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The Third Field Season (2011) of the Georgian-Italian Shida Kartli Archaeological Project - by Elena Rova (Dipartimento di Studi Umanistici - Ca' Foscari University)

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Introduction

The third field season of the Shida Kartli project of the Ca' Foscari University of Venice in cooperation with the Georgian National Museum (Georgia) took place from August the 20th to October the 5th, 2011. The Italian team was composed of: prof. Elena Rova (Ca' Foscari University Venice, co-director, chief of the Italian team), dr. Monica Tonussi (post-doctoral fellow, Ca' Foscari University), dott. Katia Gavagnin (Ph.D. candidate, University of Torino), Eleonora Carminati, Giulia De Nobili, Mirko Furlanetto and Laura Tonetto (MA students in Near Eastern Archaeology at Ca' Foscari University), prof. Giovanni Boschian (University of Pisa), geoarchaeologist, dr. Stefano Furlani (University of Padova), geomorphologist, dr. Elisabetta Boaretto (Weizmann Institute of Science, Rehovot, Israel), C14 specialist.

The Georgian team was headed by dr. Zurab Makharadze (Georgian National Museum, head of the Centre of Archaeology, co-director), represented on the field by Bidzina Murvanidze (Georgian National Museum, scientific responsible for the Khashuri region). It included the following students and doctorands in Archaeology at Tbilisi State University: Boris Gelashvili, Giorgi Khaburzania, Mariam Nikolozishvili, Ana Tevzadze, and Revaz Vadachkoria, joined for shorter periods by Davit Darejanashvili, Tamar Meladze, and Zviad Sherazadishvili. Prof. Marina Puturidze (Tbilisi State University, project's co-director) did not take part in this year's field campaign, but continued, during the same period, to work on the project's publications.

The campaign was devoted to the following activities:
1) Excavations at the site of Natsargora;
2) Archaeological survey of the Khashuri district;
3) Collection of samples for radiometric dating, archaeometric analyses and soil michromorphology analyses;
4) Geomorphological survey;
5) Other activities.

Excavations at Natsargora

The main activity of the season was the renewed excavation at the Natsargora mound. The site had been excavated in the 1980s by the late Alexander Ramishvili, who had mainly investigated its Late Bronze levels. A number of soundings had however revealed the presence of Early Bronze Age levels, and unearthed important materials of both the Kura-Araxes and the Bedeni periods, according to the excavator in association with each other. These had raised the question of the possible coexistence, at the site, of both cultures, which would have had important consequences on the general EBA chronology of the region. After analysing, during the 2009 and 2010 field seasons, the finds from the old excavations and the relevant documentation, we realised that the site's stratigraphy was so complex and confused that no firm conclusions about this question could be reached without undertaking new excavation there.

With this aim, we opened a ca 200 square meters excavation area, corresponding to eight 5 x 5 m quadrants, on the present top of the mound, S and E of Ramishvili's EBA soundings (Figs. 1, 2). Contrary to our expectations, it turned out that, after completing his excavations, the Georgian archaeologist had created an artificial horizontal surface under the level reached by his excavation, which in most squares approximately corresponded to the base of the LBA occupation (Fig. 3). Since, however, the archaeological levels were heavily sloping in E direction, this had caused the disappearance, in the W part of the mound, of the upper EBA levels as well. In addition, the whole investigated area was heavily disturbed by a huge number of LBA pits, partially excavated by Ramishvili, which had cut into the earlier levels, as well as by numerous animal holes and plant roots. For all these reasons, the EBA levels were rather poorly preserved.

In the SW part of our excavation, in particular (quadrants 099.099b), less than half a meter of anthropic deposits had been left over the natural soil, which was met in a small sounding (Sounding no. 2) at a maximum elevation of ca 775.90 a.s.l. The remaining stratification consisted of a series of at least six thin superimposed layers marked by the presence of slightly sloping floors of yellowish or whitish colour. Three of them have been excavated so far: the upper ones had probably been external surfaces, since only scanty remains of installations (fireplaces, ash-filled areas) were found lying on them. The third layer, which was less disturbed by the later pits, on the contrary yielded some remains of more substantial constructions. These belonged to two main types: sub-circular structures of small dimensions (Loci 0376, 0364, 0309) – one of them measured ca 200 x 150 cm –, built in mud-bricks (?) or blocks of reddish yellowish clay, one of which contained an in situ fireplace and an in situ grinding stone, and smaller rectangular structures with walls of dark brown mud, which appeared to host peculiar depressed combustion features (Loci 0389, 0371, 0374 etc.) (Fig. 4). None of the walls was preserved for a height of more than 7 cm; as can be seen from the section of some pits, the same is valid for the structures of the underlying layers as well. It seems, therefore, that architectural structures in the area were rather ephemeral in nature, and had often been re-built within a short lapse of time.

