EARLY NEOLITHIC POTTERY PRODUCTION IN HUNGARY:
A COMPARATIVE ARCHAEOMETRICAL STUDY OF KŐRŐS
AND STARCEVO CERAMICS

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This paper summarizes the archaeological context, objectives, methods and the
preliminary results of an archaeometrical research project that started some years ago
(Szakmány et al. in press) in order to characterize the oldest pottery production of
Hungary from Early Neolithic sites of the Kőrős-Starcevo Culture (dated to the first
half and middle of the VI millennium cal BC: Makkay 1989; 1992; Bökönyi 1992;
Kalicz et al. 1998; Whittle et al. 2002) in a comparative study. To reach this goal,
different scientific techniques – including petrography, X-Ray Fluorescence analysis
(XRF), X-Ray diffraction analysis (XRD), Mössbauer spectroscopy, SEM and
electron-microprobe analysis – were used.

Starévo culture represents the north-westernmost aspect of the large Early Neolithic
archaeological complex of the Balcans, which comprises towards the north-east the
Kőrős culture and furthermore eastward, the Criº culture. In Hungary the Kőrős
culture spreads in the Great Hungarian Plain, while Starcevo occupies the southern
part of Transdanubia, reaching its northernmost borders at lake Balaton (Kalicz et al.,
1998). These cultures show strong similarities in their material culture.

The characteristic pottery of the period is homogenous in form and macroscopic
features over a wide area, suggesting a high degree of cultural contacts and
transmission of technological skills.

Representative pottery samples were studied from five different Neolithic settlements
of the Kőrős Culture and compared to those coming from one Starcevo Culture site,
namely Vörs.

A smaller number of samples belonging to the Middle Neolithic Linear Pottery
Culture, was also analysed in order to investigate possible temporal changes in the
pottery production. Moreover other fired clay artefacts of the Kőrős Culture (net
weights, plaster) were also studied.

Both Kőrős and Starcevo pottery products have a fine-grained, dominantly serial
fabric, with a porous texture, containing vegetal tempering material, probably chaff.
In some samples rounded, pebble-like, almost opaque inclusions can also be found.

Macroscopically all the potsherds have a “sandwich-like” structure (black core and
brownish red margin). Compositional differences between the core and the margins
show that ceramics were fired at low temperature (maximum 750°C) with short
soaking times and high heating rate.

Data available so far seem to confirm the great homogeneity – already noticed at
stylistic level – of the ceramic production of the Early Neolithic in Hungary. Probably
local clay sources were exploited for pottery production throughout a long period,
most probably indicating cultural transmission within groups belonging to a
traditionally structured, technologically stable society.

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