Princes, Gold Weapons and Armies. Reflections on the Dieskau gold find and its possible origin from the Early Bronze Age Bornhöck barrow near Dieskau in the Saalekreis district

Harald Meller

ABSTRACT

The famous Early Bronze Age gold find from Dieskau, Saalekreis district, in Central Germany consists of three bracelets, a small ring, and a flanged axe, while eight other objects of unknown type remain lost. It was discovered in 1874 only three kilometres from a very large princely burial mound called Bornhöck, which was destroyed mostly in the second half of the 19th century AD. This paper argues that the gold ensemble was probably found during the removal of the Bornhöck burial mound and only subsequently attributed to a different find site to cover up the illegal extraction. In any case, there is a connection with the princely graves of the Únětice Culture. The prince of Dieskau was likely the most powerful of these princes.

KEYWORDS

Central Germany; Dieskau; Únětice Culture; Gold; Princely tomb; Axe hoard.

THE DISCOVERY OF THE DIESKAU GOLD FIND AND THE HISTORY OF RESEARCH

In the spring of 1874, a large gold find, also known as Dieskau I, was discovered during underground drainage works in the 'Saures Loch' ('Sour Hole') in the communal district of Dieskau, part of the municipality of Kabelsketal, in the administrative district of Saalekreis, Saxony-Anhalt, Germany. Though partially lost, the remaining objects – a flanged axe, two ribbed bracelets, one open bracelet, and a small eyelet ring (*Ösenring*) (**Fig. 1**, **Pl. 1/1**) – date this find to the Early Bronze Age (Br A2b; 1775–1625 BC). Only three kilometres away, the largest Bronze Age burial mound in Central Europe – named Bornhöck – was continuously removed by workers from 1844 on, particularly between 1870 and 1890 (**Fig. 2**).

The Dieskau gold find is a key assemblage for assessing both the Únětice culture as well as the Early Bronze Age in Central Europe more generally. Much thought has been given to its archaeological context and a number of studies of its provenance have been conducted. On the one hand, it was believed – based on the information provided by the finders – that it was a hoard find. Initially, the site of the find was understood to be located in the area around Merseburg, but it was later concluded that it must have been near Dieskau (Olshausen 1886, 470; Montelius 1900, 42–43; Jacob 1911, 180). W. A. von Brunn was the first to mention the location called the 'Saures Loch' ('Sour Hole') as the find site (von Brunn 1959, 55). On the other hand, the suspicion emerged that the gold objects may have originated from the barrow at Dieskau 'Meiersche Höhe', which was potentially a princely tomb comparable to the find sites in Leubingen in the Sömmerda district and Helmsdorf in the Mansfeld-Südharz district. The looting of the barrow at Dieskau was documented during a rescue excavation (Schmidt –



Fig. 1: The gold find of Dieskau, discovered by workers in 1874 includes four extant rings and one axe. These replicas are on display at the Halle State Museum of Prehistory, while the originals are at the Pushkin Museum in Moscow. The remaining eight gold artefacts, the form of which is unknown, have been lost. For a long time, it was disputed whether these objects should be designated a hoard find or a grave find. The fact that the Bornhöck, a massive Early Bronze Age princely burial mound located nearby, was being removed at the time of the find, however, suggests a grave find that was subsequently obfuscated. This is consistent with the circumstance that gold finds pertaining to the Central German Únětice Culture are exclusively from grave finds; none are from hoard finds. Photo: J. Lipták, Munich.

NITZSCHKE 1980, 182). This theory was largely accepted (e.g. ZICH 1996, 428, no. E136). Only recently has a comprehensive and commendable review of the relevant documents by J. Filipp and M. Freudenreich revealed the complete history of the archaeological finds there, at least as far as it is possible to do so (FILIPP - FREUDENREICH 2014). According to this study, the gold find at Dieskau appears to have originally consisted of 13 gold artefacts, allegedly recovered from the 'Saures Loch', which made the presupposition of a hoard find likely once more. While eight of the artefacts appear to have been melted down by a Leipzig jeweller, the remaining five artefacts were sent to the former Royal Museums in Berlin, from where they were taken to the Pushkin State Museum in Moscow, Russia, after the Second World War. Apart from the small eyelet ring, which has been lost, the gold artefacts remain undamaged. They were displayed at an exhibition in Saint Petersburg and Moscow a few years ago (PIOTROVSKI 2013, 465-466, no. 157). The chemical composition of the gold used for some of the objects has been more recently examined by E. Pernicka (BORN et al. 2015, 214). According to this analysis, the tested artefacts, namely the axe and the ribbed bracelets, exhibit relatively low copper and silver content, similar to the spiral hair ornaments (Noppenringe) from Leubingen (see Lock-HOFF - PERNICKA 2014, 230-232).



