargora, the study of the settlement material from the old Georgian excavation was completed, and a new excavation area was opened on top of the mound. In spite of the poor preservation of the EBA layers, important results were obtained concerning the relative and absolute chronology of the Kura-Araxes and Bedeni cultures.

The Shida Kartli archaeological project by Ca' Foscari University of Venice in collaboration with the Georgian National Museum was launched in 2009 with the aim of investigating the 4th and 3rd millennium BC cultures of the Shida Kartli province of Georgia.¹ The activities carried out during the second and third field campaigns (2010 and 2011) included excavation and study of unpublished material from different sites in the region, and a remote-sensing-assisted geomorphological survey.²

1 The aims of the project, which is jointly directed by the present authors, and the results of the first season have been presented at previous meetings (Rova 2011; Puturidze and Rova 2012a; see also Rova *et al.* 2011). Acknowledgements: We would like to express our warmest thanks to Prof. David Lordkipanidze (General Director, Georgian National Museum) for granting us the permission to study the Natsargora materials and to undertake excavations at Okherakhevi and Natsargora and a surface survey in the Shida Kartli region and to Bidzina Murvanidze, who represented the GNM during the 2011 field season at Natsargora. The following Italian institutions contributed to funding the 2010 and 2011 field seasons in Georgia: Ca' Foscari University, Ministero degli Affari Esteri. The Natsargora publication is funded by a special grant from the Shelby White-Leon Levy Program for Archaeological Publications.

2 Other ongoing activities of the Shida Kartli project (soil micromorphology analyses) are reported in a different contribution (by Boschian and Rova), in this same volume. The results of archaeometric analyses of finds and of the archaeological survey will be published elsewhere.

Excavations were carried out at two different sites: Okherakhevi and Natsargora, located respectively at the eastern and at the western limits of the Shida Kartli province (Fig. 1). Okherakhevi is a field of low kurgans (barrow graves) located on a flat area on the lower terrace of the Kura River, *c.* fifteen meters above the present course of the latter, not far from the important EBA settlement of Tsikhiagora, at the border between the Kaspi and Mtskheta districts. It consists of a group of five small kurgans, two of which have been excavated by our expedition.³

Kurgan no. 1 measured 10 x 4.50 m, and had a maximum height of 70 cm. The kurgan's mound had the shape of an elongated oval oriented in NW-SE direction: it consisted of rounded and smooth pebbles, and larger slabs of whitish-greyish and yellowish sandstone, both of them from the adjacent Kura river. Numerous flakes of unworked obsidian were recovered from among the kurgan's stones;⁴ the analysis carried out by Bernard Gratuze at the CNRS laboratory of Orleans suggests that all of it came from the Ch'ikiani volcano (Kujun Dag) in the Paravani district of Southern Georgia. A low overground chamber of squarish shape was located approximately in the centre of the stone mound (Fig. 2, left). This had originally been covered with flat stone slabs, which had partially collapsed inside it. It contained a few badly preserved fragments of human bones (among them one incisor tooth belonging to an adult individual), and two smashed pottery vessels. These are very similar to each other in shape and decoration, and represent typical examples of Bedeni fine ware (Early Kurgan period, mid-3rd mill. BC) (Fig. 2, right). The small size of the stone mound and its modest inventory are rather typical for the Bedeni kurgans of the Shida Kartli region, which attest to less conspicuous phenomena of wealth accumulation and investment of work in burial construction than the contemporary kurgans of the Southern and Eastern districts of Georgia.⁵

The second barrow (Kurgan no. 2) was larger (it measured 15 by 11 m) (Fig. 3, left). There was a stone-filled hemispherical pit in its centre (Fig. 3, right), which was however empty, and contained only small fragments of animal bones (it may have been a cenotaph, or it may have been robbed in antiquity). Besides that, the kurgan contained some votive deposits of the LB/EIA, so it probably dates back to this period, as confirmed by ¹⁴C dates from both the central pit and the secondary deposits.⁶ The presence at the Okherakhevi kurgans of both EBA and LBA finds suggests a long-term continuity in the use of the site as the seat of ritual activities by the local population, a situation which is common at many kurgan fields, but has not been adequately investigated so far.

