

SHEPSI, THE OLDEST DOLMEN WITH PORT-HOLE SLAB IN THE WESTERN CAUCASUS

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ABSTRACT. The dolmen known as Shepsi was accidentally discovered on the Black Sea coast (Tuapse region, Russia). Radiocarbon dates show that the classic trapezoidal construction of the Caucasian dolmens with a port-hole appeared in the region as early as 3250 BC. The distinctive structural characteristic for dolmens of that time was a floor slab laid between the side slabs, which were embedded in the ground. The material complex and ¹⁴C dates show that this type of dolmen coexisted with the Novosvobodnaya-type of the Maikop culture, located on the northern slope of the main Caucasus ridge. This leads to a new hypothesis concerning the regional origin and further development of the megalithic structures in the western Caucasus.

INTRODUCTION: TWO TYPES OF MEGALITHS IN THE WESTERN CAUCASUS

The most common monuments of the Bronze Age in the western Caucasus are megalithic tombs or dolmens with a port-hole slab—a distinctive entrance to a burial chamber. The entrance is a relatively small (25–45 cm) access, mostly round, but sometimes either square, semicircular, or oval. Most megalithic tombs consist of portal dolmens with a trapezoidal-shaped burial chamber constructed of slabs, which narrows towards the end. The entrance is characterized by a pair of tall portal slabs. These are placed inside the side slabs. Usually, the chamber is covered by a single large capstone, placed over the entrance and sloping downwards towards the rear. The cover may also consist of two partly overlapping capstones, the largest for the burial chamber and the smallest for the portal.

Particular characteristics of the dolmens are the shape and the assembly of the stones. The edges of these show carefully cut out tongues and grooves, enabling assembly in the burial chamber. There are tongues or grooves at all the edges, fitting the floor slab, the side walls, and the capstone. The tongues of the side walls were connected to the grooves of the floor slab, the latter being used as a foundation for a paneled wall of the whole structure. The side stones usually were held in place by buttresses leaning against them from the outside, later concealed by a stone cairn and walls.

In the relatively small area of the western Caucasus, the number of dolmens is estimated between 2000 and 3000. The original total number must have been truly enormous at the time. The human remains found in the dolmens show a continuous use of collective and successive burials. There were several different types of burials, but in all cases the bodies or defleshed bones of the dead were placed in the dolmen through the aperture in its stone front. The number of burials per dolmen varies from 1–2 to about 80 (Trifonov et al. 2012). In some cases, one could determine the type of burial as contracted on its side.

The material culture related to the dolmens is quite homogeneous and continuous from the 3rd through the last quarter of the 2nd millennium BC (Felitsyn 1904; Markovin 1978, 1997; Trifonov 2001a). Another group of megaliths in the western Caucasus is the so-called “two-chambered

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tombs” of the Novosvobodnaya type, originally discovered and designated as a “dolmen” by Veselovsky (1901) in the vicinity of the village Tsarskaya (present-day Novosvobodnaya) in 1898 (Popova 1963). This group consists of a dozen tombs located in the mountainous area of Adyghea (Rezepkin 2000, 2012). A map of the region with the relevant sites is shown in Figure 1.

The tombs of the Novosvobodnaya type are rectangular in shape and constructed of well-dressed slabs fitted to each other with tongue and groove joints. Side slabs are dug into the soil, while the floor slab of the burial chamber is laid flat on the ground between the side walls.



Figure 1 Map of the western Caucasus. The dolmen Shepsi (1) and other sites mentioned in the text (2, 3) are indicated. Also indicated are the boundaries of the Dolmen and Maikop cultures.

This type of tomb consists of two different compartments: a burial chamber with a port-hole slab with a round or square access hole in it, and an antechamber with side slabs set inside the side slabs of the burial chamber. Usually, a slab or set of slabs partly closes the entrance to the antechamber, standing between or in front of the side walls.

In all cases, the burial chamber and antechamber had a separate roof made of massive slabs. The antechamber roof usually overlaps the burial chamber roof. In general, the whole structure is secured with a stone cairn and a curb. The preferred orientation of the tomb entrance is to the southeast. Despite their design, the Novosvobodnaya-type tombs do not show signs of continuous use as a collective crypt. Single inhumations were placed in the burial chamber, mainly on the right side. Rich grave goods were placed in both compartments, in the burial chamber as well as in the antechamber.