Fig. 2: Drawing by the city of Halle's municipal architect L. A. Stapel depicting the Bornhöck burial mound at Dieskau in 1843, shortly before the beginning of its removal.

As mentioned, the Bornhöck, a burial mound in the communal district of Dieskau not far from the alleged site of the gold find, whose sheer size had dominated the flat landscape up to that point, was removed during the second half of the 19th century (**Fig. 2**). Excavations between 2014 and 2018 revealed that this burial mound – similar to the princely barrows at Leubingen and Helmsdorf – contained a tent-like wooden construction surrounded and covered by stone packing. The construction measured about 65 metres in diameter and 13 metres in height during the Bronze Age (**Fig. 3**). A series of ¹⁴C analyses has dated it to the second half of the 19th century BC or about 1800 BC (Meller – Schunke 2016).

HAS THE DIESKAU GOLD FIND BEEN FOUND IN THE BORNHÖCK MOUND?

Given the find history and considering the results of the most recent excavations at Bornhöck, I believe there is good reason to assume that the Dieskau gold find is related to the Bornhöck mound's removal (Meller 2019a, 46–53; Meller 2019c). That is to say, the find was probably moved to the nearby 'Saures Loch' in an attempt to cover up the local workers' illegal extraction of artefacts, an act that ultimately proved successful. In my view, it is highly unlikely that the discovery of potential burial chambers at Bornhöck, which, according to R. Virchow (1874), had already been half removed by 1874, would coincide with the random discovery of such a gold find in close geographic proximity purely by chance and without there being any kind of connection. Another particularly convincing argument is that – in contrast to other regions with Únětice hoard finds such as Bohemia – the deposition of gold artefacts in hoards appears to have been prohibited in the so-called Circum-Harz group (B. Zich) of the Central

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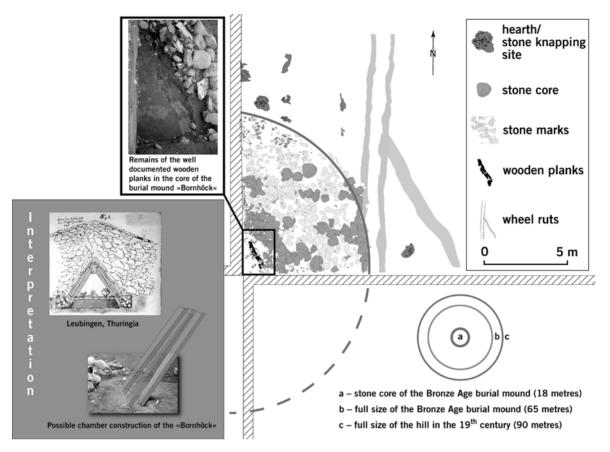


Fig. 3: Excavation plan of the large Bornhöck burial mound, the removal of which took place mainly during the second half of the 19th century. It clearly shows the stone packing (a) and the remains of the tent-like wooden burial chamber contained therein which was already looted during the Middle Ages. It corresponds to the structure of the princely graves at Leubingen and Helmsdorf. In the original surface layer, the wheel ruts from transporting the building material are still visible. There is a clear indication that the Bornhöck mound was whitewashed from the outside and thus visible from far away. Whether there were any additional burial chambers in the mound's outer layers is unknown but cannot be ruled out. Graphic design: J. Filipp, Bad Bibra.

German Únětice Culture, and that gold was instead reserved almost exclusively for graves (Pl. 1/2). One exception is the deposition of two golden spiral hair ornaments (Noppenringe) in a settlement pit in Pretzsch, located in the Burgenland district (Meller 2014, 697, no. 17; Blatschta – Klamm forthcoming). Moreover, in the hoard of Nebra in the Burgenland district, which dates towards the end of the Únětice Culture around 1600 BC, the sheet metal covering of the Sky Disc and the rivets of the sword hilts are made of gold. However, these cannot be considered genuine gold finds, but must rather be regarded as bronze finds with a golden iconographic programme (Meller 2010).