The ceramic inventory recovered in this area of the excavation was purely Kura-Araxes in date; in particular, no Bedeni sherds were found in good contexts there. This confirms our hypothesis that at least the lowest EBA levels at the site definitely belong to the pre-Bedeni period. An interesting example of complete Bedeni vessel was found, however, in a later pit cutting one of the Kura-Araxes structures (Fig. 5). The shape and the spurred handles of this mug are rather typical of the Bedeni period, but it decoration is in some respects unique.

Part of a larger construction (Locus 0431), presumably a typical Kura-Araxes hut of quadrangular shape with rounded corners, was discovered in quadrants 100.099b-d to the N (Fig. 6). It had two phases of use, during the second of which a rounded installation was built approximately in its centre, over a thick layer of ashes. The area to the N of this building had unfortunately been cut into by the stone foundations of some LBA constructions (Locus 0406), which had partially been removed by Ramishvili.

In the E part of the excavated area (quadrants 100.100a, b, 099.100a, b), the situation was quite different. Due to the natural slope of the mound, archaeological levels were much deeper here, as proved by a small test trench (Sounding no. 1), in which virgin soil was reached at alt. 774.30 a.s.l., i.e. more than one and half meter deeper than in the W part of the excavation. It is possible that the natural slope had been terraced in ancient times, as shown by the presence of one or two possible low steps visible in the EW sections.

In quadrant 100.100c, a series of superimposed LBA surfaces were preserved just under the present top soil. These were underlain by a more than 50 cm thick filling, which did not contain any significant feature. The following layer was characterised by a small stone ramp (Locus 0234) associated with a round fireplace, which appear to be still LBA in date. Excavation stopped at the top of the underlying layer. This yielded mixed LBA and EBA pottery, and might therefore represent the transition to the 3rd millennium BC occupation in this area.

On the contrary, no LBA occupational layer was preserved in quadrant 099.100a to the S. After emptying a large number of LBA pits, we reached, under the disturbed sub-surface soil, the top of the EBA (apparently Kura-Araxes) occupation, which yielded decomposed remains of pisé or mud-brick walls, and a very fragmentary fireplace.

In the easternmost part of the area (quadrants 100.100d, 099.100b), excavation did not proceed beyond emptying the LBA pits, with the exception of the already mentioned small test trench (Sounding no. 2) which was continued down to the natural soil (Fig. 7). The sounding showed the presence, in the area, of a ca 60 cm thick LBA occupational level, underlain by a ca 40 cm thick EBA, presumably Kura-Araxes, level. The latter appears have been characterised by a thickly packed sequence of undisturbed surfaces of yellowish and whitish colour directly overlying the natural soil, which we will hopefully investigate in the course of next year's campaign. From the uppermost of these surfaces, a pit had been dug, in which a circular stone feature of unclear function, covered by stones (Locus 0176) had been built (Fig. 8).

To sum up, the evidence collected so far indicates the presence at the site of a substantial Kura-Araxes occupation, though apparently characterised by rather ephemeral architectural structures, overlying the virgin soil all over the excavated area. The presence of Bedeni layers, on the contrary, remains rather elusive. The association of Kura-Araxes and Bedeni materials in the very same contexts encountered in Ramishvili's investigations was not confirmed by our own excavations. It must be noticed, in this respect, that only a handful of Bedeni sherds was recovered this year in the whole excavated area. This suggests that a large part of the abundant Bedeni material collected by Ramishvili derived from disturbed layers, or from pits. The latter were probably not deep enough to exceed the bottom level of the Georgian excavation, and had therefore been already completely removed before the beginning of our own investigations.

