Report on the Activities of the Second Field Season of the Joint Shida Kartli Project

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The second field season of the Shida Kartli project of the Ca' Foscari University of Venice (Italy) in cooperation with the Georgian National Museum (Georgia) took place from August the 21st to October the 4th, 2010.

The Italian team was composed of the following members: prof. Elena Rova (Ca' Foscari University Venice, co-director, chief of the Italian team), Katia Gavagnin (Ph. D. candidate, University of Torino), Eleonora Carminati, Giulia De Nobili and Mirko Furlanetto (MA students in Near Eastern Archaeology at Ca' Foscari University), dr. Stefano Furlani (University of Padova), geomorphologist, Alberto Stinghen (MA student in Geology at Padova University), and dr. Elisabetta Boaretto (Weizmann Institute of Science, Rehovot, Israel), C14 specialist.

The Georgian team consisted of: dr. Zurab Makharadze (Georgian National Museum, Centre of Archaeology- Head of Field Research Department, co-director), prof. Marina Puturidze (Department of Archaeology Tbilisi State University, co-director), Ketevan Bulukhia, Davit Darejanashvili, Giorgi Khaburzania, Giorgi Kvaratskhelia, Tamar Meladze, Zviad Sherazadishvili, Revaz Vadachkoria (students in Archaeology at Tbilisi State University).

The Italian team arrived in Tbilisi on August the 22^{th.} On August the 25th the expedition moved to the dig-house at Kavtishkhevi in the Kaspi district kindly provided by the Georgian National Museum, from where it carried out its activities until October the 2nd, when it left to Tbilisi. This year's work included new excavations as well as indoor study of unpublished materials from old excavations, survey activities and collection of samples for archaeometric analyses.

Study of the Khashuri Natsargora material

The first aim of the season was to conclude the study of the EBA materials from the important site of Natsargora in the Khashuri district excavated in 1984-1989 by the late A. Ramishvili of the Khashuri Archaeological expedition. This work had been started in 2009, when the cemetery finds had been processed, and was continued during the first and last weeks of work by all the archaeologists of the team, and by ca half of them during the remaining time. This year we processed the material (pottery, lithics and miscellaneous small finds) from the contemporary settlement levels. All finds were measured and described anew and (when necessary) restored, and new digital photos were taken of them. They were compared with the original drawings and necessary corrections were made to the latter. All relevant data were inserted into a dedicated database. At the same time we finished the translation and digitalization of the relevant written and graphic documentation (1985-1987 excavation diaries), thus progressing toward the final evaluation of the site's stratigraphy and interpretation. A short visit to the site helped to solve a few still standing questions about the location and dimensions of the excavation areas. A typology of the site's EBA pottery was produced on the basis of the first-hand study of the material and of the results of the archaeometric analyses carried out during the past year on the samples collected in 2009. The autoptic work on the Natsargora material can thus be considered concluded.

A few days were also dedicated to the final editing of some of the contributions to the first volume of the site's final publication (general introduction to the site and EBA graves), which is in advanced state of redaction and is foreseen to be delivered to the publisher in June 2011.

The results of the 2009 study season have been presented at international congresses (Symposium "The Caucasus: Georgia on the Crossroads. Cultural Exchanges Across Europe and Beyond" (Firenze 2-9 November 2009, "7th International Congress on the Archaeology of the Ancient Near East" (London, 12-16 April 2010); both contributions are presently in press.



Excavations at Okherakhevi

The main activity of the season was the excavation of two kurgans at the site of Okherakhevi between the Nichbisi and Kvemo Khandaki villages at the border between the Kaspi and Mtskheta districts. Previous excavations by Z. Shatberashvili (Shatberaschvili, Excavations of Kurgans in Doesi and Okhera, in Polevie Arkheologicheskie Issledovanija v 1974 godu, Tbilisi 1976) and by the Mtskheta Archaeological Expedition (Apakidze et al., Mtskheta Expedition, in Polevie Arkheologicheskie Issledovanija v 1987 godu, 1995, Apakidze et al., Expedition von Mzcheta, in Archäologische Geländearbeiten in Georgien 1989-1992, 2004, 70-81) had revealed the presence in the area of stone barrows of the Early Bronze Age period, two of which had been excavated. Our work concentrated on a group of five kurgans (nos. 1-5) located at ca 510 m. a.s.l. on the terrace on the right side of the Kura River, which we supposed to be connected with the Early Bronze Age settlement of Tzikhiagora located at distance of about 3 kilometers in SW direction. One of them (no. 1) was smaller than the others, and situated ca 80 m to the N of them, whereas the remaining ones (nos. 2-5) stood very near to each other along an approximate NW-SE axis. Kurgans nos. 1 and 2 were investigated during a period of three and half weeks (from August the 30th to September the 24th) with the help of 12 workmen from the villages of Nichbisi and Kavtishkhevi. The first excavation area had a surface of 150 sq m. and extended over 9 squares of 5 x 5 m each (101.L b-d, 100.M a-d, 100.L b, 100.M a-b); the second had a surface of 285 sq m. and extended over 12 squares (93.J a-d, 93.K a-d, 92.J a-b, 92-Ka-b). (Fig. 1)

