

The Sea and Bronze Age transformations

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Abstract *Along the western Norwegian coast, in the northwestern region of the Nordic Late Neolithic and Bronze Age (2350-500 BCE) there is cultural homogeneity but variable expressions of political hierarchy. Although new ideological institutions, technology (e.g. metallurgy and boat building), intensified agro-pastoral farming and maritime travel were introduced throughout the region as of 2350 BCE, concentrations of expressions of Bronze Age elites are intermittently found along the coast. Four regions- Lista, Jæren, Karmøy and Sunnmøre - are examined in an exploration of the establishment and early role of maritime practices in this Nordic region. It is argued that the expressions of power and material wealth concentrated to these four regions is based on the control of bottlenecks, channels, portages and harbors along important maritime routes of travel. As such this article is a study of prehistoric travel, sources of power and maritime landscapes in the Late Neolithic and Early Bronze Age of Norway.*

The Nordic Bronze Age (1700-500 BCE) is an exceptionally vibrant cultural and social expression in European prehistory. Although the term often generates geographic connotations to Northern Germany, Denmark and Scania, the cultural region extends into much of the Scandinavian Peninsula and the Baltic. One sphere of interaction within the Nordic region is found along the western Norwegian coast from Lista in southwestern Norway to Troms in Northern Norway. Though the cultural expression within this 1200 kilometer stretch is similar, there seem to be variable expressions of political hierarchy – localized chiefdoms – within the region. Such expressions are found in Lista, Jæren and Karmøy in southwestern Norway, the islands of Sunnmøre in northwestern Norway and the Trondshemsfjord area in central Norway (Figure 1).

Traditionally the rise of an elite in these regions has been seen in light of agricultural potential as especially Lista, Jæren and Trøndelag are among the most agriculturally productive regions in Norway. In recent years it has been more common to argue that the roots of the Nordic Early Bronze Age are to be found in the preceding Nordic Late Neolithic (2400/2350-1700 BCE), which was instigated by the Bell Beaker Culture in western Scandinavia (e.g. Prieto-Martínez 2008). New ideological institutions, technology (e.g. metallurgy and boat building), intensified agro-pastoral farming, maritime travel, warriors and elite interaction were introduced at this time, and represent the basis for the rise of Bronze Age society in the Nordic region.

The present article explores the establishment and early role of maritime practices in the Nordic Late Neolithic (2400/2350-1700 BCE) and Early Bronze Age (1700-1100 BCE) in the Nordic region along the western coast of Norway. Four regions with concentrations of Late Neolithic and Early Bronze Age material, and expressions of hierarchy and chiefdoms along the western Norwegian coasts - Lista, Jæren, Karmøy and Sunnmøre - are examined. Though practices and institutions like warrior ideals, technology, exchange, maritime travel,

hierarchy, intensified farming and metal are fundamental for Bronze Age society along the Norwegian coast, expressions of power are concentrated to the four regions, and it was probably tied to controlling bottlenecks, channels, portages and harbors along important maritime routes of travel. As such this article is an exploration of prehistoric travel, sources of power and maritime landscapes in the Late Neolithic and Early Bronze Age of Norway.

The sea and Scandinavian archaeology

The sea is always present in Scandinavia. Since the Kitchen Midden Commissions – two multidisciplinary projects that ran from 1848 to 1895 to investigate Late Mesolithic shell midden deposits along the Limfjord in Jutland – the sea has held a recurring presence in Scandinavian archaeology. The sea has served a multitude of purposes in archaeological study and discourse. Shoreline displacement was the basis for absolute and relative dating, the study of subsistence is often the study of marine resources, and the sea as a route of communication and mobility permeates discourse about, e.g., post-glacial colonization, Bronze Age rock carvings or Viking Age expansion.

Still, a terrestrial perspective that emphasizes agrarian production and land rights permeates the broader narratives of prehistory in Norway from the Neolithic to the Iron Age. The role of the maritime sphere has an aura of passiveness, and is often taken for granted (Kvalø 2007), entailing that the historicity of the role of the sea has been understated (Glørstad 2013). Agriculture and pastoralism are often ascribed the dynamic role in history - to the extent that Bronze Age rock art, which in western Norway is dominated by figures of boats, is traditionally labelled “agrarian rock art” (e.g., Hagen 1990, Marstrander 1978). Fortunately, the agricultural perspective has in the last ten years been complemented by a suite of factors such as maritime technologies (Glørstad 2012, Kvalø 2007, Østmo 2012), metallurgy (Melheim 2012, Melheim and Prescott 2016), exchange networks and migration (Prescott 2012).

