

GIFT OF THE RIVER: A LATE BRONZE AGE SWORD WITH CUP-SHAPED POMMEL FROM THE RIVER SAVA

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Abstract

This paper presents a Late Bronze Age sword of the Schalenknauf type, or full-hilted sword with cup-shaped pommels, from the site of Poloj, near Gradiška in Northern Bosnia. Due to its unique features, the artifact cannot be attributed to any known specific variant. It is dated to the final phase of the Late Bronze Age (Ha B1 period or ca. tenth century BC). As with most stray finds, information on its archeological context is very scarce. In all likelihood, it was made in Central Europe and seems to have ended to the south through a long-distance exchange mechanism. Wear traces indicate prolonged use and maintenance as a functional weapon for an extended period of time. Like many contemporary swords, it ended its life by being deposited in the river or, more likely, in its marshy backswamps around the banks of the Sava in the vicinity of Gradiška. The presence of still-unrepaired traces of combat suggests that cycles of combat and repair ceased relatively shortly after a battle, when the deposition took place. The paper also discusses the symbolic language of metal-hilted swords as highly important transmitters of identities.

Keywords: Late Bronze Age – metal-hilted sword – Posavina – northern Bosnia – Ha B1 period.

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Introduction

Swords are one of the most precious forms of metal objects of the Bronze Age. Their importance derives from both their material value and their function as a weapon. Furthermore, the carrying of a sword indicated social rank and contributed significantly to the weapon's importance (Mödlinger 2011a; Molloy 2018, 204f; Molloy & Horn 2020, 138f). Late Bronze Age swords from Northern Bosnia mostly come from hoards, in the form of heavily damaged items, often broken in the ritual practices associated with hoard deposition, or as stray finds from rivers, which are also believed to be a form of ritual deposition (Vinski-Gasparini 1973; Harding 1995; König 2004).

To some extent, this is also the case for the exceptional artifact presented here, which ended its use-cycle in a watery context. This sword was found in 2001 by fishermen on the banks of the Sava, at the site of Poloj, near Gradiška in Northern Bosnia (fig. 1). This is one of the best-preserved swords of the Late Bronze Age in the area, and its characteristics certainly make it an object worthy of attention. Since its discovery, the sword has remained in the private possession of Alen Mešić from Gradiška. As with most stray finds, the information on its archeological context is very scarce. Poloj is located less than a kilometer north of the confluence of the Vrbaska and Sava Rivers, in a marshy area with a sandy bank. In the summer, the Sava recedes significantly, leaving a wide and accessible bank, while in periods of greater rainfall, a wide belt is flooded, creating a marshy landscape with the accompanying characteristic vegetation and swamps. Gravel and sand have been intensively quarried throughout the area over the

