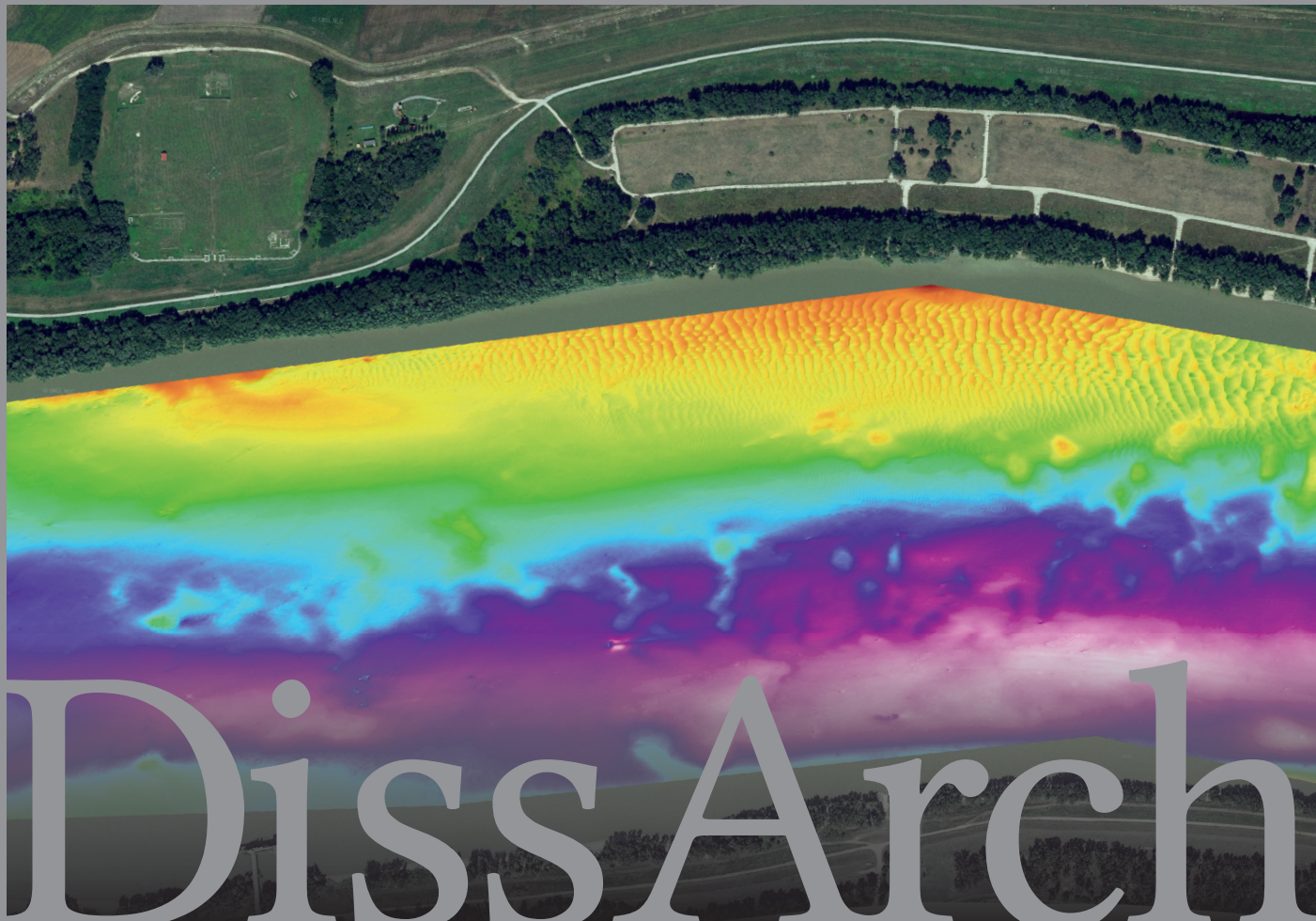


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ex Instituto Archaeologico

Universitatis de Rolando Eötvös nominatae



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ex Instituto Archaeologico
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A peculiar Late Bronze Age find from Sopron-Warischberg

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Abstract: The scarcity of Late Bronze Age finds in the mountains surrounding Sopron is a widely held topos among archaeologists. The Sopron Museum initiated a scientific programme to investigate settlement patterns during this period, concentrating on upland and mountainous sites while also including lowland contexts. Initial results from Sopron-Burgstall indicate that occupation began earlier than previously assumed. The programme was subsequently extended to the adjacent hillfort of Sopron-Warischberg to improve our understanding of the history of the microregion.

Metal detector surveys at Warischberg revealed an unusual bronze object. This article presents that find, examines its morphological characteristics and context, and situates it within a broader comparative framework to enhance understanding of the period.

Keywords: Late Bronze Age, Sopron-Warischberg, pendant, coaster

Introduction

The Sopron Mountains (*Soproni-hegység*) forms the easternmost spur of the Alps in this region. The Warischberg constitutes the eastern extremity of the range and forms a constricted zone together with Kőhegy, Harkai-csúcs and the Szárhalmi Forest. The modern town of Sopron lies within this valley-like formation. Two streams traverse this area: the Ikva and the Rák, both originating from the Alpine foothills.

To the east of Sopron lie the western margins of Lake Fertő and the marshes of the Hanság, which close the region to the north as far as present-day Győr (approximately 100 km). Viewed at a broader scale, the town and the surrounding constriction functioned as a strategic bottleneck between two wide lowlands: the western Little Hungarian Plain and the area around Vienna.

