

CHARACTERISTICS OF STONE ARTEFACTS FROM THE EARLY ENEOLITHIC SETTLEMENT OF RAKITOVO, PAZARDZHIC REGION (SOUTH BULGARIA).

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The Early Eneolithic settlement near Rakitovo found on the border between the eastern and western Rhodopian mountains is situated in the southern part of the Pazardzhik region, in the Northern Rhodopian anticline, which comprises archaic and proterozoic metamorphites, Pre-Cambrian gneisses, schists and marbles, Pre-Cambrian and Paleozoic ultrabasic bodies carbonate rocks, marl flysch etc. Also found are magmatic rocks from the Upper Cretaceous, Paleogenic and Neogenic sedimentary rocks, effusive rocks (rhyolites) (Batakliiev 1969: 15-17, 35-25; Encyclopaedia 1986: 22-23; Bonchev 1955: 106, 123, 143, 147), which creates the impression that in this case we have in mind a high mountain settlement. This settlement arose in a region with a considerable variety of rocks, all of them potential sources of raw materials. The aim of our study is to establish which of these resources were exploited and to what extent the Eneolithic inhabitants used them. In other words this is the first attempt to study the raw material supply of a settlement. The authors' presumption is based on the existence of Neolithic tells where life continued for centuries and probably millennia. Their existence was determined by suitable sources of raw materials that were successfully developed, and which provided the Neolithic-Chalcolithic population with the possibilities for a stable subsistence. The main element in the raw material base in the Neolithic were rocks and soils. The latter were tilled manually with hoes. We began this study of rocks as they were the main source of the soil in the region and a source of the raw material for stone implements.

The cultural layers in this settlement have a total thickness of 1-1.45 m. It comprises of two building horizons that cover an area of 3,300 sq. m. The set-

tlement was completely excavated in 1974-1975. (Radouncheva *et al.* 2002: 10-11). This is a supplementary study of the already published results but not studied from the point of view of the sources of raw materials (Radouncheva *et al.* 2002). Thirty-three samples were taken for thin sections from fragmented stone inventory from the two building horizons. These were subjected to microscope analysis conducted by E. Dimitrova, of the Institute of Geology, BAS. The thin sections came from the following implements and rock samples:

	Type of implement	Total	Number of rocks
1	Adzes	23	6
2	Axes	6	5
3	Hammers	4	2
	Total	33	

We shall examine the sources of raw materials of the respective types of implements. Adzes are examined first. They were made from the following materials:

No.	Type of rock	Implements No.	%
1	Actinolite-tremolite schists	15	65,22
2	Amphibolite	2	8,70
3	Diorite	2	8,70
4	Serpentinite-actinolite-tremolite rock	2	8,70
5	Serpentinite	1	4,34
6	Serpentinized Peridotite	1	4,34
	Total	23	100,00

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Axes were made from the following type of rock:

No.	Type of rock	Implements No.	%
1	Actinolite-tremolite schists	2	33,33
2	Diorite Porphyrite	1	16,67
3	Gabbro-diorite Porphyrite	1	16,67
4	Hydrothermally altered peridotite	1	16,67
5	Quartz vein	1	16,67
	Total	6	100,00

The following rocks were found with hammers:

No.	Type of rock	Implements numbers	%
1	Quartz vein	3	75,00
2	Hydrothermally altered peridotite	1	25,00
	Total	4	100,00

According to the extent of use the above rocks can be classified as follows:

Type of rock	Implements numbers	%
1.Actinolite-tremolite schist	15	45,45
2.Diorite Porphyrite	4	12,12
3.Quartz vein	4	12,12
4. Serpentine	3	9,03
5. Amphibolite	3	9,03
6.Serpentinized Peridotite	1	3,03
7.Gabbro-Diorite Porphyrite	1	3,03
8.Lomonitized Actinolite schists	1	3,03
9.Hydrothermally altered Peridotite	1	3,03
Total	33	100,00

According to E. Dimitrova microscopic analysis has shown that the artefacts studied originate from rocks found around Rakitovo - mainly in Rhodopian metamorphic complex (actinolite-tremolite schist, serpentinite, quartz veins). There are rare veins, igneous rocks, diorites and Gabbro-diorite porphyrite, which

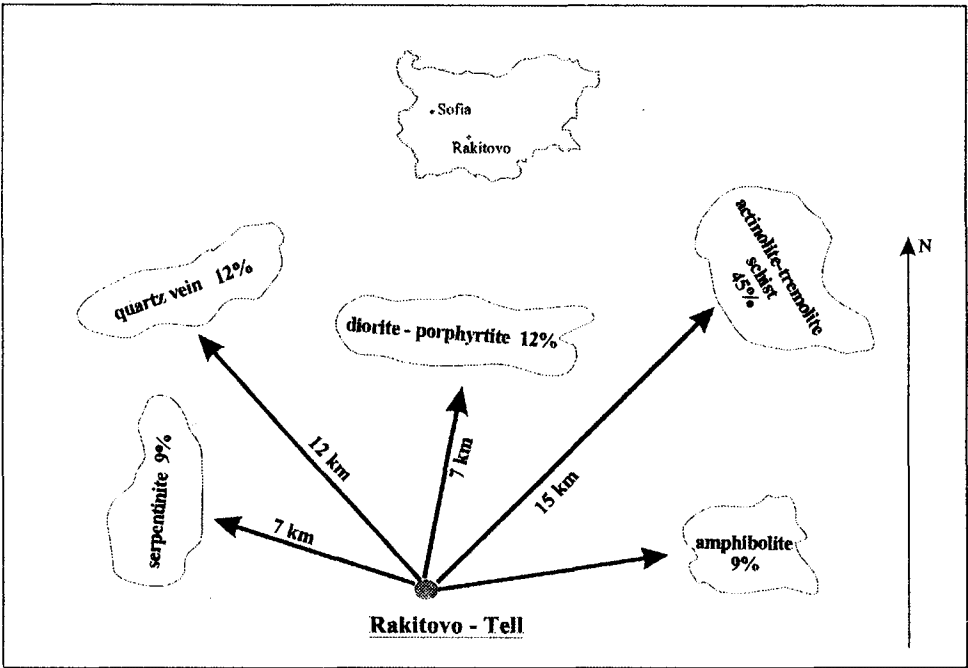


Figure 1.

are pre-Cambrian. They were all mentioned in the introduction to this study. All quarry sources of the rocks used by the inhabitants of the Eneolithic settlement at Rakitovo are to be found in its vicinity (fig. 1).

No doubt their components show a marked presence in soils around the settlement and contribute substantively to both improving their fertility and the ease of manual tillage with primitive implements. These are the main factors for determining the preferences of early farming communities for settling the area near Rakitovo for more than a century.

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