

Terra fertilis, terra deserta
Exploitation of marginal zones



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Terra fertilis, terra deserta
Exploitation of marginal zones

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The Vindelev hoard in a broader context

Mads Ravn

Introduction

The Viking site of Jelling in southeastern Jutland (western Denmark) may be best known for its royal burials and a large runic stone set up by King Harald Bluetooth to proclaim that he had 'won' Denmark and to mark the conversion of the Danes to Christianity in the 10th century. But the recent discovery of a remarkable 6th-century hoard in the small hamlet of Vindelev, eight kilometres north-east of Jelling, is bringing another, older dynastic centre into focus and painting a broader picture of power in the area. The find was discovered over Christmas 2020 when two novice amateur archaeologists, Ole Ginnerup Schytz and his old classmate Jørgen Antonsen, went for a walk on the latter's field in Vindelev with a newly acquired metal detector. A few hours later, Danish archaeology was enriched by a unique gold find (AXBOE 2021; ANTONSEN and MARTINUSSEN 2024; RAVN and LAURSEN 2024).

Including what is currently believed to be the largest known gold bracteate, the hoard consists of 23 pieces, four medallions + 13 bracteates + 1 scabbard mount with a total weight of 795.6 g (Fig. 1) (LAURSEN 2022a; 2022b; LAURSEN and NIELSEN

2022; LAURSEN and RAVN 2022; RAVN 2022a; 2022b; RAVN and LAURSEN 2024).

It dates from what is known in Denmark as the Late Roman and Early Germanic Iron Age (c. AD 335–550). The motifs and runes on the gold pieces are unique and reveal a variety of new, previously unseen elements of iconography.

Investigation into the details of the find is ongoing, so the present results represent the current state of research. The details of the find will be investigated individually by different experts in future publications.¹

Thus, this paper aims to contextualize the hoard, as detailed analyses of the runes (LIMER and VASSHUS 2023), medallions (HORSNÆS 2025) and bracteates (RAVN and LAURSEN 2024) are already available. The aim is to provide the necessary details to understand the framework for future analyses. The hypothesis, based on preliminary stamp and motif identification, is that the gold represents important relationships among dynasties of early magnates and kings with close ties to the Gudme area on Funen and the West Zealand area. In addition, it may also indicate the first close contact in the 4th century with high-ranking persons in the Roman Empire, possibly from returning soldiers serving in the Roman auxilia.²



Fig. 1. The entire find. Vejle Centre for Conservation and Vejlemuseerne. One piece is missing as it was contrived when excavating the find spot (not to scale). See Table 1.

The oldest items

The Roman Gold Medallions

The oldest part of the find consists of four Roman medallions with portraits of important emperors of the 4th century. These four medallions were found together with Nordic gold bracteates. The combination of these two types of objects in a single context has only been seen once before, in the great hoard from Zagórzyn in Poland (BURSCHE 2009; HORSNÆS 2025, 170).

The oldest medallion is a 23.7-carat gold piece weighing 39.5 g. It was minted in Trier and depicts Constantine the Great (305–337 AD). The letters are worn, as is the reverse side. The reverse shows two goddesses of victory holding a shield between them, indicating that the medal was struck to celebrate the emperor's 30th year in office on New Year's 335–336 AD. This means that the medallions were about 200 years old at the time of deposition (Fig. 2a, 2b).

Two other worn medallions from Trier depict the emperors Constans (337–350 AD) and Gratian (367–383 AD). The last medallion shows Valentinian I (364–375 AD); it was produced in Thessaloniki in the Eastern Roman Empire. The Valentinian medallion is made of 24-carat gold and weighs 44.1 g. On the obverse is a portrait of the emperor. The reverse shows him as commander-in-chief of the military. At the emperor's feet is a prisoner of war, probably a Barbarian captured by the Roman Empire (Fig. 3).

The two largest medallions in the Vindelev hoard are related to two of the largest European gold hoards of the Migration Period. The Constantine medallion has a parallel in the hoard from Szilágysomlyó in Romania, while the Valentinian medallion is struck with the same obverse die as a medallion from the Zagórzyn hoard in Poland. The Valentinian medallion from Vindelev has a loop identical to that from Zagórzyn but differs

by the addition of a border decorated with a type of zigzag pattern known from other Roman medallions outside the Roman Empire and from Nordic gold bracteates (HORSNÆS 2025). The Valentinian medallions from Vindelev and Zagórzyn must have been struck in the same workshop in Thessaloniki, then they left the Roman Empire together and had loops attached in the same workshop outside the Roman Empire before their paths diverged. XRF measurements of the elemental composition of the borders and loops show that these parts are of significantly lower gold quality than the medallions themselves, confirming the assumption that they are later additions made by craftsmen outside the Roman Empire (RAVN and LAURSEN 2024, 106).

Roman gold medallions seem to have been used as personal, diplomatic gifts from the emperor to close allies of the elite.³ This raises the question: Could these rare items be personal gifts to a high-ranking Germanic person who founded the dynasty at Vindelev, a dynasty whose family members maintained close contact with the Roman elite, perhaps as auxilia troops officers, as Skre (SKRE 2020, 222; 2025) suggests on a more general level? If this was the case, the contact must have lasted for many generations, as the number of medallions and the wear on the gold indicate that the items were revered heirlooms that served to remind the Vindelev dynasty of these recurring, prestigious personal alliances of the past. In addition, the rims seem to have been added later, suggesting that the medallions were used outside the empire (HORSNÆS 2025, 170). It cannot be ruled out that some of the gold was looted, but the curated combinations of the find do not suggest so.

The bracteates

Apart from the medallions and a scabbard mount which decorated the opening of a scabbard, the rest of the Vindelev hoard

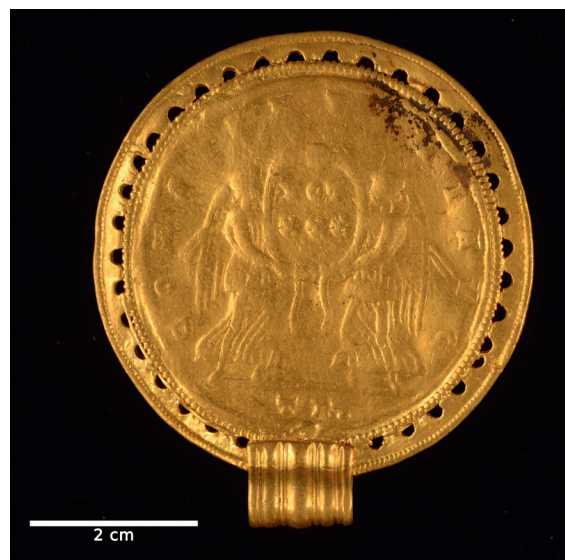


Fig. 2. The medallion depicting Constantine the Great (Photo: Michael Højlund, Vejle Centre for Conservation and Vejlemuseerne).



Fig. 3. On the obverse is a portrait of Emperor Valentinian I, who reigned from 364 to 375 AD. On the reverse is a full-length portrait of him in his role as head of the military, wearing armour and a long cloak. In one hand, he holds a globe, the symbol of world domination, and in the other he holds a banner, the supreme military emblem (Photo: Michael Højlund, Vejle Centre for Conservation and Vejlemuseerne).

consists of two different types of bracteates: eight A-bracteates, which mainly depict faces, and five C-bracteates, which depict a person with what appears to be a horse. They seem to belong to the first part of the Nordic bracteate tradition of the 5th century.⁴

The iconography and the runes of the Nordic bracteates are particularly important as unique examples that provide a glimpse into an otherwise impenetrable social and mental universe. One hypothesis is that the motifs are representations of current gods of the time, and that we may be able to identify Nordic gods, mythological creatures, and mythological tales among the motifs.⁵ Some of the depictions may also be of ceremonies and rituals performed among earthly people, probably the aristocracy, a perspective that seems to be supported by the interpretation of the inscriptions on one of the C-bracteates. It seems to suggest that the C-bracteates might represent Odin's Man, as it says exactly so on one of the bracteates (IMMER and VASSHUS 2023, 77). First, however, we need to take a closer look at the details and their combinations on the individual objects.

