

WINE-MAKING IN ANTIQUITY IN THE LIGHT OF EVIDENCE FROM EXCAVATIONS AT SAMTSKHE

The history of wine-making has always been a popular subject with Georgian scholars, and the view once expressed by Academician N. Vavilov that the domestic vine had a Near Eastern origin made Georgia an area of particular interest. Our immediate incentive to discuss this topic was the new information stemming from the splendid discoveries made during the construction of the BTC pipeline, notably the wine presses recovered in the village of Atsquri (Akhalsikhe district). They have added fresh information relating to the history of wine-making in Samtskhe in particular and in Medieval Georgia in general.

Archaeological evidence indicates that viticulture has a history of at least 7000 years in Georgia. This is a long time in terms of the development of a single agricultural product, and its study enables us to observe changes that occurred within the society that consumed wine. A short account of this earlier period is in order with a view to clarifying the situation and development of the tribes that inhabited Central Transcaucasia.

Relevant in connection with the history of the vine are various sites in the middle part of the river Mtkvari and which belong to the area of the "East Caucasian Early Farming Culture". A particular feature diagnostic of this Culture needs to be emphasized, namely the concentration of settlements on raised places, on hills. The settlements were compact in plan and topography: clusters consisting of between three and five villages, and the clusters situated 10-15 km apart (Lordkipanidze 2002, 56-57). Houses might be circular or oval in plan surrounding a central circular area. Rooms in the residential complex would have specific functions, with the tasks appropriate to the household and the farm separated from each other. O. Japaridze writes, that "the inhabited areas of the Farming Culture in the Ganja-Qazakhi Valley and on the Marneuli plain are artificial mounds today, formed as the result of the prolonged habitation of generations at the same place. A strong economic system lay behind all this. In those times villages consisted of houses and farms built of unbaked brick or adobe. The village had not undergone major changes in planning, building techniques or architecture over a long period. From the very beginning the village had the same plan, with an irregular, dense, chaotic distribution of residential quarters. The principal architectural form was a circular plan for houses and farms. Clay was the main building material. Wood and, especially, stone were not used in building. Apparently, the tradition of building with clay was very strong; moreover, clay architecture here already stood at a high level" (Japaridze 2006, 260-261).

Naturally, the development of farming was accompanied by, or more appropriately, was made possible by the presence of proper tools. Cultural strata of this period have produced obsidian, stone, bone and wooden tools. These include: sickle blades, hoes (including examples made of antler), spades, polishes, perforators, awls, and various knife-like tools. Among tools used for cultivation particular attention should be paid to a red-deer antler 67 cm long from the Arukhlo I settlement and which functioned as a primitive plough (Chubinishvili 1978, 13-16).

Judging by the palaeobotanical data found in the compact settlements of Early Farming Cultures (e.g. the Kvemo Shulaveri, Arukhlo, Tsiteli Sopeli and Qachaghana settlement clusters) it is clear that farming had a very long history, as members of the wheat family were already differentiated and hull-less barley predominates over hulled (Rusishvili 2007, 15). Against the background of such advanced agriculture we

should not be surprised to find remains of the vine in the same archaeological context. In particular, grape seeds have been excavated at “Dangreuli Gora” in Shulaveri, in strata of the 6th-5th millennia BC. Their palaeobotanical evaluation is as follows: the material is multi-layer and is represented by round and pear-shaped stones. Their length (L) varies between 6.8 and 6 mm, breadth (B) between 3 and 3.8 mm. The length of the beak of the seed is 1.3-1.8mm, ratio L/B equals 1.61-1.94. The central grooves are deep and almost parallel. According to morphological and ampelographic features, it belongs to the cultivated type of vine *Vitis vinifera* L. (Rusishvili 2007, 13).

