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Introducing the spear project: The tale of the Late Bronze Age spearhead with wooden shaft from the Marshland of Kikinda, Serbia



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ABSTRACT

The study discusses a Late Bronze Age (Br D-Ha A) spearhead with wooden shaft from the territory of Serbia (Kikinda, Vojvodina Province). This rare find was analyzed by different non-destructive analytical methods (PGAA, XRF, Neutron imaging, X-ray imaging) for documenting and characterizing its wooden and metal parts.

1. Introduction

From the Late Bronze Age (LBA) Carpathian Basin spearheads with wooden shafts are barely known. Only a few specimens have been reported from the territory of Romania: Corunca (Rezi, 2015, 379–381, Figs. 2–3), Şeuşa (Ciugudean and Ciută, 2008, 349–351, Figs. 3–4), two from Slovenia: Blatna Brezovica, Ljubljanica and Blatna Brezovica, Bistra (Šinkovec, 1995, 79, 82–83, Pl. 22.137, Pl. 24.147). More known from north, west and east from the Carpathians, in Austria, Poland, Switzerland, Germany, Greece, Ireland and Great Britain (see Hooper and O'Connor, 1976, 35–36, Fig. 2; Urbon, 1991, 128; Papazoglou-Manioudaki, 1994, 173, Pl. 28.b, Anm 61; Tarot, 2000, 67–98; Gedl, 2008, 60, Taf. 19.230; Mandl, 2008, Abb. 25.4; Bunnefeld, 2012, 161–162; Laux, 2012, 56, Taf. 22.318; Falkenstein et al., 2017). Arianna Bruno has greatly expanded the list of known specimens from Italy (see Bruno, 2012, 387, 390, 392, 394, 396, 407, 462, 564–565).

Recently, several new spearheads with wooden residues were identified by macroscopic methods in the archaeological collection of the Hungarian National Museum (Budapest) (HNM), which has raised the need for applying scientific methods for characterizing and documenting this unique artefact group. The newly initiated *Spear Project* is a scientific cooperation between the Hungarian National Museum and the Nuclear Analysis and Radiography Department of the Hungarian Academy of Sciences Centre for Energy Research, with the aims to publish new results and characterize the organic and metal parts of these weapons applying only non-destructive methods.

In the present study, from the so far investigated specimens, one spearhead from the marshlands of Kikinda will be discussed. The aim of our study is to give additional information on the manufacturing technique of the wooden part and the metal spearhead.

2. The spearhead from Kikinda

The discussed spearhead has a fragmented leaf-shaped blade and a profiled cylindrical socket (Figs. 1.1-2). Its dimensions (Length: 14.1 cm, Diameter of the socket: 18 × 1.7 cm, Length of the socket: 5.9 cm, Width of the blade: 2.9 cm, Weight: 48.1 g) correlate well with the LBA Carpathian average. Not much are known about the find's exact context and circumstances of the discovery. It was bought by the HNM in 1893 from László Pokorny collector, and now kept in the Prehistoric Collection of the Archaeological Department (Inv. nr. 75.1893.1200). According to the Inventory book of the HNM, the spearhead in question was found in the marshlands of Kikinda/Кикинда (Serbia, North Banat District, Autonomous Province of Vojvodina) (Milleker, 1902, 28; Vasić, 2015, 46, Taf. 7.93) (Fig. 2). The city of Kikinda was established on a wetland area, therefore the find could have been found in the 19century territory of the settlement but in its vicinity as well. Finds with similar wetland context can be interpreted as individual offerings, accidental lost or part of greater hoards, which have not been recovered completely. The discussed spearhead is a common Carpathian LBA type which, following to Vasić's typ-chronological model, can be classified to the so called spearheads with profiled sockets (Lanzenspitzen mit

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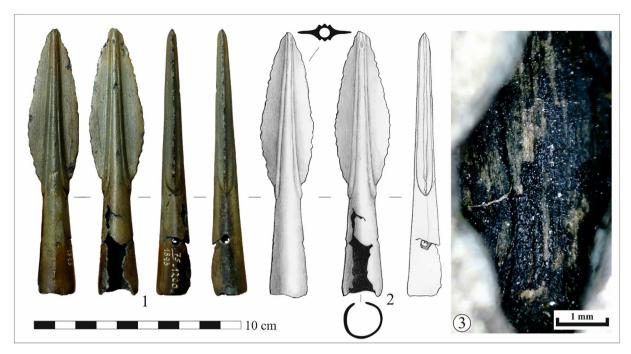


Fig. 1. The spearhead from Kikinda (Hungarian National Museum, Inv. nr. 75.1893.1200): 1. Photography of the artefact, 2. Drawings (Anna Mária Tarbay), 3. Micrograph of the wooden shaft (J. G. Tarbay).

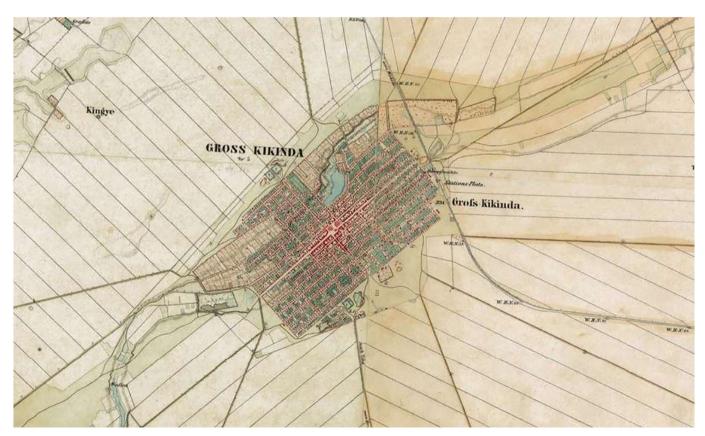


Fig. 2. Kikinda (Gross Kikinda/Nagykikinda) in the map of the Second Military Survey (1806-1869).

profilierter Blattülle). These can be dated to the Stufe II-III (Reinecke Br D-Ha A) according to the Serbian chronological system (Vasić, 2015, 48–50). In Tiberius Bader's newest typ-chronological scheme, such spearheads can be sorted in to the Group C Variant b, which is an interregional type distributing not just in the territory of the present day Serbia but Croatia, Slovenia, Hungary, Romania, Slovakia and the

Transcarpathian region of Ukraine as well. As Bader pointed out, these spear type was manufactured in a greater geographical area for a quite long interval between the Br D and Ha B1 periods (Bader, 2015, 384–385).

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