In Scandinavia, and particularly the southern part of the region, the Nordic Late Neolithic (LN) and Early Bronze Age (EBA) are associated with a spectacular archaeology that includes bifacially worked flint (like the LN fishtail dagger from Hindsgavl), bronze weapons (like the EBA Rørby sword with a boat figure on the blade) and personal items of metal, monumental graves (like the EBA oak coffin graves), rock carvings (where the boat commonly is a central motif) and settlements with long houses. These and a host of other archaeological objects and sites are the basis for interpretations concerning the establishment of metallurgy, intensified agro-pastoral production, warfare, monumentality and associated rituality, social hierarchy, political economy and integration with Northern European and indeed continental networks (e.g. Jensen 2002, Kristiansen and Larsson 2005).

Though the rich archaeological materials from present-day Northern Germany, Denmark and southerly Sweden usually comes to mind in discussions of the Nordic LN and EBA, the rapid establishment and reproduction of Nordic LN-EBA type societies, spheres of interaction and culture had a much wider dispersion into the Baltic Sea region and north into Norway (fig.1). In some ways, history in the more peripheral regions is all the more dramatic, as hunter-gatherer groups with deep regional culture traditions were rapidly replaced by LN societies. Archaeologically, in Norway this transition, around 2400-2350 BCE included the establishment of the farm as the fundamental social and economic entity, concurrent establishment of transhumant exploitation of the uplands, bifacial lithic technologies, European artefact forms, weaponry, early copper metallurgy, regular crossings of open stretches of sea, regional patterns of interaction (Prescott and Glørstad 2012).

Changing maritime practices in prehistory?

Maritime mobility has been an essential factor in the human settlement of Norway since deglaciation. The initial post-glacial settlement was profoundly tied to the sea, and the maritime orientation continued throughout most of the Mesolithic and Neolithic. The structure of human-sea interaction can be seen in the spread of cultural elements, that generally follows the coast in a southeastern to northwestern direction. Though the cumulative outcome was widespread communication and diffusion of cultural elements, the individual trips in the Mesolithic, Early and Middle Neolithic seem to have been small-scale and coast bounded – not long sea journeys between alliance partners (Glørstad 2012, 2013).

A major cultural horizon in easterly Northern Europe is represented by the Corded Ware Culture (CWC). Representing a substantial break with older Funnel Beaker, Pitted Ware and hunter-gatherer traditions, the CWC is probably the result of migration, it represents the first spread of Indo-European languages and had a strong pastoral orientation. The CWC in Norway (or Battle Axe Culture, 2750-2400/2350 BCE) is primarily represented in Eastern Norway, with a patchy settlement pattern along the Oslo fjord's coast through the inland valleys to Trøndelag in Central Norway (Hinsch 1956). The CWC represents an enigmatic period in Norwegian prehistory (Hinsch 1956, Østmo 1988:227-231, Prescott and Walderhaug 1995, Shetelig 1936); however the data at the moment suggests the following patterns:

- Migration: The CWC was the result of a small-scale immigration, but did not trigger substantial change.
- Eastern and limited impact: The CWC was primarily located to small settlement patches in eastern Norway
- Terrestrial: In terms of maritime practices, the CWC does not represent a significant break from older traditions, though it seems to have a more pronounced terrestrial bearing. It is conceivable that pastures and hunting grounds were a more important political-economic resource than waterways.

The mid third millennium in Norway, around 2400 BCE, represents a significant reorientation. Bell Beaker Culture (BBC) settlements in western Denmark and Norway archaeologically mark the instigation of the Nordic LN, though much of the historical process leading from the Bell Beaker to the Late Neolithic, 2500 to 2350 BCE, remains unclear (Prescott 2012, Prescott and Melheim 2009, Prieto-Martinez 2008:116, Sarauw 2007:66, Vandkilde 2001, 2005). Still, the outcome is the establishment of the Nordic region of interaction in the Baltic, Northern Germany, Sweden, Denmark and Norway. The distribution of artifact materials like Bell Beakers and flint daggers attests to the far flung network of regular exchange and communication. This general region of interaction was reproduced through the Late Neolithic and Bronze Age.