Later, in the Bronze Age (from the 4th millennium BC), the Kartvelian (Georgian) tribes reached a new stage of development, and began to produce metal achieving over the millennia an incredible technical and artistic level. Remains of the domesticated vine are also familiar on sites of this period. For example, grape seeds have been recovered in Kakheti, in 3rd millennium BC levels at Badaani, and they have been attributed to the cultivated type of vine, *Vitis vinifera* (Rusishvili 2007, 17); in Shida Kartli, near Urnisi, at Kvatskhelebi, seeds of the same period have been recorded. All the branches of economy and culture develop in parallel with the development of farming. One example of such a phenomenon is the “Splendid Trialeti Kurgan Culture” of the 3rd-2nd millennia BC. These grandiose buildings, whose diameters often reach 100 m, apart from being perfectly designed architectural structures, demonstrate a wealth of grave goods including a variety of drinking vessels.

From the 2nd millennium BC the domesticated vine, *Vitis vinifera* L., seems to have spread throughout Georgia. Grape pips have been recovered in both the coastal area (Anaklia) and the interior of Colchis (Nosiri). The natural conditions of this area differ sharply from those of Trialeti, Samtskhe, Kartli and Kakheti, in that there are mostly plains in the west. In keeping with this zonal difference, community types are different too, and this is confirmed by abundant archaeological and botanical evidence, including the presence of wheat, millet, beech, acorn and hazelnut and later on, of a variety of millet called *Setaria italica*. (Maisaia, Shanshiashvili, Rusishvili 2005, 6-38). In the area of craftsmanship, metallurgy still progressed and fine Colchian bronze objects engraved with a range of ornaments were produced, including both household and religious objects as well as examples of small bronze sculpture.

From this period onwards there appear to be more ceramic shapes connected immediately with wine-making. From the 6th century BC, wine *pithoi* of different sizes and decorated with diverse ornaments are widespread throughout Georgia. The emergence of special storage areas, called *marani* (wine cellar) in Georgian, must also be related to wine-making. The wine cellar (pl. I) recovered on the central terrace at Vani belongs to the 5th-4th centuries BC. But a question emerges: how well was the community developed which gave wine-making and viticulture such great importance? In order to answer this question we need to refer to the results of excavations of the Vani burial complexes of the 4th century BC.

The discovery of imported amphorae in burials indicates that although wine-making in Colchis was advanced, it was not at all unusual to bring in wine from abroad. The other side of the same coin, however, is that Colchian *pithoi* and amphorae, possible evidence for the exportation of Colchian wine, have been found in large quantities on the North Black Sea coast. The economic and cultural level of the Colchian community is perfectly displayed in burials at Vani and Sairkhe, where thousands of objects have been excavated, most of them made of precious metal. It is clear that this community, greatly concerned with wine-making during the 1st millennium BC, not only had long wine-making traditions, but in this field, but was also economically advanced.

Wine-making and the principal vessel associated with it, namely the *pithos*, were of such importance that from the 4th century BC the custom of burying the dead in wine *pithoi* was established. Further evidence of the importance of wine-making is the practice of placing amphorae in burials from the 5th century BC onwards, a practice well displayed in burials of in Greek necropolis at Pichvnari dated to the 5th century BC (Kakhidze, Vickers 2004, 48-85).

The syncretism of local and Greek cults, including the wide distribution of the cult of Dionysus, the god

of wine-making, throughout Georgia in the Classical period is yet another indication of the great importance of viticulture. An excellent example of the presence of this cult is to be found in the famous mosaics at Dzalisa (pl. II).

Christianity was declared the state religion in Kartli at the beginning of the 4th century, and wine gained even greater importance. It is remarkable, furthermore, that the symbol of Georgian Christianity is a cross made from the branches of a grapevine.

Apart from its role in everyday Christian life, the grapevine became an indispensable decorative element of Georgian architecture. Wine cellars of this period have been recorded almost everywhere throughout the country.

Our specific interest here is in the results of archaeological investigations carried out in connection with the construction of the pipeline in an area near Atsquri. But the pipeline was not the only reason for excavating here, for Atsquri is first mentioned in the historical record in an extract from *kartlis tskhovreba* (Life of Kartli). We do not know when precisely it was written, but it is believed to belong to the Early Middle Ages. The historical background of the account in the extract is rather complicated. It deals with the time when Christ's apostles began preaching in different countries. The Apostle Andrew was commissioned to preach in Georgia. The chronicle reads: "And after the Lord's Resurrection, when the apostles drew lots... the Virgin told Saint Andrew: 'Go and take my icon and one of my Son to the country allotted to me'. And the holy Apostle arrived in Atsquri, which was then called Sosangeti, and settled here at the place where stood a pagan temple which is now called an old church and idols used to be worshipped there. And there was a temple of idols in this city where Artemis and Apollo were worshipped... An icon is sent to this place as hope and safeguard to all those to whom it is granted and it is intended to rest here forever" (*kartlis tskhovreba* [Life of Kartli]) 1955, 39-42).