3 In previous years, other EBA barrow graves had been excavated in the neighbouring area (Shatberashvili 1976).

4 This feature finds numerous parallels in the EBA and, less so, in the MBA kurgans of Georgia (Shan-shashvili 2004).

5 Compare, e.g., the famous kurgans of Ts'nori, Bedeni, etc. (Miron and Orthmann 1995: 69-78).

6 Sample RTK-6335 (central pit): 3000 ±55 BP (68.2% probability: 1370-1350 cal BC [7.4%], 1315-1160 cal BC [56.4.5%], 1145-1130 cal BC [4.5%]); sample RTK-6334 (secondary deposit): 3020 ±55 BP (68.2% probability: 1385-1330 cal BC [19.7%], 1325-1210 cal BC [48.5%]); sample RTK-6336 (secondary deposit): 2815 ±55 BP (68.2% probability: 1050-900 cal BC). All samples have been analysed by Elisabetta Boaretto at the Weizmann Institute of Science of Rehovot (Israel).

The main focus of our research was the site of Natsargora in the Khashuri district. The site is located in an area of smooth hills ranging from 600 to 900 m a.s.l., c. 7 km north of the Kura river, at a short distance from the present homonymous village. It occupied a small mound, c. 90 m long and 50 m wide, and was flanked by a cemetery area. The settlement was first occupied during the EBA and then, after an occupational hiatus, again in the LB/EIA; the cemetery dates to the same periods, but was also in use during the Classical Antiquity period. Both had been excavated between 1984 and 1992 by a team of the Khashuri Archaeological Expedition headed by the late Alexander Ramishvili. The Georgian team concentrated its efforts on the cemetery, which yielded more than 500 graves, mostly dating to the Classical Antiquity and to the LB/EIA, and on the LBA/EIA levels of the settlement. The EBA levels had only been reached in small soundings, both on the top of the mound and in the adjacent flat area to the South-West. These showed that the settlement may have extended over a total area of less than 2 hectares, from the mound to the bank of the nearby Pleula stream.

Besides very fragmentary architectural remains, the Georgian excavation yielded a large amount of very interesting ceramic material of the Kura-Araxes and Bedeni cultures (see Rova 2011; Puturidze and Rova 2012a). According to the excavators, the EBA sequence consisted of 6 or 7 levels, in which, with the exception of the deepest one(s), Kura-Araxes and Bedeni pottery had been found in association with each other. They therefore considered Natsargora to bear evidence for the transitional phase between the Kura-Araxes and the Early Kurgan (Martqopi, Bedeni) period. For this reason, when we started our activities in Georgia, we felt that the evidence from Natsargora, which since then had remained virtually unpublished,⁷ could significantly contribute to the debate concerning the relative chronology and the mutual relations between the Kura-Araxes, Martqopi and Bedeni cultural groups.

The 2009 and 2010 campaigns were devoted to the study of the material from the old Georgian excavation. The cemetery material was processed in 2009, and its publication is now completed (Puturidze and Rova 2012b); it is of interest in the present context only for its chronological relation to the settlement material. The 26 analysed graves yielded exclusively Kura-Araxes material. All pottery vessels belong to very widespread types: most of them are examples of the well-known Red-Black Burnished Ware, and can be dated to a relatively early stage (KA II) of the Kura-Araxes culture.⁸ Burial customs and burial goods find numerous parallels in Kura-Araxes graves from different areas and in particular from the Shida Kartli region of Georgia.⁹ Within this region, similarities are especially close with those cemeteries (e.g. Kvatskhela), which

7 Only short annual reports in the Russian language (Ramishvili 1991, 1995) were hitherto available about the results of the Georgian excavation.

8 In particular, pottery from the Natsargora graves lack all those features which characterise the late Kura-Araxes (KA III) production in the region: raised bases, curved profiles, elongated vessel proportions, carefully polished Black Burnished Ware, incised or relief decoration.

