UPPSALA
UNIVERSITET

Institutionen för arkeologi
och antik historia

Håga in context – An analysis of the Håga complex in the Bronze Age landscape of the Mälar Valley region

Rachel N. Elliott

MA thesis 45 credits in Archaeology
Spring term 2020
Supervisor: Anders Kaliff
Campus Uppsala

Abstract

Elliott, R.N. 2020. *Håga in context – An analysis of the Håga complex in the Bronze Age landscape of the Mälar Valley region.*

The Bronze Age in Middle Sweden is characterized by several key sites and monuments which have been interpreted by previous research to play an overarching role in the elite ruling system in the Mälar Valley region. King Björn's mound (a.k.a. the Håga mound) and the hillfort Predikstolen represent one of these complexes and has been referred to as a central hub for trading between the south and east as well as a central meeting point for alliance networks throughout the Mälar Valley region. The ritual importance of the site has been particularly relevant to discussions around the mound and accompanying cult house, Hågakyrkan, since the excavation of the mound in 1902-3 by Oscar Almgren. The investigation of the mound's central cairn dated the monument to the Bronze Age Period IV, and resulted in the discovery of one of the most spectacular burials in Sweden, including gold and bronze artefacts indicative of connections with south Scandinavia, particularly Denmark, and a ritual role typified by Kristian Kristiansen's institutional divisions of elites based on artefact assemblages. To understand how Håga and other Bronze Age sites have attained the label of 'ritual' places in the landscape, a discussion is included on previous research which has defined the parameters of sacred versus profane activity utilizing theories on identity as demonstrated through material expression explored by Kristian Kristiansen (1987, 2011) and Susanne Thedéen (2004). This thesis also utilizes the ritual practice theory defined by Catherine Bell (2009) to identify the repetitive traditions which define cultic practice during the Bronze Age in Middle Sweden in order to understand the unique phenomenon of Håga as compared to other sites in the Mälar Valley region: two sites with established cultic complexes (Broby and Skeke), and two sites characterized by industrial bronze production (Apalle and Hallunda). These sites were additionally chosen based on their position along a north-south inlet system which directly connected Lake Mälaren from the eastern Baltic sea to south Scandinavia and north-western Europe. A comparative analysis of the relevant features and finds of each site as well as a brief overview of the evidence of conflict in southern Scandinavia and Europe are used to contextualize the role Håga served leading up to and following construction of the Håga mound. The delimitations and potential uses of the results are included in the discussion.

Keywords: *Håga complex, King Björn's mound, Bronze Age, Middle Sweden, Mälar Valley region, ritual landscapes, ritual practice theory*

Cover image: Picture of Håga mound as seen approaching from N-NW. Photo taken by author.

Master thesis in Archaeology 45 hp. Supervisor: Anders Kaliff. Defended and passed 2020-06-15.

Department of Archaeology and Ancient History, Uppsala University, Box 626, 75126 Uppsala, Sweden

Abstrakt

Elliott, R.N. 2020. *Håga i kontext – En analys av Hågakomplexet i bronsålderslandskapet i Mälardalen.*

Bronsåldern i Mellansverige kännetecknas av några nyckelplatser och monument vilka tidigare har tolkats av forskare att ha spelat en övergripande roll för hövdingadömet i Mälardalsområdet. Kung Björns hög (s.k. Hågahögen) och fornborgen Predikstolen utgör ett av dessa komplex och har kallats ett regionalt nav för handel mellan söder och öster, samt en central mötesplats för alliansnätverk i hela Mälardalen. Den rituella vikten har också påpekats som relevant till diskussionen kring Hågahögen och närliggande kulthuset Hågakyrkan sedan undersökningen ledd av Oscar Almgren år 1902-3. Undersökningen av högens centralrösen har daterat monumenten till bronsåldern Period IV och resulterade i upptäckande av en av de mest spektakulära begravningarna i Sverige, vilket inkluderade guld och bronsartefakter som ger indikationer på kopplingar till Sydskandinavien, speciellt Danmark, och den rituella rollen representerat av Kristian Kristiansens institutionella uppdelningar av eliter baserad på artefaktgrupper. För att förstå hur Håga och andra bronsåldersfornlämningar har märkts som 'rituella' platser i landskapet, diskuteras tidigare forskning som har definierat begränsningarna av sakral jämfört profan aktivitet med hjälp av teorier om identitet baserad på materiella uttryck utforskat av Kristian Kristiansen (1987, 2011) och Susanne Thedéen (2004). Uppsatsen använder sig också av rituellpraktiksteori eller s.k. 'ritual practice theory' definierad av Catherine Bell (2009) för att identifiera återkommande traditionerna som exemplifierar kultpraxis under bronsåldern i Mellansverige, för att kunna förstå den unika karaktär Håga har jämfört andra fornlämningar i Mälardalen: två fornlämningar med etablerade kultkomplex (Broby och Skeke) och två kännetecknade av industriell bronsproduktion (Apalle och Hallunda). De fornlämningar som har valts ut för jämförelse har också baserats på deras position längst det nord-sydliga vattenledssystemet som direkt kopplar Mälaren från Östersjön till Sydskandinavien och nordvästra Europa. En jämförande analys av relevanta anläggningar och fynd från varje fornlämning plus en kort översikt av bevisen för konflikt i Sydskandinavien och Europa används för att kontextualisera Hågas roll innan och efter byggandet av Hågahögen. Begränsningar och potentiella användingsområden av resultaten inkluderas i diskussionen.

Nyckelord: *Hågakomplexet, Kung Björns hög, bronsåldern, Mellansverige, Mälardalen, rituell landskapet, rituellpraktiksteori*

Acknowledgements

A lot of feedback and support has contributed to the completion of this thesis, not least of which came from my supervisor, Anders Kaliff, who gave me nothing but positive feedback when I expected the worst, for which I am deeply grateful. I would also like to express my appreciation for Anneli Ekblom, whose guidance and consistent tips, tricks, and reminders helped keep me on track through the thesis-writing process, and who helped me simplify the question of which theory to use when I was overcomplicating the issue.

My classmates, who were a constant source of inspiration and levity, and an endless supply of entertainment during the emails, chat groups, and pub nights when we all vented our frustrations and learned the correct usage of ‘Opa!’

My Swedish family and friends who have offered encouragement and distraction, and the pressure of making it clear they had every confidence I would finish on time despite my own misgivings.

And my family back home in the US who I don’t see often but love and miss dearly, and who have shown their unerring love and support by also assuming that there was no option for me other than to just get it done.

Contents

List of Terms

i. Montelius Periods (with dates) for the Nordic Bronze Age

Early Bronze Age (EBA)	Period I	1700-1500 BC
	Period II	1500-1300 BC
	Period III	1300-1100 BC
Late Bronze Age (LBA)	Period IV	1100-900 BC
	Period V	900-700 BC
	Period VI	700-500 BC

ii. Swedish Terminology[1]

English	**Swedish**
Mälar Valley region	*Mälardalen, Mälardalsområdet*
(archaeological) site	*fornlämning*
hillfort	*fornborg*
walled construction/ramparts	*vallanläggning*
cult house	*culthus*
burnt-stone mound	*skärvstenshög*
stone setting	*stensättning*
kerbstone (ring)	*kantkedja*
fire-split stone	*skärvsten*
feature	*anläggning*
centre block	*mittblock*
crucible fragment	*degelfragment*
casting/mould fragment	*gjutformsfragment*
seminar excavation	*seminariegrävning*
The National Swedish Heritage Board	*Riksantikvarieämbetet*

iii. Maps

Unless otherwise stated, all data/sea level estimates concerning shoreline levels during different periods of the Bronze Age are represented herein based on the map generator provided by Geological Survey of Sweden (SGU).[2]

[1] This list is meant to provide a clarification of the archaeological terms used in Swedish sources referenced in the text, for the purpose of providing transparency in the research method.

[2] Available at: <http://apps.sgu.se/kartgenerator/maporder_en.html>

iv. Bronze Age Håga River Valley/ Håga complex (*Fig. 5*)

Håga mound a.k.a. King Björn's Mound	The monumental mound burial excavated in 1902-3 by Oscar Almgren (*Fig. 3*) with oak-coffin burial and bronze and gold grave goods (*Fig. 4*).
Hågakyrkan	The monumental stone-foundation cult house south of the Håga mound (*Fig. 17-20*).
Hågahagen	The area of BA settlement and cultic activity 250 m west of Håga mound. Hågahagen includes burnt-stone mounds 366:1-4 and 368 and the smaller stone-foundation cult house with sounding stone (*Fig. 10, 11, 21,* & *22*).
Predikstolen	The BA hillfort 4 km south of Håga mound along the western bank of the Håga River Valley (*Fig. 12* & *13*).

List of Figures

1. Introduction

The Bronze Age in eastern Middle Sweden is characterized by constructions associated with the period: burial mounds, cult houses, burnt-stone mounds, hillforts, rock carvings, and stone-ship settings (Ojala 2016; Thrane 2013). Our perception of Bronze Age culture around Lake Mälaren has been heavily shaped by the grave goods and depositions associated with these monuments and limited insight into the people that settled in the Uppland region, including Håga River valley. Since the late twentieth century, construction projects and roadworks have uncovered previously invisible settlement areas from the Bronze Age which have contributed to a broader understanding of Bronze Age culture and identity around Lake Mälaren. Research focused on settlement patterns and cultural identity beyond elite hierarchies and power complexes owes a great deal of improvement to these development projects (e.g. E4) but there is still a large portion of the population from the Bronze Age which remains invisible (Eriksson 2005b; Ojala 2016: 54f).

Throughout the Mälar Valley region, the basis of developing chiefdoms and political economy has been attributed to 'bottle-necking' of flows of raw materials and prestige goods that allowed for control in certain areas, including the Håga River valley in Uppsala (see *Fig. 1)* (Artursson, Kaliff, & Larsson 2017: 36). Much of the discussion concerning Håga during the Late Bronze Age circles around the idea of an overarching power complex amongst the settlements that have been discovered around Lake Mälaren, with Håga as a central meeting place and seat of ritual power. The amount of wealth seen in the burial goods from King Björn's mound (referred to in this thesis as the Håga mound) is attributed in large part to control of the trade moving north through this valley, with centralized chieftainship possibly already established by Period III based on shifting activity from the cult house at Hågahagen to Hågakyrkan (Kaliff & Oestigaard 2018: 115). The 'Håga complex' has been assigned characteristics of ritual importance, centralised power, and trade control. These aspects have been explored by Jonathan Lindström (in Artursson, Karlenby, & Larsson 2011: 545-550) and expanded upon to contextualize the network of elites and power structures in the Mälar Valley region. Lindström and others refer to Håga as a power complex based on the assertions of earlier researchers such as Oscar Almgren (1905) who characterized Håga and the mound as representing a ruling elite in the Mälar Valley region during the Late Bronze Age.

The focus of this research will be given to the Håga valley and excavated settlements around Lake Mälaren in order to build a clear picture of all the actors involved in the construction of the Håga mound and the assignment of importance to the Håga complex. A reflexive analysis of the archaeological material, case studies of increasing warfare in central Europe, and a brief overview of other sites around Lake Mälaren characterized as playing a role in long-distance trade networks will be utilized to define the role of the Håga complex in the broader Bronze Age landscape of the Mälar Valley region. Does the evidence today support the theory of a 'paramount chiefdom? Is there a discernible difference in the artefact assemblages of the surrounding sites that could indicate similar ritual importance? Does increased conflict in central Europe have a role in the fortification of settlements around Lake Mälaren? What other changes in the archaeological record reflect these pressures, if any?

By developing a methodology focused on answering these questions, we can gain a better understanding of how Håga has been perceived both in prehistory and by modern research, both through the mechanisms by which it was constructed as a site of ritual importance and the history of usage and interpretation that has followed. This analysis will hopefully contribute to

a methodology by which archaeologists can be critical of the mechanisms that have been historically used to construct theories concerning the Bronze Age landscape of the Mälar Valley region and build arguments for power complexes based on practice theory rather than the presence of prestige goods and monumental constructions.

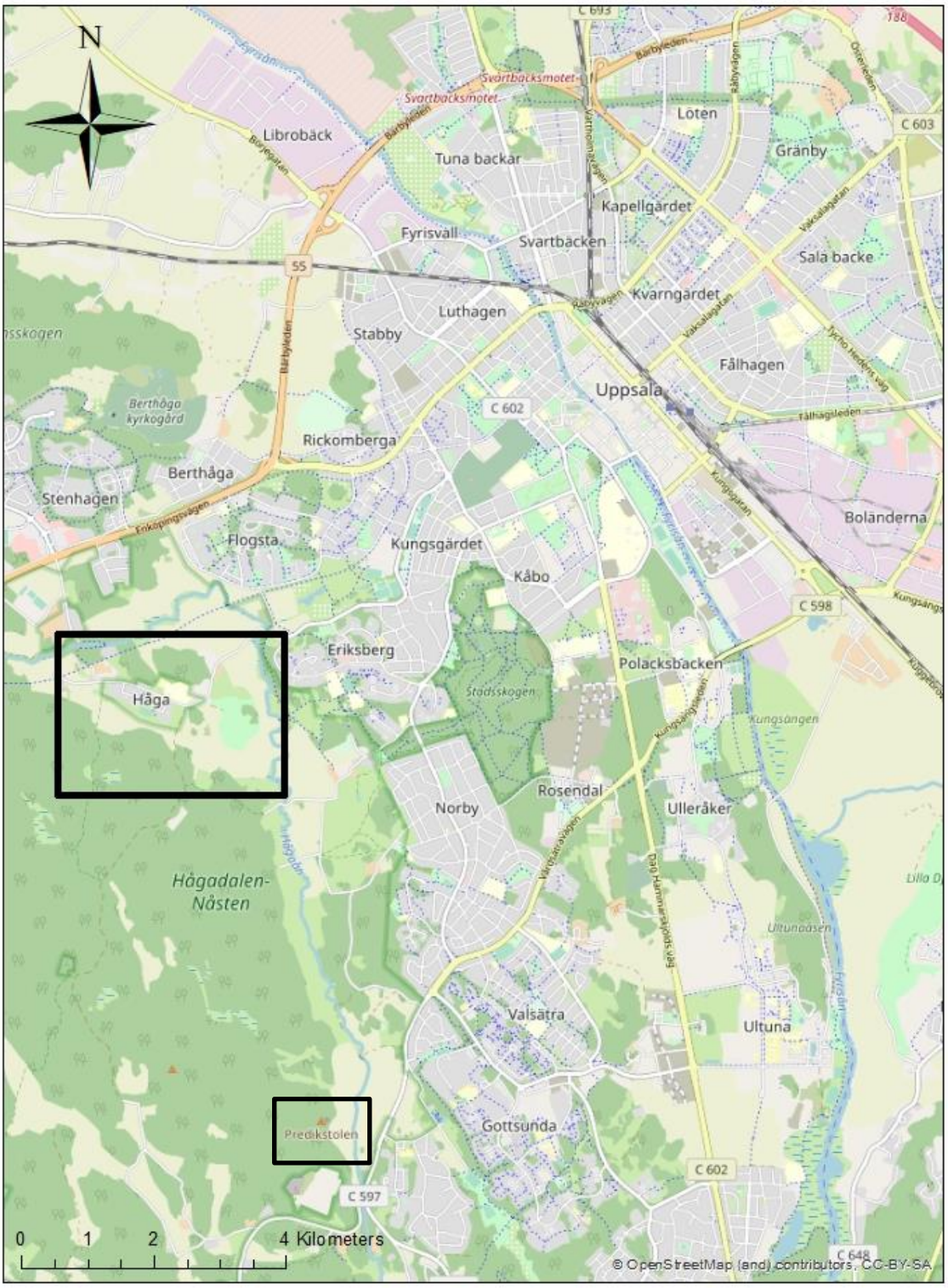

Figure 1. Map showing the present-day location of the Håga mound and the hillfort Predikstolen in Uppsala, Sweden. Base map provided by © OpenStreetMap.

1.1. Research aim

The research aims to understand what function the Håga complex served in the Late Bronze Age landscape around Lake Mälaren. Previous research has focused on the overarching similarities in cultural, economic, and ritual manifestation in the material record between Scandinavia and northern- and central European Bronze Age sites and settlements (e.g. Kristiansen and Larsson 2005; Ling, Earle, & Kristiansen 2018). Regarding Håga in particular, there have been several proposed theories focused on accounting for the amount of gold and bronze in the grave goods from Håga mound, not least of which is the connection to southern Scandinavian complexes, e.g. the princely burial mounds of Denmark. The artefact assemblage at Håga represents furthermore a combination of warrior standing and ritual importance, indicating that the cremated individual bore a substantial role in both categories based on Kristian Kristiansen's model of the 'warrior elite' (see Kristiansen 2002, 2011). However, it is important to examine if these assertions stand up to a thorough scrutiny of the available evidence and if similar artefact assemblages and monumental constructions in the surrounding sites can be interpreted to represent the same elite authority that is assigned to Håga. Beyond the geographical advantage in controlling passage through the Håga valley and proximity to the hillfort known as *Predikstolen* [the Pulpit], there are limited theories to account for the degree of wealth represented in the grave mound. By selecting sites around Lake Mälaren (see *Fig.* 2) having shown similar indications of participation in long-distance networks as well as presence of features and artefacts that can be construed as having ritual importance (that are also presented near or within Håga), this thesis will compare and analyse site assemblages from two sites with established cultic complexes (Broby and Skeke) and two sites characterized by industrial bronze production (Apalle and Hallunda) to determine if Håga was unique in this aspect. If so, what methods can we use to recognize and subsequently interpret similarities and differences?

1.2. Research questions

- Was Håga a central meeting place of power, ritual, and trade?
    - Does the site constitute a complex? How do we define a complex?
    - Can the burnt-stone mounds in the Håga Valley be used to reflect the kinds of activities which took place here?
    - What does the re-examination of the grave goods and osteological materials from the Håga mound contribute to the argument?
- Does Håga constitute a unique ritual identity in the Bronze Age landscape of the Mälar Valley region?
    - How has the site been built up over time to represent this identity?
    - What else distinguishes Håga besides the wealth of grave goods in the mound?
- Were there events in the Baltic areas and the rest of mainland Europe that may have affected trade and alliance networks throughout the Mälar Valley region?
    - Where are these changes reflected?
    - Are there any periods of non-violence/stability in the Mälar Valley region that correlate to the construction of the Håga mound?

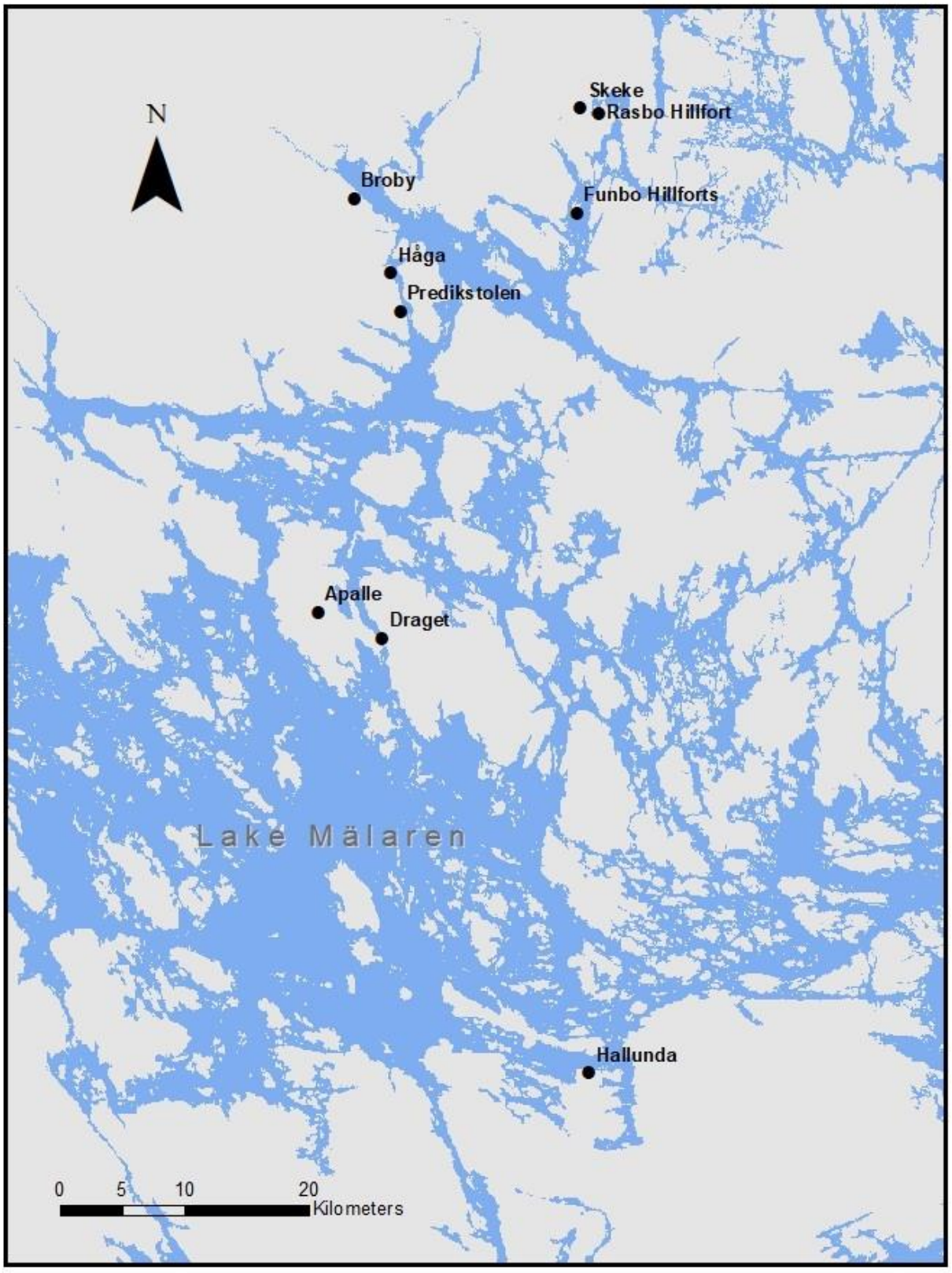

Figure 2. Håga and the other sites to be discussed in text located around Lake Mälaren. Shoreline levels are represented at ca 1000 BC, roughly 17 m.a.s.l (SGU). Background map and elevation data by © Lantmäteriet.

2. Theory

Much of the theory used to interpret Bronze Age Scandinavian society stems from material and evidence from Denmark and Skåne. While Håga is associated culturally with south Scandinavia due to aspects of the mound burial, it can be frustrating to rely so heavily on models and theories based largely on Bronze Age phenomena with such a large spatial and temporal gap from the Mälar Valley region during the Late Bronze Age. This is especially so in light of emerging trends to recognize the Mälar Valley region as its own cultural sphere and not a periphery of southern spheres (Ojala 2016: 57). Bearing this in mind, theories developed based on south Scandinavian materials are used here with caution; however, Håga in particular reflects a south Scandinavian influence based on the type of burial and the grave goods in the mound, making said theories relevant for analysis.