Apart from the Dieskau find, massive gold bracelets associated with the Únětice Culture are known only from the two princely tombs at Leubingen and Helmsdorf. Here, golden bracelets

The hoard find of Röderau, Meissen district, in Saxony (von Brunn 1959, 66), which included, among other things, three golden spiral hair ornaments (Noppenringe), does belong to Central Germany geographically, but was found outside of the Circum-Harz group's settlement area.

were used for the first time in Central Europe as a marker of distinction, starting off a long tradition (Metzner-Nebelsick 2010; Knoll et al. 2014; Meller 2019b). Interestingly, a golden bracelet was also included in the richly furnished grave no. 75 at Fuente Álamo, in the Murcia region in Spain (Schubart 2012, 139–141). This is intriguing given that the El Argar Culture exhibits certain parallels with the Únětice Culture with regard to many details, including apsidal houses, similarly standardised forms of undecorated pottery, pithos burials, distinction through precious metal ornaments (see Lull et al. 2013, 596–602). In contrast to the Únětice Culture, the distinctive metal used in El Argar is not gold, but silver (Lull et al. 2014). What is striking is that the gold bracelets from Leubingen and Helmsdorf form part of a set of princely ornaments that was apparently a tradition meticulously handed down and adhered to for at least a century (Fig. 4). In each of these cases, the bracelets are complemented with two pins, two golden spiral hair ornaments and a golden spiral bead. The apparently intentional gold composition of certain types of ornaments from the two grave finds likewise suggest that they represented traditional, established insignia (Meller 2014, 628–632; Lockhoff – Pernicka 2014, 230–232).

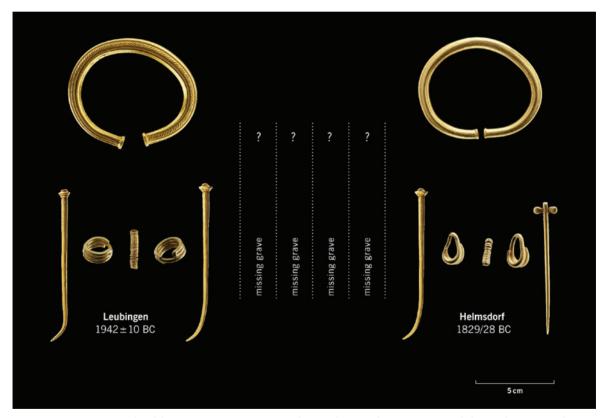


Fig. 4: The concept of golden insignia constituted a tradition that was passed down for more than a century (about five generations) and very precisely adhered to, according to the dendrochronological dating of the princely graves (new dating for Helmsdorf: CEZ Mannheim, MAD 1479 and MAD 1480, wane). Photos: J. Lipták, Munich; Graphic design: B. Janzen, State Office for Heritage Management and Archaeology Saxony-Anhalt.

As for the Dieskau gold find, it seems safe to assume that it represents not a hoard find but the contents of one or several graves discovered over the course of the Bornhöck mound's removal. The central burial chamber, remains of which still exist, can thus be ruled out as the actual site of provenance, given the likelihood of its looting as early as the High Middle Ages

(Meller – Schunke 2016, 455, note 28). Instead, we may assume the existence of at least one more burial chamber, perhaps constructed in accordance with dynastic succession. One important aspect is that the enormous mound was raised in a relatively short period of time. The new burial chamber would therefore either have been inserted at a later point or already have been planned for beforehand.

A discovery on the southwestern edge of the mound's stone packing, a pit measuring 1.7 by 1.2 metres in breadth and width, respectively, and 1.6 metres deep, indeed corresponds to a 'crouched' burial in terms of size, form and contour. Its upper filling contained shards of glass, while the bottom layers revealed remains of wood that were radiometrically dated to the 19th century. It appears that the workers who removed the Bornhöck mound in this spot dug deeper than was necessary for the removal. By 1874, the southern and southwestern side of the mound was already half removed, revealing a large profile.² That means that this area was probably already accessible at the time of the discovery of the Dieskau gold find. Whether or not this was the find site of the Dieskau gold find, however, cannot be ascertained.