While the main part of the material culture found in the Novosvobodnaya-type tombs have a lot in common with the Maikop (Majkop) culture, there is a distinctive group of pottery that stands apart from the Maikop ceramic tradition. The distinct funeral rite and the types of pottery enabled to define the Novosvobodnaya group of tombs as a separate variant of the Maikop culture, or even as a separate archaeological culture (Safronov 1989; Rezepkin 2012).

Only a few radiocarbon dates clustering around the second half of the 4th to beginning of the 3rd millennium BC are available for the burials in the tombs of the Novosvobodnaya type, but all of

them correspond to the later and terminal period of the Maikop culture. The range of ^{14}C dates for dolmens directly succeeds those of the Maikop culture, and covers the third and (almost completely) the 2nd millennium BC. Considering their proximity in space and time, and the resemblance between the rectangular “two-chambered” tombs of the Novosvobodnaya type and the trapezoidal dolmens, the question is raised whether one is connected to the other, or whether they are independent.

ARCHAEOLOGICAL PROBLEM

Few hypotheses have been put forward to explain the basic differences and similarities between the various groups of Caucasian megaliths. All of them are based on concepts of migration. The hypothesis of a west European origin of the Caucasian megalithic structures dates back to the beginning of the 20th century, when the Russian archaeologist A Spitsyn (1903) proposed that the origins of the ceramics found in 1898 in the megalithic tomb near Tsarskaya/Novosvobodnaya are linked to the Globular Amphora culture of western Europe. This concept was worked out further by Nikolaeva and Safronov (1974), who argued that the practice of burials in the Novosvobodnaya-type tombs was introduced in the Caucasus together with other features like Globular Amphora, Funnel Beaker, Corded Ware, and even the Baden-Boleraz cultural complex. This then spawned the local development of “two-chambered” tombs into “true” dolmens (Nikolaeva and Safronov 1974; Safronov 1989).

Lavrov (1960) was the first to propose the possibility that the megalithic structures were copied from somewhere in the Mediterranean, as a result of the marine expeditions of the Caucasian people. Markovin (1978) explicitly suggested the Pyrenees in the Iberian Peninsula as the area of dolmen origin. Markovin, who did not distinguish between “classic” dolmens and the tombs of Novosvobodnaya, believed that the “Novosvobodnaya dolmens” are the direct result of contacts between neighboring Dolmen and Maikop cultures (Markovin 1978).

Finally, Rezepkin (1988, 2000, 2010, 2012) proposed a compromise between the north European and Mediterranean hypotheses. In his opinion, the appearance in the Caucasus of Novosvobodnaya burials (early megaliths) is linked with migrations of the Funnel Beaker culture, while the appearance of “true dolmens” (late megaliths) in the Caucasus is the result of migrations from the Iberian Peninsula.

It is worth noting that all three hypotheses are mutually exclusive. In addition, each one by itself was in conflict with established local chronologies and cultural contexts. The transformation hypothesis of the Novosvobodnaya cultural type into the Dolmen culture ignored the total lack of the Maikop legacy in the dolmen pottery complex. The idea that the Novosvobodnaya dolmens evolved from the “classic” dolmens was unacceptable, because the latter were younger than the Novosvobodnaya two-chambered tombs.

Lastly, Rezepkin’s concept of the Novosvobodnaya origin due to the migration of people with pottery and megaliths from western Europe to the western Caucasus is in contradiction with the author’s own conclusion, that the two-chambered tombs appeared during the later or even terminal stage of the Novosvobodnaya culture (Rezepkin 2012). It became obvious that the main problem was the lack of evidence to explain what is behind the similarities and differences between “Novosvobodnaya” tombs and “classic” dolmens. Until recently, this problem was hampered by the shortage of ^{14}C dates for either.

SHEPSI: ARCHAEOLOGICAL EVIDENCE

The dolmen known as Shepsi was discovered in 2012 by local residents. The discovery was accidental, after flooding of the River Shepsi caused by heavy rains. It is located on the Black Sea coast,

in the Tuapse region (Russia), at 44°03.015'N, 39°09.467'E (see Figure 1). Space photographs from Google Maps from the period before 2010 clearly show that the spot of the site was overgrown with shrubs and trees. The course of the Shepsi River was changed and the tomb was exposed from under the ancient river deposits, which overlaid both the dolmen and the settlement related to the dolmen.

