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Cover photo:

The front page: Amber nuggets and semi-finished amber beads and pendants from pit-house 7/91 in Biskupice, Poland.

Photo: Marcin Woźniak.

The back page: Suspension loop for gold bracteate S12625, from Hå on Jæren, Rogaland. Photo: Annette G. Øvreliid.

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Landscape, places of knowledge, and religion on Iron-age Bornholm

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This paper addresses religious knowledge from a landscape perspective and explores different ways knowledge in a past oral society could have been embedded in and circulated through space and materiality. Drawing on Christian Jacob's concept of *lieux de savoir*, the article focuses on the island of Bornholm in the Iron Age, investigating various scales of knowledge transmission. It looks at knowledge in relation to central places, sacral place names, and monumental communication lines, as well as to gold bracteates and gold foil figures. Through the examples, the paper reflects on the production and social distribution of knowledge and differences between open and concealed communication, common knowledge shared by all, and esoteric knowledge passed on in narrowly defined circles.

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Key words: history of knowledge, knowledge transfer, sacral landscapes, *lieux de savoir*, sacral place names

Introduction

How can we understand knowledge in a wider sense and the ways it was produced and circulated in Scandinavian pre-Christian society? Beginning from the premises that in the Iron Age, living in the landscape was a prerequisite for understanding the world, this paper addresses the roles of space and materiality in relation to religious knowledge in what was a predominately oral society. Through the concept of *lieux de savoir* (Jacob 2017), it explores how those concepts played parts in both circulating and controlling knowledge on different levels. As a case study, the paper focuses on the Iron Age of the island of Bornholm.

Pre-Christian Scandinavian religion as a knowledge system

Unlike Christianity, Scandinavian Iron-age religion cannot be characterised as a belief or faith with a rigid and codified dogma. Rather, it was a conglomerate of ideas and practices that were tied to ways of perceiving reality, conceptualising the world present in every aspect of people's lives, and interacting with it on various levels (cf. Bønding 2023, 4; Nordberg 2018, 79). In line with this, this paper considers knowledge in a wider sense,

as something encompassing a community's collective understanding and conceptualisation of the world and its history and identity, closely tied to its religious life (Nygaard and Tirosh 2021, 25–29). It is central for our understanding of knowledge transfer in the Iron Age that this was a predominately oral culture. In such societies, ritual behaviour would be a key medium, which depended on specialists that were trained in remembering common narratives and practices, aided by poetic language as well as bodily gestures and movements (Assman 2006, 36–40; Brink 2005, 63, 73; Nygaard and Tirosh 2021, 28). In the lived lives of Iron-age people, some basic understandings and perceptions of the world were probably shared by most. However, we can expect that some areas of knowledge were held within limited circles and shared only between specialists, within households or families, or in particular circumstances (Sundqvist 2020, 757). We are reminded that the word *rune*, now denoting the writing system invented in the Iron Age, is related to a meaning “secret, mystery” or “confidential/whispered conversation” (Bjorvand and Lindemand 2019, 980). Although we do not know if Runic literacy was restricted, the word itself indicates restriction of some esoteric knowledge to certain groups.

In this text, I define religious knowledge as both a basic cosmological and mythological understanding of the world, as well as specialised religious and ritual knowledge, and finally as everyday know-how regarding the conduction of both small- and large-scale rituals and about religious aspects of everyday activities. None of these aspects are easily accessed through archaeology. However, it is a key point in the paper that the production and dissemination of all these kinds of knowledge have a material foundation.

What is a sacral landscape?

The relationship between knowledge and the material reality is interesting for our understanding of the creation of sacral landscapes. However, in Scandinavian research, there seem to be various ways to define and use this term and concept. Some draw on the works of Mircea Eliade about a universal cosmological symbolism (Eliade 1959), where mythological conceptions are seen as lying behind the organisation of sacred places (cf. Hedeager 2001, 506). Other scholars emphasise how religious aspects are particularly evident or concentrated in certain defined sacral areas (cf. Brink 2001, 79–88). While both approaches address aspects of the relations between religion and the material landscape plausibly, I use the term sacral landscape somewhat differently and regard the sacral as a potential inherent in all places (cf. Fabeck and Näsman 2013, 54–55). While some sites could be sacral to large communities or held as more imbued with religious meaning than others, the sacral was a latent quality in all lived landscapes that could be activated at different times or at certain events – or relating to various groups, be they defined by age, gender, ethnicity, or social class.

In this view, sacrality is not separate from, but a general aspect of topography in the pre-Christian Scandinavian world. This means that the sacral landscape is not one, but many things, integrated in the lived landscapes of Iron-age people.

Knowledge, landscape, and *lieux de savoir*

Scholarship often addresses pre-Christian oral culture from the perspective of collective memory (Brink 2005; Nygaard and Tirosh 2021). In this perspective, landscape and place – lived in, worked, and transformed through centuries – can be described as archives or palimpsests of practices accumulated over time, connected with both establishing and preserving collective memories (Mitchell 2020). Yet, their role rises beyond that of a mere physical backdrop or repository of memories: places become

charged with meaning through experienced and remembered associations to narratives and/or to participation in rituals. When new activities and performances are carried out, the places become part of the reinforcement and circulation of knowledge as well as of the creation of new ways to understand the world.

