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MACE OR SCEPTRE?
An exceptional Early Bronze Age male burial from the area of Lake Fertő

Eszter Melis[1] – Attila Mrenka[2] – Bálint Savanyú[3]
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A newly discovered Bronze Age cemetery, remarkable for the quantity and diversity of copper and bronze objects, was unearthed on the outskirts of Nagycenk during the excavations in the path of the then-future M85 motorway in 2017–2018. The inhumation graves and their finds can be attributed to the Gáta–Wieselburg culture, which extended into the areas of today's Western Hungary, Eastern Austria, and Southwest Slovakia between 2200/2100 and 1600/1500 BC. Grave S153, the focus of this paper, contained a unique artefact, a copper- or bronze-covered stone mace head the grave was radiocarbon dated to 2022–1892 BC. In addition to presenting a reconstruction of the burial, the study includes a detailed evaluation of the artefact, which remains without parallel in the European Bronze Age.

Keywords: mace head, Gáta–Wieselburg culture, Early Bronze Age, Middle Bronze Age, Nagycenk, power signalling

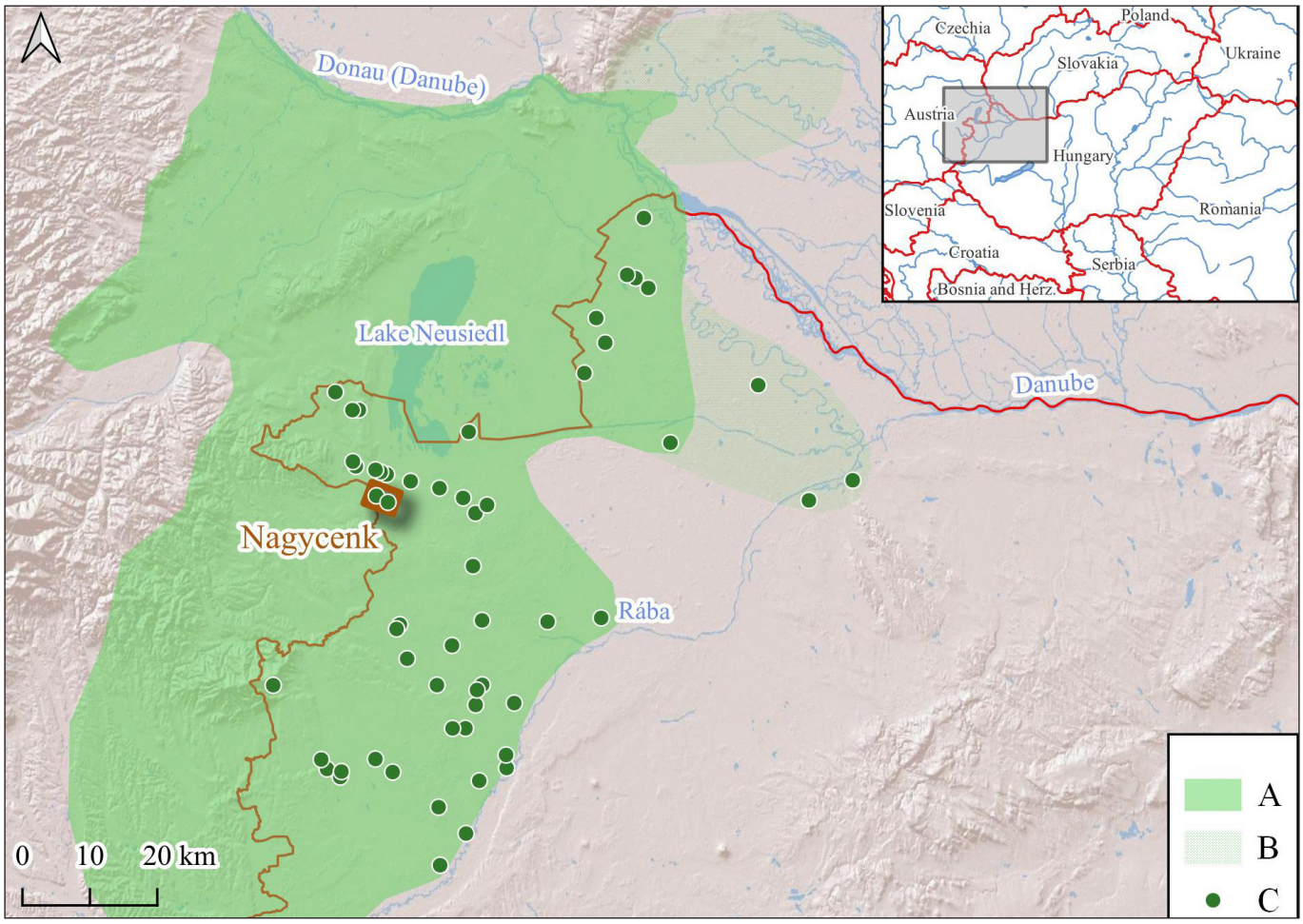

Fig. 1. Nagycenk at Lake Fertő. A, Gáta–Wieselburg culture, B, interference area with other cultures, C, Gáta–Wieselburg sites in Hungary (Krenn-Leeb 2011 completed, base map: Esri Shaded Relief; map by the author)

[1] HUN-REN RCH Archaeological Institute; e-mail: melis.eszter@abtk.hu
[2] Sopron Museum; e-mail: mrenka.attila@sopronimuzeum.hu
[3] Rómer Flóris Museum of Art and History, e-mail: savanyu.balint@romer.hu

LAKE FERTŐ AND ITS SURROUNDINGS IN THE EARLY AND MIDDLE BRONZE AGE

The third-largest freshwater lake in Central Europe is situated on the border between Hungary and Austria. Geomorphologically, the surroundings of Lake Fertő (Neusiedler See) form a transitional zone between the Alps and Carpathians and the Carpathian Basin. The current vegetation is characterised as an anthropogenic steppe (plainland, called 'puszta' in Hungarian), while originally, it was likely forest steppe (Jerem et al. 1984, 143–146; Jerem et al. 1985, 14–22; Draganits et al. 2022).

