Sherds in the box: Bringing life back to ancient ceramic fragments

Vassiliki Valantou, Vayia V. Panagiotidis and Nikolaos Zacharias

[1]Archaeologist MSc, celiasitia@gmail.com
[2]PhD Researcher, vpanagiotid@uop.gr
[3]Professor University of the Peloponnese, zacharias@uop.gr
Laboratory of Archaeometry, Department of History, Archaeology and Cultural Resources Management of the University of the Peloponnese, Old Camp Kalamata Greece

Abstract

Archaeological excavations unearth a number of findings from organic remains to man-made objects. Among the most commonly found are ceramics, the material being the most appreciated since it spans all cultural periods, usually fragmented but un-altered, also providing valuable information about its use, technology and artistic/aesthetic values of its era. The ceramic fragments in many cases cannot be easily identified as far as their initial shape, form and usage is concerned. Especially pottery sherds belonged to characteristic parts of the pots can offer hints of shape or even usage, but if their state is so fragmentary are not easily recognizable and typological classified. Also in their interpretation great part concerns the archaeological context of the findings that narrows and specifies their typological classification. Beyond common typological methods a digital recreation of pottery sherds can offer more possibilities of classification. The wider range of Computer to Design (CAD) software and of low cost 3D scanners and printers offer the opportunity to recreate the initial objects these sherds originated from, in order to enhance documentation methods.

The assemblage under study consists of characteristic sherds of fine- and courseware pottery and originates from an excavation trench in the northern Stoa of the Agora of the archaeological site of Ancient Messene in Southern Messinia Greece. Ancient Messene is one of the most significant Hellenistic to Roman times city, with important political, economic and social role in the area. The assemblage belonged to debris accumulated through the ages and a macroscopical selection was made to separate characteristic sherds from Early Roman times, 1st C. B.C. to 2nd C. A.D. in order to define their typology, as early Roman pottery lack of studies in the area of Ancient Messene. Selected sherds are initially examined with common typological criteria, regarding their form, colour, hardness and texture and type of pot. Then 2D drawings in graph paper have been elaborated. All drawings are then designed using CAD software. The 2D designs are rendered to 3D using open source 3D creation software. Finally, the objects are printed in PLA, a biodegradable thermoplastic using a low cost tabletop 3D printer. The study further aims at contribute to our knowledge on ceramic types that were in use in the area and to further aware about the significance of Ancient Messene to archaeological studies.