Inspired by the material, practical, and spatial turn in social sciences and humanities, French historian Christian Jacob has developed the concept of *lieux de savoir* as an approach in the field of the history of knowledge (Jacob 2017; see also Corbellini and Hoogvliet 2021). The French noun *savoir* translates as “body of knowledge”, in line with the Scandinavian *kundskab* denoting something that goes beyond mere factual knowledge. Drawing partly on Michel Foucault’s notions about the material properties of knowledge and partly on the material turn in social studies of science (Foucault 1969; Latour 1988), Jacob works with an approach that addresses knowledge, its circulation, and its production in relation to place, material, and practices:

...knowledge does not exist by itself. It is always embedded in artifacts or embodied in individuals, communities, or institutions. More precisely, knowledge is not something immaterial and purely ideal. Moreover, knowledge does not exist without the practices that construct it, fix it, and make its circulation and transmission possible. Knowledge does not exist without the artifacts conveying it. These artifacts could be material objects such as handwritten or printed books, notebooks tablets, oral discourses, instruments, hand-made objects: they could also be gestures and *savoir-faire*, practices; they could be oral or written statements (Jacob 2017, 86–87).

As an historian, specialising in the Classical periods, Jacob is primarily interested in literary knowledge production and scholarship in the ancient world, but interesting for the present paper is his acknowledgement that material objects or instruments as well as memory specialists, discourses, gestures, or statements can be seen as artefacts that produce and convey knowledge (Jacob 2017, 86–87, 96).

Even if we cannot see the pre-Christian Scandinavian culture of knowledge as scholarly, knowledge and deep understanding were of great importance in pre-Christian society. This is mirrored in Old Norse myths, where the acquisition of information and wisdom is a key theme. Deities, particularly the god Odin, and other beings hunt and compete for higher levels of understanding (cf. Schjødt 2020, 1150–55). In the myths, landscape elements such as mounds, springs, wells, trees, and caves are integrated in narratives about preserving, hiding,

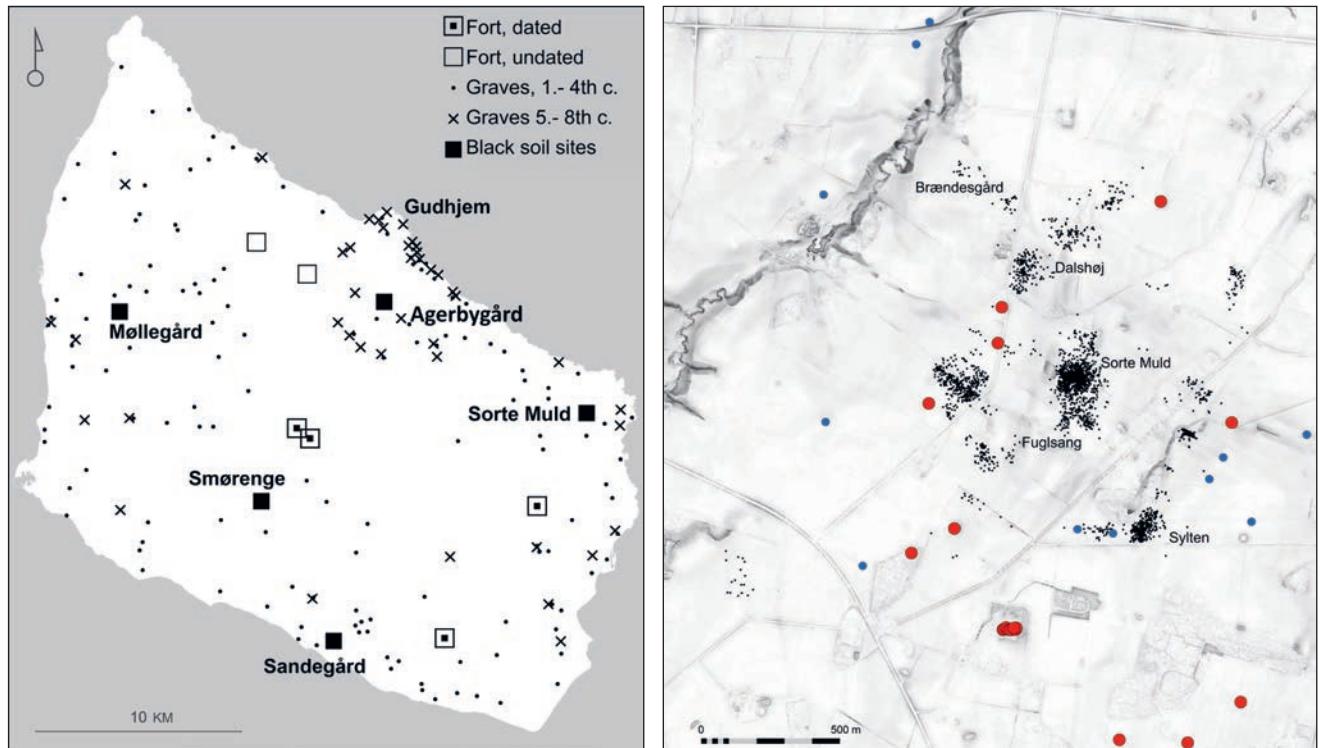


Figure 1a. Selected archaeological site categories on Iron-age Bornholm, b: find distribution in the Sorte Muld settlement complex, red: protected mounds, blue: ploughed-out mounds. Maps by Anders Pihl.

achieving, or extracting knowledge, perhaps echoing the ways spatial settings could be used in staging ritual performances (cf. Brink 2005, 110–13; Egeler 2023). Such a connection may be reflected in the inscription on the 8th-century Snoldelev rune stone from Zealand, Denmark: it references a *pulr*, “speaker”, linked to the place name *Salhaugum*, a place name that refers to a monumental landscape – with *sal* denoting a large ceremonial hall and *haugum* meaning “at the mounds”. A *pulr*, known from Old Norse literature, probably was a public speaker and ceremonial leader (Brink 2005, 104–6; Sundqvist 2020, 755–57).