Communities of the so-called Gáta–Wieselburg culture settled in this region between 2200/2100 and 1600/1500 BC. We know little about their settlements (Melis et al. 2022; 2023), but numerous cemeteries have been identified and explored from the Vienna Basin to the Rába River (*Fig. 1*; Leeb 1987, Abb. 1–2; Krenn-Leeb 2011, Abb. 1; Nagy 2013, Abb.1; Melis 2024, Fig. 2). Extensive cemeteries of the culture, some containing hundreds of graves, have been discovered in Austria (Krenn-Leeb 2011; Franz, Schwarzäugl & Tögel 2017); the largest cemetery identified in Hungary thus far is the one with 58 graves at Hegyeshalom (Melis 2020a; 2020b). The graves contained primarily copper and bronze clothing accessories (hair rings, bracelets, neckrings, pins, and spiral beads),[4] less frequently gold hair rings, as well as shell, stone, rarely bone and amber beads. Occasionally, a grave contained weapons (a bronze dagger and/or an axe; see Bóna 1975, 241–245, Abb. 23–27, Taf. 274–279; Krenn-Leeb 2011, 21–22, Abb. 17–19; Nagy 2013, 101–105; Gömöri, Melis & Kiss 2018, 61). An average grave contained two or three pottery vessels. The Gáta–Wieselburg culture was distinguished in the early 20th century based primarily on certain characteristic elements of its pottery style, including two-handled jugs with hourglass-shaped handles, amphorae with asymmetrical handles, bowls with handles, and one-handled and knob-decorated pots (Miske 1917; Hicke 1987; Leeb 1987).

Lake Fertő lies at the centre of the distribution area of the culture, but mainly the surroundings of the villages positioned at a distance from today's shoreline abound with its record. For example, two inhumation cemeteries from the period have been discovered on the outskirts of Nagycenk (*Fig. 1*; Gömöri, Melis & Kiss 2018; Melis et al. 2024).

A NEWLY DISCOVERED CEMETERY OF THE GÁTA–WIESELBURG CULTURE AT NAGYCENK–FARKASVEREM

The 27 Bronze Age graves unearthed at Nagycenk–Lapos-rét were discovered on the northern bank of the Arany Creek, a tributary of the Ikva River (Gömöri, Melis & Kiss 2018). Approximately 1.5 km eastward, on the southern bank of the creek, 32 additional inhumation graves were discovered at the merged site of Nagycenk–Farkasverem (*Fig. 2*).