Survey activities

The survey team was composed of Giulia De Nobili, Giorgi Khaburzania, and Bidzina Murvanidze. Its activities concentrated on the Khashuri district (an area of about 550 km²), and were carried out during the whole field season, between 26/08/2011 and 23/08/2011. The main purposes of the survey were:
a) to identify the exact position of sites known from literature or on the basis of unpublished materials resulting from casual discoveries by the local farmers, now stored in the Khashuri Museum, information about which was kindly provided by Bidzina Murvanidze;
b) to find people who brought archaeological materials to the Khashuri Museum in past years, and to collect from them information about the location of possible sites;
c) to interview the local people in order to collect new information about casual findings and about other possible archaeological sites;
d) to check the presence of sites spotted through the analysis of aerial photos (Soviet period photos of the 1950s kindly provided by the Centre of Archaeology of the Georgian National Museum, and photos taken in 2000 kindly provided by Tbilisi's Geolab), and satellite images;
e) to investigate in detail the fields surrounding the site of Natsargora in order to determine the entity of the "lower town" settlement.

During 20 working days, the team walked the landscape for a total of 340 Km visiting all the main valleys in the district. A total number of 146 sites have been identified and recorded in detail in a dedicated database (Fig. 9). The pottery collected during the survey was preliminarily analysed in order to identify the periods of occupation of each site; diagnostic sherds were recorded in a database and will be used to create a reference typology for future surveys in the area. In different occasions the team worked together with the expedition's geologist and geoarchaeologist, in order to better understand the studied landscape.

From the survey's results it is possible to draw the following preliminary conclusions:
1) most of the recovered material can be dated to the medieval period; most of it was unearthed on the occasion of works undertaken in churches and cemeteries.
2) most pottery sherds were collected in ploughed areas, corn fields and other cultivated areas, since in other places the surface soil was mostly covered by very dense and high vegetation. In addition, many interesting hills are not cultivated, thus making it very difficult to identify sherds on the ground.
3) the hypothetical Bronze Age sites are mostly located between 700 and 900 meters above sea level, on small hills near water sources, generally consisting of small streams.
4) as we already observed last year in the Kaspi district, Bronze Age sites are mostly characterised by the presence of LBA pottery, while EBA sherds are only seldom found. Our general impression is that EBA layers are usually deeply buried and covered by the later occupation, and are therefore not easily visible from surface sherds collection.

In spite of these difficulties, potentially interesting sites have been located at Meligora (Fig. 10), Koditskharo, Ghvriatskali and Kemperi. Further investigations in the forthcoming years might help to get clearer ideas about this mounds. We also expect to gain additional information on the other sites we visited by further study of the collected ceramics.

Collection of samples for 14C, archaeometric and soil micromorphological studies

Dr. Elisabetta Boaretto took part from 02/09/2011 to 11/09/2011 to the excavation at Natsargora, where she undertook selective collection of samples for 14C analyses in highly controlled environment from different contexts, both Kura-Araxes and LBA in date. These will considerably increase the corpus of 14C dates which had been collected during the previous seasons from both the Natsargora and the Okherakhevi sites, and will allow to obtain a more reliable absolute chronology for the EBA in the region, especially as concerns the controversial relation between the Kura-Araxes and the following Early Kurgan cultures. Since available dates for the Early Kurgan period are especially scanty, during her visit to Georgia dr. Boaretto collected some additional samples from materials (bones, seeds, nuts etc.) from old excavations of this period stored at the Georgian National Museum in Tbilisi.

Sampling of pottery from the site for archaeometric analyses this year especially concentrated on LBA sherds, in order to compare their features with those of the EBA sherds analysed during the previous seasons. In addition, some clay samples were collected from different present-day sources near Nastargora. Raw obsidian samples for provenance determination were also collected from the new Natsargora excavations. These will be analysed at the Institut de Recherche sur les Archéomatériaux, Centre Ernest Babelon, C.N.R.S. of Orleans (France), in order to compare the results with those obtained on the samples from the old excavations at the site collected in 2009 and 2010 by the members of the expedition, which suggested that the whole obsidian from the site was obtained from a single source, namely the Lake Paravani/Kojun Dag area in southern Georgia.