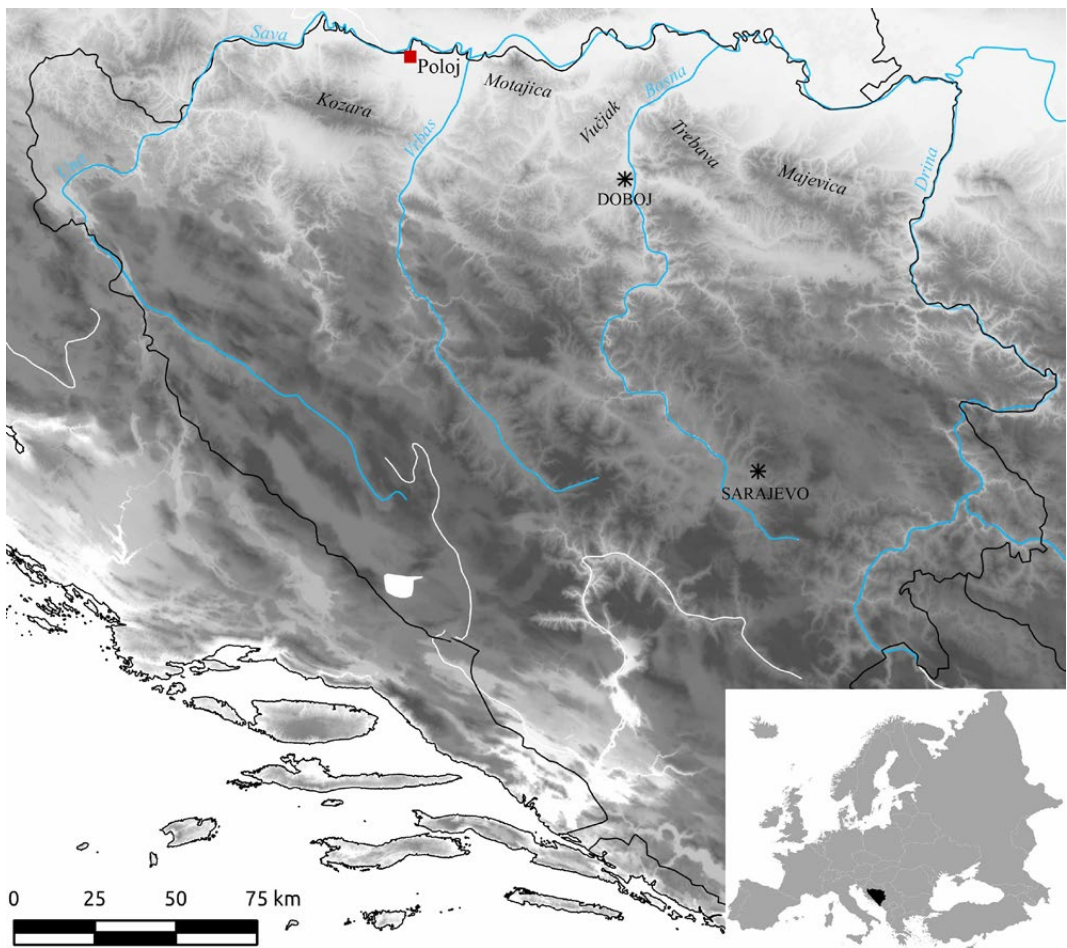


Figure 1. Map showing the position of the site of Poloj in Northern Bosnia. Image Credit: Regional Museum in Doboј and the author.

past decade, resulting in a massive extraction area that is in the process of evolving into a completely new landscape. These activities have also yielded many archaeological finds, among which are several artifacts dating to the Bronze Age.

Description of the sword

The sword weighs 870 g, and measures 61.4 cm long from the tip to the end of the cup-shaped pommel. The hilt is 11.8 cm long from the medial guards to the end of the pommel. The blade is broadest in its lower third, measuring 4.5 cm at its widest, and 3.4 cm right above the handle, where a smooth *ricasso* is situated. The maximum thickness of the blade is 1.1 cm, while the thickness of the handle is 3 cm. The upper part of the handle is cup-shaped, with a diameter of 5.3 cm. Inside the cup is a mushroom-shaped button or nub, with a small perforation running through the cup to its side (fig. 2). This is a typical feature of most swords of the type; a small pierced hole through the cup-shaped pommel, leading to its underside. It has been suggested by Kristian Kristiansen (2002, 320), based on the use of the sword according to its primary function as a weapon, that the sword was strapped to the wrist through this pierced hole, preventing its loss during a fight (see also Mödler 2011, 78; Soós 2015, 129). Another possible function, according to Jiří Řihovský (2000, 103), is that it may have been used to attach the sword to the belt.

The practical function of the sword may also be indicated by the *ricasso* present above the handle (Kristiansen 2002, 323). Metal-hilted swords of this type are made of a separate cast blade, which was joined to a hollow hilt by means of two rivets (Pola et al. 2015; Mödler 2011), as is the case here. The leaf-shaped blade has a ridged lens-shaped cross-section, and the sword is superbly crafted and exceptionally well cast. The handle is decorated with punched dots that are positioned in seven rows set at equal distance