Attila Mrenka led an evaluation excavation on the site as part of the construction of the Csorna–Sopron section of the M85 motorway in late August and early September 2017. Fieldwork continued in

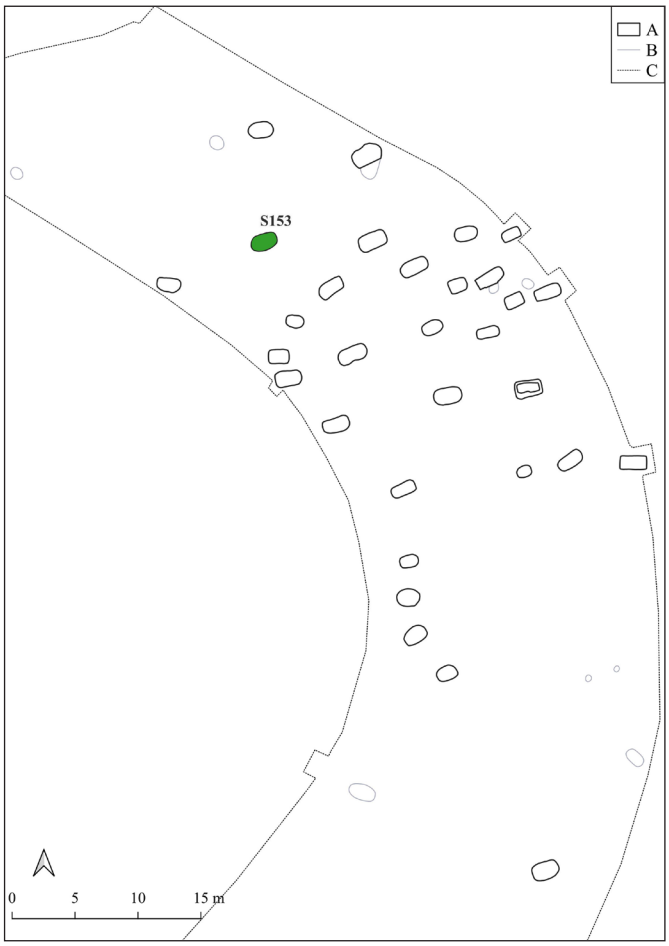

Fig. 2. Nagycenk–Farkasverem (merged site). Detail of the survey map with Grave S153 highlighted. A, Bronze Age graves, B, features from other historical periods, C, excavation area (by Benedek Érdi, Rómer Flóris Museum of Art and History, and Eszter Melis)

[4] Based on material composition analyses, the non-ferrous metal finds of the culture include pieces made of copper and tin bronze, respectively (Junghans, Sangmeister & Schröder 1968; Gömöri, Melis & Kiss 2018).

Fig. 3. Grave S153, photo (by Gábor Szalai, Rómer Flóris Museum of Art and History)

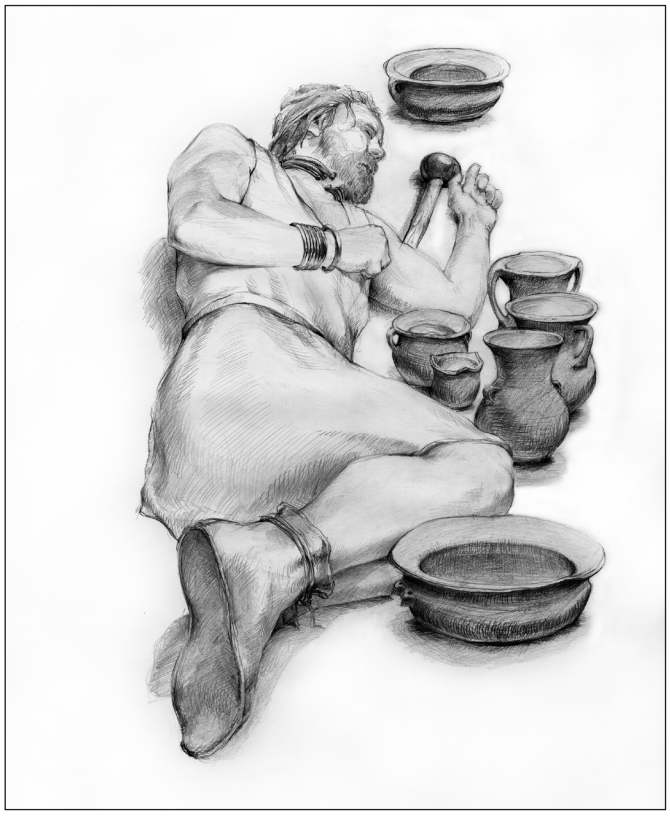

Fig. 4. Reconstruction drawing of Grave S153 (by Attila Szabadvári, Rómer Flóris Museum of Art and History)

