Trialeti is one of the historic regions of Georgia (pl. I, 1). According to current administrative arrangements, it covers the whole of Tsalka municipality and part of Tetrtsqaro, Dmanisi, Borjomi and Ninotsminda municipalities. Geographically and administratively it is included in Kvemo Kartli, and incorporates the Algeti and the Ktsia-Mashavera-Berdjui basins, and the Mtkvari valley up to the Red Bridge. The northern border of Kvemo Kartli runs along the Trialeti mountain range, the western border continues up to the Bakuriani section of the Trialeti mountain range, to the south it is separated from Armenia by the Loki mountain range and to the east it is bordered by the Samgori and Davitgareji ranges.

Natural conditions. On natural, topographic and climatic grounds Kvemo Kartli is divided into several regions. One of these is Trialeti, which embraces the upper part of the river Ktsia and the Shavtsqarostsqali valley. The region is bordered by the Shavtsqarostsqali range at the north; Narianis Veli, which extends to the Tabatsquri and Paravani lakes, is situated to the west of the region; Trialeti reaches the Chochiani and the Shavtsqala watershed to the south and to the east it extends from Kldekari to the confluence of the rivers Chochiana and Ktsia. The altitude varies between 1,000 m and 2,500 m above sea level.

The river Ktsia and its tributaries, artificial reservoirs and small lakes are the principal hydrographic features of Trialeti. The River Ktsia is the largest in this region (its length is 220 km). It rises on the south-east slopes of Tskhratsqaro Mountain, runs south of the Trialeti mountain range and flows into the artificial reservoir on Beshtasheni plateau. Among its numerous tributaries are the rivers Chochiani, Nardevani, Gumbati, Qarabulakhi, etc. The rivers Beshkenasheni and Qorsu join the Tsalka reservoir. There are lakes of various sizes in the region, such as Bareti, Khadiki, Shvidi Tba, Qarabulakhi.

In this region, elevated and surrounded by high hills, the effects of approaching frontal systems are modified as a result of local orographic conditions. Climatic conditions in Trialeti can be severe. The lower part of the region enjoys for the most part a mountain steppe climate with cold winters and long warm summers. Average annual precipitation is 600-700 mm. The average temperature in January is between -2 and -6 degrees C, although the absolute minimum of temperature may fall to -30 degrees C, while the warmest varies up to 14-15 degrees C, and the absolute maximum may exceed 35 degrees. Most of the annual rain comes in spring and at the beginning of summer and minimum rainfall occurs in winter. The climate in the region is dry continental.

In keeping with the orographic conditions, the vegetation of Trialeti consists of elements of feather-grasses and beard-grasses. Plidominant grasses are widespread in this region, where the main varieties are: steppe fescue, field fescue, steppe timothy-grass, sheep fescue, as well as Ruscus ponticus, Agrostis, bluebell, and buttercup. Feather-grasses include: Trialeti lucerne, Filipendula hexapetala, Polygala, clover. It is remarkable that this used to be a wooded area, where fir, pine, oak and birch for the most part grew. At present, only woodlands survive, in the Kusretistsqali river basin (the Ktsia valley), and in the environs of Dash-Bashi, where there are mostly deciduous forests, of hornbeam, oak, maple, etc. The area of the former woods is now covered with the above-mentioned mountain steppe flora. It should be mentioned that the region is characterized by reed swamps, which exist in abundance near lakes and rivers.

The fauna of present day Trialeti is not, owing to its landscape, as diverse as it used to be. Physical and ecological conditions, especially the lack of wooded areas, have affected the modern fauna. The wildlife of Trialeti includes: roe, jackal, fox, wolf, badger; there are very few wild cats, notably the Caucasian lynx; the
number of wild boar has declined dramatically; there are many rodents such as mouse, field-vole, hamster; birds are represented by: hawk, falcon, eagle; there are a few grouse, *Tetraogallus*. An abundance of rivers and lakes proved favourable to the growth of the water-bird population. Various species of duck, gull, crane, etc. inhabit the region.

Humans have had a great impact on the landscape of Trialeti. Trialeti has been occupied from the Palaeolithic until the present. Domestic activities, which conditioned the further development of human history, played a great part in the changes of both flora and fauna. A growing demand for farmland, and the development of livestock breeding which required the assimilation of larger and larger areas for pasture, significantly changed the floral community. Man began the wholesale destruction of forests over vast areas. These areas now survive as stepped valleys (Kvavadze, Connor, Narimanishvili 2007). A lack of forested areas led to changes in the faunal community as well, and the variety of species of animals inhabiting the region decreased dramatically.

**History of archaeological research of Trialeti (Tsalka).** The archaeological investigation of Tsalka began in the 1870s. In 1876 David Schultz, a resident of the village of Alexandershilf who later became a member of the Caucasian department of the Moscow Imperial Archaeological Society, conducted archaeological excavations in the neighbourhood of Tsalka and Guniaqala and also visited Barmaksizi (the present-day town of Tsalka) (Schultz 1907, 3). In 1881 A. Ioakimov described some archaeological sites (Ioakimov 1882, 7-9) including a cemetery near the village of Tsintsqaro (Uvarov 1887, XXXV, pl. XXXIX). In 1889 I. Chavchavadze alluded to the great historic importance of the excavated material (Mumladze 2002, 98). Between 1896 and 1905 excavations were conducted by E. Taqaishvili in Tsalka (Otchiot 1898; Taqaishvili 1907; Taqaishvili 1913; Charkviani 2002). In the 1920s L. Meliksed-beg began the investigation of the Trialeti megalithic sites (Meliksed-beg 1938).

Particularly important was work carried out in connection with the Khrami hydroelectric station in the 1930s and 1940s. Boris Kuftin investigated a few excellent sites in the area of what was soon to be the bottom of the Tsalka reservoir. He was the first to elaborate the periodic systematization and chronology of Bronze Age archaeological sites in the Caucasus and to discover new cultures on the basis of these data. To begin with, the grandiose kurgans of kings and tribal chieftains should be mentioned. Their burial chambers produced rich and unique material that had been unknown before. Gold and silver ornaments, standards, vessels, silver and bronze armour, black-burnished and painted pottery from the kurgans dated to the first half of the 2nd millennium BC firmly established itself in the treasury of Caucasian as well as world culture (Kuftin 1941; Kuftin 1948; Zhorzhikashvili, Gogadze 1974; Kuftin 1949; Menabde, Davlianidze 1968; Gogadze 1972; Gagoshidze 1982).

In 1947 an expedition from the Javakhishvili Institute of History carried out work in the village of Khadiki (Gdzelishvili 1950; Gdzelishvili 1954).


Archaeological sites of the 15th-14th centuries BC were found in five places: near the village of Sapar-Kharaba (Baiburt), at the “Cyclopean” settlement of Beshtasheni, and at Imera, Santa and Ozni.

Sapar-Kharaba cemetery. The village of Sapar-Kharaba (Baiburt) is built on the banks of the Chil-Chili (Baiburt-Chai) and Bashkov-Su rivers. At the confluence of the rivers and only 200 m from the village, is situ-
ated the site of “Beshtasheni Cyclopean settlement”.

The village was given its modern name (Sapar-Kharaba, Baiburt) by Greeks who migrated here from Turkey. They settled where, according to Vakhushshi Bagrationi, the old village of Sabechdavi had been situated. Medieval monuments reconstructed or renovated by the Greeks can still be seen in the village. The first excavations were conducted here by E. Taqaishvili at the end of the 19th and the beginning of the 20th century, when he found Medieval period sites (Otchiot 1898, 111).

In the 1930s Boris Kuftin worked at three places in the environs of Sapar-Kharaba:

Three kurgans (XII, XIII, XIV) and one stone mound studied in “Baiburtun Garsi” 1938-1939 (Kuftin 1939, 3ff);

Three cist burials excavated near the present cemetery in 1939 (Kuftin 1939, 27, 39-41; Zhorzhikashvili, Gogadze 1974, 11-12);

Four burials excavated in Baiburt valley (pl. II, 1). These burials belong to the cemetery that we excavated and are situated at its extreme western part (pl. I, 2). The part of Kuftin’s diary in which the Baiburt burials were described has unfortunately been lost (Diaries 1937-1938). The diary for 1939 does not provide any important information (Kuftin 1939). Two large “Baiburtian” burials are confined by stone circles of between 15 and 18 m in diameter. The wide burial pits are aligned north to south. Very little human skeletal material has been preserved. It can be estimated from what survives that the deceased lay with their heads to the north. Between three and seven ceramic vessels usually lay at the head. Kuftin emphasizes that these vessels are completely different from those formerly found at Tsalka. All the vessels lack handles, and all were made on a potter’s wheel. Despite their large size, they are rather thin-walled. Kuftin writes: “I cannot find a certain place for this pottery among south Caucasian cemeteries familiar to me” (Kuftin 1941, 76). No other finds were made in the large burials apart from pottery, while smaller burials yielded several beads of white and blue paste, a perforated stone and a copper-bronze pin. The head of the pin consists of open-work surmounted by the figure of an ibex.

Kuftin was very careful in dating the burials, defining their place exactly and places them between the end of the Middle and the beginning of the Late Bronze Age.

Kuftin’s four burials are situated at the extreme western part of our cemetery. It is impossible to re-establish their numbers, and uncertainty reigns with regard to their contents.

These burials can be easily seen today on a small slope. The stone circles have survived, and the outlines of the burial pits can still be discerned (pl. II, 1). A large burial with a stone circle 19 m in diameter is situated at the extreme south (Kuftin’s “lower burial”). The second burial 14 m in diameter is situated 12 m to the north-west (Kuftin’s “upper burial”). Pit-burials are located 4 m west of the large burial. These burials are situated on the riverfront terrace, on the immediate left bank of the river Chil-Chili so that the cemetery is bordered by the river to its west. The cemetery is 1.5 km long to east and west and 0.4-0.5 km wide.

The BTC pipeline cut the cemetery in the middle (pl I, 2; II, 2). The investigation of the burials found in the ROW was carried out in 2003-2005 [Narimanishvili 2006a].

Excavations in the cemetery in 2003 revealed 29 burials (Nos 1-29). Two were found in 2004 (Nos 30-31), in 2005, 78 (Nos 32-122); there remained to be excavated Burials Nos 46, 57, 58, 60, 66, 70, 102, 111-115 and some unnumbered burials trapped between the oil and gas pipes (between 119+350 km and 120+600 km of the pipeline).

Imera cemetery. The cemetery is situated east of the village of Imera, at the extreme north-west part of the Bedeni mountain range. This section is characterized by mountains in strong relief. The slopes to the north are traversed by minor gorges and streams. The burials are situated on the northern slope of the range and in a field below it, which is crossed by the small river Egrichai which goes past the cemetery to the south and via the village of Imera joins the Tsalka reservoir. The Tbilisi-Tsalka main road runs north of the cemetery. There are also two semi-desiccated lakes.

The cemetery was found during the course of construction of the BTC pipeline (at 109 and 110 km)
The burials are situated in two groups on the left and right banks of the river. The burials apparently belong to two cemeteries, only the edges of which within the building zone. Seven burials were excavated (pl. III, 4), two of which were badly damaged. Five (Nos 1-5) were located on the right bank of the river (at km 110) and two (Nos 6-7) on the left (at km 109).

**Beshkenasheni (Beshtasheni) “Cyclopean” settlement.** The settlement is situated 0.2 km north-west of Beshtasheni, at the confluence of the Chil-Chili and Bashkov-Su rivers (pl. XXVII, 2). The area between the deep canyons of these rivers (approx. 20 ha) is separated from the higher ground south of the village of Sapar-Kharaba by an artificial ditch. A “Cyclopean” wall is built at its southern edge so that the area (approx. 4 ha) naturally protected from two sides is artificially confined and fortified from the north. The central part of the settlement is built at 1550 m above sea level, on a rocky hill at the confluence of the Beiuychai (Bashkov-Su) and Chil-Chili rivers (Gerik Chai).

It is remarkable that this is the lowest part of the range dividing the Beshtasheni and Kariak-Bashkoi depressions. This is where the only road connecting the depressions runs, to continue to the passes of the Trialeti range. All the roads crossing Trialeti concentrate in Beshtasheni depression. Thus, the Beshkenasheni “settlement” is located in a convenient area. It might be the reason that this territory was intensely occupied from the Stone Age until the Middle Ages.