9 For a detailed discussion of parallels from the Shida Kartli region and elsewhere, see Rova (burial customs), Puturidze and Rova (pottery), Tonussi (metal objects) and Rova (other small finds) in Puturidze and Rova 2012b.

are considered earliest in the regional sequence. Recent ^{14}C dates from both Kvatskhela and from Arslantepe on the Turkish Upper Euphrates suggest that this material should approximately date between the last two centuries of the 4th and the very beginning of the 3rd millennium BC.¹⁰

When, in 2010, we turned to analysing the material from the settlement excavation, we first of all realised that Kura-Araxes types are largely prevalent on Bedeni types (they represent more than 70% of the total sheritage). Most of this pottery looks very similar to that from the cemetery, except for the presence, in the settlement material, of shapes connected with everyday life (lids, basins, sieves, etc.), which typically belong to domestic, and not to funerary equipment (Fig. 4). Like in the cemetery, e.g., the majority of the finds belongs to the RBBW, and decorated specimens are extremely rare. It is therefore difficult to admit that all this material could date to the transitional phase between the Kura-Araxes and the Early Kurgan period, as supposed by the excavator, although there actually is a limited presence, in the settlement material, of later Kura-Araxes types, which are not found in the cemetery, and a sporadic presence of Martqopi types (Fig. 5, left). Bedeni pottery corresponds to c. 20% of the total ceramic assemblage. It is represented both by fine and by coarser wares (Fig. 5, right), the former showing a remarkably high quality. When we considered the distribution of the different wares in the different contexts, it appeared that more than two thirds of these contained both Kura-Araxes and Bedeni pottery (at least one third of these, however, contained LBA pottery as well), while the remaining ones contained only Kura-Araxes pottery. After checking the original excavation documentation, we thus came to the tentative conclusion that the settlement's EBA occupational sequence may have included: 1) a substantial early Kura-Araxes (KA II) level; 2) traces of a very sporadic late Kura-Araxes/Martqopi occupation, and 3) a badly preserved Bedeni level, mainly consisting of pits, which had cut into the earlier layers and therefore contained mixed material. Pits and foundation trenches dating to the LBA period appeared to have been the cause of additional mixing of the Kura-Araxes and Bedeni materials.

In order to test our hypothesis and get more precise data about the site's stratigraphy and absolute date, we decided to resume excavations at Natsargora. During the 2011 field season, we therefore opened a new excavation area of c. 200 sq. meters on the top of the mound, to the South and East of the old one (Fig. 6). Two soundings at the opposite limits of the excavation area ascertained that the settlement had been founded on a natural hill, the surface of which was naturally sloping in SE direction, and had probably been shaped in wide steps in antiquity.¹¹ After the end of the Georgian excavation, local villagers had created an artificial horizontal surface on the top of the mound, thereby removing, in the W half of this, the remainin part of the c. 2.50 m thick LBA sequence and the upper part of the EBA accumulation, and dumping debris along the sides of the mound. As a consequence, at the beginning of our own excavation,

10 See Tonussi in Puturidze and Rova 2012b: 52, with relevant literature.

11 In Sounding no. 2, at the W limit of the excavation, virgin soil was found at alt. 775.90 a.s.l., while in Sounding no. 1, at its E end, it was found c. 1.5 m deeper, at alt. 774.30 a.s.l.

only less than 50 cm of the original anthropic sequence were still preserved in the W half of the investigated area. Approximately 20–25 cm of it were excavated in 2011. Unfortunately, these deposits had been intensely reworked by the LBA people, who had excavated a very large number of sub-cylindrical pits: these often cut other previously refilled pits, so that the underlying sediments were almost completely destroyed throughout wide areas, and only few remains of the older features were preserved.

In spite of these disturbances, whenever we excavated undisturbed contexts in this part of the excavation, these contained exclusively Kura-Araxes material of the kind we described above. Moreover, even in LB pits which contained mixed LB and EB pottery, we found almost no Bedeni material.¹² We were thus confirmed in our hypothesis that most of the abundant Bedeni material (often consisting of complete vessels) excavated by the Georgian expedition came from Bedeni pits which had disturbed the Kura-Araxes levels, but were not deep enough to reach the level from which our excavation started, although we cannot exclude the existence of a thin occupational level of this period, which had been completely removed by Ramishvili's excavation before our arrival. Table 1 shows a schematic reconstruction of the original stratigraphy of this part of the settlement, as we presently understand it.