Jacob describes four categories of *lieux de savoir*, some more tangible than others (Jacob 2017, 96–98). First are the places where knowledge work takes place, where people and practices related to knowledge are brought together, e.g., universities and libraries, but also places such as Royal courts and workshops on the larger scale. The second category refers more narrowly to the workspace itself, including the writing desk or working table with tools or shelves. The third category, called “inscriptions”, identifies knowledge encoded in objects such as texts, images, or maps (see also Moreland 2001). In the fourth category are practices that create, fix, circulate, and preserve knowledge and the positioning of the intellectual craftsman, both socially and locationally, when they for example create an artefact or text, solve a problem,

or build an argument. In the following, I reflect on how these categories of places of knowledge can be identified on Iron-age Bornholm.

The social configuration of Iron-age Bornholm

With its ca. 588km², Bornholm is a geographically defined and socially confined space, and as characteristic for islands, it is both isolated from and intricately connected with its surroundings (cf. Grydehøj 2017). Bornholm has an exceptional archaeological record, with some of the major site categories shown in Figure 1a. We see that while burials from the 1st–4th centuries are spread throughout the island, 5th–8th-century burial sites are concentrated near the eastern and western but especially the northern coasts. This change coincides with the abandonment of many Early Iron-age field systems that turned large parts of the island’s centre into commons and heathlands (Pihl 2021, 55, 59). In these areas, we find the remains of six prehistoric fortifications, whose relations to the surrounding society are somewhat unclear. Throughout the last 30 years, amateur metal detecting as well as investigations by Margrethe Watt have uncovered large numbers of settlements. Crucially, there are five large and find-rich black-soil settlements: Sorte Muld, Smørenge, Agerbygård, Sandegård, and Mølleågård (Watt

2006). They all seem to have their roots in the 1st century BCE and to have been active at least into the beginning of the Viking Age, beyond the structural changes indicated by burial sites and field systems. The black soil sites are spread evenly across the island, perhaps reflecting some sort of regional division.

Sorte Muld and first-generation central places as centres of knowledge and innovation

The largest and wealthiest of Bornholm's black-soil sites is Sorte Muld with a surrounding complex of settlements, known for vast cultural layers (Figure 1b; Adamsen et al. 2009). Together with Gudme on Fyn in Denmark, Uppåkra in Scania, and Helgö in Uppland (both Sweden), Sorte Muld belongs to a small group of Iron-age "first-generation central places" that can be seen as centres of knowledge corresponding with Jacob's first category of *lieux de savoir*. Archaeological evidence reflects that these sites were super-regional centres of power, trade, and technologies (Skre 2020, 219–24, with further references). Importantly, they would also have been places where knowledge was created and circulated, and socially diverse sites functioning for many people on various levels: for example, as places to meet, gather, trade, learn, and participate in political, legal, and religious events. Evidence of a wide range of different craft activities as well as of contacts and impulses from near and far suggest that these places generated creative environments in which new ideas and cross-craft innovation could flourish (cf. Nordberg 2018, 78–81; Pedersen 2020, 408–9; Pesch 2011, 232–36).

It is important to note that apparently, the early central sites were also places of religious innovation, with, for example, evidence of early cult buildings that potentially reflect impacts from the Roman Empire (Sørensen 2022, 91–92). At Sorte Muld, the dynamic religious environment is reflected most clearly in the numerous 6th–8th-century gold foil figures, of which more than 3250 have been found to date (cf. Watt 2019). Most gold foils come from central Sorte Muld, where excavations and preliminary results of advanced geophysical prospections indicate fenced-in houses, of which at least one is interpreted as a cult building (Nielsen and Thorsen 2023).

Recent research on religious festivals in the Ancient Mediterranean points out how intersections of gathering for religious and economic purposes created a special creative interchange of religion, crafts, trade, and politics (Aurigny 2020, 93–95; Kowalzig 2020, 290–96). In Scandinavia, too, similar dynamics could have been at play

when people travelled to the major centres to participate in religious events, where they could debate, trade, and exchange information. It is likely that the knowledge that was shared at these places was of both a general character and a more restricted kind (Pesch 2011, 274). Such innovative environments possibly affected not only technological advancement, but also the motifs and their meanings that were adopted into art (Pedersen 2020, 409). We may theorise that the knowledge environments at the first-generation central places played important roles in the development of the Iron-age animal styles and in the invention of runic writing, which spread very rapidly (cf. Imer 2018, 16; Pesch 2011, 270).

Knowledge and the open landscape

About 12 kilometres up the coast from Sorte Muld, there is a present-day fishing village named *Gudhjem* (1547 Gudium). Like the name of the first-generation central site at *Gudme*, *Gudhjem* is one of 11 Scandinavian *gudhem*-place names, formed of an appellative compound with the rather mysterious meaning "home of the gods" (Kousgård Sørensen 1985, 136). On Bornholm, the question presents itself why it was not Sorte Muld that was named "home of the Gods"?