The type 1 Nordic flint dagger of the LN1 was produced in Northern Jutland; however approximately 10% of the recovered daggers are found in southwestern Norway (Apel 2001:295). The distribution of the daggers demonstrates two new and important institutionalized practices:

- A substantial number of Jutish daggers (and other objects) are exported across the 130 km wide Skagerrak strait between Jutland and Norway (fig. 2). There were regular and intensive movements across open stretches of sea (compared to the predominantly small-scale coastal mobility of the preceding eras).
- The daggers help to define the western Norwegian sub-region within the Nordic region (Bakka 1976, Prescott and Glørstad 2015:79). This sub-region stretches from Lista in the south to Troms above the Arctic Circle, bound together by the sea.

The development in maritime capacity is certainly a dynamic factor in the development of the Nordic region, as well as a premise for the rapid and continuous dispersion of a range of social, technological and cultural innovations that characterize the LN and EBA. Unfortunately, apart from petroglyphs demonstrating large seafaring vessels parallel to the Early Iron Age Hjortspring war boat (Crumlin-Pedersen and Trakadas 2003, Rosenberg 1937, Østmo 2012:66), we do not have much direct archaeological evidence of boat technology in the LN and EBA (Kvalø 2007:52, Østmo 2012). What leads up to the creation of the Nordic region, intensified interaction and new exchange practices is subject to discussion (Prescott 2012). Einar Østmo (2012:67) argues that new boat technology, specific to the Nordic region, developed in Denmark and was a precondition for the LN and EBA distribution patterns. An adjustment or elaboration on Østmo's idea is that establishing social institutions, i.e. alliance networks, intensified exchange and an ideology emphasizing elite travel (cf. Kristiansen and Larsson 2005:32ff, Kvalø 2007:81ff) in the wake of Bell Beaker expansion, created the social basis for the establishment and maintenance of networks (Prescott 2012). In practical terms, this allowed boats to sail and land far from their home territory. In all probability developments represent a situation typical of the mid-third millennium: technology, politics and ideology combine to generate new practices. Thus, having boats and knowledge to navigate open stretches of challenging sea, and being welcomed by people perceived as kin at your destination harbor were probably both necessary and new to the third millennium.

Integrating waterways into Bronze Age history of Norway

The above focuses on the sea as a medium of transportation, the boat as the technology to exploit the sea, alliances as the social mechanism that permits communication and ideology that encourages travel and exchange. However, to adopt a more historical approach, the next half of this article will deal with the rise of the sea as a source of power, how a maritime landscape of power evolved and how the maritime landscape indicates the sources of power that created localized chiefdoms at advantageous places along the western Norwegian coast.

A number of interpretations, theoretical concepts and empirical observations are useful when attempting to understand the role of sea travel. These include application of Anthony's (1990, 2007:108ff) models for the process of migration, and Mary Helms' (1988) ethnographic concept of the social role of travel, to contextualize exchange and alliance maintenance but also in the legitimization of an elite's position "at home" (i.a. Kvalø 2007, Kristiansen and Larsson 2005). In empirical terms, the growingly diverse data from European isotope and aDNA studies underscore widespread and diverse mobility in third and second millennium Northern Europe (Allentoft, et al. 2015, Chenery et al 2011, Frei et al 2015, Frei et al 2012, Haak et al. 2015, Ling et al. 2013, Malmström et al 2009, Skoglund et al. 2012). Antonio Gilman (1981) emphasized a materialist approach to the rise of the Bronze Age, pointing out the requirements and long term effects of investments like permanent clearances and houses. By applying the terms "maritime realization" and "ritual mobilization", Frode Kvalø (2007) brings together the material qualities of Gilman's approach with Helms' anthropology, to situate overseas contact in the capacity to build and sail boats, have power over coastal bottlenecks, and have knowledge of the sea and ports as well as alliance partners. This is partially echoed by Rowlands and Ling (2013), in their discussion of amber, metal, trading networks and the advantages of maritime ideology and praxis for the Nordic region. The growing number of studies of materials and human remains demonstrate that, throughout Europe, people and materials were on the move throughout the third millennium, supporting the idea that maritime travel and exchange were fundamental to the Bronze Age societies of Northern Europe, and fundamental to explaining the archaeological record.