THE GOLDEN OBJECTS AND THEIR MEANING

The Dieskau find comprises four golden rings and one golden axe (Meller 2014, 628–649). Quite remarkably, the single gold bracelet corresponds to the bracelet from the Leubingen princely tomb with regard to both patterns and profile as well as its thickened terminals (see Fig. 5).³ Seeing as it was probably forged directly around a person's wrist, we may assume that it was at one point opened by force. Both ribbed bracelets form a pair and correspond to the Bohemian hoard find at Minice, Písek district, in the Czech Republic (Moucha 2005, 130, no. 121) (Fig. 6). This suggests that the custom of wearing one golden bracelet, which was common in the period associated with Leubingen and Helmsdorf, might have subsequently changed to two bracelets. The closest counterpart to the small eyelet ring made of electrum from the Dieskau find is in fact part of a votive deposit ('Jarre Montet') in Lebanon (Gerloff 1993, 66–67, 86, no. 1–44) (Fig. 7). One particularly striking feature is the 234-gram gold flanged axe with a semi-circular blade of the Langquaid II type (Fig. 1).

If this find of five gold artefacts is already by itself somewhat unique, it should be added that, as mentioned earlier, C. von Bülow reports in a letter to the Royal Museum Berlin on the 25th January 1880 that the assemblage included another eight gold objects beyond the already known five pieces (Filipp – Freudenreich 2014, 745, 748): 'In 1874 a treasure was found several feet beneath the ground surface during drainage works on my property, also referred to as the "Saures Loch". The treasure consisted of different ancient Roman gold jewellery objects, bracelets, buckles, rings, gold wire, etc. In sum, 13 pieces were reported.'4 Unfortunately, their form is not described in any greater detail. That said, the weight of the entire gold find was

² This was misrepresented in Meller 2019a, 49–51 (see Virchow 1874). It is clear from the files that the mound removal work was shifted to the south, or southwest, after the discovery of the medieval tunnel leading into the burial chamber.

Only the weight of the Dieskau bracelet (149.51 grams) slightly deviates from that of the Leubingen bracelet (199.4 grams).

Original source in German: 'Im Jahre 1874 wurde auf meinem Grundstück, "das Saure Loch" genannt, beim Drainieren mehrere Fuß unter der Erde ein Schatz gefunden, bestehend aus verschiedenen alten römischen goldenen Schmuckgegenständen, Armreifen, Spangen, Ringen, Golddraht etc. Im Ganzen sollen es 13 Stück gewesen sein.' (FILIPP – FREUDENREICH 2014, 745)



Fig. 5: The gold bracelets from Leubingen and Dieskau are very similar in terms of profile, pattern and the shape at the terminals, and could have even originated in the same workshop.

The Dieskau bracelet was apparently forcibly bent open in order to remove it from the arm of the person who had worn it. Photos: a-b J. Lipták, Munich.



Fig. 6: The two ribbed bracelets (1-2, displayed are the originals) correspond to the bracelets from a gold hoard in Minice (3-4), except for some minor details. Even the button-like extensions on the bracelet's ends exist in both pairs. Figures 1a, 2a from Piotrovski 2013, 465, fig. 157:1; 1b, 2b courtesy Staatliche Museen zu Berlin, Museum of Prehistory and Early History, photos: A.F. Kudrjavicki; 3-4 from Jiráň 2008, tab. 8:1.

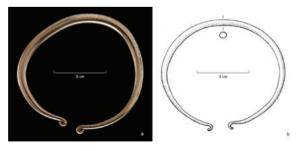


Fig. 7: The small eyelet ring from Dieskau (a) corresponds to only one comparable find regarding its material (electrum), namely in the distant Byblos, Lebanon (b). This is an important indication of the links between the Únětice Culture and the Middle East/Levant. a - photo J. Lipták, Munich; b - after Gerloff 1993, 67, fig. 4: 1.

