

A PRELIMINARY APPROACH FROM MATERIAL SCIENCE TO COPPER AGE FUNERARY POTTERY IN SOUTHERN IBERIA: THE PALACIO III (SEVILLA, SPAIN) *THOLOS* TOMB

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As a bibliographic study (Cordero Ruiz et al., 2006) has recently shown, Copper Age (c. 3200-2100 cal BC) and Early Bronze Age (c. 2100-1550 cal BC) southern Iberian funerary pottery is rather poorly understood. To date, only one ceramic assemblage, from the Bronze Age necropolis of La Traviesa (Sevilla, Spain) has been studied from an archaeometric point of view (Polvorinos, 1998; García Sanjuán et al., 2005). As part of a wider research project on Copper Age pottery technology, production and consumption in Southwest Spain, actually under development (Odriozola & Hurtado 2007, Odriozola & Martínez-Blanes, 2007), that involves an active international collaboration research project between Portugal and Spain (GRICES-CSIC) (Dias et al, 2005 a; Dias et al, 2005 b; Dias et al, in press a; Dias et al, in press b). This paper proposes a material science-based study of a large funerary pottery assemblage. This study includes 50 vessels from the Palacio III (Sevilla, Spain) *tholos* tomb, a megalithic monument that was part of a larger prehistoric funerary complex including a passage grave and an Iron Age cremation (García Sanjuán & Wheatley, 2006). The methodology involved includes physical and chemical characterization techniques (XRF and XRD), statistically evaluated (cluster and discriminant analyses) in order to determine compositional groups and categorize production as well as ritual and votive patterns. We explore the technical choices along the *Chaîne Opératoire* of these vessels, their compositional grouping and the way these categories correlate with the spatial and chronological variations recorded in the use of this megalithic burial.

The record of time within the archaeological practice is constraint to the study of the recorded stratigraphic units during excavation, but funerary monuments as Palacio III passage grave may have been used along time and the funerary assemblages recovered may have been also moved from its original position along the pass of time by the different generation that have used and maintain it, and therefore the study of technological choices is constraint to spatial distribution and ritual and votive patterns exclusively. As apart of this material science orientated work we developed Luminescence dating (Zink *et al.*, forthcoming, Cardoso et al, in press; Richter et al, 2003) of the vessels in order to correlate the observed technological categories, spatial distribution, and ritual and votive patterns along time with independence of the possible interferences that can result from the use of this passage grave along time.

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