‘Everything In Its Right Place’—Selective Depositions in Bronze Age Southwest Sweden

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Hoards have played a significant role in our narratives of the European Bronze Age, but their purpose and meaning have been the source of much debate. These debates have been positively impacted by studies that investigate the ways in which hoards are connected to specific landscape contexts. In this paper, we discuss the outcome of one such in-depth field study of 62 Bronze Age metalwork deposition locations from the Swedish province of Halland. By systematically analysing digital sources such as museum archives, church records and historical maps, we were able to establish the locations of a number of previously unlocated finds, which were then visited in the field. Through this combined archival work and fieldwork, we distinguished several patterns that allude to a connection between metalwork deposits, object types and specific places in the landscape. These patterns shed light on the landscape context of hoards in this region and illuminate how deposition patterns changed over time; we consider some factors that may help to explain these changes. The results emphasize the importance of landscape studies for understanding the role of selective deposition in European Bronze Age societies, and more broadly, the social implications of hoards in their context.

Hoards in the landscape

Hoards have played a significant role in our narratives of the European Bronze Age. This is because they are a widespread phenomenon, occurring across Europe throughout the period (Fontijn 2020). But they are also diverse. Hoards are found in different contexts, their contents change through time, and they vary geographically (Bradley 2017). They are also the source of much debate: scholars for decades have argued about the purpose and meaning of hoards. Were they sacrificial offerings or metalworkers’ stores? Were they intended to control supply chains or keep valuables safe in times of threat? A significant contribution to these debates has been made by a greater understanding of the composition of hoards (e.g. object types, provenance) and their relationship to their landscape contexts (e.g. certain types of objects were deposited in certain types of places). Studies of hoards and their landscape contexts have shown their potential for contributing to wider narratives about how metal was used, circulated and valued in these changing societies of later prehistoric Europe (e.g. Dunkin *et al.* 2020; Fontijn 2020; Visser 2021).

In this paper, we explore the functions of hoards in relation to the cultural landscape of Bronze Age Halland through a detailed field study of these hoards’ landscape contexts. The majority of hoards in Sweden, however, were found in the nineteenth century and lack detailed documentation. This presents challenges in understanding their landscape contexts, which are often described in terms of general landscape features. To overcome this obstacle, we worked intensively with archival records in combination with fieldwork to situate the hoards in more specific locations. We also recorded different topographical features at specific find locations, describing what we termed ‘complex topographies’. In doing so, we were able to gain a better

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understanding of *why* a specific place was used for deposition and *how* this practice changed through time.

This combined archive and fieldwork method was used in our in-depth study of 62 metalwork deposition locations in the Swedish province of Halland dating to Oscar Montelius's (1917) Bronze Age Periods 2–6 (*c.* 1500–500 BCE). This study acts as 'proof-of-concept' that such a method has the potential to provide a greater understanding of pivotal aspects of Scandinavian Bronze Age societies, such as landscape organization and networks, as well as the distribution and consumption of metal on a wider scale. The results emphasize the importance of landscape studies for understanding the role of selective deposition in European Bronze Age societies and, more broadly, the social implications of hoards in their context.

Halland province

Halland is a narrow county that runs north to south about 200 km along the southwestern coast of Sweden, south of Gothenburg (Fig. 1). Its landscape is structured by four major rivers flowing east–west, and it is dotted with large barrows and cairns that are iconic for the Scandinavian Bronze Age (Lundborg 1972; 2007). Many of these barrows have provided significant metalwork finds and were re-used for secondary burials into the Late Iron Age.

Bronze Age monuments, settlements, and hoards are concentrated along the coastal fertile plains and the river valleys, which in the Bronze Age was a mosaic landscape composed of small plots of agricultural land, grazing areas and wetlands (Artelius 2013). In the nineteenth century, this landscape was transformed into a modern agricultural region and many of the previous wetlands were drained and made into fertile land (Wiking-Faria 2009).

Compared to Bohuslän, the neighbouring northern province that is famous for its abundance of maritime rock art, Halland has a limited number of rock-art sites. This may be the result of the coastal area's lack of an archipelago and its abundance of sandy beaches. Additionally, Halland, unlike Bohuslän, was less affected by shoreline displacement in the Bronze Age. In northern Halland, the sea was *c.* 10 m higher around 4000 BP and 5 m higher around 2300 BP (Påsse 1987), and southern Halland was even less affected by shore displacement.

Previous studies

Find contexts have long been considered by scholars working on European Bronze Age hoards. For archaeologists such as Worsaae (1866) and Müller (1886), both the treatment of the objects and their find contexts were crucial in establishing hoards as a specific category of finds. Topographical aspects have also been used to interpret a hoard's purpose. For example, it has been argued that buried valuables intended for later retrieval would have been deposited on dry ground and marked by a stone to facilitate their recovery (e.g. Kristiansen 1996; Levy 1982). More recently, topography has been used to analyse social patterns, such as whether specific object types were deposited in certain places in the landscape and what this can tell us about hoards' functions in prehistoric societies (Fontijn 2002; Henriksen 2014; Visser 2021).

In Scandinavia, hoards' relationships to landscapes are the focus of several recent studies. Lise Frost's (2014) detailed study of Bronze Age finds along the Gudenå river in Denmark demonstrates that objects were often deposited in rivers in certain regions, even if river deposits are generally rare in a broader European context. Martin Rundkvist's (2015) study of the distribution of deposited Bronze Age metal artefacts in the Mälaren valley in Sweden identified a rather precise relationship between object types and specific places. In Norway, Merete Moe Henriksen (2014) draws on organic materials to identify activities that took place before and during deposition of metal artefacts. Finally, Visser's (2021) large-scale study investigates important changes in the depositional practices of Late Neolithic and Bronze Age Period 1 (2350–1500 BCE) hoards in Denmark and parts of Germany and the Netherlands.

Our study differs from these examples by drawing heavily on fieldwalking as a crucial method to comprehend the significance of topography and to gain a better understanding of deposition places. Fieldwalking forms a methodological part of other projects on hoards, an approach that has resulted in promising results in Britain (e.g. Dunkin *et al.* 2020; Yates & Bradley 2010); these projects have been a source of inspiration for the present study.

Methodology

Data collection and definitions

Because this is a study of deposited finds and their landscape contexts, we included only objects that had a known location and were determined to have been 'deposited'. It would be impossible for us to make an absolute distinction between an intentional deposition, a grave good, or an object deposited 'accidentally' (e.g. by loss). However, in an attempt

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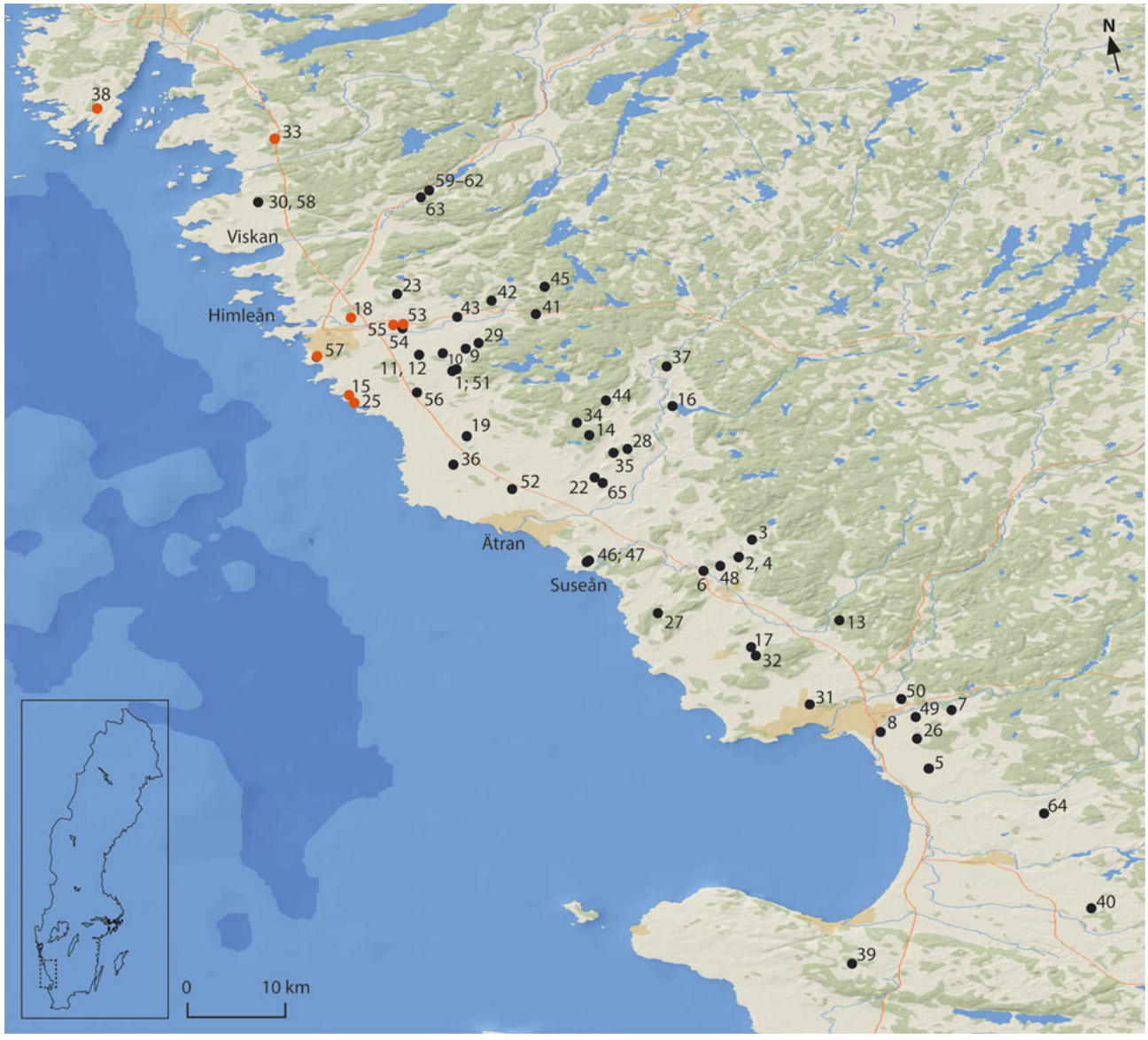

Figure 1. *Map of the Halland coast and the find places denoted by their BALMS database number. 'Wet' context (54) find locations are black dots and 'dry' context (8) find locations are orange dots. The rivers mentioned in the database are labelled.*

to distinguish these different types of depositions better, we narrowed our parameters to include only (1) those objects found in, or close to, wet environments (due to an established theory that, in the Bronze Age, 'wet' deposits were intentionally placed) and (2) finds from dry ground contexts, if they included two or more objects found together and the object types were not known as 'typical' grave goods. These parameters follow an accepted standard for distinguishing hoards from other kinds of depositions (Becker 2013, 225). We chose not to include single finds from dry ground, which is done in other recent studies (e.g. Fontijn 2002; Vandkilde 1996; Visser 2021).