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reported as four Prussian pounds, that is, 1,868 grams. According to this figure, the missing eight gold objects must have weighed a total of 1,232 grams. The grave find hypothesis postulated in this article demands an explanation of the composition of the find, that is, four bracelets, which is highly uncommon in a grave find. There are two options: either the find is a mixture of separate objects from different graves at Bornhöck. This mixing of objects could have occurred during the hasty removal of the Bornhöck mound. Or the objects belonged to the inventory of a single grave, and each object had a special significance. Following this interpretation, the small size of the electrum-made eyelet ring may have some relevance to the dead person's childhood. A parallel find at Byblos testifies to the prince's long-distance contacts. The large bent (or forcibly opened) gold bracelet in turn almost appears as a twin find matching the gold bracelet from Leubingen (Fig. 4). It could be an Early Bronze Age replica of the original item or even a contemporary artefact from the same workshop. The bracelet could thus have been a more ancient artefact commemorating a person's glorious ancestry. This is rendered unlikely by the fact that the bracelets were deposited in the prince's graves at Leubingen and Helmsdorf, however. The thickness and diameter of the bracelets show that they had to be forged directly around the wrist in order to be worn. That said, the object from Dieskau may also be a piece of booty which the prince of Dieskau might have snatched from another conquered or deposed—most likely inferior—prince of, say, the rank of the Leubingen or Helmsdorf princes. Alternatively, the prince of Dieskau may have worn the ring at a younger age, serving, perhaps, as a lower-ranked prince of the Leubingen type, before he was finally entitled to wear the two ribbed rings when he became the supreme ruler of the entire realm.

Both ribbed bracelets correspond chronologically and in their gold composition to the flanged axe of the Langquaid type. This would date the find to the Br A2b phase (1775–1625 BC). This date moreover corresponds to the recent ¹⁴C data from Bornhöck. It therefore seems possible that at least the axe and both ribbed bracelets at one point formed part of an individual grave's inventory.⁸

What might the missing eight gold artefacts have looked like? If the princely graves' inventory was canonical and had possibly expanded from one to two bracelets (as can be observed in the hoards of Minice and Nebra) the Dieskau bracelets would be part of a set including at least two pins, two spiral hair ornaments and one spiral bead—all of which are missing. In this case, three additional gold finds would remain. It is conceivable that there were originally two golden axes, one or two golden daggers and/or halberds included as well (Pl. 1/3). The only other Early Bronze Age weapon made of gold in Central Europe is, incidentally, the

⁵ Advice kindly provided by K. Michel, Zurich, based on the scanned letter by C. von Bülow (FILIPP – FREUDENREICH 2014, 745).

⁶ In graves located in Southern Germany and the Southern Alps eyelet rings have been found to resemble bracelets in both size and function (Ruckdeschel 1978, 153, 157).

⁷ Unfortunately, in contrast to the axe and the ribbed bracelet, this bracelet was not tested at the Moscow Pushkin Museum (see Born et al. 2015), the archaeo-metallurgic examination must still be performed.

As the finds from Röderau (von Brunn 1959, 66), Lhotka nad Labem, Litoměřice district (Moucha 2005, 123–124, no. 97), and Liběšovice (grave no. 5), Louny district (Moucha 2005, 58; both Czech Republic) confirm, ribbed bracelets already existed at least from the Br A2a phase. Nevertheless, they still featured in find contexts of the Br A2b phase, as is exemplified by the find in Obora, Jičín district (Czech Republic) (Moucha 2005, 133–135, no. 138).

Although C. von Bülow mentions only 'golden jewellery objects [...]' (FILIPP – FREUDENREICH 2014, 745), single gold weapons cannot be ruled out, seeing as the existing axe was not reported as such either.

gold dagger at Inowrocław, Poland (Piotrovski 2013, 466, no. 158.1). The closest location of any other gold weapons is in South-eastern Europe, e.g. in the hoard finds at Perşinari and Tufalău, both in Romania (Primas 1988).