March–May 2018, when Bálint Savanyú conducted a preventive excavation in the path of the then-future motorway.[5] Altogether 196 archaeological features have been identified, including inhumation graves of the Gáta–Wieselburg culture, settlement features of a Middle Copper Age and an Early Iron Age settlement, seven cremation graves of the Kalenderberg culture, and Roman Period ditches (Savanyú 2019).

The detail of the Bronze Age cemetery was discovered in the central part of the site, next to the Sopron–Szombathely railway line, on top of a slight, conical elevation of light grey loess with iron precipitate. The soil stains of most grave pits could not be discerned immediately after the mechanical removal of the topsoil layer, but only became visible after having been exposed to air and drying for a few hours. The 32 features (graves and depressions interpreted as burials) identified in the path of the motorway contained the skeletal remains of 32 people. The focus of this paper is Grave S153, the burial of an adult man interred with an extraordinary assemblage of grave goods (*Figs. 2–3*).

GRAVE S153

The strongly rounded rectangular, 60 cm deep grave pit was filled with light brown soil admixed with yellow and light grey soil grains and humous, dark brown soil layers with yellow soil grains deepening into it. The 20–50-year-old man was laid to rest in the northern part of the grave pit in a flexed position, with his head towards the west/north-west and feet towards the east/south-east (Melis et al. 2024, 4, 2. kép).[6] The skull and the jawbone were missing, which, together with the dark soil layers in the fill of the grave pit, may suggest grave reopening or looting (Rittershofer 1987; Kümmel 2009; Melis 2017).

Half of the fourteen finds recovered from the burial have been made of copper or bronze. The rolled-end

[5] The preventive archaeological work preceding the investment was undertaken by the Budavári Property Development and Management Nonprofit Ltd, on behalf of the National Infrastructure Development Company, in collaboration with the Rómer Flóris Museum of Art and History in Győr.

[6] We are grateful to Anett Gémes, Katalin Gyenesei, and Tamás Hajdu from the ELTE Faculty of Sciences for the anthropological evaluation of the remains.

Fig. 5. Grave S153, grave goods No. 1–3: copper/bronze neckrings (Ágnes Gera, Rómer Flóris Museum of Art and History)

Fig. 6. Grave S153, grave goods No. 5–6: copper/bronze bracelets (Ágnes Gera, Rómer Flóris Museum of Art and History)

neckrings *(Ösenringe)* and the arm spirals represent types that were widespread in Central Europe during the Early Bronze Age (2200–1600 BC) (*Figs. 5–6*; Lenerz-de Wilde 1995, 236–269; Bartelheim 1998, 56–57, 63, Taf. 45, R1, Taf. 46, S6.1, Karte 139, Karte 144; Cavazzuti et al. 2021, Fig. S4; Mrenka 2023). However, compared to the coeval burials from Central Europe, this one contained an unusually large number—three—neckrings.

In addition to the arm spiral, the man wore a solid cast copper or bronze bracelet with stamp-like, hammered ends (*Fig. 6*). This bracelet type is a characteristic find in the graves of the classical Únětice culture (2050–1750 BC) in today's Germany, Poland, and Bohemia (Bartelheim 1998, 58–59, Taf. 45, R3, Karte 140). Similar pieces, but made of gold, have been found in coeval 'princely burials' discovered under vast tumuli in Central Germany (Knoll & Meller 2016, Kat. 35, 44; Meller 2019, Fig. 4, Fig. 7).