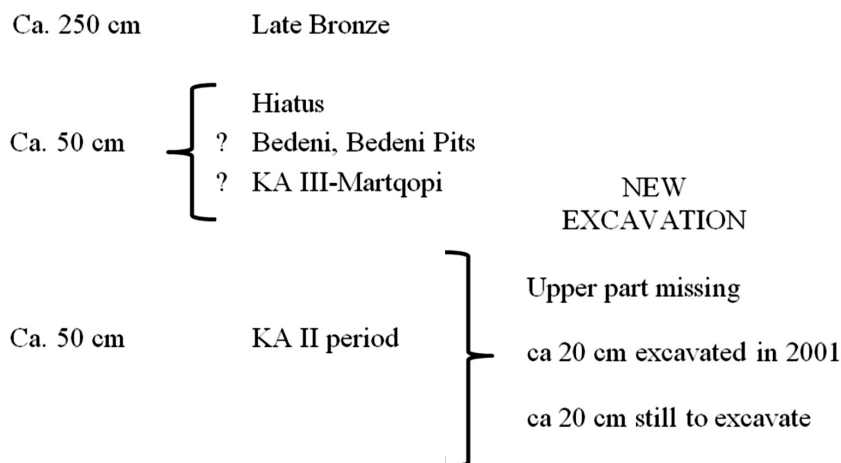


Table 1: Schematic reconstruction of the Natsargora settlement's stratigraphy (W part of the excavation)

12 The only exception was a complete Bedeni vessel, which was found inside a LBA pit.

In the eastern part of the excavated area, where excavation in 2011 did not proceed beyond emptying the LB pits, the EBA levels appear to be better preserved, but not much thicker, and not much different in nature, as shown by the stratigraphic sequence observed in the sections of Sounding no. 1 (Fig. 7). Until now, Bedeni sherds were quite rarely found in this part of the excavation as well. To sum up, this cumulative evidence does not seem to be in contrast with the traditional sequence of the Kura-Araxes, Martqhopi and Bedeni cultures, since it would not require a coexistence, at Natsargora, between the Kura-Araxes and the Bedeni cultures. Preliminary results of ^{14}C dating of samples from both Ramishvili's and our own excavation confirm a date around 3000 BC for Natsargora's Kura-Araxes occupation.¹³

Besides clarifying the site's stratigraphical sequence, the 2011 excavation at Natsargora resulted in new information about the nature of the EBA settlement on top of the mound. The Kura-Araxes levels consisted of a tightly packed sequence of domestic occupation layers with remains of rather ephemeral architecture. Possible dwellings structures were few and small in size; they apparently concentrated in the N part of the mound. The S part of this, on the contrary, was entirely occupied by small open-air structures, most of which showed strong traces of fire. These were lying on a series of superimposed external surfaces sloping in SE direction, made up of compacted whitish yellowish silt. These surfaces were obviously frequently re-made, since in a less than 20 cm thick sequence we could distinguish no less than six of them: each one was covered by a 4-6 cm thick dark greyish-brownish layer that included large quantities of charcoal, cereal seeds, some wood fragments and general domestic waste.

Building material was invariably clay, either modelled in irregular mud-bricks of the same width but of different lengths, or, in the case of smaller installations, simply packed together. Interestingly enough, none of the uncovered structures was built in 'wattle and daub' technique, although the recovery of fragments of daub suggests that this technique was known and used at the site. All walls and installations had normally been levelled at a height not exceeding 10 cm, and were covered by the floor of the next occupational layer. In the later layers, structures were generally of the same kind as the earlier ones, but differently oriented, and slightly differently located. This may suggest that the settlement was periodically abandoned and re-occupied, an hypothesis which would agree with the mobile style of life generally attributed to these populations.

We could distinguish two main types of brick structures. The first ones were larger, and may be defined as huts, were it not for their rather small dimensions (their diameter does not exceed 2.50 m). They were located in the N part of the mound, which appears to have represented the 'residential section' of the settlement. We found two of

13 Sample RTK-6440 (animal bone from Ramishvili's excavation): 4300 ± 55 BP (68.2% probability: 3010-2880 cal BC [67.5%], 2720-2710 cal BC [0.7%]); sample RTK-6586 (seeds from locus 0065, 2010 excavation): 4325 ± 60 BP (68.2% probability: 3020-2895 cal BC); sample RTK-6587 (seeds from locus 0092, 2011 excavation): 4340 ± 55 BP (68.2% probability: 3020-2900 cal BC); sample RTK-6578 (seed from locus 0038, 2011 excavation): 4380 ± 65 BP (68.2 % probability: 3090-2910 cal BC). All samples have been analysed by Elisabetta Boaretto at the Weizmann Institute of Science of Rehovot (Israel).