To historically explore the role of the sea, three scenarios based on recent studies from Norway are explored below. These scenarios explore the region's BA-history: the opening of western Norway to Northern Europe's oldest Bronze Age culture (the BBC) around 2400 BCE, the establishment of a BBC-elite around 2350 BCE and maintenance of chiefdoms in the Early Bronze Age.

Discovery: Waterways, Bell Beaker prospecting and the third millennium transition

As noted above, in the mid-third millennium a series of new practices and institutions were rapidly adopted along the western Norwegian coast. This can be described as the establishment of the Nordic Late Neolithic and Bronze Age region and a fundamental transformation of the fabric of life in the region. The transition from the preceding Neolithic period hunter-gatherer societies was rapid and represents a dramatic termination of hunter-gatherer traditions. It has been argued that the transformation is tied to initial migrations of people to the western coast of Norway from BBC areas, possibly from northern Jutland (Prescott 2011, Prescott and Walderhaug 1995:273). Bifacial tanged-and-barbed points, often referred to as "Bell Beaker points", probably represent an early, short phase of the BBC-transition around 2400 BCE. In Norway these points have a predominantly western and coastal distribution (Østmo 2012:64), underscoring the maritime nature of the initial BBC-expansion.

A number of resources have been mentioned as the "pull factor" drawing Bell Beaker people to western Norway, e.g. hunting grounds, pastures and copper resources. In terms of copper ores there is no unequivocal evidence concerning pre-Medieval exploitation of the many copper sources in Norway. Attempts at utilizing the ores can neither be proven nor ruled out. However, there are circumstantial indications of attempts at exploiting ores, such as a number of co-occurrences of BBC elements, LN and/or EBA sites and copper sources (Melheim 2015:161-202). In response to the question about what attracted people from Bell Beaker groups to western Norway, responses have hypothesized hunting products, political power, pastures and metals. Particularly the latter has been emphasized by Lene Melheim (2012, 2015:37ff).

A recent study by Melheim and Prescott (2016) integrated maritime exploration with metal prospecting to explain initial excursions of BBC-people along the western coast and into the fjords. Building on the archaeological concept of travelling metal prospectors as an element in the expansion of the Bell Beaker phenomenon in combination with anthropological perspectives on prospecting, the article explores how prospecting for metal would have adjusted to the landscapes of western Scandinavia. Generally speaking prospecting seldom leads to successful metal production, and it is difficult to study archaeologically. However, it will often create links between the prospectors' society and indigenous groups, opening new territories, and have a significant transformative impact – on both the external and indigenous actors and societies. Two archaeological sites in western Norway are relevant in terms of initial BBC exploration: the Slettabø in Rogaland (Skjølsvold 1977) and the LN1 layers at Skrivarehelleren in Sogn (Prescott 1991).

Slettabø is a settlement site in southwestern Norway (fig. 1). The BBC-phase at the site seems to represent a short visit. The single bell beaker found in Norway is from Slettabø. The phase with the bell beaker also yielded five tanged-and-barbed points and is dated to around 2400 BCE, i.e. around the Middle to Late Neolithic transition. The site would have been located on a small patch of land between a strait and a barren rock knoll, on the protected inward side of an island (figs. 1, 3) on the outer coast of Rogaland. It has been

interpreted as a harbor, potentially related to the first phase of BBC-expansion (Prescott and Glørstad 2015).

The site could have served well as a bridgehead into the region for BBC explorers or immigrants with ties to Jutland. Along the coast north of Slettabø there are several copper deposits (Melheim 2015:164). A likely scenario is that BBC-boats would have followed the coast looking for the tell-tale signs of copper deposits, e.g. in Egersund, at Karmøy, Bømlo and Årdal. One of the most promising areas would have been found by following the Sognefjord 150 kilometers into the interior to Årdal (Figures 1 and 5). The Skrivarhelleren rock shelter (Figure 4) site in Årdal is archaeologically important (Prescott 1991). The rich finds of BBC-related materials in this peripheral environment suggest that there are particular reasons for this seasonal settlement. Both this site and other parts of Årdal have long traditions of copper metalworking: the LN2 layers (1950 BCE) contain the oldest in situ copper alloy casting in Scandinavia, Skrivarhelleren and another site (Kalvebeitet) demonstrate bronze metallurgy in the ensuing Bronze Age deposits, the Årdal region has several occurrences of readily exploitable copper, and there has been extensive copper mining since 1700 CE (Melheim and Prescott 2016).