The establishment of trade and contact networks over long distances in prehistory has been discussed at length by archaeologists. Concerning Bronze Age Scandinavia, there are several established arguments for mechanisms behind regional and long-distance contacts, not least of which is the acquisition of raw materials unavailable in local regions such as copper and tin. In conjunction with this, there was also a need for craftsmen with the knowledge to work with foreign materials (Kristiansen & Suchowska-Ducke 2015). This in turn requires an exchange of goods that allows a region to establish itself within a trade network; whether Baltic amber, furs, or cattle, a region had to be able to supply some sort of demand within the European trade networks. The importance of the acquisition of metals (i.e. bronze) wove its way into all levels of society, from ritual objects to weapons, from farming tools to ornamentation, creating a dependency which subsequently required the maintenance of alliances and increasing emphasis on the need for warriors to protect and enforce said alliances (Kristiansen & Suchowska-Ducke 2015). There are different ways to recognize once a region or locale has developed a firm footing in long-distance networks based on political and economic indicators, such as the production of bronze items. Specific to South Scandinavia, regionally distinct craftsmanship has indicated a production locale where technique and tools have begun to identify a specific workshop and either differ from or provide to the surrounding areas. Only in areas with secure, stable flows of raw materials for bronze production could this advanced craftsmanship emerge (Nørgaard 2017). In Apalle and Hallunda, bronze production appears to be an integral component of the local economy and was sustained at both sites for several generations. At Apalle, there is even evidence for the production of prestige items such as ornamentation for swords and glasses-shaped brooches such as the one found in the Håga mound (Ullén *et al.* 2003: 141ff).

Just as the establishment of a power-base and long-distance networks is essential in the development of craft specialization, stability is the lynchpin which allows it to continue and improve technically over longer periods (Magnusson 2017). In the Uppland region, Apalle is an excellent example of a site with demonstrated craft specialization in bronze casting, with several others identified in the Mälar Valley region. A study of sites with high numbers of bronze casting paraphernalia show the highest frequency of casting moulds indicative of bronze specialization at Apalle, Hallunda, and Skälby, supporting the theory of the Mälar Valley region as an area of craft specialization. Likewise, the interruption of bronze production and increased single-bronze deposition finds around 900-800 BC indicate a disruption in the social and economic stability in the Mälar Valley region that further indicate contrasting periods of instability and conflict both prior to and following the construction of the Håga mound (Magnusson 2017).

Theory utilized for the interpretation of ritual features, artefacts, and constructions will be

drawn from practice theory as defined by Catherine Bell (2009) wherein focus will be given to how ritual is constructed rather than the intent or meaning (Berggren & Nilsson Stutz 2010). It is important to approach Håga with this theory in mind in order to set aside the more remarkable aspects of the mound burial, such as the gold and bronze artefacts, and focus instead on the repetition of actions which have established the area as having a central importance in the broader Mälar Valley region. This method is more easily applied to funerary practices, but for the purpose of this analysis it is essential to utilize practice theory to recognize the actions which make something ritually charged and produce the end result which we encounter in the archaeological record. This theory is derived from ritual definitions and methodologies developed by Catherine Bell, who asserts that "ritual-like action is activity that gives form to the specialness of a site" (2009: 159).

3. Method

There have been many case-studies of settlement comparison carried out by forerunners of Scandinavian Bronze Age research, such as Kristian Kristiansen, Timothy Earle, and Joakim Goldhahn. In order to adequately address the selected topic, the research questions will be limited to examining the research area during the Late Bronze Age (1100-500 BC). However, that does not preclude considerations of relevant events and constructions attributed to Periods II-III. The role of Håga in the Mälar Valley region in relation to larger Baltic-European networks of communication and trade may be examined. Using the framework of maritime modes of production defined by Ling, Earle, & Kristiansen (2018), an analysis can be made of the differing models of production and resource exploitation amongst the excavated settlements around Lake Mälaren that have produced archaeological material indicative of long-distance trade. An analysis of events which occurred in mainland Europe leading up to and during the Late Bronze Age will contribute to an understanding of shifting alliances, contacts, and opportunities for exploitation. This examination can also help to identify periods of stability conducive to the increased emphasis on ritual elites amongst the different Bronze Age sites around Lake Mälaren.

The first steps in creating a viable method will be a literary analysis of how 'ritual' and 'warrior' are defined and represented in the archaeological record from Bronze Age Scandinavia (Chapter 6), including examples available from southern Sweden and Denmark. For the sake of clarity, this analysis will include examples of both artefacts and structures which represent the ritual and warrior aspects, either separately or jointly. It is also important to consider how ritual function is expressed in central and eastern European assemblages rather than accept generalized definitions based solely on Southern Scandinavian examples (Ojala 2018: 59). Arguments from researchers such as Kristian Kristiansen (1987, 2011) and Susanne Thedéen (2004) will be compared in order to explore opposing viewpoints on interpretive frameworks for representations of profane and/or ritual function.

The second step will be a brief review of the research available documenting increased conflict in the Mälar Valley region and central Europe (Chapter 7). This will include a comparison of events preceding the construction of Håga mound during Periods II-III, such as the battle at Tollense and the spread of the Urnfield culture in mainland Europe, and evidence of increased violence within the Mälar Valley region during the Late Bronze Age (Periods IV-VI) (e.g. the burning of Predikstolen and other hillforts).

The third step will be a comparison of artefact assemblage and structure types at four sites around Lake Mälaren. In order to mitigate the temporal difference, only sites with relative and radiocarbon dates allowing for strong correlation to Late Bronze Age activity have been considered for analysis: Apalle, Hallunda, Skeke, and Broby (Chapter 9). The Bronze Age sites will be selected for several shared characteristics with the Håga complex, such as evidence of long continuity, fortification, presence of ritually important structures and/or artefacts, and a clear indication of participation in long-distance trade networks. Evidence of metalwork should be clearly present at all sites used for comparison due to its importance in both ritual and warfare during the Bronze Age. These comparative analyses will be using the interpretive frameworks from relevant researchers (i.e. Kristiansen, Larsson, Thedéen) to compare and contrast the ritual functionality of each site against Håga in order to help identify which aspects of the Håga complex set it apart from the Bronze Age landscape of the Mälar Valley region beyond the presence of the mound burial and its rich grave assemblage. For the purposes of this thesis, the 'Håga complex' refers to the areas and constructed features within the Håga River Valley (see *Fig.* 5) which includes: Håga mound, Hågakyrkan, Hågahagen (the area of BA activity 250 m

west of Håga mound which includes the burnt stone mounds 366:1, 3 & 368, and the smaller cult house with sounding stone), and Predikstolen. Special attention will be paid to any reflections of south Scandinavian culture where possible. The sites that have been selected for comparison, while reflecting the aforementioned characteristics, are already significant for Bronze Age research in eastern Middle Sweden: Broby for its characteristic cult houses and highest concentration of burnt-stone mounds in the area; Hallunda situated with strategic control of waterways from the southern Baltic; Apalle for an unparalleled preservation of cultural layers in the site's stratigraphy (Kaliff & Oestigaard 2018: 109ff). The final site for comparison, Skeke (Rasbo 669), was selected as a representation of the Bronze Age sites that connect to the northern Baltic and seafaring trips to the east, as well as the presence of fortifications and a rich ritual complex.

Just as Susanne Thedéen (2004) used bronze assemblage combinations from graves to build a picture of the identity of those buried, so it is my intention here to do the same for Håga and other Bronze Age sites around Lake Mälaren. By comparing and contrasting based on what we know of ritual assemblages and features at a site, we can better recognize the identity of a site and the precedence of what kind of activities took place there. Certain aspects of the ritual character of a site are less common and more engaging for scientific enquiry, such as the human femur from the Håga mound which bears processing marks indicative of ritual cannibalism (Kaliff & Oestigaard 2018: 170f). This and other unburnt human bones in the Håga mound can be interpreted not only for what they represent at face value (human sacrifice), but also what they were intended to represent when the bones were originally deposited during the burial process.

This analysis will attempt to incorporate prior research on Håga and the selected sites around Lake Mälaren in a comparative discussion of specific Bronze Age feature [*anläggning*] types to differentiate between the identity of each site as it is established and interpreted in the archaeological record, from the earliest material to the latest made available through survey and excavation (e.g. Almgren 1905; Victor 2002; Noge 2008; Kaliff & Oestigaard 2018). Ritual landscapes are characterized by the presence of several phenomena (e.g. stone settings, cult houses, cup-marked stones), and we should especially expect these in a site classified as a 'paramount chiefdom' noted for significant ritual importance for the entire region.

4. Research background

The Bronze Age of Scandinavia is divided into the six periods developed by Oscar Montelius, with periods I-III comprising the Early Bronze Age (EBA) and periods IV-VI representing the Late Bronze Age (LBA). There are several recognizable features that have been used by researchers to characterize the Scandinavian Bronze Age, including specialized craftsmanship, metalwork, rock carvings, stone-ship settings, and burial mounds (Thrane 2013: 746). Some examples of famous mounds characterized by monumentality and rich grave goods include Lusehoj and Guldhoj in Denmark, Bredarör on Kivik in Sweden, Albersdorf in Germany, and King Björn's mound (hereafter referred to as the Håga mound) in Uppsala, Sweden. Burials from Periods I and II have typically continued the Neolithic tradition of inhumations, in some cases utilizing coffins carved of tree trunks such as those found in the mounds in Denmark. From Period III onward, cremation began to replace inhumation in burial practices (Jaanusson 1981: 125; Thrane 2013; Kaliff & Oestigaard 2018). Parallel to the shift to cremation, the LBA in Scandinavia also shows a decrease in the metal grave goods deposited with burials, specifically cremations (Thrane 2013: 756f). Researchers at one point commonly referred to the northern Mälar Valley region as the 'periphery' of southern Scandinavian culture, but archaeologists in recent years have pushed to classify Uppland as having a unique regional identity during the Bronze Age. It has been proposed that the Mälar Valley region on the whole be classified as a separate cultural phenomenon from the south and maybe even from western-central Scandinavia due to contact and influence through the Baltic sea (Ojala 2016: 57ff); however, the interdependence of all regions of Scandinavia during the Bronze Age, including north, south, and central, is well defined by Kristiansen's summation of centre/periphery relationships (see Kristiansen 1987 for further discussion). The Håga mound (*Fig. 3*) and the surrounding features (see *Appendix 2*) have been classified as a ritual complex of singular importance within this landscape throughout the Bronze Age (Johnsen & Welinder 1993). One notable distribution pattern that is highlighted by Olausson (1995: 164) is the concentration of stone cairns in the central and eastern areas of Lake Mälaren, potentially marking a socio-cultural border against the south further highlighted by higher numbers of hillforts in the same areas. The central placement of the Håga complex amidst these distribution patterns would serve well in bridging the two territories if they were, in fact, distinguishable from each other.

The research area, specifically the Håga River Valley (*Fig. 5*), is located within the Mälar Valley region [*Mälardalen*] (*Fig. 2*) and has been heavily associated with south Scandinavian culture thanks to several aspects of the burial which reflect EBA practices in Denmark and Skåne (Kaliff & Oestigaard 2018: 125ff; Ullén & Drenzel 2018). Additionally, a direct connection can be traced south from the grave assemblage, e.g. the sword having been produced in Denmark (Johnsen & Welinder 1993). The construction of Håga mound is dated to the LBA Period IV through various methods, but the site continued to be treated as a significant place in the landscape into the Iron Age. Located near the mound are two Bronze Age cult houses—the larger *Hågakyrkan* [Håga Church] and the smaller cult house in Hågahagen—and a Bronze Age fortress (Predikstolen) located a few kilometres south, both of which have been dated to Period III, prior to the construction of the mound (Johnsen & Welinder 1993: Olausson 1995; Victor 2002). The Håga mound is significant for several reasons, not least of which is the 'princely' quality of the grave goods (see *Fig. 4* & *Table 1*) in conjunction with a cremation inside an oak coffin burial; as far as coffin burials, Håga is the northernmost found to date (Kaliff & Oestigaard 2018: 130).

The amount of gold in the grave goods is unparalleled in Bronze Age Sweden (one-third of all gold artefacts to date) and has been a point of comparison to Ryssgärdet, a Bronze Age site

Figure 3. King Björn's mound a.k.a. Håga mound, seen from the S-SE side of the mound. Photo taken by author.

Figure 4. Picture of the gold and bronze artefacts from the oak-coffin burial in Håga mound. Photo by Sören Hallgren (SHM 1996). Sourced through Wikimedia Commons.

in use from the Late Neolithic with a main phase of activity during the Middle Bronze Age. The finds at Ryssgärdet yielded a spiral-wound ring of several gold threads assumed to function as an arm ring and is further complimented by another gold find a short distance north in Sommaränge Skog (Hjärthner-Holdar, Eriksson & Östling 2008: 211ff). Beyond the typological connection of the artefacts from the burial, the mound itself represents a south Scandinavian tradition in establishing control of an area through monumental constructions such as grave mounds, specifically after the metal-shortages and resultant instability of Period III (Johnsen & Welinder 1993). The Håga complex is believed to have gone into decline and potentially relocated towards the end of Period V, evidence of which can be seen in the razing of Predikstolen (Artursson, Kaliff, & Larsson 2017: 39). The burning of Predikstolen is also used as evidence to further the argument of changing trade networks and hierarchical structures, perhaps in response to disruption of metal trade on the continent (Olausson 1995: 169ff). In summary, Håga mound and Predikstolen are thought to represent a complex of elites who built the mound to establish an ancestral claim on the area and utilized the hillfort to control and facilitate communication and trade throughout the Mälar Valley region from the east and the south.

Table 1. The metal grave goods from the oak-coffin burial in Håga mound. Based on Almgren (1905) after Kaliff & Oestigaard (2018: 45-9).

Total	**Artefact**	**Notes**
1 (30, 1)	Bronze sword	Included gold detail on the hilt, gold rivets, and a gold 'button' for the pommel
1	Bronze spectacle-shaped brooch	Gold plated
2	Bronze long-ribbed button	One wrapped in gold thread
4	Bronze buttons	Gold plated with ornamentation (one fragmented)
≥8	Gold, spiralled wire	Three 'very small', some fragmented
2	Bronze razor	One with gold wire-wrapped handle
2	Bronze tweezers	
2	Bronze hanging ornament	
2	Bronze fragments	

Only two excavations have been conducted on Håga mound itself. The first was carried out by Jacob Gyllenborg towards the end of the seventeenth century, resulting in a trench on the northern side of the mound which documented no finds and did not extend to the central cairn (Almgren 1905: 4). The other was carried out by Oscar Almgren in 1902-03 which excavated a third of the mound's diameter and uncovered the central cairn as well as the oak coffin grave therein. Most of what is known about the Håga mound comes from the grave goods excavated by Oscar Almgren and Prince Gustaf Adolf over a total of 6 weeks (Almgren 1905). More recently, this knowledge has been supplemented by seminar excavations [*seminariegrävningar*][3] of the surrounding area in addition to preliminary surveys and excavations pursuant to development projects. Among the first was a seminar excavation for Uppsala University led by Eva Hjärthner-Holdar (Forsberg & Hjärthner-Holdar 1985) which was followed up in 1995 and 1997 by UV Uppsala, the latter excavation prior to a development project a little less than a kilometre west of Håga mound. Michael Olausson led another seminar excavation, this time at Hågakyrkan, in 1998 and 1999 (Kaliff & Oestigaard 2018: 118); this investigation was more comprehensive than the partial excavation done by Almgren (1905) and revealed a number of small hearths around the outside of the structure believed to be used for preparation of ritual deposits in the walls of the cult house as well as depositions in the inner space (Victor 2002: 40). The last seminar excavation was led by Helena Victor in 2000 and 2001 at Hågahagen, an area of BA activity 250 m west of Håga mound, to examine the Bronze Age constructions such as the second, smaller cult house and the four associated burnt-stone

[3] Seminar excavations refer to excavations carried out by students of one or more universities in conjunction with a field course or university funded project.

mounds—one which had not been previously recorded (Victor 2002). A thorough assembly and examination of previous research concerning Håga, including documentation of the excavation of the mound itself and the related features, was recently published by Anders Kaliff and Terje Oestigaard (2018). The narrative of the Håga complex has been incorporated into interpretations of the Bronze Age in the Mälar Valley region (see Johnsen & Welinder 1993; Lindström in Artursson, Karlenby & Larsson 2011: 545-550). As development in Uppland increased in the late 90's and early 2000's as a result of large public works projects such as construction of the E4, several publications on major sites, artefacts, and kinds of monuments in relation to the broader understanding of Scandinavian prehistory have been published and synthesized material spanning large locales which have drastically increased knowledge of Bronze Age trade and alliance networks in eastern Middle Sweden (Ojala 2016: 54).

The associated hillfort Predikstolen is one of the largest recorded structures of its type in the area (4.5 ha), excavated to varying degrees in 1902 and 1944 with some sample trenches and phosphate mapping (Olausson 1995: 35). The collected assemblage from this excavation was not analysed until Michael Olausson made further investigations in 1988 and wrote a comprehensive catalogue of hillforts from the Bronze Age in Uppland (for further reading, see Olausson 1995). The site was initially chosen for further investigation not only due to the emergence of pottery sherds with Bronze Age features (i.e. rusticated ceramics, in Swedish *rabbig keramik*) but also due to the proximity the hillfort shares to the Håga mound (Olausson 1995: 127). The Pulpit has been interpreted by Michael Olausson as unlikely to have been a point of defence for settlements in the area. Based on his examination of the available evidence, construction, and usage of the fort, there is a consensus amongst archaeologists that the Pulpit was likely built to reinforce Håga's importance on a local and regional scale, serving as a gathering point for community and cultic events (Johnsen & Welinder 199). The fort was built before the Håga mound somewhere between the 13th and 11th centuries BC and was burnt down—twice—around 900 or 800 BC. While it was not a site of continuous occupation, Olausson asserts that the structure reveals much about the socio-political landscape around Håga during the Bronze Age (1995: 237ff), not least of which is the supportive evidence for long-term, continuous occupation of the area.

Evidence of long periods of continuity at other Bronze Age sites around Lake Mälaren (e.g. Apalle and Hallunda) suggest that Håga valley (*Fig. 5*) may have remained in use for several generations (Thrane 2013: 750). Several surveys and excavations have been carried out since the late 1970's to locate settlement activity from the Bronze Age in the area (see Victor 2002: 158 for given references). Johnsen & Welinder interpret the high phosphate signature around the mound as an indication of settlement activity, and further assert that the local ecology and landscape would have easily supported settlement for a continuous period of '500 years or more' (1993: 214ff). Burnt-stone mounds [*skärvstenshögar*] have been discovered throughout the valley and are considered to be another strong indicator of settlement activity during the Bronze Age (Eriksson 2005b; Thrane 2013), as well as representation of ritual and burial activities in many cases (Noge 2008). Burnt-stone mounds appear in the archaeological record around the early periods of the Bronze Age and reach a zenith of usage in the LBA, most commonly at elevations between 25-30 metres above sea level (m.a.s.l.) (Rundkvist 1994: 84). It is relevant to consider the changing function of Håga as a ritual place in the landscape both as a grave and maybe even as an altar prior to the mound's construction as far back as the EBA. The significance of the Håga area carried over from being an island in the EBA to a peninsula during the LBA as shorelines receded, adding an element of functional advantage to an already established cultic importance in the landscape (Kaliff & Oestigaard 2018: 116f). The concept of establishing a ritual complex on an island as a sort of altar in the earlier periods of the BA is seen in other areas of Middle Sweden, one example being at Ringeby in Östergötland (Kaliff 1997). This argument is strengthened by the presence of a stone cairn typical of earlier periods built up against the emerging bedrock inside the mound (Johnsen & Welinder 1993), and while there are no significant bronze deposits from these earlier periods, it is likely that equivalent items being used in the Mälar Valley region such as stone tools were utilized for ritual depositions instead (Kristiansen 1987: 79). Despite being such a small sample size, Noge's

(2008) analysis of burnt-stone mounds in the Mälar Valley region had several important results that are relevant to understanding the Håga complex: the presence of central stones in burnt-stone mounds without human bones, increased variation of deposit assemblage in mounds with human bones, and lack of bronze deposits in mounds similarly lacking human bones. Of the sample group, it is also worth noting that most of the human remains were deposited during the Late Bronze Age.

Håga and the surrounding ritual landscape have been compared to many sites throughout the Mälar Valley region. One site with a comparative ritual complex and established continuity from the EBA is Nibble (Tillinge 335), located roughly 40 km southwest of Uppsala outside of Enköping, an area known for a large assemblage of rock carvings from the Bronze Age and a central area for settlement activity during this period (Kaliff & Oestigaard 2018: 109). The site was extensively excavated in 2007 in conjunction with roadwork for the E18 highway and the resultant documentation assembled in a large synthesis of interpretation wherein Nibble is placed in the context of the surrounding settlements of the Mälar Valley region, including the Håga complex. Jonathan Lindström (in Artursson, Karlenby, & Larsson 2011: 511-552) put forth the theory that Nibble was part of a handful of settlement complexes along the mainland of the Mälar Valley region which during the Bronze Age may have been involved in internal conflict which resulted in the establishment of the Håga elite responsible for building Håga mound. Regarding the different phases and changing locations of the cultic area in the settlement, Nibble and Skeke are also very similar, a point that will be further explored in later discussion.

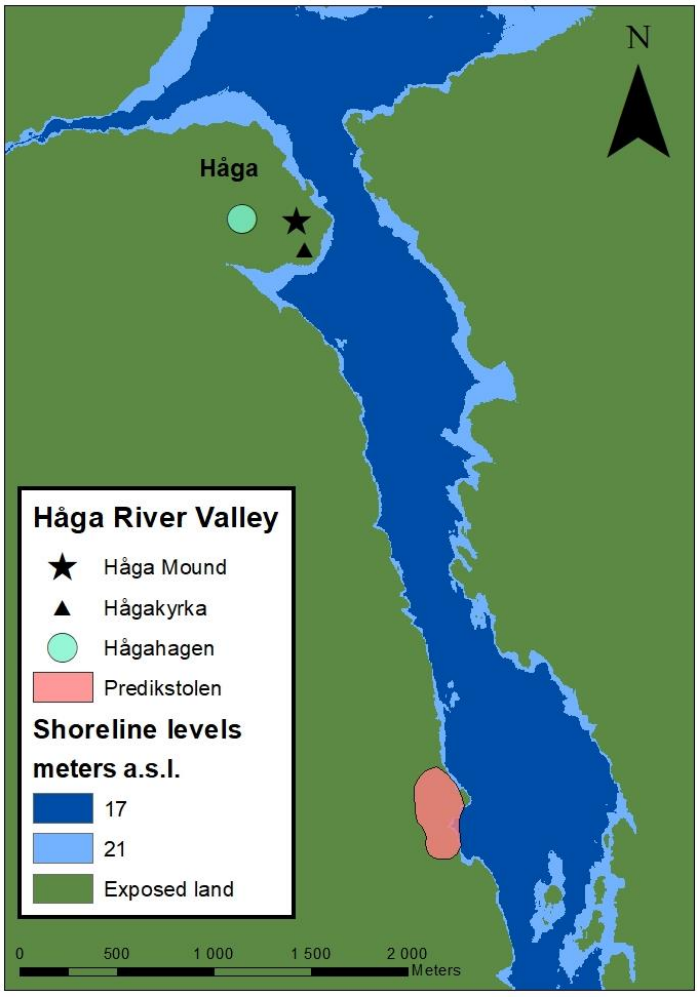

Figure 5. The Håga River valley represented with shoreline levels at c. 1500 BC and c. 1000 BC (SGU) in relation to the sites at Håga discussed in the text. Base map and elevation levels by © Lantmäteriet.

The mound itself is a good subject of research for focus on Period IV grave assemblages since all the objects were deposited in one burial phase and not over the course of several secondary burials as some mounds in Denmark have been (Johnsen & Welinder 1993). A recently published re-examination of the material from the Håga mound (Ullén & Drenzel 2018) has established that the cremated individual in the coffin had a local upbringing based on strontium analysis. Additionally, new carbon-14 dates from the osteological material, specifically the unburnt human bones deposited in the layers outside the central burial, correlate to Montelius Periods I-II (EBA) which could indicate that Håga had already been an established site for ritual and social functions prior to the mound's construction. One interpretation that has changed with this newly released data is the association of ritual cannibalism with the funerary rites and construction of Håga mound; the processed femur bone used as basis for this argument has been dated to an earlier period of the Bronze Age (Ullén & Drenzel 2018) and hence offers new implications for interpretation in association with the mound.