The finds were selected using two different approaches. The first was to query the Swedish National Heritage online database, Fornsök, using the search terms *fyndplats* [findspot], *fyndsamling* [find collection] and *depåfynd* [hoard]. The second was to use published literature that included geographical information on where the findspots were recorded (Baudou 1960 & Oldeberg 1974 being the most important). All finds were entered into a database with defined fields (see Supplementary

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Appendices 1 & 2) and were given a Unique Identifier (B01, B02, and so on. 'B' refers to the project title 'BALMS: Bronze Age Landscapes and Metalwork in Sweden').

Many of the finds included in the database were discovered during the second half of the nineteenth century or the beginning of the twentieth, which means that their locations were not described with the same accuracy as today's standard. Our minimum requirement for inclusion in the database was that a find was attributable to a village. The accuracy of the find descriptions was evaluated according to three categories:

- Category 1 = findspot: i.e. a findspot recorded by an antiquarian, or where the findspot can be rather precisely spotted in the terrain because of information provided by the person who found the object.
- Category 2 = find place: i.e. specific details in the find description indicate a location to a restricted part of a property.
- Category 3 = property: i.e. there may be details in the descriptions that favour an attribution to a specific part of the property, but other alternative locations cannot be ruled out.

Archival research

Major effort was made to locate as many find places as possible by working with online church records and online cadastral maps; the maps are very detailed and accurately describe ownership issues. In Sweden, multiple land reforms in the early nineteenth century transferred common ground into private property, which resulted in the production of excellent maps. The reforms also gave rise to new agricultural activity, such as land clearing, allowing farmers and labourers to discover new archaeological objects. The maps used in this project date mainly from 1830–60, and there is often a small time-gap between the design of the detailed cadastral maps and the year when the objects were found; the discoveries of the finds postdate the land reforms.

In many cases, the name of the person who found the objects was mentioned in the records, but the find place was only known with reference to a larger geographical unit, such as the name of a village or the name of a bog. By using maps and church records, the properties of the people that found the objects could often be located to a restricted part of that village or bog. For example, in 1860 a golden spiral ring (B23) was found in a bog in Mossarp within a parcel of land belonging to Anders Börjesson, who lived in the village of Lindberg (Fig. 2). In the same year, the bog that hitherto had been used as common ground was divided into individual plots, and Anders Börjesson together with Olof Svensson became the owners of plots number 163 and 164. With this information, we can narrow down the findspot to a rather restricted space. Moreover, important landscape information was gained as we now understand that the find was close to the edge of the bog and close to the Skatebäcken stream. Multiple factors, thus, seem to have guided the decision to make the deposition at this specific place.

Using this methodology, we were able to pinpoint the most likely location of *c.* 20 finds (one third of the total sample) that had been previously located only to a rough geographical reference.

Fieldwork

Archive work was complemented with fieldwork in May 2022. The database contains 157 objects found in 62 metalwork deposition locations. Four of these deposition locations share the same coordinates, as they were all found in a river, and two share similar coordinates but are considered separately, because they were found by two different people, and we cannot be sure they were deposited together. Of these 62 deposition locations, we visited 61 (Fig. 1; Supplementary Appendix 2). All Category 1 and 2 sites were studied *in situ*, apart from one that was not accessible due to military restrictions (B31). We also visited the Category 3 sites, but as their geographical information was less accurate, some were only viewed from a distance. The sites are not distributed evenly throughout the landscape but are concentrated in mid-Halland. Why there are fewer finds from south Halland is difficult to explain, as this is fertile land that is rich in Bronze Age monuments (Lundborg 1972; 2007). However, similar regional differences have been identified in other parts of southern Scandinavia, and this has been explained by ascribing burials and depositions to different 'social' and 'ritual' activities (Larsson 1986, 160).

The fieldwork was important for multiple reasons. First, it helped us to confirm or adjust the conclusions drawn from the archival research. For example, we could identify gravel pits and ditches in the field when such features were mentioned in the archive records, which added further evidence in support of specific find places. Second, we were able to identify new features by experiencing the landscape on foot, which changed our understanding of some of the places included in the dataset. Climbing an outcrop where an object was deposited and seeing the view from that hill, and how it is situated in relation to other landscape features, adds a

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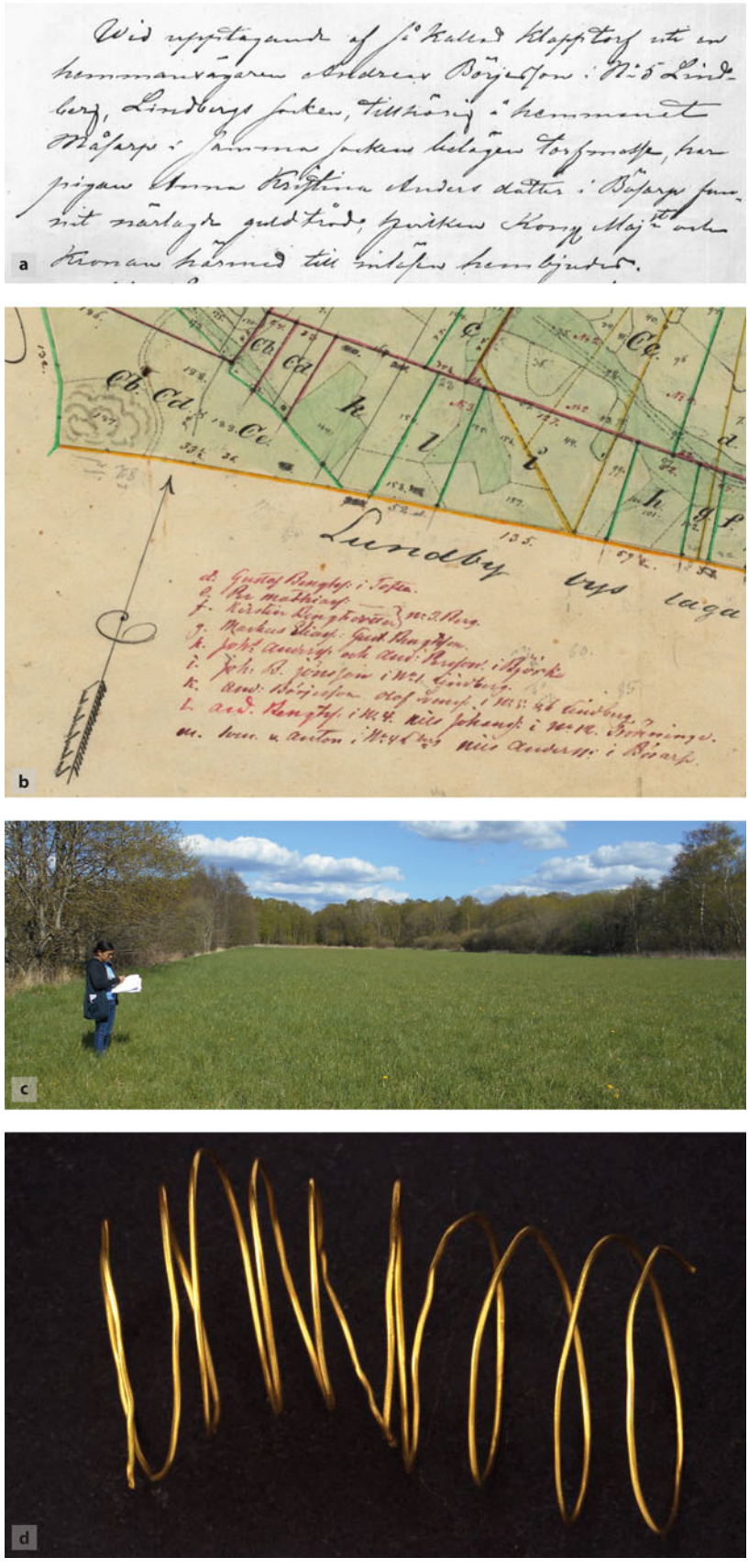