According to Gábor Ilon, most Late Bronze Age hillforts were sited along communication routes to control territory and trade.¹ The lack of substantial Late Bronze Age occupation in the Sopron Mountains therefore contrasts with broader regional patterns and can be considered striking—as well as unlikely. Apart from some Late Urnfield traces recorded at Sopron-Burgstall, archaeologists have not hitherto documented dense settlement in the high ground. This contrasts with the lowland along the Ikva and Rák streams, where at least half a dozen Late Bronze Age open settlements have been documented in recent decades (Fig. 1).

At the time of the first excavations, the hill was referred to as Váris-hegy (Fig. 2) or Warischberg, while today, locals call it ‘Károly-magaslat,’ after a typographer who funded the construction of a lookout tower on the summit. The first excavations took place under Lajos Bella in the final decade

1 [ILON 2007](#), 137.

of the 19th century.² Bella attributed the earliest occupation, paralleling that of Sopron-Burgstall, to the Early Iron Age.³

The site comprises a hilltop settlement with substantial ramparts and a few tumulus graves. Excavations ceased in the first quarter of the 20th century; thus, the bulk of primary information available today derives from early work undertaken without modern documentation. For this reason, it was necessary to start this evaluation with an overview of the site's research history based primarily on unpublished archival material held in the archaeological repository of the Museum of Sopron (henceforth SOMRA⁴).