The seven pottery vessels from Grave S153 all represent types characteristic of the Gáta–Wieselburg pottery style: a two-handled jug, an asymmetrical amphora, a two-handled amphora, two deep bowls, a handled pot, and another pot with no handle (*Fig. 7*; Melis et al. 2024, 10. kép; Hicke 1987, 102–105; Leeb 1987, Abb. 3–5; Melis 2024, Fig. 7). The long bone samples from the graves, measured in the HUN-REN ATOMKI Radiocarbon Competence Centre (INTERACT), were dated with a 95.4% probability between 2022 and 1892 BC (Melis et al. 2024, 1. táblázat/table, 16. kép), corresponding to the classical phase of the Únětice culture.[7]

The exceptional grave find assemblage was first presented to the public in the exhibition '*Sírhalomtól a halomsírig*' ['From grave mounds to tumuli'] in the Rómer Flóris Museum of Art and History in 2022 (Ujvari 2022).[8] Originally, the body was likely intact when interred, and the lack of the skull upon discovery is probably due to intentional reopening ('looting') after the funeral (Weiss-Krejci 2011; Király 2016). One can only guess the position of the head in the grave and the accessories that adorned it—perhaps solid gold hair rings, similar to the ones found in Grave 55 of Nagycenk–Lapos-rét or the coeval 'chief's grave' at Balatonakali (Gömöri, Melis & Kiss 2018, 57–58, Fig. 9,7–10; Kiss 2020, 534, Fig. 3.2). A relatively large bowl stood in each end of the grave pit; besides, a jug, two amphorae, and two pots were placed

[7] DeA-40140, 3597 ±18 BP. The radiocarbon sample was measured within the framework of the scientific collaboration between the HAS-RCH Lendület/Momentum BASES project in the HUN-REN RCH Archaeological Institute (LP 2023-8, 2023–2028, PI: Viktória Kiss) and the HUN-REN ATOMKI Radiocarbon Competence Centre (INTERACT). For the methodology applied during the preparation and measurement of the sample, see Molnár et al. 2013; Major et al. 2019. The radiocarbon data was calibrated using the OxCal 4.4 program (Bronk Ramsey 2009) and the IntCal 20 calibration curve (Reimer et al. 2020).

[8] Subsequently, the metal artefacts from Grave S153, including the mace head, were displayed in the new permanent archaeological exhibition of the Sopron Museum, entitled *Sopron örök! — Scarbantia aeterna!* [Sopron is eternal!], opened in May 2024. From March 2025, the objects have been exhibited in Győr again, in the temporary exhibition *„Sírhalomtól a halomsírig 2.0*" [From burial mounds to tumuli 2.0].

in front of the hips. The latter were found lying on their sides and crushed; their content will be analysed soon. The right arm, bent at a right angle, lay on top of the body with the lower arm and hand on the waist, while the left one was strongly bent, with the hand in front of the face. Based on the position of the arms, the upper body of the cadaver probably turned to its back at some point; however, only some very small fragments have remained of the ribs and vertebrae. The legs were found flexed on the left. This body position aligns with the burial customs observed in the Gáta–Wieselburg cemetery at Hainburg in Austria, where most men were laid to rest flexed on their left sides, with their bodies oriented along the southwest–northeast axis (Ehrgartner 1959; Krenn-Leeb 2011). Based on their position in the grave, the man wore the three neckrings, weighing more than half a kilogram (604 g) in total, with their open ends facing forward and the solid bracelet and the nine-coil arm spiral on his right lower arm. The artistic reconstruction of the burial incorporates these observations (*Fig. 4*; by Attila Szabadvári).

Fig. 7. Grave S153, grave goods No. 10, 7, and 8: pottery vessels (Rezső Rák, Rómer Flóris Museum of Art and History)

PREHISTORIC MACE HEADS IN CENTRAL EUROPE AND THE NEAR EAST

A greenish grey, blue-spotted stone mace head with a copper (or perhaps bronze) cover[9] was found next to the inner side of the left wrist. The 5.35 cm tall artefact, 7.2 cm in diameter and weighing almost half a kilogram (469 g), has a somewhat corroded surface (*Figs. 8–10*). It bears a cylindrical perforation at the centre; its surface is decorated with incised strokes around the hole on both sides, as well as ray-like line pairs and triple ribs on the sides. Textile remains were corroded onto the part above one of the line pairs and the quarter of the globular surface next to it, and remains of a wooden shaft were preserved in the shafthole.

From a technological perspective, the metal-covered stone artefact is unique in the European Bronze Age. A similar copper-covered stone mace head, dated to 4500–3500 BC, is known from Shiqmim in the southern part of present-day Israel; it was made of local stone using the lost-wax technique (Shalev et al. 1992). According to Near Eastern sources, sacred mace heads with metal covers, often made of precious metal or equally precious iron, were made of wood in the area during the 2nd millennium BC (Popka 2002, 8).

