

Precious Pots: Making and Repairing Dolia

Caroline Cheung

Dolia defy generalizations about pottery. Considered a class of pottery yet often manufactured alongside bricks and tiles in workshops that supplied building industries, dolia were large storage containers for agricultural commodities that were also considered architectural features. Despite their widespread use in the ancient Mediterranean, little work has been done on their production and repair.¹ This paper discusses findings based on over four hundred dolia and dolium fragments from three sites in western central Italy: Cosa, Pompeii, and Ostia. Although dolia were usually robust vessels that were estimated to have been in use for decades, a significant portion of them experienced some form of damage. Because dolia were expensive farm equipment, any damage was usually repaired. Unlike other types of pottery though, damage on dolia demanded different types of treatments and materials to support their heavy and bulky parts. Dolium mending techniques were not static or fixed; instead, they reveal developments in skills, knowledge transfer, and industries, as well as the different workforces, and their skill sets, responsible for treating damage. As craftspeople gained a deeper understanding of material properties for producing dolia, they developed more sophisticated techniques and materials for repairs that were made during the production-phase. Dolium repairs shifted from traditional pottery mending techniques added during the vessel's use to architectural joinery techniques applied during the production.

This paper first provides an overview of the different techniques used for repairing smaller types of pottery and then surveys the various methods and materials craftspeople used to repair damaged dolia. Because small pottery often became damaged while in use (pottery damaged during production was likely discarded rather than sold), craftspeople such as tinkers and pottery menders generally repaired these vessels using lead on an *ad hoc* basis. Lead was a relatively abundant and low-cost metal with a low melting point; it was also easy to work, so tinkers and pottery menders often used it to fill cracks, patch holes, and form staples or clamps that would join fragments. Dolia, on the other hand, were large and bulky vessels. When severely damaged, the malleability of lead meant that the metal might not provide enough mechanical strength to mend and support dolia. Moreover, archaeological examples show that drilling holes through a damaged dolium to form staples or clamps could actually worsen the damage, or even destroy the vessel completely. As a result, dolium repairers began to experiment with different methods and materials, such as adding other metals to the lead to strengthen the repair. Moreover, the repairers drew on the mortise-and-tenon joinery techniques from the architectural realm as a more effective way to mend these large vessels, and even began making preemptive repairs during the production-phase. Based on the neatness and consistency of these new double dovetail and double dovetail tenon repairs, the makers of these preventive repairs were forming them on the vessel before they were fired in the kiln, meaning that the repairers of these new methods were based

in the workshop. While the craftspeople making use-life repairs were non-specialist tinkers or pottery menders, those forming production-phase repairs were likely also the makers of dolia, or at least worked alongside them.

Studying both the production and repair (during production-phase and use-life) of dolia illuminates not only the value of these containers, but also the complex relationship between making and repairing. Initially, different craftspeople with different sets of knowledge and skill were responsible for the production and repair of these vessels, with potters making dolia in the workshop and tinkers and pottery menders forming repairs during use-life. The new preventive repairs formed during production-phase suggest that there was interaction and some sort of feedback between makers and users, creating an impetus on the part of the maker to identify and treat preemptively common problems that would form on dolia during the production-phase in a collaborative workshop setting. Over time, the role of the dolium maker expanded to include the responsibilities of a repaired.

Notes

¹ Some exceptions include Rando 1998; Peña 2007, 35 and 213–227; Peña – Cheung 2015, 2121–2222.

References

Peña 2007

J. T. Peña, *Roman Pottery in the Archaeological Record* (Cambridge 2007).

Peña – Cheung 2015

J. T. Peña – C. Cheung, *The Pompeii Artifact Life History Project: Conceptual Basis and Results of First Three Seasons*, in: C. Gambardella (ed.), *Heritage and Technology. Mind, Knowledge Experience. Le Vie degli Mercanti XIII Forum Internazionale di Studi, Fabbrica della conoscenza 56 – Capri 11–13 June 2015 (Naples 2015)* 2115–2123.

Rando 1998

P. Rando, *Le antiche riparazioni in piombo sui dolia provenienti dal relitto della nave romana del Golfo di Diano Marina*, in: *Centro Ligure per la Storia della Ceramica (ed.), Atti del XXIX Convegno Internazionale della Ceramica 1996: La ceramica nell'iconografia, l'iconografia nella ceramica. Rapporti tra ceramica e arte figurativa, Albisola Superiore, maggio 1996 (Albisola Superiore 1998)* 235–242.