Importantly, the *gudhem*-names may be area names rather than referencing single sites. The landscape around Gudhjem is dramatic, with tall rocks facing the sea. In its hinterland, we find Agerbygård, a black-soil site with rich metal finds dating from the entire 1st millennium CE, located on a high elevation and naturally fortified by two steep river valleys (Figure 2). Around Gudhjem and Agerbygård, there is a striking concentration of burial sites, many still marked with monumental stones. Thus, the designation *Gudhjem* – as "home of the gods" – might be a place name that could be somehow related to these clusters of burial sites.

Anne Nørgård Jørgensen (2011) has suggested that the Gudhjem burial monuments follow ancient roads towards Sorte Muld. This hypothesis is supported by evidence of 1st–4th-century burial sites located close to sunken roads that cross the major rift valleys between Sorte Muld and Agerbygård/Gudhjem. It appears that this route was marked by burial sites as early as the Roman Iron Age, creating a monumental alley that could have acquired a processional function, probably on the occasion of festivals or funerals (cf. Murphy and Nygaard 2023). In this light, the name *Gudhjem* can even represent a sanctuary zone sought out by visitors and inhabitants of Sorte Muld. Agerbygård might be included in this zone. Its name (1746–50 *agere-gd*) is probably based on an original simplex **Ager*, "arable field" possibly in the

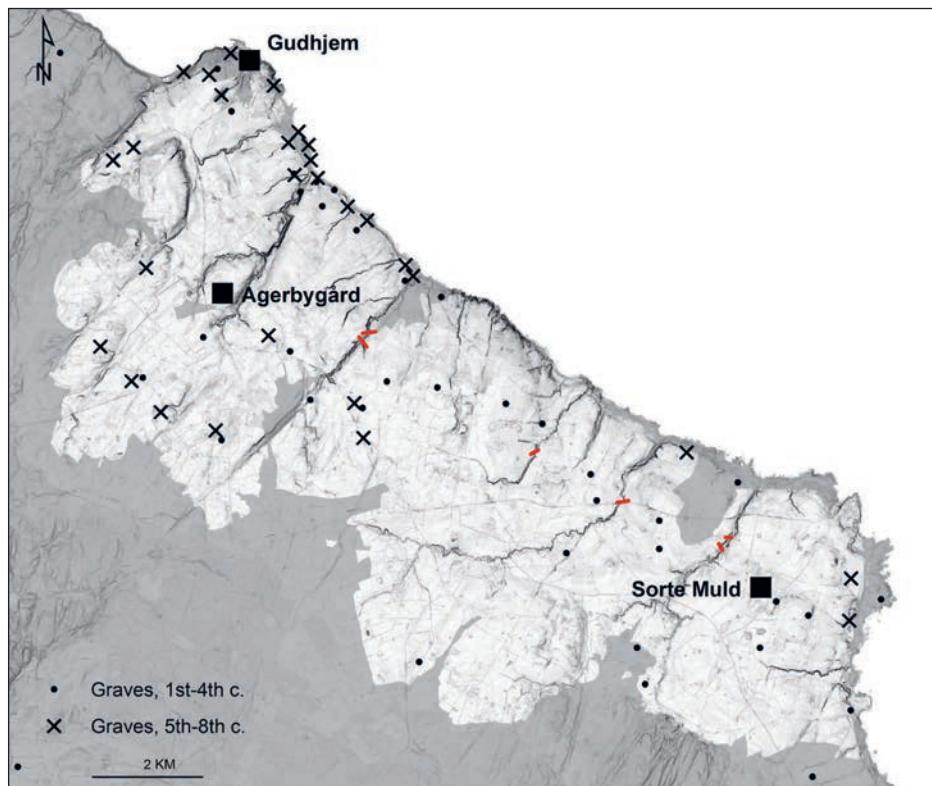


Figure 2. The reconstructed Medieval district of Hænnings herred, north-eastern Bornholm. Red strips mark sunken roads crossing major rift valleys. Map by Anders Pihl.