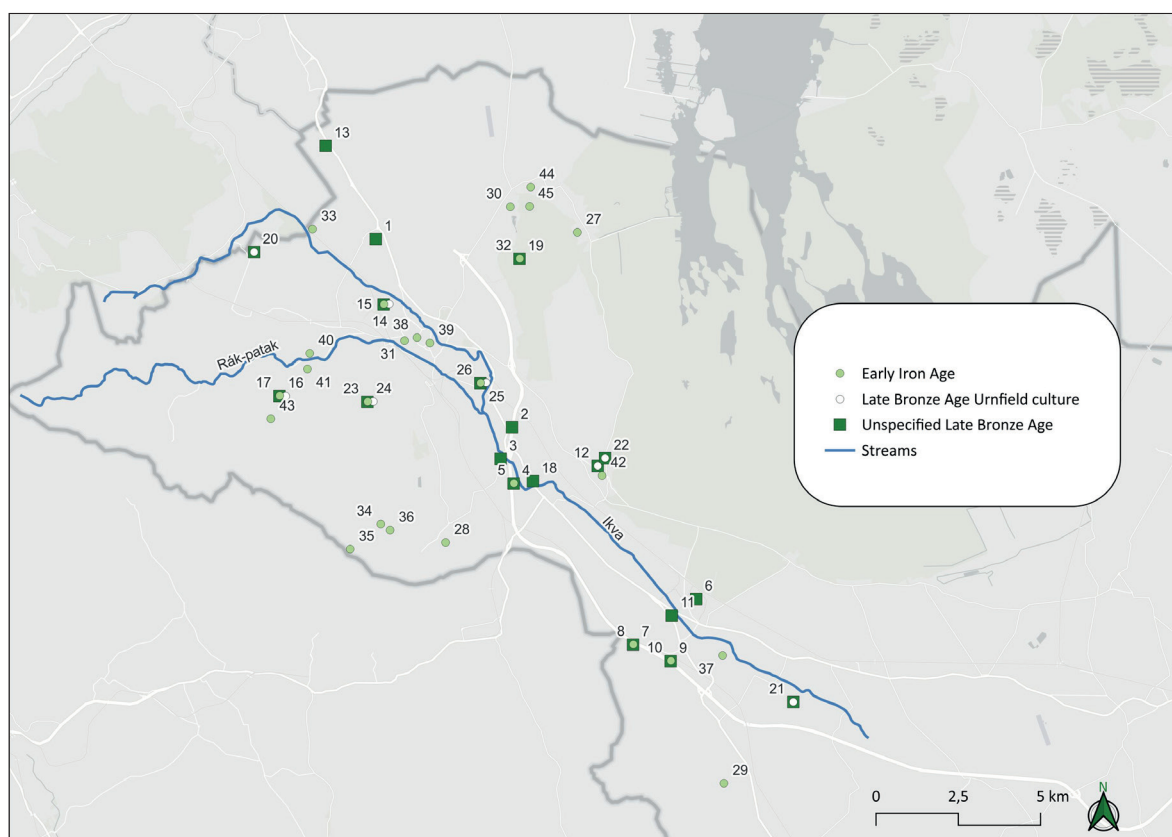


Fig. 1. Late Bronze Age and Early Iron Age sites around Sopron. 1 – Sopron-Untenacker-dűlő IV, 2 – Sopron-Kőhegy-alja, 3 – Sopron-Lóverseny-tér, 4 – Sopron-Széles-földek (Late Bronze Age, LBA), 5 – Sopron-Széles-földek (Early Iron Age, EIA), 6 – Nagycenk-Mikó-föld, 7 – Nagycenk-Alsó-domb-dűlő (LBA), 8 – Nagycenk-Alsó-domb-dűlő (EIA), 9 – Nagycenk-Farkasverem (LBA), 10 – Nagycenk-Farkasverem (EIA), 11 – Nagycenk-Soproni út-Ikva között, 12 – Balf-Fürdő épület mögötti tomb, 13 – Sopron-Bécsi úti táblák, 14 – Sopron-Krautacker (LBA), 15 – Sopron-Krautacker (EIA), 16 – Sopron-Burgstall (LBA), 17 – Sopron-Burgstall (EIA), 18 – Sopron-Hegy-dűlő, 19 – Sopron-Szárhalmi erdő, 20 – Ágfalva-Keskeny-földek, 21 – Pereszteg-Keleti lakóterület, 22 – Balf-Fő utca 118, 23 – Sopron-Warischberg (LBA), 24 – Sopron-Warischberg (EIA), 25 – Sopron-Potzmann-dűlő (LBA), 26 – Sopron-Potzmann-dűlő (EIA), 27 – Fertőrákos-Erdei utca, 28 – Harka-Kenderes, 29 – Pereszteg-Vejke-major, 30 – Sopronkőhida-Deicht, 31 – Sopron-Jókai utca 5, 32 – Sopron-Kistómalom feletti rét, 33 – Sopron-Tiefenbach-dűlő III, 34 – Harka-Kányaszurdok II, 35 – Harka-Istenszéke, 36 – Harka-Pfennigwald, 37 – Nagycenk-Belső vízálló, 38 – Sopron-Ógabona tér 44–46, 39 – Sopron-Várkerület 75 (Pannonia szálló), 40 – Sopronbánfalva-Avar utca 44, 41 – Sopronbánfalva-Sánc-hegy, 42 – Balf-Kogarl-szőlő, 43 – Sopron-Burgstall (necropolis), 44 – Fertőrákos-Kőhidai-dűlő, 45 – Fertőrákos-Kecskehegy (by Attila Mrenka).

² BELLA 1890.

³ BELLA – MÜLLER 1891, 175.

⁴ Soproni Múzeum Régészeti Adattár (Archaeological Data Repository of the Sopron Museum).

Research history

The discussion of settlement excavation and work in the tumulus field are separated; this study focuses on settlement evidence.

Bella's first excavation on the settlement (1888)⁵ is cursorily described: without specifying the location of the trench, he reports on a thick layer of ash, charcoal, sherds, and bone, and interpreted the feature as a pit.⁶ Apparently, the finds from this excavation have not survived, and there is no record of their accession to the museum.

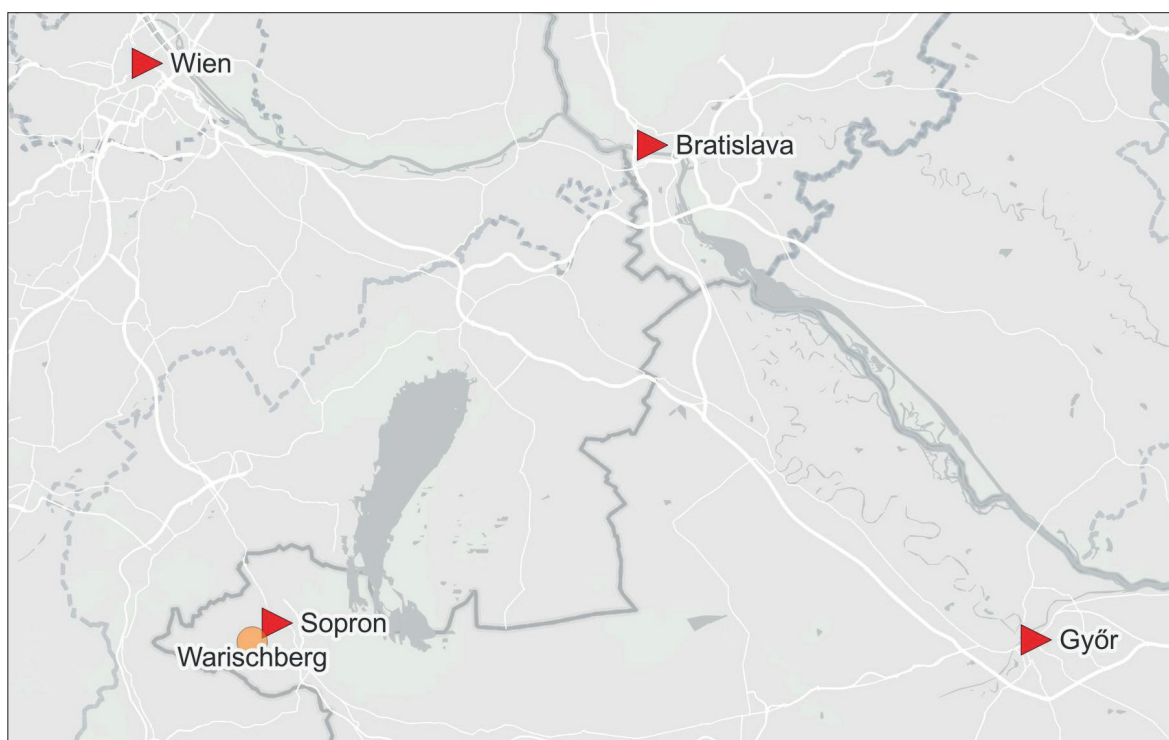


Fig. 2. The Warischberg in Western Transdanubia (by Attila Mrenka).