The stratigraphy shows that the Shepsi dolmen was cut into the lower level of the settlement accumulation and overlain by more younger cultural deposits. Later, both the dolmen and the settlement were buried under the river deposits due to a changing Black Sea level (known as the New Black Sea transgression). A 2- to 3-m-thick alluvial deposit left the burial chamber to remain untouched since approximately the end of the 2nd millennium BC.

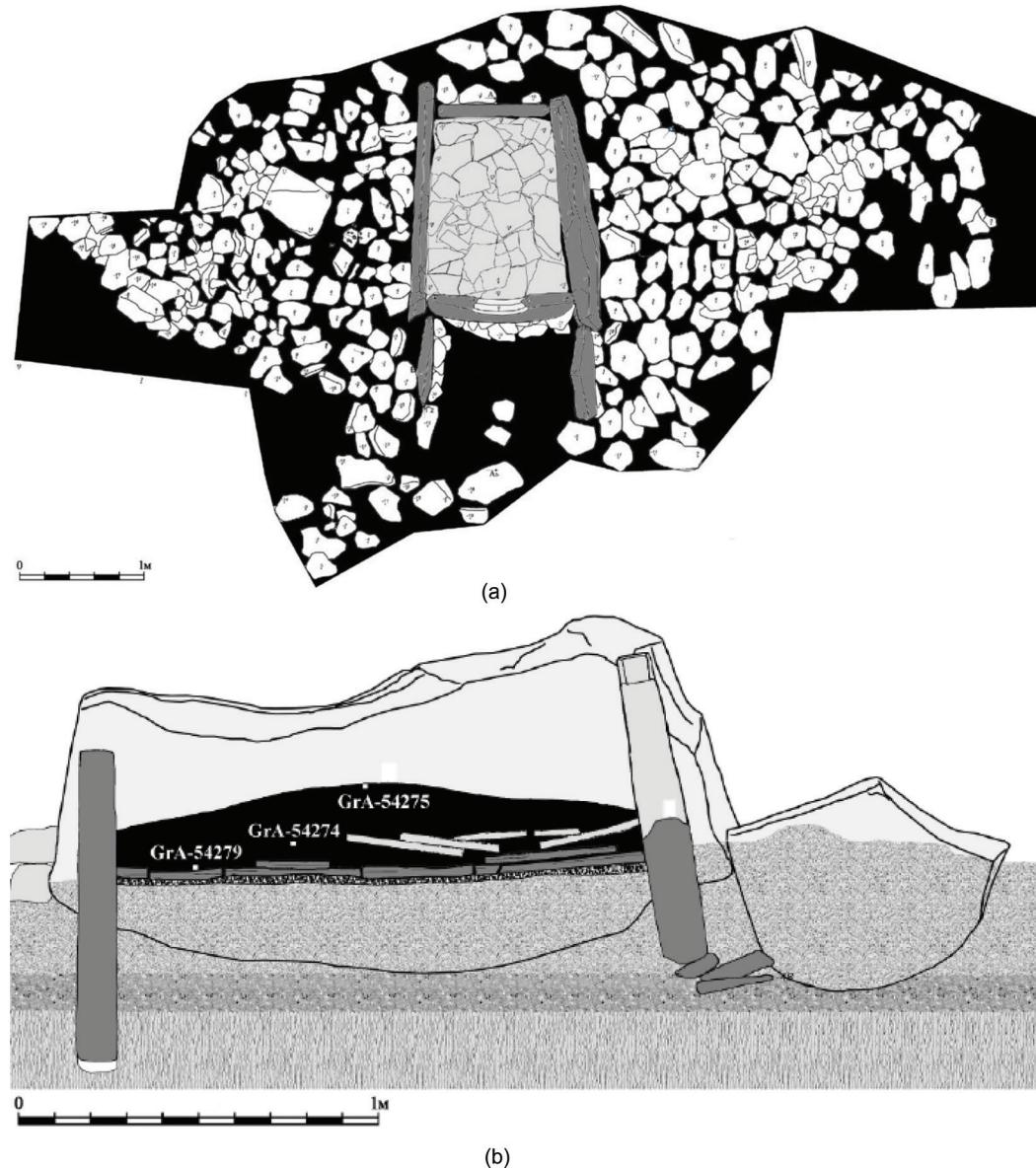


Figure 2 Layout of the dolmen Shepsi: (a) general layout of the dolmen and cairn (in gray); (b) cross-section through the antechamber. The location of the ^{14}C samples are indicated by their laboratory codes (see Table 1).