Of the 12 largest Nordic gold bracteates in existence, half are found in the Vindelev hoard. If the average weight of a bracteate is between two and seven grams, the weight of the 13 Vindelev bracteates is equivalent to about 100 ordinary bracteates. The unusually large borders have provided space for artistic expression, where, in addition to geometric patterns, several unique face masks, animal figures and water birds can be seen (RAVN and LAURSEN 2024, 108). The A-bracteates significantly increase the number of specimens of this type, as A-bracteates make up only 10% of the total corpus but eight out of 13 pieces in the Vindelev treasure.

Six of the ten largest known bracteates appear in the Vindelev hoard, suggesting that the site was important in terms of

both symbolic and actual power. An A-bracteate catalogued as X10⁶ has recently been confirmed as the largest known bracteate, although it is still folded. This bracteate measures 138 mm in diameter, 15 mm wider than a bracteate from Åsum in Scania, in Sweden.⁷ It is also the heaviest, weighing 123.7 g, which is 23.4 g heavier than the Scania bracteate (Fig. 4).



Fig. 4. The largest known bracteate comes from the Vindelev hoard. With a diameter of 138 mm, it is 15 mm wider than the previous largest example from Åsum in Scania. It was folded in antiquity and then recently exposed to modern agricultural machinery (Photo: Michael Højlund, Vejle Centre for Conservation and Vejlemuseerne).

Its size and the fact that it was folded symmetrically suggest that it was deliberately destroyed before being deposited. Together with other objects and the context, which I will return to below, it is likely that it was part of an offering, a destructive phenomenon known from other deposits of the period and from other find categories before and after (LUKJÆR 2002; RAVN 2024).

At the time of its discovery, bracteate X1⁸ represented a new variant of the A-motif, which has since been followed by new finds from Himmerland⁹ and Funen.¹⁰ Common to this type is the depiction of the characteristic late Roman consul attire (Fig. 5).¹¹



Fig. 5. This bracteate shows a head, and several abstract marks. Its closest parallels are found on the North Sea coast (Photo: Michael Højlund, Vejle Centre for Conservation and Vejlemuseerne).

Another interesting bracteate from this find is X16,¹² which shows a head and several abstract marks. Its closest parallels are found on the North Sea coast.¹³

Bracteates X10 and X20 belong to the same variant of the A type with depictions of two male heads side by side, although they are not die-identical. This variant was previously only known from Funen,¹⁴ Rågelund,¹⁵ and the large Broholm hoard near Gudme.¹⁶ However, the two bracteates from Vindelev are much larger.

The remaining A-bracteates have unique features, which can be seen on the die-identical X3 and X14,¹⁷ where the person depicted appears to be wearing chain mail and holding an oath ring in one hand (PESCH 2015) (Fig. 7), a type of oath ring that has recently also been found in a well-preserved high-prestige site dating from AD 1–450 in Løsning Søndermark near Vejle, only 16 km as the crow flies from the Vindelev site.¹⁸ The person on X9¹⁹ seems to be wearing a similar garment and holding a drinking horn to his mouth, a motif also known from bracteates from England in Scaford and Hoby (WICKER 2015; 2021) (Fig. 8).²⁰ The motifs on the A-bracteates show clear contact between Gudme and Vindelev and/or an itinerant goldsmith who had contact with both places.



Fig. 6. The central motif on bracteate X20 from the Vindelev hoard is closely related to the motif on X10 but is easier to see as the bracteate is not nearly as bent. In the presented X-ray image of X20, the motif of two king brothers or twins is clearly visible (Photo: Signe Nygaard, Vejle Centre for Conservation and Vejlemuseerne).

The close contact between Vindelev in southern Jutland and Gudme on Funen is also clearly illustrated by the C-bracteates, which may also show connections to Zealand (RAVN and LAURSEN 2024, 114).

One C-bracteate²¹ is particularly interesting in this context, as it is surprisingly similar to a contemporary bracteate found on Funen in the 17th century.²² The two almost identical bracteates further indicate close alliances between southeast Jutland and the contemporary power centre of Funen, some 135 km to the south-east of Vindelev, around Gudme and neighbouring Lundeborg (SØRENSEN et al. 2022; DENGSSØ JESSEN et al. 2024). They are not die-identical, and the borders are different, but they must have been made by the same goldsmith and based on the same model. The Funen bracteate is inscribed with runes, which have played an important role in the history of research into the interpretation of the iconography of C-bracteates (e.g., HAUCK 1985–1989; 2011;



Fig. 7. The oath ring is clearly visible here, as well as what appears to be the chainmail. The letters are illegible (Photo: Michael Højlund, Vejle Centre for Conservation and Vejlemuseerne).



Fig. 8. On this bracteate we see a rare motif of a person holding a drinking horn. We know that drinking rituals were important from both archaeological grave goods and written sources, including the poem *Beowulf* (Photo: Michael Højlund, Vejle Centre for Conservation and Vejlemuseerne).

HEDEAGER 1991; 1992; 2011; AXBOE 2007). This inscription now exists in a new version, and the reading leads to debate (Fig. 9).

On bracteate X4 we see a man and a four-legged animal. Around him are runic inscriptions. The man's impressive hair-style ends in a long braid, and he wears a crown with two rows of beads running through his hair. Above the animal's head and in front of the man's face is a large bird of prey. Under the horse's muzzle is written: *HOUAR*, which means 'The High One'. Another recent reinterpretation is 'The Dear One', *HORAR*, related to the Latin *carus* (VASSHUS and IMER 2023, 69). While the



Fig. 9a–b. Does it say *HOUAR*, or *HORAR*? A world of difference and meaning (see also IMER and VASSHUS 2023). On the left is the bracteate X4 from the Vindelev hoard, which is almost identical to the bracteate on the right, found before 1687 on Funen (Photo: Michael Højlund, Vejle Centre for Conservation and Vejlemuseerne, right: National Museum).

former has been seen as an early version of an epithet for Odin, who is known as such from later sources, for example, from the Old Norse poem *Hávamál*, the latter points in a different direction, perhaps focusing more on the man.²³

The iconography therefore probably illustrates the ideal king and warlord on horseback. This 'aristocratic combination' of man, horse and drinking vessel is often found in contemporary graves in Anglo-Saxon England and Scandinavia, where rich burials contain a combination of stylish grave goods, drinking vessels and gaming pieces, and horses and other animals are buried alongside people in the same graves. The later Sutton Hoo grave is just one extravagant example of a trend that can be seen in numerous less conspicuous, contemporary and early graves such as Spong Hill in East Anglia (RAVN 2003). Looking at this iconography one can imagine Odin's Man, the king riding

his horse with his dogs and ravens, just as Odin, his patron and wise lord, played strategic games with the clever giant Mimir, in life and death, as we read much later in the sagas. From this perspective it seems that the nobility created their gods in their own image.

In addition to the name HOUAR, or HURAR, there are other legible inscriptions. Behind the man's head is the runic word ALU, which means 'beer' or 'I protect', and on the bird's tail is LAPU, which means 'I invite'.²⁴ Is it The High or Dear One, now also known on another bracteate as Jagaz, who is extending an invitation to a celebration or ceremony where beer is involved? We know, for example, from the Old English epic Beowulf that feasts, wine, mead, and beer are part of important social and ritual ceremonies to which the king invites several people.²⁵ It is likely in this perspective that we should understand this condensed worldview of the writings and iconography on the bracteates?²⁶

X11²⁷ seems to be die-identical with a bracteate from another find near Odense in 1852 (Fig. 10).²⁸ However, the Vindelev specimen has a larger border and a more elaborate loop. The difference in the colour of the gold on two die-identical bracteates makes it possible that the die travelled with a goldsmith between Funen and Vindelev (RAVN and LAURSEN 2024, 111). Around the central motif there is a runic inscription which has proved difficult to decipher, but which may be a distortion of the more legible inscription on X13.

The motif on X13²⁹ is a new variant, but it is otherwise closely related to X11 in details such as the spiral-shaped ear, the swastika in front of the face, and the position of the horse's legs. The figures are surrounded by a runic sequence which, as mentioned, is semantically readable. Its interpretation provides important new insights. A series of frontal face masks can be



Fig. 10. C bracteate X11 (IK 31,2) (Photo: Cecilie Odderskov Saugbjerg, Vejle Center for Conservation).