Consequently, according to Christian tradition, St Andrew left the icon of the Virgin in Atsquri and headed for the land of the Scythians. From this time Atsquri became the resting place of the Virgin's icon and all the further events that took place in this region were related to Atsquri.

Naturally, information like this inspired a certain archaeological interest in Atsquri, and for twenty years intensive archaeological work was carried on here. A vast settlement of pagan times (second half of the 1st millennium BC) was found, and the information given in the extract was partly confirmed on the basis of artefacts (Licheli 1999a, 27-34; Licheli 1999b, 13-15; Licheli 1999c, 101-107) and palaeobotanical material.

The subject of Atsquri, and Samtskhe in general, in the context of viticulture and wine-making requires further explanation: the environment of this region is not very favourable for the development of wine-making, due to its high altitude and its severe climate.

It is remarkable, however, that despite repeated invasions throughout the Middle Ages, which almost destroyed the country's economy, the tradition of wine-making still survived. These facts are clearly shown to be true by excavations in Samtskhe (South Georgia). As a result of work carried out in the interior of the church of the Virgin in the village of Atsquri, it became clear that in the 7th-8th centuries there stood here a large building standing upon a firm foundation, presumably a church. A wine cellar was attached to the south. We investigated only a small part of the latter, which produced three *pithoi* of different sizes with capacities respectively of 100, 200 and about 800 litres. It is worth recording that a burial was found here containing a unique gold pendant-icon decorated with cloisonné enamel and inlaid jasper representing a Crucifixion scene.

Many wine presses of a later period, the 10th-16th centuries have been found in this region. In a place that the local community calls "Navenakhari", a former vineyard, seven wine-cellars and presses were found that belong to the 10th-16th centuries (pl. III-IV). Their construction is exactly the same as that of modern wine presses. It is interesting, that in a number of cases there are two presses in a single cellar, which suggests that different kinds of grapes belonging to one owner might have been pressed simultaneously and that the juice flowed into different reservoirs (pl. Va). The sizes of presses vary: one might be 2.8 x 1.5 m,

while a press situated nearby was 11 m long. In general, the capacity of the presses was between four and seven tons.

The walls of the wine cellar are built of rough or partly cut blocks (pl. Va, VI). They are of different sizes, although their general configuration is nearly similar. It is remarkable that every cellar had tanks specially arranged next to the press, into which the residue that remained in the press from the pressed grapes was thrown, and pressed again under heavy pressure. For this purpose they used millstones or pear-shaped stones specially made for the wine press and weighing about 150-200 kg (pl. Vb).

In the sample collected from the bottom of the press, which was submitted to palynological analysis, the pollen of the cultivated vine (*Vitis vinifera*) predominates among arboreals (with 12 grains). There was also pollen of hazelnut (*Corylus*) and olive (*Olea*), which points to the development of horticulture. A third sample included walnut pollen (*Juglans regia*). (Thanks are due to Prof. E. Qvavadze for this information).

These buildings were used for pressing wine and the resultant juice was taken to the village to keep in wine cellars.

It must be pointed out that both wine cellars and presses have always been holy places for Georgians, and in this connection we should mention a wine cellar that contained an altar and a small bakery for the holy bread. To the right of the stairs leading down to the wine cellar an altar consisting of stone slabs was fitted into a square pit cut in the floor (pl. VIIa). It is cist 0.7 x 0.4 m made from thin slabs and covered with thin tiles. A 9th century triangular clay slab with an inscription in Georgian reading "Saint George" and found close to a wine cellar is further evidence in support of the view that such places were considered holy (pl. VIIIb).