5. Sites for comparison and analysis

5.1. Apalle (Övergran 260 & Håtuna 108)

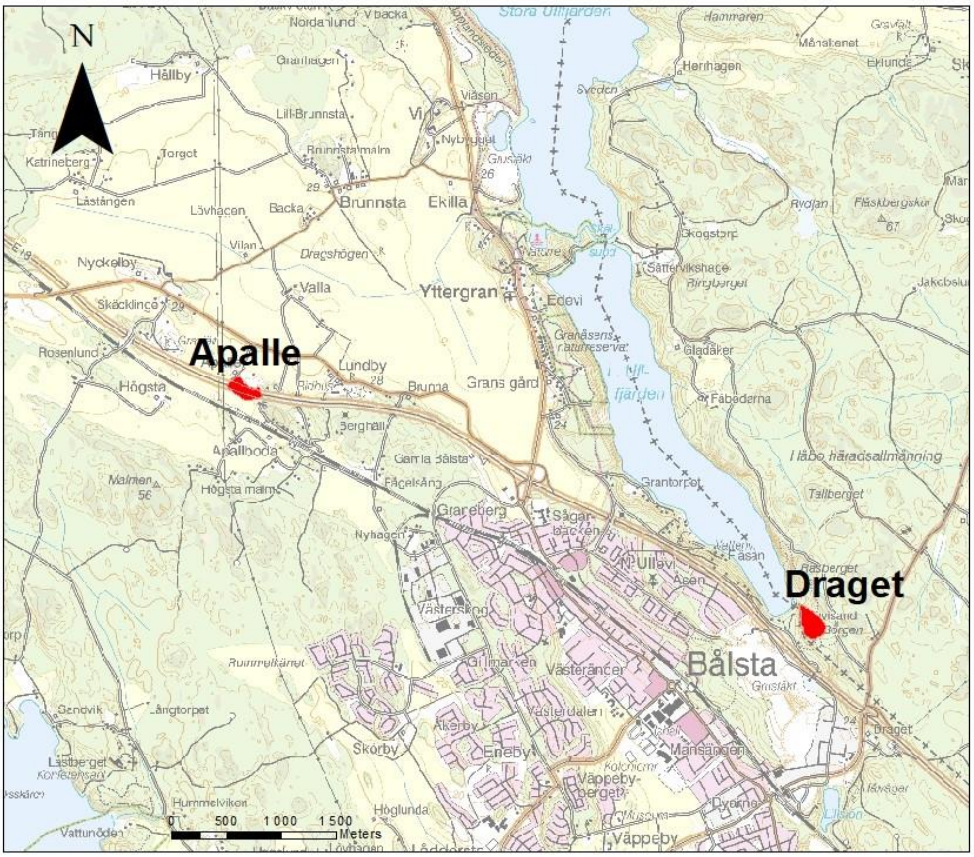

Figure 6. Apalle (Övergran 260) and the hillfort Draget (Håtuna 108). The extent of each site is highlighted in red (FMIS). Terrain map by © Lantmäteriet.

Apalle (shown in *Fig. 6*) is a good example of a settlement discovery resulting from expanding development during the late twentieth century. The site (Övergran 260) was excavated in the years 1986-87 and 1989-90 and dated samples from the layers of settlement activity have indicated long-term use from the EBA well into the Iron Age. Apalle has additionally yielded some of the best-preserved cultural layers from a Bronze Age site in eastern Middle Sweden. The reasons for such high preservation conditions are attributed to various factors ranging from the late age at which the area was developed for agricultural use (1800's) to the emerging bedrock scattered throughout the terrain preventing extensive ploughing and cultivation (Ullén *et al.* 2003: 9). After investigation of the area was completed, the broad spread of fire-split stones [*skärvstenar*] in addition to other evidence led to the conclusion that a grave complex was built over the cultural layers and may have acted as protection for said layers when the area was cultivated, though this unfortunately meant the destruction of the overlying structures (2003: 75). The shoreline levels around the time Håga mound was built would have connected the Håga valley to Lilla Ullfjärden, a strait which passes roughly 5 km east of Apalle and is overlooked by a hillfort (Håtuna 108 a.k.a. Draget) dated to the Late Neolithic and in use through the LBA (Olausson 1997).

In terms of net weight, Apalle is one of three Bronze Age sites (including Hallunda) with significant numbers of clay moulds and crucible fragments, indicating the presence of a prolific bronze production industry. Fragments of both types are found in a concentration where two-thirds of the material for bronze production can be accounted for. The types of bronze artefacts produced range from simple items such as pins and neck rings to elite items such as glasses-shaped brooches and decorative elements for swords. This indicates that while producing bronze objects for local consumption, the site was also capable of manufacturing prestige items that were likely traded or given to elites in other parts of Scandinavia (Ullén *et al.* 2003: 137ff), perhaps even at Håga. Unfortunately, no ovens like those located at Hallunda could be found in the cultural layers at Apalle. Instead, an estimate of the number of crucibles potentially represented by the weight of fragments indicates roughly five to a dozen crucibles were in use at the site. The highly degraded state of the material should be taken into account since it is likely that the original number was higher but other fragments have been reduced to powder in situ (Ullén *et al.* 2003: 129ff).

5.2. Hallunda (Botkyrka 13 & 69)

Hallunda (shown in *Fig. 7*) is a Late Bronze Age site in the southern region of Lake Mälaren excavated at the end of the 1960's to early 70's, made significant by an extensive pottery sherd assemblage and several bronze smelting furnaces indicative of bronze production in higher quantities than anywhere else in Middle Sweden. The area was divided into two sites (Botkyrka 13 & 69) and both have cultural layers from Bronze Age activity recorded in a series of published reports by Riksantikvarieämbetet (Jaanusson & Vahlne 1975 a, b; Jaanusson, Löfstrand & Vahlne 1978). The area was surveyed and excavated before the construction of apartment facilities and resultingly there remains a large percentage of the area that has not been completely investigated. Workshops for bronze casting, traces of textile industry, and the presence of animal husbandry in the area all indicate a sort of industrial complex of production and regional trade of the items produced in the area, including swords and other weapons. (Jaanusson 1981)

An interesting aspect of the sites are burnt-stone mounds with bronze-casting debris and no structural indications of deliberate assemblage and deposition of the aforementioned debris, including not only moulds but also bronze pins, buttons, and other metal objects; in contrast, the burnt-stone mounds identified as graves had very few artefacts (Jaanusson 1981: 18, 24). This raises the question of whether bronze production and all its generated debris at Hallunda carried the same ritual importance as is seen in Broby and Håga. The bronze moulds and artefacts were dated by type to Period IV and potentially very early stages of Period V, referring specifically to Sites 13 and 69. While there are some complications in the radiocarbon dates, relative dating of artefacts has helped cement the interpretation that the two sites belong to Period IV, with perhaps Site 13 seeing use until the beginning of Period V (Jaanusson 1981: 25ff). Another site in the nearby vicinity (Site 76) has additionally evidence of Bronze Age occupation, including several round stone settings and a large burnt-stone mound with depositions of clay mould fragments in the construction (Jaanusson 1981: 13). Since the majority of the ceramic moulds, ovens, and other bronze-production waste was found at Site 69 and the designated Bronze Age grave field at Site 13, they will be the focus of the coming comparisons (Section 9.1), but the presence of a large burnt-stone mound at site 76 will be revisited for the purpose of discussion. During the LBA, the site would have been connected to maritime networks travelling south to Skåne and Denmark with a direct path to Håga just a little more than 65 km north through the straits and inlets of Lake Mälaren.

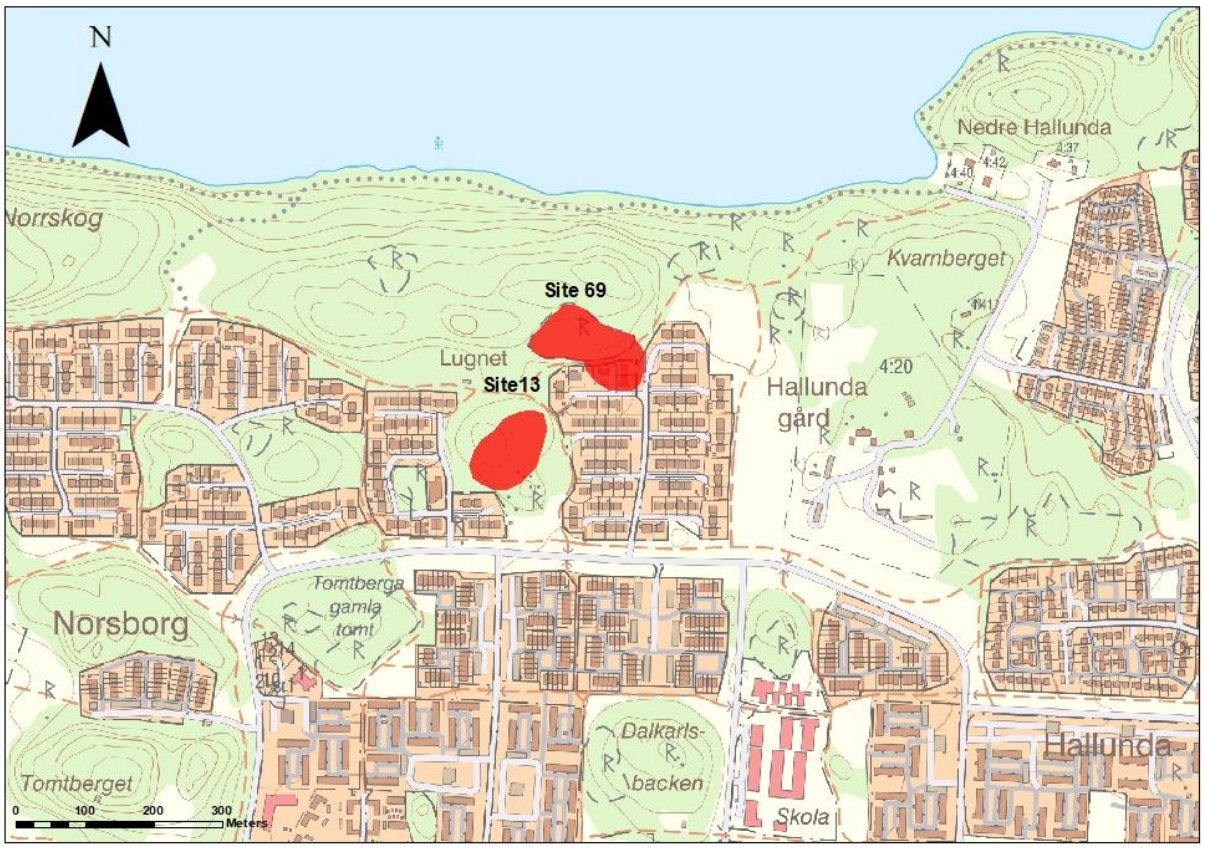

Figure 7. The Hallunda area with Site 13 and Site 69 highlighted in red (FMIS). Terrain map by © Lantmäteriet.

5.3. Skeke (Rasbo 669 & 490)

Rasbobygden [Rasbo village/district][4] refers not to one site but to a collection of recent excavations from 2008-2010 that have revealed a Bronze Age settlement (perhaps even a complex) in Rasbo parish as a result of the expansion of highway 288. A synthesis of the excavations and reports (Artursson, Kaliff & Larsson 2017) for the individual sites of activity[5] illustrates a picture of farmstead clusters loosely separated by landscape and water features, wherein the largest plots with the most diverse assemblage of artefacts are central in the region, including a hillfort in the immediate vicinity. More hillforts clustered at the mouth of the inlet protect and afford passage in the region and complete the image of a somewhat isolated and well-defended territory. The other sites within Rasbobygden that are used to contextualize discussion of the area include Skeke, Björkgärdet and Prästgården (Artursson, Kaliff & Larsson 2017: 7ff). The Rasbo district can be divided in fifteen farmsteads of varying size and centrality with the larger homes in the centre and smaller farmsteads in the marginal areas, demonstrating their lesser importance in the hierarchical system of the area during the Bronze Age. Skeke is located in the central area where the theoretical rhetoric would expect the chief farmsteads to be, near the hillfort Rasbo 490 as shown in *Fig. 8*. The structures and graves from Skeke create a picture of a ritual complex on top of the impediment[6] where the original settlement was

[4] -*bygden* can be defined as a collection of farms/homesteads which create a local community with control of the area.

[5] For a list of all excavations and reports pursuant to the highway 288 extension in Rasbobygden, see Table 1.1. in Artursson, Kaliff & Larsson (2017: 9).

[6] Impediment is used in Swedish archaeological text to refer to a point in the landscape unsuitable to growing crops (a.k.a. badlands), usually typified by raised, rocky terrain with exposed bedrock and forest cover. Since the English translation of the word does not quite fit the intended meaning, the author has chosen to continue using

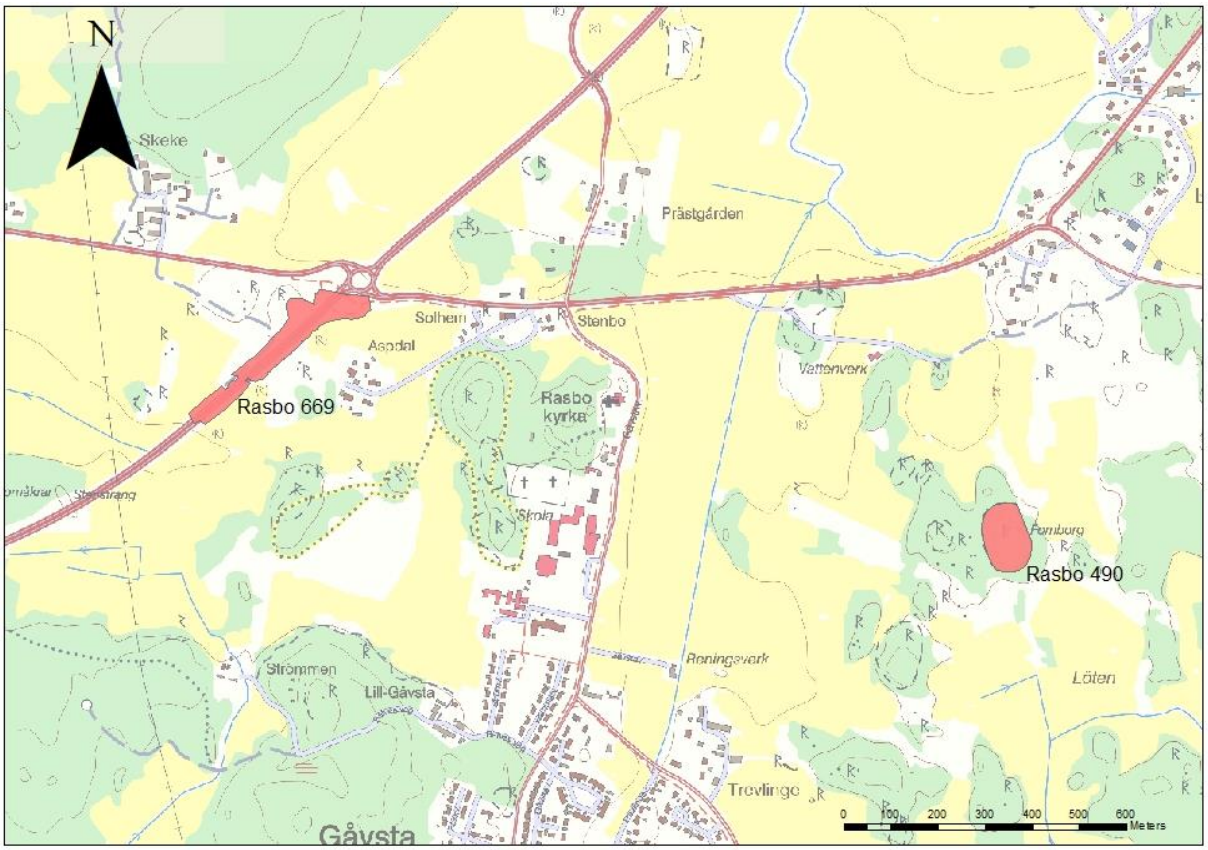

Figure 8. Map showing the area of excavation at Skeke (Rasbo 669) and the extent of the survey area for the nearby hillfort (Rasbo 490), both shapefiles highlighted in red (FMIS). Terrain map by © Lantmäteriet.

established in the EBA, an arrangement which is reflected in sites like Ryssgärdet and Nibble where cultic activities were also concentrated in the high areas of the landscape. The maximum estimate for population in the district during the LBA is 1500 persons (Artursson, Kaliff & Larsson 2017: 39).

Skeke and the surrounding sites were established in a water-rich landscape with centralized islands during the EBA, attested to material recovered from the burnt-stone mounds and stone cairns throughout the area. The settlement was originally built on an impediment but appear to have moved down to the mudflats at the beginning of the first millennium BC (middle of Period IV) while a ritual complex was built over the previous settlement area (Larsson 2014: 8). According to Artursson, Kaliff & Larsson (2017: 17), these stone cairns mark the inlets and indicate as early as the EBA an awareness of the importance of controlling communication channels along the rivers and streams. The importance of islands in a Bronze Age landscape will be discussed and comprise a part of the arguments for a ritual site developing at Håga during the EBA when sea-levels were still high enough that Håga was an island in the river valley (see Section 6.3). This area was in use from the Bronze Age well into the Migration Period and has produced several examples of metal production in the early and later periods; however, the production periods were brief and appear to be specific to production of specialized items which were not found in deposits or graves at the local level (Hjärthner-Holdar 2014). In order to avoid oversaturating the text with comparison sites from Rasbobygden, focus of the comparative analysis will be limited to one site in the vicinity, Skeke (Rasbo 669), where evidence of metal production from the Bronze Age has been found, and the nearby hillfort (Rasbo 490) roughly 1.5 km east-southeast of Skeke. Three more hillforts[7]

the Swedish name for this type of terrain feature throughout the text.

[7] At the time the report was published, the third hillfort mentioned (Funbo 227:1) was still classified as a hillfort but has since been downgraded to a *vallanläggning* [walled construction/ramparts] by Riksantikvarieämbetet.

roughly 8.5 km south of Skeke were also included in Artursson, Kaliff & Larsson (2017) as LBA constructions (min. 25 m or higher[8]) that could have served several purposes in controlling and defending the flow of goods to the north and the east. These fortifications would have been vital in protecting against "water-borne threats" during the LBA once the inlet systems began to shrink and concentrate due to land up-lift and receding shoreline levels (Artursson, Kaliff & Larsson 2017: 17).

5.4. Broby

Roughly 7 km north of Håga, Broby (*Fig. 9*) was initially excavated by Uppsala University in the late 40's and early 50's in order to understand the character of the site, resulting in a wealth of individual excavations (Börje 1:1, 14:2, 19:1, 24:1, etc.) (Schönbäck 1952: 26). The early excavations have been used as interpretative material in publications by Bengt Schönbäck (1952, 1959), Helena Victor (2002), and Karin Ojala (2016) among others, as a site of particular importance when interpreting ritual practices relating to death, burials, and 'death house' constructions like Hågakyrkan. The site as a whole is consistently dated to the LBA with some emphasis on the later periods (V and VI). The grave field at Broby is relatively well preserved and shows a long history of continuous use attributed to Bronze Age shifting settlements following receding shorelines and making use of newly arable lands (Schönbäck 1959: 52f). Features of the site bear similar functional characteristics of ritual activity to Håga; evidence of bronze casting and traces of ritual events, plus the presence of cult houses, burnt-stone mounds, and a grave field indicate a parallel importance in cult practice during the Bronze Age (Victor 2002: 108; Ojala 2016: 89).

Compared to the overall picture of burials during the Bronze Age up to this point, the site at Broby appears to break pattern with the tradition of elevation choice for gravesites, where small groupings of stone mounds and stone settings with graves are usually built on high points in the landscape, which has been interpreted by Schönbäck as a shift from elitist graves to a more "democratic" tradition. Additionally, the grave types and shapes are not consistent and reproduced, with different arrangements of inhumation and cremation graves in almost every construction (Schönbäck 1959: 72ff). The importance of the cult house type defined by the examples at this site (*Brobyhus*) reaches all the way south to Skåne and leaves no doubt as to the far-reaching extent of the importance of ritual practices observed in the Mälar Valley region and the rest of Scandinavia (Johnsen & Welinder 1993).

In the surrounding area is one of the richest collections of stone settings and specifically burnt-stone mounds, nearly 400 surveyed to-date, and a number of larger burial mounds a short distance south. Broby is one of the few sites with an extensive ceramic assemblage from the LBA in Middle Sweden that Hille Jaanusson (1981) was able to compare with pottery sherds from cultural layers at the site of Hallunda. Another significant aspect of the site is the mixed chronology of inhumation and cremation graves which can be found in several of the stone settings and which indicate that both practices occurred simultaneously for some time during the Bronze Age, at least in this region (Schönbäck 1959: 73). Karin Ojala considers the Broby site to be a good representation of local artefact styles and culture which shows influence from eastern contacts (2016: 89ff), examples of which can be found in the grave goods such as bronze, spiral-headed pins associated with inhumation graves, similar instances of which are found in Finland during the LBA (Schönbäck 1959: 73). A pin of this type has also been more recently found in a cremation grave in a burnt-stone mound in Hågahagen (Victor 2002: 165).

[8] The three hillforts mentioned are surveyed by Riksantikvarieämbetet at 25 m.a.s.l.

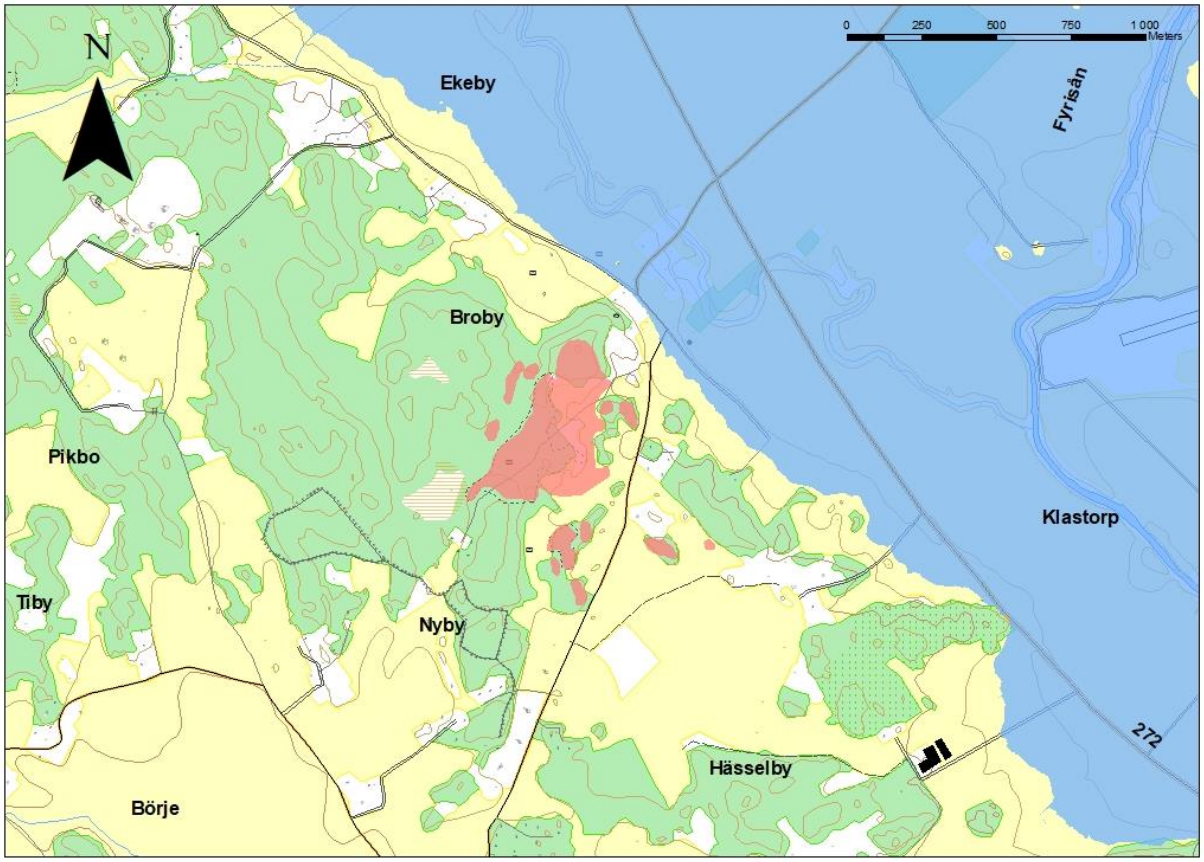

Figure 9. The extent of the excavated and survey areas at Broby (FMIS) with a reconstructed shoreline level at 17 m.a.s.l. (SGU). Terrain map by © Lantmäteriet.

