

## DECORATIVE ARCHITECTURAL DETAILS IN THE BASILICA N4 AT THE TOWN OF SANDANSKI (ANCIENT PARTHICOPOLIS), SOUTH-WEST BULGARIA

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**ABSTRACT.** At all the seven Early Christian basilicas found so far in Sandanski (South-West Bulgaria) the application of river boulders as construction material is documented. The walls of Basilica N4 are made of granite boulders as well as porphyry granite stones whose feldspar admixtures are coloured in pink. Also made of granite are the Roman-Dorian style columns and capitals from atrium of the basilica. The study of the marble ornaments from Basilica N4 shows that they are from two mineral types: calcite and slightly dolomite marbles. Some of them have middle-grained massive texture, light yellow knotted shell surface. Other marble material is presented in white, middle-grained but homogenous texture. The light-grey marbles are presented by shining crystal reflecting the light again with middle-grained homogenous massive texture. The application of different rocks together with the presence of several stone-pits in the region proves that the quarrying and stone-cutting was one of the main crafts in the region during Antiquity.

Parthicopolis is a town mentioned by Flegon from Trales. Michailov identifies the town making the following remark: "Parthicopolis, antea oppidum anonymum loco oppidi Sandanski" (Michailov, 1997, 401ff). From the seven Early Christian basilicas found in the town of Sandanski, built between the first half of IV and the first half of VI century, as well as from other public buildings from the same period, the application of river boulders as material for construction is known. If in the Northern, North-Eastern, Eastern and Southern part of present Bulgaria the most used material is the quadra and the chopped (cleaved) stone – the settlements along the rivers of Mesta and Struma are showing river boulders as the basic material for construction.

Locally, they are predominantly taken from the river-bed of the Sandanska Bistritza River where during the spring period of snow-melting there are a lot of pulled down huge masses of boulders and granites. Marble and sporadic application of granite boulders is found in the construction of the walls of the Basilica N4; but the granite is porphyry elvan, whose feldspar admixture is coloured in pink (Fig. 1).

Also made from granite are the columns and some of the capitals in Roman-Doric style inside the atrium of Basilica N4 (Fig. 2), the columns from the naos of Basilicas N1, 2 and 6 (unpublished "DSK III") and N7 (unpublished "G. Delchev Str. 37") and the street with the columns known as "via sacra".

Some of the columns in the atrium and the columns from the Basilica N1 are made from entire blocks of green (in pink)

porphyry elvan. The granite boulders and porphyry elvan dragged down by the spring waters of the Sandanska Bistritza River show that up the river course there was a stone-pit where the blocks for the columns and the capitals of the Early-Christian town were extracted from. At present there is a working modern stone-pit over an ancient pit, located at the Sandanska Bistritza River about 10 km North from the town (the road to Popina Laka, Lilyanovo village) and there are another four stone-pits up the river. Similar deposits of granite and porphyry elvan are still existing at different places in the Pirin Mountain but they are comparatively distant from the ancient town – fine-grain granite nearby Kresna, near Bansko in the Northern part of Pirin, and porphyry elvan at the Toshev road locality.

The marble provided as ready-made products (Fig. 3) or blocks of stone has been obtained from several stone-pits located at different distances from the town. Here and in the Western part of Pirin as well, a pre-Cambrian marble has been excavated. Proof is the smell of hydrogen sulphide that the marble releases after break up. Such a smell is released by the architectural details – capitals and columns found in the naos of the Basilica N4. There is no doubt that the marble is local and has been delivered from the region of Sandanski: for example there was a stone-pit for marble nearby Sandanski still on existence till the middle of the last century. The ancient quarries providing white-grey and striped marble to the workshops and probably trading with the town and the nearby settlements are located close to the town (settlement) of Neine.



**Fig. 1. River boulders from granite and porphyry granite – from the walls of the Basilica**



**Fig. 2. Colonnade of the atrium – granite**



**Fig. 3. Colonnade from the naos of the Basilica – marble**

The location of this town is found recently by an inscription found at the Rukaloto locality Ilindentzi village, 6-7 km away from Sandanski (Gerasimova-Tomova, 1981, 192 ff). The ancient stone-pits which are even now acting in the Zlina locality have been providing white, white-grey and striped marble to the settlements down of the Struma valley. Having in mind the location of the marble massif on the North-East side of that Pirin Mountain that is on the side of Nicopolis at Nestum in which Southwestern direction is Drama, Philippi, Kavala and Thassos, it is quite logical that the lower course of Struma River – down to Amphipolis (the Struma outflow), provides marble from the Neine stone-pits, in view of the remoteness of Thassos from Amphipolis (more than 130 km from the river outflow, not counting the distance by sea). It is very likely that the trade and provision of marbles for this settlement to be have been done by sea, but it is more unprofitable having in mind the fame of the Thassos marble and its expensive price. According to the Diocletian's rate the marble from Thassos is classified by its importance (quality) and price immediately after the marble from Prokonessos.