In 1890, Bella conducted a second campaign, funded by the *Anthropologischen Gesellschaft in Wien*.⁷ In his notes, he mentions opening five pits on the slope facing Sopron (likely the north-eastern one, where finely constructed terraces are still visible today).⁸ A contemporary account in the *Oedenburger Zeitung* describes a substantial excavation: one pit reached 8 m in diameter and the overall area investigated covered ca. 50 m². Finds included spindle whorls and, notably, stone slabs. At a depth of 1.2 m, the excavated part of the pit was overlain by 'horizontally laid stone slabs' (dry stone walls⁹), under which Bella recovered further artefacts: a Tibullanus bronze,¹⁰ a bronze pin from the Hallstatt Period, a whetstone, fragments of jasper, a pottery spool, and a large 'moon idol', and

5 Nováki, Gyula: *A Károly-magaslat ásátásának rövid története*. SOMRA; NOVÁKI 1998, 145.

6 BELLA 1890.

7 SOMRA 28.

8 BELLA 1890.

9 BELLA 1890.

10 He did not specify the details; about it might have been a Roman bronze coin, but there is no 'Tibullan/Tibull' known from the Roman Period. Balázs Nagy numismatist/archaeologist, leader of the Numismatic Department in the Ferenczy Museum Centre, suggested that the coin might be a provincial Tiberian mint, most likely an Emmett 61, Geissen 55, Dattari 86, Milne 57, or RPC 5097.

lots of animal bones. He also reported finding a thatched roof structure covering the pit, composed of twigs and branches and packed with earth,¹¹ as well as the remains of a hearth in the form of an 87 cm-thick layer of oak ash admixed with most of the animal bones. According to the baffling concluding lines of the article, Bella stated that he had identified 29 such features and calculated they were enough to serve about 120 individuals. However, this account is inconsistent: he reports excavating only five pits (only three in *Archaeologiai Értésítő*¹²) but claims multiple times identifying 29 ‘dwellings’,¹³ none of which is mentioned anywhere as visible on the surface. Combining forces with Rudolf Hoernes, Bella also excavated several tumuli (four in 1890 and one more in 1891¹⁴) and one more dwelling in 1891.¹⁵

After a ca. two-decade hiatus, investigations resumed in 1911 but produced no significant new information.¹⁶ The last recorded digging at the settlement took place in 1918, when a dwelling was exposed.¹⁷

By contrast, accounts of research in the tumulus cemetery in 1890 and 1891 are more detailed.¹⁸ Bella recorded seven tumuli in 1890 and excavated four;¹⁹ he noted that more tumuli had existed, but most had eroded away by then. Gyula Nováki provided a comprehensive description of the finds from the site, with inventory numbers, in the 1950s,²⁰ and he was the first to survey the ramparts,²¹ though he did not conduct further excavation.

Taken together, these early investigations indicate the site is insufficiently understood and highlight the need for systematic, modern archaeological investigation.

Field surveys in 2024–2025

Because of the paucity of reliable information, I expanded the Sopron-Burgstall research programme (initiated in 2021) to include the wider environs of Burgstall, with Warischberg as a starting point given its assumed approximate contemporaneity with Burgstall.²²

Recent investigations at Burgstall have yielded new data on the site’s chronology, raising the need for a revision: the earliest occupation now dates to the final phase of the Ha A and the beginning of the Ha B1 period,²³ implying the existence of a previously unidentified Late Bronze Age settlement horizon in the mountains. Similarities between the materials from Burgstall and Warischberg suggest interconnections in the Late Bronze Age, too; however, Early Iron Age material is only known from Warischberg today.²⁴

Modern intrusions complicate fieldwork. A viewing platform erected in the early 1930s occupies the summit and a large children’s playground now sits within the Iron Age fort. The hill was a focal

11 BELLA 1890.

12 BELLA 1891a, 59.

13 BELLA 1891a, 59; BELLA 1891b, 168.

14 SOMRA 28.

15 SOMRA 28.

16 MIHALIK 1912, 175.

17 SOMRA 28.

18 SOMRA 28.

19 BELLA 1891b, 168.

20 SOMRA 31.

21 NOVÁKI 1997, 118–119.

22 EIBNER-PERSY 1980, 23, 31, 33, 34, 121, 207–209; PATEK 1976, 23; PATEK 1983, 110.

23 MRENKA 2023, 28.

24 NOVÁKI 1997, 122.

point during the Second World War²⁵ and a television mast stands on an adjacent summit. Contemporary metal debris from wartime activity and modern scrap metal, together with electromagnetic interference from the mast, generate abundant 'false' signals, posing significant challenges for metal detection. The large proportion of built-up area and the dense forests covering the rest restrict access and limit areas available for survey, as well as the results that can be achieved; combined with significant modern ferrous contamination, they render field research extremely difficult.

Consequently, recovered artefacts are few and ceramics are conspicuously scarce; the collected few sherds belong to the Early Iron Age horizon.

Metal finds are more varied and display a broader chronological range. An unexpected number of Roman Period coins, issued from the Early to the Late Imperial Period, have been recovered, while a minority of objects date to the Middle Ages. As for metal finds, nearly half of them were dated to the Late Bronze and Early Iron Ages.

The scatter map of the finds (Fig. 3) reveals a modest spatial difference between prehistoric and Roman material: prehistoric objects are concentrated to the west of the playground within the southern half of the hillfort, whereas Roman Period ones are similarly distributed but extend slightly further to the west. The general scarcity of finds stems from current land use and possibly from earlier illegal metal detector activity. However, there is no definitive evidence of systematic looting: since the television mast began operation, single-frequency detectors perform poorly on the site and only multi-frequency instruments have been usable; these have been widely available only in the last decade, making extensive looting of the site improbable.