Figure 2. *The findspots in this study were located through a combination of archival research and fieldwork, a method which is exemplified at Mossarp (B23). (a) The record at the National Historical Museums in Stockholm, dated 10 June 1862, says that a golden spiral ring was found by Kristina Andersdotter when digging for peat in a plot in a bog in Mossarp that belonged to Anders Börjesson in Lindberg. (Source: SHM 2967.) (b) An extract from a map dating to 1860 where the formerly commonly used bog in Mossarp is divided into individual plots. Anders Börjesson in Lindberg 5 was, together with Olof Svensson, assigned plot 'k' which is written below the map. (Source: Delning av mosse Mossarp 1860 Lmm, 13-Lin-124.) (c) Peter and Courtney make observations on plot 'k' in May 2022, as part of the fieldwork. We now understand that the find was found close to the edge of the bog and close to the stream Skatebäcken. (Photograph: P. Skoglund.) (d) The golden spiral ring today in National Historical Museums in Stockholm. The shape of the spiral was somewhat changed by the finder Kristina Andersdotter. (Photograph: Ulf Bruxe, Historiska museet/SHM [CCBY 2.5].)*

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Table 1. *The number of different natural elements observed at the find places related to Period 2–6, organized by Phases.*

Period	No. of sites	1 Element	2 Elements	3 Elements
Phase 1: Period 2–3	17	10	5	2
Phase 2: Period 4	14	5	2	7
Phase 3: Period 5–6	31	16	11	4
Total	**62**	**31**	**18**	**13**

new dimension to a place that cannot be inferred from Geographical Information Systems, maps, or written records (although we recognize that in some cases the prehistoric vegetation would have been quite different, impacting the view and visibility of other landmarks) (e.g. Tilley 1997). The idea of 'complex topographies', which play a vital role in this study and will be further described below, was largely developed and confirmed during fieldwork. Lastly, the fieldwork gave rise to new questions regarding the visual appearance of these sites in the Bronze Age; this inspired us to return to the cadastral maps and look further into the descriptions of the sites. It also became easier to comprehend the maps after we gained first-hand experience of the sites in the field. A better understanding of the sites developed as pieces of information from the archives and the field were combined.

Another key goal of the fieldwork was to clarify, if possible, the environmental context of the objects' deposition places. In certain cases, this was fairly straightforward; if an object was found during peat or gravel extraction, we can conclude that these objects were found in a bog or on dry ground respectively. However, for many finds it was more difficult to characterize the past environment. An object might have been found in a field during agricultural work, which the cadastral maps show was where a bog was present in the nineteenth century (e.g. B64), but which fieldwork or present-day maps do not show. Alternatively, there may be no signs of a bog in the archival records, but fieldwork and topography might show that the object was found in a low-lying area that would have been generally wet and possibly flooded at certain times of the year (e.g. B44).

Watery places and complex topographies

For this study, we only made a distinction between 'wetlands' and 'bogs'. According to definitions used in maritime archaeology, wetlands include a variety of wet areas such as bogs and running water (Van de Noort & O'Sullivan 2006). However, we have chosen to use the word wetland for wet areas that are not part of a bog or running water. This is because objects are sometimes found in wet environments that are difficult to characterize precisely. Wetlands and bogs may have also changed character during the Bronze Age or after. Recent studies demonstrate how the vegetation and water level in bogs changed during the Bronze Age, making it very difficult to reconstruct these environments without on-site paleoecology studies (Edvardsson 2016).

Additionally, different bogs have different time-depths, and some started to emerge after the period we are studying. In other parts of Scandinavia that experience more rainfall and humidity than Halland, Bronze Age settlement debris and non-hoard artefacts have been covered by turf during succeeding periods (Henriksen 2014, 99–129). Even though it cannot be excluded totally, this phenomenon is not known in Halland. Therefore, in this study we regard finds from bogs as hoards. We also make a distinction between lakes, rivers and streams. In dry ground environments, we distinguish those depositions made in relation to prominent rock outcrops as a specific category.

Many objects seem to have been deposited in places with 'complex topographies', i.e. where different kinds of topographical features were present in the same location (cf. Frost 2011). In order to describe these contexts accurately, we recorded additional elements in our database (Table 1). For example, in the case of B51, it was located in a bog (1), close to a stream (2), where an outcrop extends into the bog (3). In this case, we listed three different natural elements: bog, stream, outcrop (Table 3, below). There is always a risk of arbitrariness when trying to define specific features in a fluid landscape, so we have been critical towards our own assumptions and observations, which were discussed at length in the field.

Halland hoards: some general observations

Based on our work, we can make some general observations and begin to discern some patterns regarding where the objects were deposited, the specific characters of those places, and how the objects were treated before deposition.

Overall, the finds that had an accurate context were largely deposited at the *edge* of a wet environment or on the *border* of wet and dry land. More specifically, the socketed axes from Periods 5 and 6 (*c.* 900–500 BCE) were not found *in* rivers or streams,

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but rather on the periphery of these watercourses in places that were probably only flooded during certain times of the year (B03, B08, B29, B44, B45). There are few axes from lakes, and most of them had an unreliable position. For the one axe with an accurate position (B52), we concluded that it was found close to the shore. The same is true for objects deposited in bogs. There is no indication of any object type from any period deposited in the middle of a bog (perhaps for purely practical reasons). Where we could accurately locate a findspot, the pattern showed that objects were found at the *edge* of bogs (B14, B23, B40, B43, B51). Similarly, we discerned that objects associated with wetlands were deposited where dry ground dipped into a low-lying—and presumably wetter—area (B32, B44, B50, B54, B56). Rock outcrops were also of interest. Here, objects were not deposited on the highest point, but rather at the foot of the hill from where it was possible to have a fuller view of the outcrop itself (B11, B12, B46, B47).

Deposition places were not always associated with one natural feature exclusively. In many cases, multiple prominent natural features were present (Table 1). Depositors might have preferred the confluence of features, or they could have been drawn to one feature more than another, which we cannot know. Whether the drive was toward many natural features or one, this was likely not a static preference, but one that could have changed over time. Socketed axes from Periods 5 and 6 were not only deposited along rivers, but they were also deposited near a confluence (B45) or rapids (B03). A golden spiral ring (B23) was not just deposited at the edge of a bog, it was deposited at the edge of a bog close to the only stream that ran out of it. In other locations, we could identify three different factors that seemed to have guided the location of the find. A Herzsprung shield (B51), for example, was deposited in a bog that was close to a stream and near an outcrop that almost reached the edge of that bog. At about half of the find locations, we observed more than one natural element that could have attracted the depositor (Table 1).

These observations underline two important points. The first is that depositions made on the border of bogs and wetlands were made on drier ground, which would have enabled an audience to witness the act of deposition. They were publicly accessible and offered the opportunity to be re-visited at later dates. The second is the importance of 'the view'—many depositions were made at places where one could overlook a wetland or bog or look upon a significant rock outcrop. Alternatively, rock outcrops could have been a platform to witness the deposition. Our general observations indicate that these deposition places were not random places; they contained significant features that distinguished them from the surrounding area and must have had meaning for the people who chose them.

Next, we will explore the data in more detail and outline some basic observations regarding find contexts and how these changed through time, then discuss aspects of the emerging patterns (see Supplementary Appendix 2 for the complete dataset).

Chronological deposition patterns

On a broad scale, the relationships of depositions to certain natural features were not chronologically consistent. We have devised three chronological phases based on the changing character of the depositions:

Phase 1: Period 2–3, *c.* 1500–1100 BCE
Phase 2: Period 4, *c.* 1100–900 BCE
Phase 3: Period 5–6, *c.* 900–500 BCE.

Phase 1 (Table 2)

Phase 1 (Period 2–3) includes 17 deposition places containing 73 objects. The majority are single finds, and the others contain 3, 4, 5, 12, and 37 objects.

Swords and daggers were deposited as single objects and have a relationship to running water such as rivers and streams, or in one case a spring. The two swords (B16, B37) were broken before deposition. Alternatively, palstaves were deposited as single finds and in groups of various quantities in a variety of contexts such as rivers, lakes, bogs, wetlands, and on dry ground. The two complete and functional shaft-hole axes were associated with wetlands, but an unfinished shaft-hole axe that showed casting faults (B53) was deposited on dry ground. Two groups containing 12 (B19) and 37 (B32) objects were also associated with wetlands.

Finally, there are two finds from dry ground. One of these is a find from Klastorp (B53) that includes the above-mentioned shaft-hole axe, which is skewed due to a failed casting. This find also includes a socketed axe with a piece of scrap metal found inside the socket. The other find is from Trönninge and consists of five palstaves (B18). Four of these were very similar, and it is thought that they might have been made in the same mould (Oldeberg 1974, no. 1612). We were able to study one of these axes, and it showed traces of being used. During the casting of the fifth axe, the two parts of the mould seem to have been misaligned,

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Table 2. *Objects from find places dating to Phase 1 (n = 17 sites; 73 objects) and their relationship to different topographical elements, organized alphabetically by object type.*

BALMS #	Type	No of objects	Element 1	Element 2	Element 3
B32	Belt plate (2), Bronze sickle (4), Flanged axe (1), Neckring (5), Palstave (3), Razor (1), Spiral armring (1), Sword (1), Tutulus (19)	37	Wetland		
B60	Dagger	1	River	Inlet	Ford
B17	Dagger	1	Stream		
B53	Miniature axe, shaft-hole axe, socketed axe	3	Dryland	Boulder	
B64	Palstave	1	Bog	Stream	
B18	Palstave	5	Dryland		
B36	Palstave	4	Lake		
B62	Palstave	1	River	Inlet	Ford
B49	Palstave	1	Stream		
B28	Palstave	1	Wetland		
B19	Palstave (5), Spearhead (7)	12	Wetland	Boulder	
B65	Shaft-hole axe	1	Wetland		
B48	Shaft-hole axe	1	Wetland		
B56	Shaft-hole axe	1	Wetland		
B54	Socketed axe	1	Wetland	Boulder	
B16	Sword	1	River	Rapid	
B37	Sword	1	Spring		