At the time of the beginning of the excavation, the Shepsi dolmen appeared badly damaged by the water flooding. The capstone was missing, and the upper parts of the side slabs and portal stones were damaged. Nevertheless, the basic features of the construction are still clearly recognizable. The burial chamber was trapezoidally shaped and constructed of massive slabs applying the tongue-groove technique. The side slabs were dug into the soil, while the floor slab was laid flat on the ground between side walls. Details of the structure are shown in Figure 2.

The entrance hole (45×45 cm) in the front slab was rectangular with round corners, and was originally closed with a stone plug. The port-hole slab was flanked on either side by upright standing slabs placed inside the line of the side slabs of the burial chamber. The length of the burial chamber was 1.52 m, and the maximum width was 1.16 m. The length of the portal or antechamber was about 1 m. The entrance to the burial chamber faces southeast, sloping down towards the river. The whole dolmen was encased in a (semi)circular cairn with a diameter of about 8 m. Photographs of the Shepsi dolmen are shown in Figure 3, which depicts the entrance hole in the front slab (Figure 3a) and the partly preserved bones from the first burials (Figure 3b).

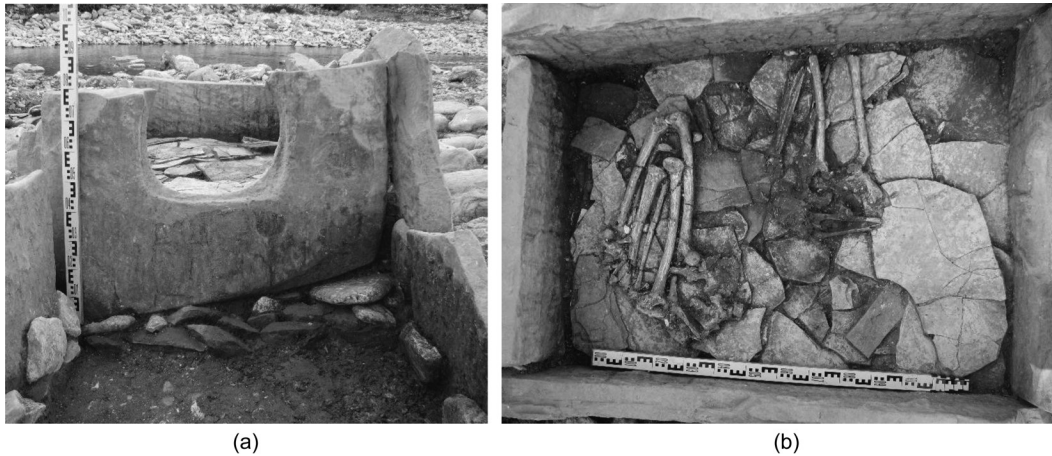


Figure 3 The dolmen Shepsi during its rescue excavation in June 2012: (a) the entrance slab with port hole; (b) the partly preserved lower burials.

About 20 human skeletons of different age and sex, including infants, were found in the chamber. None was older than 55 yr. Of the successive burials, the first included a man, 25–30 yr old, and a woman, 35–45 yr old. They were preserved in original position (crouched on the right side, with the heads of the bodies to the southeast). The rest of the human remains were partly disarticulated.

A distinctive group of objects was mixed between the deposits of bone. The pottery, known as “black polished ware” was represented by two beakers, a jug, and a bowl. The other finds consist of six ovine astragals, a small bronze hafted knife, a bronze spiral earring, a bone hafted arrowhead, pieces of bone pins, a piece of silver decoration, and a decorated pebble with hole (see Figure 4).

SHEPSI: RADIOCARBON DATES

A first and important series of ^{14}C dates was obtained for the Shepsi site. Five bone dates were measured by accelerator mass spectrometry (AMS) in Groningen (GrA), and one charcoal date was measured conventionally in St. Petersburg (Le). The dates are shown in Table 1.