Kuftin’s were the first excavations at the settlement in 1939. He dug four trenches. The first trench was dug near the main wall, which revealed the deepest cultural stratum. The strata were 3.5 m deep on the inner side of the wall, while outside, by the old artificial trench they were 1.8 m deep and filled with mainly Medieval material. Inside the wall, at a depth of 2 m, a large vessel was recovered, beneath which a stratum of the Kura-Araxes culture was recorded. He also excavated the west part of the old artificial trench (second trench), where the cultural layer reached 3 m. This layer was divided into two parts by a carbon strip. The surface of the pottery excavated in the upper layer was painted reddish-ochre, in which respect, according to Kuftin, they resembled the painted pottery from the kurgans, but of coarser workmanship. The lower layer contained pottery of the Kura-Araxes Culture (Kuftin 1941, 109). The third trench was dug in the north-east corner of the settlement (the plot we investigated is connected to, and extends, the trench dug by Kuftin). The upper layer contained Medieval material and the next contained pottery analogous to that of the Late Bronze Age cemetery excavated on the right bank of the Gerik-Chai. The lower layers belonged to the Early Bronze Age (Kuftin 1941, 110-112). The fourth trench contained only Medieval material (Kuftin 1941, 109). As a result of his work Kuftin remarked that the earliest layer was found beneath Late and Middle Bronze Age layers and was situated lower than the foundations of the “Cyclopean” wall (Kuftin 1941, 107).

Work was resumed at the Beshkenasheni settlement in 1991. The purpose of the excavations was to define the correlation between the settlement layers and the “Cyclopean” wall. For this reason two plots (XVII and XVIII) were selected north-west of the settlement (pl. XXVII), embracing the defensive wall and the area left by Kuftin’s third trench (Narimanishvili, Makharadze et al. 2004, 126, pl. CCXII).

Eight cultural levels were been recorded in the “Cyclopean” settlement and its environs: A Mesolithic level (excavations of 1991) was situated 100 m south of the fortress, on the right bank of the river Bashkov-Su, 3 m above datum. Finds include obsidian and flint microliths. Kura-Araxes period levels were found both within the fortress (excavations of 1939 and 1993) north-east of it, and on the right bank of the river Chil-Chili, in the area of the Late Bronze Age cemetery. Remains of the settlement of the middle of the 2nd millennium BC were discovered in the north-east corner of the fortress (excavations of 1939 and 1991-93). Late Bronze and Early Iron Age sites were found in the fortress and on the right bank of the river Chil-Chili (excavations of 1939 and 1991-93). A cemetery of the 7th-6th centuries BC were excavated near the road running from Beshtasheni to Sapar-Kharaba, on the edge of the dry gorge (excavations of 1995-99). A cemetery of the 5th-4th centuries BC is situated immediately north-east of the fortress (excavations of 1939). A settlement of the 4th-1st centuries BC and a cemetery (excavations of 1991-99) are situated 100 m south of the “Cyclo-
A Medieval settlement was found lying mainly in the inner area of the fortress (excavations of 1939, 1992-93).

During the work of 1991 2nd millennium BC finds were made in plots XVII and XVIII. Among the buildings found House No. 1 was completely excavated and House No. 2 only partly. The area east of these houses was badly damaged and only fragments of the walls of the structures have survived.

House No. 1 is situated in grids 6, 9, 12 of plot XVII and grids 4, 7, 10 of plot LXVIII (pl. XXVII, 3). The walls are built of basalt rocks, whose greatest surviving height is 0.8 m. The length of the south wall is 7.2 m and of the north wall 6.75 m. The exterior of the eastern part is damaged, but the greatest width of the wall is 1.5 m and the least 1.0 m. A niche 0.9 m wide is situated in the centre of the wall. The length of the west wall is 6.75 m, and its width 1.0 m. The east wall is 6.5 m long; its masonry includes bedrock, which is why the wall is slightly deformed; its length in the southern part is 1.5 m and in the northern 1.0 m. There is an entrance in the central part of the south wall. Remains of a floor paved with stone slabs have survived along the west wall. Such differences between the width of the walls is clearly the result of major repairs to the house. The north and east walls of the house must have been built later. The east wall of the house is cut through by a floor paved with stone slabs (grid 5, plot LXVIII). Finds were made at three levels: material recovered at a depth of 0.3 m from the upper part of the wall was ascribed to level I, material from between 0.3 and 0.6 m to level II, and level III was recorded on the floor.

House No. 2 is joined to House No. 1 in that they have a common wall. House No. 2 is situated in grids 6, 9, 12, plot LXVII and was partly excavated (pl. XXVII, 3). The north and south walls are badly damaged; The remains of a floor paved with stone slabs were found in the west part of the trench. Finds were made in three levels: material recovered at a depth of 0.3 m from the upper part of the wall was ascribed to level I, material from between 0.3 and 0.6 m to level II, and level III was recorded on the floor.

All the pottery from the houses was made from well precipitated clay, the fabric is black or greyish, and surface is well-treated and bears signs of burnishing. Part of the pottery is ornamented with engraved, concentric lines, with an undulating ornament between two lines, or with wedge-shaped impressions. The rims of the bowls might have dotted or herring-bone ornament. The pottery of the settlement is analogous to that recovered in the burials excavated nearby, on the right bank of the river by B. Kuftin (Kuftin 1941, 65-75, fig. 67, 82, 83, pl. LXVIII, 1). The Beshtasheni cemetery is dated to the 13th-12th centuries BC (Abramishvili 2003, 24, 26).

During the excavations at Beshkenasheni remains of cultural strata were recorded in grid 12, plot LXVIII and grids 4 and 10, plot XIX. The stratum found in grid 4, plot LXIX is fragmentary and bears a trace of intense burning. This stratum contains small fragments of “Baiburt” type pottery and is immediately attached to the defensive “Cyclopean” wall.

A level containing similar material was also recorded in grid 10, plot XIX, where remains of the House No. 3 were discovered.

House No. 3 is located on grid 12, plot LXVIII and grid 10, plot XIX (pl. XXVII, 3). After removing 0.1 m thick layer part of the house was found. The north-west corner built with pebbles dressed on one face has survived. The surviving length of the south-west wall is 1.2 m and that of the north-west wall 1.9 m. The major part of the house has been destroyed through erosion.

At a depth of 0.2 m from the bottom of the wall the remains of a floor 5.5 x 6.5 m plastered with clay were recorded (Level A). This layer is filled with black earth. Ash and a thin layer of carbon containing stray fragments of pottery cover the clay-plastered floor. The floor is laid immediately upon another ash-carbon layer (Level B), whose plastering formed the floor of the level visible in places. A similar floor was found after removing a 0.3 m thick layer. The floor of this layer (Level B) is also attached to the walls described above. The layer was completely filled with ash and carbon mixed with animal bones (mainly of large rather than small bovines) and pottery fragments. At 0.7 m from the face of the wall and at a depth of 0.2 m from the B level floor was bedrock. The uneven surface had been levelled and plastered with an ashy mixture (floor of Level
C). The stone wall goes down this level and has bedrock for a foundation. The floor of Level C must have been well smoothed and flattened. It is partly damaged with occasional natural stones projecting. There is a large amount of ash on the floor, in which pottery fragments and cattle bones are mixed. Here were recovered bones of a single-hoofed animal and a horse.

Thus, three layers with corresponding floors were found from the face of the wall to bedrock (although it must be mentioned that part of pottery excavated in the top 0.1 m thick layer is similar to the material found in the house). The house seems to have been repaired and renovated several times. The scanty finds from the house are useless for dating. They resemble the pottery from SAPAR-KHARABA cemetry. The coarse pottery with thick fabric among the material from Level C level is somewhat different (pl. XXVII, 4), but this might be explained by different functions or different dates. It has to be mentioned that a ceramic vessel recovered north of the Beshkenasheni settlement, in the vast cemetry near SAPAR-KHARABA is identical to the pottery found in House No. 3. Bearing this in mind, and the proximity of these two sites, we believe that the residents of the Beshkenasheni “Cyclopean settlement” were buried in the SAPAR-KHARABA cemetry.

The defensive wall of Beshkenasheni is badly damaged. In the 20th century the walls were dismantled and the stones were used for building purposes. On the basis of the excavations carried out by Kuftin and our expedition, it can be stated that the width of the defensive wall is 3.0-3.5 m in plots LXVII and LXVIII, and 4.0-4.2 m in plot XIX. The interior of the wall facing the south is rectilinear and is oriented almost east-west. The exterior is irregular, which might be either due to the idiosyncrasies of the building or the result of a later damage. The north walls of Houses Nos 1 and 2 are situated parallel to the defensive wall so that there is a passage left between them, which must indicate the simultaneous functioning of the defensive wall and the houses.

There used to be a deep ditch north of the defensive wall cut between the bank of the river Bashkov-Su to that of the Chil-Chili. Kuftin showed (Kuftin 1941, 109) that the ditch must have been at least 3 m deep. The defence system was reinforced by a wall built on a height north of the ditch (Kuftin 1941, 108) which does not exist today.

The correlation between the ditch and the defensive wall is interesting. The lower layers of the ditch contain Early Bronze Age material overlaid by layers of Bedeni Culture. The top layer 2 m thick is Medieval. Despite the scanty data we may assume that the defensive ditch was dug in the Early Bronze Age, while the “Cyclopean” wall was built in the middle of the 2nd millennium and functioned through the middle of the 1st millennium BC.  

**The “Cyclopean” fortress at Santa.** The Santa “Cyclopean” fortress is situated on the crest and the slopes of the mountain range north of the village of Santa (pl. XXVIII, 1). It is 1300 m long and it varies in width between 70 and 130 m. The fortress complex consists of two parts, upper and lower. The upper fortress is built immediately on the crest and is closely follows the terrain.

The settlement extends from east to west and consists of several separate sections. The central section within the confines is the most remarkable. Unfortified sections are situated to the east and west of the fortress. The wall in the centre of the crest, which divides the central section into two parts is really impressive. Its length reaches 100 m and it is 5-6 m wide, while the greatest surviving height is 2 m. There is an entrance in the wall that formerly had a tower with stairs to one side. Buildings and defensive walls are made of large uncut basalt rocks. Judging by the archaeological data the upper fortress should be dated to the 13th-12th centuries BC.

Kuftin made a trench inside the fortress in 1936 (Kuftin 1936), which proved to contain four layers: 1. A sterile humus layer from the present ground level to a depth of 0.2 m; 2. In the layer between 0.2 m and 0.45 m a large amount of red fired pottery was recovered. A fragment of a vessel with a tubular handle was thought by Kuftin to be Medieval, but on closer inspection of the material it is likely that this layer belongs to the Classical period; 3. The third layer is between 0.45 m and 0.8 m. The fabric of most of the pottery found here is grey and well fired. The surface is burnished. Some pieces are decorated with a chequer-board orna-
ment. The fabric of the second group of pottery is coarse and contains obsidian admixtures. The material recovered in this layer is similar to that recovered in the upper fortress and at other Cyclopean settlements and belong to the 13th-12th centuries BC. 4. The fourth layer is the thickest. It starts at a depth of 0.8 m and continues to 1.7 m. In the upper part of this layer a strong wall built with large rocks was found, which prevented archaeologists from reaching the static layer of the ditch. Kuftin observed that the wall was recorded to a depth of 1.7 m, although the reddish-greyish burnt layer went down even deeper (Kuftin 1936). It is this very layer that is contemporary to the Sapar-Kharaba cemetery and the Beshkenasheni settlement.

**Ozni settlement.** Pottery analogous to that recovered from the Sapar-Kharaba cemetery was found at the settlement situated on the terrace south of Ozni “Cyclopean” fortress which is situated on a high plateau south-west of the village of Ozni. The site is a complex consisting of a central part (the fortress) and settlements inside and outside the fortress (pl. XXVIII, 2). The fortress is rectangular in plan and at present has three entrances. Two are in the north wall and one in the south. There is an impression that to begin with there was a gateway only in the west wall. The walls of the fortress are built of untreated basalt rocks and are have masonry of dressed stone outside and mortar inside. The area within was completely occupied by the settlement, while a modern enclosure for cattle is situated in the south. Late Bronze-Early Iron Age potsherds were collected in the fortress. The main residential area is situated on terraces east of the fortress, which also encroaches on the borders of the modern village.

Another fortress is situated west of the central fortified part, opposite the old entrance. It clearly differs from the central fortress in building technique. Its walls are built of huge basalt stones and firmly fit each other. Houses of the settlement that are attached to the second fortress to the south and which descend towards the village on terraces are also built in the same technique. The difference in building techniques of the walls of the first and the second fortresses must be explained by their having been constructed at different times.

