



The Pottery Archaeometry Project

Antonella Pautasso, Giacomo Biondi (CNR-ISPC Catania)

Eleonora Pappalardo (University of Catania, DISFOR)

Introduction

Over the last few years, the development of pottery studies from the settlement on the Patela of Priniàs and the related necropolis in the Siderospilia district has made it necessary to undertake a first campaign of archaeometric analyses. In particular, the launch of the study project and publication of the Siderospilia necropolis, has highlighted the demand for a multidisciplinary approach to the study of pottery. The quantitative richness and qualitative diversification of the ceramic material from the burial contexts and the settlement offer a broad documentary basis from which to recompose the history of ceramic production at the site in a diachronic key and to distinguish possible imports.

Three archaeometry projects have been launched in recent years, involving different partners. They are part of a long tradition of studies on the site's pottery production, which is one of the few Cretan settlements to have yielded an entire craft installation with kilns and working areas dating back to the late 7th century in the district known as Mandra di Gipari.

The 'CIPARCH' Project

The first project, named CIPArch (Italian-Greek joint laboratory for archaeometric investigations on Cretan Iron Age pottery), is a Joint Archaeological Laboratory funded by the CNR for the years 2018-2020 and extended until early 2021, which had Antonella Pautasso as its head and Anno Hein of the Demokritos (National Centre for Scientific Research) in Athens as a partner. For the project, a group of shards was selected from the most interesting and problematic specimens offered by the necropolis. The results were published in the Yearbook of the Italian Archaeological School of Athens, within the report on the activities carried out at Priniàs in 2021.

The methodology

Thin sections were obtained from these samples at the Fitch Laboratory of the British School at Athens; all of them were brought to Italy and delivered to LANDIS-INFN for petrographic analysis, which is still ongoing. Of the same shards, ten samples were analysed using electron microscopy (SEM) at the Demokritos in Athens; these ten plus a further nine samples were analysed using the NAA (Neutron Activation Analysis) method at Missouri University.

The Results

The analysis results confirmed what had already been suggested by the archaeological analysis regarding the presence of a series of crucial Attic imports: in particular, a Late Protogeometric Attic crater and a series of *skyphoi* of the same period from the eastern sector of the necropolis, from the area of the large Iron Age chamber tombs. The analyses also revealed the presence of imports from other areas of the island and the Aegean area helping to characterise the local production.

The ‘Pottery from the stratigraphic sounding in the VA room (building VA-VD) on the Patela of Prinias’ Project

The second archaeometry project concerns the UNICT research team, led by Prof. Eleonora Pappalardo. Based on a collaboration with the INSTAP SCEC (Institute for Aegean Prehistory - Study Center for East Crete), represented by Dr. Eleni Nodarou, the project is aimed at conducting archaeometric analyses on thin sections obtained from a sample of approximately 130 shards. These are dated from the Late Minoan IIIC to the Late Orientalisation (12th - 7th century BC. C.) and are coming from the stratigraphic sampling conducted in 2005 in the large monumental building VA-VD, north of the VA room, as part of the interdisciplinary project entitled 'Pottery from the stratigraphic sounding in the VA room (building VA-VD) on the Patela of Prinias'.

The ‘Pithoi’ Project

Over the last few years, a third research project coordinated by Antonella Pautasso and carried out by Flavio Ferlito (PhD UniCT) concerned the study of pithoi, large rough ceramic containers used for the burials of children and sub-adults (*enchytrismo*) in the necropolis of Siderospilia. The project, carried out according to a multidisciplinary approach that combines typological-productive-contextual aspects with archaeometric investigation, is of fundamental

importance for the site, which, as we know from the discovery of the ceramic workshop in contrada Mandra di Gipari, was a centre for the production of large vessels.

Picture captions

Eleni Nodarou (centre) of INSTAP SCEC and Eleonora Pappalardo (left) during the sampling of shards at Priniàs

Thin sections taken from the samples at the Fitch Laboratory of the British School at Athens

Dendogram of the NAA analysis

Two Attic *skyphoi* from the necropolis of Siderospilia analysed in the 'CIPARCH' Project