Table 3. *Objects from find places dating to Phase 2 (n = 14 sites; 30 objects) and their relationship to different topographical elements, organized alphabetically by object type.*

BALMS #	Type	No of objects	Element 1	Element 2	Element 3
B12	Arm ring-spiral (4), Fragment (1)	5	Outcrop	Boulder	Spring
B31	Armring (5), Necklace (2), Tutulus (1)	8	Wetland		
B47	Bowl	1	Outcrop	Flagstone	Bog
B01	Fibula (1), Socketed axe (2), Unidentified (1)	4	Bog		
B13	Neckring	2	Bog	Stream	Outcrop
B51	Shield	1	Bog	Stream	Outcrop
B43	Socketed axe	1	Bog		
B39	Socketed axe	1	Bog		
B52	Socketed axe	1	Lake	Ridge	
B61	Socketed axe	2	River	Inlet	Ford
B23	Spiral ring	1	Bog	Stream	
B22	Sword	1	Bog		
B30	Sword	1	Bog	Stream	Rock
B46	Sword	1	Outcrop	Flagstone	Spring

or something went wrong during cooling, because the axe has an overall skewed appearance. The objects deposited on dry ground, thus, stand out as different from the objects deposited in wet environments, as they include imperfect objects with visible production faults.

Phase 2 (Table 3)

Phase 2 (Period 4, as well as objects whose dating spans Periods 3/4/5 and Periods 4/5) includes 14 deposition places containing 30 objects. Nine of these are single finds, and the others contain 2, 4, 5 and 8 objects.

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This is the phase in which rock outcrops begin to feature in the pattern. We observed prominent outcrops at five different locations, in combination with other natural elements that were noted in the previous phase (B12, B13, B46, B47, B51). The outcrops were a new way of marking the location of depositions, especially in dramatic and complex topographic settings. The objects deposited in these places are 'high-status' items such as a Herzsprung shield, a golden bowl, a bronze sword, a golden spiral armring and a pair of bronze neckrings. In contrast, socketed axes do not appear to be related to outcrops but instead were found in bogs or water (B39, B43, B52). A golden spiral ring (B23) was also deposited in a bog, but in this case, it was also related to a stream.

Three swords are included in this phase (B22, B30, B46), two of which follow the Phase 1 pattern of being related to running water, although they are also associated with additional topographic elements. One was found close to a spring and an outcrop (B46). As with other Phase 1 examples, it had been manipulated before deposition: it was broken in parts, and the tip was filed. Another sword was deposited in a bog close to a stream and a rock (B30). Before deposition, this sword (along with one other from Period 5) had been bound with an organic material, which has not survived, but which left traces on the surface of the blade. Finally, a sword (B22) was found in a bog with no traces of special treatment and no obvious relation to water, even though the latter cannot be ruled out due to the lack of precise data.

Phase 3 (Table 4)

Phase 3 (Period 5–6) includes 31 places containing 54 objects: 17 of these are single finds, and nine contain 2 objects, four contain 3 objects, and one contains 7 objects.

While the distinction between Phase 1 and Phase 2 is rather clear-cut, the distinction between Phases 2 and 3 is not as straightforward. A few finds have an imprecise date and cover periods in both Phases 2 and 3 (B12, B23, B51). However, their deposition contexts have greater similarities with Phase 2 than with Phase 3, which is why they were assigned to Phase 2. At three locations, objects were deposited in places that were 'used' in the previous periods (B11, B58, B59). Despite that, it is clear that Phase 3 depositions were made in places with less complex topography than in Phase 2. In fact, only *one* find place that has a date restricted to Period 5 only (B50) has three topographical elements.

In contrast to Phase 2, outcrops are almost absent from the pattern. The one example is a golden armring (B11), which also differs from the other objects, as it is the only one made of gold. The accepted dating of this object is Period 5, but a dating to Period 4 has also been claimed (Knoll *et al.* 2014). In the context of Halland depositions, this armring can be regarded as the end of a tradition of depositing objects close to outcrops that started in the previous Period 4.

Just as in previous periods, axes were deposited in many different contexts: rivers and bogs dominate, but they also appear in relation to streams, wetlands and dry ground. When found in wetlands, they always appear as single finds. Neckrings have a strong correlation to bogs (Levy 1982, 66), and they were often deposited in pairs (Baudou 1960, 122; Levy 1982, 14 & pl. 10a; Worsaae 1866, 315). As in the previous period, swords appear in bogs and they often have a relationship to water; running water was observed close to three of the four places where swords were deposited (B41, B58, B59). Sword depositions also demonstrate continuity in other respects as well; most of the swords were manipulated in different ways before deposition, as we saw in Phase 2. Finally, there are six examples of objects from dry ground, and four of these are related to boulders or flagstones (B25, B38, B55, B57), a comparatively high number.

Halland in context: some comparisons

Many of our observations in Halland align with well-established patterns (Larsson 1986) in other parts of Scandinavia. For example, in Denmark the correlation between neckrings and bogs is well-established (Levy 1982). Although they also appear in bogs, swords were often related to running water (cf. Frost 2014, 40–43; Thedéen 2004, 78–82; Weiler 1994, 94–7). Interestingly, most swords in this study have been manipulated or subject to other special treatment. This has not been much discussed in the Scandinavian literature, although it has been observed on a Period 1 sword found on the shore of Randsfjorden, Norway (Melheim & Horn 2014). Our observed relationship between hoards and outcrops has some parallels in Norway, where finds are known to have been deposited in mountain cracks (No. Fjellsprekk) (Henriksen 2014, 144; Melheim 2006, 128). Similarly, finds found close to outcrops and impressive hills are also known from Denmark, including depositions with 'high-status' objects, as we also noted in Halland (Kaul 2014).

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Table 4. *Objects from find places dating to Phase 3 (n = 31 sites; 54 objects) and their relationship to different topographical elements, organized alphabetically by object type.*

BALMS #	Type	No of objects	Element 1	Element 2	Element 3
B11	Armring 'Eidenringe'	1	Outcrop	Boulder	Spring
B50	Belt bucket (1), Hanging bowl (4), Neckring (2)	7	Wetland	Spring	Ridge
B25	Fibulae	2	Dryland	Boulder	
B35	Figurine	1	Bog		
B27	Neckring	2	Bog		
B10	Neckring	2	Bog		
B63	Neckring	3	Bog		
B09	Neckring	2	Bog	Confluence	
B33	Neckring	2	Dryland	Ridge	
B26	Neckring	3	Wetland	Boulders	
B07	Socketed axe	1	Bog		
B34	Socketed axe	1	Bog		
B40	Socketed axe	1	Bog		
B42	Socketed axe	1	Bog		
B55	Socketed axe	2	Dryland	Flagstone	
B02	Socketed axe	1	River		
B04	Socketed axe	1	River		
B06	Socketed axe	1	River		
B08	Socketed axe	1	River		
B45	Socketed axe	1	River	Confluence	
B03	Socketed axe	1	River	Rapid	
B29	Socketed axe	1	Stream		
B05	Socketed axe	1	Stream		
B44	Socketed axe	1	Wetland	Stream	
B38	Socketed axe (2), Spearhead (1)	3	Dryland	Boulder	
B15	Socketed axe (1), Spearhead (1), Sword (1)	3	Dryland		
B59	Socketed axe (1), Sword (1)	2	River	Inlet	Ford
B57	Spearhead	2	Dryland	Boulder	
B14	Spearhead (1), Sword (1)	1	Bog		
B41	Sword	1	Bog	Stream	
B58	Sword	2	Bog	Stream	Rock

Deposition of metalwork in Halland: discussion

The deposition of metalwork in Halland took a number of forms and, despite being a geographically restricted dataset, we can highlight three ways in which this study can contribute to our understanding of Bronze Age depositional practices. First, we discuss the connection between certain object types and the activities that took place in cultural landscapes, using axes as an example; second, we assess the topographic characteristics of deposition places in the Bronze Age; and third, we compare the depositions on dry ground and in wet places. Together, these discussions not only shed light on depositional practices, but also contribute a different perspective to broader themes, such as the circulation of metalwork on a regional scale.