Kuftin excavated on the left bank of the river Oznis Tsqali, at the bottom of the south slope, where he recorded a solid settlement of the Kura-Araxes Culture. Here he also found cultural layers containing pottery analogous to that of the burials excavated at Sapar-Kharaba (Baiburt) (Kuftin 1948, 35-36). In my opinion, the second “Cyclopean” building of Ozni must be contemporary with this layer.

**Architecture and building technique of the Bronze Age settlements.** Trialeti Bronze Age (3rd-1st millennia BC) architecture has three main types: timber, clay and stone.

In the southern highlands of Georgia, including Trialeti, untreated stones were used as the principal building material in the middle of the 2nd millennium BC. “Cyclopean” architecture occupies a special place among stone-built sites. The monumentality of buildings and the large scale of settlements distinguish them from other sites in the South Caucasus. The building of houses, fortresses or fortification walls with large untreated stones and without mortar is the main characteristic feature of Georgian “Cyclopean” settlements and castles.

This building technique was common in South Caucasus from the 3rd millennium BC, although earlier settlements were not fortified with defensive walls built with “Cyclopean” masonry.

This building technique was not practised after the middle of the 1st millennium BC. Stone was only used for constructing the foundations of walls which were usually continued upwards in adobe brick. At the same time wooden architecture became prominent. Wood was used for strengthening walls as well as for masonry with a dressed stone exterior and mortar interior. Small pebbles and lumps of adobe were used for filling. At the same time ashlar masonry began to be used.

In the Middle Ages dry-stone masonry is typical of villages and large settlements in a number of regions in South Caucasus, but there are no fortresses or fortification systems built in this manner. Thus, only the sites which have defensive walls built with dry-stone masonry are believed to belong to “Cyclopean” settlements and fortresses.

Defensive walls of “Cyclopean” settlements follow the relief. Builders made splendid use of naturally
fortified places. Besides, defensive ditches were cut across plains and increased the height of fortifying walls by cutting off the slopes of rocky outcrops. With a few exceptions, defensive systems and simple fortresses did not have towers.

The date and definition of this type of settlement are controversial issues. Some (Khanzadyan 1969; 23; Esayan 1976, 7-18) believe that they began in the 3rd millennium BC. Only one level of the 3rd millennium BC was recorded in the “Cyclopean” fortresses investigated by S. Esayan in north-east Armenia (Esayan 1976, 17-18). Levels of this period were found in Triatei at the Beshkenasheni and Tezi “Cyclopean” settlements (Kuftin 1941, 108, 115, 117; Shanshashvili, Narimanishvili 1996). It is difficult, however, to conclude that these levels and fortification systems built with “Cyclopean” masonry were contemporary with each other.

The results of the excavations at the Beshstasheni settlement point to the likelihood that confining settlements within “Cyclopean” walls apparently began in the 16th-14th centuries BC (Beshkenasheni). In the following period the building of settlements and fortresses with “Cyclopean” technique was conducted on a large scale (Shanshashvili, Narimanishvili 1996; Narimanishvili, Makhadze et al. 1996; Khanzadyan 1969; Esayan 1976; Narimanishvili, Shanshashvili 2000; Narimanishvili, Shanshashvili 1997; Narimanishvili, Shanshashvili 2001; Narimanishvili, Shanshashvili 2001a).

So far judging by to the “Cyclopean” settlements excavated on the Triatei Plateau we can judge that this kind of construction began exist in the 16th century BC (Beshkenasheni), while they become predominant in the 13th-7th centuries BC (Sabechdavi, Knole, Tsritsi, Bareti, Akhaldaba, Losho, Armenian sites).

Works carried out at “Cyclopean” settlements and fortresses situated in South Caucasia clearly indicate that this type of site predominates in the central and eastern parts of Caucasia in the 16th-5th centuries BC, although most belong to the 13th-8th centuries BC. They are intensively built in the second half of the 2nd millennium and the first half of the 1st millennium BC.

The differences recorded in the “Cyclopean” settlements points to their hierarchy, which clearly also reveals a complicated societal structure. The “Cyclopean” settlements investigated at Triatei (Utsqlo, Bareti, Sabechdavi, Akhaldaba, Knole) display a situation when there is a citadel or a few fortified parts with unfortified or less fortified settlement around them. In most cases a less fortified settlement outside the citadel is attached to the citadel by strong walls, while the citadel itself is divided into two or three parts (Sabechdavi, Knole, Utsqlo, Akhaldaba, Kokhaji). At Akhaldaba the citadel is divided into two absolutely isolated parts with independent entrances. Only one half of the citadel was connected to the settlement outside the fortress. This might point not only to the existence of a civil, but also of a military hierarchy. It can be assumed that the main function of “Cyclopean” settlements was military control and the protection of the population and support of the prosperity of weakly fortified or unfortified places.

Large “Cyclopean” settlements are intricate complexes. Their main characteristic feature is a strong outer wall and citadel, and regularly planned residential quarters. As a rule, they contain several fortified sections (Sabechdavi, Tezi, Losho) or fortified sections confined within a common outer wall (Utsqlo, Bareti, Akhaldaba) and are built under the central, common planning principle. Residential and household constructions are mainly inside the outer wall. The emergence of a population outside the wall apparently occurs somewhat later, perhaps as a result of population increase or settlement close to the fortified area due to an unstable situation. The presence of an inner castle suggests that the ruling class was separated from the rest of the population. The principle of planning of “Cyclopean” settlements indicates a high level of urbanization, which is one of the main components of civilization.

Huge “Cyclopean”, multi-layer settlements (Beshkenasheni, Tezi, Losho, Bareti) are situated in strategic areas, on the main roads running from Triatei to neighbouring regions. Traces of lengthy habitation can only be observed at these sites. All (except Bareti) display Kura-Araxes levels too. Middle Bronze Age levels are only recorded at the Beshkenasheni settlement. All are intensively adapted from the second half of the 2nd millennium BC. By the end of the 2nd millennium BC some (e.g. Tsritsi) cease to exist, but new ones emerge (e.g. Knole).
Freestanding fortresses were apparently advanced outposts which, apart from protecting a certain section, controlled roads in the whole area of "Cyclopean" sites. We may assume that isolated fortresses were involved in the defensive system of the central authorities, which must have had more important functions than just protecting a particular region.

The structure of burials and burial practices. All the burials excavated at Sapar-Kharaba and Imera cemeteries were pit burials (pl. VI, 8, 10; VII, 6, 8; VIII, 3). Burial chambers are surrounded by circles consisting of huge basalt stones (chamber tombs) whose diameter varies between 4 and 18 m (pl. III, 1-4; IV, 1-4; V, 1-6; VI, 1-4). The interior space of the chamber tomb is mainly filled with small pebbles (pl. III, 1; V, 1-3; VI, 3). In some cases the stone of the chambers are also covered with such stones. There are chamber burials where only the burial chambers are overlaid with pebbles (pl. II, 3; III, 2). The roof structures of the burial pits are immediately beneath these stone mounds (pl. VI, 2-4). Burial chambers are covered with basalt slabs of different sizes (pl. VI, 1, 5-6), or wooden beams (pl. VI, 7-10).

A single burial is usually placed in the centre of a chamber tomb. Burials Nos 67 and 68 are the exception (pl. VIII, 1), which are placed within one chamber tomb. It is remarkable that both burials seem to have been arranged simultaneously, as is suggested by the fact that the pit burials are cut not in the centre of the chamber tomb but are arranged symmetrically within the circle (pl. VIII, 2). A young woman is buried in Burial No. 67, while Burial No. 68 revealed four children of different ages (pl. VIII, 3).

Burial chambers are cut into yellowish loam. Most are rectangular (2 m x 1.2 m) with rounded corners (pl. VI, 9; VII, 1-2; VIII, 3; XI, 1, 3-5). Only four (Nos 10, 23, 30, 90; pl. VII, 3-5, 8) of 109 burials have a different shape. They are extended in a north-south orientation and reach a length of 5-6 m. These burials also stand out because the deceased rest on wooden beds (Nos 10, 23, 90; pl. VII, 3, 6; XXV, 1-3) or they contain parts of a cart (Burial No. 30; pl. XXV, 4-6; XXVI, 1-3).

Burial chambers are mainly oriented north-south (with minor deviations; pl. IV, 1-4; V, 1-6; XI, 1, 3-5; XVII, 7; XXV, 1). The deceased are buried in a crouched position lying on their right or left sides (pl. XXV, 2-3), with their heads to the north (pl. VII, 3, 5, 8). The burials are usually single and only Burials Nos 6 (with two deceased) and 68 (with four) contained young children (pl. VIII, 4).

In most cases the skeletons of the deceased are covered with a black substance (pl. VII, 1; X, 2; XI, 1, 3-5) that also extends beneath the skeletons. This layer is distinguished by straight geometrical forms. It is 0.2-0.4 m thick and contains many wooden fragments and impressions of leather. It would appear that the burials had flimsy wooden structures covered with leather, which turned into an irregular mass when the roof collapsed. A layer of black earth was also recorded beneath the deceased at the Artiki cemetery, which also contained wood and textile remains. The deceased in Burial No. 89 there was covered with cloth (Khachatryan 1975, 139; Khachatryan 1979, 7).

The grave goods follow a regular pattern. Each of the deceased was buried with 1-8 vessels, and the pottery was mainly laid in the north, near the head (pl. VIII, 5-8). Weapons are laid before the face (pl. XVII, 5-7), bronze pins are recorded at the neck, while there are beads and other ornaments. Strings of sardonyx beads also occur at the wrists and feet.

There are remains of both large and small cattle in every burial (pl. VII, 6-8; VIII, 5). They are laid on the floor of burials. Some burials (Nos 1, 2, 30, 90) yielded whole skeletons of a sheep or a goat (pl. VIII, ), with untreated obsidian flakes laid near the neck. Vessels contain the remains of a meal.

A certain ritual was also practiced outside the chamber tomb (pl. IV, 3-4; V, 4, 6; VI, 3, 4); small ritual pits (0.4 m x 0.5 m; 0.6 m x 0.8 m) are situated to the north of burials and are attached immediately to the chamber stones. Some are covered with stone slabs, or are marked with a mound of small stones, although a few do not have any markers. Pottery (3-5 items) might be laid in the pits and some are filled with animal bones. Some of the vessels had stone lids.

Vessels of different shapes have different kind of provisions for the next life. Food freshly boiled in large pots was covered with stone lids and laid in a pit. Such vessels contained only meat. Smaller pots were used...
for vegetables and porridge; honey, hazelnuts and walnuts were placed in bowls (Kvavadze 2004; Kvavadze 2005). Food vessels were placed both in burials and in ritual pits.

**Grave goods. Pottery.** Most grave goods are ceramic, and a large and varied number of vessels were found. All the vessels except one (pl. XIV, 1) lack handles. One group is made of precipitated clay. They are wheel-made, are thin-walled and are fired black (pl. XII; XIV-XV). The surface of such vessels is burnished and decorated with incised and burnished ornament.

Vessels of the second group are also wheel-made (pl. XIII; XVI), are usually large, made of coarse-grained clay, and have a brownish-grey surface and a black core. The exterior is decorated with relief bands (pl. XIII, 7, 9, 11, 13; XVI, 9, 10, 12-13), and similar ornament occasionally occurs on the underside (pl. XVI). All of them bear traces of burning and are filled with cattle bones. Vessels of the third group have a coarse fabric, are hand-made, poorly fired and friable.

As a result of the palaeological study of samples from the vessels found in the Sapar-Kharaba cemetery it was concluded that both animal (cattle, lamb, goat) and vegetable (chestnut, hazelnut, walnut, wheat, buckwheat, goosefoot, nettle) foods were consumed in everyday life. Animal fat was used in cooking, while umbellate plants were used for spices.

The diet seems to have been quite varied. For example, honey was found in a jar recovered in Burial No. 10; a large pot from Burial No. 25 contained wheat, hazelnut, lime pollen; on the floor of Burial No. 28, in the burnt soil, there was a quantity of wheat, rye and other cereals, nettle, the remains of hornbeam, lime, oak and beech pollen. A pot in Burial No. 29 produced the burnt remains and pollen of juniper; a wide-rimmed pot contained animal fat, a quantity of wheat, crop weeds and many pasture elements. A ceramic vessel in Burial No. 30 held cattle bones, animal fat, a quantity of wheat and umbellate plants (spices) (Kvavadze 2004; Kvavadze 2005). The vessel bears vivid traces of burning, and was apparently placed in the grave immediately after cooking a meal. Swastikas on the vessel point to a sacrificial function and its contents must be related to the preparation of ritual food.

