



Original Study

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The Emergence of Coercive Societies in Northwestern Scandinavia During the Late Neolithic–Early Bronze Age

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Abstract: This paper discusses how coastal societies in northwestern Scandinavia were able to rise in power by strategically utilizing the natural ecology and landscape in which they were situated. From two case studies (the Norwegian regions of Lista and Tananger), it is shown that it was possible to control the flow of goods up and down the coast at certain bottlenecks but that this also created an unstable society in which conflict between neighboring groups occurred often. More specifically the paper outlines an organizational strategy that may be applicable cross-culturally.

Keywords: political economy, socio-political organization, interregional communication, northwestern Scandinavia, coercive strategy

1 Introduction

The turn to the Late Neolithic (c. 2350 BCE) brought with it major changes along the coast of northwestern Scandinavia, evident by a homogenous material culture, but also through a new kind of social organization (e.g. Prescott, 2012a, 2014). This transformation is generally credited a new and direct sea route from Jutland in South Scandinavia across the Skagerrak strait (Østmo, 2005). With this new crossing, societies were able to access new technology in larger quantities. Seen first with the spread of Jutish flint daggers, followed later by a steady income of metal, and new architectural constructions, expressed both through the many longhouses but also in the form of hundreds of monumental burial mounds (e.g. Nordenborg Myhre, 2004; Møllerop, 1963; Børsheim, 2003). This material manifestation stretched nearly 1500 km, from the peninsula of Lista in the very south, all the way north to the southern borders of Troms (Figure 1). These societies were all encompassed within what is often termed the Nordic Bronze Age (e.g. Bakka, 1976; Kristiansen, 1998). The connectivity was in all likelihood made possible through new advancements in ship technology and seafaring knowledge (e.g. Kvalø, 2004; Rowlands & Ling, 2013; Ling, Earle, & Kristiansen, 2018). Even though few seafaring boats are preserved in Scandinavia from the Late Neolithic–Early Bronze Age (c. 2350–1100 BCE), the Hjortspring boat from the transition to the Pre-Roman Iron Age (Crumlin-Pedersen, 2003), and thousands of ships depicted on rock art help support our understanding of the Nordic Bronze Age as an age of skillful maritime voyagers. This helped connect the region of Scandinavia into a homogenous region – at least based on the material assemblage.

However, the similarities seen in the material assembly are contrasted against a coastline that is highly diverse and fragmented. Some areas like that of the southwestern coast are set apart by good agricultural land, while other areas further north benefitted from mountainous pastures and hunting grounds. This

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contrast also created a skewed ratio of the commodity flow coming from the south. Distribution analysis of several artefact categories indicate that the bulk of the imported products (such as metal) were distributed to only a few selected regions (Austvoll, in press). This does not alter the fact that large parts of the Scandinavian Peninsula had access to foreign objects and technologies. However, what is less clear is how certain societies managed to accumulate the majority of those commodities. This must be specifically related to procurement and management strategies. It could be argued that local societies developed through a political economy based on local comparative advantage, as illustrated by the use of natural bottlenecks and local subsistence strategies (see Rowlands & Ling, 2013, p. 498; Prescott, Sand-Eriksen, & Austvoll, 2018). However, dependence on alliance ties and an ever-present risk of conflict with neighboring groups must also be considered when addressing organizational practices in northwestern Scandinavia.



Figure 1: Delimitation of northwestern Scandinavia connected through similarities in the material assembly. Distribution of barrows and cairns are shown. Case studies are highlighted.

This paper will discuss the ecological potential and political circumstances that enabled a handful of coastal societies to develop a new political economy through distinctive strategies, referred to in this paper as coercive. This type of strategy helped not only northwestern Scandinavia to connect with the Continent through trade networks and alliance ties, but also helped create efficient nodal points locally which controlled the flow of commodities along the coast. In order to concretize this paper, two case studies will be presented: the Norwegian regions of Lista and Tananger (see Figure 1), which illustrate wealth-accumulation through coercion.