6. Defining ritual terminology and power complexes

6.1. Paramount chiefdoms vs. decentralized chiefdoms

This section will focus on exploring this contradiction in how the relevant researchers have defined the two socio-political structures and the problems inherent in using south Scandinavian theory to define usages of artefacts assemblages in the Mälar Valley region. Kristiansen, Larsson, Earle, and others have helped develop the theory of the '*hövdingadömet*', or institution of elites which arose during the Bronze Age and which heavily shapes research into the period in Scandinavia. As a result, theories about the Håga complex have been coloured by models of interpretation developed in the study of the south Scandinavian Bronze Age. Additionally, Thedéen asserts that while a theoretical framework has contributed to improved research into the Bronze Age, Kristiansen and Larsson have begun to return to diffusionist models in recent years (2005: 386). Her criticisms raise valid points, including a gendered exclusion of emerging 'new' artefact types and their meanings in favour of focus on swords (Thedéen 2005: 395). The link between Håga and sites in the south is demonstrated in the construction style of the mound itself, the oak log coffin used to inter the cremated remains, the motifs on the grave goods (e.g. the razor), and even the style of the bronze and gold artefacts interred with the individual for whom the mound was built (Artursson, Karlenby & Larsson 2011; Kaliff & Oestigaard 2018; Ullén & Drenzel 2018). Since many Bronze Age swords found in the Mälar Valley region are of a south Scandinavian type, they are presumed to have arrived through trade channels or are described as potential 'loot' by Christian Horn (2016: 122). This has also contributed to the idea that eastern Middle Sweden may have been the northernmost periphery of south Scandinavian Bronze Age culture, although this has been refuted in recent years as new sites around the Lake Mälaren have been discovered and contributed to the idea of a culture specific to the Mälar Valley region while still participating in the exchange of material goods and ideologies encompassing southern Scandinavia (see Kristiansen 1987 and Ojala 2016 for discussion). Bearing this in mind, it is understandable that production models for the south during the EBA have been applied to Late Bronze Age Uppland.

Håga's centralized placement in the Mälar Valley region may have played into the centre-periphery dynamics laid out by Kristiansen (1987), wherein maintaining control of alliance networks, goods, and information allowed local chiefs to build and maintain power on a regional level. Northern and central Scandinavia likely had access to resources that were regionally abundant (potentially sealskins and furs) which allowed initial participation in exchange networks with the south, if not having already established trade and alliances further afield, such as across the Baltic sea (Kristiansen 1987: 83). The closest parallels to the Håga mound are dated to Periods II and III from Denmark and Skåne, and as a result, most of the discussion and analysis utilized in conjunction with the Håga complex has a glaringly large discrepancy in both time and distance and should not be overlooked. There also exist other propositions for the political structure that dominated the Mälar Valley region during the LBA, including the argument for Håga as a 'paramount chiefdom (Artursson, Karlenby & Larsson 2011: 541-3). This interpretation of several chiefdoms owing allegiance to a single chieftain contradicts with recent publications proposing 'decentralized chiefdoms' in south Scandinavia in the EBA (e.g. Ling, Earle, & Kristiansen 2018). On the subject of chiefdoms built on the idea of elites travelling to gain prestige and establish contacts for trade and alliance, Joakim Wehlin proposes a counter-argument that long-distance travel by chieftains in the Nordic Bronze Age would invite internal power conflicts and leave the chiefdom vulnerable to internal and external threat (2013). Furthermore, Wehlin offers an alternative explanation in the concept of a class

of "maritime specialists" which, while still under the influence of the local elites, possessed an autonomy of agency to establish trade and acquire resources from foreign regions on the chieftain's behalf (2013: 207).

6.2. Ritual vs. Warrior

The "warrior figure" begins to appear as early as the transition from the Late Neolithic to the EBA, *ca* 2000 BC, alongside development of agriculture and the appearance of "halls" (Iversen 2017: 361). The transmission of warrior-elite ideologies and the accompanying accoutrement and rituals are traceable to the Aegean through a combination of evidence ranging from images on rock carvings to items of personal hygiene and weapons, all indicating a close connection with the power and trade centres of Mycenae (Kristiansen & Larsson 2005: 225-231). Much of the interpretation of what defines a ritual elite versus a warrior elite has been interpreted through grave goods and usage (e.g. sword wear indicating use in combat) (Earle and Kristiansen 2010: 237; Kristiansen & Suchowska-Ducke 2015). Interpretation of grave goods from the EBA in south Scandinavia has even contributed to the application of the 'twin gods' paradigm on Nordic EBA chiefdoms, wherein power was shared between a warrior chief and a ritual chief (for further discussion see Kristiansen & Larsson 2005: 271-80). This includes a classification system of sword types from the Bronze Age which defined which swords were utilized in warfare and which swords served more of a ritual and prestige function. Based on comparisons of wear and re-sharpened sword blades from central Europe and Scandinavia, Kristiansen & Suchowska-Ducke (2015) identify flange-hilted swords as designed for warfare and not for ritual usage, citing them as the preferred weapon for warriors working as mercenaries between the fifteenth and eleventh centuries BC. The strongest proponents of this distinction between sword types and their purpose in defining institutional roles are Kristian Kristiansen and Thomas Larsson.

According to Kristiansen (2002, 2011), warrior assemblages versus ritual assemblages in the EBA of Scandinavia have come to be defined by repeatedly occurring items and symbols in the material record—moreover, items and symbols which appear in groups separately from each other. This makes it possible to identify the role of an individual in the EBA social structure. Burials which include items with the sun-spiral, personal grooming utensils, and Nordic full-hilted (ceremonial) sword types can be assumed to represent a ritual leader. Elite graves with flange-hilted swords showing wear can be characterized as warrior elite (Kristiansen 2002, 2011; Kristiansen & Suchowska-Ducke 2015). Ritual chiefs were restricted to the local/regional sphere to maintain and promote the 'shared cosmological identity', while warrior chiefs were expected to defend, attack, or maintain alliances abroad (Kristiansen 2011: 205-6). Additionally, these voyages beyond the local sphere were expected to bring back new ideas on ritual and power as much as valuable prestige objects in order to maintain the status-quo (Kristiansen & Larsson 2005: 232f). Beyond these two, Kristiansen also asserts that burials featuring octagonal-hilted swords represent tradesmen who played a role in metalsmithing and long-distance trade. These three categories are examples of how swords can be used as a material identifier of institutional and cultural standing in EBA society (2011: 203-4). Sword types helped identify a person's status and skills, not only in Scandinavia, but throughout the alliance and trade networks of Bronze Age Europe, offering a measure of security on what were already dangerous journeys across the continent (Kristiansen & Larsson 2005: 233f).

Concerning Kristiansen's assertion that gold objects are more commonly associated with full-hilted swords and hence with ritual elites, there has been some criticism of his conclusions that can be summarized in two points: a) that his sample size of burials is small and does not preclude the factor of 'richer' graves rather than 'ritual' graves, and b) that there are examples of gold objects associate with flange-hilted (warrior elite) swords which he does not address (Bunnefeld 2018: 203f). Based on the available information, it is then not enough to classify Håga mound as the grave of a ritual elite based solely on the presence of a full-hilted sword and gold objects in the grave.

There are certainly merits to the sword-use analysis method to define institutional roles for elite figures, but when it comes to defining a boundary between ritual and warfare, we begin to see the problems. There is an association of ritual and warfare that is expressed in several media such as rock art and weapon hoard depositions, or singular weapon sacrifices in watery landscapes, highlighting an inseparable connection between the two (Horn 2016, 2018: 56). Warfare was highly ritualized and hence it was necessary for even warrior chieftains to still have the knowledge and skill to be ritual leaders as well (Kristiansen & Larsson 2005: 225). It is also important to bear in mind that how we define an item as having ritual function relies on the context in which it was deposited and found. The role of cosmology in determining the function of an item cannot be discounted when discussing the Scandinavian Bronze Age and it is very likely that many things served dual purpose in both profane and sacred contexts (Victor 2002: 16; Kaliff & Oestigaard 2018: 128). This raises even more complications concerning how we define an object or motif as representing a ritual function in the comparative data to follow. Conversely, certain objects have been assigned an unrequited ritual function by researchers, such as bronze razors. Thedéen proposes that razors—in addition to all bronze craftsmanship—is associated with special settlements which are strongly connected to not only graves but transformative processes through all phases of life, using Hallunda as an example of this (2004: 126). On the other side of the issue, weapons can be interpreted both as tools for violence and warfare while still serving a ritual function depending on context. Ritual often served to initiate, facilitate, and conclude violence during the Bronze Age, the examples of which given by Vandkilde include "sacrificial depositions in watery places of weapons and of people" (2012: 42).

The mound at Håga is dated to the beginning of the LBA (Period IV); however, in Period III (1300-1100 BC), there is a decrease in the appearance of ritual sword-types in favour of warrior sword-types which Kristiansen believes represents an increase in warfare (2011: 206). If we accept that the Håga complex was heavily influenced by culture in south Scandinavia, it is important to bear in mind the shifting importance of these roles when considering the implications of the ritual assemblage of grave goods represented in the Håga mound and how it should be interpreted. In comparison to a similar compilation of grave goods from a burial in Skåne which included gold items and a sword, Thedéen notes a similar interpretation of the osteological material found there to that found in the oak coffin of Håga mound—specifically the 'graceful' aspect of the individual's musculature. This has the potential to link ritual assemblages to both male and female identities but also to individuals with a requisite androgynous characteristic (2004: 122).

6.3. Ritual landscapes and cosmology

Ritual landscapes and control of sacred spaces and practices played a vital role in building the system of elites seen in Bronze Age Scandinavia. As an example of this, Kristiansen cites one of the main differences between Bronze Age centre-periphery relations and later IA networks as a system of "ritual [and ideological] superiority" versus "commercial and military dominance" (Kristiansen 1987: 84). In order to maintain power over ritual complexes, elite chiefs of the Bronze Age would need to control the influx of ritual ideologies that were travelling though alliance and trade just as much as material goods. Kristiansen offers some insight into how this was done by defining the cosmologies of Bronze Age Scandinavia as either centred or decentred. The centred cosmology is typical of southern Europe (i.e. the Mediterranean) and is characterized by an established cosmological identity that is not receptive to influence from without. Decentred is the opposite, typical of the 'north' and receptive to influence and change, adopting new symbology, and spread through marriage and conflicts (Kristiansen 2005: 136f). What he seems to be saying is that cosmology takes on an institutional role closer to religion as we know it today than cult, securing an element of rigidity in centred cosmologies that is not present in decentred cosmologies. This correlates to an extent how Sjögren (2005) categorized the Scandinavian archaeologist's tendency to characterize Aegean

influence in the north. It is difficult not to note that Kristiansen has demonstrated a tendency towards dichotomies in his classification of Bronze Age institutions, which can become problematic for archaeological analysis, as is demonstrated by the following quote:

> But throughout the Bronze Age the ritual equipment employed by divine priests during ceremonies, belonged to the gods and could only be deposited in their sanctuaries/holy places. It could not be owned by mortal chiefs and is therefore never found in burials. (Kristiansen 2005: 141)

Interpretations of 'ritual equipment' are rarely so black and white that they can be placed in the sacred sphere unequivocally in all cases. Setting aside for the moment the problems with these strict divisions, the dichotomy of ritual versus profane can be extended beyond artefacts to the motifs and symbols which define them as having entered the ritual sphere. Use of specific motifs (i.e. animals, faces, spirals) is reserved for objects of ritual and cult significance, hence almost never found on simple drinking vessels or cooking vessels for everyday use. Eriksson demonstrates this in an analysis of ceramic decoration, specifically the remains of a burial urn bearing traces of stylized horses and faces usually reserved for metal artefacts (see Eriksson 2005a for further discussion). It should be noted that this is an exceptional stand-alone example, but this taboo in using ritual symbols for everyday object decoration additionally offers implicit support for the interpreted importance such symbols held in Bronze Age society.

One of the features that embodies what archaeologists consider a part of the Bronze Age ritual landscape is the cult house, two examples of which are found in Håga: Hågakyrkan and the cult house in Hågahagen. Cult houses are typically characterized by three geographical factors: connection to a grave or graves, connection to water, and visibility in the landscape just below the paramount visibility of monumental features such as mounds (Victor 2002: 114). Victor emphasizes further that the space between monumental structures and cult houses is significant in that it possibly represents the length of a funeral procession, especially if there are other graves in the area between the two. *"Platser som vi idag betraktar som isolerade från varandra kan man ha betraktat som sammankopplade"*[9] (Victor 2002: 114), meaning that proximity does not always determine a connection between two constructions as we would understand it today. The presence of cup-marked stones in the vicinity of such features is interpreted as evidence of 'libation' and can support arguments for a ritual space that has taken several phases to create (Kristiansen & Larsson 2005: 242). This idea is applicable to many structures and features of the Bronze Age landscape, such as cup marks and grave fields in connection to settlements. Furthermore, it is not only relevant to understand where cult houses are placed in relation to graves, but also the components of constructing such a house, which build a picture of the physical objects required and the process of their collection and/or production (Victor 2002: 116ff). Olausson asserts that walled constructions in the Bronze Age (i.e. hillforts) are designed to create an enclosed, separated space—a border between two spheres, both physically and ideologically; hence, the purpose of such structures must be studied individually to determine "*en identitet, en klar relation mellan function och form*"[10] (Olausson 1995: 11). Once again, this can be applied to other structures such as cult houses to determine whether a structure had a profane or ritual purpose, or if a construction began in one context before transitioning into the other through deliberate actions by Bronze Age peoples.

The mounds of the Bronze Age, beyond being monumental structures in the landscape which establish power and ancestral claim, also helped to define ritual traditions and symbolism relevant in situating the deceased within the regionally shared cosmology (e.g. circular kerbstones to represent the sun)(for further discussion see Kristiansen & Larsson 2005: 243ff). Furthermore, it is possible to draw a parallel between the cult houses and the mound in terms of construction. There is a central structure which is walled off from the outside or 'living' environs, represented by the walls of the cult house and in some cases by the kerbstone ring

[9] English translation: "[Places that we today perceive as isolated from each other could have once been perceived as connected]."

[10] English translation: "[an identity, a clear relationship between function and form]."

[*kantkedja*][11] found in some burial mounds and burnt-stone mounds of the Bronze Age. According to Almgren, the early documentation pertaining to mentions of Håga mound include descriptors of a kerbstone ring around the mound all the way up to 1807 (Almgren 1905: 5ff; Kaliff & Oestigaard 2018: 29ff). Anna Sara Noge further demonstrated this correlation in her analysis of burnt-stone mounds with human bones, wherein she demonstrated that kerbstones occurred often in mounds both with and without human remains but proportionately more often in those with human remains (see Noge 2018: 59f). Much of the discussion concerning cult houses in terms of function and placement in the landscape as well as construction details can be applied to burnt-stone mounds in the Mälar Valley region. They served as both waste heaps and ritualized depositions, though defining the difference can be problematic. Kaliff & Oestigaard define the parameters of a ritualized burnt-stone mound thusly:

> *Dessa skärvstenshögar utgörs av konstruktioner med en komplicerad uppbyggnad, exempelvis inre kretsar eller spiraler av sten, stenfundament under högens fyllning samt depositioner av ben och föremål i olika skikt. I många fall förekommer depositioner av keramik, föremål med anknytning till metallhantering samt inte minst brända och obrända ben från såväl djur som människa.* (Kaliff & Oestigaard 2013: 100)[12]

Deposition of singular bone fragments and other ritual tokens within the walls of a cult house reflects in the deposit at each layer of bones, human and animal, that have been accumulated from the ritual feasting surrounding the process of construction of a mound. One can even infer that the human femur showing evidence of cannibalism found in the mound, having been dated to an earlier period of the Bronze Age than the mound's construction, was intended as a link between the old ritual landscape and the new, which was altered irreversibly with the construction of the Håga mound.

Just as a monopoly of resources can help to establish control in a region, so too can control of ritual practice (Kristiansen 1987: 77). Through successive acts and alterations to the Håga area, the mound began to commemorate not only a great elite and his wealth, but the sacred nature and the shared, communal memories of its constructions, of the feast for the burial, and all the events which took place before and after. Over time, *who* was buried became less important than the symbolism of the monument itself and the 'specialness' it helped to reinforce in the landscape (Bell 2009: 157ff). Additionally, monuments like Håga mound can encapsulate the duality previously discussed in Section 6.2, such as the chaos of death reconciled through the order of ritualized preparation and handling of death, offering stability where there usually is none (Bell 2009: 158).

[11] While *kantkedja* directly translates as 'edge chain', this thesis will use the more recognizable term 'kerbstone ring'.

[12] English translation: [These burnt-stone mounds consist of structures with complex construction, for example inner stone rings or spirals, stone foundations under the mound's filling, and deposits of bone and artefacts in different layers. In many cases there occur deposits of ceramics, artefacts related to metal production, and both burnt and unburnt bones from animals as well as humans.]

7. Increased conflict and warfare

7.1. Evidence from Scandinavia

Many settlements sites around Lake Mälaren show indications of long-term, continuous occupation. Identifying farm areas has proven difficult, however, which is due in part to inconsistent usage and the relocation of structures over time (Earle & Kristiansen 2010; Thrane 2013). Other areas that show indications of being central hubs of economic and social activity based on surrounding archaeological landscape features include Apalle, Hallunda, and Skeke (Artursson, Kaliff, & Larsson 2017: 44-5). In addition, many of these areas share indications of increased fortification (i.e. construction of hillforts) and increased settlement density (Earle & Kristiansen 2010: 94). This could be interpreted as a return to conflict within the area. By comparison to the continent, Scandinavia is relatively poor in fortified settlements, but according to Vandkilde (2012: 50) this does not suggest a lack of conflict or violence in the region—rather a different stratagem for addressing and handling defence of populated territories. Additionally, decreased conflict does not implicitly mean *no* conflict occurred, and it is very likely that small, opportunistic raids still occurred along the coasts and waterways, accounting for at least a percentage of the exotic goods found in the archaeological record around Lake Mälaren (Horn 2018).

Evidence of fortification is not the only example of waxing and waning periods of conflict during the Bronze Age. There is a significant amount of depicted violence in rock art that is attributed to Periods II and V, which could be loosely interpreted as two peaks in the Bronze Age where warfare was a fact of life, and alternatively less so in the periods in-between. Interestingly, rock-art representing violence and warfare is strictly a domain of the Bronze Age in Scandinavia (Ling & Cornell 2017: 16ff). The amount of metal used in burials decreased towards the end of Period III as availability became limited, a consequence of the spread of Urnfield Culture and disruption of trade networks that affected all of Europe. One of the clearest examples of this is blade wear and refurbishment of swords to an extent not previously seen (Earle & Kristiansen 2010: 252).

When defining the parameters of what constitutes increased conflict in a given area, it is important to consider alternative interpretations of features such as hillforts. Just as swords in some instances served as symbols of prestige and ritual function, so too was it possible that hillforts were used as visual symbols on a grander scale, or even in the function of policing within a community rather than defending against invaders (Magnusson 2017). Olausson (1995: 160, 164) surmises that the Pulpit hillfort in the Håga valley had less to do with defence and more to do with regulating control of the trade coming in from foreign regions and reinforcing the control of the Håga elite, including use as a meeting place for local ritual activities. Even the burning down of the Pulpit in Period V can be interpreted as an increase of conflict in the area or as a deliberate act once use of the hillfort dwindled or no longer served the same purpose in earlier periods.

7.2. Archaeological evidence from mainland Europe and eastern Baltics

The introduction and spread of Urnfield culture meant a change from local war bands to larger, organized disputes with the aim of not only raiding but also controlling territories. These large migrations of organized warriors, and later over-populated settlements, can likely be blamed for the disruption of metal trade throughout mainland Europe and northern regions like

Scandinavia (Kristiansen & Suchowska-Ducke 2015). In terms of archaeological and osteological evidence, there are examples of increased violence throughout Scandinavia and Europe during the Bronze Age. Bergerbrant demonstrates this using several case studies of all weapon types found in graves during Periods II and III, from which she concludes that the increase in violence indicated during Period II gradually decreased by Period III thanks in part to the use of "intermarriage" (2007: 106). Resistance to expansions southward from Scandinavia may also have played a part in the rising conflicts, leading to attacks like that at Tollense (Ling & Cornell 2017: 26).

Evidence of major shifts in economy and social structure are evident in other regions during the Bronze Age from *c.*1400 BC forward, an example of which can be found in Iarcuri—the "largest known prehistoric settlement in Europe" (Szentmiklosi *et al*. 2011). Located in the Romanian Banat, the site is comprised of four ramparts, of which the largest reaches more than five kilometres in length and nearly four kilometres in width. Based on sherd distribution and radiocarbon dates, the main settlement phase was the continental Late Bronze Age. Excavations of the second rampart prior to World War II and recent surveys from 2009 revealed that the fortification suffered extensive fire damage indicative of concentrated attacks from without the fortifications. This is one of several sites indicating an increased movement towards fortification throughout Europe contemporary to Montelius Periods III-VI (Szentmiklosi *et al*. 2011). The presence of this massive structure in central Europe appears too distant to have had a direct impact on the Bronze Age peoples of Lake Mälaren, but it is a tangible representation of the shift in scale from local disputes to broader regional conflicts capable of impacting long-distance trade and alliance networks.

Osteological evidence of warfare and violence during the Bronze Age is also crucial to consider. This is well represented in the Tollense River Valley in northeast Germany where a large deposit of skeletal and archaeological material dated to 1200 BC have offered invaluable insights into conflict of the Bronze Age era beyond standalone acts of violence. In the surrounding area, burial mounds and settlements from the Bronze Age have been well documented, and the prior discoveries of bronze artefacts, both weapons and otherwise, along with the occasional instance of skeletal material led to an in-depth exploration of the site starting in 2008 (Jantzen *et al.* 2011). While not all the material has undergone osteological examination, the remains of an estimated 100 individuals have been recovered from the site including some examples of women and children, with a handful of clearly defined examples of violent assault by clubs, arrows, etc. These weapons are even present and preserved with the archaeological material, the clubs bearing significant implications concerning the "traditional picture of the Bronze Age warrior elite" (Jantzen *et al.* 2011: 431).