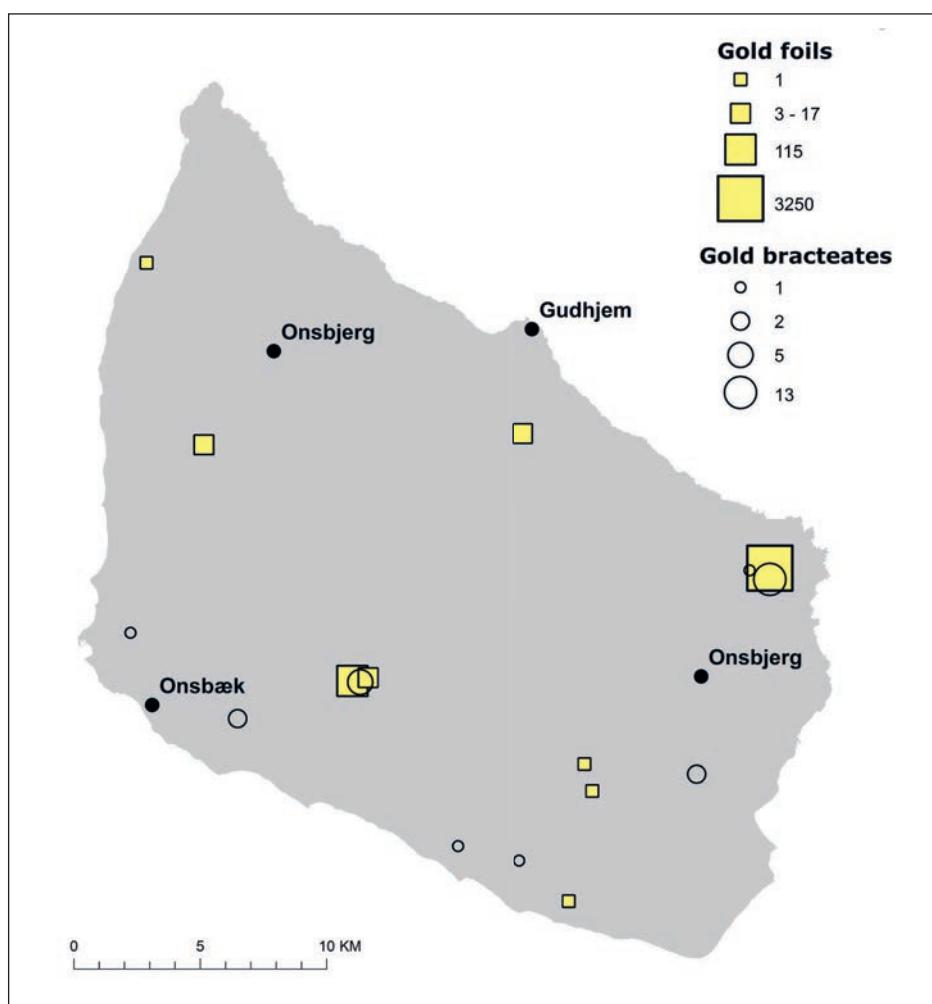


Figure 3. Sacral place names, bracteate finds, and gold foil figure finds on Bornholm. Map by Anders Pihl.

plural (DS 10, 308). Simplex *åker*-names in Sweden and Norway, are considered as potentially referencing ritual sites, possibly of an “official” kind. Further, *åker*-names are often connected with names of larger districts and their thing-sites and are sometimes found close to parish churches (Brink 1990, 358; Vikstrand 2001, 367, 384). This is also seen here, where the magnificent Medieval round church of Østerlars lies immediately next to Agerbygård.

In the 5th–8th centuries, burial sites began to cluster around Agerbygård/Gudhjem, while they are sparse around Sorte Muld (Nørgård Jørgensen 2011, 135). The processional route between these places and its traditional religious status probably made the Gudhjem area a preferred site for burials, which caused it to become a scenic monumental area. From a knowledge perspective, the creation and transmission of place names represent what is universally known and communicated about localities. This means that place names, like monuments, provide insights into conceptualisations of landscapes, and both can be seen as inscriptions on them. But while the creation of monuments might be politically motivated, place names require group consensus and often represent a common understanding of places. In both cases, this creates a constituent that influences the further understanding of the locality and becomes a part of the way a place creates and embeds knowledge (Albris 2014, 49–61; Vikstrand 2001, 19).

Bornholm’s late and poorly preserved place name records, including its field names, yield little more information about places that might have been assigned sacral properties. We find three place names that possibly reference the god Odin, none of which, however, were recorded before the post-Medieval period (Figure 3). Two of them represent prominent hills named *Onsbjerg*, “Odin’s hill”, including one on eastern Bornholm that cannot be localised precisely today (DS 10, 223). The third name is *Onsbæk* on western Bornholm (1676 Oensbeck), “Odin’s stream” (DS 10, 25; DSÅ 5, 187). These three names may possibly have been coined post-Christianisation, but they align with known patterns of *Odin*-names in Scandinavia and England (cf. Fellows-Jensen 2022; DSÅ 5, 187).

Bornholm’s *Odin*-names are all found in the heathlands or commons created in the Iron Age; they do not relate clearly to any of the island’s known central places, nor to sites where gold bracteates and gold foil figures were found. While such finds may yet appear in the future, the picture presented on Bornholm today contradicts the general notion, first introduced by Karl Hauck, that there are close connections between place names referring to Odin and finds of bracteates (cf. Hauck 1980;

Pesch 2011, 232–36). Although we clearly see a concentration of bracteates around other sites with *Odin*-names such as *Odense*, “Odin’s sanctuary”, on Fyn, I believe this alleged relation needs to be revisited; instead, I rather see general connections between bracteate finds, central places, and sacral place names in a broader sense (cf. Pesch 2011, 232–36).

Bracteates: open display and coded messages

Gold bracteates are interesting objects from the perspective of knowledge, as they combine open social communication with hidden and coded messages. Used as elaborate jewellery, the 5th-century bracteates were worn for show, flashing signals about the wearers’ social status and political connections (Wicker 2020). Reading and decoding their intricate images, however, required physical proximity and perhaps deeper levels of understanding. An even less accessible knowledge was displayed in the runic inscriptions on some bracteates. Imitations reflect that the artisans sometimes possessed limited runic literacy (Imer and Vasshus 2023). Bracteates can thus be seen as multifaceted artefacts of knowledge, inscribed with both accessible and inaccessible information.