2 Background

The introduction of a new political economy at the beginning of the Late Neolithic is inherently linked to the incorporation of an agropastoral-based economy. This has traditionally been interpreted as a gradual evolutionary development with roots back to the beginning of the Neolithic (c. 4000 BCE). This view is challenged by scholars who argue that the agropastoral trajectory can be found with the cultural transition from Middle Neolithic B to Late Neolithic I (c. 2350 BCE) (e.g. Prescott, 1996, 2012b). The explanation for such a swift change lies in the contemporary appearance of a homogenous material assemblage including flint daggers, pressure-flaked arrowheads, tanged and barbed arrowheads, stone writsguards, copper and gold artefacts, and two-aisled longhouses (e.g. Holberg, 2000; Østmo, 2005; Prescott & Melheim, 2009; Melheim, 2015). Several of these objects have been linked to the Bell Beaker Culture that stretched across Western Europe during this period (Harrison, 1980; Melheim & Prescott, 2016). Alongside this culture appeared a warrior identity that has been interpreted by some as the origin of the individualizing chiefdoms in the Early Bronze Age (e.g. Vandkilde, 1999; Sarauw, 2008; Prescott & Melheim, 2009; Varberg, 2015). The reason behind the sudden increase of a new material culture and ideas, explained as a ‘cultural package’ (Prescott & Walderhaug, 1995a) has not only reaffirmed older ideas by Gordon Childe of traveling metal prospectors but also suggests a potential pull factor for a new consolidation of a state of mind along the coast of northwestern Scandinavia (Melheim & Prescott, 2016). The introduction of the first rock art ship motifs also appear in this period (Mandt, 1983; Sand-Eriksen, 2017), relating to the importance of a new technology that functioned as the foundation for the development of a new socio-political structure. Later, around 1600 BCE, this would be followed by the construction of barrows and cairns at strategic locations along the coast, which functioned as a form of visually guidance (e.g. Skoglund, 2005; Kvalø, 2007; Austvoll, 2017).

As such, over the course of the last two decades, the two periods (i.e. Late Neolithic and Bronze Age) have gradually emerged into what is now seen as a much more close socio-cultural unison, mirroring a Central European chronology (Vandkilde, 2007, p. fig. 1). This is credited to a renewed focus on interregional developments on the Continent, re-evaluation of early metal use (e.g. Prescott & Walderhaug, 1995b; Melheim, 2015; Prescott, 2014), and recent bioarchaeological studies suggesting both large-scale migration and individual journeys (e.g. Allentoft et al., 2015; Frei et al., 2015). Some see these developments as the threshold of a new socio-cultural way of living that defined the rest of European history – and most certainly the Bronze Age (e.g. Kristiansen, 2017). However, a neglected field of research examines how local societies regionally, under the influence of these dramatic changes, evolved and subsequently transpired in the Early Bronze Age (see also Furholt, 2008, 2014). One of the reasons for this lacuna could lie in the fact that traditional Norwegian Bronze Age discourse has had a tendency to stress the Bronze Age as a period with dispersed and limited material (e.g. Bjørn, 1927; Brøgger, 1925; Indrelid, 1984). This rationale is not arbitrary, as even in regions with “large” quantities of Bronze Age finds (such as the region of Jæren) the material remains are often fragmentary, with little or no contextual information (Nordenborg Myhre, 2004). As a result, many of the preconceived notions of organizational practice in northwestern Scandinavia during the Bronze Age have been based on comparative studies with the much richer Bronze Age finds in South Scandinavia. To some extent it is likely that developments further south (i.e. South Scandinavia) affected managerial choices in northwestern Scandinavia, however; there is always a danger of misinterpreting the complicated processes that gives rise to societies by not giving equal weight to local factors.

The real issue lies, therefore, in identifying the causes and effect of the material accumulation seen at specific locations along the coast. It was likely driven by both local and interregional factors. However, as a preliminary standpoint, one could argue that the accumulation of material culture along the coast is indicative of an adoption of more institutionalized societies dependent on a surplus-based economy (e.g. Earle, 2002). Whether this was taken from the local subsistence economy, as has often been the traditional explanation (see Sahlins, 1972), or whether there were other dominating factors at play will need further investigation.