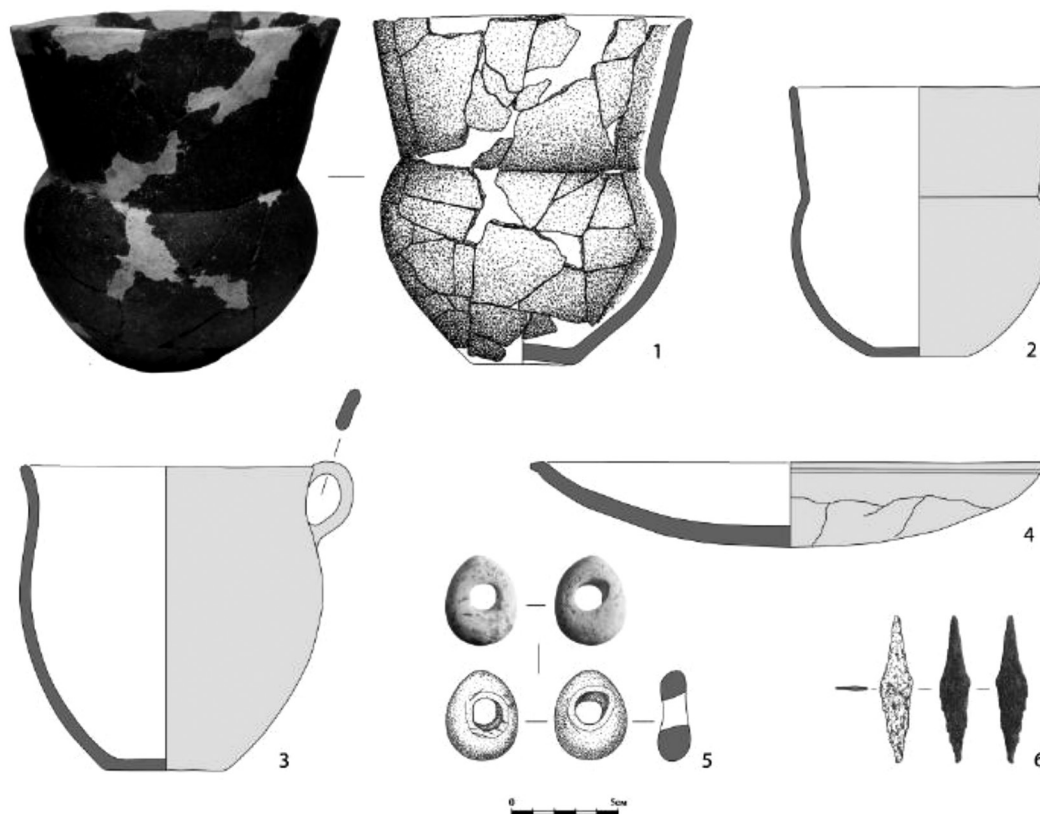


Figure 4 Burial goods found in the dolmen Shepsi: 1–4 pottery, 5 – decorated pebble, 6 – bronze knife

The locations of the ^{14}C samples are indicated in Figure 2 by their laboratory codes. Three ^{14}C dates (nr 1–3 in Table 1) were obtained from human bone samples taken from remains of three different skeletons laying on top of each other. One sample was taken from the thigh bone of the male, 25–30 yr old, whose body was buried first. Another sample (first molar) was taken from the upper jaw of a skull that was found in the upper layer of the bone accumulation inside the chamber. A third sample (molar) was taken from a skull found in the middle of the bone stratum. The aggregated thickness of the deposit was about 25 cm, so that the difference in depth between the samples was ~10 cm.

At present, these are the oldest ^{14}C dates for dolmens in the western Caucasus (Table 1). Another set of three samples (nr 4–6 in Table 1) was obtained from the cultural deposit of the settlement that overlaid the burial chamber and the cairn of the dolmen. This set consists of two animal bone samples (*Capra/Ovis* and probably *Bos*) and a charcoal sample from a hearth located directly on the surface of the cairn.

The $\delta^{13}\text{C}$ values of the bone samples are also shown in Table 1. For two bones, also the $\delta^{15}\text{N}$ values are available. Sample nr 1 (GrA-54279) has $\delta^{15}\text{N} = 8.9\text{‰}$, and sample nr 4 (GrA-56034) has $\delta^{15}\text{N} = 3.6\text{‰}$. Both are common values for human and sheep/goat, respectively. The ^{14}C dates for the human remains from the burial chamber are in good agreement with the stratigraphic depth of the samples and are consistent with a continuous chronology. The dates show that the dolmen was used as a sepulcher for ~300 yr between the 33rd and 29th centuries BC. About 500 yr later, the cairn

Table 1 ^{14}C dates of the samples from the Shepsi location.