Objects and places: activities in the cultural landscape

Although this paper's main focus is the (often complex) topographic contexts of hoards, they formed only part of the network of activities that created Halland's cultural landscape. Axes (Fig. 3) are the most abundant object in our dataset and are, therefore, a good case study to analyse the relationship between object type, place and human activity in

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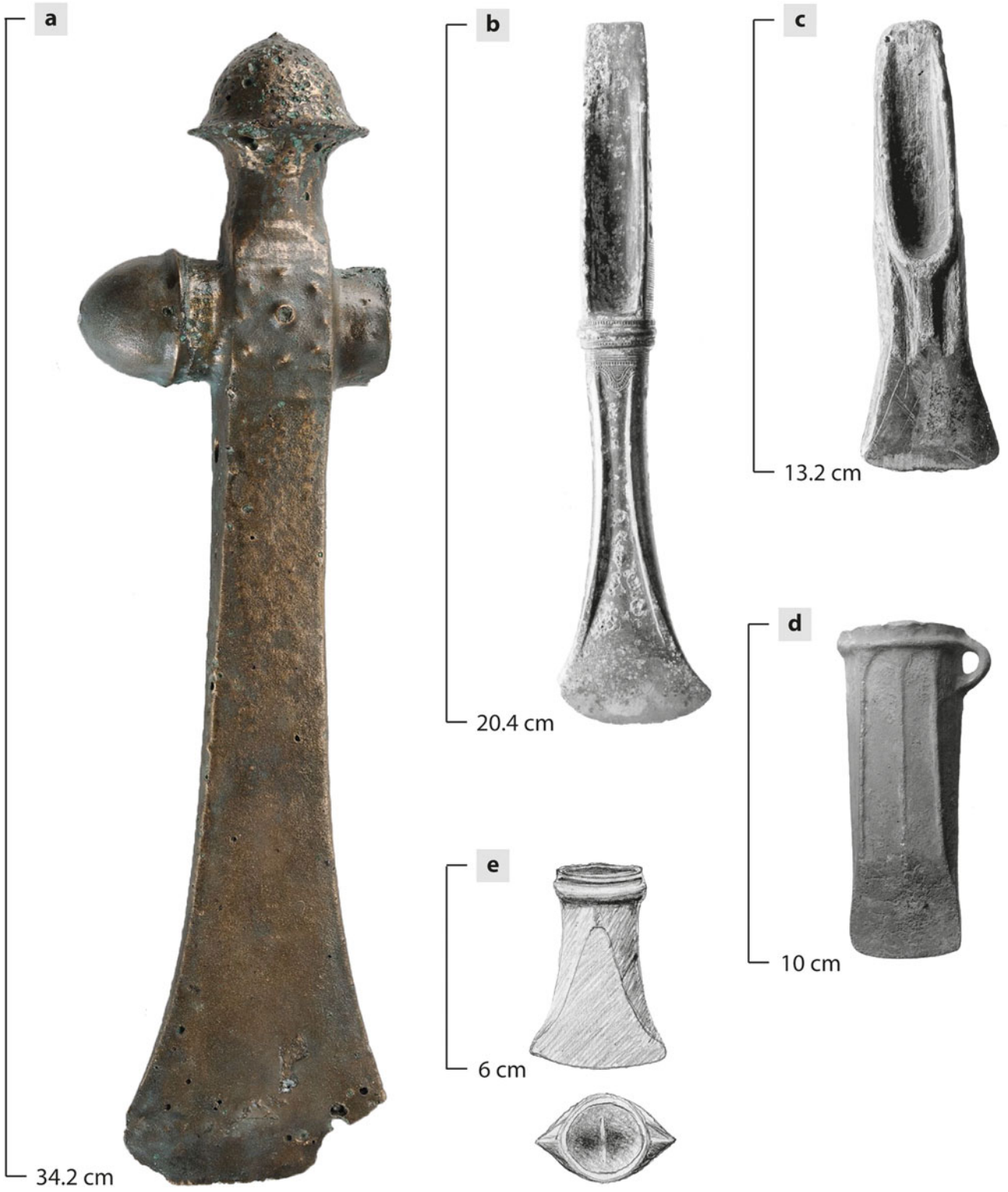

Figure 3. *Selection of axes (the most common object type in the BALMS database) from different periods. (a) Shaft-hole axe, Phase 1: Period 2, B65, SHM 6928; (b) Palstave ('ceremonial/prestige'), Phase 1: Period 2, B19, SHM 6434 and (c) Palstave ('working') from the same site; (d) Socketed axe, Phase 2: Period 4, B61, SHM 4728: 5; (e) Socketed axe, Phase 3: Period 5/6, B34, SHM 13387:3. (Drawings and photographs: Historiska museet/SHM [CCBY Sweden 2.5].)*

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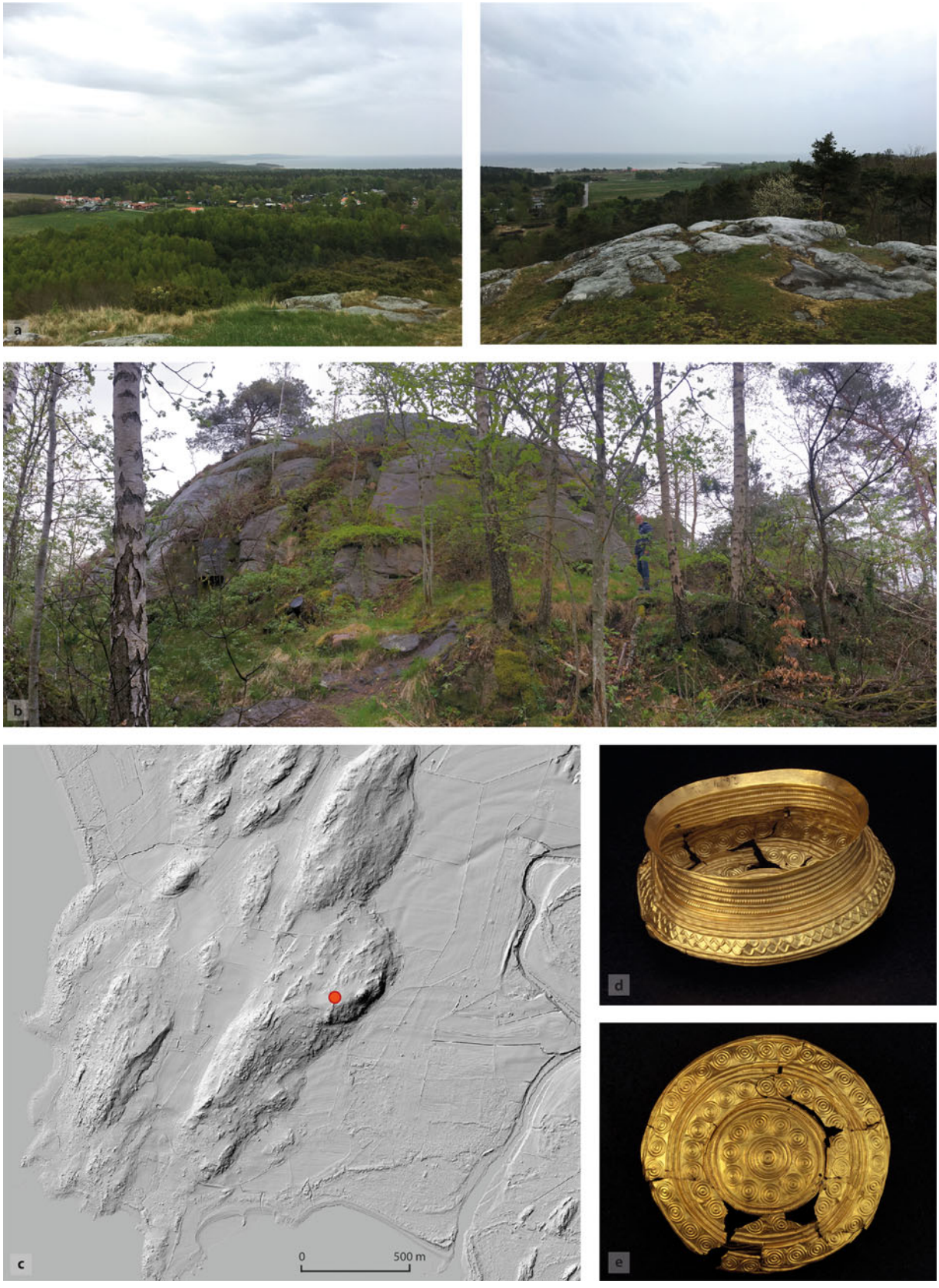

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Halland. We will specifically assess palstaves and socketed axes. Throughout the Bronze Age, axes in Halland were deposited in a variety of contexts (rivers, streams, bogs, wetlands, dry ground) and in differing combinations (as single find, multiple find and multi-type hoards). This diversity in deposition likely stems from their multiple roles as commodities, tools and weapons (Bradley 1990, 118–19; Fontijn 2002, 251). However, it is possible to formulate ideas on why certain places were chosen for deposition if we consider other activities taking place within the broader cultural landscape.

Palstaves from Period 2 are found in areas where both burials and settlements are common, but they are also found outside the main 'settlement districts'. Four palstaves were found in Lake Ramsjön (B36) and five palstaves, including a decorated ceremonial palstave and seven spearheads, were deposited in a wetland at Norra Långås (B19). These two places are situated outside the Bronze Age settlement district, and there is little indication that this area was ever permanently settled in prehistory; it appears empty on distribution maps of Bronze and Iron Age graves (Arbman 1954, 67; Svanberg 2003, 26). The low-lying area includes a formerly large, shallow lake (Ramsjön) and several wetlands, most of which are drained today, but which would have been favourable for fishing and bird/game hunting. The numerous Mesolithic settlements are evidence of the landscape's richness (Svensson 1985). Although these two sites represent only two of the seven places where palstaves were deposited, they contained nine of the 18 palstaves and all deposited spearheads in our dataset. The axes and spears would have been deposited by people who were away from their farmsteads, perhaps when they came to this place to take part in fishing, hunting, or possibly martial activities (Horn 2023).

In the Late Bronze Age, socketed axes replaced palstaves as the most common type of axe, and they were deposited in wet environments such as bogs, rivers, and streams. Unlike the Early Bronze Age palstaves, they were consistently deposited as single objects when they were placed in wet contexts, and in areas related to permanent settlements, as evidenced by the distribution of Late Bronze–Early Iron Age graves. In those cases where we are fairly confident of their findspot, they are found *c.* 200–500 m from burial monuments (B03, B29, B44, B45). Given their widespread distribution and their occurrence as single objects, we interpret their depositions within the framework of settlement activities, as opposed to the palstaves from Period 2.