Palaeozoological investigation of domestic animal bones from the Sapar-Kharaba cemetery (Bendukidze 2005) point to advanced livestock breeding (cow, goat, sheep, pig), while palynological research throws light on the development of cereals.

**Weapons.** Daggers were found in only three graves (Nos 8, 13, 85) (pl. XVII, 3-8). A so-called Near Eastern-type dagger lay before the deceased in Burial No. 13 (pl. XVII, 7). Its overall length is 0.494 m, the blade is triangular (pl. XVII, 4; XVIII, 7), and thin wooden plaques were inserted in the handle frame (length 0.105m; pl. XVII, 5).

Such daggers are known from different parts of the southern Caucasus and are mostly dateable to the 15th–14th centuries BC (Piliposyan 1999, 52, 61, pl. 6; Pitskhelauri 1979, 79-81). Short daggers are also made of bronze. One (in Burial No. 8) has an elongated blade (length 0.215 m, width at the handle 0.047 m; pl. XVII, 3; XIX, 8), and another (in Burial No. 85) is similar to the first, but with a shorter blade (length 0.13m, width at the handle 0. 06 m) and a bone handle (pl. XVII, 6, 8; XVIII, 1; XIX, 4).

A quiver 0.51m long and whose greatest width was 0.17 m was found in Burial No. 8 (pl. XVII, 1-3) was made from thin wooden strips overlaid with leather (pl. XVIII, 6). The exterior of the quiver is decorated with thin bronze plaques (pl. XVIII, 10-12). Micro X-ray and spectral analysis showed that bronze details were made from a tin alloy.

There was a round black spot 0.15m from the quiver tip enclosed by a woven, rope-like curb. There had once been eight arrows in the quiver (6 obsidian and 1 flint arrowheads lay at the mouth and an obsidian arrowhead at the bottom of the quiver). There were the stems of five arrows 0.38m long within the quiver. The length of the quiver 0.51 m and the width 0.17 m.

Plaques for decorating quivers were recovered from Burial No. 74 at Trialeti (Abramishvili 1978, 62, fig. 28), which is assigned to the Middle Bronze Age (Abramishvili 1978, 55), although it was stated that “Burials No. 53 and No. 74 give the impression that they are the latest among the Middle Bronze Age burials” (Abra-
This burial is dated to the 15th century BC (Abramishvili 1978, 68). Fragments of a quiver were recovered in Kurgan No. 4 at Zemo Bodbe (Pitskhelauri 1979, 83, pl. VI, 3) attributed to the transition period by K. Pitskhelauri (Pitskhelauri 1979, 69) and dated by him to the second half of the 15th century or the first half of the 14th century (Pitskhelauri 1979, 80).

Arrowheads were recovered in two burials (Burial No. 8, pl. XVIII, 13; Burial No. 85, pl. XVII, 2; XVIII, 14). Ten arrowheads were recorded in Burial No. 8, and 30 in Burial No. 85 (pl. XVIII, 13). In Burial No. 8 the arrows were in a quiver, while in Burial No. 85 they lay at the wrist of the deceased.

The arrowheads were made from black transparent obsidian and reddish-brown or greyish/off-white flint (pl. XIX, 21). Particularly interesting is the arrowhead from Burial No. 8 (pl. XVIII, 2; XIX) that has a different shape from the others.

The discovery of lancet-type weapons is of special interest since they are unique in Caucasian archaeology. Two such objects were recorded in Burial No. 8. They have a thin bronze blade, a four-faceted hoop narrowing towards the end and a handle made of tubular bone (pl. XVIII, 8-9). Such objects may in fact have been scalpels and used as medical instruments.

**Jewellery.** The cemetery produced two bronze bracelets (Burial Nos 56, 119; pl. XVIII, 3; XIX, 10) and three bronze pins (Burial Nos 18, 73, 56; pl. XVIII, 4-5; XIX, 5, 7). The beads are extremely varied in character. There are round, barrel-shaped, bi-conical, flat and cylinder beads of sardonyx, glass, paste and bronze (pl. XIX, 11-20, 22-25; XX, 18-35). Gold tubes occur in strings of beads (pl. XX, 9-11; XXIV, 19-25).

**Seals.** Several seals of different shapes were discovered in the cemetery: three are rectangular (pl. XXII, 10-12; XXIV, 2-4), four are circular (pl. XXII, 5-6, 8-9; XXIV, 12-15), one is triangular in section (pl. XX, 7; XXIV, 11), seven are cylinders, five of which are decorated with geometrical ornament (pl. XX, 1-2, 5-6; XXII, 13-14; XXIV, 6-10), while two rare pictorial a theme (pl. XXI, 1-2; XXIV, 1, 5).

Fish on a cylinder seal from Burial No. 27 are arranged in two rows (pl. XXII, 1; XXIV, 1). Such seals were common in Syria (Ras-Shamra) in the 16th-14th centuries BC and belong to the so called “Common Style” of Mitannian glyptic (Salje 1990, 66, pl. VII, 136-138). It is interesting that such a theme and style was typical of seals from Jemdet-Nasr (3000-2800 BC) (Afanasjeva 1979, pl. 34, 35, 41). All these seals represent a male figure, occasionally kneeling, holding a sceptre with a star or plant at the tip. There is an ibex front of him, on an altar or on a height. On one of the seals from Nuza rows of fish are depicted above the central figure. On the seals from Razdan, Mingecheaur and Gezer there is an undulating ornament above the ibex. All these seals, as well as the one excavated in Burial No. 27, belong to “Common Style” of Mitannian glyptic examples of which are widespread throughout Mesopotamia and the Levant (Salje 1990, 34, pl. IV-VI).

The iconography of the Sapar-Kharaba seal is similar to that of Hurrian-Mitannian seals. The imagery is also related to Hurrian mythology. In our view, the ibex on an altar is a representation of the ancient Mesopotamian deity Ea, who appeared in the Hurrian pantheon as early as the Akkadian period. In ancient times Ea-Enk was depicted as an ibex with a fish’s tail. Ea-Enk was the lord of the ocean of the nether world (Abzu) and represented wisdom and magic. In the Hurrian literary work “Song of Ulikumi” Ea is qualified by the epithet hassiss (in Akkadian hasisu – wisdom) (Wilhelm 1992, 95).

A total of 13 cylinder seals with graphic representations have been excavated in the Caucasus. All belong to the “Common Style” of Mitannian glyptic and were widespread in the 16th-14th centuries BC (Pogre-
bova 2000, 145-150) and coincide with the period at which the Hurrian-Mitannian kingdom was powerful.

Apart from the above mentioned seal, Sapar-Kharaba produced other imported cylinder, rectangular and scarab-type seals. Glass beads were also imported. A blue glass “scaraboid” has a human face (pl. XXII, 7; XXIV, 16), not uncommon on Egyptian scaraboids. There are similar samples in the British Museum in London (Budge 2001, 243).

Pyramid-shaped stones must also be an Egyptian import. They are in the form of a truncated pyramid; the hole on the wide bottom does not go all the way through (pl. XXIII, 4-6). Besides this, Burial No. 8 yielded stones of a different character (pl. XXIII), of such a shape and size as some found in Tutankhamen’s burial, employed in the ritual of “mouth opening”. Similar objects were used in ancient Egypt with the same purpose (Hagen 2002, 160).

Noble (or “royal”) insignia. Among metal objects discovered at the cemetery royal emblems and insignia deserve special mention.

A bronze sceptre-like object was discovered in Burial No. 8. It has a T-shaped head and a long twisted stem ending with a hook. The stem is round in section at the upper part (for 0.03 – 0.35 m) and then it becomes square in section and is twisted for a further 0.045 m from the head. The end of the twisted stem which is rectangular in section transforms into an arched pointed hook (pl.XIX, 1-2). The overall length is 0.62m. It was broken into two parts. The head of the object lay over the rim of vessel No. 62 and the tip of the hook touched the back of the head of the deceased (pl. XVII, 3).

The solid bronze sceptre head from Burial No. 85 is a symbol of nobility. Remains of wood in the hole on the underside indicate that the sceptre once had a wooden stem (pl. XIX, 6; XXI, 1).

A number of objects from Bronze Age sites in south Caucasia are believed to be ritual, household goods and armaments. Some must be royal emblems, although the problem has never received the attention it deserves. There are references to sceptre heads (chief’s sceptres) in the archaeological literature, but these have not yet received proper study either. The diversity of sceptre heads allows us to make a typological and chronological distribution, which might provide a basis for their attribution (i.e. their specific function).

The closest parallel for the royal emblem discovered in Burial No. 8 of Sapar-Kharaba cemetery comes from Trialeti (Narimanishvili 2005).

In 2003 a local resident discovered and excavated a burial in the village of Avranlo, Tsalka district. The burial contained bronze grave goods as well as pottery. The cemetery where the burial was discovered is situated in the western part of the village, on the left bank of the river Ktsia (Kuftin conducted limited excavations here. Every now and then local residents come across burials while farming their land. Today the majority of these objects are kept at the Trialeti archaeological expedition headquarters).

The burial inventory recovered at Avranlo in 2003 (for detailed information see: Narimanishvili, Amiranashvili, Kvachadze, Shanshashvili, Archaeological sites at Avranlo, in this volume). Particularly interesting is the complex of bronze objects: a hook, a belt and a sculpture of an ox head (pl. XIX, 3; XXI, 4-6). Objects with a hook-like ending had been discovered in South Caucasia before (e.g. coarse hooks, considered to be household items), but this is the first time that a example of such high artistic value has been discovered. I believe it to have been the insignia of a high ranking person.

A hook-like sceptre was the symbol of ancient Egyptian Osiris. It symbolized a shepherd’s crook (Egipetskaya mifologia 2002, 72), and later also became a symbol of the pharaoh. A character of such a shape denoted the word “govern” in ancient Egypt (Leontiev 1990, 117). The ideal pharaoh for an ancient Egyptian was a “good shepherd”, who watched over everything (Frankfort, Frankfort, Wilson, Jacobson 2001, 103). In Mesopotamia the sceptre, crown and shepherd’s crook were symbols of the god Anu (Frankfort, Frankfort, Wilson, Jacobson 2001, 177). In ancient Babylon a hook was the symbol of the deadly and destructive deity Amuru (Martu) (Black, Green 1992, 54). On Kassite seals hooks are held by human-fish which are associated with the god of underworld streams, Ea (Black, Green 1992, 54). A hook was a symbol of Assyrian kingship too. Ashurnasirpal II (883-859 BC), whose image was erected in the city of Kalhu (Nimrud) (pl. XXI, 2) holds a
royal sceptre in his left hand and a hook-like symbol in his right (Britanskii muzei 1980, 41-42).

It can thus be confidently stated that hook-like symbols or insignia were common in many Near Eastern countries and were perceived as symbols of special power (they may also have been associated with death). The insignia excavated at Trialeti (pl. XXI, 4) are symbols of “royal” power.

Means of transport. A cart and its attachments recovered from Burial No. 30 illustrate the use of vehicles and their intricate construction (pl. XXV, 4-6; XXVI). The body of the cart from Sapar-Kharaba cemetery differs in the way the body is constructed on the four-wheeled cart of the Middle Bronze Age.

Burial No. 30 is a pit grave overlaid with a stone mound, oriented north-south. It is 3.5 m long and 1.9m wide. Two ceramic vessels stood in the north-west corner of the burial chamber. At a depth of 1.4 m remains of wooden beams were recorded in the south part of the burial. These turned out to be parts of a cart (pl. XXV4-6). The wood is badly preserved, and the vehicle is only partially intact.

Before discussing the wagon from Sapar-Kharaba it should be noted that this type of vehicle consists of three main parts: body, axle-wheel and yoke. The body is the part where the load is placed. It is mounted on an axle-wheel and the front rests on the yoke. The body is made up of separate parts: shafts, struts, square braces, plank seats, horizontal beams, etc. The main part of the body is a rectangular shaft cut from two long planks, joined together so as to form an isosceles triangle. The shafts are not strictly straight, for they are somewhat curved (Gegeshidze 1956, 48-50).

