

SERRA D'ALTO NEOLITHIC WARE IN THE IV MILLENNIUM BC OF SOUTHERN ITALY

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“Serra d’Alto” Middle-Late Neolithic ware is widely diffused in Southern Italy during the IV millennium BC and it shows homogeneous formal and technical features. It mainly consists in fine depurated pottery, dark brown painted with complex geometrical motives, with ribbon handles often surmounted by plastic appendices. Its wide distribution, with the recurring vessel forms and decorations, and its frequent occurrence in funerary/cultural contexts, have led many scholars to emphasise its exchange value: this ware would represent a prestige wealth in a large net of middle distance exchanges.

The aim of this archaeometric project is to verify the hypothesis of circulation of finished ceramic pots rather than of production models in different areas in Southern Italy. The first effort were focused to build up a wide database concerning mineralogy, petrography and chemistry of more than one hundred pottery samples from many excavated Neolithic villages settled in Apulia (Tavoliere and Murge) where this ware is largely documented. In this paper a new large set of 131 pottery samples will be presented from 9 excavated Neolithic villages settled in Basilicata (Bradanic trough), Calabria (Plain of Sybaris) and Sicily, where this ware is probably produced and/or exchanged.

Thin sections analyses show a quite fat clay matrix; among sheet-silicate mica crystals are recognisable. Some petrographical groups with different grain-size distribution (mainly $\leq 150/200 \mu\text{m}$) and composition can be distinguished. Textural features and low birefringence relates to a high sinterization grade. Mineralogical analyses (PXRD) show in almost all samples the occurrence of new phases, such as diopsidic pyroxenes, gehlenite and hematite. The mineral assemblage points to firing temperature range between 850 and 1,050 °C. Chemical analyses evidenced that SiO₂, Al₂O₃ and CaO were the main oxides, with some variations as regards CaO, Na₂O, K₂O and MgO percentage. Also trace elements concentrations confirm the homogeneity between samples, although some elements are

significant to distinguish different sub-groups of pottery related to their geographical setting.

The mineralogical and petrographic components of the ceramics fit very well with those of different marine clays which crop out in different areas of Southern Italy. The Plio-Pleistocene marly clays of the Bradanic trough were then used in Basilicata, while Calabrian grey marly or silty clays of the Crati River were used in the Plain of Sybaris. The hypothesis of a wide diffusion of technological models of production will be confirmed. In Middle and Late Neolithic societies the pottery production, mainly of fine brown painted or plain ware, probably evolved from a “domestic mode of production” to an “incipient-specialization stage”. This stage would include an increasing standardization of paste composition, reflecting greater exploitation of particular kinds of local clay, the improvement in forming, finishing techniques and in an advanced (up to 1,000°C) firing technology.