them (loci 0364 and 0376) in the best preserved excavated layer:¹⁴ both were circular in shape, and yellowish in colour (Fig. 8); one of them was originally provided with a typical Kura-Araxes hearth (locus 0319). In the Shida Kartli region, small rounded structures, though built in ‘wattle and daub’ technique, have been unearthed at Khizanaant Gora in phase D, which is attributed to the KA II period (Palumbi 2008: 180, fig. 5.18). Comparable, but generally larger structures have also been found in Kura-Araxes levels in Armenia, e.g. at Shengavit (*ibid.*: 196–98, fig. 5.30), and in NW Iran, e.g. at Yanik Tepe (Kushnareva 1997: fig. 29, 27). Another, unfortunately very fragmentary structure of the first type appears to have been rectangular with rounded corners, and thus to belong to a rather common type of plan for EBA dwellings in the Shida Kartli region of Georgia, e.g. at Kvatskhela, Tsikhiagora, Khizanaant Gora, later levels, in the Kura-Araxes period (see Palumbi 2008: 170–186, *passim*), but also at Berikldzebi in the Bedeni period (Miron Orthmann 1995: 69, fig. 48). The date of this structure is unclear, since the area where it is located had been severely disturbed by pits; one possibility is that it dates back to the later Kura-Araxes/Early Kurgan period.

The second kind of brick structures were smaller in size, and rectilinear; they were made of dark brown bricks or, better, their bricks had probably been darkened by fire. We found parts of several such features, which we interpret as low open-air firing installations, in the S part of the excavation. All of them were quite damaged; some of the best preserved examples (loci 0389, 0371, 0342) (Fig. 9, left) consisted of three walls forming a rectangle open on one side and containing a shallow depression filled with heavily burnt soil, ash and some charcoals. A type formed by two tiny mud-brick walls set at a right angle (locus 0374) with a fire-blackened area in the corner was attested as well. They were accompanied by other firing installations of different kinds, ranging from simple pits or concave areas filled with ashes and/or burnt soil, to more formal installations surrounded by a round or horse-shaped raised band of packed clay. The type with inner projections (Fig. 9, right), which give it a characteristic quatrefoil shape (locus 0093), is very typical of the Kura-Araxes culture and particularly frequent in the Shida Kartli region (e.g. at Kvatskhela, Tsikhiagora etc).¹⁵

The remote-sensing-assisted geomorphological survey aimed at reconstructing the palaeohydrographic evolution of the Kura river and its left-side tributaries in the section of the Kartaliny basin between the archaeological sites of Natsargora and Aradetis Orgora in the Kareli district, and at outlining the interactions between human settlement and the palaeohydrographic setting of the area (Fig. 10).¹⁶ The position of the two sites suggests that the drainage system, dominated by the Kura River base level, was already in a phase of deepening in the whole basin during the EBA. Field observations, along with the reconstruction of the palaeosurfaces and palaeochannels, suggest that this situation was the result of rapid changes in fluvial styles and drainage

14 A third alleged structure of the same type (locus 0369) turned out to be illusory after completing its excavation in 2012.

15 For some illustrated examples, see Palumbi 2008: 170–187 *et passim*.

16 More detailed information about the results of this activity can be found in Furlani *et al.* 2012.

network, and of fast erosion processes connected with the Late Pleistocene and Early Holocene climate instability.

The studied settlements are preferentially located on terrace edges or on isolated high spots of the landscape. Even if the shape of the sites resembles the typical Near Eastern ‘tells’, their mound-like shape is in fact for the most part natural, and only to a limited extent the result of continuous rebuilding of clay features and of the accumulation of human-made debris. The first site, Natsargora, was built on the top of a small natural relief separated from the Kura River terrace, while the second one, Aradetis Orgora, is located on an intrenched abandoned meander. In both cases, relatively strong intentional modification of the topography was apparently carried out by the settlers in order to adapt the areas to the settlement needs, most probably by flattening their top and, at Natsargora in particular, by shaping the sloping bedrock into wide steps. It is also possible that the sides of both hills had been artificially shaped in order to improve their defensive power, but this is rather difficult to prove, since recent excavations have virtually obliterated all traces of the sites’ post-settlement history.