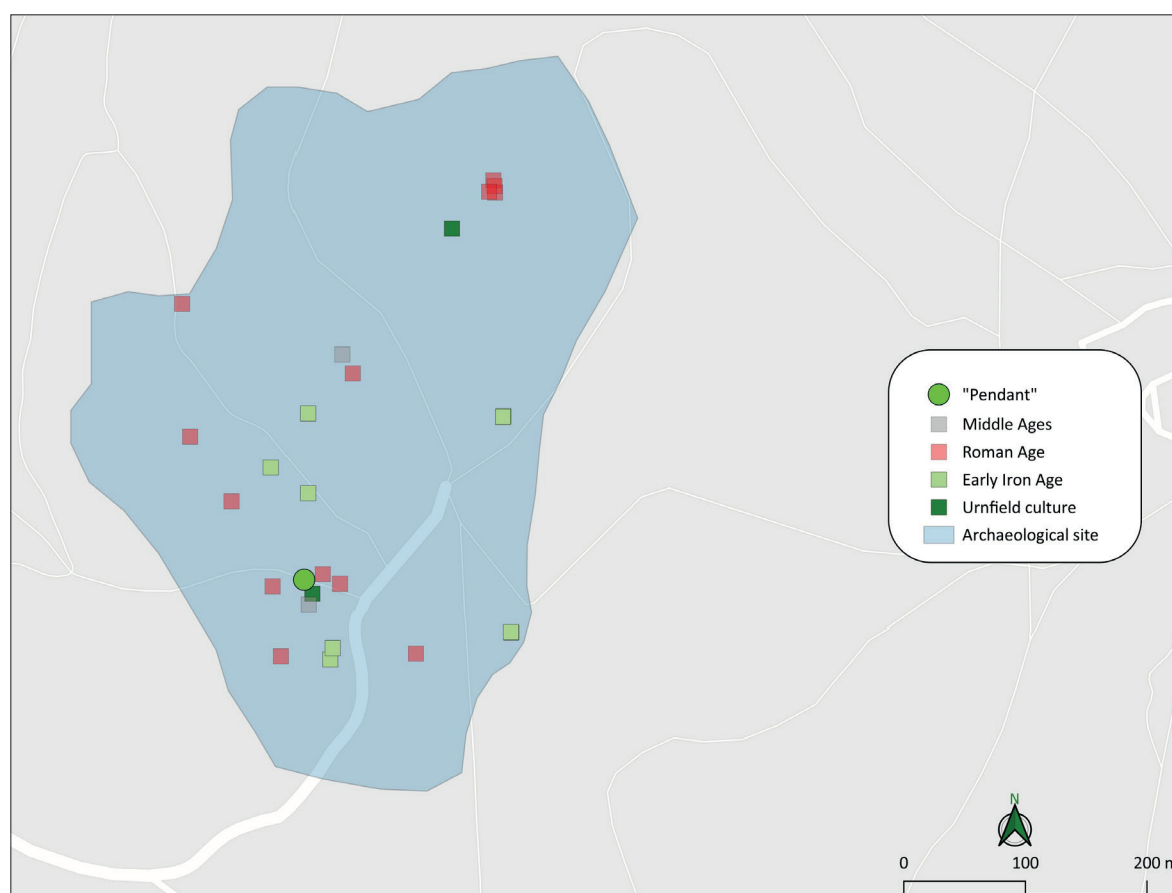


Fig. 3. Distribution of finds and the findspot of the 'pendant' (by Attila Mrenka).

A peculiar find

On 3 March 2024 Attila Kónyai, a volunteer metal detectorist participating in the Sopron Museum's public archaeology programme, recovered an unusual bronze object together with two iron hoops near the centre of the hilltop. The find was recovered from the recent brownish humus topsoil layer at a point where a sidetrack passes between the green-triangle and yellow-stripe hiking routes. Given the site's history and its complex stratigraphy, the object may derive from a secondary context.