8. Presentation of source material

Reports from excavations and surveys conducted on Bronze Age sites in Uppland and around Lake Mälaren will be included as source material, in addition to the primary report published by Oscar Almgren on the excavation of Håga mound. Where the reports are not sufficient to facilitate analysis, subsequent publications and interpretations of the sites mentioned here have been utilized to varying extents. The data used for analysis was, in many cases, qualitative rather than quantitative, hence the use of tables and catalogues from the find lists of necessary reports was not employed to a large extent. For the information regarding bronze production assemblages from Apalle, the most important source was the assembled report for the excavation after the extension for the E18 (Ullén *et al.* 2003). Similarly, the comprehensive summary of the Hallunda excavations written by Hille Jaanusson (1981) on Hallunda as an introduction to her doctoral dissertation was used to help understand interpretations of the data taken from the original reports on the excavations done at Site 69 and Site 13 (Jaanusson & Vahlne 1975a, b; Jaanusson, Löfstrand & Vahlne 1978). Complementary data from recent excavations at Hallunda will be considered in discussions in order to contextualize the interpretations from the original excavations since there are no assembled, edited analyses including information from recent research in the surrounding area, as with Skeke. For the site of Skeke, both the reports from the excavation at Skeke and the compiled synthesis of interpretations of Rasbobygden as a whole (Artursson, Kaliff, & Larsson 2017) will be used to define discussion points and the focus of analysis in this area; this is especially important since the interpretations of cultic traditions are thorough and comprehensive, allowing for a selection of burnt-stone mounds, stone settings, and cult houses with relevant characteristics and ritual importance to be discussed here. Ultimately, the amount of information from Skeke is so dense and categorized that differentiating burnt-stone mounds and stone settings for comparison based on the same components as the other sites would have been redundant and unnecessary for the analysis. At the time this thesis was written, the hillforts near Skeke (Rasbo 490:1) and the two hillforts further south (Funbo 65:1, 191:1) were not excavated and hence provided no published reports on which to base analysis or discussion beyond the synthesis of Rasbobygden given by Artursson, Kaliff & Larsson (2017); in order to compensate, survey details compiled by Riksantikvarieämbetet (FMIS) were utilized instead. A number of hillforts were located around the areas of Apalle and Hallunda, of which only one (Håtuna 108:1) had prior published data available (Olausson 1997). The other sites were rejected for varying reasons relating to uncertain dating and position in the landscape in relation to the discussed sites. At Broby, there are several sites of importance and a long history of research excavation which make it difficult to define a singular site to focus on, in addition to a lack of official reports on some of the included areas. Instead, the work of Schönbäck (1952, 1959), Helena Victor (2002), and Karin Ojala (2016) will be used as the primary sources of information and data collection.

9. Analysis

9.1. Bronze production and deposition

The importance of bronze in the period to which it lends its name cannot be discounted when considering how metal craftsmanship was perceived by prehistoric peoples. Bronze casting involved political implications (such as control of production), economic aspects (having the means to acquire raw materials and specialists), and the transformative properties of the sacred realm. These metal workshops supplied items needed for everyday use, for personal adornment, for prestige objects of ritual importance, and for the swords which are used to acquire more wealth and defend from attack (Kristiansen & Larsson 2005: 52-61). Additionally, a bronze item did not have to serve a ritual purpose while it was in use to be deposited in a ritualized manner (Kristiansen 1987: 77). How bronze was created, where it was created, and how it was disposed of are inevitably woven into the fabric of sacred spaces during the Bronze Age.

Having defined what creates a ritualized landscape or construction (see Section 6.3), we can start to differentiate between bronze that is utilized and/or deposited for ritual function and bronze items that are produced and/or used in a profane setting. It is important to make this distinction rather than allocate generalized 'ritual importance' to all bronze items and all associated waste from bronze production. In the context of Apalle, fire-split stones and bronze production fragments of crucibles and moulds are spread and treated jointly as waste from the process (Ullén *et al.* 2003: 145), and not with the same ritualized depositions of singular bronze artefacts or mould fragments as seen at Håga or Broby. The same can be said of Hallunda where fire-split stones produced in the heat of smelting and crucible- and mould fragments for casting bronze objects wound up scattered in the cultural layers of both Site 13 and Site 69 (Jaanusson 1981). At first glance this would seem to differentiate these sites from the bronze-casting traditions at Broby and Håga. *Table 2* lists the types of fragments/waste and total weight of said fragments attributed to bronze production collected from each site for the purpose of comparison. It should be noted that there were no artefacts of bronze or bronze production waste uncovered at Predikstolen, hence the numbers listed are from finds within Håga mound itself and the excavated material from Hågahagen (i.e. cult houses and burnt-stone mounds).

Table 2. Comparison of bronze production waste discovered at each site dated to the LBA (Jaanusson 1981; Victor 2002; Ullén et al. 2003; Hjärthner-Holdar 2014; Ojala 2016).

Site	***Bronze mould fragments (#)***	***Bronze furnaces***	***Bronze crucible fragments (#)***	***Bronze artefacts***
Hallunda[13]	230	15	130	41
Apalle	365	0	148	103
Skeke[14]	51	2	35	5
Broby[15]	15	1	12	21
Håga[16]	≥1	0	≥1	19

[13] Combined totals from Site 69 and Site 13 (Jaanusson 1981: 19, Tables 1 & 2).

[14] Report uses 'copper-based alloys' instead of 'bronze' (Bilaga 6: 802, 810, Tables 3 & 4). Additionally, the report includes 10 fragments interpreted as used in bronze production but not falling into previous categories (Bilaga 6: 816, Table 5).

[15] Estimates of bronze mould fragments and bronze crucible fragments are to be considered ± since the documentation for the sites does not include exact numbers for this type of find (Schönbäck 1959; Ojala 2016).

[16] The lack of itemized documentation for these types of finds by Almgren (1905) and Hjärthner-Holdar (1985)

Apalle, which has clearly produced the highest number of bronze mould fragments and bronze artefacts by number, does not have any identified smelting furnaces or pits in the immediate vicinity (as of 2003), though much of the site is covered in the fire-split stones which are characteristic of the activity. Hallunda is also characterized by this cultural layer of fire-split stones but does not show the ritualized deposition of bronze-producing waste to the same extent as Håga or Broby, where bronze production was not a prolific industry. There are many factors that can account for the higher numbers of bronze mould- and crucible fragments at Apalle which is not apparent at first glance, such as the highly degradable character of such clay which in many cases reduces the material to even smaller fragments. In some cases, the reused crucibles and porous moulds break down much easier from the high temperatures of the firing process and are reduced to granules, a process which is also affected by the type of clay and temper used for the moulds and crucibles (Jaanusson & Vahlne 1975b: 18; see Jaanusson 1981 for further discussion). Much like bone fragments, the collective weight of the fragment types is typically found on find lists alongside the total number of fragments. In addition, the numbers above do not reflect the kinds of bronze artefacts and whether or not they represent large numbers of fragments or whole, significant prestige goods such as those from the burial at Håga mound, which constitute the majority (16 of 19) of the bronze artefacts found in the Håga area. Many of the objects found in the mound are additionally gold-plated, to the amount of a third of all gold from Sweden found during the Bronze Age (Kaliff & Oestigaard 2018: 126f).

The problems with a quantified representation of the finds between each site becomes apparent when one looks at the individual categories. While this is a very simplified perspective of the role that bronze production played at each of the sites, it does seem to indicate a pattern. Broby, Skeke, and Håga, though they may have hosted bronze production processes at some point during long periods of usage, does not indicate production as a feature of their economic roles in the region. As an example, the bronze production at Skeke represents a local tradition of bronze casting for specific occasions, using 'new' copper rather than recycled metal objects that were broken or no longer in use. Bearing in mind the channels needed to acquire raw metals, this would indicate a significant use for the objects being produced. Additionally, the lack of artefacts in the nearby graves corresponding to the moulds found at the site shows that items produced here went directly into regional and long-distance alliance networks, such as gifts or focal objects of large ritual events (Hjärthner-Holdar 2014: 234ff). Broby represents a similar tradition of deposition, wherein bronze artefacts and bronze casting fragments were produced in small numbers that do not indicate industrial production, and their deposition shows a clear ritual association with cremation graves in the various stone settings and burnt-stone mounds. This is further supported by the construction of a stone setting containing several cremation graves on a bronze smelting pit (A53B) (Ojala 2016: 248f).

The specialized nature of bronze production at Broby can be seen to parallel casting activities at Skeke in the idea that the grave goods include bronze products which are not indicated to have been produced at the site, an example of which is the bronze comb found in the burnt-stone mound A2 (Ojala 2016: 100f). Furthermore, the smelting pit A53B as Broby was covered with a stone setting and several phases of burials of different type, a tradition which was not practiced at the bronze production workshop at Hallunda. It is relevant to note that constructions of stone settings/graves on smelting pits are found in other parts of Hallunda and have been dated to the LBA (Jaanusson & Vahlne 1975a, b; Jaanusson, Löfstrand & Vahlne 1978), a point which will also be discussed later (see 9.2.2). At Broby the smelting pit was symbolically enclosed in the realm of the dead when the stone setting was built on top of it. This does not divorce the furnaces at Hallunda from any ritual significance, but it is a glaring difference of how the remains of the furnaces were handled in comparison to Broby. The examples of bronze mould and crucible fragments found in Hågahagen and are similarly ritualized in having been deposited around the perimeter of the cult house in a clearly defined 'offering' zone, as well as in one of the excavated burnt-stone mounds (366:3). Bronze

make it difficult to confirm figures found at Håga and hence are represented as 'greater than/equal to one'.

production at Hågahagen may further have been incorporated into the cultic sphere by using fire-split stones from the smelting process in the walls of the cult house and the burnt-stone mound constructions (Forsberg & Hjärthner-Holdar 1985; Victor 2002: 148, 158). The examples of bronze depositions at Broby indicate a pattern of one or two bronze artefacts, some simple enough to be considered scrap by modern standards, with cremated or inhumated remains, a tradition which continued through the LBA.

The archaeological material at Hallunda has several examples of stone settings of various types with bronze artefacts and production waste included with cremated bones, and still more without bones. The largest proportion of bronze-production waste comes from the cultural layers around the workshop with the smelting furnaces for bronze production; however, hearths and pits appear to have been used for bronze casting at other areas of both sites during the LBA. Site 13 is partially comprised of a Bronze Age grave field with only five (out of 33) stone settings positively identified with burials; four which contained bronze artefacts and one which contained a clump of bronze smelt [*smält*]. The remaining three stone settings with bronze artefacts/waste did not have positively identified human remains but can still be considered ritualized depositions (Jaanusson & Vahlne 1975a). The bronze workshop area was also included in the settlement area of Site 13 separate from the grave structures and produced 21 bronze artefacts, 10 crucibles in fragments, and more than 50 mould fragments. Less than half of the mould fragments had identifiable inner structures from which artefact types could be deduced but included weapons (sword and spear) as well as adornments such as neck rings. (Jaanusson & Vahlne 1975b: 16ff). The oldest calibrated date from the workshop material and layers is 845±100 BC (1975b: 32), which would seem to indicate that scale of bronze production at Hallunda began to ramp up around the time Håga mound was being constructed. It is estimated that the workshop was no longer in use by the transition from the Late Bronze Age to the Early Iron Age but questionable whether production like this would have been consistent over so long a period (Jaanusson & Vahlne 1975b: 106).

One significant question to consider is why stone settings and graves were built over bronze-smelting hearths in Broby but not over the workshop at Hallunda. At Site 69, there are nine features of different types which included bronze crucible and mould fragments or bronze artefacts in the layers of construction, only one of which contained an urn grave (A1). To summarize, bronze production and artefacts were present at all of the discussed sites; however, the scale of bronze production at Apalle and Hallunda is much larger than at Håga, Skeke, or Broby. Also present at the latter sites is the tradition of building stone settings with grave caches on top of bronze smelting hearths, thus transitioning the site into the sacred sphere. Many of the stone settings at Hallunda, particularly in the grave field at Site 13, include bronze artefacts or production waste with grave caches, and there are many more features at Site 69 though only one positively identified in association with a grave. This will be further addressed in Section 9.2.2.

9.2. Cultic structures

The numbers of stone settings and burnt-stone mounds in the area around the selected sites is one method by which to gauge not just ritual activity, but rather activity in general during the Bronze Age. Settlements during these periods usually shifted to follow the receding shorelines and take advantage of the mud flats and newly exposed land (Schönbäck 1959). Stone piles and burnt-stone mounds resultant from daily activities such as cooking would have followed this pattern, but the same cannot be said of stone settings which housed grave depositions, as these were more likely to be placed in higher points in the landscape pursuant to burial traditions during this period (Schönbäck 1959; Olausson 1995: 53ff). Håga mound is a perfect example of this tradition as it sits at one of the highest elevations in the surrounding terrain and is visible from long distances in all directions. As has already been discussed (see Section 6.3), the visibility of such constructions was as important to their impact as size was. While burnt-stone mounds in general are attributed to the Bronze Age, the only reliable method of dating a specific

stone setting is through analysis of the material recovered from the ones which have been excavated. This severely limits the number of mounds which can be utilized for discussion, especially bearing in mind that nearly 4000 burnt-stone mounds are surveyed in eastern Middle Sweden alone, most commonly along the shores of Lake Mälaren. Selection of structures for comparison has been aided here by the previous writings on the excavation and analysis of materials from burnt stone mounds (e.g. Schönbäck 1959; Victor 2002; Noge 2008; Ojala 2016).

9.2.1. Cult houses at Håga and Broby

Helena Victor (2002: 114) defines the placement of stone-foundation cult houses (*Brobyhus*) as 'half-monumental' since they inhabit visible places in the landscape but not the crown of the terrain where they would be most easily seen. At Håga there are two cult houses of the Broby type: Hågakyrkan a short distance south of Håga mound (see *Appendix 2: Fig. 17, 18, 19, & 20*), and one to the west in Hågahagen (see *Fig. 10 & 11; Appendix 2: Fig. 22*). While Hågakyrkan is the larger of the two at a length of 44 m and width of 13 m, the cult house at Hågahagen, which measures 21.5 m wide and 7 m long, was built in an earlier period than Hågakyrkan. Both of these structures are built with inner and outer kerbstones in proximity to water and graves from the Bronze Age. The cult houses of this type at Broby are closer in size to the cult house at Hågahagen and have other small differences in construction relating to kerbstones and placement in the landscape (see *fig. 26* in Victor 2002: 78f). Victor's thorough compilation and analysis of Broby-type cult houses in Sweden makes it clear that Hågakyrkan is a special case, not least of which because it is the largest of its type save for two exceptions (the cult houses at Kivik) (Victor 2002: 114f). Additionally, the cult house at Hågahagen has one of the most significant features of any of the cult houses: the sounding stone [*klangsten*] with cup marks placed at the north end (*Fig. 11*). The length of this stone measures just short of the width of the house and was positively dated through the crushed ceramic vessels partially under and in front of the stone and the organic materials therein (Victor 2002: 169f).

Figure 10. The remnants of the cult house at Hågahagen from the S-SE with the sounding stone [*klangsten*] featured in the foreground. Photo taken by author.

Figure 11. Close-up of the sounding stone from the cult house at Hågahagen, with cup marks visible on the upper-right edge of the stone. Photo taken by author.

A note should be made that the type of rusticated vessel used as an urn inside the cult house at Hågahagen was, up to that point, rare and known only to be found at Hallunda (e.g. Jaanusson 1981: 125f). According to Victor, this type of vessel was potentially seen as foreign prestige goods, and hence why it was selected for the special ritual deposition inside the house (2002: 167f). While it has already been mentioned that ceramic vessels can be specialized (see Section 6.3), it should not be assumed that this kind of pottery will always serve as a ritual item, especially considering the large assemblage of pottery at Hallunda which is shown to be spread throughout the cultural layers as well as deposited in grave constructions (Jaanusson & Vahlne 1975a, b; Jaanusson, Löfstrand & Vahlne 1978).

9.2.2. Burnt-stone mounds and stone settings

Stone settings and burnt-stone mounds are found at all the sites that have been discussed, many with and without grave caches/ritualized deposits (see *Appendix 1*). Of the sites included in this analysis, the only area which does not have a comprehensive publication discussing the role of burnt-stone mounds and stone settings in the local ritual sphere is Hallunda. While the excavations at Sites 13 & 69 produced extensive reports with a wealth of examples of such structures, they are only explored in relation to the Bronze Age ceramic assemblages (e.g. Jaanusson 1981); otherwise, the site is referenced for the bronze-production workshop in the context of metal trade throughout the Mälar Valley region. Burnt-stone mounds particularly have been a topic for problematization as they concern Bronze Age studies in the Mälar Valley region (see Larsson 2014: 126 for the provided list of further reading). The point of comparing the burnt-stone mounds and stone settings at each site is not to reinterpret the material found but to establish a tradition of ritual depositions which include the construction and reuse of said features over several phases during the Bronze Age. Including all relevant constructions from Håga, Skeke, Hallunda, Apalle, and Broby for analysis is beyond the scope of this thesis and hence will be restricted to those constructions which have been investigated and include a grave deposition positively dated to the Bronze Age, preferably with secondary depositions from later

phases. Hågahagen, Skeke, and Broby are all areas rich in burnt-stone mounds and other types of stone settings which represent long-lasting traditions of grave deposition and ritual usage (Schönbäck 1959; Victor 2002; Artursson, Kaliff & Larsson 2011; Ojala 2016). The stone settings and burnt-stone mounds excavated and previously interpreted in these areas will be used as a framework against which material from Hallunda and Apalle (especially the former) will be compared to determine if similar structures were present and utilized over longer phases during the Bronze Age. Unfortunately, Apalle does not have as many surviving examples of stone constructions and only limited conclusions can be drawn based on what remains are found of such features in the cultural layers.

Of the three burnt-stone mounds discussed and interpreted in the Apalle report, only one (A1577) had human remains: unburnt bones identified as part of a fibula and a cranial fragment, the latter of which is dated to 870±70 BC, though these were found in the edge of the mound. The grave caches that were positively identified were in areas of the settlement where the overlying stone structure was likely destroyed through the agricultural usage of the area, a theory supported by the spread of human bones and traces of kerbstone rings in the cultural layers throughout the site (Ullén *et al.* 2003: 238f). Two of the three burnt-stone mounds (A480, A1577) were situated in a central part of the settlement area with the remains of kerbstone rings, though much of the top layers of both mounds had been strewn amidst the surrounding area as a result of later activity in the area. Both mounds are founded in cultural layers dated to the MBA and LBA. Based on the available evidence, the surviving mounds and grave caches without overlying constructions indicate that more stone settings and burnt-stone mounds with graves were built on top of the cultural layers but did not survive subsequent phases of activity at the site. The last burnt-stone mound (A4262) was built adjacent to bedrock near the edge of the settlement area with a hearth pit underneath the stone filling. Though one contained human bone, none of the discussed mounds are considered to have grave caches. (Ullén *et al*. 2003: 49)

The data collected on Hallunda is taken from two sites (13 & 69) which are part of the same settlement area divided by a road construction. Site 13 recorded a grave field constituted by 33 stone settings and a stone border; two-thirds of these had grave caches with and without cremated human remains. Much like the burnt-stone mounds at Håga and Hågahagen, the area is adjacent to exposed bedrock, on top of which some of the features are built (Jaanusson & Vahlne 1975a: 8ff). Bronze artefacts and bronze production waste like crucible and mould fragments were found in eight of the stone settings at Site 13 (see *Appendix 1* for complete list). Site 69 also included a designated grave field consisting of stone settings with similar find assemblages. The ratio of investigated stone constructions in this area compared to Site 13 is much lower, however, and must be taken into account when considering the overall character of the settlement. In total, Site 69 had 29 certain stone setting constructions of which six were burnt-stone mounds, and furthermore of which only two were investigated (69: A1, A43). They were found mostly in the eastern part of the settlement area with a large number of other graves from the IA. One of the burnt-stone mounds (69: A1) included an urn-grave in the inner construction (Jaanusson, Löfstrand & Vahlne 1978: 15). Because the stone settings have been difficult to interpret in this area and as a result are interpreted as part of the cultural layers (Jaanusson, Löfstrand & Vahlne 1978: 19), the best candidate for a more thorough examination and comparison with burnt-stone mounds from the other sites is 69: A1. Of the stone constructions constituting the grave field at Site 13, 17 included burnt human remains but only five were positively identified with grave caches (13: A1, A3, A4, A14, A18). Four of these included bronze artefacts with the grave depositions and the fifth—A14—produced no grave goods but did include bronze smelt. None of these stone settings were built over a hearth or fire pit (Jaanusson & Vahlne 1975a). Of the five structures with positively identified grave depositions, 13: A1, A3, and A4 included both kerbstone rings and centre blocks; these three stone settings will be used for discussion since there are no burnt-stone mounds reported with positively identified grave depositions.

Burnt-stone mound 69: A1 was located in Zone VI of the settlement area of Site 69 in proximity to four other—uninvestigated—burnt-stone mounds and the aforementioned IA

grave field. Aside from the grave urn with the two burnt bones found in the central layers, the mound included an inner kerbstone ring, a centre block, and a hearth in its construction. Two secondary graves of IA dates were built against the north-northeast edge of the mound (Jaanusson, Löfstrand & Vahlne 1978: 166). The finds from the inner construction of this mound included bronze mould fragments (six fragments, 18 grams), flint chips, ceramic shards, and wattle and daub in addition to the urn (Jaanusson, Löfstrand & Vahlne 1978: 203).

The established traditions at Broby, Skeke, and Håga have already created a framework for how to recognize a long-standing ritualized grave deposition inside stone settings and burnt-stone mounds. Having already addressed the significance of kerbstone rings in relation to burials in such constructions (see Section 6.3), it is relevant to note that all three of the stone settings from Site 13 and the burnt-stone mound from Site 69 include not only kerbstone rings, but centre blocks as well, indicating the use of regional traditions in keeping with burial practices; the same can be said of the burnt-stone mound from Apalle. Another component of Bronze Age cultic tradition is the construction of such features over previous settlement areas. Both Hallunda and Apalle fit well into this dynamic to the point that distinguishing cultural layers from the depositions and construction of graves has been a difficult endeavour for interpretation (see Jaanusson, Löfstrand & Vahlne 1978; Ullén *et al.* 2003). Jaanusson (1981: 18) mentions at least nine stone settings with fire-split stone filling and bronze artefacts-and production waste which do not seem to follow the patterns of deliberate construction demanded of ritualized depositions, especially in keeping the with finds of bronze artefacts and bronze production waste in such structures at Broby or Skeke. Based on an examination of the excavated grave field at Site 13, bronze was indeed utilized for grave depositions during at least one phase of the sites use during the Bronze Age. Based on the parameters set forth by Bell (2009), an argument could be made that the sheer number stone settings at Hallunda with centre blocks and kerbstone rings is an established ritual as a tradition practiced over several phases with very little deviation, despite whether these stone settings included grave depositions or artefacts that could be considered as having cultic significance.

In line with this topic, another point that needs to be addressed is the tradition seen at Broby of building graves on top of prior bronze production hearths. While the stone settings and burnt-stone mounds have most likely been disturbed at Apalle, there are several surviving examples of this tradition at Hallunda—none of which have been built over the workshop or the surviving bronze furnaces in the surrounding vicinity. This raises the question as to why bronze production waste and artefacts were included in some of the grave depositions at Hallunda—just as at Broby—but the workshop was not incorporated into the cultic sphere as was the tradition at Håga, Skeke, and Broby. One possibility is that the single-use furnaces scattered throughout the settlement area were used in earlier periods for single-instance objects with strong ritual overtones and the workshop was a later addition during a time of ideological transition in and around the Mälar Valley region. Alternatively, this area may have been subject to the same disturbances by cultivation in subsequent periods that have reduced the overlying structures to a scattered cultural layer, as at Apalle, but at the moment there is nothing from the reports or interpretations on the site indicating that this is the case.