Objects and places: topographic significance

As David Fontijn (2002) has argued, *any* deposition creates a relationship between places, artefacts and people. In Bronze Age Halland, it is clear that intricate relationships between objects and places were formed and strengthened through the act of deposition, which highlighted and intertwined specific topographical features. The deposition of (often spectacular) objects could have enhanced a place that already held significance or made a place special and implored people to comprehend it in new ways. This is especially true of those places with complex topography, which afforded different landscape features in one location. Some of these places could be described as 'public landmarks'—visible from great distances, even from the sea—that were inviting. We will explore five such examples that we identified during fieldwork, which cluster in our Phase 2 (Period 4). Our general observations are presented above (Tables 1 & 3), but we will deepen the discussion here by describing more thoroughly the landscape features and object characteristics of these depositions.

In Period 4, a gold bowl was deposited at the foot of the rock outcrop Smörkull (B47), whose peak is about 52 m above sea level and only 1 km from the sea (Fig. 4). The top of Smörkull provides a clear view of land, sky and sea, and an especially magnificent view of the sun setting on the sea. The ability to interact simultaneously with these three features (land, sky and sea) from atop Smörkull was perhaps why people chose this specific outcrop to deposit the gold bowl. This is further supported by its ornamentation—concentric circles (especially on gold) have often been interpreted as solar symbolism (Armbruster 2012). Although it is a speculative observation, one cannot help noticing in the field that the shape of the object is reflected in the shape of the outcrop itself; the rounded top has the appearance of an upside-down bowl (Fig. 4). The deposition at Smörkull exemplifies how place, object and topography could be closely entwined.

At Nackhälle (B51), a Herzsprung shield decorated with concentric ornaments and waterbirds

Figure 4 (opposite). *Smörkull (B47). (a) The panoramic view of the sea from the top of the outcrop (Photographs: C. Nimura); (b) the view of the outcrop from the find place (Photograph: C. Nimura); (c) a LIDAR map of the region, showing the location of the find place (Data source: Lantmäteriet); (d–e) the gold bowl from Smörkull showing the circular designs on the bottom (Photographs: Ulf Bruxe, Historiska museet/SHM [CC BY 4.0].)*

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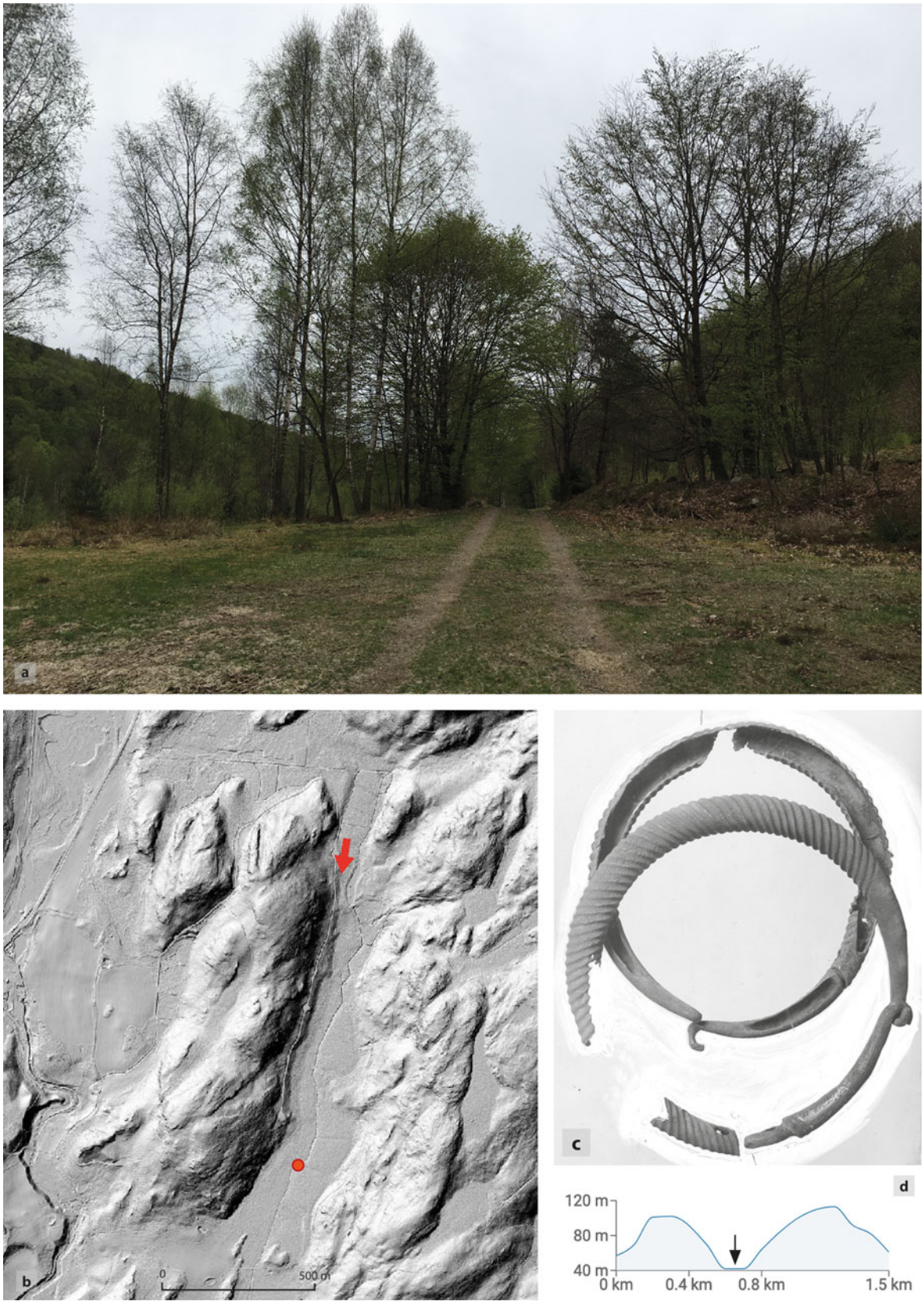

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(Uckelmann 2012, Tafel 77, 120, 121) was deposited close to a stream and the edge of a bog, near an impressive outcrop. The outcrop, situated as far as 7 km from the sea, is said to have been used as a navigation marker by seafarers in the nineteenth century (Sjöbeck 1931). Just as at Smörkull, it was possible to interact with different topographic elements (land, sky and water) simultaneously in this place. This is echoed by the representation of waterbirds on the shield, as they too navigate on land and water and in the sky.

The same pattern is repeated at Kalvabol (B13; Fig. 5), where a pair of neckrings was deposited in the southern part of a rather narrow bog stretching north–south. The objects were deposited close to a stream in between two major outcrops that encase the bog to the east and west. Atop the eastern outcrop, it is possible to see the sea 14 km away. In this case, it is not the ornamentation on the objects that connects them to this place, but rather the pair of neckrings echoes the pair of outcrops that define the boggy locale. While neckrings are common in Phase 3 depositions, these are the only neckrings dating to Phase 2, which underlines their special character.

At Källebjär (B12), four golden spiral armrings were deposited at the foot of an outcrop overlooking a hill, which provides an impressive view of the surrounding plains. Situated on the outcrop, *c.* 150 m from the find, is a spring that was used until recently for watering horses. The spring is such an important part of this place that it gave it its name—in Swedish, *Källebjär* means 'hill with a spring'. Here again, land, water and sky are accessible.

Our fifth example is slightly different but also combines varied topographical features. At Ramsjön (B52), a drained lake, a socketed axe was deposited close to the southern shore. It would have been a sheltered harbour when the lake still existed, as there is a long and narrow ridge west of the findspot that people could have used to walk out onto the water. At the shore, the land rises sharply into a hill from which you can overlook large parts of the lake, combining land, sky and water once again.

Other finds from Period 4 share a pattern that differs to those spectacular sites discussed above. They are deposited in wet contexts but in flatter, more open topographical environments (B22, B30, B31, B43). This openness makes the sky the dominant feature, because it is not obscured by any other natural element in the landscape. Different elements still come together in these places, but this time in more modest ways that emphasize the sky and water.

Why is it that these complex topographical sites cluster in Period 4? The answer could relate to Bronze Age worldviews that have been widely acknowledged. Flemming Kaul (1998) has argued for a three-tiered cosmology that involves the sky, land and sea, based on a detailed study of the ornamentation on bronze razors. The same has also been identified in Scandinavian rock art (Bradley 2009; Bradley & Nimura 2013; Lahelma 2005). Interestingly, this portrayal of the world—where different spheres are separated but joined by the movement of the sun—appears for the first time on Period 4 razors. A similar worldview is indicated by the famous Trundholm chariot dating to Period 2 (Gelling & Davidson 1969), and comparable iconographic elements are known from the Early Bronze Age. However, this mode of organizing the world involving several different topographic elements is clearly expressed for the first time in Bronze Age Period 4 iconography. In Period 4, these ideas became so influential that they were not only a design feature on some metal objects, but they became a guiding principle in where metal objects were deposited. People sought to encapsulate water, land and sky in the deposition place.