There are several low-lying copper deposits in Årdal easily accessed from the fjord, and with higher sea levels in the Late Neolithic, several of these would have been situated along the mid-third millennium shoreline (fig. 5). Other substantial deposits are located in the mountain sides along the fjord, and would have been visible from the water (as they are today). Not even having to leave his boat, an experienced prospector would have discovered the potential for finding copper ores – instigating an investigation of the region. This might be an explanation for the lowest levels (with Bell Beaker related finds) in the Skrivarhelleren site, 790 m a.s.l. and a few hours walk from the fjord.

Prospecting is extremely difficult to archaeologically study, and as the evidence now stands there is no conclusive evidence for the exploitation of Norwegian ores in the third millennium BCE. However, most prospecting expeditions do not lead to successful metal production, but they can spearhead other processes of contact and migration. Bell Beaker prospectors may have played the role of David Anthony's "scouts" (Anthony 1990), the first explorers into an area, starting a migration process. There is strong evidence of a maritime exploration of or expansion along the Norwegian coast around 2400 BCE, and it is worth considering if boat based scouts were initially searching for metals, but ended up changing the course of history.

Establishing a Nordic elite: the Mjeltehaugen monument and Sahlin's "Stranger King"

The Mjeltehaugen mound is one of the most enigmatic prehistoric monuments in Norway. Located on the island of Giske on the coast of Sunnmøre (Figures 1 and 6), the mound was excavated in 1847, 1867 and 1878. The mound is monumental in size, estimated to originally have been 25m in diameter and 7m high. It contained a large chamber, or set of eight chambers, made of stone slabs. Importantly, the slabs were decorated with geometric motifs, boats and a dagger (Figure 7).

The age and cultural context, based on the decorated slabs, has been subjected to debate for over a century, with suggestions ranging from the Middle or Late Neolithic (based on comparison with the Göhlitzsch grave in Halle, Germany) to Early Bronze Age (based on comparison with Nordic graves like Kivik in Sweden and Skjølningstad, Steine and Rege in Norway) (Linge 2007, Mandt 1983, Marstrander 1978). A recent study of the figures and context based on comparison with Nordic and European graves context (Sand-Eriksen 2015) found that the figures had little in common with the Nordic EBA graves, but had clearest

parallels in Bell Beaker monuments, Le Petit-Chasseur in Sion, Switzerland (Harrison and Heyd 2007) being the clearest parallel. Typological studies of the dagger and boat figures partially substantiated the chronological and cultural conclusions of a Bell Beaker affiliation (Sand-Eriksen 2015).

The Mjeltehaugen slabs demonstrate many similarities with, amongst others, Le Petit-Chasseur, but the boats articulate an adaptation to the local maritime context. In context with the mound and grave's position overlooking the sea lane and the other motives on the slab, the boats express the referential importance of the sea and seafaring as the important Nordic mode of communication and source of power for the elites.

The practical and referential importance of the sea, and the sea as a long-term source of the elite's power, is demonstrated by how the mound is situated in the landscape – or rather *seascape*. Giske is a flat island and the Mjeltehaugen mound would have towered above the fields and bogs around it, visible to everyone sailing by on the east side of the island. Giske is one island in a row of outer islands that protects the islands and mainland to the east from the powerful waves, currents and storms of the North Atlantic. The open sea along the western Norwegian coast is difficult to sail, with treacherous currents and winds, heavy waves and frequent storms. Predictable communication along the coast is dependent upon long stretches of protected routes behind the protective string of islands along the coast. Controlling these, especially at bottlenecks like narrow straits, staging grounds for crossing open stretches (when conditions permitted) or harbors is a potential source of power in a chiefdom type of society. The Mjeltehaugen mound is on the inner side of Giske, looking over the protected north-south sea lane and the east-west lanes into the fjords leading into the interior (Figure 6). Virtually all traffic in the area would have passed Giske.