The body of a cart was placed in the centre of Burial No. 30 (pl. XX, 4-5; XXVI, 2). Its composition is complicated. Its overall length is 2.1 m and the width at the end is 1.1 m. The individual members of the body are mostly of timber trimmed in a rectangular fashion. The body has the shape of a truncated or rounded triangle. The frame is braced with large joists, and timbers support the floor and the front and rear plank seats. The left joist of the frame appears to consist of two parts. One large joist 1.25 x 0.12 x 0.11 m is situated at the back of the body, is curved at the end and points upwards. At this point the height of the body including the joist is 0.28-0.3 m. The length of the second joist is 0.85 m. It abuts the larger joist at 0.1 m along its length. After the removal of a 0.03m thick blackened area (the remains of wood?), it became clear that both joists were notched in such a way that they fit firmly together.

It would appear that this was where the pieces were joined: at a point where both joists are 0.09 m thick and 0.1 m wide. At the front of the body, where it is narrow, the second joist is 0.05 m thick and 0.06 m wide. At the beginning of the cart body this joist is curved and joins the right joist. Now it is difficult to say whether this part of the body was cut from a single piece of timber or was made up of several parts. Here, at the same level, the remains of a figured joist were recorded. The plan of the body of the cart is triangular with a rounded tip (pl. XXVI, 1-2).

After the removal of the upper beams, a rectangular wooden frame was recorded at this section of the body, connected to the main body structurally connected to the main body. These rectangular joists might have been timbers supporting the floor of the cart, and which bound together the main frame in the construction of the cart. Length of the first plank is 0.30 m and the width of the cart frame at the front is consequently 0.33m. The second timber is 0.45 m long and is detached from the first by 0.2 m. The width of the first plank is 0.05 m and that of the second 0.07 m. Both are 0.07m high (pl. XXVI, 3).

It is probable that the upper structure fixed to the timbers was initially vertical with respect to the body; when it collapsed there were two layers of wood fragments. It is noteworthy that here, apart from the above mentioned figured joists, wood fragments different shapes were also found, including one resembling a small wheel.

The rectangular part of the body lay on a 0.25m wide wooden plank (the front seat bench) (level VI) (pl. XXVI, 2). It projects beyond the body on each side and is 0.75 m long. The plank has only survived as an impression. In this section a flat wooden circular plate (diameter 0.35m) was placed at the south of the body (pl. XXV, 4-6; XXVI, 2), which lay on the above-mentioned plank. The head of the forked shaft was placed on the edge of the plank (pl. XXV, 5; XXVI, 2, 3, 5).
As can be seen from this description, the front of the body of the cart was very complicated. An accurate restoration is difficult at this stage. The discovery of better preserved comparable contemporary carts at Berikildeebi and Lchasheni allow the possibility of a reconstruction the Sapar-Kharaba cart. It is likely that the Sapar-Kharaba cart also had a light roof construction.

The right joist of the body situated at the west wall of the burial chamber consists of two or, perhaps, three parts. A relief band was applied to the joist at 0.25 m from the tip. There is notch cut in the wood as well, which tends to make us think that this joist was joined to another, but it is difficult to be certain. The second joist is 0.75 m long, 0.9 m wide at the north end and 0.04 m at the south (unless it is damaged here). There are rectangular holes on the joist 0.04 m long, 0.02 m wide and 0.05 m deep. There are three holes of the same size on the third beam. These holes must have been used for the shafts or for the framework of a light roof. Two figured details were noted at the bottom of the west wall, at the level of these joists (pl. XXVI, 4).

The third joist is 1.0m long, 0.08-01 m wide and 0.12m high. At the back of the body the joist points upwards like the left joist. Such a construction detail suggests that end of the cart was raised. Both principal joists are connected to each other by means of a thin wooden plank (the rear seat bench) that is 1.1 m long and 0.17 m wide. Fragments of similar planks were also recorded on the body. One was 0.7m long, 0.14m wide and the other 0.9 m long and 0.15m wide. The panels are parallel to the main joist of the body frame.

Vestiges of wood were preserved over the whole area of the body, but it was not possible to make sense of them. A thin black firm coating was found on each plank that might have been the remains of leather or a mat. Planks found inside the body of the cart might come from the floor.

In the south-western part of the cart, two ceramic vessels stood on planks (pl. XXV, 4; XXVI, 1-2): a larger and a smaller pot. Two plain pebbles lay next to the larger pot which was filled with cattle bones. At 0.4 m to the north, near the right joist of the body, was an obsidian flake.

A joist rectangular in section (2.0 x 0.06 x 0.06 m) was found at the north wall of the burial. In the southern part of the burial two more members of the cart were recorded. One resembled the left joist of the body and appears to have been its continuation. The second is parallel to the rear part of the cart (seat). They were noticeably higher (level IV) than the main part of the body.

The southern part of the burial had been completely destroyed, so that we could not completely record the cart and its details. Judging by the disposition of the bones of the deceased we assume that over a third of the burial chamber was cut off. It is thought that a part of the burial inventory and some details of the cart were in this section too. Two principal parts of the cart, a shaft and a yoke, were recorded beneath the wooden joist described above, at the east wall of the burial (pl. XXVI, 2, 3, 5-6). They lay parallel to the body of the cart and partly beneath it (pl. XXV, 5-6).

The shaft was made from a single piece of timber 1.45 m long. It has a double-head end and its tip is in the form of a hook. The overall length of the double-head is 0.3m, and the projections are 0.07-0.08 m wide. The distance between them is 0.15 m, and the depth of the double-head is 0.22m. Two protuberances are apparent on the shaft, 0.8 m from the end of the double-head, which give it a countered shape for a distance of 0.3 m. The shaft gradually narrows towards the hook where its width and height is 0.04 m, and it is likely that the shaft was round in section in this part. A 0.05 long notch, perhaps used for attaching the shaft to the body, is cut in one of the projections of the double-head, although the other projection lacks such a feature and is also shorter by 0.03 m.

The yoke is also cut of from a single piece of timber (pl. XXVI, 5). Part lay beneath the body and was so badly damaged that it was deformed. The overall length of the yoke is 1.4 m, and it is 0.04 m wide and 0.05 m high. The ridge is bent into a crescent, with a rectangular shape at the beginning (pl. XXVI, 3, 5). There are traces of a hole, and there must have been another on the ridge, but it was not possible to confirm these details in the course of excavation.

In the surviving part of the cart neither the axle nor wheels were recovered. There are two possible
reasons: either these were in the damaged part of the burial, or were not buried at all. The suspicion arose during the excavations that we were dealing with a sledge and not a cart, but this was rejected on account of the shape of the back of the body, since a sledge should have a raised front and not a raised back.

After the planks lying on the frame of the body of the cart were removed, two complete skeletons of lambs were discovered lying beneath pottery vessels. The lamb to the east lay on its right side and the one to the west on its left. The head of the latter was trapped beneath the right joist of the body of the cart and there was an obsidian flake between its forelegs.

Although neither wheels nor an axle were found in the burial (they might have been in the damaged part of the burial), the shape of the yoke and the analogous assemblage from Berikldeebi allow the conclusion that a horse was the means of traction employed to pull the cart from Burial No. 30 in the Sapar-Kharaba cemetery. The yoke from Sapar-Kharaba was similar to that from Berikldeebi, where horses were harnessed to a cart dated to the 14th-13th centuries BC (Mansfeld 2001, 50).

At this period the horse was a common animal in Trialeti. Osteological data indicate that horse-breeding was common among the population of the Beshatsheni (Narimanishvili 1992, 18) and Jinisi settlements (Amiranashvili, Narimanishvili 2005, 42-43).

**Beds.** In some burials at the Sapar-Kharaba cemetery the deceased were laid on long rectangular beds (pl. XXV, 1-3). Some (Burial No. 90) are decorated with figured handles. One bed has only handles on the front, but it is likely that was not a bed but a part of a cart. For example the upper joists on the body of one of the carts from Lchasheni (Martirosyan 1964, 168, fig. 64) have figured heads like those from Burial No. 90 of the Sapar-Kharaba settlement, but this resemblance is not sufficient to decide whether they had identical functions.

**Chronological problems: mid-2nd millennium BC Trialeti sites.** Sites of the middle of the 2nd millennium BC were first studied by B. Kuftin. In his work Arkheologicheskie raskopki v Trialeti (Archaeological Excavations in Trialeti) he dedicated a special chapter “A Bronze Age Cemetery with Stone Circles” to burials excavated at the Sapar-Kharaba (Baiburt) cemetery. Although he remarks at the beginning that “due to the insufficient investigation of this type of sites in Trialeti it is difficult to find place this cemetery with any certainty”, he attributed the Baiburt cemetery to the period immediately after the Middle Bronze Age but preceding the Beshtasheni burials of the Late Bronze-Early Iron Ages (Kuftin 1941, 75-77). Kuftin mentions that the four excavated burials contained very poor grave goods, mostly pottery.

Although the Baiburt cemetery produced very important material, it was some time before its proper role was recognised. E. Gogadze wrote in 1972: “The upper date of Middle Bronze Age sites is somehow defined by the latest dates accepted for the principal East Georgian sites of the early stage of the Late Bronze Age. The beginning of this stage approaches the middle of the 2nd millennium BC. Typical Trialeti kurgan sites must be very close to being Late Bronze Age sites (15th century BC or the turn of the 15th-14th centuries BC), but only if there were not an important transitional period in Trialeti. It is possible that sites of the early stage of the Late Bronze Age are contemporary with sites recognized as chronologically transitional, e.g. the Baiburt-type burials at Trialeti, which have not yet been identified as a single group. We cannot say much about them, but there is a distinct tendency to view the Baiburt burials as belonging to the Late Bronze Age” (Gogadze 1972, 69).

On a map appended to a work published in 1974 (Zhorzhikashvili, Gogadze 1974, 11-12) Kurgans XX and XXI are mentioned at the Baiburt cemetery. These kurgans and their attendant finds are not described, being simply marked on the map as Middle Bronze kurgans. Material from Kurgans XX and XXI is not described in Gogadze 1972 either (nothing is said apart from the passage quoted above); in the chronological scheme given here only the date of the Baiburt burials is mentioned (Gogadze 1972, 95). We do not have any other information about these kurgans.

Kuftin was very careful about dating the burials, though he defines their position accurately and places them at the end of the Middle Bronze and the beginning of the Late Bronze Age.
The date of the Baiburt cemetery was discussed by a few scholars (Koridze 1955; 1958; Chubinishvili 1957; Abramishvili 1957, 1961; Gogadze 1972 [where the chronological outline indicates a date of 1400 BC]). Sites of the end of the Middle Bronze and the beginning of the Late Bronze Age were first studied in context by K. Pitskhelauri (Pitskhelauri 1973). He distinguished a transitional stage between the Middle and the Late Bronze Age which he dated to 1450-1350 BC and divided into three stages on the basis of a number of distinctive features. He writes: “We called this stage ‘transitional’ because it contains features of two different stages and is a link in the chain between them” (Pitskhelauri 1973, 139). He ascribed a cenotaph at Ilto to the first stage; the Baiburt (Sapar-Kharaba) burials excavated by Kuftin, the barrows of Zemo Bodbe, and several burials of the Ole cemetery were attributed to the second stage, and Kurghan No. 2 at Ulianovka to the third, which was placed at the verge of the transitional stage and the Late Bronze Age (Pitskhelauri 1973, 145-146).

In 1979 Pitskhelauri changed this scheme: sites of Group I of the transitional stage were placed at the end of the Middle Bronze Age, group II remained in the “Transitional” stage itself and the third group was placed in the Late Bronze Age (Pitskhelauri 1979, 67). He referred to (1) the end of the Middle Bronze Age Burials Nos 70 and 156 of the Samtavro cemetery, Kurghan No. 1 of Sadugha, the grave goods from Tsaghvili, Burials Nos 43, 51, 53, Burial No. 12 of Shulaveri, Kurgans Nos 1 and 2 at Gadrekili, the Ilto cenotaph, Kurghan No. 5 of Lilo, Burials Nos 85, 108 at Arichi. (2) The transitional stage was represented by Kurgons Nos 1, 2, 4-7 at Bodbe, the burials at Baiburt, the burials at the Tskhinvali industrial timber complex, Burial No. 2 at Namgalamitsebi, Burial No. 2 at Naomari gora, Burial No. 74 at Treli, both complexes at Brimatsqali, the sanctuary in the lower level at Chaliankhevi, Kurghan No. 42 at Tabatsquri, Kurghan No. 28 at Sabidakhcha, Besastqe. (3) Burial No. 6 at Gadrekili, kurgans at Ole, Kurghan No. 2 at Ulianovka, were attributed to the Late Bronze Age (Pitskhelauri 1979, 69-70).