Fig. 8. Grave S153, grave good No. 4: the mace head, field photo (Gábor Szalai, Rómer Flóris Museum of Art and History)

Fig. 9. The mace head from Nagycenk, photo (Ágnes Gera, Rómer Flóris Museum of Art and History)

[9] To date, specific results of the material analysis have remained unavailable.

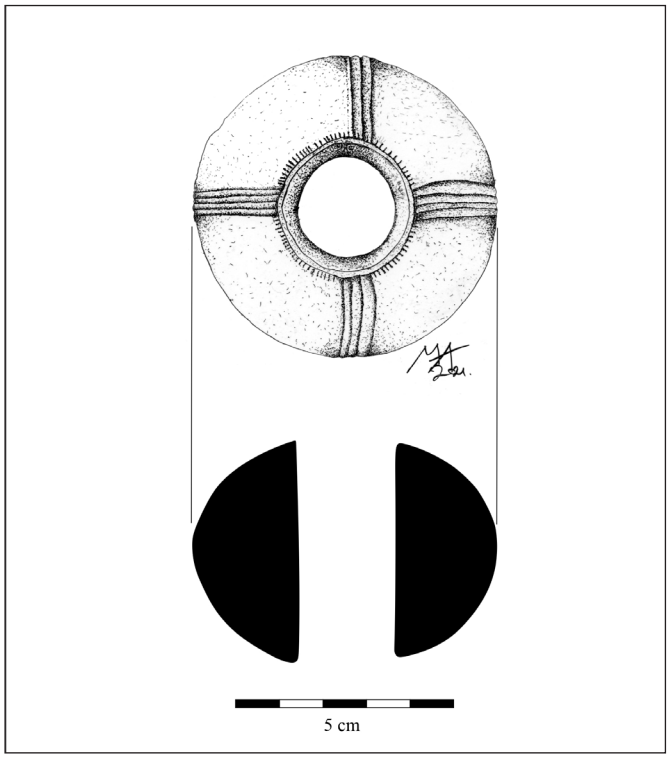

Fig. 10. The mace head from Nagycenk, drawing (Attila Mrenka and Krisztina Balassa, Sopron Museum)