Excavated wine cellars with stone press and reservoirs clearly demonstrate the important role of viticulture and wine-making in the economy of the population of this region. At the same time these wine cellars are peculiar monuments of Medieval folk architecture. It is remarkable that both wine cellars and presses are typologically similar to contemporary monuments excavated in other part of Georgia (Kakheti, Kartli, the Aragvi Valley) (Rcheulishvili 1977, 101-105; Rcheulishvili 1980, 57-66; Rcheulishvili 1990, 101-103; Chilashvili 1975, 21-23). At the same time it is interesting that there are no *pithoi* in these wine cellars for fermenting and keeping wine. We believe that these structures were arranged away from the dwellings, in vineyards, and were only used for pressing grapes. The juice was immediately taken to wine cellars which must have been arranged near dwellings. The same situation exists in the ethnographic record of the Aragvi Valley in the Middle Ages and at the beginning of the last century (Nanobashvili 1960, 162; Songhulshvili 1974, 152).

It is worth mentioning that Georgian written sources ("Nikortsinda writing") use the term "stone press" next to the word *marani* (wine cellar) (Berdzenishvili 1979, 25). Apparently, our ancestors distinguished the function of buildings called *marani*, where they used to keep *pithoi*, from those in which they kept wine presses, which only contained the press itself and a tank for the primary treatment of grapes. From this point of view, it might be appropriate to establish the term *sacnakhelo* (pressing room) for wine cellars in general in the scientific literature.

As was mentioned above, it was quite remarkable to find a pagan ritual place with a small bakery and hearth in the north-west corner of the wine cellar. This is doubtless evidence for vestiges of pagan rituals. Similar phenomena were recorded during excavations at the Zhinvali settlement (Rcheulishvili 1990, 108-109).

There were remarkable finds of quantities of various kinds of pottery of a kind found elsewhere in Georgia (Mitsishvili 1967, 10-38). Some of the individual idiosyncrasies, however, suggest that both glazed and unglazed tableware and household pottery and building ceramics were produced locally.

The excavated sites and finds have provided important scientific information, which creates a firm basis for the study of the economy, culture and everyday life of the population of Medieval Samtskhe. Thanks to this research we have fresh information concerning ancient Georgian wine-making in the Samtskhe region.

The results of the palaeobotanical analysis of grape pips found in one of the wine cellars of the 15th-16th centuries deserve special attention. It seems that we may have here some primitive varieties of grapevine. There may, however, be another explanation: given the difficult political situation of Samtskhe, and of Atsquri in particular, as reflected in endless wars, it is possible that normal agricultural activities such as pruning were not always carried out. In viticultural terms pruning is a highly important matter, but perhaps it was impeded as a consequence of fighting. Nevertheless, this branch of agriculture was not destroyed. It is worth mentioning in this connection the well-known site of Vardzia, a monastic complex with a great importance with regard to the zonal development of wine-making in Samtskhe. It is situated at an altitude of 1300m and contained more than 600 rooms. Most rooms had *pithoi* fitted in the floor for storing food as well as wine. They had different capacities, the smallest holding 60 litres and the largest 1800 litres. The capacity of the *pithoi* in this monastery alone was approximately 91,000 litres.

In terms of Medieval wine-growing, the recent finds at Atsquri allow us to conclude the following: the palynological evidence points to the climatic conditions in Samtskhe having been rather different between the end of the 13th century and the 16th century from today's conditions. The presence of oak, lime, oleaster, sea-buckthorn, and hornbeam point to a much warmer climate then. This is confirmed by the discovery spores of fern, adder's tongue fern, and cretan fern. All these plants grow today in a lower forest zone, and do not occur higher than 700 m, while Atsquri is situated at 960 m above sea level. The palynologist Eliso Qvavdze has concluded that it was the warm climate that stimulated the development of viticulture.

The warmer climate presumably allowed olives to grow, but the eventual fall in temperature destroyed both viticulture and olive-growing in Samtskhe. The fall in temperature was global, but there are nevertheless still some kinds of grapevine preserved in Samtskhe that are adapted to a severe climate and grow there perfectly well.