The study of the marble ornaments from Basilica N4 shows that there are two mineral types of rock: calcite and slightly dolomite marbles (Table 1). *The calcite marble* is white, light-grey to grey, solid and dense, with a shell-like unequal surface. The texture is massive, rarely patterned with unclear stripes. The major part is medium crystalline. Sometimes fine and coarse crystalline varieties could be found. They have medium to coarse granoblastic, rarely heterogranoblastic, slightly cataclastic structure. The mineral content is predominantly calcite, minor dolomite and under 1% quartz and muscovite. The calcite grains are mainly 2-3 mm in size.

Sample N1 is from the baptistery – small columns, capitals, tiles of basins. The marble is white with yellow shade, coarse-grained with homogeneous massive texture. The major mineral is calcite, the minor – dolomite. Sample N5 is from capital impost. The marble is white, medium crystalline with butyric luminosity and homogeneous texture of sparkling calcite crystals. Sample N7 is from coarse-grained marble with crystals grains up to 7 mm and massive homogeneous texture. Sample N8 is from white marble, sugar-shaped, medium-grained with shining calcite surfaces.

Table 1. Mineral content of marble ornaments from Basilica N4

N	CaO	MgO	CO <sub>2</sub>	Calcite	Dolomite	Rock
1	54.54	0.40	43.24	97.35	1.79	calcite marble
5	54.63	0.58	43.51	97.51	2.62	calcite marble
6	51.78	2.73	43.62	90.03	9.45	slightly dolomite marble
7	54.53	0.66	43.52	97.34	2.98	calcite marble
8	54.07	0.81	43.31	96.51	3.65	calcite marble
9	54.26	0.59	43.26	96.85	2.81	calcite marble
10	53.58	1.97	44.02	93.64	6.21	slightly dolomite marble

Sample N9 is from white marble, sugar-shaped with homogeneous texture and shining surfaces of the calcite crystals.

The *slight dolomite marbles* are mainly light-grey and snow-

white, middle to large crystalline. The texture is predominantly massive. Major mineral is calcite, minor – dolomite. The calcite is clear, represented by isometric grain with size of 0.1 to 1.0 mm. The dolomite is observed as xenomorphic, rarely rhomboid crystals extended in one direction. The rocky impurities in these marbles are also from quartz and muscovite totally under 1%. Sample N6 is from grey slightly dolomite marble, medium crystalline with homogeneous texture. Sample N10 is from light-grey fine-grained, dolomite marble with homogeneous structure.

During the study of the rocks from which the details in the Basilica N4 are made, several kinds of marble applications were found. Some of them have medium-grained massive texture, light yellow colour, knotted with shell surface. Other marble material is presented by white colour, medium-grain with homogeneous massive texture. Some of the light-grey marbles are with shining crystals, reflecting the light, again with medium-grained massive texture. Coarse-grained marble was also present, with crystals up to 6-7 mm. The studied materials proved the existence of another stone-pit that had supplied Sandanski with white marble with sugar-shaped structure. This is the quarry at the Petrovo village. Here is the origin of many burial plates, marble details etc. showing the presence of a local workshop, existing at the quarry. Together with the use of the local marble types, it was also concluded that the shining white marble was probably imported.

Except the granite, porphyry elvan and marble from the baptistery of the basilica, it was found out that another rock was used in the building – argillite. This is a compact, grey-blue clayish rock, tiles from which are forming the *opus sectile* mosaic on the floor of the baptistery. The argillites pertain to the group of the sediment rocks. There are two kinds – massive and flaggy (Georgiev, 1965, 204). The argillite from the baptistery belongs to the second kind. The use of different rocks, as well as the presence of several stone-pits in the region shows that quarrying and stone-cutting is one of the major crafts in the region. Definitely, the great number of ancient stone monuments from the Hilyadniza, Rukaloto locality and Ilindentzi village are related to the rich plastic decoration of the constructions in Neine, unfortunately not researched yet.

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## References

- Georgiev, G. K. 1965. *Mineralogy, Petrography and Mineral Deposits*. Technika, Sofia (in Bulgarian).
- Gerasimova-Tomova, V. 1981. Die Stadt Νεϊνη. – In: *Spartacus. Symposium rebus Spartaci. gestis dedicatum 2050 A. Sofia*, 192-194.
- Mihailov, G. (Ed.) 1997. *IGBulg. V. Serdicae*, 401-413 (*antea oppidum anonymum loco oppidi Sandanski*).
- Smilyanov, J. 2007. In: *History of Sandanski*. Sofia (in Bulgarian).