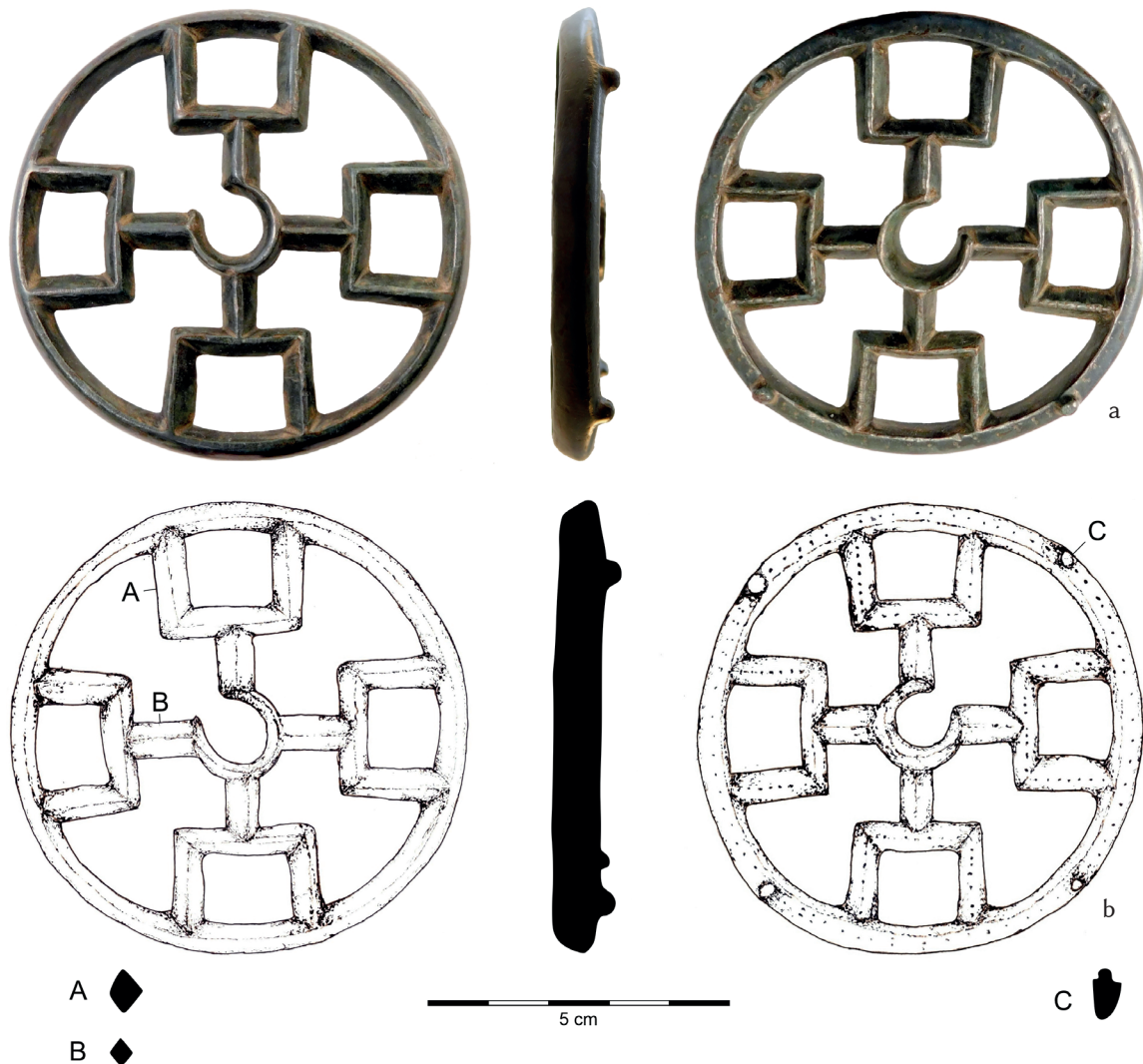


Fig. 4. a – front- and backside of the ‘pendant’ (photo by Krisztina Balassa), b – front- and backside of the ‘pendant’ (graphics by Attila Mrenka, Krisztina Balassa).

Openwork ‘pendant’

The object is circular and superficially resembles a spoked wheel pendant (*Radanhänger*) (Fig. 4.a–b), but the spokes are forked. The outer rim has a slightly triangular cross-section with its apex on the front; the backside surface is gently convex rather than flat. The external side of the central aperture is flat, the internal one bears a midrib; approximately one-quarter of this circumferential zone is missing. The rim of the central aperture protrudes slightly (c. 1–2 mm) from the flat surface of the artefact. The cross-section of the forked spokes is trapezoidal. The backside features four small, knob-like supports and a series of minute points between them on the outer rim and on the back-

sides of the forks. Wear on the four knobs indicates that the object rested upon them. The bronze artefact exhibits a stable deep green patina indicating good alloy quality. Inv. no. 2025.1.2.1. Diameter: 7.4 cm, thickness: 0.7 cm, weight: 85.02 g.

No comparable object is held in the collection of the Sopron Museum and, to date, no closely similar object has been reported from the wider Sopron region.

Late Bronze Age wheel-pendants

Diverse wheel-shaped pendants were in fashion across Central and south-eastern,²⁶ as well as western Europe²⁷ from the Middle Bronze Age; finds of such are known even from Mycenaean Greece (for example, Grave M15 in Argos).²⁸ Types include ones with and without suspension loops; their principal morphological variation concerns the arrangement of the radial elements.²⁹ The type was long-lived and widely distributed from France to the Carpathian Basin and into the territory of today's Greece.³⁰ Based on associated finds, most archaeologists consider them jewellery worn by women and girls.³¹

K. Jankovits recently summarised Hungarian examples;³² in her typological framework, our piece belongs to Type D (*Sonderformen*) of wheel-pendants with spokes (*Radanhänger mit Speichenschema D, Sonderformen*), the name inferring a scarcity of exact parallels. A stray find from Hungary³³ shows a close resemblance to the piece from Warischberg; the type was associated with the Middle and Late Urnfield Periods in Hungary.³⁴

A specimen identical to the stray find mentioned above was found at Dolné Janíky (okres Bratislava-vidiek) in Slovakia (Fig. 5).³⁵ T. Farkaš discovered the find in 1964, after heavy ploughing, at 50–60 cm depth; the object reached the museum only in 1965, after J. Bereš of the Slovak Academy of Sciences inspected the site.³⁶ The pendant was part of a hoard found in a single-handled vessel³⁷ dated to the Ha B period.³⁸ Paulík sorted the items in the hoard, classifying the pendant into the group of artefacts collected for repair and re-use.³⁹

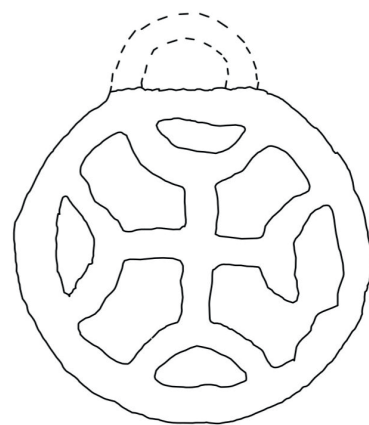


Fig. 5. Pendant from Dolné Janíky (graphics by Attila Mrenka after PAULÍK 1972, Obr. 8.12).