Fig. 11. X13. Behind the head one can see the inscription mentioning the name of Odin (Photo: Michael Højlund, Vejle Centre for Conservation).

seen on the border. X13 also reveals the earliest direct mention of Odin on bracteates, dating from the mid-5th century (Fig. 11). This strengthens the belief that the imagery of the bracteates revolves around Odin and the pantheon known from 13th-century sagas. However, Odin's name in the genitive case refers to another person, Jagaz, 'the hunter,' called Wodanasweraz, 'Odin's Man'. So, the person depicted is probably Odin's Man, a member of the aristocracy and a worshipper of Odin, not Odin himself. It says: *Hostiōz. Helpu ufarfatai Jaga[i], iz Wōd[a]nas weraz*. Although these new readings are likely to be subject to future collegial scrutiny, the preliminary conclusion is that they suggest that Jagaz is a helper and Odin's Man. One version is: I help the hunter Jagaz, who is Odin's Man. IMER and VASSHUS (2023, 77–78) suggest that the inscription belongs to the religious sphere, as Andrén also suggests about bracteates. Andrén has additionally proposed that the borders of bracteates may depict an element of sun worship, explaining the triangles, hemispheres and spirals 'as suns or sun rays' on X13, X4, X11, X 7, and X8 (ANDRÉN 2014, 150). Hedeager also emphasizes the religious aspect due to the marginal placement of bracteates in space and suggests that the person depicted could be Odin, travelling to the other world in a shamanistic universe (HEDEAGER 1991; 2011, 207).

The new text on X13, however, suggests that the depicted figure is not Odin himself, but Odin's Man, meaning Jagaz in this specific case of X13. This interpretation deviates from the influential and important theses of Karl Hauck (HAUCK 1978; 1985–1989), but not in a binary way. The idea that this is an earthly person, one who offers sacrifice rather than a recipient of the sacrifice, also seems more in line with some Roman motifs.³⁰ Moreover, the runic inscription is the so far oldest known inscription mentioning the name of Odin, dating it at least to the 4th century.³¹

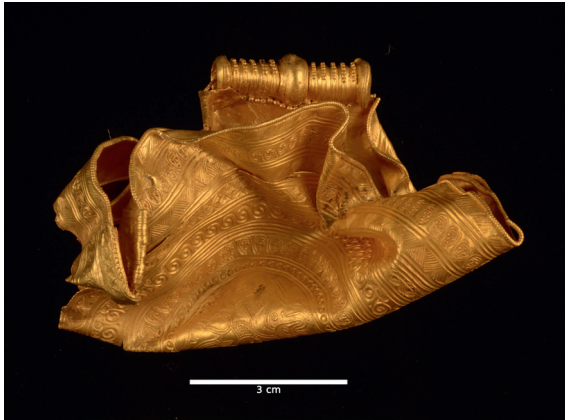


Fig. 12. Symmetrical, intentionally folded bracteate X17. See also Fig 4 (Photo: Michael Højlund, Vejle Centre for Conservation).

The folded bracteate X17³² is the third-largest bracteate known to date (Fig. 12) and a new variant of the C-theme. A large face is seen above a four-legged creature, representing a horse with a visible mane and tail. Details include a protruding tongue and a pronounced antler, with a horn ornament on the horse's head. As on X4, a large bird is seen in front of the human's face, in contrast to the swastika that occupies this space on X11 and X13. The large border is adorned with two rows of frontal face masks, which are repeated in a plastic version on the decorative triangle.

An unusual motif can be seen on X7,³³ a large male head with a curved moustache over a four-legged animal (Fig. 13). The animal has a long tail and a snake's tongue with a split tip extending from its mouth. The man wears a torque around his neck and is shown with two arms, one with his hand on the animal below



Fig. 13. On X7 (IK 731) the man is wearing a torque around his neck and is shown with two arms, one with the hand on the animal below him (Photo: Michael Højlund, Vejle Centre for Conservation).

him. In the other, he raises what is probably a scepter with an ornament at the end. Such scepters are known from late Roman depictions of emperors and consuls. He is dressed in a tunic underneath and a shaded cloth on top, which ends like a fish's tail. Here he is probably depicted in a ritual or mythical scene.³⁴

A similar theme was found at Kristianslund near Odense on Funen.³⁵ The two bracteates here were probably made in the same workshop. Close parallels can also be found in some North Zealand C-bracteates.³⁶ There are also two variants on Zealand from the Hjørunde field further south.³⁷ On an A-bracteate from Kongsvad Å, even further south on Zealand, there is also a small full figure in front of the head of the central figure.³⁸

Close links with Funen and Zealand

Connections across and along Jutland and possibly as far as northern Germany/the Netherlands can thus be established, as for example in the Hjarnø hoard, 47 km east of Vindelev, which shows some of the same ornamental details on the beads (HORSNÆS and RAVN 2021). The contacts across the Little Belt to the central sites on Funen near Gudme are particularly evident in bracteates X1, X4, X7, X10, X11, X13, and X20. The connections across the Little Belt have been noted before and are reinforced by the discovery of the Vindelev treasure (AXBOE 2022).

In addition to medallions and bracteates, the Vindelev treasure contains another circular pendant without the embossed image typical of bracteates.³⁹ It resembles a bracteate in other details, with the same type of loop, decorative triangle, and border with geometric stampings. The decorative triangle has filigree circles and dark glass settings, with the central setting empty.



Fig. 14. This piece resembles a bracteate with a decorative triangle. It has filigree circles and dark glass settings, with the central setting empty. (Photo: Michael Højlund, Vejle Centre for Conservation).

Circular pendants with filigree decoration and settings are known from other hoards with bracteates – one from Darum in southwest Jutland and four from Sletner, Østfold in Norway. Both the southwestern Jutland and Norwegian finds are from larger hoards, each containing a gold mouthpiece, as does the Vindelev hoard.⁴⁰

At Vindelev, all this happened in the 6th century, as research seems to suggest. I propose this because the most recent object is a mouthpiece from a sheath (Fig. 15a–b).

The gold mouthpiece is one of a group of 17 others known from Denmark, Norway, and Sweden. They feature a solid gold base plate with gold foil animal ornamentation on the sides crowned with filigree and granulation and heavier beaded wire along the edges

Its size could indicate that it was a mouthpiece for a sword scabbard. It is adorned with beautiful writhing animal-style

figures with eyes, legs and mouths, and looks to be from an intermediate phase between Style I and II. This style dates the mouthpiece to the first half of the 6th century.

Thus we have a more recent, early 6th-century mouthpiece buried with ‘ancient’ but modified 4th-century Roman medallions and some ritually ‘killed’ 5th-century bracteates, probably in a single event. Before we go any further, we need to look at the discovery site in more detail.

The find location

GPS data from the finders’ detector survey show that the hoard was in two main concentrations within 10 square metres, with the remainder dispersed across the field by ploughing. Below the two concentrations, our fieldwork uncovered traces of a con-