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Illustrations:

Pl. I – Vani. *Pithos* burial, beginning of the 3rd century BC

Pl. II – Dzalisa. Dionysus and Ariadne. Mosaics of the bath floor. 3rd century AD

Pl. III – IV – Atsquri. Plans of wine-press. 10th -15th centuries

Pl. V – Atsquri. Measurement of the wine-press wall

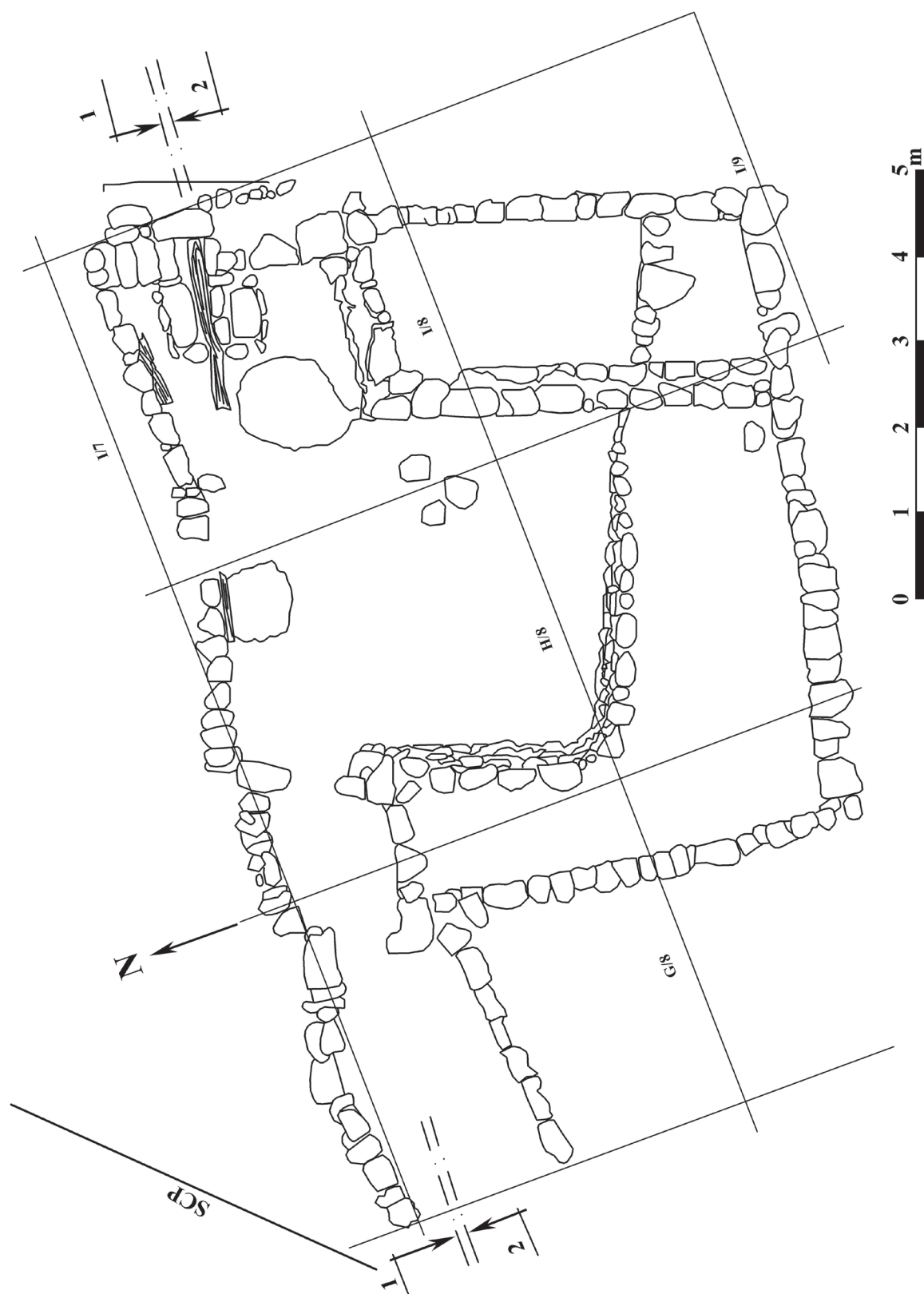
Pl. VI – Atsquri. 1. Section of the press wall with a *pithos* used as a tank; 2. Press stones; 3. Press, Plan