9.2.3. Depositions in wells at Skeke and Apalle

Much like the presence of cult houses of the Broby-type at select sites around the Mälar Valley region and further south, there is another kind of construction which in recent years has been recognized as a place for cultic depositions during the Bronze Age in eastern Middle Sweden. Wells [*brunnar*] like those found at Apalle and Skeke can be used to understand the phases of use for a site through successive periods as well as thick collections of depositional material ranging from food waste to grave depositions. In other areas of Europe, these kinds of wells have in some cases held offerings of human remains with other finds in accumulated debris that require closer scrutiny. The wells at Apalle have been analysed at length in relation to similar instances of well depositions in mainland Europe and the British Isles (Ullén 1995: 9f), and the presence of wells placed in areas of cultic activity at Skeke (Artursson, Kaliff & Larsson 2017:

52f) allows for a short, direct comparison of the archaeological material and interpretations put forth by reports of the respective sites.

Several wells were positively identified at Apalle, many of which were concentrated in the western area of the site. The well which will be considered here for discussion (A1992) is part of a well construction (K91) which included a secondary, later attachment above the original structure (A1640) and a fenced enclosure which altogether encompasses an area of 8 m in diameter. An assortment of ceramic sherds was found in the surrounding cultural layers in addition to a house construction roughly 10m in area (Ullén *et al.* 2003: 50f). While the well was used in successive periods after it was built, the deposition layers from the original construction included human remains consisting of a femur, a radius, and two cranial fragments which were somewhat higher in the depositional layer (Ullén 1995: 19). At Skeke, one Bronze Age well (A110002) was found in the far north-eastern end of the site in the higher impediment area in proximity to a cult house—not a Broby-type—and several burnt-stone mounds with grave depositions. The well is of smaller dimensions and used for a drastically shorter period—estimated at roughly a decade—compared to the well at Apalle and as a result is very find poor for comparative materials. Two large stone boulders were used to seal the well after it was used which has contributed to an interpretation that the well served a specific function during a ritual ceremony and was immediately closed after the event was finished. No deposition of human bone was found in the well at Skeke (Larsson 2014: 191ff).

Superficially it would appear that there is not much to compare between the two wells. Though they both date from the Bronze Age, they are different in construction, length of usage, as well as the finds that were recovered from the accumulated layers inside. One of the most significant points is that the well at Skeke was deliberately removed from usage after only ten years. Despite these differences, the well at Apalle was used for a ritualized deposition of human bones (the bones are believed to have been in circulation prior to deposition as 'relics') (Ullén *et al.* 2003: 239) and the well at Skeke was built in conjunction with a ritual complex area, indicating the purpose of both structures was involved in the cultic sphere of the respective sites at some point; in the case of Skeke, the well appears to have been constructed specifically for use in conjunction with cultic activity in the 'liminal zone' between the settlement in the lower landscape and the grave structures or 'necropolis' on the higher impediment (Artursson, Kaliff & Larsson 2017: 54). Further support for the ritualized nature of the human remains in the Apalle well is taken from the association of said remains with a heavy layer of animal bones, specifically pig and cow, which Ullén interprets as a singular event rather than disposal of food waste over time (1995: 11f). Another significant parallel can be drawn from the specific selection of bones for the grave depositions in a burnt-stone mound (A83) at Skeke, where singular bones from different body parts are believed to represent the full body rather than a total inhumation (2017: 101). This phenomenon bears a striking resemblance to the selection of cranial fragments, an arm bone, and a leg bone in the Apalle well, essentially representing the significant extremities on the body.

9.3. Hillforts and walled enclosures

The sites to be discussed are Predikstolen (Uppsala-Näs 133), the hillfort near Skeke (Rasbo 490), the two hillforts south of Skeke near the banks of Funbo lake (Funbo 65 and 191), and the hillfort Draget east of Apalle (Håtuna 108) at the southern tip of Lilla Ullfjärden, with respective size- and construction details shown in *Table 3*. The third structure formerly classified as a hillfort near Funbo lake (Funbo 227) will be used where necessary to further discussion. Of the four sites that have been selected for comparison, only Skeke, Apalle, and Håga include hillforts in relative proximity that are reasonably dateable to the LBA and have been included in discussions in previous publications (e.g. Olausson 1997; Artursson, Kaliff & Larsson 2017). A cursory look in *Fornsök* (FMIS) reveals at least one hillfort immediately near

Hallunda (Botkyrka 388:1)[17] with no published dated material but which was constructed at minimum 25 m.a.s.l. and positioned at the Bronze Age shoreline of the inlet from the southwest. Botkyrka 388, also known as *Hundhamra*, is located 1.5 km west of Hallunda on a natural ridge overlooking Lake Mälaren and would have been a prime location for such a structure; however, shoreline projections for this area indicate the ground where the hillfort stands was inundated with water up until Periods V and VI (SGU). This in combination with the association the site has been given to Viking Age grave monuments in the surrounding vicinity raise too many questions concerning its origin to be included in this analysis.

Table 3. List of dimensions and relevant details for discussed hillforts. *Min a.s.l.= Minimum height above sea level.

Hillfort	Area (m)	Main wall(m) (WxH)	Outer wall	Inner wall	Entry location	Min. a.s.l.*
Uppsala-Näs 133 (Predikstolen)	470x180-250	3-14 x 0.3-1.5	No[18]	No	N, SW	25m
Rasbo 490	150x90	1-3.5 x 0.3-0.7	Yes	Yes	NNE, ENE	25m
Funbo 65	115x90-100	2-5 x 0.3-0.5	Yes	No	N	25m
Funbo 191	100x80	5-6 x 0.4-0.7	Yes	No	N	25m
Håtuna 108 (Draget)	300x190	3-6 x 0.2-1.0	Yes	Yes[19]	S	35m

Predikstolen, as previously mentioned, has been investigated by Westin (1944) and Olausson (1988) before the information was synthesized and analysed in Olausson's doctoral dissertation on Bronze Age fortified structures in the Mälar Valley region (Olausson 1995). Draget has also been partially excavated by Olausson and the findings and his interpretation have been published in a collection of archaeological reports by Stockholm University (Olausson 1997). It is unfortunate that there are no similar undertakings concerning the hillforts in Skeke beyond the surveyed details taken by Riksantikvarieämbetet and hence discussions concerning these structures must be limited to what conclusions can be drawn from observable features rather than cultural layers from excavation or dated samples. Size, construction, and proximity to other Bronze Age features of the landscape will take precedence in analysis.

Approximately 5.5 km east-southeast of Apalle is the hillfort Draget (Håtuna 108), situated 35 m.a.s.l. on what would have been the opposite bank of Lilla Ullfjärden which during the LBA still connected to the Kalmar gulf in the south and provided a narrow strait by which to reach the northernmost part of Lake Mälaren. The hillfort was investigated by a seminar excavation led by Michael Olausson in 1996. The results of the excavation found that the structure was originally built towards the end of the late Neolithic but was in use through the MBA and LBA, after which there was a pause in activity until the EIA. In his discussions concerning Draget, Olausson appears to question its classification as a hillfort, instead favouring the term *vallanläggning* [walled construction/ramparts] (Olausson 1997: 410). Just as with Predikstolen, Olausson interpreted the site as not having been originally constructed as a defensible structure but more as a place for communal gatherings and large ritual and cult events. The structure consists of a bluff facing west—towards the water, just as with Predikstolen—and triple walls encircling the area on the north, east, and south sides. Of the four entrances set evenly along the length of the walls, the main entrance is believed to be in the south on top of a Late Mesolithic-Early Neolithic settlement which accounts for the oldest

[17] Other hillforts in the vicinity of Apalle and Hallunda were not included in analysis based on distance from the sites and locations not directly correlated to the selected sites/inlet system.

[18] Though Predikstolen does not have an outer wall in the same style as the other hillforts, it does have a secondary enclosure or "annex fort" in the south-southwest that covers an area of 1.5 ha (Olausson 1995).

[19] The innermost wall at Draget is interpreted by Olausson as the main wall (1997: 412f).

dates recovered from the site. A number of small cairn clusters are placed along the inside of the main, most inner wall, of which five have been investigated (Olausson 1997: 412ff).

Predikstolen was constructed on a cliff overlooking the Håga river valley which at its highest point (10-15 m) offers expansive views of the Håga River valley facing east and south (see *Fig. 12* & *13*), from which the structure derives its name (see Olausson 1995: 125ff; Kaliff & Oestigaard 2018: 120f). The hillfort sits 25 m.a.s.l. and at its largest points is 470 m x 250 m large, covering an area of 4.5 ha and an additional secondary enclosure on the south side of the embankment covering 1.5 ha; of the total area, only 200 m² has been investigated in the main enclosure and no excavation has taken place in the secondary enclosure. The wall of the enclosure measures 760 m long and has breaks in the east and southeast where the natural bluff is at its highest and a rampart seemingly unnecessary (Olausson 1995:127). Entrances are visible in the north and southwest parts of the embankment. The ramparts were built in two phases, the earliest of which has been dated to Period III and the second phase to Periods VI-V; indications of the final razing of the fort during this secondary phase are visible in the burnt stones and broken sections of embankment. While there is documented and dated Bronze Age activity inside the hillfort, the area around the immediate vicinity appears free of corresponding Bronze Age activity such as graves or burnt-stone mounds, though this may have more to do with a lack of surveyed area than a lack of activity. Numerous examples of Bronze Age activity such as settlement areas, depositions, and stone settings of different types have been documented within a few kilometres in the surrounding landscape (Olausson 1995: 125; Kaliff & Oestigaard 2018). One stone-ship setting (Uppsala 651) located 250 m SE of the fort along the banks of the Håga river is registered at 10-15 m.a.s.l. and does not appear to have been investigated beyond an initial survey by Riksantikvarieämbetet, hence providing no dateable material (FMIS).

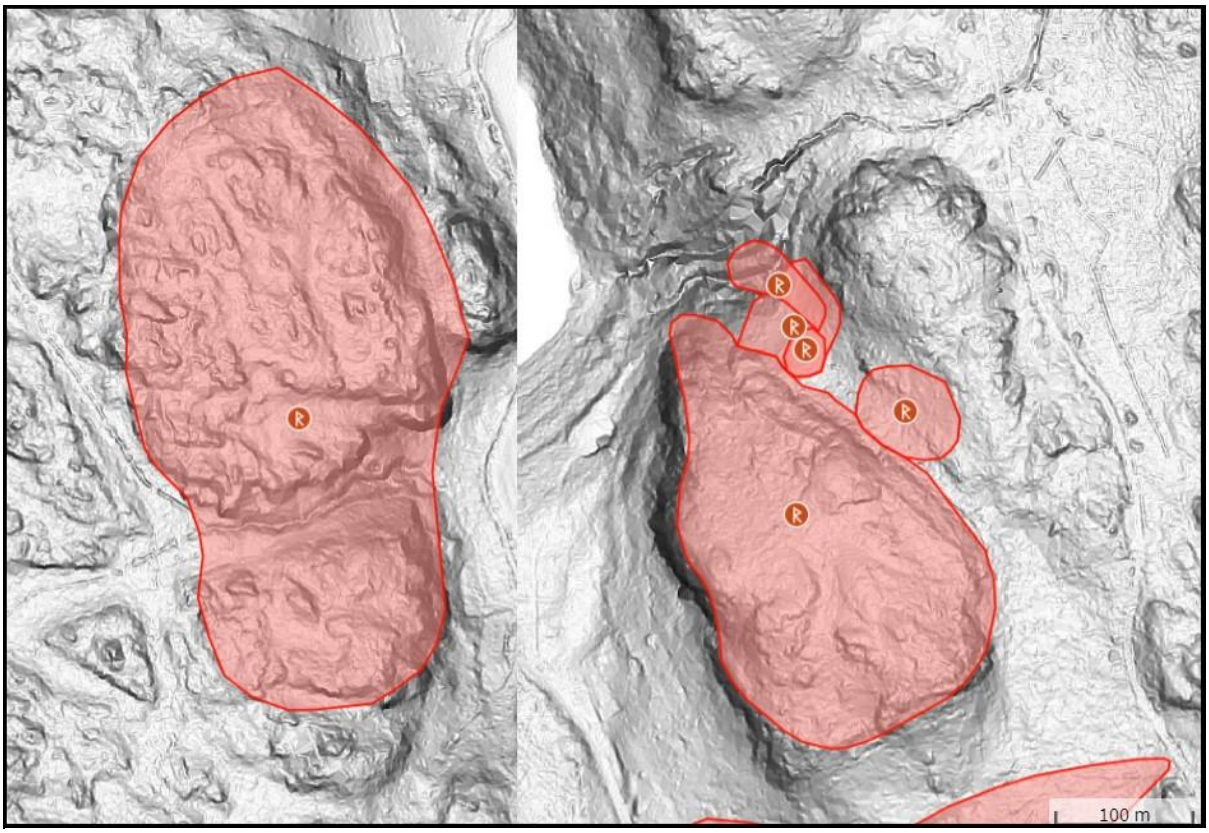

Figure 12. Left: Terrain map of Predikstolen. Right: Terrain map of Draget. Both are represented at the same magnification/ scale for comparison. Terrain data and shapefiles taken from Fornsök (FMIS). Base map by © Lantmäteriet.

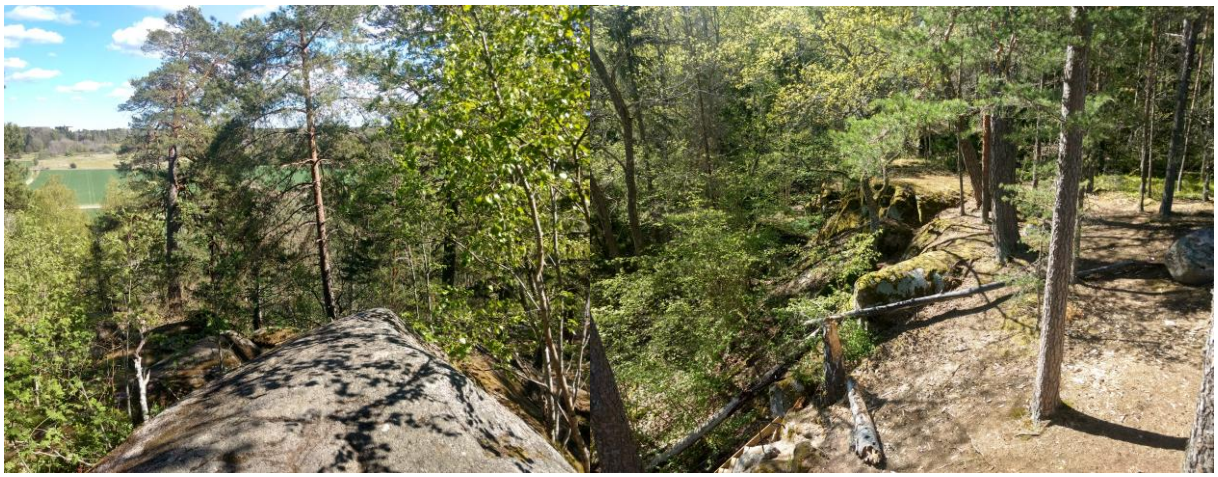

Figure 13. Views from Predikstolen. Left: View facing E from the highest point on the cliff/embankment. Right: The south embankment with recently (modern-day) installed staircase. Photos taken by author.

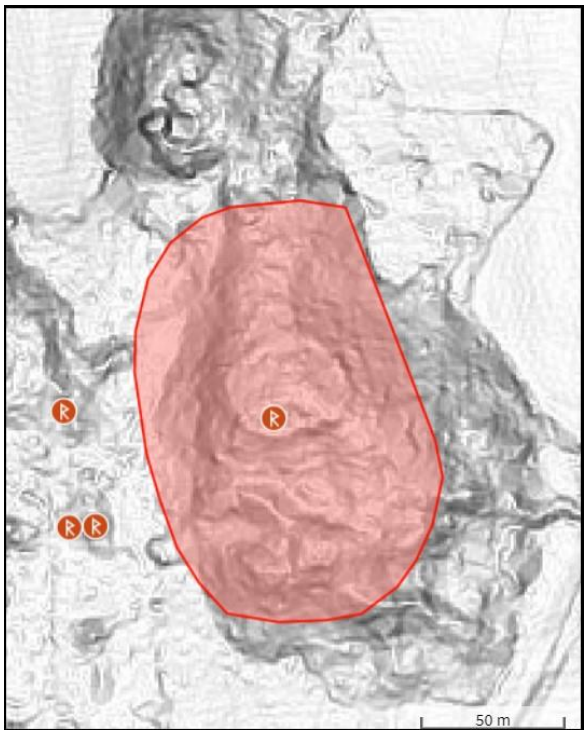

Figure 14. Terrain view of the hillfort Rasbo 490 with the referenced survey area encircled. Terrain data and shapefile taken from Fornsök (FMIS). Base map by © Lantmäteriet.

Rasbo 490 (*Fig. 14*) sits 25-30 m.a.s.l. roughly 1.5 km east-southeast of Skeke on a rocky impediment with steep slopes that delimit the size of the enclosure to 150 m x 90 m. The enclosure consists of walls both outside and inside the main embankment, 150 m and 75 m long respectively; however, there are no walls in a section of the NE of the enclosure. The area surrounding the structure is peppered with burnt-stone mounds and stone settings/cairns which help provide strong indications of Bronze Age activity despite the lack of excavation and dateable material from the hillfort directly. Funbo 65 and Funbo 191 are located 8.5 km south of Skeke and are situated today a few hundred metres west of the banks of Funbosjö. Shoreline levels during the LBA would have made the area where these two hillforts sit an island in the middle of the lake with natural embankments and an abundant supply of stones with which to build the walls. The enclosures measure 115 m x 90-100 m for Funbo 65 and 100 m x 80 m for Funbo 191, with both hillforts including outer walls of differing dimensions and heights in the terrain ranging from 25-40 m.a.s.l. The obvious discrepancy in size becomes apparent when comparing the dimensions of Predikstolen and the hillforts at Skeke and Funbo. Of these hillforts, the largest (Rasbo 490) is barely half the meter coverage of Predikstolen, while the other two (Funbo 191 & 65) are marginally smaller still. While size may not be the most relevant factor in the importance of a hillfort, it does lend itself to the argument of a monumental structure creating a significant space in the landscape for locals and for visitors alike since visibility of a hillfort during the Bronze Age was as important as defensibility. It is possible to speculate that the holding capacity and ability to host certain activities would be limited in the smaller hillforts. At Draget, for instance, the area of the structure is only marginally smaller than that of Predikstolen and has similarly been interpreted by Olausson, who worked on excavations at both sites, as a communal as early as the Late Neolithic, developing into a place of cultic importance for the local Bronze Age peoples (Olausson 1997: 420f).

Moving past the difference in size it is easy to see parallels in the construction style and placement between Predikstolen and Draget. The hillforts are located within or near clusters of Bronze Age settlement activity and are in close proximity to other features indicative of ritual activity such as the stone cairns, burnt-stone mounds, and cup-mark carvings that have been previously discussed. All of the discussed hillforts would have been adjacent to some nearby body of water but Predikstolen and Draget are particularly placed on bluffs overlooking long river systems stretching N-S with enclosures built to supplement the natural rockface which would have created a barrier facing the water (FMIS; Olausson 1995). Olausson discusses a possible entrance to Predikstolen in the southwest but highlights the main entrance in the north in relation to the older phase of rampart construction (Period III), the opening two metres wide and 12 metres deep at one of the widest points of the wall (1995: 127). Based on the ideas behind monumental constructions during the Bronze Age, it seems reasonable to assume that traffic coming up from the south would have been greeted first by the intimidating bluffs and walls closing in these large spaces. It should be noted the openings or entry points in the walls of Draget differ to those at Predikstolen and are not interpreted by Olausson to function for the same purpose. The four entry-points in the alternating wall and dike system enclosing Draget would seriously hinder the ability of the structure to rebuff an invasion, and the additional concentration of visual- and ritual components of the architecture at the main entrance indicate that the site was designed to be open, not closed (Olausson 1997: 412f).

Funbo 65 and 191 are further located on an impediment that would have been an island in the middle of a large inlet during the LBA (*Fig. 15*). Having previously discussed the significance of islands in the Bronze Age landscape of Middle Sweden (see Section 6.3), this point seems worth highlighting as it could indicate that the island was already significant as a place for ritual and deposition before the hillfort was founded, exactly like Håga and the nearby Kvarnbo falls (Kaliff & Oestigaard 2018: 119). This idea appears contradicted, however, by the lack of visible activity in and around the structure, in contrast to the hillfort near Skeke. There are no recorded rock carvings, stone settings, or burnt-stone mounds around the structures, the lack of which would seem to indicate not only a lack of ritual activity, but activity altogether. This could change in the future if/when the area is surveyed more in depth. At present, there is

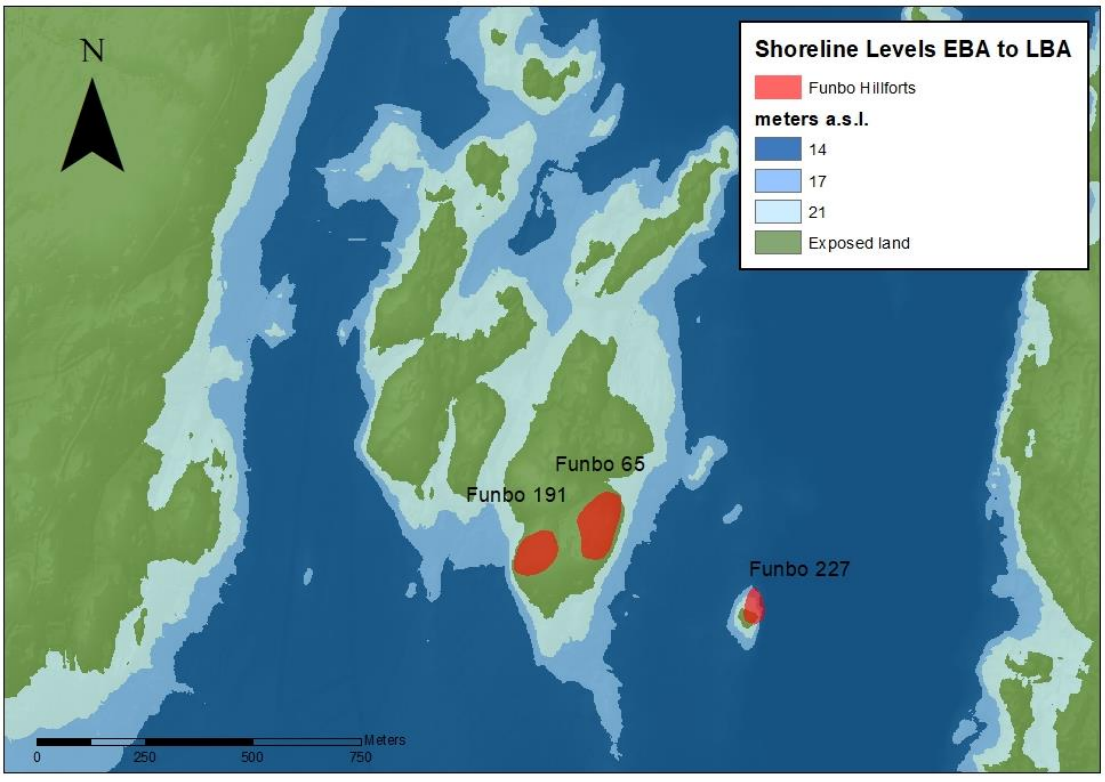

Figure 15. Reconstructed shoreline levels of the Funbo Lake from the EBA to LBA (c. 1500, 1000, and 500 BC) with the Funbo hillforts outlined in red (FMIS). Terrain map and elevation data by © Lantmäteriet.

not enough evidence to support the idea that the hillforts Funbo 65 and Funbo 191 served as a significant ritual place in the LBA landscape. One possible cause for this abandonment of the site is the receding shoreline which would have shrunk the inlet to a narrow width and left the two hillforts stranded in the open landscape, limiting their functionality in controlling passage through to the north and east. Estimates of the shoreline levels at 1000 BC compared to even 600-500 BC show the drastic change towards the end of the LBA (*Fig. 15*). The third rampart construction (Funbo 227) may have been a later addition during the Iron Age based on its elevation.