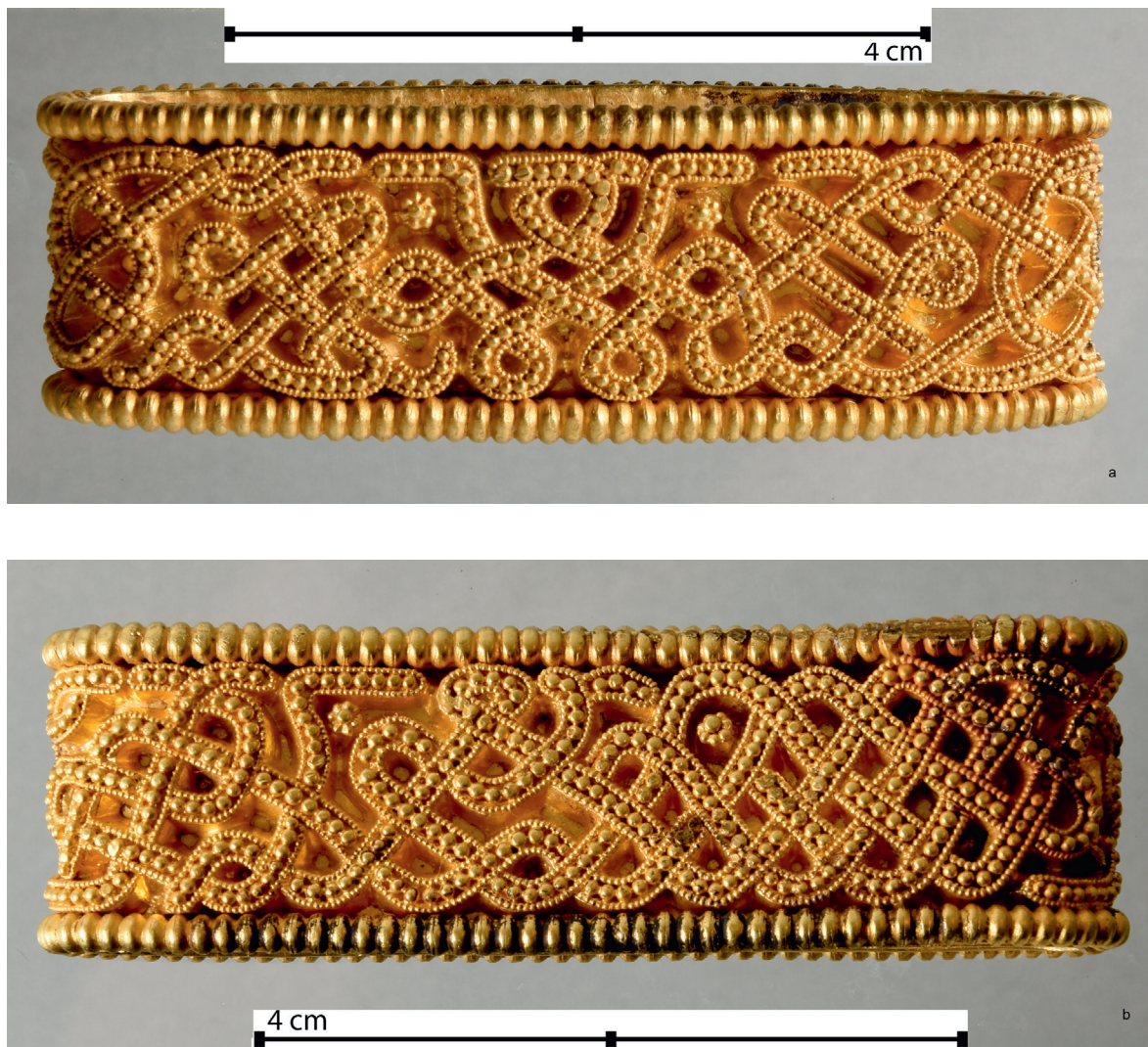


Fig. 15a–b. Mouthpiece dating the hoard to the 6th century. Vejle Centre for Conservation and Vejlemuseerne (Photo: Michael Højlund. Vejle Centre for Conservation).

temporary 6th-century settlement consisting of long houses and fences with ¹⁴C dates corresponding to the most recent find in the Vindelev hoard, X18 (LAURSEN and RAVN 2022, 56). The hoard appears to have been deposited all at once near what looks like a normal longhouse in the Iron Age settlement (Fig. 16), with bracteates and medallions from different time periods, suggesting that the most recent find marks the date of deposition.

The large bracteate X10 was found by the northern wall line. Seven ¹⁴C age determinations were conducted on material from three different postholes. The three youngest dates are from three cereal grains from the same posthole and give a narrow dating of 530–565 AD (RAVN and LAURSEN 2024, 120–122).

Gold hoards have previously been found buried at or in houses in Gudme and, with what we know so far, we must interpret this as having been deposited in the house of the owner.

Interpretations of the find in its context

In the context of the Vindelev hoard, it seems that the lineage of a person whose name begins with 'Win-', or as the runes suggest, Jagaz (lit. 'The Hunter') can be traced back to the 4th century, and that the dynasty had important relations with the Roman elite and the Gudme and Lundeborg complex in Funen. Diplomatic connections to Zealand and the North Sea coast are also evident. With this in mind, it should be considered that the spread of die-identical bracteates, as shown above, could be seen as an expression of gift exchange and diplomatic relations between political entities, where the masculine imagery and male names in the runes point to the leaders of these entities. That bracteates in grave contexts in Norway and England are exclusively associated with women may be explained by the fact that they seem to occur later, and were further away from the Danish core area, and were therefore subject to different local meanings and rituals (SKRE 2025, 484). Suffice it to say here that the bracteates should be seen as a sign of connections among the higher families. If so, die-identical bracteates reflect connections among dynasties, perhaps through marriages in a proto-feudal alliance, where the magnate in Vindelev, judging from the die-identical bracteates, clearly referred to some degree to a king in the Gudme area, either directly or indirectly, as I will return to below in the discussion of the place name.

The reason for deposition

The chronology of the most recent find and compelling evidence for a disastrous volcanic event in the middle of the 6th century, when temperatures dropped by 2–4 degrees Celsius, and a consequent epidemic first presented by Axboe, could provide a tempting context to explain the hoard as a ritual offering of an entire assemblage of heirlooms of a dynasty from what is now Denmark (AXBOE 1999; GRÄSLUND and PRICE 2012; KELLER et al. 2019; HALD et al. 2024; ZACHRISSON and FISCHER 2024).

That this gold hoard was offered at this time is confirmed by the dating of the mouthpiece. Besides, the symmetrically folded, large bracteates suggest that someone offered their most precious possessions, which further suggests that the hoard may have been deposited as an offering to higher powers by a desperate, starving agricultural population hoping for better times. The ritual destruction of the largest and most valuable bracteate, X10, may be the second most valuable offering one can give after one's own life. For whatever reason, the Vindelev hoard was placed under the floor of the house and was never recovered. What happened to the inhabitants, whether those who deposited it died and everyone else forgot about the place, or whether they emigrated, is not known for certain. However, we do know from other sources of extensive migrations from the North Sea coast of Germany and Denmark to England, but mainly before this event (GRETZINGER et al. 2022). We also know that many settlements were abandoned at this time (NIELSEN 2005). The chaos of these decades is seen throughout Scandinavia (ZACHRISSON and FISCHER 2024), and in the area around Vindelev a number of settlements did not continue after the mid-6th century, as the compilation of ¹⁴C evidence from several contemporary nearby settlements seems to suggest (JUUL BALSGAARD and LINDBLOM 2024). They all ended around 560, as indeed also the ¹⁴C dates from the house structures underneath the Vindelev hoard seem to suggest (RAVN and LAURSEN 2024, 120). Either we have simply not found any later occupation, or it was abandoned due to the documented dust veil event (NIELSEN 2005).

In any case, the settlement pattern changes over the following centuries as the remaining settlements and plots of land grow in size, a trend that suggests increasing social complexity in fewer hands (RAVN 2018). Some have suggested that this growth was linked to the phenomenon of the Viking Age in general, already emerging in the 7–8th centuries (PRICE 2022). It is also in this period that the great aristocratic royal halls from Uppsala (Sweden), Lejre, Tissø, Erritsø (Denmark) and elsewhere appear (RAVN 2024; CHRISTENSEN et al. 2024), something we also see in Anglo-Saxon England slightly earlier: at Yeavinger, Cowdery Down, and, more recently, Rendelsham (SCULL and THOMAS 2020; SCULL 2024). Whether the myth of the Fenris wolf eating the sun at Ragnarök can be traced back to this volcanic event is uncertain, but likely (GRÄSLUND and PRICE 2012).

Discussions: Vindelev – a proto-feudal settlement pattern revealed?

