

Changes in Function, Structure, and Morphology of Textile Impressions on Pottery from the Late Neolithic to the Late Bronze Age

Monika Kaczmarek - m.kaczmarek21@uw.edu.pl ^{P,1}

Kinga Winnicka ¹

Magdalena Przymorska-Sztuczka ²

Marek Truszkowski ¹

Agata Ulanowska ¹

^P Presenting author

¹ Faculty of Archaeology, University of Warsaw

² Archaeological Museum in Biskupin

In prehistoric societies, textile crafts were employed not only in the production of garments but also in the manufacture of utilitarian objects and luxury items. Textiles also played a significant role in pottery production, as evidenced by archaeological finds from the area of present-day Poland dating back to the Neolithic period. Fibre-based materials could be incorporated into clay vessels at various stages of the manufacturing process, from vessel formation to surface decoration.

This paper examines the diachronic and regional development of textile imprints on ceramic vessels from the Late Neolithic to the Late Bronze Age in Poland. An integrated analytical approach is employed, combining Reflectance Transformation Imaging (RTI), Structure-from-Motion photogrammetry (SfM), portable digital microscopy, positive casts of textile imprints, and experimental replication to investigate surface morphologies and the cross-craft traditions that produced them. The study aims to demonstrate that textile imprints on ceramics provide valuable insights into changing pottery manufacturing practices and shifting functional priorities. It traces the evolution of textile applications on pottery surfaces, including changes in textile techniques and the types of raw materials used. The paper also identifies the functions of textile materials and explores relationships between vessel shape, size, and type, as well as the role of textiles in pottery production. By integrating imaging, microscopic analysis, and experimental approaches, this study shows how textile-generated surface morphologies reflect broader technological transformations within Bronze Age communities.

Keywords

textile impressions, pottery production, cross-craft interactions, Neolithic–Bronze Age

Note/comment