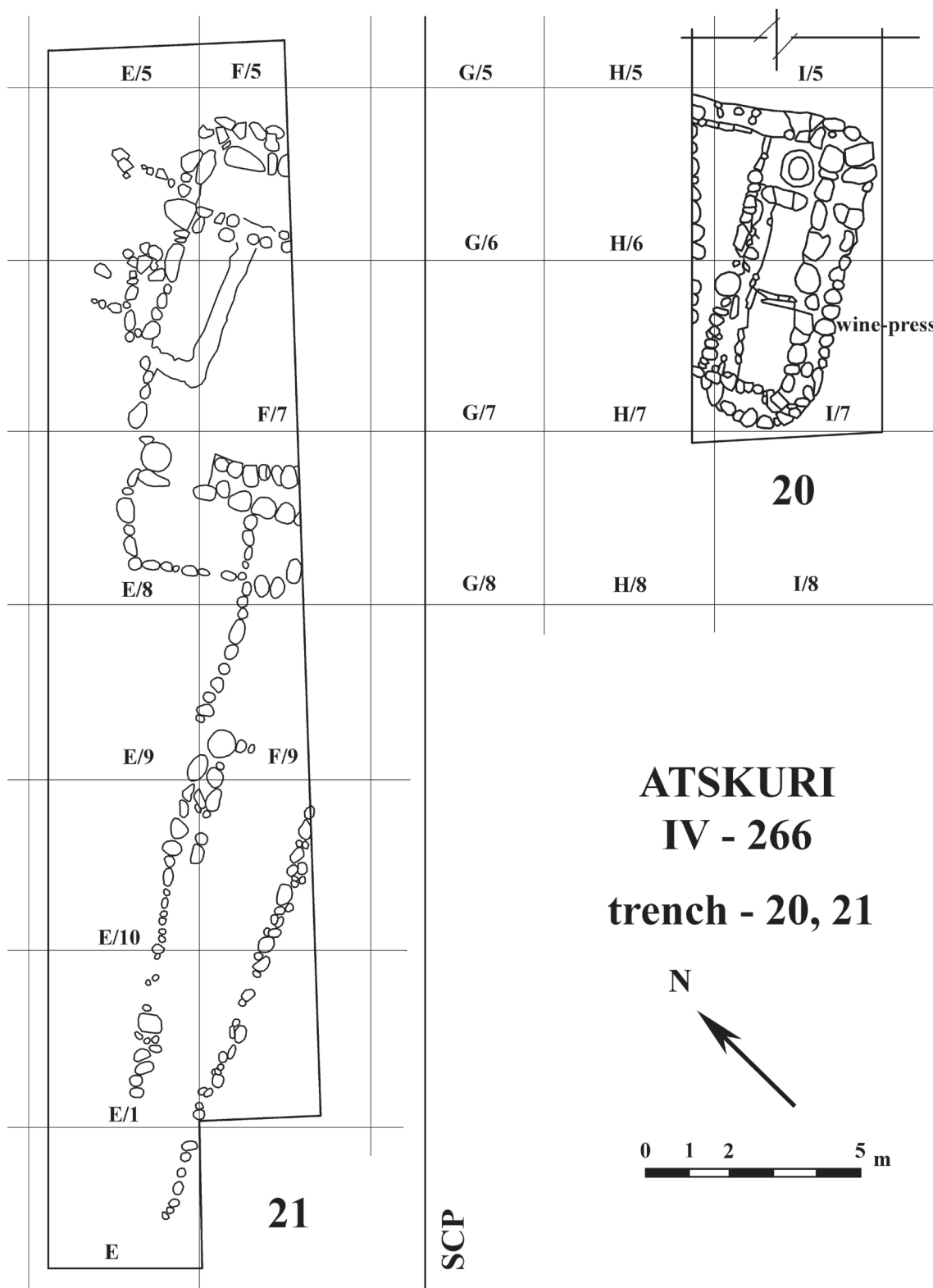
Pl. VII – Atsquri. Press from Trenches Nos 9, 12, 20