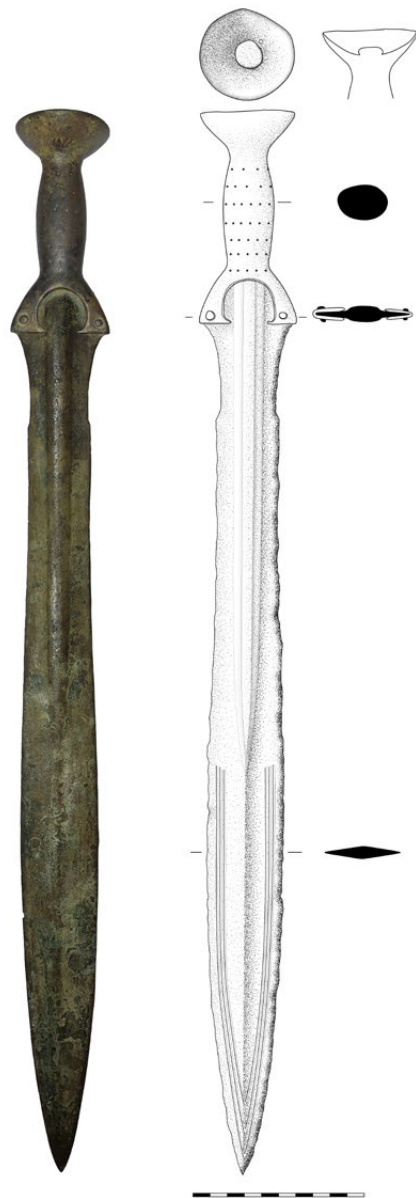


Figure 2. Photo (left) and drawing (right) of the sword from Poloj. Image Credit: the author (photo) and V. Žigic (drawing).

from one another across the entire surface of the handle. The blade is decorated with three groups of incised lines on each side, stretching from the tip to the end of the middle rib. The hilt is well-preserved, and is covered by a largely uniform dark brown patina. The patina of the blade has flaked off, exposing a greenish corrosion. It is unclear how this idiosyncrasy of preservation arose, but it must be mentioned that the sword has been regularly handled in recent times. Striation patterns on the middle rib cutting through the corrosion layers indicate that some of the patina has been mechanically removed in modern times, perhaps with a metal brush or some kind of metal file.

Numerous authors have defined the primary functions of cup-hilted swords as being both cutting and stabbing (cf. Řihovský 2000, 102f; Mödler 2011, 75). This highly functional sword bears evidence of use before the final deposition. A small notch can also be seen on the sword; this mark shows similarities to others found on Late Bronze Age swords, argued to represent sword-to-sword combat damage (Hermann et al. 2020). The notch is located in a heavily scraped area of the edge, and most of its surface has no patina. However, the patination inside the notch's fissure and the presence of cleaning striations only on the outermost part of the burr created by the impact suggest that the notch was produced in a phase pre-dating the mechanical cleaning of the sword.

Classification and parallels

This object belongs to the rare category of Late Bronze Age Schalenknauf type swords, which has appeared in the literature under a variety of names derived from different typological classifications (Müller-Karpe 1961; Bader 1991, 141f; Kemenczei 1991, 60; Harding 1995, 78; Stockhammer 2004, with ref.). The sword with cup-shaped pommel from Poloj has many unique features, which lead us to classify it as a unique type, or rather as a variant. Nevertheless, it can be classified amongst a wide group of metal-hilted swords that appear at the end of the Bronze Age. This sword type was among the most common ones from the eastern fringes of the Carpathian Basin to the eastern Alpine range during the eleventh and tenth centuries BC. The highest frequencies of similar weapons have been found in Eastern Hungary, east of the Tisza and in Transylvania (Szabó 2019, 164f). Its different variants have been found in various parts of present-day Europe, including southern Germany, Bohemia, Slovakia, southern Poland, Austria, Hungary, Romania, and Western Ukraine (Stockhammer 2004, 87, maps 31 and 32; Tarbay 2022, 34). In Hungary, similar weapons are known from Tibor Kemenczei's W-type (1991, 60, Taf. 59/254), variant 3, characterized by a leaf-shaped blade with ridged cross-section, smooth *ricasso* feature and the decoration of the lower part of the blade with incised lines, and are dated to the Hajdúböszörmény horizon, or Ha B1 period according to the Central European chronology (Soós 2015, 129; Siedlaczek 2015, 282; Tarbay 2018, 319; Puskás 2019, 204; Tarbay 2022, 35). An identical conclusion was reached by Amália Mozsolics (2000, 23) following an analysis of bronze swords discovered in Hungary. According to Tiberiu Bader's typology (1991, 150, Taf. 50/358) derived from an analysis of Late Bronze Age

