

Thracian marbles from Archaic to Roman Times – Imports or local production?

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Marble use and trade in the region of Thracia took place extensively already before it became Roman province in 46 AD. Within this territory some of the most prominent and renowned marble sources of antiquity are located (e.g., Prokonnesos or Thasos). The coastal regions at the Aegean, Marmara, and Black Sea, as well as the islands, were shaped by Greek culture and these marbles were widely exported throughout the empire. Accordingly, the marble trade in these coastal or island regions was always connected to the international commerce. Recent extensive studies in the course of the project “Fingerprinting White Marbles - Quarries and Cities of Roman Thrace, 1st-3rd century AD” (Austrian Science Fund) revealed that these marbles also were extensively used not only in the coastal areas but also in the larger inland cities of Thrace. In contrast to these renowned international marbles, the numerous marble deposits in the interior, in particular in today's Bulgaria, have received far less attention, however, as will be shown in this paper, they were of considerable economic importance.



Figure 1. Geologic/geomorphological zonation of Bulgaria (Zagorchev 2009) with the marble producing areas.

The integration of the territory into the Roman Empire was followed by urbanisation and the extension of the infrastructure. Evidence of Roman marble production in the inland territory of Thrace is known in different areas: The most important geologic unit for economic marble production are the Rhodope Mountains with high-grade marble deposits. In the eastern parts of the Sredna Gora region further marble deposits occur with different metamorphic grades. Furthermore, in greenschist facies series of the NW Balkan Mountains near the town of Berkovitsa fine-grained marbles occur. Initial analyses indicate that these marbles were not only employed in the province itself, but were also exported. On the other hand, architecture and sculpture in the province of Thrace reveal striking connections to Asia Minor. By means of a sampling of the Thracian quarries on one hand and of Roman artefacts throughout the province on the other hand, the question regarding marble trade as well as the cultural and technological transfer will be discussed in the presentation. One example of far distant trade of the marble of that region is the “boarhunt” found during excavations in 2010 in Felix Romuliana in today’s Serbia sculptured from Berkovitsa marble.



Figure. 2: The sculpture “boarhunt” made of marble from Berkovitsa SW of the town of Montana in today’s Bulgaria. The sculpture or its marble was transported along a distance of more than 100 km in beeline.

More than 1400 samples from ancient quarries in Thrace and samples from artefacts in the museums all over the region were analysed in order to assign the marble of a given artefact to a corresponding quarry or quarry area. To achieve reliable results a multi method approach was applied using stable isotope analysis (O- and C-isotopes), trace element analysis by ICP-MS and petrographic investigations. Naturally, this large number of variables analysed has to be evaluated by statistical means. We used the programme packages STATISTICA and SPSS. On this basis the different marbles of Thracia can be told apart, and a very precise correlation of the artefacts to the corresponding sources can be achieved.

Zagorchev I (2009): Geomorphological zonation of Bulgaria. Principles and state of the art.- Proceedings of the Bulgarian Academy of Sciences 628(8), 981-992.

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