The name of the hamlet, Vindelev, may provide some clues as to the meaning of this find. The suffix *-lev* is in general related to the contemporary Danish word '*at levne*', meaning 'heirloom', and so Vindelev may mean that this area was the inheritance of a person whose name began with '*Win-*'.⁴¹ This particular prefix dates from the late Roman or early Germanic Iron Age and suggests that this male founder and his dynasty lived here between the AD 300s to the 550s. According to Dagfinn Skre, the prefix *Win-* may be short for the Slavic name Winipharjaz (Slavic + warrior) (SKRE 2025, 512).⁴² If one follows his recent

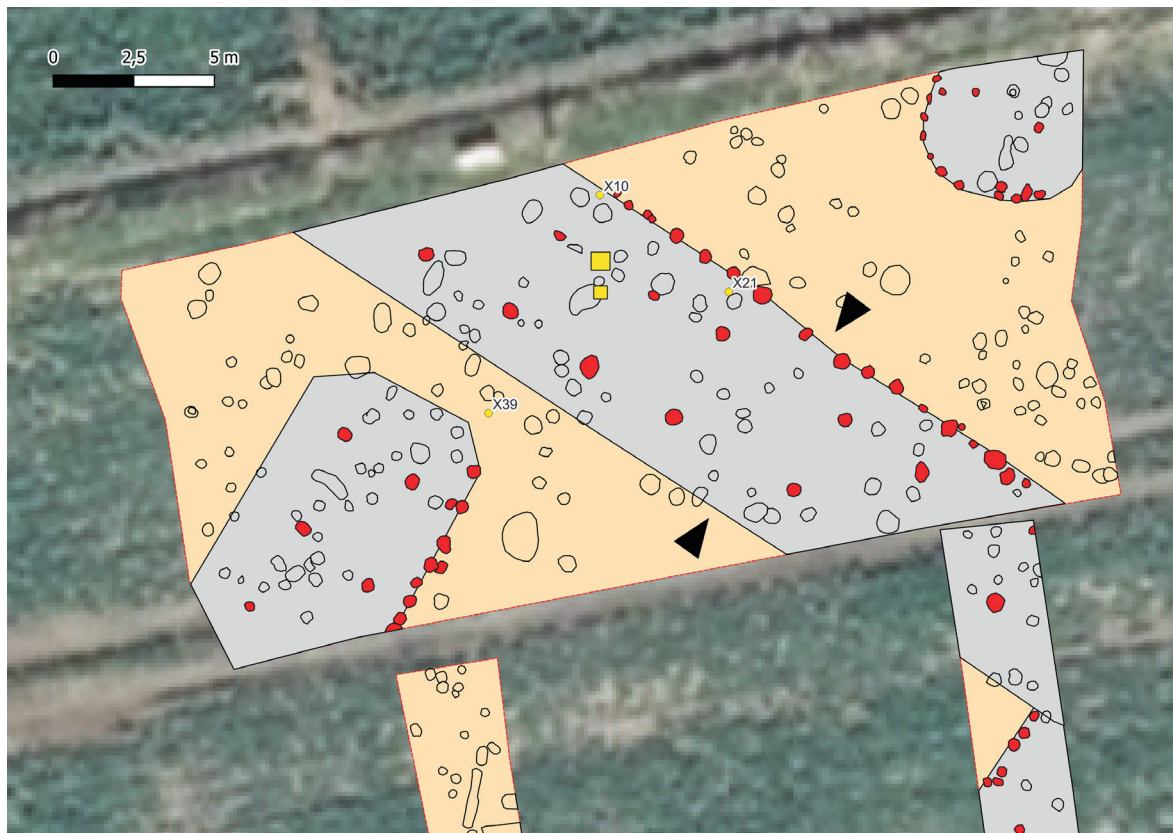


Fig 16. The underlying Iron Age settlement, which can be dated to be contemporary. The red spots are postholes from roof-bearing posts and walls. It was impossible to uncover the entire length of the house. The yellow spots are some of the gold pieces found within the possible deposition area. Modern fieldwork had at this stage pulled some of the pieces out of context. Graphics: Vejle Museums.

hypothesis that the king of the Danir settled with an invading, heterogeneous army in the Gudme area around 420–450, and incidentally, like the Roman emperors, donated bracteates to his retinue of magnates in a periphery around Gudme including western Funen and eastern Jutland, as indeed the numerous die- and type-identical bracteates and medallions in this hoard suggest, then this Winiþharjaz could be a part of a genetically heterogeneous retinue group of the Danir.⁴³ In this case he would be of Slavic ancestry and seems to have arrived from the North European Plain in the 5th century, as recent a DNA studies suggest for the Danir (McCOLL et al. 2024). From this, Skre suggests the following bold, hypothetical, but not highly unlikely scenario, which may need further scholarly scrutinising:

Winiþharjaz was an officer in the Danir army that conquered what became the Danir realm, and was subsequently granted rights in the village of Vindelev. He may have come from the lands of the Black Sea – Slavic peoples lived east of the Vistula at that time – and was probably recruited into the army before the conquest, while they were still at the north of the continent (SKRE 2025, 512).

He may have brought with him the old, worn medallions issued by Valentinian in Thessaloniki in 364–375, along with the older ones from Trier. The accumulation of bracteates over generations and the wear on them suggest that they were hereditary. Rune research indicates that the person on the bracteate, and possible later descendants to Winiþharjaz at some stage in the 5th century had the name of Jagaz, the hunter, as mentioned above (IMER and VASSHUS 2023, 72 pp).

In addition, one should further consider the hypotheses presented by onomasts, that the *-lev* names could refer to a proto-feudal settlement structure, where the *-lev* names of a retinue of magnates surrounded a lord's realm (ALBRIS 2015, 28; SKRE 2025, 493–494). According to Skre, the details of this settlement pattern are explained by the fact that the Vindelev location was donated to this Winiþharjaz and his descendants, if he honoured the oath. Indeed, the overlap of distribution maps of hoarded gold bracteates and *-lev* names on the fertile soils seems to suggest a connection between these two phenomena (SKRE 2025, 508).

The kings of the Danir appear in written sources in the early 6th century, when they are mentioned by Gregory of Tours (AD 538–594).⁴⁴ Skre, however, suggests from other evidence that the Danir may have appeared around 420–450, settled in Gudme and Jutland, and shortly afterwards moved to Lejre in

Zealand, distributing the land of the *-lev* names to their retinue (SKRE 2025, 512). In his interpretation, the whole of southern Scandinavia, with the possible exception of eastern Scania, was already under one king at that time.

In this context, it is interesting to note that the oldest phase of the fortifications of Danevirke, 168 km to the south of Vindelev, has recently been dated back to the 5th century (TUMMUSCHEIT and WITTE 2019). Ulf Näsman also suggested in 2006, based on similarities in the regional distribution of several similar archaeological find categories, that the Danir king had already reigned in the 6th century in an area covering southern Jutland, Funen and Zealand. In his opinion, North Jutland, Southern Halland, Scania, Blekinge and Bornholm were in a near periphery but more loosely connected (NÄSMAN 2006, 226).⁴⁵ Recent aDNA studies and the hypothesis proposed by Skre support this claim, as do more recent studies in archaeology, placenames and indeed bracteates. The last are seen as the Danir kings emulating the Roman emperors' way of offering *dona*. From this perspective a magnate in Vindelev or another magnate could have moved to Erritsø and served as the king's steward when the Danir king and his itinerant court moved from Gudme to Lejre (RAVN and JUEL 2024, 295). It is 40 km to Erritsø, an aristocratic hall dating from the late 7th century.

Although this is hypothetical, the Erritsø site so far fills the 400-year gap between Jelling and Vindelev, although it needs to be substantiated by further archaeological, onomastic and landscape analysis.⁴⁶ The role of four 10th-century rune stones mentioning Queen Thyra in the core area outlined by Näsman in south-eastern Jutland, within a radius of 40 km from Vindelev, is not clear (IMER et al. 2023).

The Vindelev hoard certainly reveals a strong dynasty of a magnate in south-east Jutland from the end of the Roman Iron Age until the 6th century. Less certain is the relevance of an earlier, recently found rich site at Løsning Søndermark 16 km east of Vindelev dating between AD 1–450. Here there are significant finds of chainmail, a Roman helmet from the 4th century and more than 100 swords and lances offered.⁴⁷ The question is whether this site is a predecessor to the Vindelev site despite close proximity of the Gjesager River Valley, which marks a barrier towards the west from Løsning Søndermark. It is interesting to note that a knobbed oath ring found there is identical to the one depicted on the Vindelev bracteate X3, only 16 km away (Fig. 7). Later in the region, the rise of the Erritsø hall 40 km to the south, from the late 7th century seems to have eastern relations to the Danir kings, judging from the identical architectural features, which are strikingly similar to contemporary Lejre and Tissø (RAVN and JUEL 2024). The pattern becomes easier to understand if, as I have suggested elsewhere (RAVN and JUEL 2024, 296), we take into account the existence of an itinerant king already in this period, as known among the contemporary Anglo-Saxons and Franks. Especially if one accepts Skre's claim that the Danir kings may have moved further east, to Lejre, when Scania was incorporated into the kingdom in the 6th century (SKRE 2025, 512). In order to substantiate these hypotheses, which certainly require further research, the chang-

ing dynamics of power in the landscape and the region need to be clarified archaeologically.