3 Mode of Organization

Identifying the organizational practice of prehistoric societies is deeply anchored in political economy approaches (e.g. Brumfiel, 1992; Earle, 1997; Feinman, 2000; Earle, Ling, Uhnér, Stos-Gale, & Melheim, 2015; Uhnér, 2017). The debate has been particularly visible in Anglo-American research and Steward and White's cultural ecology (Steward, 1955; White, 1959). The approach capably looks into the correlation between ecological restrictions and/or opportunities in human development. Adapting and building on a human ecological framework, the processual archaeology of the 1970s and early 80s were able to show how the structural causation of prehistoric societies worked through factors such as ecology, economy and ideology (e.g. Mann, 1986). While efficient, this approach is also flawed in a frequently overly functionalistic presentation of human development, often neglecting social variation internally within societies, but also the complicated processes that transpires between groups and associated networks (see Barth, 1969; Feinman, 2000). Therefore, it is important that the evidence available to us are understood within its appropriate socio-historical context(s). For the Bronze Age in particular, which is linked to increased stratification and institutionalization (Kristiansen & Larsson, 2005; Kristiansen & Suchowska-Ducke, 2015), a political economy approach serves as a point of departure for identifying management strategies and socio-political organization.

Timothy Earle and Matthew Spriggs (2015, p. 516) argue that a political economy of past societies "involved an economic structuring to channel resource flows [...] to finance power strategies". Often this comes down to the control of local subsistence (Sahlins, 1972). Subsistence evidence from the northwestern coast is limited. However, settlement sites have provided evidence of macrofossils, indicating a subsistence reliant on cereal processing (Hjelle, Prøsch-Danielsen, & Soltvedt, 2016), and a handful of rock shelters along the coast have yielded well-preserved organic material (e.g. Olsen, 1976; Todnem, 1999). Combined, these data give insight into an economy based on animal husbandry, hunting activities, and metal-working (e.g. Bakka, 1955; Prescott, 1995). Moreover, the frequency of bones from domesticated animals at sub-alpine rock shelters, such as Skrivarhelleren in Årdal, have led Christopher Prescott (1995) to suggest a complex economy based on a seasonal pastoral agriculture, in which livestock were taken up into the mountains seasonally, with sedentary arable settlements in the lowlands near the coast (e.g. Diinhoff, 2004).

Accompanying the subsistence economy is an ideology of power expressed through the construction of monumental burial mounds. From the archaeological record of burial mounds, it becomes evident that societies along the northwestern coast were stratified and that they were also well integrated into Continental developments (cf. Vandkilde, 2011, 2014). This is specifically seen through metal objects like weapons and jewelry (e.g. Møllerop, 1963; Myhre, 1981). New evidence from the natural sciences further elaborates on this connection, pointing to the distances that metal moved from ore to final product (Ling, Hjärthner-Holdar, Grandin, Billström, & Persson, 2013; Ling et al., 2014; Melheim et al., 2018; Nørgaard, 2018; Nørgaard, Pernicka, & Vandkilde, 2019).

At best, the local stable economy based on cereal cultivation and animal husbandry facilitated a growing political economy at specific areas along the coast. However, it was more likely that a broad range of factors helped to transform certain areas into central nodal points of material wealth. It is argued that key central factors included strategic utilization of the local landscape and alliances with comparable groups.

As a mean to identify systems that would have fostered power differential and participation in interregional developments, house structures and burial mounds are chosen as this papers frame of

reference. These categories are often-used sources to study power differentially; however, they also show homogeneity across distances, which makes them easy to frame comparatively between regions (e.g. Smith & Peregrine, 2012, p. 4). Before moving on to the case studies it should be stated that this paper presupposes that the societies studied were connected by the seaway (Kristiansen & Suchowska-Ducke, 2015, p. 361; Prescott et al., 2018), which enabled them to access foreign goods and nurture long-distance alliance ties. The dependence on certain goods, like metal, forwarded new political strategies that gave good-fortuned regions a competitive advantage over others.