A new area of research which was started in 2011 is the collection of samples for soil micromorphological analysis from archaeological contexts, which was carried out under the responsibility of prof. Giovanni Boschian.

The main aim of these studies is to elucidate the influence of past human activities on sediment production and deposition, as well as on the site's formation processes, in order to understand the ancient use of the site and of its areas. More in particular, work was focused on some floors that appear to have been intentionally prepared; these are made up of sequences of several couples of 2-4 cm thick layers of compacted yellowish silt overlain by 4-6 cm thick greyish-brownish layers, that include large quantities of charcoal, mostly cereal seeds, and some wood fragments. There are still several open questions relating to the preparation and use of these yellowish silty floors. The soil micromorphological technique can be applied in order to find clues to these issues, because several types of traces of human activity can be put into evidence at microscopic level, including ash, phytoliths, dung remains, trampling, etc. Thus, sequences of traces of past human activities can be found concentrated in the layers that cover the above mentioned surfaces, even if these are rather thin. Samples for micromorphological analyses are usually undisturbed sediment blocklets measuring approximately 9 x 6 x 6 cm that are carved out from excavation profiles or surfaces and are transformed, after preparation in specialised laboratories, in thin sections to be observed under a standard polarising microscope and described following standard procedures.

A sounding of 1 x 1,5 m (Sounding no. 2) was excavated in quadrant 099.099a, at the W edge of the excavation area, where a sequence of Kura-Araxes floors directly overlying the virgin soil was evident and represented by several superimposed levels (Fig. 11). All these sediments were sampled for micromorphological analysis, including all their peculiarities and mostly the boundaries between layers. In addition, charcoal samples were also collected in order to date the sequence by 14C and to identify the vegetal species involved in the use of the features.

One monolith was also collected from the excavation profile in quadrant 100.100c, through some light yellowish silt floors that resemble those of the previous area, but can be ascribed to the Late Bronze Age (Fig. 12). Here, the silty layers are largely similar to those of area 099.099a, but are in some cases somewhat thicker. Other samples were collected through the profile of Locus 0342-0343, which is apparently a peculiar depressed combustion feature, rather shallow and of roughly rectangular shape, filled up with charcoal and light reddish sediment, and from other interesting contexts.

Geomorphological survey

During one week, from 27/08 to 04/09/2011, dr. Stefano Furlani continued the geological and geomorphological survey of the Shida Kartli region which had been started in 2009, the aim of which is to produce a geomorphological map of the region (Fig. 13), in order to analyse the relation of the archaeological sites with the ancient natural environment, and to reconstruct, on the basis of satellite images and autoptic observation, the ancient hydrographical system of the Kura river basin in the province. This year's campaign was especially devoted to the Khashuri district, which was systematically surveyed, and to the immediate neighbourhood of the Natsargora site. One and half days were spent in the Kareli area, in order to clarify some still unsolved questions concerning the shifting in historical times of the bed of the Kura river.

Preliminary results of the geomorphologist team work have been published in: S. Furlani et al., Integrating Archeological and Geomorphological Data to evaluate the Late-Holocene Behaviour of the Kartalini Basin (Georgia), Il Quaternario - Italian Journal of Quaternary Sciences 24 (Special number, Abstracts AIQUA, Roma 02/2011) 2011, 186-188. In the framework of the project, a MA thesis about "The Tectonic and Geomorphological Evolution of the Kartalini Basin, Georgia" was discussed at Padova University in March 2011 by A. Stinghen.

Other activities

In the course of the field season, some days were also dedicated to organising, together with prof. Marina Puturidze (Tbilisi State University), co-director of the project, the second volume of the publication of the old Georgian excavation at Natsargora, which will be dedicated to the EBA settlement excavation, to archaeozoological and paleobotanical analyses, as well as to archaeometric analyses of materials (pottery and obsidian). The delivery of the volume to the publisher is foreseen for June 2013. The first volume of the publication – M. Puturidze, E. Rova (eds.), Khashuri Natsargora: The EBA Graves (Publications of the Georgian-Italian Shida Kartli Archaeological Project I) (Subartu 30), Turnhout – has been delivered to the publisher in June 2011 and is due to appear by December 2011.

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