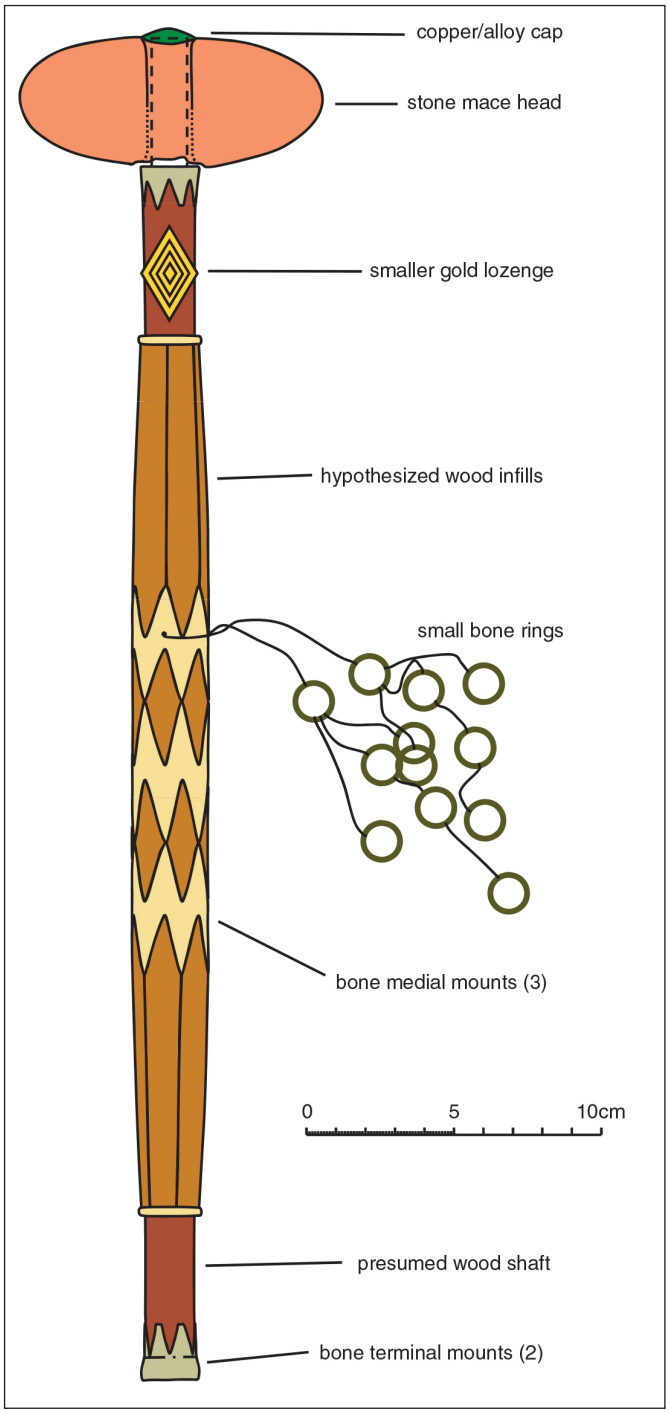

Fig. 11. Reconstruction of the ceremonial mace found at Bush Barrow (UK) (©Stuart Needham, Needham, Lawson & Woodward 2010, Fig. 8)

Another type of composite mace comprised a stone head and a metal sheet cover on the shaft. Such objects are known from the Chalcolitic record of the Near East and the Balkans, as well as Great Britain: the ceremonial mace found in the princely grave unearthed at Bush Barrow, a large tumulus near Stonehenge and dated to around 1950 BC, was adorned with a copper alloy cap closing the headside end of the shaft and a diamond-shaped gold sheet and stone inlays along the shaft (*Fig. 11*; Hansen 2002, 164; Needham, Lawson & Woodward 2010, 9–24; Klaunzer 2017, 87, Karte 3; Klimscha 2018, 108, Fig. 7.5, 7.6).

Metal (mainly copper) mace heads were produced in the Near East since the 6th millennium BC; the oldest known, cold-hammered specimen was discovered in Can Hasan, Turkey (Klauzner 2017, 87). The first cast bronze mace heads were used in the Northern Pontic area in the first half of the 2nd millennium BC (Klochko 2001, 187), while the first bronze mace heads in Central Europe appeared only in the Early Iron Age in the 1st millennium BC (Kemenczei 2005, Taf. 16, A, 84, 85, Taf. 26, C2; Metzner-Nebelsick 2009).

Mace is actually an evolved version of the oldest weapon, the club. Maces with a most often more or less globular, polished stone head were used in Europe and the Near East throughout the Neolithic. Research on these artefacts is highly diverse; therefore, only some interesting close parallels and possible functional analogies are highlighted here.

The best-known coeval parallels to the artefact in focus are marble mace heads found in graves comprising several pottery vessels of the Encrusted Pottery culture at Királyszentistván in Transdanubia (Bóna 1975, Taf. 218, 20, Taf. 222, 6); besides, recently, a stone mace head dated to the Middle Bronze Age was published from Nagymizdó (Ilon 2024, 2.2. E1.3. kép 3). In central Hungary, more than ten oblate biconical stone mace heads have been recovered from fortified settlements of the Vatya culture (1900–1500/1450 BC; see Kovács 1984, 223, Taf. 64, 7; Horváth 2004, 69–70; Váczi & Stibrányi 2008, 210, Taf. 3. 5).

Stone mace heads are more frequently found in the Early and Middle Bronze Age archaeological records of Eastern Europe, including Romania, Ukraine, and Moldova (Klochko 2002; Schuster et al. 2015). The most common globular type includes special variants with vertical ribs or grooves (Kośko 2002; Schuster et al. 2015, 200–203; Kośko, Klochko & Makarowicz 2022). Fluted stone mace heads were widespread from the Pontic region to the Baltic mainly in the second half of the 3rd millennium BC and to a lesser extent also at the turn of the 2nd and 1st millennia BC (Kośko 2002, 52–61, Fig. 12–16; Kośko, Klochko & Makarowicz 2022, 505–511), wherefrom their 'fashion' may have reached the Early Bronze Age Únětice culture in the area of today's Poland and Germany (Kośko 2002, 55–62; Czebreszuk 2013, 770).