3.1 House Structures

The longhouses of Late Neolithic and Early Bronze Age Scandinavia mark a major break with previous forms of living, a move toward permanent settlement, and an agro-pastoral based economy (e.g. Artursson, 2009). Several have argued that this change transformed the collective view of societies and their understanding of the house as a source of power, social consolidation and structural coordinator of its residents (e.g. Bourdieu, 1979; Lévi-Strauss, 1982; Waterson, 1995; Vandkilde, 2008). Common for ‘house societies’ (see Lévi-Strauss, 1982) is that their tangible power is often expressed in the material representation of the house. This creates habitual structures that can facilitate the emergence of hierarchical societies. As stated by Claude Lévi-Strauss (1982, p. 174), the definition of the house is “a corporate body holding an estate made up of both material and immaterial wealth, which perpetuates itself through the transmissions of its name, its goods and its titles down a real or imaginary line, considered legitimate as long as this continuity can express itself in the language of kinship or of affinity and, most often, of both”. Simply put, a house is constructed in such a way that it forces individuals to work together and actively engage in each other’s space, which sets the stage (or at least increases) the chances for a hierarchical and kinship-based system. Following the ideas of Lévi-Strauss, both the material and immaterial aspects of the house are emphasized, as it perpetuates the importance of a house’s economic system and social power in the development of hierarchal societies (i.e. Waterson, 1995, p. 51). Roxana Waterson (1995) exemplifies this by pointing to the stratified societies of the Toraja in Indonesia. Here the house is explicitly used by the upper strata of society to differentiate themselves from commoners. Decorative woodcarvings on the houses are used to display wealth and social power, but the custom can also serve as a primary cause of conflict with competing households and neighboring groups (Waterson, 1995, p. 58). Numerous ethnographic cases can be used as analogies to illustrate the social significance that reside in the architectonic construction of houses. However, whether it involves longhouses from the European prehistory, Toraja origin houses, or French châteaux, houses are all expressive of power, both directly and indirectly to legitimize economic control and power. In the Nordic Bronze Age, the escalation of house-building at strategic locations along the coast could thus be seen as material expression of power, kinship, alliance ties, and property rights.

3.2 Burial Mounds

Similar to longhouses, burial mounds are part of the built environment. As such, they were expressive of power and, possibly, kinship. At the threshold of Early Bronze Age Period II (c. 1500 BCE), a distinct network of earthen barrows began to emerge all around the Continent, recognized as part of an expanding Tumulus Culture of Central Europe (e.g. Holst, Rasmussen, Kristiansen, & Bech, 2013; Kristiansen & Larsson, 2005). In Scandinavia, the vast majority of burial mounds of this sort can be dated to Early Bronze Age Periods II–III (c. 1500–1100 BCE), signifying a trend or moment of conjuncture. Some areas on the Scandinavian Peninsula were particularly perceptive to this new way of treating their dead. Along the northwestern coast of Norway, Lista and Jæren (including the area of Tananger), saw an early and contemporary construction of earthen barrows together with the rest of Europe. In other parts of the northwestern coast, concurrently with the earthen barrows, large cairns emerged with central coffins usually built in a dry stone technique of horizontally laid slabs (see Figure 1). Compared to the preceding Late Neolithic, which has extremely few documented cases of burial practice, the Early Bronze Age shows a rapid adoption of external elements that were part of a grander interregional scale of social developments (e.g. Reiter, 2014). For a long time, Bronze

Age burial mounds have been seen as expressions of wealth and stratified power. Equally so have they been seen as markers for seafaring travelers along the coast of Scandinavia; while they may have guided their movement across the seascape, they also inadvertently created a cross-cultural symbol that worked as an incentive for communication, or as an outward expression of power, and (in certain cases) of conflict.

4 Case Studies

The paper will now turn to two case studies that highlight the ability to rise in power through a combination of local circumstances but also, in all likelihood, strategic alliance ties with Continental societies. In order to determine their organizational practices, both regions will draw on the archaeological data of house structures and burial mounds. These data will be contextualized within the local landscape and ecological restrictions and/or opportunities to discuss organizational strategies locally, and their connections with wider trans-regional networks.