In order to define the lower boundary of the transitional stage it is important to estimate the upper chronological boundary of Group III sites of the Trialeti Culture, which is still problematic due to the relative lack of material. To estimate this date scholars mainly based their argument on the date of the butted spearhead excavated in Kurgan XV at Trialeti (Abramishvili 1978; Gogadze 1972; Japaridze 1969). Pitskhelauri noted that “the upper date of the Middle Bronze Age, defined as the mid-15th century BC, must be unreliable…” (Pitskhelauri 1979, 101; Pitskhelauri 1990, 270). G. Kavtaradze believed that “defining the end of the Trialeti Culture in the 15th century BC on the basis of the butted spearhead must be wrong” (Kavtaradze 1981, 118). Kavtaradze attributed this kurgan to the first phase of the Middle Bronze Age (Kavtaradze 1981, 115-118; Kavtaradze 1983, 130-136) and dated it to the early centuries of the 2nd millennium BC (Kavtaradze 1981, 33, 114).

Those kurgans at Trialeti (XXVIII, XXX, XXXII, XLII) that display a number of features common to the Late Bronze Age were placed in Phase II by Kavtaradze. He unified in the same group Kurigans Nos 43, 51, 81, 84, 104 at Treli, No. 156 at Samtavro, No. 12 at Shulaveri, No. 1 at Sadugha and Nos 1 and 2 at Gadrekili, the burial overlaid with stone mound at Metekhi, Nuli, Kvasatali, the burial inventory from Tsaghvili, Burials Nos 65, 85, 108 at Arichi and Kurigans Nos 6 and 46 at Lchasheni (Kavtaradze 1981, 121; Kavtaradze 1983, 136), and noted that they immediately followed Kurgan XV and its contemporary sites, whose date was defined as the middle of the 16th century BC (Kavtaradze 1981, 120-121, 128: Kavtaradze 1983, 36).

Pitskhelauri later attributed the following features to the final stage of the Middle Bronze Age: Gadrekili Kurgans Nos 1 and 2, chamber tombs of the Pevrebi cemetery, the Ilto cenotaph, Kurgan No. 1 at Sedugha, Burials Nos 70 and 156 at Samtavro, Burial No. 12 at Shulaveri, Burials Nos 1, 3, 7, 8, 11, 13, 16, 17, 18, 21 at Tsaghvili and a number of burials in Tbilisi. He ascribed to Stage I of the Late Bronze Age some of the sites of the transitional stage (Zemo Bodbe, the Baiburt burials, the burials of the Tskhinvali forest industrial complex, Burial No. 2 at Namgalamitsebi, the Udabno kurgans) and those sites formerly attributed to Stage I of the Late Bronze Age (1350-1250 BC. Plavismani, Tskhinvalis Natsargora, Qatlanishevi, the Meligehe I-sanctuary, Pirdapiri Mitsebi, Madnishala, Ghramaghele barrows, Barrow No. 1 in Ulianovka, a number of burials in Samtavro, the lower level at Mchadjivari) were attributed to stage II of the Late Bronze Age. Burial complexes
containing daggers of Kakhetian type with a compound shaft and those with a leaf-like blade fell into stage III. Sites where the first iron items are recorded were referred to Stage IV (Pitskhelauri 1990, 248-249).

The date of Phase I of the Late Bronze Age was defined by G. Kavtaradze as between the middle of the 16th century BC and the beginning of the 14th century (Kavtaradze 1981, 128; Kavtaradze 1983, 146). He attributed to this phase the following: Treli Burials Nos 53, 74, 115, the Ilto cenotaph, Lilo Kurgan No. 5, Burial No. 70 of the south section of Samtavro, Zemo Bodbe Burials Nos 1, 2, 4-7, Burials of the Tskhinvali forest industry complex, Namgalamisbebi Burial No. 2, Naomari Gora Burial No. 2, both complexes at Brimatsqali, the lower level sanctuary of the Chaliankhevi settlement, and material recovered from the Besastqeq settlement. He places Artiki Burials Nos 53, 422 and 625 burials here too, where cylinder seals that could be dated were recovered (Kavtaradze 1981, 127; Kavtaradze 1983, 145). According to T. Khachatryan, these burials belong to Artiki (the earliest) Group I and date to the 14th-13th centuries BC (Khachatryan 1975, 158; Khachatryan 1979, 14). The earliest group from the Artiki cemetery, including the burials containing cylinder seals, is dated to the 15th-14th centuries BC by A. Piliposyan (Piliposyan 1999, 61; Piliposyan 1998, 42-43, pl. 41). Other scholars attribute the burials of this group to the second half of the 14th century (Badalyan, Smith, Avetisyan 2003).

Kavtaradze dated Phase II of the Late Bronze Age to the 14th century BC (Kavtaradze 1981, 131; Kavtaradze 1983, 149), in which he included the Baiburt cemeteries, Ulianovka Burial No. 2, Treli Burials Nos 37, 42, 55, 56, the lower Gadrekili burials, the lower Pevrebi burials, the upper level of the Chaliankhevi complex settlement, Ghrmaghele, Meli-Ghele I and Samtavro burials, and burials of Artiki Group II (Kavtaradze 1981, 128-129).

Thus, some of the sites of the transitional stage as defined by Pitskhelauri were attributed to Phase I of the Late Bronze Age by Kavtaradze (Kavtaradze 1981, 125), i.e. to the transitional period from the Middle to the Late Bronze Age and dated this phase to the mid-16th century and the beginning of the 15th century BC (Kavtaradze 1981, 128). The second part, including the Baiburt burials, were attributed to Phase II of the Late Bronze Age and dated to the 14th century BC (Kavtaradze 1981, 131).

M. Abramishvili defined the upper chronological limit of Phase II of the Middle Bronze Age in Trialeti as the middle of the 16th century BC (Abramishvili 2003, 51). If this date is accepted, then that of the sites of Phase III will need to change.

The upper date of Group III kurgans of the Trialeti Culture must fall at the time when individual items of new material appear alongside typical Middle Bronze Age material. R. Abramishvili dates Treli Burials Nos 43, 51, 81, 84, 104, where there occur individual features of the Middle Bronze Age, to the 16th century BC (Abramishvili 1978, 68), while sites “which contain items typical of the Late Bronze Age alongside material characteristic of the Middle Bronze Age” are attributed to the 15th century BC (Abramishvili 1978, 68). As for the Baiburt burials excavated by Kufin, R. Abramishvili considers them to be contemporary with the Samtavro sites containing leaf-like daggers, as well as with Treli Burials Nos 337, 42, 55, 56, Ulianovka Burial No. 2, Ole Kurgans Nos 11 and 13, Sabidakhcha Kurgan XXVIII, Tabatsquri Kurgan XII, and the Arichi and Artiki cemeteries, and dates them to the 14th century BC (Abramishvili 1978; 85). A. Piliposyan dates Treli Burial No. 37 to the 15th-14th centuries BC (Piliposyan 1998, 62).

Recently A. Ramishvili proposed new dates for sites of the middle of the 2nd millennium BC on the basis of material he had excavated. He divided Phase II of the Middle Bronze Age (the second quarter of the 2nd millennium BC) into two parts. The first he assigned to the end of the Middle Bronze Age (17th century BC), in which he did not include the Trialeti kurgans. He attributed Trialeti Kurgan No. 32, the Ilto cenotaph, Samtavro Burial No. 70, cenotaph I, Treli Burials Nos 43 and 53 and a large group of Tsaghvli burials to Stage II (the first half of the 16th century BC), which he considered to be sites of Stage I of the Transitional period. He writes, “the Transition period from the Middle to Late Bronze Age begins precisely when there emerge features diagnostic of the Late Bronze Age alongside material typical of the Middle Bronze Age (Ramishvili 2004, 165). He divided also Phase I of the Late Bronze Age into two parts. He dated the first half to the sec-
ond half of the 16th century and attributed it to Stage II of the Transition period. In this stage he included the Baiburt burials excavated by Kuftin, Burials No. 28 at Sabidakhcha, No. 42 at Tabatsquri, No. 198 at Samtavro, No. 5 at Lilo, Nos 56 and 74 at Treli, Nos 1 and 2 at Namgalamitsa, Nos 4 and 18 at Kaspi, Nos 3 and 4 at Tsikhinvali, No. 11 at Ole, Nos 1 and 2 at Gadrekili, Nos 1 and 2 at Brimatsqali. He dated the second half to the 15th century BC and attributed it to the early stage of the Late Bronze Age, where he included the settlements at Tsikhinvali Natsargora, Satsikhuris Gora, the Khashuri Natsargora, Qatlanikhevi, Mchadijaviri, and Besastqe (Tsaghvli), Burials Nos 62, 91 at Tsaghvli, Nos 510-514 at Natsargora, Plavismani, Tserovani, Nos 2, 4, 6 at Ghrmaghele, Nos 37, 42, 55 at Treli, No. 2 at Ulianovka, No. 13 at Ole, Nos 4-7 at Zemo Bodbe, Nos 1, 6, 9-11, 26, 27, 42, 66, 102, 105 at Gadrekili, Nos 1-3 at Pirdapirite Mitsebi, Nos 21, 25, 53 at Pevrebi, and Nos 139, 153 at Samtavro. He divided Phase II of the Late Bronze Age (the 14th century BC) into two parts. He referred to the period of daggers with leaf-like blades as Stage I, while the period of daggers with leaf-like blades and those with compound shafts were assigned to Stage II (Ramishvili 2004, 178).

V. Sadradze dates Burials Nos 70, 156 of the Samtavro cemetery to the first half of the 16th-15th centuries BC and refers to them as belonging to the final Stage III of the Middle Bronze Age (Sadradze 2002, 41). He also includes the following in the chronological Group III: Trialeti Kurgans I, II, XV, Burial No. 5 at Sabidakhcha, Nos 3, 9, 13 at Akkhchia, Nos 7, 20, 21, 22, 27 at the Natakhtari cemetery III, Nos 55, 62, 70, 123, 142, 156, 178, 194, 196, 222, 257, 263 at Treli, Nos 11, 20, 94, 95 at Tsaghvli, Nos 43, 51, 53, 81 at Treli, the Ilto cenotaph, and Lilo Kurgan No. 5 (Sadradze 2002, 101-102), which he dates to 1600-1450 BC (Sadradze 2002, 108). He defines the Transitional period as 1450-1350 BC. He places the early stage of the Late Bronze Age between 1350 and 1250 BC and divides it into two parts. He attributes sites of the Central Transcaucasian culture to the first, earlier period and dates them to 1350-1300 BC, while in the second period he unifies sites of the Samtavro culture and dates them to 1300-1250 BC (Sadradze 2002, 148-161, 242-247; see chronological tables). He remarks, that “the Central Transcaucasian culture ceases to function and it is replaced by sites diagnostic of the Samtavro culture” (Sadradze 2002, 163).

Kote Pitskhelauri locates the final stage of the Middle Bronze Age within the 16th century BC (Pitskhelauri 2005, 98). He states that “the Central Transcaucasian Culture is the immediate continuation of the transitional period between the Middle and Late Bronze Ages. This culture precedes the one which until recently was considered the early stage of the Late Bronze Age and characterized by the Samtavro or Shida Kartli bronze daggers with leaf-like blades. According to a series of radio-carbon analyses (from Pevrebi cemetery), the date of this culture must be defined as the 14th–13th centuries BC” (Pitskhelauri 2005, 107). Thus, the Central Transcaucasian Culture, is consequently be placed by Pitskhelauri in the 14th-13th centuries BC, although he does not exclude some adjustment to this date through decay correction. (Pitskhelauri 2005, 107). He considers the following sites to belong to this culture: the settlements of Qatnalikhevi, Mchadijaviri, Khovlegora, Sajoge, Tskhinvali Natsargora, Satsikhuris Gora, Zghudris Khevi, Besas Tqe, Khashuri Natsargora, Chalipiragorebi, Pevrebi, Chaliankhevi (Vaistsqali), Tsiteli Gorebis, Didi Gora, Muraokesi Gora, Khashal Gora, Nergit Gora, Rukhi Gora, Patara Gora, Bumbula Gora, Anagis Gora, Kombala Gora, Naomari Gora, Dasakani, Naomari Gora (Udabno), Sabaduris Gora, Avazas Gora, Takhti-Mukha, Chankaani, Sasantliant Gora, Khatis Gora, Arkhiloskalos Gora and Zemokedis Gora; Bakurtsikhe, Tsitiletgorebi (kurgans), Satvalistsqali, Udabno (Kurgan No. 8), Udabno (Kurgan No.5), Chichkhitur, Ole (Kurgans Nos 11, 13), Ulianovka (Sighnaghi district), Kodistsqaro (kurgans), Pevrebi, Gadrekili “Nasadgomevi”, Gadrekili “Pirdapirite Mitsebi”, Gardabani (kurgan), Tserovani, Kareli (kurgans), Orgora (Doghlauri), Zurgovani (kurgan), Sasierti (Gandzi), Tsikhiagora (Sadaraulo Seri), Dzveli Kanda, Plavismani, Bulachauri, Borjomi, Sajoge (kurgans), Chalipiragorebi, Tbilisi (Ghragele kurgans), cemeteries at Plevi, Kviratskhoveli, Namgala Mitsa, Treli Nos 37, 42, 55, Kopala, Madnischala, Machartsqali, Samtavro, Irganchai (Kurgan V5), Bornighiele, Abanoghele (Khimshiaant Mitsebi), Berikdeebi, Natakhtari II (kurgans), Rveli (Banis Khevi), and Tsaghvli (Pitskhelauri 2005, 104-105).