26 TURK 2001, 258.

27 DE ANGELIS – GORI 2016, 265.

28 KROGH 1970, 156. Fig. 6.1.

29 WELS-WEYRAUCH 1978, 67.

30 WELS-WEYRAUCH 1978, 68.

31 WELS-WEYRAUCH 1991, 53.

32 JANKOVITS 2017.

33 JANKOVITS 2017, 407. Taf. 71.2506.

34 JANKOVITS 2017, 194.

35 PAULÍK 1972, 13. Obr. 8.11.

36 PAULÍK 1972, 5.

37 PAULÍK 1972, 7. Obr. 1.

38 PAULÍK 1972, 6.

39 PAULÍK 1972, 10.

The closest parallel to our pendant was excavated in 2011 at Győr by Gábor Ilon.⁴⁰ That specimen is larger (diameter 8.57 cm, weight 123.78 g)⁴¹ but its design closely resembles the pendant in focus. Ilon believed the knob-like supports to be casting seams⁴² and did not mention *pointillé*-like decoration on the reverse; he dated his find to the Ha B1 period.⁴³

G. Kossack placed similar wheel-like pendants in the Ha A1–2 period⁴⁴ In his typological framework, The Warischberg object matches Type 19,⁴⁵ which he originated from the Tumulus culture of southern Germany.⁴⁶ He cited only two parallels. One was excavated in an Iron Age cemetery by the road connecting Cetona and S. Casciano dei Bagni (Siena, Italy) and sold by antiquities dealer Giuseppe Pacini to Luigi Adriano Milani.⁴⁷ However, the design of this piece is different (Fig. 6):⁴⁸ it has four crooked spokes, and the central part with the hub is solid and features a tube-like sleeve; thus, it cannot be regarded as a close parallel.

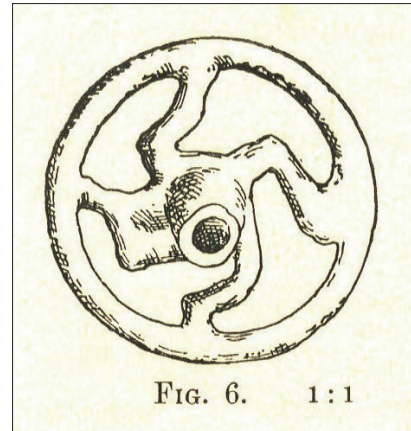


Fig. 6. Pendant from Cetona (after MILANI 1899, 154, Fig. 6).

The other pendant mentioned by Kossack seems to be a precise analogy (Fig. 7). But he did not enlist all parallels: the closest known analogue to our piece is known from Tolfà (Roma), Coste del Marano,⁴⁹ and a further example is known from the Early Iron Age cemetery of Fontanella di Casalromano (Fig. 8). The latter has similarly shaped spokes but a solid central disk rather without a perforation.⁵⁰ Colini attributed this find to the Early Iron Age,⁵¹ while Müller-Karpe suggested a Protovillanova dating (11th century BC).⁵²

The deposit from Chiusi di Pesio contains, among other objects, several variants of this pendant, differing in design and size. Based on the associated metal vessels, the hoard was generally dated to the Ha A–B periods, narrowing the date range of the pendants to the 10th–9th centuries BC.⁵³

However, the closest parallel to the Warischberg object is a pinhead rather than a pendant, also from the 10th–9th centuries BC.⁵⁴ As a major difference, that piece features a long shaft ('axle'), which the artefact in focus, if it was originally also a pin rather than a pendant, may also had once—although unlikely, as the rims of its central aperture are smooth and intact save for the missing quarter. Moreover, the Italian example notably lighter.

40 ILON 2022.

41 ILON 2022, 98.

42 ILON 2022, 98.

43 ILON 2022, 99.

44 KOSSACK 1954, 15.

45 KOSSACK 1954, Taf. 16.19.

46 KOSSACK 1954, 21.

47 MILANI 1899, 149. This reference was extremely difficult to track from Kossack's mention because he only cited the abbreviated name of the journal where Milani's study was published.

48 MILANI 1899, 154. Fig. 6.

49 KOSSACK 1954, 90. A169.

50 COLINI 1910, 124, Fig. 15.

51 COLINI 1910, 124.

52 MÜLLER-KARPE 1959, 47.

53 BOREL 2009, 74–80, Figs 53–54.

54 BOREL 2009, 96, Fig. 67.5; 100.

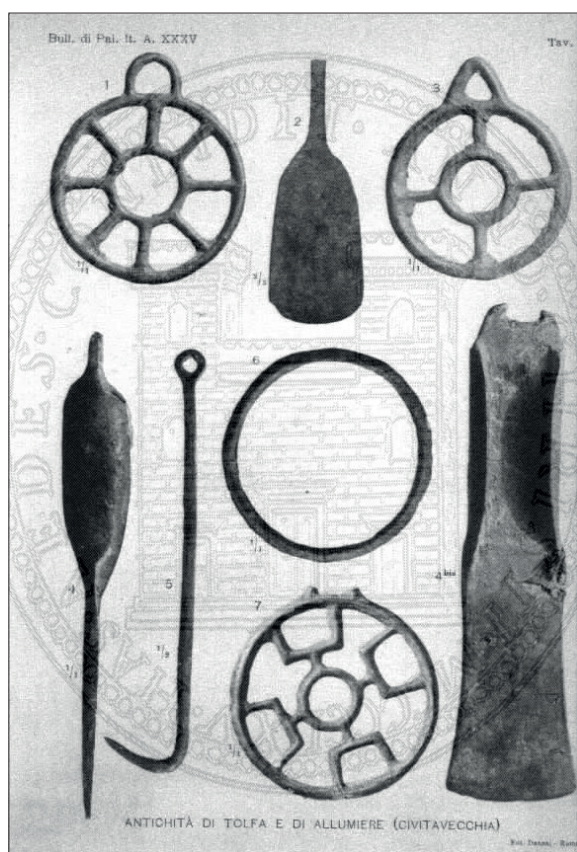


Fig. 7. Bottom centre: pendant from Tolfa (after COLINI 1910, Taf. 10.7).

this unlikely. The artefact in focus has a smooth, lustrous patina and a highly polished surface with elaborate decoration. The rim of the central aperture projects slightly, but both obverse and reverse planes remain essentially flat. Clear rasp marks on one side of the central part (unfortunately, close to the missing section) indicate that the surface was filed even; perhaps the hub's quarter broke off during this process, too. There is no trace of a suspension fitting: the outer surface is intact, without the attachment site of any additional but missing part.