9.4. Long-term usage and geographical considerations

The assertion that Håga has a geographically advantageous position in the landscape of the Mälar Valley region is not a new revelation. This interpretive tradition began with the excavation of Håga mound by Almgren (1905) and has been used as a discussion point in many publications concerning the Bronze Age peoples of Middle Sweden (see among others Schönbäck 1959; Johnsen & Welinder 1993; Olausson 1995). Jonathan Lindström covers this topic at length in his summation of the development of Håga as a 'paramount chiefdom' with special authority within Lake Mälaren, highlighting the monopoly Håga could have exercised on the narrow Håga River valley as shorelines began to recede and the inlets and river systems in other areas dried up (Artursson, Karlenby & Larsson 2011: 511-552). Kaliff & Oestigaard (2018: 122f) characterized Håga as a 'regional hub' where different cultural traditions met and mixed from across the Baltic to the southern reaches of Denmark, Germany, and beyond. Håga is not unique in this aspect since transmission of ideas and prestige items required most Bronze Age settlements to have access to or be established near a waterway which allowed involvement in these networks.

Many sites additionally were built near inlets or rivers which allowed a certain amount of control on who or what could pass. As an example, Skeke had a similar advantage in the EBA that increased by the LBA as the inlets and waterways became concentrated and easily controlled, hence allowing for manipulation of goods, information, and travel between the north and south, and in later periods the east and west (Artursson, Kaliff & Larsson 2017: 21). This focus of Bronze Age societies on the 'bottle-necking' areas is thoroughly explored by Timothy Earle (2002) as a method to supply political economies, and seems equally possible to have happened along the Lilla Ullfjärden where the narrow channel would have passed several Bronze Age settlements on the way to Uppsala, including Draget and Apalle (*Fig. 16*); the site of Vi northeast of Apalle on the then island of Bålsta would have also been a part of the settlement complexes during this period and was strategically positioned on the northern shores of the small lagoon that was fed by Lilla Ullfjärden during the Bronze Age (Ullén *et al.* 2003: 74f). That settlement activity from the Late Mesolithic/Early Neolithic was discovered under the wall constructions at Draget should not be overlooked since this also points to a continued (though perhaps not uninterrupted) usage of the area where Draget was built (see *Table 4* for sequence/phases of activity as each site). However, this may be overreaching since the activity during the Bronze Age at Draget does not appear to be the same kind of settlement activity, but rather a specific cultic tradition that led Olausson (1997) to question the classification of the site as a hillfort.

The choice of geographical location for settlements sites is also subject to influence from cultic considerations as well as receding shoreline levels, the former often established in earlier periods due to the limitations of the latter. Most Bronze Age sites discussed have been associated to or are built near areas of emerging bedrock or raised outcrops in the terrain. In Hallunda, several stone settings have been built on top of the red sandstone bedrock or utilized small outcroppings as the centre stone during the first phases of construction. The settlement at Hågahagen had similar areas of emerging bedrock which were incorporated into some of the burnt-stone mounds in the area. Even Håga mound is built on a rise with several areas of emerging bedrock. Bedrock is also significant as a medium for cup-marks and other rock

Figure 16. Shoreline levels of Lilla Ullfjärden around 1000 BC (SGU). Terrain map and elevation data by © Lantmäteriet.

carvings, significant examples of which are found in Enköping and Bohuslän where cup-marks are overshadowed by a wealth of stylized figures and motifs carved into the stone near Bronze Age settlements. One of the patterns that has emerged in most of the areas discussed is the initial occupation of an impediment or high point in the landscape and subsequent phases of shifting settlement to follow the receding waterways, a phenomenon explored by Schönbäck (1959) at Broby and applied by later researchers to other areas around Lake Mälaren. Skeke and Håga are examples of areas which bear traces of graves from the EBA when both were still islands; in the case of Skeke, the settlement activity moved down from the impediment as arable land was exposed and the hilltop began to be used exclusively for graves and ritual activity. This pattern continued until the landscape was divided into three parts: the daily activity at the lowest elevation where land cultivation occurred; the liminal zone overlooking this area were cult houses, burnt-stone mounds, and special wells were used to facilitate cultic activity and ritual events; and the highest part of the impediment where the ancestral graves were visible from the lower parts of the landscape, or 'necropolis' (Artursson, Kaliff & Larsson 2017: 51ff). The ritual complex at Nibble closely resembles this pattern, and additionally reflects practices

at Håga and Skeke through the incorporation of a cultic house[20] structure in close relation to burnt-stone mounds and graves at a designated area for ritualized activities (Artursson, Karlenby & Larsson 2011: 196). Based on these recurring patterns and limitation of the landscape, it could be argued that the choice of building graves or monuments on visible hilltops was not a matter of choice by the transition to the LBA if an elite group wanted to establish ties to ancestral claims on an area. Only the highest points in the landscape were capable of being settled in the transition from the LN to the EBA and hence those are the areas where activity is found. This is worth keeping in mind when discussing the traditions of building monumental structures at visible points so that they can be seen from all points in the landscape.

Table 4. Chronology of events/dates for the discussed sites and associated hillforts.

Site	**EBA**		
	Period I	**Period II**	**Period III**
	1800-1500 BC	**1500-1300 BC**	**1300-1100 BC**
Håga	fr. 1800--Pit fires/gallery grave →	→	Cult house at Hågahagen is built (1300 BC) →
Predikstolen			Predikstolen is built (1200 BC) →
Broby			
Apalle			Early phase of activity (1200-1000 BC) →
Draget	Settlement activity from the LN→		Ritual complex/burials through part of the LBA with a pause in activity before Early Iron Age starts →
Hallunda			
Skeke	Traces of LN activity		Early burials/ activity starts (1200 BC) →

cont'd.	**LBA**		
	Period IV	**Period V**	**Period VI**
	1100-900 BC	**900-700 BC**	**700-500 BC**
Håga	Hågakyrkan is built and sounding stone is toppled (1100 BC) → Håga mound is built (1000 BC) →	The cult house at Hågahagen is active again simultaneously with Hågakyrkan (900-700 BC) →	
Predikstolen	→	Predikstolen is razed (800 BC)	
Broby	Settlement activity and ritual complex (including Broby-type cult houses) are established and in use through LBA→	→	→
Apalle	→	Later phase of activity (800-700 BC) →	
Draget	→	→	
Hallunda	Site 69 is active (1100-600 BC) → Site 13 is active (950 BC-cont'd. to IA) →	→	→
Skeke	Settlements moves down from impediment and ritual complex starts (1000 BC) →	→	cont'd. to IA →

[20] The cult houses at Nibble and Skeke are not the stone-foundation cult houses of the Broby type.

10. Source criticism

Early establishment of long-distance trade networks in south Scandinavia hinges in part on the presence of Baltic amber in Greek and Mycenaean burials. From the perspective of archaeologists in Scandinavia, this is a clear indication of not only the exchange of goods, but also the transfer of social and cultural ideas (Kristiansen & Suchowska-Ducke 2015: Bergerbrant & Wessman 2017). Helene Whittaker argues that this does not represent an established trade network, especially in light of the absence of Baltic amber in other elite burials with impressive bead assemblages (2017: 396ff). In addition to exchange of Baltic amber, Scandinavian archaeologists identify similarities in symbology and metal artefacts as evidence of contact and diffusion between the north and the south of Bronze Age Europe (Sjögren 2005: 151f). There are three factors that should be used to define an empirical analysis of diffusion between regions as defined by Sjögren: time and distance between the two comparative objects/images, whether the object/image has been available for public consumption during this time, and what the object/image *means*. She utilizes this framework in a comparison of imagery and iconography between the stone-slab carvings from inside Kivik and the Agia Triada sarcophagus from Crete (2005: 157ff). These considerations should also be applied to the Håga mound as it relates to the princely mound burials in Denmark during the EBA. Additionally, conclusions drawn in publications from late-twentieth century excavations must be balanced against the wealth of individual project reports from contract-archaeology firms and the latest surveys of archaeological sites updated in Fornsök. If not, we miss opportunities to contextualize older published material in the research produced during the twenty-first century.

Anna Noge touches on the development rate of Uppland versus Västmanland in her study of burnt-stone mounds around Lake Mälaren (2008: 14); this is an aspect of utilizing older sources of data and theory that should not be overlooked. The number of sites discovered in the survey and construction of public works like roads and shopping centres has the potential to shift the accepted interpretations of areas heaviest in artefacts and specific feature types, i.e. burnt-stone mounds. Even if the highest totals and ratios don't change on the large scale, artefact assemblages and catalogues are still used to interpret the level of Bronze Age activity in a given region. Discoveries over the course of the past few decades unknown to previous archaeologists would go unaccounted for in early research and need to be considered when making new interpretations or using primary sources such as Almgren (1905). This aspect has also been taken into consideration by Reidar Magnusson in his analysis of bronze casting activity in the LBA, in which he argues that the prevalence of bronze casting activity at elevated- and coastal areas more accurately represents the higher levels of preservation inherent in sites which are not vulnerable to cultivation and are further imprinted by subsequent activity in later periods. This data should not be interpreted as meaning that these are the only areas where bronze-casting activity was practiced, especially considering the highly degradable nature of bronze-casting debris (Magnusson 2017).

10.1. Archaeobotanical/palaeoecological considerations

In order to fully understand the function of Håga, understanding the agrarian practices which occurred at the settlements near and around the mound during the different periods of the Bronze Age is key, and can be achieved in part through pollen analysis to identify the species of crops that were cultivated here. Ideally, one method that could be used in this aim is that utilized by Hannon *et al.* (2008) in a case study examining the palaeoecological profiles of

Bronze Age mounds on the Bjäre peninsula. The research utilized pollen analysis from soil deposits both within and in the vicinity of monumental burial mounds to use in reconstructive landscape models in order to determine the percentage of forested landscape both before and after the mounds were built. While this does present a dilemma when one considers that soil samples were taken from the profiles within the mounds, it does represent a potential methodology for understanding the vegetation of the surrounding area and helping to determine the degree of deforestation as a result of agrarian practices. The case study offers relevant data of land usage during the Bronze Age in southern Scandinavia and during the construction of burial mounds. Results of the case study suggest a reduction in forested area by the beginning of the Bronze age and subsequent introduction of cereals. The abundance of charcoal found with the samples additionally indicates slash-and-burn techniques were in use at this time (Hannon *et al.* 2008). The case-study concludes that areas where mounds were built underwent a higher percentage of deforestation for land usage, especially in the areas immediately surrounding burial mounds themselves.

> The combination of pollen, charcoal and plant macrofossil studies from sediments and buried soils has proved to be a powerful tool for documenting the timing, location and scale of human impact on the landscape and linking small archaeological monuments to their surrounding landscapes. (Hannon *et al.* 2008: 631)

Bronze production and casting during the LBA came with significant implications concerning local deforestation practices, specifically the requirement of fuel for charcoal in the casting hearths. Magnusson suggests a preference for lime wood which may be supported by a decrease in lime wood pollen congruent with increased bronze production (2017: 146f). This could potentially correspond to a climatic shift between 1300 and 1200 BC, causing stresses on large population centres that may have contributed to the changing migration patterns and the push from the south by Urnfield cultures (Jantzen *et al.* 2011). Earle additionally touches on the changing pollen profiles in Thy which reflected a shift of coastal sand dunes inland and a decrease in arable grazing land for cattle (2002: 320). If deforestation was compounded by climatic change, which affected the availability of fuel necessary for the production of metal objects such as swords, Bronze Age cultures in south Scandinavia may have looked northward to the Mälar Valley region for the supply of fuel, especially if trade networks on the mainland were already disrupted by increased conflict. Additionally, the continued production of bronze at both Apalle and Hallunda during a period when southern Scandinavia was showing a marked decrease in metal availability could support that the Mälar Valley region was not affected by the same delimitations of fuel shortage. This has also been considered as an avenue of further research by Ullén (1995), who says:

> *Ett förslag till arkeologisk tolkning av pollenproverna från bronsåldern i denna del av Uppland, är därför att den ekologiska stressen inte varit lika stark under yngre bronsåldern som längre söderut.* (Ullén 1995: 24)[21]

10.2. Methodological considerations

This thesis has attempted to tackle a discussion that spans several decades and multiple theories of archaeological interpretation as it pertains to ritual activity in the Mälar Valley region and Scandinavia in general during the Bronze Age. The reason for this attempt to cover so many aspects of ritual activity can be found in the previous section on defining ritual terminology (see Sections 6.1, 6.2, & 6.3) in which there was a clearly expressed difficulty in assigning cultic value to anything (e.g. object, structure, place) in the archaeological record. The difficulty of defining what 'ritual' means makes it almost impossible to categorize what is ritual and what is not, and for those categories which we manage to create with some confidence, there are

[21] English translation: [One theory for the interpretation of pollen samples in this part of Uppland is because the ecological stresses have not been as strong during the Late Bronze Age compared to further south.]

always exceptions to the rule. This thesis has attempted to compensate for that by building an argument for a ritual complex at the aforementioned sites not on one or two examples of cultic activity but on several. In order to understand what makes Håga unique it was necessary to look at the broad scope and not through the narrowed lens, though it is my hope that more focused research can be pursued in the future. If nothing else, it is clear that archaeologists have only just scratched the surface of the Bronze Age ideology guiding ritual practices in the Mälar Valley region.

11. Discussion and conclusion

Archaeological theory relies entirely on the availability of material to interpret. This was the case when Almgren began excavations on the Håga mound in 1902 and it is still the case in present day. Despite our many technological advancements, we know very little about the sites that are visible in the landscape until we are able to excavate and investigate the settlements which are invisible to us. These are the patchwork clues to build a picture of the Bronze Age in the Mälar Valley region, often uncovered by luck and development rather than the pursuit of research goals. Apalle, Skeke, and Hallunda are perfect examples of this process, and the information we glean from these sites can alter or contradict the assertions and theories of previous generations of archaeologists. It cannot be overlooked that while the Håga mound and the hillfort Predikstolen are constructions of significant interest for archaeologists, the surrounding area today is relatively undeveloped—in comparison to Skeke, Apalle, and Hallunda—and hence there is much less information to draw our conclusions from. It should also be noted that despite two phases of excavation at Predikstolen, only 200 m² of a 4.5 ha area in the main enclosure have been explored, 36 m² of which was dedicated to the ramparts and none to the annex fort in the southwest which covers an additional 1.5 ha (Olausson 1995: 127). The sheer amount of unexplored area inside the hillfort leaves an enormous question-mark as to what other activities happened inside this enclosure from Periods III-V.

Was Håga a powerful ritual centre? Based on the evidence presented, it seems a safe assertion that events of ritual importance took place here, not least of which was the construction of Håga mound. And though Håga was certainly important for settlements in the surrounding regions, it by no means prevented ritual structures from playing a role in the landscape of the sites discussed here. All the settlements used for comparison have graves and associated components of ritual activity that suggest local ritual was commonplace; Broby especially seems to represent a ritual place in the landscape (though this may have been in connection with Håga due to the proximity of the site). One of the most notable examples of a ritual feature at the Apalle site is the well, in which human and animal remains were deposited in a singular event. The human remains (two cranial fragments, a femur, and a radius) have been interpreted by Ullén *et al.* (2003: 239) as a ritual offering after the fragments had been in use by the local community as "relics" for an unspecified period of time, an assertion based on similar practices in other parts of Europe during the Bronze Age. If we consider the human femur in the Håga mound that predates the structure by more than a century, it is plausible that this may also have been a circulating 'relic' that was deposited with a similar idea in mind as compared to the bones in the Apalle well.

Control of the waterway through the use of Predikstolen was also not an aspect exclusive to Håga, and though the hillforts in proximity to the other sites have not been excavated, future investigations may reveal a connection formerly missed but serving a similar purpose as at Håga. East of Apalle, the walled enclosure Draget shows indications of an extensive cultic tradition through the Bronze Age but after which did not resume activity until the EIA. This interpretation bears a striking resemblance to perceptions of Predikstolen by researchers today but has not been included in discussions concerning the Bronze Age networks in Lake Mälaren or potential importance to nearby settlement like Apalle except by Olausson (1997: 412). A possible point of contention to the connection between this hillfort and Apalle is that the structure is situated on the *opposite* bank of the strait, but as has already been established, water was an essential medium for travel in Bronze Age periods. It is unlikely that travelling to the opposite bank would have barred settlements like Apalle from using Draget for ceremonies and large cultic events. The potential ritual importance of this site also raises questions as to the

extent of ritual activity that can be seen to have been performed at or near the Apalle settlement.

The factor which seems to separate Håga from the other sites discussed here is the continued construction of graves, deliberate depositions in burnt-stone mounds, cult houses, and burial mounds which indicate that ritual lie at the heart of what role Håga performed in the region as a whole. The cult houses at Håga tell of waxing and waning phases of activity that could be interpreted as a revival of importance for ritual affairs corresponding with the emergence of a local elite, i.e. the individual buried in Håga mound, not to mention a change in ideology as practices at the cult houses began to differ from prior periods. Victor (2002: 178) describes the phases of activity in correlation to the mound and to the events at Predikstolen during the Bronze Age. According to Victor, this reflects a transition of evolving cultic traditions and ideological changes from the EBA to the LBA. Concerning regional variation, while this thesis does not have the scope to cover further nuances, future research may benefit from an examination of regional/functional differences in construction of burnt-stone mounds and stone settings, specifically the practice of kerbstone rings with a flat side facing outward versus inward, examples of both having been noted in the mounds discussed here. The categorization of burnt-stone mounds utilized by Larsson (2014) would be very useful for such a project.

This brings us circling back to the Håga mound and the reason it was constructed where it is, with an incredible wealth of gold that is not seen at Apalle, Hallunda, Skeke, or Broby during the same period. The area was maintained and added to over several centuries during the Bronze Age, but what kinds of services would such a place provide to the surrounding settlements or the industrial complexes of Hallunda and Apalle? Ling & Cornell offer a possible theoretical perspective on the issue, wherein the procedures meant to prevent unfavourable mishaps, observed before and after long-distance trading voyages, were performed at Håga (2017: 29f). In this interpretation, Håga was responsible for ensuring safe passage of trading and raiding vessels by facilitating "ritual performances on or in connection with ships" (Ling & Cornell 2017: 30).

Due to the southern influence apparent in both the burial method and the artefacts found in Håga mound, it is important to consider what impact southern contacts may have had on the social and ritual institutions of the Håga complex. As mound burials represent a significant percentage of the EBA population in Southern Scandinavia, Johansen, Laursen, & Holst (2003) re-examines the 'chiefdom model' as it relates to the social and spatial organization of EBA societies. While the analogy to Håga is problematic due to the different region and periods (Montelius I-III), it nevertheless offers possible scenarios in how the settlement patterns around Håga may have been distributed. In the examination of the barrow lines in central and southern Jutland, an interdependent relationship between the construction of barrows and the development of roads during the EBA is drawn (Johansen, Laursen, & Holst 2003). This analysis could potentially be applied to the waterways of the LBA throughout Lake Mälaren wherein the water routes navigable by boat represent a parallel to the infrastructure of building roads. The methodology used also makes use of an analysis of artefact assemblages in relation to the roads/barrow lines that can be applied to the Bronze Age landscape of the Mälar Valley region.

The landscape and archaeological knowledge of the Mälar Valley region is constantly changing. Just as it has been noted by the researchers mentioned previously here, it is clear that very little is available to archaeologists until large-scale development projects unearth significant finds of settlement activity. Until then we are mostly reliant on the same methods of identifying prehistoric activity as our forebears: monumental constructions or visible features of the landscape. An in-depth study of much broader scope would be able to do a comparison and analysis of all the Bronze Age sites, both EBA and LBA, in the Mälar Valley region to track the increasing presence of bronze production, fortification, increased ritual activity, and weapon deposition in graves, both in geographical and chronological terms. This thesis is not large enough to explore each of these aspects in turn; however, they should continue to be discussed in further works to continue building a thorough understanding of the Mälar Valley region through all periods of the Scandinavian Bronze Age.

The Håga area held a significant role from the EBA well into the Iron Age despite changing

shoreline levels, fluctuating levels of conflict which disrupted networks and alliances, and even the razing of the hillfort Predikstolen around 800 BC. While increasing levels of violence are visible in the archaeological record both prior to the end of the EBA and in Periods IV and later, there appears to be a gap in the level of violence as seen around Lake Mälaren for the span of a few centuries. Based on this brief period of stability in the Mälar Valley region, Håga was able to evolve into a power complex with a specific role of ritual leadership in this landscape. That this was specifically a ritual elite harkens back to the examples of ritual versus warrior chieftains from the EBA in south Scandinavia and is further supported by Ullén & Drenzel's re-examination of the sword found in Håga mound—or more specifically, a lack of usage wear on the sword blade (2018). This in combination with the accumulation of wealth seen in the amount of gold, the artefacts of ritual function such as the razors, the use of an oak coffin burial typically seen in the EBA in Denmark and Skåne, along with the myriad of other evidence previously presented, all point towards a power complex built on the importance of Håga's role in the ritual landscape of the Mälar Valley region. Integral to the establishment of this complex was the brief period of stability in the Mälar Valley region which allowed for the development of this ritual elite while other regions in south Scandinavia were facing turbulent changes and increasing violence. Once these disruptions reached Middle Sweden, the stability which enabled the construction of a monument like Håga mound was affected, and the power complex dissolved or re-established elsewhere. However, the evidence and arguments here do not necessarily support a ritual leadership which had any form of monopoly on ritual events and ceremonies around the Mälar Valley region. It is more likely that every chiefdom around Lake Mälaren had strong local ritual traditions and cult structures at or near the individual settlements, and that the central location of Håga between the south/southwest and north and east played a larger role in determining its importance in the region than any amount of gold or previously established significance.

Bibliography

Almgren, O. 1905. *"Kung Björns hög" och andra fornlämningar vid Håga.* Kungl. Vitterhets Historie och Antikvitens Akademien. No. 1. Stockholm: K.L. Beckmans Boktryckeri.

Artursson, M., Kaliff, A., & Larsson, F. (eds.) 2017. *Rasbobygden i ett långtidsperspektiv: 1100 BC till 1100 AD - kontinuitet och förändring*. Occasional Papers in Archaeology 62: Uppsala.

Artursson, M., Karlenby, L., & Larsson, F. (eds.) 2011. *Nibble: En bronsåldersmiljö i Uppland: Särskild undersökning, 2007: E18 sträckan Sagån-Enköping: Uppland, Tillinge socken, Tillinge-Nibble 1:9 & Tillinge-Mälby 5:1*: Riksantikvarieämbetet. [Sverige]: Riksantikvariämbetets arkeologiska uppdragsverksamhet.