Nr	Sample location	Material and index of sample	Lab code	^{14}C age (BP)	Calibrated age (1 σ , cal BC)	$\delta^{13}\text{C}$ (‰)
1	Burial chamber, floor level, relative heigh (-12)	Human thighbone Shps-12-287	GrA-54279	4525 \pm 35	3360 (14.5%) 3320 (1.6%) 3260 (52.1%) 3110	-19.91
2	Burial chamber, floor level, relative heigh (-7)	Human teeth M1 Shps-12-255	GrA-54274	4390 \pm 30	3090 (7.5%) 3060 (60.7%) 2920	-19.18
3	Burial chamber, top level, relative heigh (+10)	Human teeth M Shps-12-8	GrA-54275	4295 \pm 30	2920 (68.2%) 2885	-19.76
4	Cultural layer, top level	Animal bone, <i>Capra/Ovis</i>	GrA-56034	3925 \pm 35	2470 (47.9%) 2390 (20.3%) 2340	-20.36
5	Cultural layer, top surface of the cairn, bonfire site	Charcoal	Le -9736	3980 \pm 50	2580 (64.9%) 2450 (3.3%) 2400	
6	Cultural layer, level of the cairn bottom	Animal bone, <i>Bos primigenius</i> Shps-12-292	GrA-56072	3945 \pm 40	2560 (4.5%) 2540 (49.6%) 2400 (14.1%) 2340	-21.52

Table 2 ^{14}C dates of the samples from the tombs of Novosvobodnaya type of the Maikop culture.

Nr	Site	Sample location	Sample material	Lab code	^{14}C age (BP)	Calibrated age (1 σ , cal BC)
1	Tsarskaya, 1898, kurgan 1	Burial chamber, floor level	Bone	OxA-5063	4500 \pm 60	3350 (68.2%) 3090
2	Tsarskaya, 1898, kurgan 2	Burial chamber, floor level	Deer tooth	GrA-24441	4270 \pm 45	2920 (56.6%) 2870 (9.3%) 2780 (1.6%) 2760 (0.8%) 2710
3	Tsarskaya, 1898, kurgan 2	Burial chamber, floor level	Textile	GrA-21334	4200 \pm 60	2890 (12.8%) 2850 (55.4%) 2670
4	Novosvobodnaya (former Tsarskaya), 1979-1991, kurgan 30, grave 1	Burial chamber, floor level	Wood	Le-4528	4620 \pm 40	3500 (47.5%) 3430 (20.7%) 3350

of the dolmen was overlaid with cultural deposits of the settlement dating to the 25th–24th century BC. Unfortunately, there is at present no sample material available for dating the cultural deposit on which the dolmen was built. It is still unknown whether there are any cultural and chronological relationships between the deposits from below and above the dolmen.

DISCUSSION

The ^{14}C dates of human remains and types of grave goods clearly show that the dolmen Shepsi has many similar aspects of the Novosvobodnaya-type Maikop culture. First and foremost, it has black polished pottery ware, which has direct parallels with black polished beakers from megalithic tombs and graves of the Novosvobodnaya culture. The same can be said of the bone hafted arrowhead, bone pins, and bronze knife (see Figure 4) (Rezepkin 2012). Second, there are quite a number of similarities between the dolmen Shepsi and the Novosvobodnaya-type tombs. Besides the general layout (a rectangular burial chamber with antechamber inside a cairn), presence of a port-hole slab, and the tongue-groove technique of slab fitting, the dolmen and the tombs have identical construction: the side slabs were dug into the soil, while the floor slab was laid flat on the ground between the side walls (Figure 2). Third, the dolmen Shepsi and the tombs of Novosvobodnaya have the same orientation of the entrances—towards the southeast. Also, the crouched bodies placed into the burial chambers of both the dolmen and the tombs are oriented the same way. Finally, we conclude that the ^{14}C dates for the burials in the dolmen Shepsi are within the range of a few other established ^{14}C dates available for burials in Novosvobodnaya-type tombs (see Table 2) (Shishlina et al. 2003; Korenevsky and Rezepkin 2008).