Conclusion

The discovery of the Vindelev hoard tells us that there was a powerful figure in the area from the 4th to the 6th century, whose ancestors commemorated their alliances with important Roman figures through ancient golden heirlooms, most likely buried during the turbulent times of the 6th century (HORSNÆS and RAVN 2021; RAVN and LAURSEN 2024).

The rare combinations of Roman medallions alongside Nordic bracteates within the hoard suggest prolonged interactions with the Roman Empire, possibly through diplomatic gifts and other services (e.g. military) that highlight a network of elite alliances within and beyond the immediate geographical boundaries of Iron Age Scandinavia. The iconography on the bracteates, depicting possible kings and mythological scenes, which may emulate the use of Roman medallions used as *dona* within the empire, provides invaluable insights into the religious beliefs and ritual and social practices of the time, suggesting a pantheon that included figures such as Odin as early as the 5th century.

The deposition of the hoard, possibly as a ritual offering in response to a climatic disaster, indicates the socio-political and environmental challenges faced by the inhabitants of the region. The hoard's location, near the later significant site of Jelling, could further emphasise the continuity and evolution of power centres in this region from the Iron Age to the Viking Age and beyond.

Ultimately, the Vindelev hoard is a testament to Denmark's rich heritage, but also to the close co-operation among volunteer metal detectorists and the benefits of involving interested amateurs in the process. It also offers a glimpse into a bygone world where power, religion, art and enigmatic runes were intricately woven into the fabric and genesis of society. It invites further research and analysis, and it promises to unravel more about the mysterious past of ancient Scandinavia and its connections to the ancient Roman world in general, and the dynamics of power and landscape in the rise of the Danir in this period in particular.

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Table 1: The entire collection of artefacts in the Vindelev hoard.

X-NR	Type	Weight in grams	Diameter in cm	IK-NR
X 1	A-Bracteat	7,1	3,3	IK 729
X 2	Medallion	13,1	2,9	
X 3	A-Bracteat	20,2	5,3	IK 730
X 4	C-Bracteat	15,6	4,4	IK 737
X 5	Medallion	39,5	5,1	
X 6	Medallion	16,7	3,6	
X 7	C-Bracteat*	6	3,8	IK 731
X 8	Circular pendant	32	7,7	
X 9	A-Bracteat	87,2	10,3	IK 732
X 10	A-Bracteat	123,7	13,8	IK 733
X 11	C-Bracteat	13	4,6	IK 31,2
X 12	Fragment of Bracteat	37,2		IK 734
X 13	C-Bracteat	16,2	5,2	IK 738
X 14	A-Bracteat	54,5	8,2	IK 730
X 15	Medallion	44,1	5,1	
X16	A-Bracteat	6,4	3,4	IK 735
X 17	C-Bracteat	91,8	11,8	IK 739
X 18	Mouth piece for scabbard	72,6	B=5,6; H=1,9	
X 19	A-Bracteat	58,5	8,8	IK 736
X 20	A-Bracteat	32,4	11,4	IK 734
X 21	rivet	1,2		(IK 732)
X 22	Fragment of Bracteat with a rivet attached	5,3		IK 734
X39	rivet	1,3		
Sum og weight:		795,6		
*) X7 is in IK classified as a type of A-Bracteat				

(Endnotes)

- 1 This paper therefore differs from the presentation given at Kraków in 2022 and includes new data from recent publications by several experts, results that could not be revealed at the time of the presentation.
- 2 For an elaboration of this hypothesis see SKRE 2025, 13ff.
- 3 Further details about the medallions, see HORSNÆS 2025.
- 4 IMER and VASSHUS (2023, 62), suggest the early 5th Century. AXBOE (2022) and RAVN and LAURSEN (2024) suggest the mid-5th century.
- 5 See HAUCK 1985–1989; AXBOE 2007. For a more thorough review of the Vindelev find see also AXBOE 2022 and RAVN and LAURSEN 2024; as the latter, however, is not in English I will review some of the most important details here.
- 6 IK 733.
- 7 IK 11.
- 8 IK 729.
- 9 IK 726 Lundby.
- 10 IK 752 Lumby Torp.
- 11 For further details see RAVN and LAURSEN 2024, 108.

- 12 IK 735.
- 13 IK 76 & IK 156 from Wurth, Hitzum and Sievern, see also RAVN and LAURSEN 2024, 109.
- 14 IK 47,1 Elmelund.
- 15 IK 680.
- 16 IK 47, 2–3.
- 17 IK 730.
- 18 <https://www.vejlemuseerne.dk/udstillinger/digitale-udstillinger/vaabenofringen/the-weapon-sacrifice/> (accessed 01.11.2025).
- 19 IK 732.
- 20 IK 635.
- 21 In the current inventory x4, IK 737.
- 22 IK 58.
- 23 For a further discussion see IMER and VASSHUS 2023, 69.
- 24 I here follow IMER and VASSHUS' (2023) interpretation. For further discussion regarding the reading see also NOWAK 2003; <https://ediss.uni-goettingen.de/handle/11858/00-1735-0000-0006-AEE1-A> (accessed 01.11.2025), pages 279–282, see also DÜWEL and NOWAK 2011.

- 25 The poem is dated much later in writing, but it probably reveals pre-Christian ideals and rituals from the 5–6th centuries, see also NEWTON 1993, RAVN 2003, 8, and more recently SKRE 2025, 210.
- 26 See ALEXANDER 1973, e.g., line 609–621 and 1169–1200.
- 27 IK 31,2.
- 28 IK 31,1.
- 29 IK 738.
- 30 See also RAVN and LAURSEN 2024, 130.
- 31 For an elaboration of this see IMER and VASSHUS 2023, 77.
- 32 IK 739.
- 33 IK 731.
- 34 For an extended analysis see RAVN and LAURSEN 2024, 115.
- 35 IK 691.
- 36 IK50.
- 37 IK 79 and IK 78.
- 38 IK 101.
- 39 X 8.
- 40 MACKEPFRANG 1952, table 23 and 28.
- 41 For an elaboration of this, see also RAVN and LAURSEN 2024, 135.
- 42 See also PETERSSON 2004.
- 43 As SKRE (2025, 3) I prefer to distinguish between later kingdoms of the Danes and tribe Danir in order not to link it up to a later nationalist discourse.
- 44 See also ANDERSEN 2017 who even suggest earlier mentioning in the late 5th century.
- 45 My translation. For a criticism of this see IVERSEN 2012.
- 46 Looking into this hiatus see also PEDERSEN et al. 2023; RAVN and JUEL 2024; JUUL BALSGAARD and LINDBLOM 2024.
- 47 <https://www.vejlemuseerne.dk/udstillinger/loesning-soendermark/> (accessed: 03.11.2025).

Bibliography

ALBRIS 2015

S. L. Albris, Navngivning og bebyggelses forandring: Nybøløg et arkæologisk perspektiv på stednavne stilblivelse og død. In: B. Eggert, R. S. Olesen and B. Jørgensen (eds), Navne og skel: skillet mellem navne: rapport fra den femtende nordiske navneforskerkongress på Askov Højskole 6.–9. juni 2012. *NORNA-rapporter* 91 (1–2) (Uppsala 2015) 25–40.

ALEXANDER 1973

M. Alexander, *Beowulf. Verse Translation by Michael Alexander* (London 1973).

ANDERSEN 2017

K. H. Andersen, Da danerne blev danske. Dansk etnicitet og identitet til ca. år 1000 (Aarhus 2017).

ANDRÉN 2014

A. Andrén, Tracing old Norse cosmology. The World tree, middle earth, and the sun from archaeological perspectives (Lund 2014).

ANTONSEN and MARTINUSSEN 2024

J. Antonsen and H. Martinussen, *Vindelevskatten. Et sted – et fund* (Tranbjerg/Aarhus 2024).

AXBOE 1999

M. Axboe, The year 536 and the Scandinavian gold hoards. *Medieval Archaeology* 43, 1999, 186–188.

AXBOE 2007

M. Axboe, *Brakteatstudier* (København 2007).

AXBOE 2021

M. Axboe, *Gulds-katten fra Vindelev. En meget foreløbig præsentation*. *Fund & Fortid – Arkæologi for Alle* 2021/4, 2021, 14–20.