swords from Romania, the closest parallels are found with swords of the Cobor type, variant 2. Another interesting find originates from the site of Zlatná na Ostrove in Slovakia. This stray find from the Danube River has all the morphological characteristics of the sword from Poloj, but is undecorated, and has been dated to the Ha B1 period or Hajdúböszörmény horizon (Bartík & Trugly 2006, 48, 50). There are also formal parallels beyond this territory, but most of these are – unfortunately – stray finds devoid of archaeologically secure contexts. Finds from the Western Balkans and the adjacent regions are certainly included within that group. Ksenija Vinski-Gasparini (1970, 161) was the first to draw attention to swords with cup-shaped pommels from this territory more than half a century ago. She published descriptions of two swords: one from Kastav, presumably discovered in a skeletal grave, and the second is a stray find from Grižane, both from the Kvarner area (Vinski-Gasparini 1970, 161; Blečić Kavur 2014, 96). They represent the most southern finds of this type of sword, with highly individual characteristics that reflect a stylistic variability formed by different regional and cultural influences (Glogović 1989, 40; Blečić Kavur 2014, 100). Both are also dated to the Ha B1 period, or the tenth century BC (Vinski-Gasparini 1970, 165). Only five swords with cup-shaped pommels were previously known from former Yugoslavia, described and classified by Anthony Harding (1995, 78f; see also Šinkovec 1996, 145).¹ He highlighted the fact that all of them lack direct or exact parallels, but considered them to be close to swords from Romania and Western Transdanubia (Harding 1995, 78f). In summary, it can also be assumed that the cup-shaped pommel swords were manufactured in eastern and western workshop circles (Stockhammer 2004, 126), with local designs being developed that incorporated foreign stylistic elements. In addition to direct exchange, we cannot exclude the possibility that local metalworkers borrowed certain attractive foreign stylistic features (Tarbay & Mitrović 2022, 140).

Depositional context

As with most stray finds, precise information on the depositional context of this sword is unknown. Its patina confirms that it remained in a waterlogged environment for an extended period of time. However, whether it was left in the flowing river itself, in marshy backswamps, or in a part of the river bed that remained dry in the summer, remains uncertain. The original brownish patina seems to best match a long period of deposition in a peaty environment, like the backswamps of a river. Since the majority of bronze swords with relatively certain archaeological contexts come from hoards in Northern Bosnia, with such swords being conspicuously lacking from burials and settlements, it is generally assumed that they were deliberately deposited in the context of ritual activities (König 2004, with ref.).

¹ In the same year, independently of Harding, Rastko Vasić (1995, 53) published a sword from the confluence of the River Morava and the Danube, classifying it amongst the broad group of Konigsdorf type swords.

Given their symbolic significance, most of the Late Bronze Age swords were deposited individually, by means involving specific rituals (Szabó 2019, 167). Given the unrepaired damage evident on this sword, it seems likely to have been deposited after combat, and its deposition may well relate to its role in such an event. So far, the present find is the first Late Bronze Age sword of this type known from the southern fringe of the Pannonian basin. Metal-hilted swords had been completely absent from the inventories of the hoards of Northern Bosnia (König 2004) until recently, when a fragment of a metal hilt was found in a hoard from Srebrenik, which has been classified as a metal-hilted sword of the Erlach or Schwaig type, and dated to the Ha A1 period. It is worth noting that this represents the southernmost example of this type of sword (Blečić Kavur et al. 2016, 58). Roughly thirteen kilometers east of Poloj along the river Sava lies the eponymous site of Donja Dolina, and across the river there is another site – Dolina. The distribution of certain bronze objects found both within these settlements, and also frequently discovered as isolated finds along the riverbank, indicates the inclusion of the Posavina communities within a communication network spanning from Eastern Austria, Moravia and Bohemia, all the way to Western Hungary (Gavranović & Ložnjak Dizdarević 2019, 142).

Conclusion

The typical weapon of the Bronze Age warrior was the sword. European Bronze Age swords had a high functional and symbolic value, and, as a result, weapons were commonly exchanged across cultural borders, becoming useful indicators of group identities and craftsmanship due to the fact that they were perceived as prestige objects (Ling et al. 2019). The sword from Poloj can be classified as a Schalenknauf type, or sword with cup-shaped pommel, although, due to its individual features (form of blade, *ricasso*, and decoration), it cannot be attributed to any known specific variant. It is dated into the final phase of the Late Bronze Age (Ha B1 period, or c. tenth century BC), and, in all likelihood, it was made in Central Europe, most likely reaching the south through a long-distance exchange mechanism. Wear traces indicate prolonged use and maintenance as functional weapon, and, like many contemporary swords, it ended its life by being deposited in the river, or, more likely, in its marshy backswamps around the banks of the Sava River near present-day Gradiška. The presence of still unrepaired traces of combat suggests that cycles of combat and repair ceased relatively shortly after a battle, when the deposition took place. Although it is not as richly decorated as most other examples of this type, the reduced decorative elements indicate that certain final stylistic finishing elements, whether at the request of the owner or according to the craftsman's own tastes, were still needed. As Philipp W. Stockhammer elaborated, many locally popular decorative elements, which might also have borne a symbolic character, may not have been understood in other regions. Furthermore, in some regions there was not only a preference for certain types of swords, but also for particular lengths and shapes. Compared with the (metal) hilt, which is usually decorated, the blade, as the active part of the weapon during a fight, is more