Tying all these strands of evidence and interpretation together, the Mjeltehaugen mound is an early expression of monumentality, most likely from the mid-third millennium. The decorative scheme of the slabs tie it to the exclusive suite of elite graves in Europe at this time, and the context should be fixed within the Bell Beaker expansions. The Bell Beaker influx has been interpreted as the result of migration and the influx of a new elite. An important source of power for this elite was symbolically in reference to its foreignness – a parallel to Sahlin's (2009) concept of the stranger king, where an outsider may ascend to power in reference to being outside local indigenous conflicts. As "the elementary forms of kinship, politics and religion are all one" (Sahlins 2009:197), the Bell Beaker elite brought robust networks to Sunnmøre based on their kinship with groups in the area of their origin. The elite's power was symbolically and in real terms linked to control of the sailing route, but also its capacity to realize maritime endeavors through boat technology. This entails the knowledge and capacity to get suitable boats built, knowledge of sailing conditions, and the vital networks and alliances of kin that allowed them to travel safely to distant harbors and settlements. This elite probably held a warrior identity that communicated a capacity to use force, if necessary. Mjeltehaugen is potentially the oldest monumental materialization of new institutions of power that in time would characterize the EBA in central areas. Based on maritime capacity (especially the power to control the local sea lanes and expressed through strategically positioned monuments), networks and alliances with elites in Northern Europe –, the sources of the power of the Bronze Age elites along the western Norwegian coast can be discerned. Though Mjeltehaugen stands alone in the archaeology of the LN of Norway and Scandinavia in terms of its size and decorated chamber, it is not a unique expression of new, externally provided (Bell Beaker) burial customs. A LN1 cairn with a cremation and tin awl at Farsund in Vest-Agder and a LN2 mound with a gold *Noppenring* at Klokkehamar in Lista (Melheim 2015:31-35) as well as several *hocker* burials in rock shelters convey some of the same cultural message. These graves represent the new era of hierarchy and the Bronze Age.

Bronze Age seaways – a source of chiefly power

The Mjeltehaugen mound has often been viewed as an isolated and enigmatic anomaly in Scandinavian prehistory, but interpreting it as a result of the establishment of a Bell Beaker elite and dating it to the early Nordic LN creates a consistent and logical cultural historical context. If this monumental mound is seen in light of LN and EBA trends, instead of viewing it as an isolated incident, the mound should be seen as an incipient expression of a “marinescape of power.” This interpretation creates a meaningful structural and historical context. The ensuing developments demonstrate that Mjeltehaugen represents the start of a Bronze Age praxis.

Within the Nordic Bronze region along the western Norwegian coast a handful of areas stand out with concentrations of EBA bronzes, petroglyphs and monumental mounds and cairns (Hagen 1983, Johansen 2000). These include, from north to south, the Trondheimsfjord area, the islands of Sunnmøre (where the Mjeltehaugen mound is situated), the area around the Karmsund sound, the Jæren region in Rogaland and Lista in Vest-Agder.

In modern times these are among the most productive agricultural districts in Norway. Though the contemporary landscape is largely the result of artificial draining of wetlands and industrial agriculture, these areas were probably relatively productive in the Bronze Age as well. The concentration of EBA material, and the interpretation that these areas held more hierarchical and larger-scale political entities, has largely been explained in reference to their agro-pastoral potential, though the premises and implications of this agrarian perspective have not been explored in depth. Agro-pastoral production and the farm economy is certainly an important economic, demographic and cultural factor in the Bronze Age. Still, it does not seem to explain the concentration and expressions of power to these regions at various times of the Bronze Age, nor their role in the networks of exchange and interaction.

The main advantage of long distance transportation by boat, as opposed to movements on land, is that it is relatively fast, it is difficult to control and moderately safe from predatory attacks. However, climate, wind and currents render the open and unprotected sea outside the islands dotting large parts of the Norwegian coast difficult and perilous to navigate for open boats (Kvalø 2007:62-64). However, large stretches of the coast can be navigated through protected lanes between the mainland and the outer line of islands. A number of difficult sea stretches can be avoided altogether by pulling boats over portages (e.g. articles in Westerdahl 2006). Harbors, where travelers can rest and wait for beneficial weather conditions just before crossing difficult stretches like the mouth of a fjord or open sea like Skagerrak are vital. Natural conditions can thus force boat traffic into bottlenecks and harbors, and controlling and protecting these are readily a source of social, political, economic and military power. Several recent studies (Austvoll 2014, Kvalø 2007) demonstrate that the areas where expressions of Early Bronze Age power and wealth accumulate coincide with bottlenecks or harbors.