Bracteates turn up on Bornholm in a variety of archaeological contexts (Table 1). I focus here on contexts and traces of handling the bracteates (see Pesch 2011, 251–53, regarding motif groups and their relations). At the Sorte Muld complex, a flawed stamp for a C-bracteate found at the site Sylten 2 reveals that bracteate *production* happened here. However, the largest number of bracteates comes from two depositions buried just outside longhouses at the site Fuglsangager, immediately south of Central Sorte Muld (Figures 1b, 3). One hoard was a magnificent necklace made up of five C-bracteates, looped solidi, and gold beads that had been neatly packed, folded, and rolled into a Roman silver plate. A smaller hoard combined three B- and two C-bracteates with one unlooped solidus (Axboe 2008, 36). Folding and burying removed these objects from function and view, embedding them into the location (cf. also Eriksen 2022, 86), while at the same time, they remained intact and incorporated their “bracteateness” in the deposition.

This differs significantly from stray finds around the Sorte Muld complex (Central Sorte Muld, Brændesgård II, Dalshøj I, Sylten 3, and Sønderhøj), where fragmented folded bracteates as well as fragments of loops and rims represent various degrees of fragmentation that destroyed the objects’ identities as bracteates (Table 1, Figure 1b).

At Smørengegård, Bornholm's second-largest settlement complex, fragments of bracteates showed signs of both cutting and melting (Figure 4b); and remarkably, pieces of the same large C-bracteate were found 16 kilometres apart at Rønne and Sandegård, respectively, in the latter case contained in a hoard with solidi, ring-gold, and hack gold (Axboe 2023, 205).

These fragments might represent decommissioned bracteates intended for the crucible (Axboe 2023, 204) and craftspeople transporting scrap gold across landscapes and between sites. However, considering that bracteates were objects inscribed with powerful knowledge, cutting them into small pieces and melting them down could also represent ritual destruction (cf. Reiersen 2018). In order to transform bracteates into bullion gold, could it have been necessary to dissolve both the objects' identity and the knowledge embedded in them?

It seems that on Bornholm, bracteates were more

likely to stay intact (even if folded) when deposited in ritual contexts. Guldhullet next to Smørengegård is a small natural spring where finds of relief brooch fragments, glass beads, fibulae, miniatures, sword parts, coins, and animal bones indicate ritual activities from the 2nd century CE into the Viking Age (Nielsen and Watt 2018, 80–81). This also included two A-bracteates from the same die. Both were intact, although one was bent, which could have been caused by the plough. The place is otherwise known for peculiar gold foil figures, most of them female (Nielsen and Watt 2018, 88).

Another type of ritual context may be seen at Bakkegård and Kjøllergård, where bracteates were deposited associated with older burial monuments (Table 1, Figure 4a). The Saltholmgård solidus hoard, placed under a megalith of a Neolithic dolmen, shows that solidi, indeed often found together with bracteates, could be deposited in similar situations (Horsnæs 2013, 128–29).

Table 1. Overview of bracteate finds from Bornholm.

Locality	Context	Number and types	Object/die numbers	Assemblage
Bakkegård (SB 060203-62)	Near BA-burial mound and EIA cremation cemetery	1 C-bracteate	2999, IK19	Single find
Brændesgård II, Sorte Muld (SB 060403-175)	Settlement, Sorte Muld complex	Loop, fragment	DNF 165/98	Detector site
Dalshøj I, Sorte Muld (SB 060403-135)	Settlement, Sorte Muld complex	2 loop fragments, 1 rim fragment, 1 B-bracteate fragment	C47256-57, C59486, C59356, IK685	Detector site circular pendant, hack gold
Fuglsang/Sorte Muld II (SB 060403-93)	Settlement, Sorte Muld Complex Two hoards outside houses	Hoard 1: 5 C-bracteates. Hoard 2: 3 B-bracteates, 2 C-bracteates.	Hoard 1: C34952-56, 1 IK592, 4 IK593 Hoard 2: C35138-42, 3 IK595, 2 IK596	Hoard 1: Roman silver plate, gold beads, circular pendants, solidi. Hoard 2: solidus Valentinian 3.
Gadegård (SB 060201-127)	Settlement, near large Iron Age cemetery, St. Kannikegård	2 C-bracteates, 1 intact, 1 fragment, inscription ota	C35178, DNF 1/94 Same die, IK578	Detector site
Guldhul (SB 060305-554)	By spring/ritual site near Smørenge	2 A-bracteates	C37909-10 Same die, IK628	Detector site
Kjøllergård (SB 060303-110)	Small mound near three cairns, 100 m. from Vellenså river	2 C-bracteates with runes, 1 in 2 fragments.	C5366, C37581 Same die, IK95	Gold finger ring, hack gold
Near Rønne (SB 060304-9)	Found by children after ploughing, 1829. Precise location unknown	Originally 2 fragments, very large bracteate, same as Sandegård C341	MMLIII, IK324	Single find
Sandegård (SB 060205-33)	Settlement	Fragment of large bracteate, same as Near Rønne MMLIII	C 341, IK324	Hoard with 2 solidi, ring-gold and hack gold
Smørengegård (SB 060305-144)	Settlement (BMR 766)	1 small cut fragment, C-bracteate	C36013, IK606	Detector site
Smørengegård (SB 060305-144)	Settlement (BMR 766)	1 melted fragment	Uncertain type, C59098, IK724	Detector site
Smørengegård East (SB 060305-70)	Settlement (BMR 1469)	Small fragment of B-bracteate	BMR 1469 x1158-1191, IK 727	Detector site
Sorte Muld (SB 060403-93)	Central settlement, Sorte Muld Complex	1 C-bracteate	DNF 28/88, IK 397	Detector site
Sylten 2, Sorte Muld (SB 060403-74)	Settlement, Sorte Muld Complex	1, folded C-bracteate, failed production	DNF 63/89 IK570	Detector site
Sylten 3, Sorte Muld (SB 060403-193)	Settlement, Sorte Muld Complex	C-bracteate, fragment	BMR 1716x70-74, IK751	Detector site
Sønderhøj, Sorte Muld (SB 060403-169)	Settlement, Sorte Muld Complex	C-bracteate, folded fragment	BMR 802x296-334, IK725	Detector site

While the bracteates themselves carry encoded knowledge, these depositions near monuments emphasise the historicity of a place by inserting the objects in the landscape as new inscriptions.