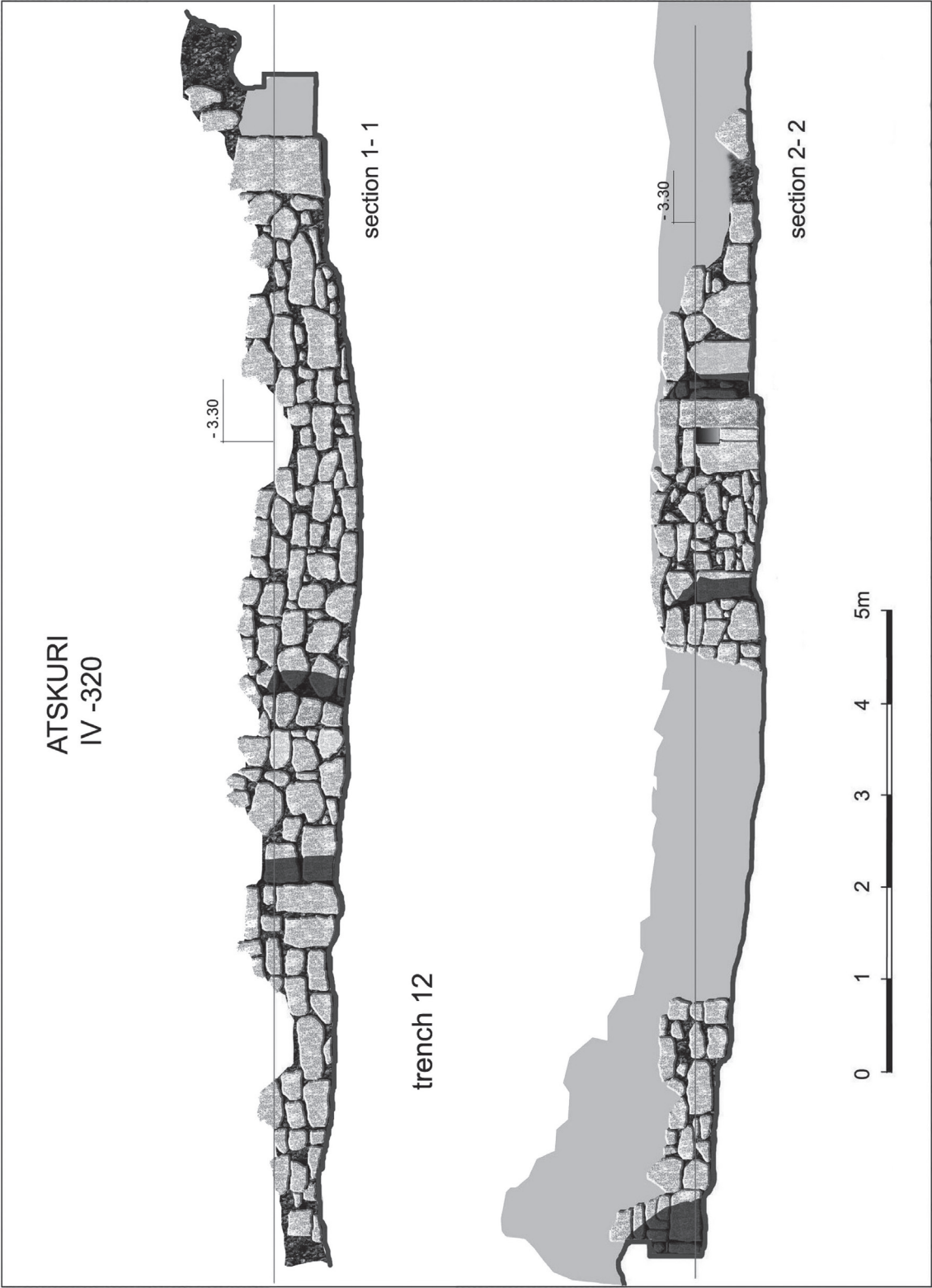
Pl. VIII – Atsquri. Trench No. 9. 1. Tank; 2. Antefix inscribed "Saint George".