Problems of dating the sites of the middle of the 2nd millennium BC and their cultural attribution have to be defined more precisely. For instance, the dating of the Baiburt burials is still controversial. The same
can be said of the Ilto cenotaph and some other sites. Such a situation requires new material and innovative analysis of previously excavated material. The solution of the problem will crucially depend on objective data acquired by radiocarbon and other methods. The correlation of typological series created by analysis of artefacts from all mid-2nd millennium BC sites in Central South Caucasus and their comparison with calibrated radiocarbon data will help to elucidate the haphazard chronology of this period. At the same time, historical processes occurring in the Near East should be taken into consideration. Research of this nature may even be the means of identifying a new archaeological culture (or cultures).

At present we can only make some provisional suggestions. We believe that it is correct to define a “Transitional” period from the Middle to Late Bronze Age, since elements diagnostic of these two cultures can really be seen coexisting at a certain stage. It should also be taken into account that Middle Bronze Age material can be seen to predominate at some of the sites, while others only produce material typical of the “Transitional” period.

In our view, it is likely that the “Transitional” stage belongs to the 17th century or at least the second half of the 17th century BC. This stage corresponds to Phase II of the Middle Bronze Age as identified by G. Kavtaradze and Phase I of the Transitional stage according to A. Ramishvili (the first half of the 16th century BC).

We consider the Jinisi settlement to be the earliest site in Trialeti to belong to this stage. Some of the pottery from Jinisi is made of well precipitated clay, is thin-walled and has a burnished exterior. Among them are fragments decorated with small stamped triangles (Amiranashvili, Narimanishvili 2005a) (not chevrons applied by hatching, which is diagnostic of Transitional sites, but a row of unfilled triangles). Pottery decorated with similar ornament has been found in Trialeti Kurgans I and II (Gogadze 1972, pl. XV, 20-21, 25; Pl. XVI, 13), Zurtaketi Kurgans Nos 3 (Japaridze 1969, pl. XV) and 4 (Japaridze 1969, pl. XXI, fig. 37), Kvasatali Burial No. 6 (Japaridze 1969, fig. 64, 1-2), Natakhtari cemeteries II and III (Sadradze 2002, pl. XX, 10; pl. XVI, 5; pl. XXVI, 38, 48), and Tsitsamuri Burial No. 13 (Nikolaishvili, Narimanishvili 1995, 59, 69-73, fig. 358, 362-365, 529-575). The Natakhtari and Tsitsamuri burials belong to the Middle Bronze Age (Sadradze 2002, 87-91, 100, 105-108; Nikolaishvili, Narimanishvili 1995, 59; Apakidze et al. 1991, 82, pl. 191, 192, 194-195).

It can be confidently stated that this type of pottery from the Jinisi settlement is identical to pottery of the Middle Bronze Age and is a typical product of the period. Apart from the pottery described above, the Jinisi settlement also produced pottery with a relatively coarse fabric, rough firing and a grooved exterior. Such vessels have a band of hatching around the shoulder (Amiranashvili, Narimanishvili 2005a, pl. Cl, 6; Cxi, 5; Cxvii, 4-6; Cxix, 9; Cxxvi, 7-8; Cxlxxix, 1, 2; cl, 7, clxxvii, 8; clxxxvii, 5, 7). They are similar to those excavated in the Imera and Sapar-Kharaba cemeteries in fabric and in the presence of hatched ornament, with the difference that relief bands are not common on the Jinisi pottery.

The Jinisi type vessels first appear at the end of the Middle Bronze Age (Pitskhelauri 1979, 67; Abramishvili 1978, 65). R. Abramishvili attributes such complexes to the end of the Middle Bronze Age as does K. Pitskhelauri, although he notes that the identification of the transitional stage is beyond any doubt and that further discoveries will allow us to identify separate steps of this stage (Pitskhelauri 1979, 67, note).

I thus concur with the assignment of the Jinisi settlement to the end of the Middle Bronze Age. To be more precise, it is a settlement where single fragments of pottery typical of the “transitional” stage appear for the first time. The settlement, in my opinion, should be dated to the 17th century BC or the second half of the 17th century BC.

Sites that K. Pitskhelauri placed between the end of the Middle Bronze Age and immediately in the “transitional” stage, are chronologically assigned to Phase II of the Middle Bronze Age by G. Kavtaradze.

Those sites which “reveal common features of Late Bronze Age beside Middle Bronze material” can be attributed to Phase I of the Late Bronze Age. This phase is probably to be placed in the 16th century BC.

Phase II of the Late Bronze Age must be dated to the 15th-mid-14th century BC (1500-1350 BC). It corresponds to Phase II of the Late Bronze Age as defined by G. Kavtaradze, in which he also places the Baiburt burials and dates to the 14th century BC. A. Ramishvili attributes these burials to Phase II of the Transitional...
We place the Sapar-Kharaba (Baiburt) and Imera cemeteries in Phase II of the Late Bronze Age. The Beshkenasheni (Beshtasheni) settlement must also belong to this phase. However, due to the limited number of finds, it is difficult to fit it within a narrow chronological frame and, therefore, it must be broadly dated to the 16th-14th centuries BC, although three levels of the settlement strata recorded at the site may become the foundations for a more detailed chronology should there be further excavations (Narimanishvili 2006). Remains of settlements contemporary with the Beshtasheni settlement and the Sapar-Kharaba cemetery were recorded by Kuftin near the village of Ozni (Kuftin 1947, 5, 12, 16, 21; Kuftin 1948, 34-35) and near the lower “Cyclopean” fortress of Santa (Utsqlo) (Kuftin 1936, 73-74). We already have a certain type of a Near Eastern dagger and “Common style” cylinder seals, whose dates make it possible to suggest a plausible date for this phase. No artefacts typical of the Middle Bronze Age occur in the material of this period.

Two types of pottery were recovered from the Sapar-Kharaba cemetery. One group is made from well precipitated clay, is fired baked with a burnished exterior. Some examples are decorated with a burnished ornament applied under pressure (pl. XII; XIV; XVI). Pottery of the second group is made from coarse-grained clay (pl. XIII; XVI), has a thick fabric, and an exterior and base decorated with relief bands of rope-shaped or oblique hatching. Both types of pottery are made on a potter’s wheel and have no handles.

Pottery from the Sapar-Kharaba and Imera cemeteries do not bear ornament diagnostic of the Middle Bronze Age. Vessels from these cemeteries are no longer decorated with the so-called wedge-like ornament common in the Central Transcaucasian Culture, and which belongs to Phase III of the Late Bronze Age and dates to between the mid-14th and the 13th century BC (1350-1200 BC). As for the Samtavro Culture, which R. Abramishvili dated to the 14th century BC, it belongs to the stage following the Central Transcaucasian Culture (Sadradze 2002, 148-163, 242-247; Pitskhelauri 2005, 107) and must be dated to the 12th-11th centuries BC. Thus, the Sapar-Kharaba cemetery corresponds to Phase II of the Late Bronze Age and dates to the 15th-14th centuries BC.

K. Pitskhelauri suggest that a uniform culture was formed from the beginning of the 15th century BC, whose predecessor covers the whole scope of “the Trialeti Splendid Kurgan Culture” (Pitskhelauri 1979, 70). This “uniform culture” group includes the archaeological sites of Sapar-Kharaba (Baiburt), Beshkenasheni (Beshtasheni), Utsqlo (Santa), Metrevana (Imera) and Losho (Ozni) in Trialeti.

The earliest site of Stage II of the Late Bronze Age anywhere in Central South Caucasia was excavated at Trialeti, at Baiburt, situated at the centre of the Bareti plateau. The “uniform culture” that occupies the whole span of “the Trialeti Splendid Kurgan Culture” and dateable to 1500-1350 BC, may conventionally be called “the Bareti Culture” [Narimanashvili 2006a]. This is a time when the whole complex of artefacts is created that is also diagnostic for the ensuing Central Transcaucasian culture.

One of the main distinguishing features of the Bareti and Central Transcaucasian cultures is the pottery. Central Transcaucasian culture is characterized by ceramic vessels with handles decorated with stamped “wedge-like” ornament, but such pottery does not occur at Bareti at all. Changes in the Bareti Culture can be observed from the middle of the 14th century BC, when new materials emerge. This phenomenon is apparently connected with processes occurring in Asia Minor. A new distribution of power brought about the decline and collapse of the Mitannian kingdom, and the cultural and economic environment was changed in ways that also affected South Caucasia. The Bareti Culture led immediately on to the Central Transcaucasian Culture, followed in turn by the Samtavro culture (Sadradze 2002, 148-163, 242-247; Pitskhelauri 2005, 107).

Thus, the “Transitional” stage must be assigned to the 17th century BC, Phase I of the Late Bronze Age must be dated to the 16th century BC, and Phase II must be dated to the 15th or the mid-14th century BC. Sites of the “Bareti Culture” must be attributed to this phase. Phase III of the Late Bronze Age must be dated to the mid-14th century and the 13th century BC, to which sites of the “Central Transcaucasian” Culture are assigned; the “Samtavro Culture” sites must be attributed to Phase IV of the Late Bronze Age and dated to the 12th-11th centuries BC (correlations between the Central Transcaucasian and Samtavro Cultures go beyond the pres-
ent work and are a subject for special discussion).

**Conclusion.** Material from the Sapar-Kharaba and Imera cemeteries belongs to one of the least studied periods in South Caucasus. Burials dated to the 15th-14th centuries BC have been excavated in many places in the region, but their corresponding settlements have not actually been found. A small part of a settlement of this period was excavated between the villages of Beshtasheni and Sapar-Kharaba in Tsalka. A vast settlement situated south of the cemetery has a complicated defense system. It is situated on a rocky outcrop between deep canyons at the confluence of rivers, which enhanced its defensive capacity. The 15th-14th centuries BC stratum excavated at the settlement contains three levels.

So far five sites of this period have been excavated in Trialeti: the Beshtasheni, Ozni and Santa settlements, and the Imera and Sapar-Kharaba cemeteries. Only a small part of the Beshtasheni settlement was excavated. The part of the settlement which was excavated as a result of recent construction activity is badly damaged; only one corner and a part of a floor have survived. It is difficult therefore to speak of the architecture of the period. It is remarkable enough that one stratum with three building levels was recorded in the excavated area.

The part of the Imera cemetery that appeared in the ROW was not intensively occupied. The part of the cemetery that was investigated indicates that most of the burials are presumably situated north of the ROW. Unlike the Sapar-Kharaba cemetery, the Imera cemetery contains poor grave goods and there are no special burials. It has to be taken into consideration, however, that 115 burials were excavated at Sapar-Kharaba, while at Imera only seven were found.

The Sapar-Kharaba cemetery occupies an outstanding place among the sites of this period from Trialeti. It stretches over 1500 m east-west and is 400-500 m wide. 115 burials were excavated in the cemetery between 2003 and 2005. The objects recovered from the cemetery point to the society to which these burials belonged to had close relationships not only with South Caucasian, but also with Near Eastern ancient civilizations. In this connection Mitannian cylinder seals (Common Style) are of particular interest. This type of seal is rather rare in South Caucasus, and they were imported, which points to close cultural and economic ties between this region and the outer world. These relationships are also indicated by Mesopotamian, Anatolian and Egyptian items excavated at the Sapar-Kharaba cemetery and contemporary sites of South Caucasus.

