

Petrographic features of Bükk pottery and local sediments (with special regard to fineware)

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This petrographic study of the pottery of Middle Neolithic Bükk Culture involved 123 fine and 57 coarse potsherds. In addition, there 63 clayey sediment/soil samples taken from 10 shallow hand drillings, 1 natural outcrop and the Aggtelek Baradla cave were paralelly investigated as potential raw materials.

The Bükk fineware is carbonate-free or -poor and its plastic paste can be classified into 3 basic types (loan, fat and micaceous) with their mixed transitions. These basic types are differentiated into groups regarding their non-plastic's composition ('crystalline group' with low-grade metasedimentary and granitoid-metagranitoid rocks; 'crystalline and volcanic group' with both the above mentioned and volcanic rocks). Most of these ceramics are fine-grained and well sorted, but some coarser-grained and medium sorted are also present.

The Bükk coarseware has similar fine paste to the fineware, though it is always appear together with significant amount of coarse-grained temper (volcanic or crystalline rock and mineral clasts, argillaceous rock fragments, plant remnants).

Both fine- and coarseware have well prepared raw material. Paste of fine pottery is most probably levigated, while coarse ceramics are variably tempered. With some exception, there is no direct correlation between the petrographic composition of pottery types and the location of the archaeological sites.

Potential raw materials selected from the local sediments are predominantly loan paste types. However, some samples show more 'fat' characteristics. These samples are generally coarse-grained, with the exception of sediments from Bodrogkeresztúr. In most of the cases, the composition of their non-plastic constituents is very similar to that of the ceramics. However, there are some samples with clasts (carbonatic, limonitic nodules or mineral crystals) of origin differing from the pottery. The only potential raw material which could be directly (without pretreatment) appropriate for fine pottery making was collected at Bodrogkeresztúr. All the other sediments have to be prepared with levigation before use for fine ceramic making. Our field work was unsuccessful in finding the 'fat' and the 'micaceous' paste types.