The marinescapes of Bronze Age power in southwestern Norway

The southwestern peninsula of Norway, Lista, is a flat and delimited area of about 70 sq. km. The peninsula is situated between rocky uplands and the sea, and in the Bronze Age would have offered a varied landscape of wetlands, tillable glacial soils, lakes and inlets favorable for settlement. Routes along the western coast of Norway to the Baltic, over Skagerrak to Jutland and Germany pivot around Lista. The sea outside of Lista being one of the two most difficult stretches to sail along the Norwegian coast, weather conditions change quickly and vary seasonally, while wave climate is usually difficult. Not surprising, this area is host to a high concentration of shipwrecks.

Lista has one of the most concentrated accumulations of prestigious Late Neolithic and Early Bronze Age finds in Norway (Johansen 1986:164), and 90% of the metal finds in the county of Vest-Agder are found on the small Lista-peninsula. In terms of monuments, the low coastal zone and the inlets into bays are dotted with monumental mounds and cairns from the Bronze Age and Iron Age. Against the low-lying terrain, these monuments form a chain along the sea-land interface that is readily visible from the sea. The construction of these mounds started with a moderate sized burial at Lundevaagen in the LN1, but evolved into the large mounds of the Bronze Age and Iron Age (fig. 8). The mounds can thus be viewed as expression of the power of the elite controlling directed out towards those sailing these waters. For domestic use, the mounds demonstrated the source of and legitimacy of power – sea travel and networks -, as well as a lineage's "deed" to the sea lanes. The importance of the sea, boats and maritime communication is further demonstrated by the many ship figures that dominate petroglyphs from between 1500-700 BCE in Lista (Hagen 1990: 143ff; Mandt and Lødøen 2005:242ff).

If the landscape is examined in more detail, the source of power is not solely the position along important Nordic sea routes, but the bottleneck feature of the landscape. Along the Lista-peninsula's 20 nm (37 km) long coast there are virtually no harbors and no refuge from bad weather. However, the difficult conditions can be avoided, and access to harbors attained, by using an 800 m portage from the western inlet into a series of inland waterways (Figure 8). Indeed, this portage is in use today, allowing boats up to 35 feet to be pulled overland. A number of large "inland" grave monuments are explained by their association with this route (Kvalø 2007:69).

Lista's Late Neolithic and Bronze Age materials and the monumental grave monuments represents the historical rise and reproduction of an elite that is probably best understood in reference to power based on controlling a bottleneck at a critical passage along one of the most important maritime communication routes along the Scandinavian peninsula (Austvoll 2014:83).

Jæren and Karmsund, warriors and waterways

Northwest of Lista, but still in SW Norway, there are two further concentrations of Bronze Age materials at Jæren and Karmøy (Figure 1). Like Lista, both these regions demonstrate a concentration of monumental mounds and cairns along the waterways (Figure 9, see Austvoll 2014:69). The situation in Karmsundet, the northernmost of the two regions, is interesting in that the graves here are found along the inner side of the island of Karmøy, facing the narrow channel between the mainland and the island. In practice, most coastal traffic would have had to pass through this narrow and easily controlled passage. The marinescape along the coast of Jæren, the richest EBA region in Norway, can be related partly to harbors and passages along the coast. The intervening Boknafjorden between Jæren and Karmøy would have been primarily crossed under favorable conditions, and both northern Jæren and Karmsund would have been bottlenecks.

Turning to the monumental graves, again we have an expression directed towards the traveler that communicates the presence of a powerful lineage in command of the seaway, and internally communicating the source and legitimacy of the local elite's power. The physical and probably coercive nature of dominating the sea lanes along the coast are illustrated by the nature of the materials in the graves at Karmsund and Jæren. All the graves directly located along the Karmsund channel contain weapons, and with one exception, a majority of the graves along the coast or at critical points in Jæren contain weapons (Figure 9) – all these graves contain male burials. On a general level the weapon graves communicate to us that there was a military side to these societies, that control of the waterways was important and

that there is a tie between warriors and the waterways. What connotations these monuments (and the weapon graves they contained) communicated to the traveler seeking leave to pass through these controlled waters is difficult to ascertain. It is reasonable that the presence of power and a threat of force permeated the message.