As excavated, the stone mound of kurgan no. 1 measured 10 x 4.50 m, and had a maximum height of 70 cm. It had the shape of an elongated oval, oriented in NW-SE direction (**Fig. 2**).



Fig 2. View of Kurgan no. 1 from W s

The kurgan had been partially damaged by modern agricultural activities on its N and S sides, and stones originally belonging to it were found scattered over an area of 14 x 9.5 m. In spite of this, it can be supposed that its original shape was already, albeit less pronouncedly, oval. The stone mound had been built on a low natural height which rose from the underlying clayish natural soil on top of the river terrace. It consisted of pebbles of small and middle dimensions, interspersed with larger slabs of whitish and yellowish sandstone, both of them from the adjacent river bed. Numerous obsidian fragments were recovered from among the stones.

A low overground chamber of squarish shape, also oriented in NW-SE direction, was located approximately in its centre. It measured 240 x 220 cm, and was ca 40 cm high; its walls were 40-50 cm wide, and were made of large flat slabs of whitish sandstone (**Fig. 3**). The burial chamber had originally been covered with flat stone slabs of the same type, which had partially collapsed inside it due to the weight of the overlying stones. The filling of the 160 x 140 cm space inside the chamber was preserved only for ca 10 cm under the collapsed stones. It contained two smashed pottery vessels, which were both located in the northern half of the grave, in its W and respectively E part. Both were small single-handled carinated pots of fine black-coloured Bedeni pottery with corrugated shoulder and with finely incised decoration in the area of the carination. A few badly preserved fragments of human bones (among them one tooth) were found in the NE corner of the chamber. They were so few that it may be doubted that the kurgan ever contained an entire skeleton.



Fig 3. View of the burial chamber of Kurgan 1 from S.



Kurgan no. 2 lay 85 m to the SW of kurgan no. 1, near kurgans nos. 3 and 4. Like these, it was oriented in NW-SE direction. Its stone mound measured 15×11 m and was 20-40 cm high, mainly composed of small-size river pebbles occasionally interspersed with larger slabs of whitish sandstone (**Fig. 4**). A few fragment of obsidian were recovered among the stones. These were lying directly on the underlying clayish natural soil, on what was probably originally a low natural height. A 150 cm deep pit of irregular circular shape measuring 520 x 545 cm was situated in the central part of the stone mound, and was covered by this. It was surrounded by a ca 1 m wide slightly raised ring of yellowish soil, which derived from the accumulation of the soil dug from it. Outside of this raised ring, in the northern half of the kurgan there were some traces of a possible outer ring of stones, the diameter of which may have been ca 700 cm.

The central pit (**Fig. 5**) had an approximately hemispherical shape; its walls had a rather irregular profile and were marked by the presence of a number of approximate "steps". The pit was filled with different layers of stones: on the top, under the pebbles of the overlying stone mound, there was a 25-30 cm high layer of very small white and reddish river pebbles; under this, a 60-70 cm deep layer of large pebbles and flat sandstone slabs. The lowest part of the filling was formed by smaller pebbles. Except for a few fragments of decomposed animal bones, nothing was found in the pit's filling. Interestingly enough, these bones were all found on the side of the pit, lying on one of the "steps", under the stones. Two small pits with a diameter of 100 and respectively 150 cm cut the top of the central pit's filling, under the kurgan's stone mound. Both pits contained fragments of small pottery vessels of the Late Bronze Age.



Fig 5. View of the central pit of Kurgan 2 from S

A third Late Bronze Age pit was located at the NW periphery of the kurgan (**Fig. 6**). It was also covered by the stones of the kurgan's mound, from the outline of which is slightly projected. Its location was marked by a cluster of very large out of place white stone slabs, which might have originally belonged to some structure connected with it. The pit was ca 40 cm deep: on the top it was roughly circular and measured 120 x 150 cm, while on the bottom it was ovoid in shape, oriented in SW-NE direction, and measured 155 x 95 cm. It contained two smashed pottery jars with very typical Late Bronze combed decoration, and scattered animal bones.

