What Can Lead Tell Us about Celtic Life? Tracing the Origin of Lead in Celtic Artifacts Using Mass Spectrometry

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“Celtic” tribes of the La Tène culture inhabited a considerable part of Europe in the Late Iron Age (ca 500–40 BC), which indicates the necessity of the existence of certain trade mechanisms between the individual “Celtic” settlements. The aim of this research is to prove the contact of the Trisov oppidum and the Zehun settlement (both located in the Czech Republic) with European metal deposits by connecting lead used in the artefacts with its source. Analysis of four chosen “Celtic” spoked wheels (three from the Zehun settlement and one from the Trisov oppidum) used Multicollector–Inductively Coupled Plasma–Mass Spectrometry (MC-ICP-MS) to determine lead isotope ratios in the samples. By comparing the measured isotopic ratios with isotopic signals of various deposits in Europe, and further analysing the artefacts, it could be stated that one of the Zehun spoked wheels and the Trisov spoked wheel have a common source of lead in southeast Spain. Furthermore, the elementary composition revealed a possible source of copper in the Eastern Alps or in the Czech Republic. The source point of the lead in the other two Zehun spoked wheels is most probably located in the Czech Republic or Slovakia, although it would need an additional examination to prove or deny this hypothesis. The results confirm the existence of active trade and cultural contact of both settlements with southeast Spain and northern Italy. Moreover, Trisov could have served as the so-called port of trade on routes from the Mediterranean to the trans-Alpine areas.

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