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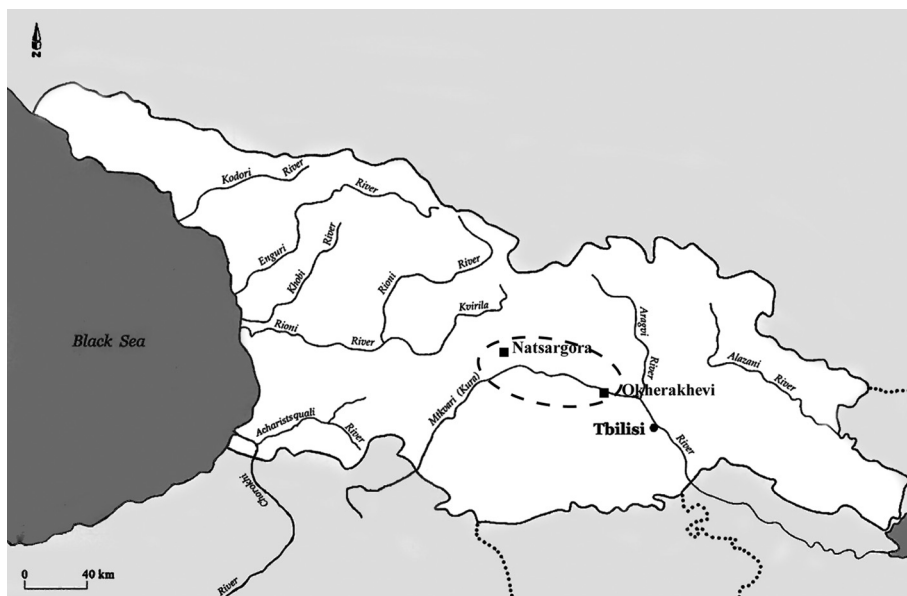


Fig. 1: Map of Georgia with approximate location of the research area and of the Khashuri Natsargora and Okherakhevi sites.
(Modified from Sagona and Abramishvili 2008)

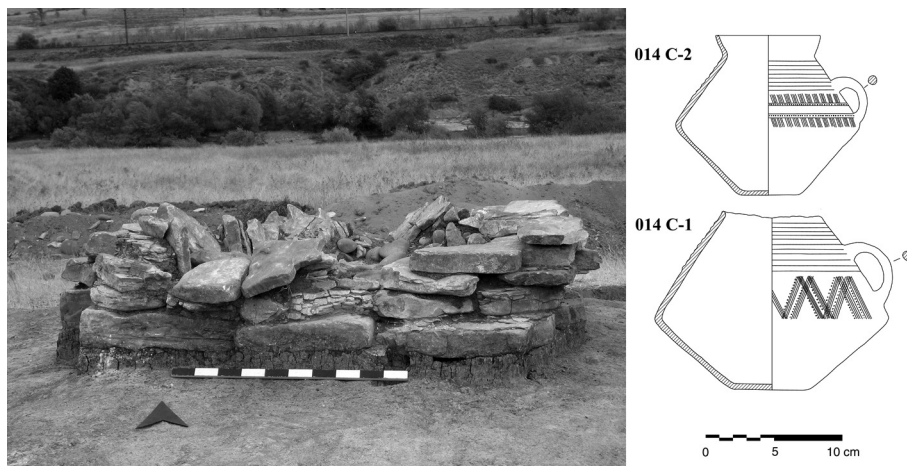


Fig. 2: Okherakhevi, Kurgan no. 1, burial chamber (left) and burial goods (right).



Fig. 3: Okherakhevi, Kurgan no. 2, stone barrow (left) and central pit (right).



Fig. 4: Examples of Kura-Araxes pottery from Natsargora settlement.



Fig. 5: Examples of Late Kura-Araxes and Martqopi (left); Bedeni fine and coarse (right) pottery from Natsargora settlement.