Meanings assigned to bracteates may have been subject to change between production, distribution, use phases, and depositions. When bracteates found their ways into hoards in the ground intact, the knowledge assigned to them was concealed or redirected, whereas when they were destroyed, their messages became dissolved, even if their medium itself remained recognisable as bracteate fragments.

Gold foil figures, access and exchange between sites

Gold foil figures are very different from gold bracteates if we think about them in terms of knowledge and its transfer. Given their small size, they did not have the same quality of ostentation (although a few that were fashioned with loops may have been worn as amulets). From a knowledge perspective, key traits to emphasise about gold foil figures are their tininess and fragility, the details in their motifs and the anthropomorphic figures' emphasis on poses and gestures, the high numbers in which they sometimes were found, and the fact that often, they were folded, crumbled, scratched, perforated, or furnished with extra ornaments (Figure 5c; cf. Back Danielsson 2013; Eriksen 2022, 73–76; see also Pesch in this volume).

The miniature size meant that gold foils were not visible from afar, and even up close, their details can be hard to discern. Lotte Hedeager has discussed this deliberate "near invisibility" and linked it to the blind eye of Odin (Hedeager 2015). Whoever their communication was directed towards, it has been remarked how gold foils embody a high level of knowledge about details of dress and gestures (Back Danielsson 2013; Watt 2019, 44–46). Both were recognisable from real-life experiences and used as clear signals of social roles or ritual procedures, be they narrative, legal, religious, or social. It is an interesting contrast that while exaggerated poses could be a tool for performing rituals to large crowds in open spaces, gold foils can only be observed up close. The first requirement to accessing and understanding the gold foil figures was not a question of decoding the motifs, but of getting close enough to even see them. In this light, it is important to note how the gold foils are often found in relation to ceremonial buildings at elite sites (Watt 2019, 37–38), which were spaces that were confined and possibly not accessible at all times and to everyone. On Bornholm,

finds of gold foil figures mainly derive from the black-soil sites (Figure 3). Preliminary results of geophysical prospections performed by ZAMG (Zentralanstalt für Meteorologie und Geodynamik), Vienna, at Agerbygård and Smørenge showed that at both sites, detector finds of gold foils were concentrated in the topsoil around central buildings (Albris et al. forthcoming). This indicates that the communication of gold foil figures was exclusive to the elites or at least not aimed at a larger audience. They could have worked on more personal or inter-personal levels. The great numbers and variations found at Sorte Muld suggest that gold foils were used on many occasions, potentially reaching many people, but not at the same time.

As centres of knowledge and innovation, the central places would be nexuses for the transfer of information and inspiration between geographical areas and social groups (Nordberg 2018, 78–81). Die links between gold foil figures can be seen as a proxy for such circulation between sites and regions (Figure 5). Sorte Muld is the absolute hub of gold foil stamp types, linked to the other early central sites at Uppåkra, Helgö, and Gudme–Lundeborg, but also to a network *within* Bornholm (Watt 2019, 49–50, 61). Even though we do not know whether it was craftspeople, dies, or the foils that moved around, the die links reveal a general interconnectedness between sites and communities on multiple levels (see also Eriksen 2022, 83).

Despite these connections, there are indications that a partiality for some motif groups was place specific, which encourages us to think about differences between sites, their status, and associations with certain rituals. While single male figures dominate at Sorte Muld and Uppåkra, Gudme–Lundeborg only has double figure dies, as do most Norwegian localities (Watt 2019, 37, 40). Guldhullet with more than 100 foils deposited in a wetland context seems to be an exception from a norm on Bornholm, where gold foils are mostly associated with ritual buildings (Nielsen and Watt 2018, 86–88): there, female motifs, often depicted naked, were clearly favoured. At Agerbygård, with at least eight stamp identities with Sorte Muld finds, there was a preference for a motif showing men and women with arms hanging and feet pointing down, which is also well known at Sorte Muld (Figure 4c; Nielsen and Watt 2018, 66, 70). These site-specific preferences could be key to understanding the use of gold foil figures and the characteristics of the sites where they are found.

Like bracteates, gold foil figures can be interpreted both as "inscriptions" (objects encoded with knowledge) and as tools for making "inscriptions" at particular sites.



Figure 4. Examples of bracteates and gold foil figures, a: the Kjøllergård bracteate with illegible runes, photo: Lennart Larsen, CC-BY-SA, b: melted bracteate fragment from Smørengegård, photo: Anne Vad Christiansen, CC-BY-SA, c: gold foil figures from Agerbygård, photo: René Laursen, Bornholms Museum.

Representing that which is difficult to see and often connected with secluded places, gold foil figures and their associated activities must be seen as related to a level of restricted knowledge.

Concluding remarks

Beginning from Jacob's concept of *lieux de savoir*, this text has explored various examples of the ways transfer and control of knowledge could happen in Iron-age society, using objects, landscapes, and rituals as tools and media. Discussing where knowledge is created, contained, or shared can help us to identify the different dimensions and flows of knowledge across time and space; this also allows us to think about the social distribution of information and levels of exoteric and esoteric knowledge.

