

'Metallurgists' Tombs in South-Western Poland Again From Late Bronze Age Using Casting Models

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Perspective

Introduction

Three metallurgists' graves at the Late Bronze Age cemetery in Legnica, south-west Poland, were discovered alongside a collection of prehistoric metallurgical items, including casting moulds, a casting core, and a tuyere fragment. By using various analytical processes to characterise the residues of metals inside the casting moulds, the findings from these graves provided an opportunity for a scientific research of key facets of Bronze Age metallurgy in this region.

The casting moulds contained visible wear marks, indicating that they had been used. The moulds in two cases featured extensive greenish-black layers, which could have been the remains of rusted metal. ED XRF and SEM EDS were used to study the chemical compositions of these layers and metal from two other relics. These investigations revealed the wide range of metals utilised in castings[1]. Lead isotope analysis utilising the MC ICP MS revealed information on the possible source of lead in the mould remains. The ores of the Erzgebirge in eastern Germany, a few hundred kilometres south west of the burials, are the most likely source of this lead.

While the determinants of metallurgy in graves, as well as questions of funerary rituals and the social position of the deceased, are investigated, the metallurgical instruments buried in the graves of so-called metallurgists are rarely studied in depth. Consider the following example. This mostly refers to the casting moulds that are frequently recovered in these burials. The potential of exploiting metal remnants in moulds discovered in tombs to trace the provenance of the metal sources utilised for casting has been rarely explored. The residue of copper from a casting mould for an LBA oxhide ingot Kastro-Palaia, a Bronze Age settlement site in Greece [2]. The database has several similar investigations of metal remains in crucibles from Minoan sites on Crete, but none of them have been published in papers.

Description

Legnica's cemetery on Spokojna Street. Context archaeology

The items used in this study were discovered in a Bronze Age cemetery in Legnica, Poland, in the south-western part of the country. On the floodplain of the Kaczawa River, near the Kopanina Stream, the site was situated on the slope of a big hill [3-5]. Emergency excavations on this site were carried out in 1972–1973 as a result of building work on Spokojna Street in Legnica, and 188 Late Bronze Age tombs were discovered. The classification of graveyard Legnica's cemetery on Spokojna Street. Context archaeology

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Archaeological and anthropological evidence for metallurgists' burials

Artefacts associated to metal casting, such as moulds, a casting core, and a tuyere piece, were discovered in three of the 188 tombs unearthed in the Legnica cemetery see details of the graves here. All of the casting moulds were bivalve in shape and were utilised for gravity casting vertically. There was no discernible pattern in the cemetery's deposition or placement of these tombs. A razor that fits the casting mould.

The razor found in burial no. matches the grave no. 5 casting mould. Grave no. 11 was an urn grave that was 0.35–0.40 m deep. An urn, seven vessels, a metal razor, and vessel fragments were found in the burial. The urn's human remains belonged to an adult female. The urn also contained animal remains. The single-edged razor from the tomb no. 11 has a crescent-shaped blade and a handle.

Conclusion

In three funeral complexes from the cemetery in Spokojna Stree, Legnica, an exceptional number of bronze metallurgy-related artefacts were uncovered. The structure and inventory of these burials were identical to that of other sepulchral artefacts recovered at the site. The casting moulds discovered in the graves, which were used to make a variety of goods, show that the local community was able to meet demand for common tools, as well as toiletries and weapons, on its own.

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