Dry land, wet land, and metal circulation

As we have discussed, wetland finds were deposited according to certain norms. In our dataset, for example, Early Bronze Age swords were related to running water and Late Bronze Age socketed axes were deposited in wet contexts as single finds; these patterns may relate to their diverse life stories and biographies (Fontijn 2002, 215–17). Although there are only eight within our dataset, hoards from dry contexts differ in their composition and distribution from wet contexts (Table 5). For example, in wet environments, socketed axes were typically deposited as single items, whereas in the dryland context of Klastorp (B38) and Runsås (B55), two socketed axes dated to Period 5/6 were deposited

Figure 5 (opposite). *Kalvabol (B13). (a) View of both outcrops flanking the bog, taken from the road above the bog (Photograph: C. Nimura); (b) a LiDAR map of the area, showing the location of the find place and an arrow that shows the direction of the photograph (Data source: Lantmäteriet); (c) the two neckrings (Photograph: Historiska museet/SHM); (d) an elevation diagram showing the height of the two outcrops that surround the bog.*

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Table 5. *Dryland finds: their date, contents, relationship to natural elements, and other observations.*

BALMS #	Name	Date (Period)	Hoard contents	Element	Comment
B53	Klastorp	2	1 shaft-hole axe, 1 socketed axe, 1 miniature axe	Boulder	Shaft-hole axe: casting failed. Socketed axe: piece of scrap metal found inside the sock
B18	Trönninge	2	5 palstaves		Four of the axes are almost identical, while the last one was oblique and the casting had failed
B38	Runsås	5	2 socketed axes, 1 spearhead	Boulder	One of the socketed axes is missing a ring, which was broken. The spearhead is complete
B25	Gamla Köpstad	5	2 fibulas	Boulder	Two almost identical objects
B15	Gamla Köpstad	5	1 sword, 1 spearhead, 1 socketed axe		No data
B57	Apelvik	5	2 spearheads	Boulder	The pieces were damaged during retrieval, and their original status cannot be determined
B55	Klastorp	5, 6	2 socketed axes	Flagstone	Two identical objects
B33	Burhultet	6	2 neckrings	Ridge	Two similar objects

together. Dryland hoards often contain objects that are similar in shape and style. This is the case with the five axes from Trönninge (B18), the two axes from Klastorp (B55) and the two fibulae from Gamla Köpstad (B25). The similarities between some of these objects found together indicate that they may have been made by the same workshop (Lindälv 1971, 20; Oldeberg 1974, no. 1612). Two of the dryland hoards—Klastorp and Trönninge—included objects that may not have been used or had some imperfections, which differs from most of the wetland finds.

A long-standing interpretation of hoards found on dry land is that they were deposited by traders or founders who intended to retrieve them later in time. From this perspective, founders' hoards would contain large numbers of fragmented objects and traders' hoards would be made up of more or less identical objects (e.g. Coles 1962; cf. Fontijn 2002, 58 & 247).

How well do these interpretations fit the dryland hoards presented in Table 5? Klastorp could be argued to be a founders' hoard because it includes a shaft-hole axe that is skewed due to a failed casting and a socketed axe with a piece of scrap metal found inside the socket. However, this interpretation cannot be applied as a general explanation to the entire suite of dryland finds from our dataset. Neither could these easily be interpreted as traders' hoards, as they contain small numbers of finds that are not 'foreign', but rather representative of objects known to circulate in the region.

Perhaps what is most helpful when attempting to interpret these small, dryland hoards is their proximity to the sea (Fig. 1). This is a common trait in our dataset; some of these dryland hoards were found at the beach near safe harbours, and others were found at a maximum of 4 km from the Bronze Age shoreline close to rivers or streams. They would have been part of the wider 'maritime cultural landscape', which included the sea, the estuaries and the transit points where cargoes were exchanged between ships and inland modes of transportation (Nimura *et al.* 2019; Westerdahl 1992). The distinction between 'wet' and 'dry' contexts may have been defined according to different principles in the Bronze Age than in the present day: therefore, the dryland (as we have defined them) hoards' physical proximity to the sea may well have given them a 'wet' character.

The majority of these 'dryland' depositions (six of eight) are from the later Bronze Age, Periods 5 and 6, and they appear to be sets of personal objects, such as a sword, a spearhead and an axe; a spearhead and two axes; two axes; two spearheads; two fibulae; and a pair of neckrings. The Period 2 hoards instead consist of five palstaves (B18) and a smaller set of rather special objects (B53). These small hoards found in dryland contexts close to the coast could well be associated with activities related to the 'maritime sphere' (Ling *et al.* 2018). It is understood that copper and tin was imported into Sweden, and this would have required travel by boat (Ling *et al.* 2013; 2014; 2019; Melheim *et al.* 2018). The importance of these vessels is emphasized by the thousands of boats/ships depicted in rock art across Scandinavia. It has been argued that these coastal rock-art sites could

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have marked the places where maritime activities took place as people embarked or disembarked on journeys—these watery journeys were embedded in larger social and cultural frameworks. Perhaps the deposition of objects in coastal locations was, as is the case with rock art, also related to activities that took place in this maritime arena.

The patterns identified with the dryland hoards in contrast to the wetland norms could be explained by their maritime setting; these objects were perhaps selected from the cargo of a ship or might have comprised part of a crew members' personal belongings. It is unnecessary to assume that there were any significant differences in the underlying rationale for depositing hoards in wet or dry contexts; rather it could have been determined by the quantity and character of objects that were available for selective deposition (cf. Fontijn & Roymans 2019).

Halland's hoards

This study first combined archival research and fieldwork to locate deposits of metalwork in Halland and then analyse their landscape contexts. By systematically analysing online digital sources, such as museum archives and historical maps, we were able to locate a number of previously unlocated finds. The emphasis on ground-truthing fieldwork has proven fruitful in other parts of Europe, and we aimed to apply it to southern Scandinavia, where less analysis of this type has taken place. This approach made us aware of the very complex topography that characterized many of the sites. By recording different topographical features at deposition locations, we were able to gain a better understanding of the possible motivations for choosing those specific places. This also made it possible to identify changes in depositional practice during the transition from the Early to the Late Scandinavian Bronze Age, *c.* 1100 BCE. Around this time, it became important to choose vantage points where water, land and sky could be seen simultaneously from deposition places. We were also able to discern different depositional practices for different kinds of axes and to illuminate the possible relationships between dryland finds and Bronze Age maritime cultural landscapes. Our study revealed that metal objects were acquired, circulated and deposited according to certain norms and principles.

This detailed field study not only sheds light on the landscape contexts of hoards in this region, but it has also pointed to new observations that should be further studied and may add to our understanding of the circulation and distribution of metalwork on a wider scale. These are avenues that need further exploration, to which a larger study of this type can hopefully contribute in the future.

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Supplementary material

Supplementary Appendices 1 & 2 may be found at https://doi.org/10.1017/S095977432400009X

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References

Arbman, H., 1954. Hallands Historia: Från äldsta tid till freden i Brömsebro 1645 [Halland's history: from

ancient times to the peace of Brömsebro in 1645], in *Hallands historia Del I*. Halmstad: Hallands läns landsting.

Armbruster, B., 2012. Goldgefäße der Nordischen Bronzezeit – eine Studie zur Metalltechnik [Gold vessels of the Nordic Bronze Age – a study of metal technology]. *Praehistorische Zeitschrift* 87(2), 370–432.

Artelius, T., 2013. Inventions of memory and meaning: examples of Late Iron Age reuse of Bronze Age monuments in south-western Sweden, in *Beyond Barrows: Current research on the structuration and perception of the prehistoric landscape through monuments*, eds D.R. Fontijn, A. Louwen, S. Van der Vaart & K. Wentink. Leiden: Sidestone Press, 21–40.

Baudou, E., 1960. Die regionale und chronologische Einteilung der jüngeren Bronzezeit im Nordischen Kreis [Regional and Chronological Classification of the Late Bronze Age in the Nordic Region]. PhD thesis, Stockholms universitet.

Becker, K., 2013. Transforming identities: new approaches to Bronze Age deposition in Ireland. *Proceedings of the Prehistoric Society* 79, 225–63.

Bradley, R., 1990. *The Passage of Arms: An archaeological analysis of prehistoric hoards and votive deposits*. Cambridge: Cambridge University Press.

Bradley, R., 2017. *A Geography of Offerings: Deposits of valuables in the landscapes of ancient Europe*. Oxford: Oxbow.

Bradley, R., 2009. *Image and Audience: Rethinking prehistoric art*. Oxford: Oxford University Press.

Bradley, R. & C. Nimura, 2013. The earth, the sky and the water's edge: changing beliefs in the earlier prehistory of Northern Europe. *World Archaeology* 45(1), 12–26.

Coles, J., 1962. Scottish Late Bronze Age metalwork: typology, distribution and chronology. *Proceedings of the Society of Antiquaries of Scotland* 93(1962), 16–134.

Dunkin, D., D. Yates & R. Bradley, 2020. The findspots of Bronze Age metalwork in lowland England: a new field study. *Oxford Journal of Archaeology* 39(1), 67–88.

Edvardsson, J., 2016. Mid- to Late Holocene climate transition and moisture dynamics inferred from South Swedish tree-ring data. *Journal of Quaternary Science* 31(3), 256–64.

Fontijn, D.R., 2002. Sacrificial Landscapes: Cultural Biographies of Persons, Objects and 'Natural' Places in the Bronze Age of the Southern Netherlands, 2300–600 BC. PhD thesis, University of Leiden.

Fontijn, D.R., 2020. *Economies of Destruction: How the systematic destruction of valuables created value in Bronze Age Europe, c. 2300–500 BC*. Abingdon: Routledge.

Fontijn, D.R. & J. Roymans, 2019. Branded axes, thrown into a pool? The Hoogeloon Hoard and the shape-based bronze economy of the North-West European Bronze Age. *Oxford Journal of Archaeology* 38(2), 164–88.

Frost, L., 2011. Depotfund fra yngre bronzealder i et lokalt, landskabsarkæologisk lys [Late Bronze Age depositt finds in a local landscape archaeological perspective], in *Depotfund i yngre bronzealders lokale kulturlandskab* [Selective depositions in the local cultural landscape of the Late Bronze Age], eds S. Boddum, M. Mikkelsen & N. Terkildsen. Viborg/Holstebro: Viborg Stiftsmuseum & Holstebro Museum, 63–74.