AXBOE 2022

M. Axboe, Short Report – The World's largest Gold Bracteate: A brief presentation of the Migration Period gold hoard from Vindelev, Denmark. *The European Archaeologist* 74, Autumn 2022, 54–61.

BURSCHE 2009

A. Bursche, Germanic gold bracteates from the hoard in Zagórzyn near Kalisz. In: M. Wołoszyn (ed.), *Byzantine Coins in Central Europe between the 5th and 10th Century*. *Moravia Magna, Seria Polona* 3 (Kraków 2009) 133–153.

CHRISTENSEN et al. 2024

T. Christensen, J. Ljungkvist and N. Price (eds.), *Viking Dynasties. The Royal Families of Lejre and Uppsala Between archaeology and text*. *Jutland Archaeological Society Publication* 127 (Århus 2024).

DENGSGØ JESSEN et al. 2024

M. Densgø Jessen, M. M. Hald, M. F. Mortensen, P. S. Henriksen and S. L. Albris, *Gudme as First-Generation Central Place*. In: M. Ravn (ed.), *Viking Age Aristocratic Residences in Northern Europe* (Aarhus 2024), 48–64.

DÜWEL and NOWAK 2011

K. Düwel and S. Nowak, Die semantisch lesbaren Inschriften auf Goldbrakteaten. In: W. Heizmann and M. Axboe (eds.), *Die Goldbrakteaten der Völkerwanderungszeit – Auswertung und Neufunde. Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde* 40 (Berlin/New York 2011) 375–473.

GRÄSLUND and PRICE 2012

B. Gräslund and N. Price, Twilight of the gods? The 'dust veil event' of AD 536 in critical perspective. *Antiquity* 86 (332), 2012, 428–443.

GRETZINGER et al. 2022

J. Gretzinger, D. Sayer, P. Justeau, E. Altena, M. Pala, K. Dulias, C. J. Edwards, S. Jodoin, L. Lacher, S. Sabin, Å. J. Vågene, W. Haak, S. S. Ebenesersdóttir, K. H. S. Moore, R. Radzeviciute, K. Schmidt, S. Brace, M. Abenhus Bager, N. Patterson, L. Papac, N. Broomandkhoshbacht, K. Callan, É. Harney, L. Iliev, A. M. Lawson, M. Michel, K. Stewardson, F. Zalzal, N. Rohland, S. Kappelhoff-Beckmann, F. Both, D. Winger, D. Neumann, L. Saalow, S. Krabath, S. Beckett, M. Van Twest, N. Faulkner, Ch. Read, T. Barton, J. Caruth, J. Hines, B. Krause-Kyora, U. Warnke, V. J. Schuenemann, I. Barnes, H. Dahlström, J. Jark Clausen, A. Richardson, E. Popescu, N. Dodwell, S. Ladd, T. Phillips, R. Mortimer, F. Sayer, D. Swales, A. Stewart, D. Powlesland, R. Kenyon, L. Ladle, Ch. Peek, S. Grefen-Peters, P. Ponce, R. Daniels, C. Spall, J. Woolcock, A. M. Jones, A. V. Roberts, R. Symmons, A. C. Rawden, A. Cooper, K. I. Bos, T. Booth, H. Schroeder, M. G. Thomas, A. Helgason, M. B. Richards

- , D. Reich, J. Krause and S. Schiffels, The Anglo-Saxon migration and the formation of the early English gene pool. *Nature* 610, 2022, 112–119.
- HALD et al. 2024
M. M. Hald, A. Styring, M. F. Mortensen, T. Maltas, D. Vidas, P. S. Henriksen, A. Pihl, P. M. Jensen, L. B. Christensen, J. Hansen, S. Dollar, T. Egeberg, M. B. Lundø, N. Haue, E. Hertz, R. B. Iversen, T. Jørgensen, I. K. Kristensen, L. Klasse, N. A. Møller, V. J. Pedersen, M. Ravn, K. Vestergaard and M. D. Jessen, Farming during turbulent times: Agriculture, food crops, and manuring practices in Bronze Age to Viking Age Denmark. *Journal of Archaeological Science: Reports* 58, 2024, 104736.
- HAUCK 1978
K. Hauck, Götterglaube im Spiegel der goldenen Brakteaten. In: C. Ahrens (ed.), Sachsen und Angelsachsen. Ausstellung des Helms-Museums, Hamburgisches Museum für Vor- und Frühgeschichte, 18. November 1978 bis 28. Februar 1979 Sachsen und Angelsachsen: Ausstellung des Helms-Museums, Hamburgisches Museum für Vor- und Frühgeschichte, 18. November 1978 bis 28. Februar 1979 (Hamburg 1978) 185–218.
- HAUCK 1985–1989
K. Hauck (ed.), Die Goldbrakteaten der Völkerwanderungszeit. Ikonographischer Katalog. Münstersche Mittelalter-Schriften 24, 1,1–3,2 (München 1985–1989).
- Hauck 2011
K. Hauck, Die Bildformeln der Goldbrakteaten in ihren Leitvarianten (Zur Ikonologie der Goldbrakteaten, LV). In: W. Heizmann and M. Axboe (eds.), Die Goldbrakteaten der Völkerwanderungszeit – Auswertung und Neufunde. Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde 40 (Berlin/New York 2011).
- HEDEAGER 1991
L. Hedeager, Guldepotene fra ældre germanertid – forsøg på en tolkning. In: C. Fabech and J. Ringtved (eds.), Samfundsorganisation og Regional Variation (Højbjerg 1991) 203–212.
- HEDEAGER 1992
L. Hedeager, Iron Age Societies. From Tribe to State in Northern Europe, 500 BC to AD 700. (Oxford/Cambridge 1992).
- HEDEAGER 2011
L. Hedeager, Iron Age Myth and Materiality. An Archaeology of Scandinavia AD 400–1000. (London 2011).
- HORSNÆS 2025
H. Horsnæs, Large Imperial Gold Medallions from the 4th century — the hoard from Vindelev, Denmark. In: A. Bursche, J. Bodzek and A. Zapolska (eds.), Proceedings of the XVI International Numismatic Congress, 11–16.09.2022, Warsaw. Roman Numismatics. Circulation. Warsaw Studies in Archaeology 11 (Turnhout 2025) 169–188.
- HORSNÆS and RAVN 2021
H. Horsnæs and M. Ravn, The Queen's Gift. A Coin-like Pendant and a Gold Hoard from Hjarnø in a Comparative Perspective. In: R. Ciolek and R. Chowaniec (eds.), Aleksanderia. Studies on Items, Ideas and History Dedicated to Professor Aleksander Bursche on the Occasion of his 65th Birthday (Wiesbaden 2021) 167–178.
- IMER et al. 2023
L. M. Imer, L. Kitzler Åhfeldt and H. Zedig, A lady of leadership: 3D-scanning of runestones in search of Queen Thyra and the Jelling Dynasty. *Antiquity* 97 (395), 2023, 1262–1278.
- IMER and VASSHUS 2023
L. M. Imer and K. S. K. Vasshus, Lost in Transition. The Runic Bracteates from the Vindelev Hoard. *NOWELE: North-Western European Language Evolution* 76 (1), 2023, 60–99.
- ILKJÆR 2002
J. Ilkjær, Den bevidste ødelæggelse i krigsbytteofringerne. In: K. Jennbert, A. Andrén and C. Raudvere (eds.), Plats och Praksis. Studier av nordisk förkristen ritual. Vågar til Midgård 2 (Lund 2002) 203–214.
- IVERSEN 2012
R. B. Iversen, Skolepenge spildt på god Latin en kommentar til Ulf Näsman. *KUML* 61, 2012, 231–258.
- JUUL BALSGAARD and LINDBLOM 2024
K. Juul Balsgaard and C. M. Lindblom, Dynamic changes of society and settlements in the Greater Jelling Area in the first millennium AD. In: M. Ravn (ed.), Viking Age Aristocratic Residences in Northern Europe (Aarhus 2024) 80–104.
- KELLER et al. 2019
M. Keller, M. A. Spyrou, Ch. L. Scheib, G. U. Neumann, A. Kröpelin, B. Haas-Gebhard, B. Paffgen, J. Haberstroh, A. Ribera I. Lacomba, C. Raynaud, C. Cessford, R. Durand, P. Stadler, K. Nägele, J. S. Bates, B. Trautmann, S. A. Inskip, J. Peters, J. E. Robb, T. Kivisild, D. Castex, M. McCormick, K. I. Bos, M. Harbeck, A. Herbig and J. Krause, Ancient *Yersinia pestis* genomes from across Western Europe reveal early diversification during the First Pandemic (541–750), *PNAS* 116 (25), 2019, 12363–12372.
- LAURSEN 2022a
K. O. Laursen, A-brakteaterne fra Vindelev. *Skalk* 2022 (2), 2022, 10–13.
- LAURSEN 2022b
K. O. Laursen, C-brakteaterne fra Vindelev. *Skalk* 2022 (4), 2022, 14–17.
- LAURSEN and NIELSEN 2022
K. O. Laursen and K. H. Nielsen, Guldmundblikket fra Vindelev, Aarhus. *Skalk* 2022 (4), 2022, 18–19.
- LAURSEN and RAVN 2022
K. O. Laursen and M. Ravn, Guldfundet fra Vindelev og verdens største brakteat/The Gold Hoard from Vindelev and the World's Largest Bracteate. In: M. Ravn and C. Lindblom (eds.), Magt og guld. Vikinger i øst / Power and Gold. Vikings in the East (Aarhus 2022) 52–77.
- MACKEPRANG 1952
M. B. Mackeprang, De Nordiske Guldbrakteater. Brakteatstudiets Historie. Brakteattypernes Udvikling, Geografiske Fordeling, Kronologi, Motiver Og Prægningsteknik. *Jysk Arkæologisk Selskabs skrifter* 2 (Aarhus 1952).