conductive to technological change (Stockhammer 2004, 153).

The Sava Valley was an important point of communication between the Lower Danube, southwestern Pannonia and southeastern Alpine spheres. The distribution of particular types of bronze ornaments, tools and weapons indicates also connections with the wider Central European area. From the eleventh century BC onwards, at the beginning of the younger phase of the Late Bronze Age (Ha A2 – Ha B1), the communication network changed; regional differences became more prominent, and north-south communication gained in importance. An example of this can be seen in knives of the Kletnice and Pustiměř types (Gavranović & Ložnjak Dizdar 2019, 142) and razors of the Oblekovice type,¹ which were predominantly distributed across the territories of what is now Moravia, Czech Republic, Western Hungary and Eastern Austria, with finds from the Sava Valley often marking the southeastern edge of distribution (Gavranović & Ložnjak Dizdar 2019, 142).

Connections between the Balkans and the Carpathian Basin that impacted weapon craftsmanship persisted into the following period, between 1100 and 850 BC. During this time, a decrease in the number of weapons in the Northern and Central Balkans coincided with a dramatic decrease in metal hoarding. The geographic distribution of Late Bronze Age weapons may have been influenced by several other factors; in certain parts of the Northern Balkans, the metal objects' stylistic designs and the patterns of object selection and treatment in depositions were so similar to those of Central Europe that we can assume they were the product of communities that shared the same metallurgical and ritual traditions (Blečić Kavur 2014, 101). Local designs can be seen to have developed in combination with foreign stylistic elements. In addition to direct exchange, we cannot exclude the possibility that local metalworkers 'borrowed' certain attractive foreign styles, with weapons from the Northern and Central Balkans fitting such a hypothesis. As noted previously, the ritualized exchange of weapons across regions is also plausible, especially when the possession of a particular object afforded great prestige. The advanced weapon technology and the diversification and specialization of weapon types are strong indicators of the existence of professional warriors in the Northern Balkans during the Late Bronze Age.

Mobility has always been an essential part of a warrior's life, and Late Bronze Age warriors likely crossed vast areas, carrying their own equipment and looting goods, prestigious foreign objects and trophies. Weaponry and exotic goods recovered from the Northern Balkans, but more typical of northeastern Hungary, Italy, and Central Europe, may have been associated with the activities of these specialists, who participated in war campaigns of their own or served as mercenaries or military escorts of local chiefs (Tarbay & Mitrović 2022, 140). Finally, the appearance of this rare type of Late Bronze Age sword must also be viewed through the lens of different social identities that could have

¹ Unpublished finds from the Brčko District Museum.

been materialized through such objects, and were a result of the craftsman's own specificities relating to workshop traditions, kinship group, age, community-based traditions, and micro- and macro-regional trends. The specific features of a sword were primarily conditioned by the identities to which the craftsman was exposed and the social constraints imposed by potential customers and their according community-based traditions, etc., and therefore a sword cannot be considered an entirely 'free' artistic creation. The attributes given to a sword by any individual craftsman are therefore – so to speak – but symbols, the meaning(s) of which remain almost entirely lost in our time, to the extent that they essentially constitute a form of non-decodable 'symbolic language'. Yet it is to be noted that this symbolic language also undergoes distinct phases of development as the Late Bronze Age progressed (Stockhammer 2004). When it comes to Schalenknauf type swords of the Ha B1 period, it is to be noted that not only the ornamental but – to a certain degree – also the formal shaping of these swords achieves a level of diversity that had previously been unseen, with the symbolic language of metal-hilted swords becoming a key transmitter of identity.

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