Frost, L., 2014. Flodfund Bronzealderdeponeringer fra Gudenåen [Bronze Age river deposits from the river Gudenåen]. *KUML* 2014, 29–63.

Gelling, P. & H.E. Davidson, 1969. *The Chariot of the Sun*. London: Dent.

Henriksen, M.M., 2014. Stille vann har dyp bunn Offerteoriens rolle i forståelsen av depotfunn belyst gjennom våtmarksdepoter fra Midt-Norge ca. 2350–500 f.Kr. [The Role of Theory in the Understanding of Deposit Finds Illustrated through Wetland deposits from Mid-Norway *c.* 2350–500 BC]. PhD thesis, Norwegian University of Science and Technology, Trondheim.

Horn, C., 2023. Warriors as a challenge: violence, rock art, and the preservation of social cohesion during the Nordic Bronze Age. *European Journal of Archaeology* 26(1), 57–80.

Kaul, F., 1998. *Ships on Bronzes: A study in Bronze Age religion and iconography*. Copenhagen: National Museum.

Kaul, F., 2014. Bronze Age gold from Denmark, in *Metals of Power: Early gold and silver*, eds H. Meller, R. Risch & E. Pernicka. Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 885–902.

Knoll, F., H. Meller & J. Filipp, 2014. 'Nordisch by nature'. Die Jungbronzezeitlichen, goldenen Eidringe Sachsen-Anhalts an der südlichen Peripherie des Nordischen Kreises in ihrem Kontext ['Nordic by nature'. The Late Bronze Age golden oath rings of Saxony-Anhalt on the southern periphery of the Nordic area in their context], in *Metals of Power: Early gold and silver*, eds H. Meller, R. Risch & E. Pernicka. Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 789–872.

Kristiansen, K., 1996. Die Hortfunde der jüngeren Bronzezeit Dänemarks. Fundumstände, Funktion und historische Entwicklung [Hoard finds from the Late Bronze Age in Denmark. Find circumstances, function and historical development], in *Archäologische Forschunge zum Kultgeschehen in der jüngerren Bronzezeit und frühen Eisenzeit Alteuropas* [Archaeological research on ritual activities in the Late Bronze Age and Early Iron Age of Ancient Europe], ed. P. Schauer. Bonn: Habelt Verlag, 255–69.

Lahelma, A., 2005. Between the worlds: rock art, landscape and shamanism in subneolithic Finland. *Norwegian Archaeological Review* 38(1), 29–47.

Larsson, T.B., 1986. The Bronze Age Metalwork in Southern Sweden: Aspects of Social and Spatial Organization 1800–500 B.C. PhD thesis, University of Umeå.

Levy, J.E., 1982. *Social and Religious Organization in Bronze Age Denmark: An analysis of ritual hoard finds*. (BAR International series S124.) Oxford: British Archaeological Reports.

Lindälv, E., 1971. Minnen från det forntida Träslöv [Memories of ancient Träslöv], in *Träslövsboken: historik över Träslövs socken från forntid till nutid* [History of the parish of Träslöv from ancient to modern times]. Varberg: Träslövs hembygdsförening, 9–32.

Ling, J., T. Earle & K. Kristiansen, 2018. Maritime mode of production: raiding and trading in seafaring chiefdoms. *Current Anthropology* 59(5), 488–524.

Ling, J., E. Hjärthner-Holdar, L. Grandin, K. Billström & P.-O. Persson, 2013. Moving metals or indigenous mining? Provenancing Scandinavian Bronze Age artefacts by lead isotopes and trace elements. *Journal of Archaeological Science* 40, 291–304.

Ling, J., E. Hjärthner-Holdar, L. Grandin, *et al.*, 2019. Moving metals IV: Swords, metal sources and trade networks in Bronze Age Europe. *Journal of Archaeological Science: Reports* 26, 1–34.

Ling, J., Z. Stos-Gale, L. Grandin, K. Billström, E. Hjärthner-Holdar, & P.-O. Persson, 2014. Moving metals II: provenancing Scandinavian Bronze Age artefacts by lead isotope and elemental analyses. *Journal of Archaeological Science* 41, 106–32.

Lundborg, L., 1972. *Undersökningar av bronsåldershögar och bronsåldersgravar i södra Halland: Höks, Tönnersjö och Halmstads härader under åren 1854–1970* [Investigations of Bronze Age mounds and Bronze Age graves in southern Halland: Hök, Tönnersjö and Halmstad juridical districts in the years 1854–1970]. Halmstad: Civiltryckeriet.

Lundborg, L., 2007. *Undersökningar av bronsåldershögar och bronsåldersgravar i södra Halland 2* [Investigations of Bronze Age mounds and Bronze Age graves in southern Halland 2]. Halmstad: Kulturmiljö Halland.

Melheim, A.L., 2006. Gjennom ild og vann [Through fire and water], in *Myter og religion i bronsealderen studier med utgangspunkt i helleristninger, graver og depoter i Sør-Norge og Bohuslän* [Myth and religion in the Bronze Age – studies based on petroglyphs, graves and deposits in southern Norway and Bohuslän], ed. C. Prescott. Oslo: Oslo Academic Press, 127–40.

Melheim, L., L. Grandin, P.-O. Persson, *et al.*, 2018. Moving metals III: possible origins for copper in Bronze Age Denmark based on lead isotopes and geochemistry. *Journal of Archaeological Science* 96, 85–105.

Melheim, L. & C. Horn, 2014. Tales of hoards and sword-fighters in Early Bronze Age Scandinavia: the brand new and broken. *Norwegian Archaeological Review* 47(1), 18–41.

Montelius, O., 1917. *Minnen från vår forntid* [Memories of our ancient past]. Stockholm: Norstedt.

Müller, S., 1886. Votivfund fra Sten- og Bronzealderen [Votive finds from the Stone and Bronze Ages]. *Aarbøger for nordisk oldkyndighed og historie* 1886, 216–51.

Nimura, C., P. Skoglund & R. Bradley, 2019. Navigating inland: Bronze Age watercraft and the lakes of southern Sweden. *European Journal of Archaeology* 23(2), 186–206.

Oldeberg, A., 1974. *Die ältere Metallzeit in Schweden I* [The Early Metal Age in Sweden I]. Stockholm: Kungl. Vitterhets-, historie och antikvitets akademien.

Påsse, T., 1987. Shore displacement during the Late Weichselian and Holocene in the Sandsjöbacka area, SW Sweden. *Geologiska Föreningen i Stockholm Förhandlingar* 109(3), 197–210.

Rundkvist, M., 2015. *In the Landscape and Between Worlds: Bronze Age deposition sites around lakes Mälaren and Hjälmaren in Sweden*. Umeå: Umeå University.

Sjöbeck, M., 1931. *Halland: en landskaplig orientering vid betraktandet av Halland från statsbanornas tåg och under utfärder* [Halland: a landscape orientation when viewing Halland from state railway trains and during excursions]. Stockholm: Seelig.

Svanberg, F., 2003. *Decolonizing the Viking Age 2: Death rituals in south-east Scandinavia AD 800–1000.* Stockholm: Almqvist & Wiksell International.

Svensson, F., 1985. *Det gåtfulla träskfolket och andra berättelser* [The enigmatic swamp people and other stories]. Kållered : Kompendietryckeriet.

Thedéen, S., 2004. Gränser i livet – gränser i landskapet. Generationsrelationer och rituella praktiker I södermanländska bronsålderslandskap [Boundaries in Life – Boundaries in Landscapes. Relations between Generations and Ritual Practices in the Bronze Age Landscapes of Södermanland, Sweden]. PhD thesis, Stockholm University.

Tilley, C., 1997. *A Phenomenology of Landscape: Places, paths and monuments*. Oxford: Berg.

Uckelmann, M., 2012. *Die Schilde der Bronzezeit in Nord-, West- und Zentraleuropa* [The shields of the Bronze Age in northern, western and central Europe]. Stuttgart: Steiner.

Van de Noort, R. & A. O'Sullivan, 2006. *Rethinking Wetland Archaeology*. London: Duckworth.

Vandkilde, H., 1996. From Stone to Bronze: The Metalwork of the Late Neolithic and Earliest Bronze Age in Denmark. PhD thesis, Aarhus Universitet.

Visser, M., 2021. *A Completely Normal Practice: The emergence of selective metalwork deposition in Denmark, North-West Germany, and the Netherlands between 2350–1500 BC*. Leiden: Sidestone Press.

Weiler, E., 1994. Innovationsmiljöer i bronsålderns samhälle och idévärld: kring ny teknologi och begravningsritual i Västergötland [Innovation Environments in Bronze Age Society and the World of Ideas: On New Technology and Funeral Rituals in Västergötland]. PhD thesis, Umeå University.

Wiking-Faria, P., 2009. Freden, friköpen och järnplogarna: drivkrafter och förändringsprocesser under den agrara revolutionen i Halland 1700–1900 [Peace, Land Acquisition and Iron Ploughs: Driving Forces and Processes of Change During the Agrarian

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Revolution in Halland, 1700–1900]. PhD thesis, University of Gothenburg.
Westerdahl, C., 1992. The maritime cultural landscape. *International Journal of Nautical Archaeology* 21(1), 5–14.
Worsaae, J.J.A., 1866. Om nogle Mosefund fra Bronsealderen [About some Bronze Age bog finds]. *Aarbøbger for nordisk oldkyndighed og historie* 1866, 313–26.
Yates, D. & R. Bradley, 2010. Still water, hidden depths: the deposition of Bronze Age metalwork in the English Fenland. *Antiquity* 84, 405–15.

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