A granite mace head, adorned with four radial rib bundles, similar to those on the artefact in focus, was found as a stray find in a Late Bronze Age cemetery at Laski in Poland (Kośko 2002, 78, B20, Fig. 6, 5). Similar ribs decorate the butt of some shaft-hole axes made in Eastern Europe in 2500–1900 BC (Kośko, Klochko & Makarowicz 2022, 511–516). Multiple crosswise ribs, similar to those on the pickaxe in a grave from Sárrétudvari–Őrhalom, dated 2900–2500 BC (Dani & Horváth 2012, 26–32, 11. kép 6; Dani et al. 2016, Fig. 2a–b), may imitate the fastening of the shaft. Currently, the best parallels to the mace head from Nagycenk originate from the Late Copper and Early Bronze Age archaeological record of the Eastern European steppe.

INTERPRETATION OF THE MACE HEAD FROM NAGYCENK

As mentioned before, mace is one of the oldest close-combat weapons, which lost its military significance in the Near East in the second half of the 4th millennium BC and became a power insignia of kings and gods, according to both written and archaeological evidence (Popka 2002; Taracha 2002). In this area, several metal mace heads have been found as votive offerings in depositions, while stone specimens are frequent finds in the settlements of the period (Schuster et al. 2015, 201–203; Klimscha 2018, 108).

In contrast, stone mace heads in the Early Bronze Age (2500–1900 BC) record of the Eastern European steppe are typically found in graves and depositions (Klochko 2001, 104, 113–119, Fig. 33, 7–8; Kośko 2002, 22–26). As mace was a typical weapon of cattle-herder communities of the Pit Grave (Yamna) culture, its function was also associated with herding (Klochko 2001, 23; Kośko 2002, 63). However, in the northern Pontic region, several rite elements and power symbols—including the mace head—were adopted from the Near East. Based on the associated finds in Early and Middle Bronze Age tumulus burials and hoards, as well as mace depictions on anthropomorphic stone stelae, these weapons were linked to high-status individuals (Kośko 2002, 62–64, Fig. 24; Kalinin & Shishlina 2023). However, some believe that in less stratified and smaller herder societies, possessing a mace head represented the power of the community rather than the individual (Kośko 2002, 64–65).

According to the evidence of grave finds, in the Early and Middle Bronze Age (2600/2500–1500/1450 BC) tribal societies and chiefdoms in the territory of today's Hungary usually copper and bronze axes and daggers and gold jewellery served for signifying acquired social position (Earle & Kristiansen 2010; Kienlin 2015; Dani et al. 2016, 219–220; Kiss 2020). In this light, the marble mace heads found together with some lavish pottery vessel sets in graves at Királyszentistván are unique (Bóna 1975, Taf. 218, 20, Taf. 222, 6).

Bronze axes and halberds in Central Europe in the Early Bronze Age (2200–1600 BC) can be interpreted as weapons signalling exceptionally high social position, primarily in the social pyramid reconstructed from burials unearthed in Central Germany (Knoll & Meller, 2016, Abb. 13; Meller 2019, Fig. 12, Fig. 22). The large numbers of bronze weapons accumulated in some graves likely marked the outstanding

status of the deceased. In some exceptional cases, the weapons found in the grave were made of special materials, such as gold, and probably marked an even higher status (Hansen 2002; Meller 2019, 46–53, Fig. 7–9). The complex stone mace head with a metal cover found at Nagycenk was likely born from the same need for signalling.

Graves of the Early Bronze Age elite in Central Europe contain not only metal artefacts but also stone battle axes, representing a tradition that survived from the burial practice of the previous Corded Ware culture. Stone axes have lost their practical significance alongside the spread of bronze ones; therefore, some believe that they symbolised the continuity of power (Meller 2019, 45–46, Fig. 4, Fig. 5). A similar stone shafthole axe was found—together with a dagger and bronze jewellery–in a grave of the Gáta–Wieselburg culture at Prellenkirchen in Austria (Sauer 2009, 13–14). The stone mace head, which has become the core of this composite mace, could have been a similar ancient relic for the related community at Lake Fertő.

Although the Early–Middle Bronze Age community behind the cemetery at Nagycenk certainly did not live in a state-like society with a level of organisation where using the term 'sceptre' when describing power signalling would be fitting, it seems appropriate for emphasising the role of the uparalleled mace head as an insignia of power, as well as underscore its uniqueness and demonstrative character (Klaunzer 2017, 87). Further possibilities of interpretation may be revealed in the near future through more socioarchaeological research, archaeometric analyses aimed at learning about the material of the artefact and the technology applied in its making, as well as a comprehensive bioarchaeological evaluation of the entire cemetery.

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