- McCOLL et al. 2024
H. McColl, G. Kroonen, V. J. Moreno-Mayar, F. V., Seerholm, G. Scorrano, T. Pinotti, T. Vimala, S. M. Sindbæk, P. Ethelberg, R. Fyfe et al., Steppe Ancestry in western Eurasia and the spread of the Germanic Language. *BioRxiv*, doi: <https://doi.org/10.1101/2024.03.13.584607>
- NEWTON 1993
S. Newton, *The Origins of Beowulf and the Pre-Viking Kingdom East Anglia* (Woodbridge 1993).
- NIELSEN 2005
K. H. Nielsen, "...the sun was darkened by day and the moon by night... there were distress among men..." – on social and political development in 5th– to 7th century southern Scandinavia. *Studien zur Sachsenforschung* 15, 2005, 247–285.
- NOWAK 2003
S. Nowak, *Schrift auf den Goldbrakteaten der Völkerwanderungszeit. Untersuchungen zu den Formen der Schriftzeichen und zu formalen und inhaltlichen Aspekten der Inschriften*. Dissertation Göttingen (Göttingen 2003).
- NÄSMAN 2006
U. Näsman, Danerne og det danske kongeriges opkomst. Om forskningsprogrammet fra stamme til stat i Danmark. *KUML* 55, 2006, 205–241.
- PESCH 2015
A. Pesch, *Die Kraft der Tiere: Völkerwanderungszeitliche Goldhalskragen und die Grundsätze germanischer Kunst*. RGZM, Kataloge Vor- und Frühgeschichtlicher Altertümer 47 (Mainz 2015).
- PEDERSEN et al. 2023
A. Pedersen, M. Dengsø Jessen and M. Kähler Holst (eds.), *Jelling – Monuments and Landscape*. Publications from the National Museum. *Studies in Archaeology and History* 20:4. Jelling Series (Copenhagen 2023).
- PETERSSON 2004
L. Pettersson, *Lexikon över urnordiska personnamn* (Uppsala 2004), <https://www.isof.se/utforska/publikationer/publikationer/2004-10-10-lexikon-over-urnordiska-personnamn>.
- PRICE 2022
N. Price, *The Children of Ash and Elm. A History of the Vikings* (London 2022).
- RAVN 2003
M. Ravn, Death ritual and Germanic social structure (ca. AD 200–600). *BAR international series* 1164 (Oxford 2003).
- RAVN 2018
M. Ravn, Roads to complexity: Hawaiians and Vikings compared. *Danish Journal of Archaeology* 7, 2018, 119–132.
- RAVN et al. 2019
M. Ravn, Ch. Juel and Ch. Lindblom, A. Pedersen, Erritsø – new investigations of an aristocratic, early Viking Age manor in Western Denmark c. 700–850 AD. In: R. Annaert (ed.), *Early medieval Water-scapes. Risks and opportunities for (im)material cultural exchange*. *Neue Studien zur Sachsenforschung* 8 (Braunschweig 2019) 37–44.
- RAVN 2022a
M. Ravn, *Guldsnitten fra Vindelev*. *Skalk* 2022 (2), 2022, 10–13.
- RAVN 2022b
M. Ravn, A Warlord's Hoard? *Minerva – Archaeology and Ancient Art* 198, November/December 2022, 22–28.
- RAVN 2024
M. Ravn, Haraldskær Woman under a new light: Bog bodies, martial rituals and value. In: M. J. Walsh, S. O'Neill and L. Sørensen (eds.), *In the darkest of days: exploring human sacrifice and value in southern Scandinavian prehistory* (Oxford/Philadelphia 2024) 61–68.
- RAVN and JUEL 2024
M. Ravn and C. Juel, The Erritsø Excavations in a Bayesian Perspective. In: M. Ravn (ed.), *Viking Age Aristocratic Residences in Northern Europe* (Aarhus 2024) 276–301.
- RAVN and LAURSEN 2024
M. Ravn and K. O. Laursen, Vindelevskatten. Et dynastisk offer fra folkevandringstiden. *KUML* 2024, 103–147.
- SCULL 2024
C. Scull, "Great Hall" and "Central Place": characterizing power in the settlement geography of England in the fifth to eighth centuries. In: M. Ravn (ed.), *Viking Age Aristocratic Residences in Northern Europe* (Aarhus 2024) 107–119.
- SCULL and THOMAS 2020
C. Scull and G. Thomas, Early Medieval Great Hall Complexes in England. *Temporality and Site Biographies*. *Anglo-Saxon Studies in Archaeology and History* 22, 2020, 50–67.
- SKRE 2020
D. Skre, Rulership and Ruler's sites in 1st–10th century Scandinavia. In: D. Skre, (ed.), *Rulership in 1st to 14th century Scandinavia*. *Royal Graves and sites at Avaldsnes and beyond*. *Ergänzungsbände zum Reallexikon der Germanischen Altertumskunde* 114 (Berlin/Boston 2020), 193–234.
- SKRE 2025
D. Skre, *The Northern Routes to kingship. A history of Scandinavia AD 180–550* (Oxford/New York 2025).
- SØRENSEN et al. 2022
Ø. P. Sørensen, M. D. Jessen and M. L. Bendtsen, Gudme. Iron Age Settlement and Central Halls. *Pre-Christian Cult Sites 1* (Oxford 2022).
- TUMMUSCHEIT and WITTE 2019
A. Tummuscheit and F. Witte, The Danevirke. Preliminary Results of New Excavations (2010–2014) at the Defensive System in the German-Danish Borderland. *Offa's Dyke Journal* 1, 2019, 114–134.

WICKER 2015

N. L. Wicker, Bracteate Inscriptions and Context Analysis in the Light of Alternatives to Hauck's Iconographic Interpretations. *Futhark – International Journal of Runic Studies* 5, 2014 (2015), 25–43.

WICKER 2021

N. L. Wicker, Bracteate Inscriptions. An image from Scaford (and Hoby) and the transcripts *alu*. In: I. M. MacLeod, M. Bianchi and H. Williams (eds.), *Reading Runes. Proceedings of the eight International Symposium on Runes and Runic Inscriptions*, Nyköping, Sweden, 2–6 September 2014. *Runrön* 24 (Uppsala 2021) 127–141.

ZACHRISSON and FISCHER 2024

T. Zachrisson and S. Fischer, (eds.), *Change. The Shift from the Early to Late Scandinavian Iron Age in the First Millennium AD*, *Neue Studien zur Sachsenforschung* 13 (Stockholm 2024).

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