4.1 The Region of Lista

The region of Lista is a peninsula covering an area of roughly 140 km² (Figure 2). It is situated at the very south of the northwestern coast of Scandinavia, with only c. 150 km separating it from South Scandinavia, and the wealthy Bronze Age region of Thy (Bech, Eriksen, & Kristiansen, 2018). Ecologically, the region is placed in the warmest climate zone in Norway (the neomoral zone), with natural growing oak and other broad-leaved deciduous woodland, a long growing season for cereal, and the ability to keep animals outside year-round. Low plains, hills, lakes and higher mountains towards the north round out the landscape. In the Late Neolithic–Early Bronze Age, massive deforestation and the presence of cereal grains is evident in pollen diagrams (Prøsch-Danielsen, 2011). Intriguingly, the region contains approximately 90% of the metal objects in the county from the Late Neolithic–Bronze Age (Prescott et al., 2018, p. 191), which cover an overall area of 7200 km².

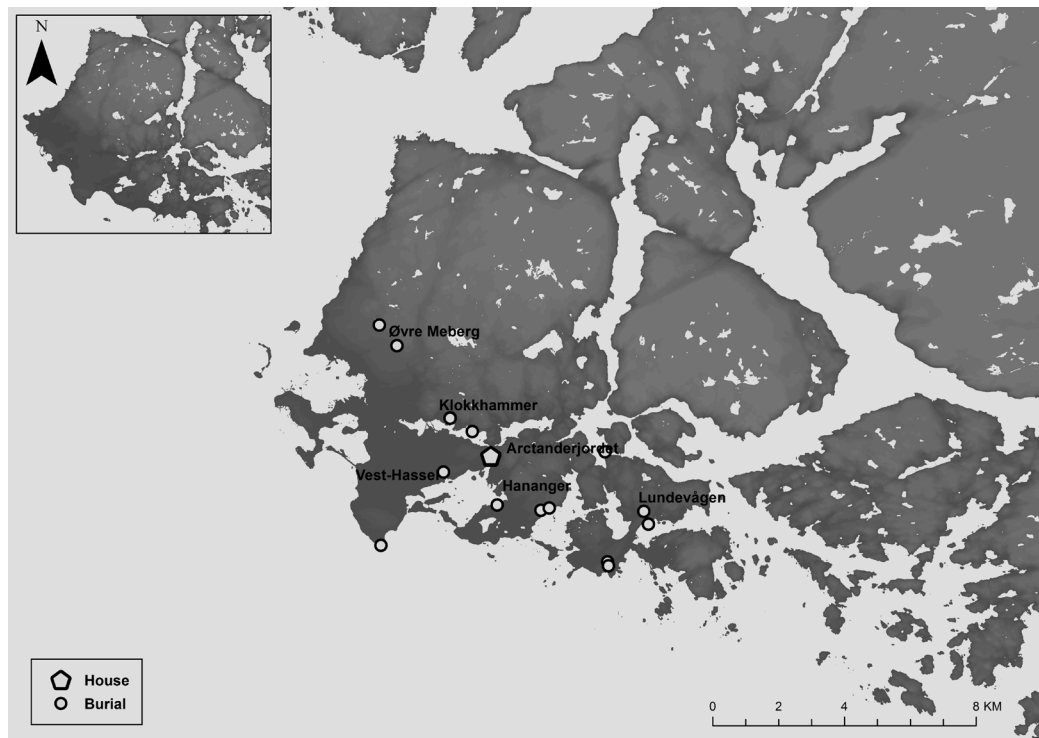


Figure 2: Map of Lista with distribution of notable archaeological sites and constructions. Sea level set to 5 m asl.

4.1.1 House Structures

Several Late Neolithic settlement sites have been discovered in the area around Lista (Kilhavn, 2013, p. 44), but only two two-aisled longhouses have been unearthed together with a single three-aisled longhouse dated to the end of the Late Bronze Age. Since this study is confined to the Late Neolithic and Early Bronze Age, the Late Bronze Age house will not be discussed further. From excavations at Arctanderjordet from 1999, two rows of postholes were unearthed, which were later interpreted as two successive two-aisled longhouses. The two-aisled longhouses at Arctanderjordet are situated on a low hill on Bryne farm, strategically placed between three lakes: Brastadvannet, Prestevannet, and Nesheimsvannet. Nesheimsvannet to the south (now dry) most likely functioned as an easily accessible waterway for boats, made possible due to a combination of the elevated sea level (Prøsch-Danielsen, 1997), and the larger lakes and bogs that have been drained in modern times (Valum, 2011, p. 24; Prøsch-Danielsen, 2005). At the same time, it should be mentioned that the lakes were probably already cut off from the sea around 3200 BCE due to the formation of natural beach ridges (Prøsch-Danielsen, 2005, p. 47), but smaller outlets or creeks would presumably have created easy access into the interior landscape (Figure 2).

