Copper shaft-hole axes and early metallurgy in south-eastern Europe: an integrated approach

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Abstract

Although the copper axes with central shaft-hole from south-eastern Europe have a long history of research, they have not been studied on a transnational basis since the 1960s. What has also been missing is an integrated or holistic approach, trying to use as many methods as possible and better understand the production, use and context of these enigmatic objects. This present research therefore approaches the axes from different angles. A database was compiled in order to find answers on questions such as the patterns of distribution, context, fragmentation and deformation of axes. For the distribution of axes in general as well as different attributes like fragmentation and typology, the content of the database was imported into GIS software and analysed. Aspects of production were considered through experimental archaeology, metallographic analysis and a re-discovered axe blank with missing shaft-hole. Especially the missing moulds make it difficult to fully understand the production sequence. The typology was re-evaluated and modified to ensure comparability across modern national boundaries. The context and background was developed through a thorough review of the literature and combined with theoretical considerations. The integration of all these approaches yielded some interesting results. The great variability in shape combined with the results of metallographic analyses clearly shows that a variety of production techniques were used, but it is as yet difficult to relate these to specific geographic areas or even cultural groups. In fact the typology as well as the practice of marking the axes indicate that traditional archaeological ‘cultures’ rarely correspond to the distribution of a type or to the practice of marking the axes. They show instead that there were different spheres of influence, some even more localised and others much larger (like the Carpathian Basin) than specific ceramic traditions. These different levels of belonging, as well as the increasing visibility of the individual in the archaeological record, show that it was a period of complex cultural patterns and interactions. The axes were a part of these networks of the daily life on many different levels from the strict utilitarian to the ritualised placement in burial contexts.
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