Fig. 8: The elaborate axe hoards from the Dieskau area, like Dieskau III shown here, testify to the prosperity of the micro-region. Assuming that it is a direct representation of military units, the Dieskau prince commanded the largest armies. Photo: E. Hunold, State Office for Heritage Management and Archaeology Saxony-Anhalt

Consequently, we may assume that the golden princely insignia were expanded to include golden weapons. The backdrop for this may become clearer through some observations made with regard to the hoard finds (Fig. 8). In the Br A2a phase (2000–1775 BC), the large axe hoards, e.g. Dieskau III, consist almost exclusively of copper or are alloyed with such a small amount of tin that no difference in colour to copper is discernible (see Wunderlich et al. 2019). Tinalloyed axes, daggers and other devices with a golden colour were reserved exclusively for the elites and princes in the Early Bronze Age (Meller 2019d). In the more recent hoard finds dating to the Br A2b phase (1775–1625 BC), e.g. in Gröbers-Bennewitz I, Saalekreis district, the share of tin-alloyed axes rose considerably. Given that as a result, even common soldiers may have carried lighter, slightly gold-coloured axes by this time, the distinction of the supreme prince of Dieskau would have required him to bear weapons of pure gold. The phenomenon of precious-metals weaponry ultimately originated in the Middle East and South-eastern Europe, where they feature in graves, hoards, and temple treasures, demonstrating their owner's superior status (Primas 1988, 162–178; Hansen 2001, 42–58).

CONCLUSION

It is certainly no coincidence that the gold find was discovered near Dieskau. O. Montelius and M. Jahn have already noted that Dieskau represented a particularly wealthy region unmatched in Central Europe (Montelius 1900, 77–78; Jahn 1950; Maraszek 2012; Filipp – Freudenreich 2016). The high density of find sites and the remarkably elaborate hoard finds impressively demonstrate as much (see Filipp – Freudenreich 2016) (**Fig. 9**).

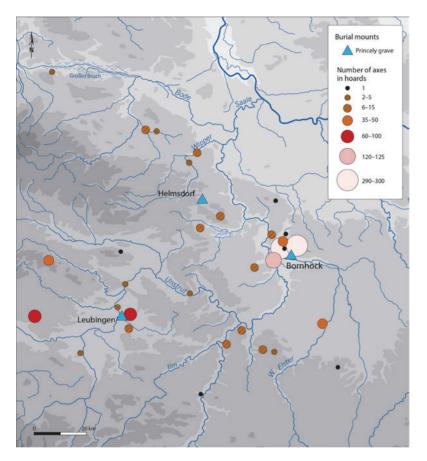


Fig. 9: It is quite conspicuous that the (by far) largest axe hoards associated with the Circum-Harz group of the Únětice culture were found in the micro-region of Dieskau, that is, in direct proximity to Bornhöck, the likely origin of the Dieskau gold find. Map: A. Swieder, B. Janzen, State Office for Heritage Management and Archaeology Saxony-Anhalt.

The hoard finds in the Dieskau area date to the Br A2a–A2b phases, i.e. they correspond to the fully developed Únětice Culture. If the axe hoards represent actual soldiers or troops, there is no question that the Dieskau region was not only home to the largest armies, who eventually deposited their axes, but that it was also the only region in which there were military units comprising more than 100 soldiers (Meller 2015; Meller 2017; Meller 2019a, 53–57). While the find at Dermsdorf containing 100 axes is the largest such find in the Leubingen area, we know hoard finds with more than 300 axes in the Dieskau region, namely Dieskau III or Gröbers-Bennewitz I. Correspondingly, the rulers of Dieskau likely reserved the privilege of maintaining the highest troop force levels, doubtlessly enabling them to dominate neighbouring regions.

Following this hypothesis, a coherent narrative emerges: a prince from Dieskau was buried in the largest grave mound of his time, likely constructed in accordance with dynastic succession, together with his elaborate gold insignia, golden weaponry in particular. In Dieskau, he ruled over the most prosperous and fertile region and, considering the axe hoards, apparently commanded the largest number of soldiers and thus an enforcement or administrative staff in the sense posited by Max Weber (Weber 1922/1978, 54). It appears, then, that either the Central German Únětice Culture developed, an extremely hierarchical system of power headed by a single supreme ruler, beginning at Leubingen, or the centre of power during the entire existence of this cultural group was at Dieskau, as the discovery of further burial mounds cannot be ruled out (**Pl. 1/3**).

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Harald Meller

Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt Landesmuseum für Vorgeschichte Richard-Wagner-Str. 9 D-06114 Halle (Saale), Germany sekretariat@lda.mk.sachsen-anhalt.de