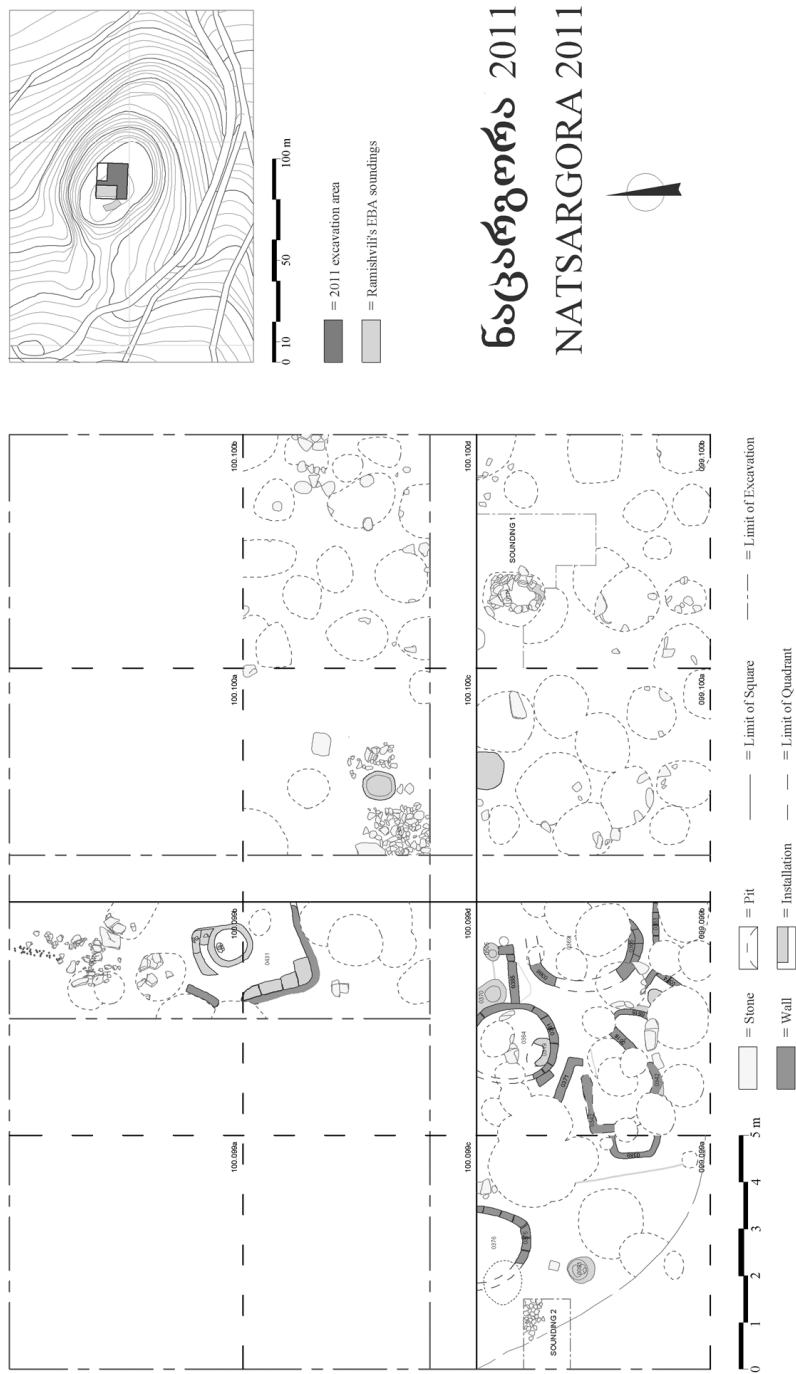


Fig. 6: Natsargora: plan of the 2011 excavation.