P. Turk, reassessed the type in context with Hoard I of Kanalski Vrh, proposing that similar objects could function as weights.⁵⁷ However, the only exact analogue in that hoard⁵⁸ weighs only 14.9 g,⁵⁹ a fraction of the Warischberg object's mass (which is 5.7 times heavier, while the pendant from Győr is 8.3 times heavier). Given that most examples carry suspension loops (as noted by B. Žbona-Trkman and A. Bavdek⁶⁰), the weight hypothesis cannot be dismissed.⁶¹ Nevertheless, in the Warischberg case the polished finish, the absence of suspension, the presence of four feet, and the parallel obverse and reverse planes suggest an alternate use: as a coaster.

G. Vinci reports a similar object from San Giovanni di Triario,⁵⁵ which he also interprets as a pinhead with an elongated axis.⁵⁶ This suggests that the wheel-like design was applied to pendants and, less frequently, pinheads alike.

The internal layout of the Warischberg object is uncommon for the Late Bronze and Early Iron Age; nonetheless, wheel pendants in general were widespread across vast areas (Fig. 9). Whether the distribution of this particular variant reflects direct contacts between Late Bronze Age communities in the Italian Peninsula and Central Europe remains unresolved; in any case, the associated variant is so rare, and its design so unparalleled, that the pendant found at Warischberg can be regarded a unique work of art.

Function

Most published analogues bear a suspension loop, a feature absent on the Warischberg object (the Chiusi pin-head is an exception). Both the Győr and the Sopron objects possess four small knob-like protrusions. Ilon proposed that these result from the casting process; I consider

55 VINCI 2012, 38, Fig. 38.14.

56 VINCI 2012, 39.

57 TURK 2001, 261.

58 TURK 2001, 261, Fig. 6, Group 2.

59 TURK 2001, 264, Fig. 11.

60 ŽBONA-TRKMAN – BAVDEK 1996, 64.

61 The openwork artefacts could be linked even without a suspension loop; see ILON 2022, 98.

Archaeologists commonly associate wheel pendants with a ‘sun cult’.⁶² Perhaps the Warischberg object functioned as a stand or platform beneath a vessel containing ritual goods or liquids, thereby elevating the object above the ground, thus separating their sacred contents from it.

Chronology

Although wheel pendants were produced and used for a long time, this specific morphological variant (Kossack’s Type 19) is limited to a specific horizon. The piece from Győr is dated to the beginning of the second part of the Late Bronze Age (Ha B1),⁶³ and the Dolné Janíky pendant was dated to the Ha B period,⁶⁴ akin to a stray find from Hungary.⁶⁵ Kossack placed similar forms even earlier, into the Ha A1 period.⁶⁶ The find material of Sopron-Burgstall indicates that the first settlers lived there during the Ha A2–B1 period.⁶⁷ In light of the close connection between Warischberg and Burgstall (mainly during the Iron Age), the artefact in focus most likely belongs to the Ha B1–B3 period, in line with its analogues. The find from Chiusi indicates that the type could persist as late as Ha B3, but its continuation into the Early Iron Age remains unlikely. On balance, and in light of our current understanding of settlement dynamics in the Sopron region, the artefact in focus belongs most likely to the Ha B1 period.

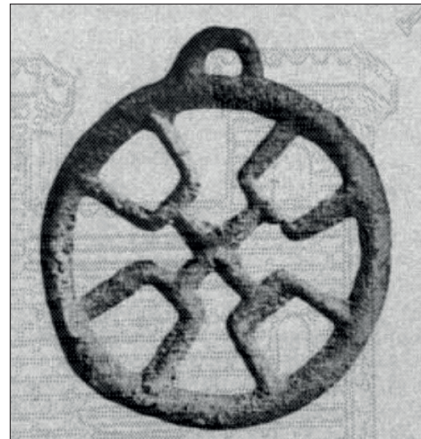


Fig. 8. Pendant from Fontanella di Casalromano (after COLINI 1910, 124, Fig. 15).



Fig. 9. Analogues of the artefact from Warischberg (by Attila Mrenka).

62 KOSSACK 1954, 21; ILON 2012.

63 ILON 2022, 99.

64 PAULÍK 1972, 6.

65 JANKOVITS 2017, 194.

66 KOSSACK 1954, 20.

67 MRENKA 2023, 28.

Conclusion

Renewed fieldwork at Warischberg has produced significant new data. The previously assumed Hallstatt cultural dominance at the site must be re-evaluated, and previously unknown horizons have also been identified. The occurrence of Roman Period material is unsurprising given the proximity of Scarbantia and the Amber Route; however, the presence of a Ha B1–B3 ‘coaster’ links Warischberg to the earliest occupational horizon identified at Sopron-Burgstall. This suggests a parallel settlement history for these sites and indicates that at least two upland settlements were occupied in the Ha B1–B3 period, contradicting E. Patek’s earlier hypothesis⁶⁸ of sparse Late Bronze Age activity as a prelude to the local Iron Age in the Sopron mountains.

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