Bell, C. 2009. *Ritual: Perspectives and Dimensions*. New York: Oxford University Press.

Bergerbrant, S. 2007. *Bronze Age Identities: Costume, Conflict and Contact in Northern Europe 1600-1300 BC.* Diss. Stockholm: Stockholm University.

Bergerbrant, S. & Wessman, A. (eds.) 2017. *New perspectives on the bronze age: Proceedings of the 13th Nordic Bronze Age Symposium held in Gothenburg 9th to 13th June 2015.* Oxford: Archaeopress Publishing.

Berggren, Å. & Nilsson Stutz, L. 2010. From spectator to critic and participant: a new role for archaeology and ritual studies. *Journal of Social Archaeology* 10: 2, 171-197.

Bunnefeld, J-H. 2018. The Chief and his sword? Some thoughts on the swordbearer's rank in the early Nordic Bronze Age. In: Horn, C. & Kristiansen, K. (eds.) *Warfare in Bronze Age Society*. New York: Cambridge University Press, 198-212.

Earle, T. 2002. *Bronze Age economics: the beginnings of political economies*. Boulder, Colorado: Westview Press.

Earle, T. & Kristiansen, K. (eds.) 2010. *Organizing Bronze Age Societies: The Mediterranean, Central Europe, and Scandinavia Compared*. Cambridge: Cambridge University Press.

Eriksson, T. 2005a. Dekorerad keramik i Mälardalen. In: Goldhahn, J. (ed.) *Mellan sten och järn: [report from the 9th Nordic Bronze Age Symposium, Gothenburg 2003-10-09/12]*. D. 1. Gothenburg: Department of Archaeology, Gothenburg University: 369-383.

Eriksson, T. 2005b. Human bones in the Bronze Age of Uppland. In: Artelius, T. & Svanberg, F. (eds.) *Dealing with the dead: archaeological perspectives on prehistoric Scandinavian burial ritual*. Stockholm: Riksantikvarieämbetet: 237-260.

Forsberg, L. & Hjärthner-Holdar, E. 1985. Ett "titthål" med mersmak – vårens seminariegrävning i Håga. *Fjölnir* 4: 3. Uppsala

Hannon, G.E., Bradshaw, R.H.W., Nord, J., & Gustafsson, M. 2008. The Bronze Age landscape of the Bjäre peninsula, southern Sweden, and its relationship to burial mounds. *Journal of Archaeological Science* 35: 623-632.

Hjärthner-Holdar, E. (ed.) 2014. Gjutning och smide på Skeke under bronsålder och folkvandringstid. Arkeometallurgiska analyser av metall, slagg och teknisk keramik samt rekonstruktion av ett folkvandringstida gjuteri. *Riksantikvarieämbetet*. UV GAL Rapport 2011: 7.

Hjärthner-Holdar, E., Eriksson, T., & Östling, A. (eds.) 2008. *Mellan himmel och jord:*

Ryssgärdet, en guldskrimande bronsåldersmiljö i centrala Uppland. Uppsala: Riksantikvarieämbetet, UV Gal.

Horn, C. 2016. Nothing to lose: Waterborne Raiding in Southern Scandinavia. In: Melheim, L., Glorstad, H., & Glorstad, Z.T. (eds.) *Comparative Perspectives on Past Colonisation, Maritime Interaction and Cultural Integration.* Sheffield: Equinox Publishing Ltd., 109-127.

Horn, C. 2018. Warfare vs. Exchange? Thoughts on an integrative approach. In: Horn, C. & Kristiansen, K. (eds.) *Warfare in Bronze Age Society*. New York: Cambridge University Press, 47-60.

Iversen, R. 2017. Big men and small chiefs: the creation of Bronze Age societies. *Open Archaeology* 3: 361-375.

Jaanusson, H. 1981. *Hallunda: A Study of Pottery from a Late Bronze Age Settlement in Central Sweden*. The Museum of National Antiquities. Stockholm. Studies 1.

Jaanusson, H., Ekman, J., Lahtiperä, P., Nordström, H.Å., & Robertsson, A.M. *et al*. 1988. *Fornlämningarna 13 och 69: Hallunda, Botkyrka socken, Södermanland: arkeologisk undersökning 1969-71. Del IV: Naturvetenskapliga rapporter och analyser.* Stockholm: Riksantikvarieämbetet Uppdragsverksamheten 1987: 4.

Jaanusson, H., Löfstrand, L. & Vahlne, G. 1978. *Fornlämning 69: boplats, Hallunda, Botkyrka sn, Södermanland. Del III: arkeologisk undersökning 1969-71*. Stockholm: Riksantikvarieämbetet Uppdragsverksamheten 1978: 11.

Jaanusson, H. & Vahlne, G. 1975a. *Arkeologisk undersökning 1969-71: Hallunda, Botkyrka sn, Södermanland. Del I: fornlämning 13, gravfält*. Stockholm: Riksantikvarieämbetet Uppdragsverksamheten 1975: B23.

Jaanusson, H. & Vahlne, G. 1975b. *Arkeologisk undersökning 1969-71: Hallunda, Botkyrka sn, Södermanland. Del II: fornlämning 13, boplats*. Stockholm: Riksantikvarieämbetet Uppdragsverksamheten 1975: B64.

Jantzen, D., Brinker, U., Orschiedt, J., Heinemeier, J. & Piek, J. *et al*. 2011. A Bronze Age battlefield? Weapons and trauma in the Tollense -Valley, north-eastern Germany. *Antiquity* 85: 417-433.

Johansen, K.L., Laursen, S.T., & Holst, M.K. 2003. Spatial patterns of social organization in the Early Bronze Age of South Scandinavia. *Journal of Anthropological Archaeology* 23: 33-55.

Johnsen, B. & Welinder, S. 1993. Hågahögen. In: (eds) Blent, K., Svalin, E., & Flygare, I.A. *Kärnhuset i riksäpplet.* Upplands fornminnesforening och hembygdsförbunds årsbok. Uppland: 209-245.

Kaliff, A. 1997. Gravbyggnader och altare – arkeologiska spår av bronsålderns katologiska föreställningar. *Fornvännen* 92: 1, 1-18.

Kaliff, A. & Oestigaard, T. 2013. *Kremation och kosmologi – en komparativ arkeologisk introduction.* Occasional Papers in Archaeology 56. Uppsala: Uppsala University.

Kaliff, A. & Oestigaard, T. 2018. *Bronze Age Håga and the Viking King Björn: A history of interpretation and documentation from AD 818 to 2018.* Occasional Papers in Archaeology 66. Uppsala: Uppsala University.

Kristiansen, K. 1987. Centre and periphery in Bronze Age Scandinavia. In: Rowlands, M.J., Larsen, M., & Kristiansen, K. (eds.) *Centre and periphery in the ancient world.* Cambridge: Cambridge University Press, 74-85.

Kristiansen, K. 2002. The tale of the sword – swords and swordfighters in Bronze Age Europe. *Oxford Journal of Archaeology* 21: 4: 319-332.

Kristiansen, K. 2005. Cosmology and consumption in the Bronze Age. In: Goldhahn, J. (ed.) *Mellan sten och järn: [report from the 9th Nordic Bronze Age Symposium, Gothenburg 2003-10-09/12]*. D. 1. Gothenburg: Department of Archaeology, Gothenburg University: 135-149.

Kristiansen, K. 2011. Constructing social and cultural identities in the Bronze Age. In: Roberts, B.W. & Linden, M.V. (eds.) *Investigating Archaeological Cultures: Material, Culture, Variability, and Transmission*. New York: Springer, 201-210.

Kristiansen, K. & Larsson, T. 2005. *The Rise of Bronze Age Society: Travels, Transmissions, and Transformations.* New York: Cambridge University Press.

Kristiansen, K. & Suchowska-Ducke, P. 2015. Connected Histories: the Dynamics of Bronze Age Interaction and Trade 1500-1100 BC. *Proceedings of the Prehistoric Society* 81: 361-392.

Larsson, F. (ed.) 2014. *Skeke—gudar, människor och gjutare. Rituella komplex från bronsålder och äldre järnålder samt en höjdbosättning från yngre järnålder med gjuteriverkstad. Utbyggnad av väg 288, sträckan Jälla—Hov. Arkeologisk undersökning. Uppsala län; Uppland; Uppsala kommun; Rasbo socken; Skeke 1:3, 2:6; Rasbo 55:1–2, 654, 655, 669, 695, 696, 697, 626:1–627:1, 682–688 samt delar av Rasbo 628:1 och 629:1*. Riksantikvarieämbetet. UV Rapport 2014: 53.

Ling, J. & Cornell, P. 2017. Violence, warriors, and rock art in Bronze Age Scandinavia. In: Chacon, R. & Mendoza, R. (eds.) *Feast, Famine, or Fighting? Multiple pathways to social complexity.* Springer International Publishing (e-book): 15-34.

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

Magnusson, R. 2017. Bronze casting specialists during the Late Bronze Age in the Lake Mälaren region of Middle Sweden. In: Bergerbrant, S. & Wessman, A. (eds.) *New perspectives on the bronze age: Proceedings of the 13th Nordic Bronze Age Symposium held in Gothenburg 9th to 13th June 2015.* Oxford: Archaeopress Publishing, 143-152.

Noge, A-S. 2008. *Skärvstenshögar med människoben i norra Mälarområdet*. Magister thesis in Archaeology. Department for Archaeology and Ancient History. Uppsala University: Uppsala.

Nørgaard, H.W. 2017. Bronze Age metal workshops in Denmark between 1500-1300 BC: elite-controlled craft on Zealand. In: Bergerbrant, S. & Wessman, A. (eds.) *New perspectives on the bronze age: Proceedings of the 13th Nordic Bronze Age Symposium held in Gothenburg 9th to 13th June 2015.* Oxford: Archaeopress Publishing, 127-142.

Olausson, M. 1995. *Det inneslutna rummet: om kultiska hägnader, fornborgar och befästa gårdar i Uppland från 1300 f Kr till Kristi födelse*. Diss. Stockholm University.

Olausson, M. 1997. Arkitektur och social praktik: Diskussion utifrån undersökningar av en uppländsk vallanläggning från senneolitikum och bronsålder. In: Åkerlund, A., Bergh, S., Nordbladh, J., & Taffinder, J. (eds.) *Till Gunborg: Arkeologiska Samtal.* Stockholm Archaeological Reports Nr. 33. Stockholm University.

Ojala, K. 2016. *I bronsålders gränsland: Uppland och frågan om östliga kontaker*. Occasional Papers in Archaeology 61. Uppsala: Uppsala University.

Rundkvist, M. 1994. Skärvstenshögar med gravgömmor i östligaste Mälarområdet. *Fornvännen* 89: 2, 83-89.

Schönbäck, B. 1952. Bronsåldershus i Uppland. *TOR* Vol. 2: 23-45.

Schönbäck, B. 1959. Bronsåldersbygd i Mälarområdet. *TOR* Vol. 5: 52-107.

Sjögren, L. 2005. Minoiskt i norr? Om kulturella influenser från Kreta till Skandinavien. In:

Goldhahn, J. (ed.) *Mellan sten och järn: [report from the 9th Nordic Bronze Age Symposium, Gothenburg 2003-10-09/12]*. D. 1. Gothenburg: Department of Archaeology, Gothenburg University, 151-166.

Szentmiklosi, A., Heeb., B.S., Heeb, J., Harding, A., & Krause, R. *et al*. 2011. Corneşti - Iarcuri—a Bronze Age town in the Romanian Banat? *Antiquity* 85: 819-838.

Thedéen, S. 2004. *Gränser i livet – gränser i landskapet: Generationsrelationer och rituella praktiker i södermanländska bronsålderslandskap.* Diss. Stockholm University.

Thedéen, S. 2005. Till frågan om hövdingadömet under bronsåldern. In: Goldhahn, J. (ed.) *Mellan sten och järn: [report from the 9th Nordic Bronze Age Symposium, Gothenburg 2003-10-09/12]*. D. 1. Gothenburg: Department of Archaeology, Gothenburg University, 385-401.

Thrane, H. 2013. Scandinavia. In: Fokkens, H. & Harding, A. (eds.) *The Oxford Handbook of the European Bronze Age*. Oxford: Oxford University Press, 746-766.

Ullén, I. (ed.) 1995. *Om brunnar – arkeologiska och botaniska studier på Håbolandet.* Stockholm: Avdelning för arkeologiska undersökningar, Riksantikvariäembetet.

Ullén, I. & Drenzel, L. 2018. Återbesök i Håga högen: nya analys resultat. *Fornvännen* 113. Stockholm.

Ullén, I., Ericson, P., Eriksson, T., Kjellberg, A-S. & Lindholm, P. *et al*. 2003. *Bronsåldersboplatsen vid Apalle i Uppland.* Arkeologi på väg – undersökningar för E18. Riksantikvariämbetet. UV Uppsala, rapport 1997: 64. Uppsala.

Vandkilde, H. 2012. Warfare in Northern European Bronze Age Societies. In: Ralph, S. (ed.) *Archaeology of Violence: Interdisciplinary Approaches.* New York: New York State University Press, 37-62.

Victor, H. 2002. *Med graven som granne: om bronsålderns kulthus = The grave as a neighbor: on Bronze Age ritual houses*. Diss. Uppsala University.

Wehlin, J. 2013. *Östersjöns skeppssättningar: monument och mötesplatser under yngre bronsålder*. Diss. Gothenburg University.

Whittaker, H. 2017. The North from the Perspective of the Greek Mainland in the Late Bronze Age. In: Bergerbrant, S. & Wessman, A. (eds.) *New perspectives on the bronze age: Proceedings of the 13th Nordic Bronze Age Symposium held in Gothenburg 9th to 13th June 2015*. Oxford: Archaeopress Publishing, 395-402.

Web resources[22]

Fornsök (FMIS). 2020. Riksantikvarieämbetets digitala fornlämningsregister. https://app.raa.se/open/fornsok/

Geological Survey of Sweden (SGU). 2020. Kartgenerator. http://apps.sgu.se/kartgenerator/maporder_sv.html

Lantmäteriet. 2020. Geodata Extraction Tool. https://zeus.slu.se/get/?drop=

Images

Figure 4: Hallgren, Sören. 1996. SHM 11915: Kung Björns hög: Föremål 108803. http://www.historiska.se/data/?foremal=108803

[22] All websites accessed multiple times from 2019-09-01 through 2020-06-05.

Appendix 1: Burnt-stone mounds and stone settings catalogue

Site	Feature type	Name/ #	Bronze finds	Bronze waste	Human remains	Kerb-stone ring	Central stone	Hearth	Notes	Reference
Apalle	Burnt-stone mound	A1577			UBB*	x			Unburnt bone fragments (fibula, cranium) found in the edge of the mound.	Ullén et al. 2003
Apalle	Burnt-stone mound	A480				x				Ullén et al. 2003
Apalle	Burnt-stone setting*	A4262				x		x	Potentially originally a burnt-stone mound, later used as a stone setting; built directly on bedrock.	Ullén et al. 2003
Broby	Stone setting	(A)34	awl, fragment	*	BB, UBB			x	Cremation grave 34B found 2m outside w/fragments of moulds	Ojala 2016: Appendix 1; Schönbäck 1959
Broby	Stone setting	(A)38	fragment of razor, bit of awl shaft, small ring of flat, spiralled thread	MF	BB			x	No central grave distinguished, interpretation of the feature uncertain.	Ojala 2016: Appendix 1; Schönbäck 1959
Broby	Burnt-stone mound	(A)42			BB, UBB					Ojala 2016: Appendix 1
Broby	Stone setting	(A)43	bent bronze bit		BB, possibly UBB	x				Ojala 2016: Appendix 1; Schönbäck 1959
Broby	Stone setting	(A)51	costume pin (*dräktnål)*	CF	BB			x	Interpreted by Schönbäck as a bronze smelting pit	Ojala 2016: Appendix 1; Schönbäck 1959
Broby	Stone setting	(A)53	single-edged knife, bronze bit	CF, MF	BB, UBB			x	Interpreted by Schönbäck as a bronze smelting pit	Ojala 2016: Appendix 1; Schönbäck 1959

Broby	Burnt-stone mound	A2	comb, double button, finger ring, armband, disk-headed pin, razor fragment, small ring, fragment	BS	BB	x				Ojala 2016: Appendix 1
Broby	Burnt-stone mound	A3			*				Two human bone (fragments), one from a looting pit and the other of uncertain origin	Ojala 2016: Appendix 1
Broby	Burnt-stone mound	A20	fragmented wire, large blade*		BB	x			Bronze blade may be from a razor, saw, or sickle	Ojala 2016: Appendix 1
Broby	Stone setting	A29			BB					Ojala 2016: Appendix 1
Broby	Stone circle	A44	bronze bit	BS, CF, MF	BB	*			Lower edge ring	Ojala 2016: Appendix 1
Broby	Stone setting	A56	bowl-headed pin, fragment, small plate		BB		x			Ojala 2016: Appendix 1
Broby	Stone setting	A57	buckle nail		BB, UBB	x				Ojala 2016: Appendix 1
Broby	Stone setting*	A58				x	x		Considered to be a stone ring	Ojala 2016: Appendix 1
Broby	Burnt-stone mound	A60								Ojala 2016: Appendix 1
Håga-hagen	Burnt-stone mound	368		*		x			Victor (2002:158) states both crucible- and casting mould fragments were found based on oral communication with Hjärthner-Holdar.	Forsberg & Hjärthner-Holdar 1985; Victor 2002
Håga-hagen	Burnt-stone mound	366:3		MF, CF	BB	x			Disturbed by construction of a mill, included a stone-cist burial from earlier period (II-III).	Victor 2002; Noge 2008
Håga-hagen	Burnt-stone mound	366:1	spiral-headed pin w/ back-bent shaft, 2 razors		BB				Two erected stones as grave markers.	Victor 2002; Noge 2008

Hallunda (S13)	Stone setting	13: A1	bronze ring		BB	x	x			Jaanusson & Vahlne 1975: Part I
Hallunda (S13)	Stone setting*	A2		CF		x			Classified as a round stone setting with a fire-split stone filling; three additional outer stone circles created an incomplete spiral	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A3	swan-neck pin with rosette head			x	x		Urn-grave; cup-marked stone slab in the kerbstone ring	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A4	tutulus pin, ring		BB	x	x		Bone layer under red sandstone slab	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A6			BB		x		A '*jordfast*' block in the NE edge of the setting.	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A7	bit of bronze	MF, BS	BB		*		Built directly on bedrock	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A8			BB	x			Built directly on bedrock	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A10			BB	x				Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A11			BB	x				Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A12			BB	x				Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A14		BS	BB	x				Jaanusson & Vahlne 1975: Part I; Part IV: 1988

Hallunda (S13)	Stone setting	A18	fragmented needle		BB		*		No centre block, but the grave cache was concentrated in a crevice in the bedrock the stone setting was built on	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A19			BB	x				Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A20			BB	x	x			Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A21			BB	x	x			Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A22			BB	x	x			Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting*	A27			BB	x	x		Rectangular stone setting with a rounded corner	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A29			BB	x	x*		Emerging bedrock as centre block	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A33			BB	x	x			Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S13)	Stone setting	A34		MF	*	x	*		Built directly on bedrock; burnt bones unable to be determined as human remains	Jaanusson & Vahlne 1975: Part I; Part IV: 1988
Hallunda (S69)	Burnt-stone mound	69: A1	comb fragments*	MF		x	x	x	Urn-grave with secondary IA graves; comb fragments found in turf layers, not in the mound proper	Jaanusson, Löfstrand & Vahlne 1978: Part III; Part IV: 1988

Hallunda (S69)	Stone setting	A25	arrowhead, awl, fragmented awl, fragment with round outer edge			*			8 kerbstones	Jaanusson, Löfstrand & Vahlne 1978: Part III; Part IV: 1988
Hallunda (S69)	Stone setting	A26		CF			x			Jaanusson, Löfstrand & Vahlne 1978: Part III; Part IV: 1988
Hallunda (S69)	Stone setting	A27		CF			x			Jaanusson, Löfstrand & Vahlne 1978: Part III; Part IV: 1988
Hallunda (S69)	Stone setting	A28		CF, MF					Covered a round setting and a triangular setting with a post-hole like pit in the centre. No grave cache	Jaanusson, Löfstrand & Vahlne 1978: Part III; Part IV: 1988
Hallunda (S69)	Burnt-stone piling	A30	blade (knife), needle, bronze fragment							Jaanusson, Löfstrand & Vahlne 1978: Part III; Part IV: 1988
Hallunda (S69)	Stone packing	A97		MF						Jaanusson, Löfstrand & Vahlne 1978: Part III; Part IV: 1988
Hallunda (S69)	Stone setting	A164	awl				x		Awl was found in a pit lined with stones near one of the centre blocks.	Jaanusson, Löfstrand & Vahlne 1978: Part III; Part IV: 1988
Skeke	Stone setting*	A41		MF	BB	x	x	x	Classified as '*mittblocksgrav*'; urn-grave	Larsson 2014: Bilaga 19
Skeke	Stone setting*	A42		MF	BB	x	x	x	*Mittblocksgrav*; built over early activity 13-1200BC; MF from neck ring in 3 contexts	Larsson 2014: Bilaga 19
Skeke	Stone setting	A43		MF	BB	x				Larsson 2014: Bilaga 19
Skeke	Stone setting*	A45		CF	BB		x		*Mittblocksgrav*	Larsson 2014: Bilaga 19

Skeke	Stone setting*	A49			BB	x	x	x	Stone-ship setting?	Larsson 2014: Bilaga 19
Skeke	Stone setting	A50	bowl-headed pin	*	BB	*			Traces of a kerbstone ring; pin from Period V-VI; some '*gjutformslera*'	Larsson 2014: Bilaga 19
Skeke	Stone setting	A53		*	BB		x		*'gjutformslera*'	Larsson 2014: Bilaga 19
Skeke		A63		MF	BB	x	x	x		Larsson 2014: Bilaga 19
Skeke	Stone setting	A72			BB		x*		Cup-stones on the centre block	Larsson 2014: Bilaga 19
Skeke	Burnt-stone mound	A81						x		Larsson 2014: Bilaga 19
Skeke	Burnt-stone mound	A82	unidentified artefact	CF, MF	BB	x	x	x	Traces of a bronze furnace	Larsson 2014: Bilaga 19
Skeke	Burnt-stone grave	A83	armband	CF	BB	x	x	x	Successive phases of use as cremation pit, grave, ritual and offer space including a cult house (H19) attachment.	Larsson 2014: Bilaga 19
Skeke	Stone setting/ cairn	A86			BB	x*			Traces of a kerbstone ring.	Larsson 2014: Bilaga 19
Skeke	Stone setting	A87			BB	x				Larsson 2014: Bilaga 19

*Refer to notes column
BB=Burnt bones
UBB=Unburnt bones
CF=Crucible fragments
MF=Mould fragments
BS=Bronze smelt

Appendix 2: Pictures related to the Håga area

Figure 17. Håga mound as seen from S, with the middle section of Hågakyrkan in the foreground. Photo taken by author.

Figure 18. The view from N-NW taken from the top of Håga mound facing S-SE towards Hågakyrkan, with the stone frame visible at the crest of the hill. Photo taken by author.

Figure 19. Hågakyrkan seen from the E-NE end of the cult house. Photo taken by author.

Figure 20. Hågakyrkan seen from the W-SW end of the cult house. Photo taken by author.

Figure 21. View of Håga mound as seen from Hågahagen, facing NE. Photo taken by author.

Figure 22. Additional photo of the remnants of the cult house at Hågahagen taken from S-SE. Photo taken by author.