Both the material complex and the ^{14}C dates provide a solid ground to believe that the dolmen Shepsi and the two-chambered tombs of Novosvobodnaya coexisted for some time and were culturally related to each other. The most pressing question to date is, what was the nature of this relation? To answer the question, we should look at the differences between the dolmen Shepsi and the Novosvobodnaya tombs. A major difference in construction and design concerns the layout of the burial chambers. The burial chamber in the dolmen Shepsi has a trapezoidal shape, while burial chambers in the tombs of Novosvobodnaya are rectangular. The dolmen Shepsi combines typical features of both the two-chambered tomb and later “classic” dolmens, which in most cases are trapezoidal. Another difference concerns the burial ritual. Both the dolmen and two-chambered tomb have a port-hole slab and are designed to be used as a collective sepulcher for successive burials. However, all tombs of Novosvobodnaya have been used as single graves showing no signs of secondary burials. It is very significant that the Novosvobodnaya-type tomb known as Psebe, with its collective successive burials, was discovered quite far beyond the Maikop/Novosvobodnaya culture area, just 30 km from the dolmen Shepsi (see Figure 1) (Teshev 1986).

The chronological and spacial context of the similarities and differences between the dolmen Shepsi and the Novosvobodnaya-type tombs enable us to hypothesize about the development of megalithic phenomena during the Bronze Age in the western Caucasus. Megalithic structures of domestic origin appeared during the second half of the 4th millennium BC. In the mountainous area of the western Caucasus, the dolmen culture superseded the Darkveti-Meshoko culture (Trifonov 2001b) and came in contact with the Maikop culture in the foothills of the northwestern Caucasus. As a result, the Novosvobodnaya type of the Maikop culture emerged in the area of contact.

The most significant common feature of megalithic construction for this period was the tradition to dig side slabs of the tomb into the soil, while the floor slab was laid flat on the ground between the side walls. Later, this tradition was changed to slab-on-grade or strip foundation for the side walls. When the Maikop culture disappeared from the northwestern Caucasus (around 2900 BC), the dol-

mens with a foundation for paneled walls became predominant in the whole area. Probably, a series of diverse Caucasian dolmens is a result of their local development. The emergence of the dolmen Shepsi is strong evidence for direct and unbroken continuity from the two-chambered tombs of the Novosvobodnaya type into the “classic” dolmens.

CONCLUSION

The ^{14}C dates obtained for the dolmen Shepsi and its cultural context provide important conclusions concerning the development of megalithic monuments in the Bronze Age of the western Caucasus. The classic trapezoidal layout of the Caucasian dolmens with a port-hole appeared in the region as early as 3250 BC. The distinctive structural type of dolmens during that time was that a floor slab was placed between the side slabs embedded into ground.

Just two dolmens of this type (Shepsi and Psebe) are discovered thus far, both located on the seaside slope of the main Caucasian ridge. They were used as collective sepulchers for a long time. The ^{14}C dates clearly show that these dolmens were contemporaneous with the Novosvobodnaya type of the Maikop culture, located on the northern slope of the main ridge. In addition, the material culture shows that both cultures were in contact with each other.

Several structural similarities between dolmens of the Shepsi type and tombs of the Novosvobodnaya type suggest that they are different manifestations of the same common phenomenon. From this point of view, the difference between “dolmens” and “two-chambered tombs” is significant. This suggests that the Novosvobodnaya type was a result of contact between the Dolmen and Maikop cultures in the foothills of the northwestern Caucasus.

We suppose that the diverse dolmens in the western Caucasus were the results of local development, which included the invention of remarkable building techniques like a flat flooring slab and perhaps ashlar masonry. Given the local west Caucasian origin of the black-polished pottery ware, which is associated with dolmens, the Dolmen culture probably must have had local roots as well.

While the origin of the Caucasian dolmens with a port-hole slab is still an enigma, its purpose seems clear. Their primary function was a depositary of human remains. The basis on which early forms of megalithic burial constructions were developed may have been adopted from secular architecture of storehouses. Different types of granaries could serve as a model for different early forms of megalithic burial structures. The existence of such a connection between ritual and secular architecture could explain specific features of dolmen construction, layout, dimensions, design, decoration, and even choice of building material. There is nothing better than stone for use as an eternal storehouse of human remains. Similarities between dolmens with port-hole slabs in the Black Sea region (Turkey, Bulgaria), and beyond in Europe and Asia, cannot always be used to determine their origin. New approaches to this problem should be developed.

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