Considering that no EBA finds were made in the whole kurgan's area, it seems reasonable to conclude that the kurgan is contemporary with the above mentioned pits, and should therefore be dated to the Late Bronze Age. Its function remains rather enigmatic: it seems improbable that the central pit, the filling of which appeared to be undisturbed, contained a human burial. It would appear, therefore, that the kurgan was merely used as a site for ritual offerings. If, as it seems, kurgan no. 2 was contemporary with the neighbouring kurgans nos. 3, 4 and 5, one may suppose that it had an auxiliary function within a complex of mounds, one of which (maybe no. 5, which is definitely larger than the other ones), hosted the main burial. Another possibility is that we are dealing with an earlier (EBA?) kurgan, which was reused, after having been emptied of its original contents, during the Late Bronze Age.

Be that as it may, the presence at Okherakhevi of kurgans of both the Early and the Late Bronze Age points to a long-term continuity in the use of the site as the seat of ritual activities by the local population.



Survey activities

During two weeks of work, from 10/09 to 24/09/2010, dr. Stefano Furlani and Alberto Stinghen completed the geological and geo-morphological survey of the Shida Kartli region through the analysis of selected exposed sections in different parts of the study area and the collection of deposits samples initiated in 2009 by Luca Bertoldi. Special attention was devoted to the location of the EBA sites of Okherakhevi in the Kaspi/Mskheta district, Aradetis Orgora and Nastargora in the districts of Kareli and respectively Khashuri in relation with the ancient natural environment, and to the reconstruction, on the basis of satellite images and autoptic observation, of the ancient hydrographical system of the Kura river basin in the Shida Kartli province. Available evidence suggests an overall stability of geo-morphological conditions at least since the EBA at both Okherakhevi and Nastargora, whereas at Aradetis Orgora the presence of alluvial layers overlying the archaeological levels suggests that the bed of the Kura river was located nearer to the site than in present times, in agreement with the results of aerophotos interpretation. More in general, one should consider that during the last few thousand years the river basin has been under degradation rather than aggradation conditions, and that therefore, except for very specific local conditions, ancient sites are rather unlikely to have been buried under thick deposit layers.

During their field investigations, The geologists were accompanied by two of the team's archaeologists (G. De Nobili and G. Khaburzania) who recorded the presence of possible archaeological remains in these areas.

Archaeological survey activities concentrated on the section of the Kaspi district located near the excavated site, with the aim of defining the archaeological landscape in which the Okherakhevi kurgans were settled. Ca 30 possible sites identified through the analysis of two sets of aerophotos (Soviet period photos of the 1950ies kindly provided by the Centre of Archaeology of the Georgian National Museum, and photos taken in 2000 kindly provided by the Tbilisi's Geolab) were visited. Some of them, which were already known and/or excavated, were used as reference examples. Results are somehow problematic, since the collected pottery is scanty and mainly of late date, although the occasional presence of flint and obsidian flakes could support the presence of additional EBA settlements and/or burials in the area.

In the Nastargora area, interviews with the local population and study of the old excavation documentation allowed us to identify the so-called "Valley of the pits", where Ramishvili carried out short excavations during the Natsargora campaign. We collected some pottery (most of which was again of late date) and lithics from the neighbouring area, in order to verify the possible presence of additional EBA pits or other archaeological remains.

Collection of samples for C14, archaeometric and other analyses

In the framework of the project, dr. Elisabetta Boaretto spent a period of nine days on the Okherakhevi excavation, where she undertook selective collection of samples for C14 analyses in highly controlled environment from both the excavated kurgans. In addition, she collected samples from the old excavations at the neighbouring site of Tsikhiagora.

The dates obtained from these samples will be integrated with those from the samples from the EBA levels of Natsargora and Aradetis Orgora collected by the expedition in 2009, which have been analyzed at the Weizmann Institute Laboratory during the past winter, and compared with the corpus of available C14 dates from the region. We thus hope to progress toward the definition of a absolute regional chronology for the EBA.

Animal and human bones from the Okherakhevi excavation were collected with the aim of analyzing them it Italy. If the very poor state of preservation of the human remains will allow, these will be used for palaopathological and paleonutritional analyses. Raw obsidian samples for provenance determination were collected from the Okherakhevi excavation, as well as from the Natsargora material, to be analysed together with those collected in 2009.

Finally, additional pottery samples were collected from the Natsargora material. These should allow to implement the results of the analyses carried out in Padova and Venice on the samples collected in 2009, by adding important information on the less frequent wares attested at the site (Martkopi etc.).

Aknowledgements

We would first of all 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. We would also like to thank Giorgi Bezarashvili (Deputy Director Georgian National Museum) and Mikheil Gaprindashvili, who greatly helped us with logistics. Special thanks are due to our driver Emzar Tsulukidze for his precious assistance in various circumstances.