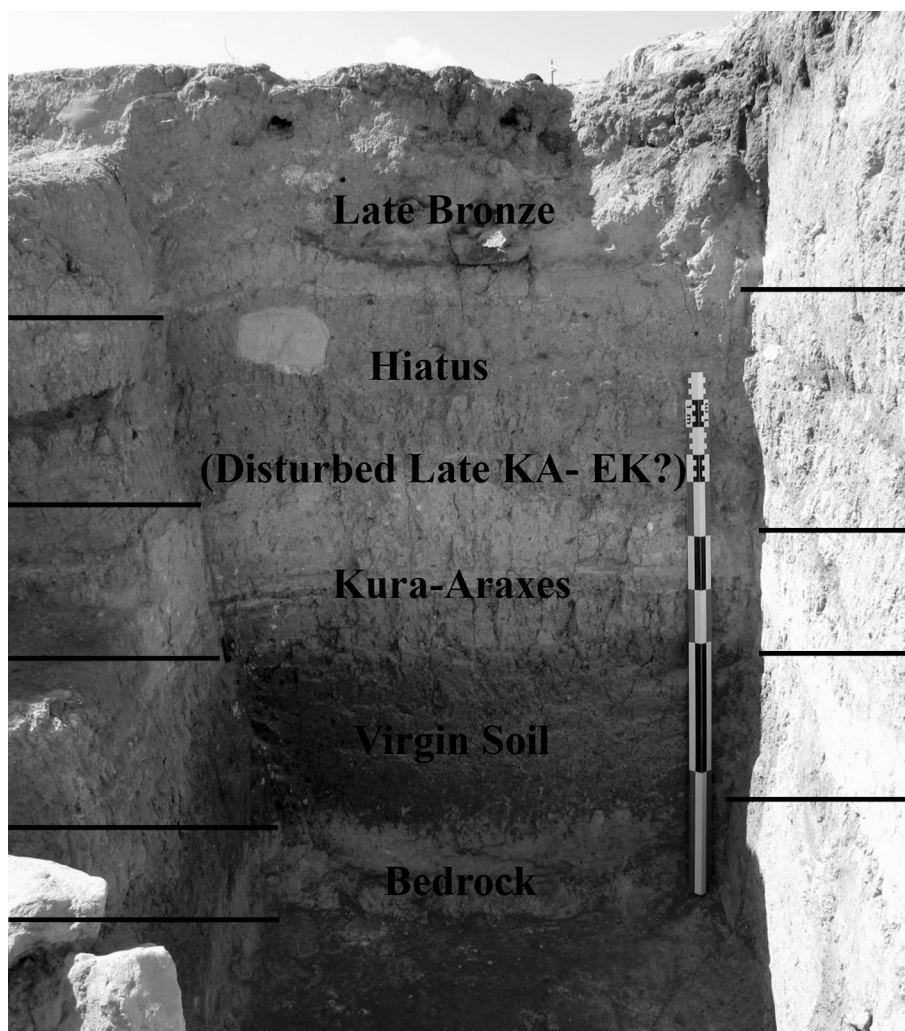


Fig. 7: Natsargora, Sounding no. 1: view of the W section, with main occupational levels.



Fig. 8: Natsargora, view of Kura-Araxes structure no. 0364.



Fig. 9: Natsargora, examples of firing installations: nos. 0342 (left) and 0093 (right).

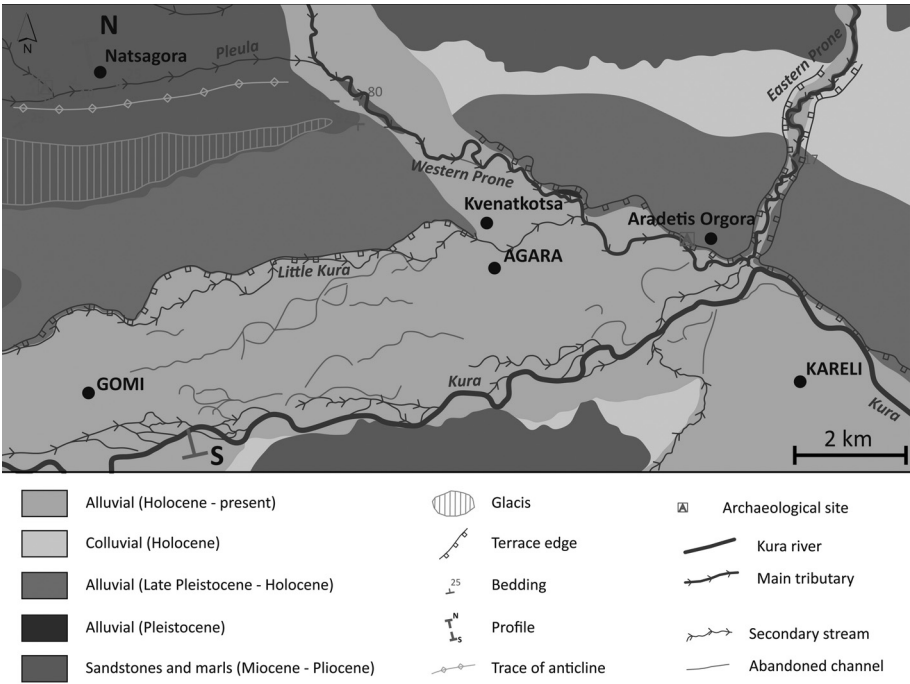


Fig. 10: Geomorphological survey: geological and geomorphological sketch of the study area.