The discovery of cylinder seals and other Near Eastern items in South Caucasus points to a close relationship between this region and Hurrian-Mitannian state, which became one of the most powerful states of the Near East from the 16th century BC. The Mitannian royal dynasty established kinship ties with the Egyptian pharaohs of the XVIII dynasty (1550-1355 BC) ([IDV](1988), 73).

Hurrians had lived in the Near East since ancient times. By the middle of the 3rd and the beginning of the 2nd millennium BC Hurrian states already existed in the Zagros highlands (Karakhar, later Shushara, Arapkha, etc.). It is probable that in the 3rd millennium BC it was the Hurrians who occupied the upper part of the Euphrates. There was Hurrian-speaking representation at the commercial centre of Kanesh and in other cities connected with it (especially Urshu). This fact indicates that the population of the Tavros and Zagros highlands had commercial relations with western regions of Near East before they established political contacts ([IDV](1988), 66-67).

In the 16th century BC the influence of the Hurrian population over the western Euphrates was considerable. By the 15th century BC the Hurrian-Mitannian kingdom was the strongest political unit. By the 14th century it was a power to be reckoned with, so that Egyptian pharaohs preferred to enter into marriage arrangements rather than fight Mitanian kings. The wife of Thutmose IV was the daughter of Artatama I. Amenhotep III married Kelu-Heba, daughter of Shuttarna I. Nefertiti, the beautiful wife of Amenhotep IV was probably Tushrata’s daughter ([Egipetskaia mifologia](2002), 357-358).

In their wars of conquest the Mitanni depended on a military elite, the army, called *marijanni-na* both in Mitannian and in Syro-Palestinian. The word has been connected with the ancient Indian *marqa* (mean-
ing “young man”), but without any basis, while in the Avesta it meant “a member of male society.” What had been simply a social description turned into a noble title: “those riding military chariots” (although texts in the Alalakh archive mention such marijanni-na who do not possess military chariots) (Wilhelm 1992, 47-48). It should be mentioned, that it was very expensive to keep a horse and a cart in Syria-Palestine, and only the rich could afford them (Wilhelm 1992, 47).

In mid-2nd millennium BC South Caucasia the practice of burying the dead on a chariot or on a wooden couch, or inserting parts of a chariot into a burial is probably an indication of the presence of this particular social group in Caucasia. This may be indicated by the fact that not only men but women are buried in graves with chariots (Burial No. 30 at Saper-Kharaba, Berikldzeebi, Lchasheni). We believe that the deceased buried in graves with chariots are these marijanni-na nobles, and that the symbol of their high social rank is the chariot. (It is interesting that in Svanetian a male is called mare, so that the name marijanni-na might be of Georgian origin).

According to some scholars, the population residing in the area from the northern regions of Mitanni and Arapkhan to modern Armenia and South Georgia was ethnically unvaried throughout the 2nd millennium BC (IDV 1988, 90). B. Piotrovski believes that there is much in common among the pottery, weapons, building, etc. throughout these regions. Common features can also be observed between the Hurrians of southern regions (south of the Tigris, Upper Mesopotamia, Northern Syria) and the population of Central Transcaucasia (IDV 1988, 90).

According to modern linguistic theory, the Hurrian language is related to North-East Caucasian (Nakh-Daghestan) languages. Ancient Hurrian texts are known from the second half of the 3rd millennium BC. There are no texts written in this language from the 1st millennium BC (Lingvisticheskii slovar 1990, 574). According to I. Diakonov, single lexical similarities between the Hurrian and Kartvelian (Georgian) languages might be evidence for remote marriage links (Diakonov 1980, 104).

Some Urartian expressions have been detected in Georgian. They were first identified by A. Svanadze and include “qiramala”, “tavdaqira” (upside down), “ivri arale”, “ari arale”, “tari arale”. G. Melikishvili explains the origin of these expressions by the fact that some Urartian tribes assimilated with Kartvelian (Georgian) tribes and integrated with the Georgian people (Melikishvili 1959, 117). We may also assume that Hurrian-Kartvelian (Georgian) lexical coincidences point to an ancient unity that began far earlier than the Urartian period.

In the second half of the 14th century the Hittite kingdom, Egypt and Assyria opposed the Mitanni with joint forces. The Hittite king Suppiluliuma I (1340-1325 BC) conquered all the lands of Mitanni as far as the Mediterranean, including Carcemish (Wilhelm 1992, 69). In the middle of the 13th century BC Adadnerar I king of Assyria conquered a large part of Mitanni (Wilhelm 1992, 75).

The Saper-Kharaba cemetery produced beads of precious stones (Burials Nos 6, 56, 73, excavated in 2005; pl. XIX, 11; XX, 19-20), a pin with an ibex’s head (Kuftin 1941, 77, fig. 87, 1) and heeled vessels (pl. XIV, 7), whose closest parallels are found in Northern Iran, Southern Turkmenistan and Northern Afghanistan. Bi-conical beads incrusted with white or red paste were common in North-East Iran (Tepe Hisar III), Southern Turkmenistan (the Murghab basin) in the times of Namazga VI; in the Indus Valley, in the post-Harrapian culture, and in Northern Afghanistan (Mundigak), and are dated to the first half of the 2nd millennium BC. Pins with horned animals (ibex, ox) were widespread in the same regions and belong to the same period (Sarianidi 1977, 83-84, 102-104). Heeled vases and drinking vessels were widespread across the Zagros highlands, in the Giani culture, were belong chronologically in the 2nd millennium BC, and are widespread throughout north-east and north-west Iran (Stankevich 1978, 17-31). The discovery of similar material in southern regions of Trialeti and the Caspian Sea must indicate contacts there too.

In the second half of the 2nd millennium BC the major part of the Hurrian-Mitannian kingdom was taken over by a union of the lands of Nairi, which seems to be led by kingdom of the Diaukhi. By the end of the 2nd millennium BC Urartu had moved into the leadership of the coalition of the lands of Nairi and became the most powerful state from the 9th century BC.
We consider that in the 16th-14th centuries BC at the height of Hurrian-Mitannian power, Trialeti experienced strong political, economic and cultural influence from this quarter, as a result of which there appeared the Near Eastern type daggers, the Hurrian-Mitannian seals of the “Common Style”, the glass beads and the Egyptian scarabs among the grave goods in the Sapar-Kharaba cemetery. At the beginning of the 2nd millennium BC the redistribution of political power and the formation of new states were followed by the destruction of old caravan routes. Prior to this (4th–3rd millennia BC) a trade route from South Caucasus to Mesopotamia, Syria and Palestine apparently ran through Malatya. This fact proved favourable to the formation of Early Bronze Age Cultures in Anatolia (Mellaart 1985, 24) and probably in Caucasus, as well as to their spread further south. This trade route, as well as the Assyrian commercial colonies, was destroyed at the beginning of the 2nd millennium BC. In the middle of the 2nd millennium BC contact between South Caucasus and Mesopotamia was presumably via the Lesser Zab and Arbela. These lands were controlled by the Mitanni in the 15th–14th centuries BC (Narimanishvili 2004a, 105).

The emergence of new cultural elements in Caucasus was followed by the flowering of the Hurrian-Mitannian state. Mesopotamian and Egyptian imports were a reflection of the political and economic situation in the Near East. Alongside cylinder seals, Near Eastern type daggers and swords, Mesopotamian and Egyptian imports (scarabs, seals, beads) were widespread across Caucasus. A new technology of pottery production was created and new types of ceramic vessels began to spread. Two-wheeled chariots and carriages appeared, apparently drawn by horses.

In the 2nd millennium BC the main cargo of trade caravans was textiles. There were woollen and linen textiles of various colours. Clothes, especially good ones, were rather expensive in Hittite Anatolia. Beautiful clothes cost 30 shekels, which corresponded to 30 sheep (Gurney 1987, 78-79). Linen and woollen textiles of various weaves and colours (purple, turquoise, brown, grey and blue) were recorded in the Sapar-Kharaba cemetery. Not all have been analysed yet, and some are coarse and undyed. Especially noteworthy are the remains of red and purple cloth (from Burial No. 85). Production and distribution of purple textile was monopolized by eastern Mediterranean (Levantine) cities in the mid-2nd millennium BC. Red dye was produced from a variety of molluscs existing only on the coast of the eastern Mediterranean (IDV 1988, 74; Bernhardt 1982, 90). Dye used to be made from these shellfish even before the Phoenicians, but they exported it to neighbouring countries (Bernhardt 1982, 90). It was the Phoenicians who started dying linen and woollen cloths purple-red and violet-blue with dyes obtained from these molluscs (murex). Consequently, the importation of cheap and natural-coloured wool from animal-breeding regions of Syria and later from all over the Near East gains great economic importance. Phoenicia exported textiles dyed red and blue at a high price (the dye itself, unlike the dyed items, was impossible to preserve for a long time; it could not therefore have been exported [IDV 1988, 236]). South Caucasus probably exported metal, wool, leather, timber and horses.

In the 2nd millennium BC a horse, and a horse drawn chariot, were very costly in the Near East. A draught horse cost 30 shekels in Anatolia (Gurney 1987, 78). Treatises on the care of horses are known from the writings of the Mitannite Kikuli from Bogzakoy and from Ugarit. It seems that a horse was such an exotic animal and so unusual to look after that special instructions were necessary for grooms and coachmen. Treatises on potting or ploughing have not been preserved. Such information was passed down through the generations as an element of everyday knowledge that everyone was well aware of. Treatises on the care of horses were an exception (Schifmann 1987, 41-42).

The horse was a great rarity in Syria-Palestine in the 2nd millennium BC. As early as the 14th–13th centuries BC horses were the object of interstate commerce and were very expensive (Schifmann 1987, 41). According to Assyrian sources, horses were imported in Assyria from north-eastern countries from ancient times (Piotrovskii 1959, 151). After gaining victory over the union of the kings of the lands of Nairi, Tiglatpileser I imposed on them as a tax payment of 1200 horses and 2000 cattle. Shalamanasar III received a large number of horses from the lake region of Urmia. Urartian inscriptions often give accounts of driving horses from Transcaucasia into the centre of the kingdom of Kingdom. Horses top the list of trophies (Piotrovskii 1959, 151).
The domesticated horse existed in Anatolia and South Caucasia presumably as early as the 4th-3rd millennia BC (Burney 1993, 314). Osteological material from settlements of the 17th-16th centuries BC confirms its use in Trialeti. In the second half of the 2nd millennium BC horse breeding was already a specialized activity. In the 2nd millennium BC horses could have been the principal export of South Caucasia, a trade which was simplified by the existence of an ethnically uniform population and the presence of the Hurrian-Mitannian kingdom from South Caucasia to Syria-Palestine in the 16th-14th centuries BC.

Trialeti of the 15th-14th centuries BC, as well as the Bareti Culture region, experienced the cultural and economic influence of the Mitannian kingdom, and there may even have been in addition some kind of political integration. “Cyclopean” settlements and fortresses began to be built from the 16th century BC in central regions of South Caucasia, and they covered areas of the former Trialeti and Bareti Cultures from the 13th century BC. Sites built of “Cyclopean” masonry also occur in the Middle Bronze Age (kurgans with burial chambers, the temple complex on the top of Shaori Mountain), although they have religious function. The building of defensive constructions must have begun from the 16th century BC (Beshkenasheni). Over the region of “Cyclopean” sites, apparently, separate “kingdoms” were formed, among which theDiaukhi-Daiaeni “kingdom” was the most powerful. In the second half of the 2nd millennium BC the majority of the Hurrian-Mitannian kingdom was taken over by the union of the “lands of Nairi” led apparently by the kingdom of Diaukhi.

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Illustrations:


Pl. XXVII – 1. Beshtasheni settlement. Topographic plan; 2. The “Cyclopean” fortress at Beshtasheni (according to V. Tsilosani); 3. Beshtasheni, plan of the area excavated in 1990-1993. The dark colour marks cultural strata of the 16th-14th centuries BC; 4. Beshtasheni, pottery of the 16th-14th centuries BC.

Pl. XXVIII – 1. The “Cyclopean” fortress at Santa. Plan (according to V. Tsilosani); 2. The “Cyclopean” fortress at Ozni. Plan.