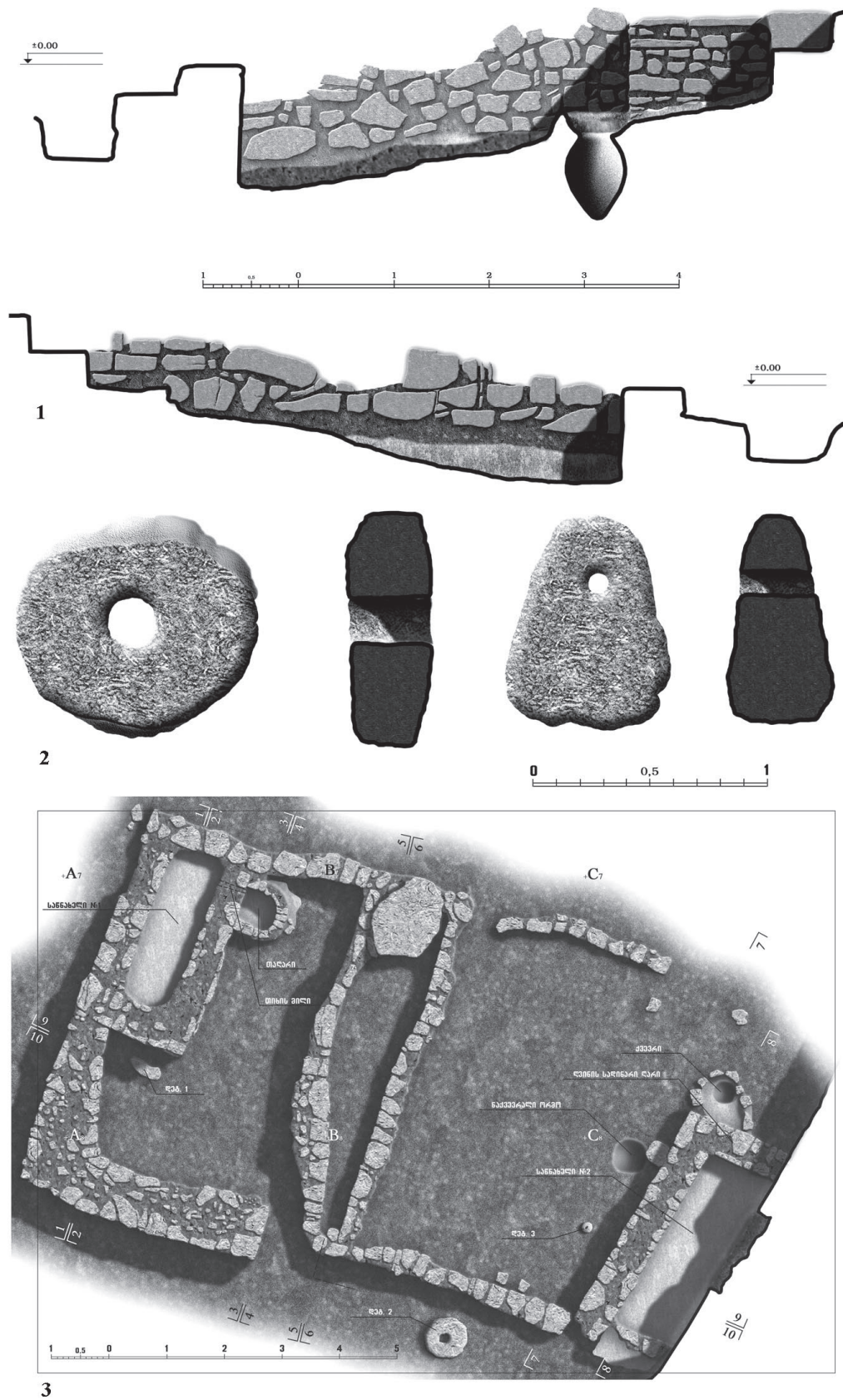














Trench No 9



Trench No 12



Trench No 20



1



2