Maritime chiefdoms?

Around 2400 BCE a field of interaction arose along the western Norwegian coast. This region was part of the Nordic Late Neolithic world that was reproduced through the Bronze Age. The transition to the LN along the coast represented a dramatic breach with older hunter-gatherer economies, and it would seem most aspects of life were transformed. The driving force for this transformation is probably a Bell Beaker expansion into this northern part of Europe. The initial “pull factor” was probably the search for resources, and the search for copper ores was conceivably one of these resources. The waterways along the coast and fjords were probably the most important means for exploring the coast.

The Bell Beaker expansion leads to the establishment of an elite that began to mark its presence with monumental grave mounds and cairns. Though the European cultural background is readily recognized in the material expressions at this time, the new elite also communicated its maritime orientation in and through its monuments. The Mjeltehaugen mound is probably an expression of this Bell Beaker elite.

Sea travel was an all-important medium for maintaining networks, alliances and exchange within the Northern European sphere. Within the Nordic region there is a remarkably homogeneous cultural expression that also communicates wider Nordic and European affiliations. However, within the Nordic region along the Norwegian coast there are also concentrations of monuments and metal objects that indicate that wealth and power were unevenly distributed. Such concentrations are found at places like Lista, Jæren, Karmøy and the islands of Sunnmøre. This situation probably represents local, small-scale chiefdoms during the Early Bronze Age. The archaeological material suggests that the material base for this power and wealth is found in the local elite’s control of bottlenecks and other strategic places.

Though the sea has always been present in the history of the Nordic area, as of the mid-third millennium it binds the region together in a field of interaction. The capacity to realize maritime practices was probably essential to elites, as was controlling maritime traffic. This is expressed archaeologically in the many references to boats and the sea. The social capacity to interact with Northern European elites has roots in the establishment of alliances. As politics, kinship and religion are one, as of the Late Neolithic the sea, travel and boats were thus very real sources of power and integral to social institutions, but they also permeated the fabric of thought and symbols. To paraphrase Levi-Strauss, the sea and boats are not only useful in communication and politics, they are chosen as symbols because they embody central elements of society – they are “good to think” (Levi-Strauss 1966:89).

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Figure Captions

Figure 1. The Nordic region in the Late Neolithic and Bronze Age. Sites and regions discussed in the text are marked (after fig. 1 Prescott and Glørstad 2015).

Figure 2. Distribution routes for LN1 flint daggers type 1 suggesting communication routes and networks. (Redrawn after Apel 2001 fig 9:17).

Figure 3. Map showing the location of the Slettabø site 2400BCE and today (underlying shadowing). The site's position, on the protected side of an outer coastal island, indicates its role as a harbor (based on Prescott and Glørstad 2015).

Figure 4. The Skrivarhelleren rock shelter (790 m asl. In the center of the picture, indicated by circle) in the interior of Norway lies in an area rich in copper deposits and easily accessed from the Sognefjord (photo: Christopher Prescott).

Figure 5. View from the Moa valley, in which the Skrivarhelleren is located towards Øvre Årdal and the eastern end of the Sognefjord. In the Late Neolithic and Bronze Age the fjord would have covered today's built-up areas. Known copper deposits, prospecting sites and mines visible from this vantage point are marked with arrows (photo: Christopher Prescott).

Figure 6. Map and photo of Giske demonstrating how the island and the mound is situated in the seascape. The Mjelthaugen mound's position is indicated (photo: Frode Inge Helland, map from Sand-Eriksen 2015).

Figure 7. Fragments of the decorated Mjeltehaugen slabs. Top: the geometric design pieced together. Bottom right: depiction of a boat. Bottom left; the dagger blade (from Sand-Eriksen 2015).

Figure 8. Distribution of Bronze Age mounds and cairns on the Lista peninsula. The shoreline is adjusted for a 5 meter higher sealevel and before modern draining of inlets and wetlands, and demonstrates that the grave mounds and cairns would have been located in relation to the sea. Portages (indicated with arrows) are located at the foot of the peninsula (after Austvoll 2014).

Figure 9. Distribution of cairns and mounds with graves containing either weapons or jewelry, Karmøy and Jæren (from Austvoll 2014).