One thing this text has not addressed is the distinction between public and private and whether this concept pair is meaningful in relation to a pre-Christian society,

such as in the difference between "official cult practices" tied to central places and the more secluded worship taking place at individual farmsteads (Nordberg 2018, 81, 83). However, even if a public–private dichotomy may be a useful tool to work with, the material presented here suggests that we should rather think about various scopes of knowledge communities across Iron-age society and about when and to whom communication was inclusive versus exclusive (Jacob 2017, 89).

We can expect a common knowledge of how to act in the landscape, such as recognising places of meaning and the correct contexts for certain practices. The examples here have shown how shared religious knowledge linked to topography and burial monuments could be transmitted through movement and speech and how it also seems to have acted on smaller or secluded scales. While landscapes can mediate an understanding of the world that may have appeared given and shared by all, they could also embed knowledge in more subtle ways and be used

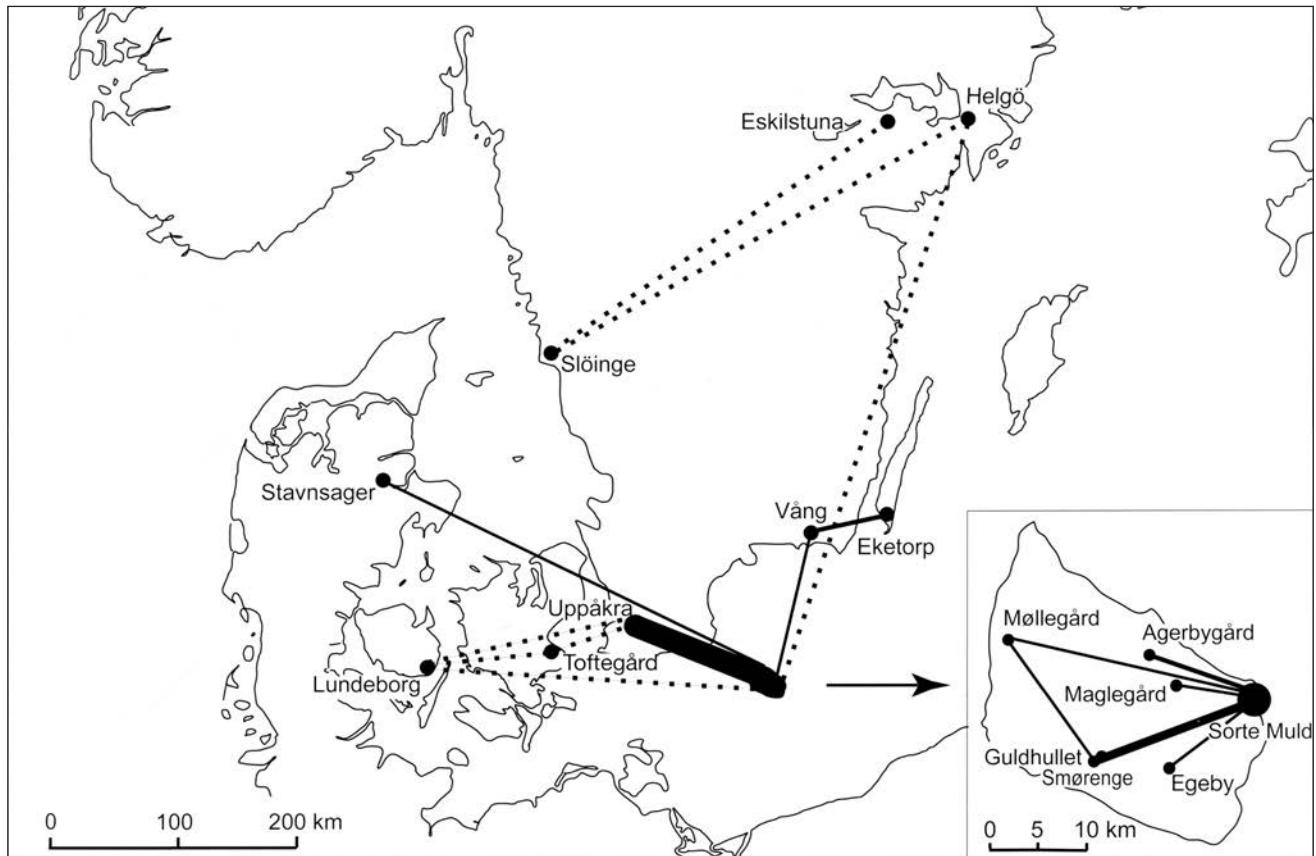


Figure 5. Die links between find places of gold foil figures. After Watt 2019, reproduced with permission.

to seclude or embed information that only few were acquainted with or had access to.

Both bracteates and gold foil figures incorporated several layers of knowledge, and both types of objects related to the central “knowledge hubs”, with Sorte Muld at the top. At the central places, some aspects of religious life involved the whole society, such as participation in large communal rituals. At the same time, both groups of objects discussed here, bracteates and gold foils, each in their own way, were used for encoding or even hiding information, which could result in the exclusion of some festival attendees.

In conclusion, the concept of *lieux de savoir* can be a helpful tool for discussing both transmission and restriction of knowledge in relation to landscape and materiality in the oral society of pre-Christian Scandinavia.

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