The 31 structures that were originally interpreted as postholes from two three-aisled longhouses have since been reinterpreted by Silje Hauge (2007, pp. 72–74) as two two-aisled longhouses from the Late Neolithic and Early Bronze Age Period I, and a single three-aisled longhouse from the Late Bronze Age, based on radiocarbon dates and house typologies. The earliest two-aisled longhouse has a length of minimum 15 meters, while the later house must have had a minimum length of 13 meters based on the distance between the outermost postholes. With only the roof-bearing postholes intact, there is little information that can help explain the interior structure of the longhouses. However, the absence of an interior layout may well be reflective of the actual arrangement; given the very favorable climatic and ecological conditions at Lista it would not have been necessary to provide animals with inside stalls (even during winter). Charcoal from two postholes from different rows was radiocarbon dated and recalibrated in OxCal v.4.2 to 2043 to 1882 BCE and 1881 to 1729 BCE. The two distinct dates makes it tenable to assume that they derive from two successive longhouses, one from the Late Neolithic I to Late Neolithic II transition, and the other between Late Neolithic II and Early Bronze Age Period I.

The settlement site yielded ceramic sherds, flint fragments, and burnt bones. Both the coarse character of the ceramic sherds and the pressure-flaked flint debris correspond with the Late Neolithic–Early Bronze Age phase. Some of the flint fragments also exhibit retouch, which could indicate that they have been used as scrapers, regularly associated with hide work. Due to its spongy nature, the bone fragments have been tentatively interpreted as stemming from human remains, though it is emphasized that these traces are also commonly seen in the bone structure of smaller animals (Valum, 2011, p. 37). A more peculiar find was a Vestland stone adze that was recovered in one of the postholes. These adzes are traditionally dated between the Early and Middle Neolithic (Bergsvik, 2012, p. 105) and should best be interpreted as an ‘antique’ deposition (Valum, 2011).

There are several finds from the original report that suggest that Arctanderjordet was settled for a long period (Grimsrud, 1999). This is substantiated by the two-aisled longhouses from Late Neolithic I to Early Bronze Age Period I. The three-aisled longhouse dated to Late Bronze Age further supports the idea of a long-term site. The absence of finds from Period II–III is seen as inconsequential as several finds in close proximity to the settlement suggest a strong presence in these periods as well. Of particular interest is an intact bivalve mold for casting both palstaves and chisels (Figure 3). A combined mold such as this is unique in Scandinavia, and it is also among the earliest soapstone molds in the region (Melheim, 2015, p. 119). The find was discovered in a wetland area at Voile, roughly 200 meters southeast from Arctanderjordet (Valum, 2011, p. 28). Several other finds have been uncovered in the wetland area as well, including two flint daggers, a shaft-hole axe (Figure 3), and sherds from a soapstone vessel. The long-term depositions at Voile have been interpreted as a place for ritual sacrifice (Melheim, 2006, pp. 77–78). Furthermore, a palstave weapon axe together with a Period I Sögel-type blade (Figure 3) were discovered in close proximity to Arctanderjordet at Vanse. Although the exact location and context of the finds are unclear (Johansen, 1986, p. 31), they clearly indicate interregional contacts further south. In contrast, northern connections are

indicated by a deposit at Østre Hauge that contained asbestos-tempered ceramic sherds together with a type VI flint dagger and a spoon-shaped scraper (Prescott, 1991, p. 94). This makes it the southernmost find of asbestos-tempered ceramics in northwestern Scandinavia, which is generally concentrated in the Møre and Romsdal region (Norway), c. 550 km further north (Ågotnes, 1986; Hop, 2016).

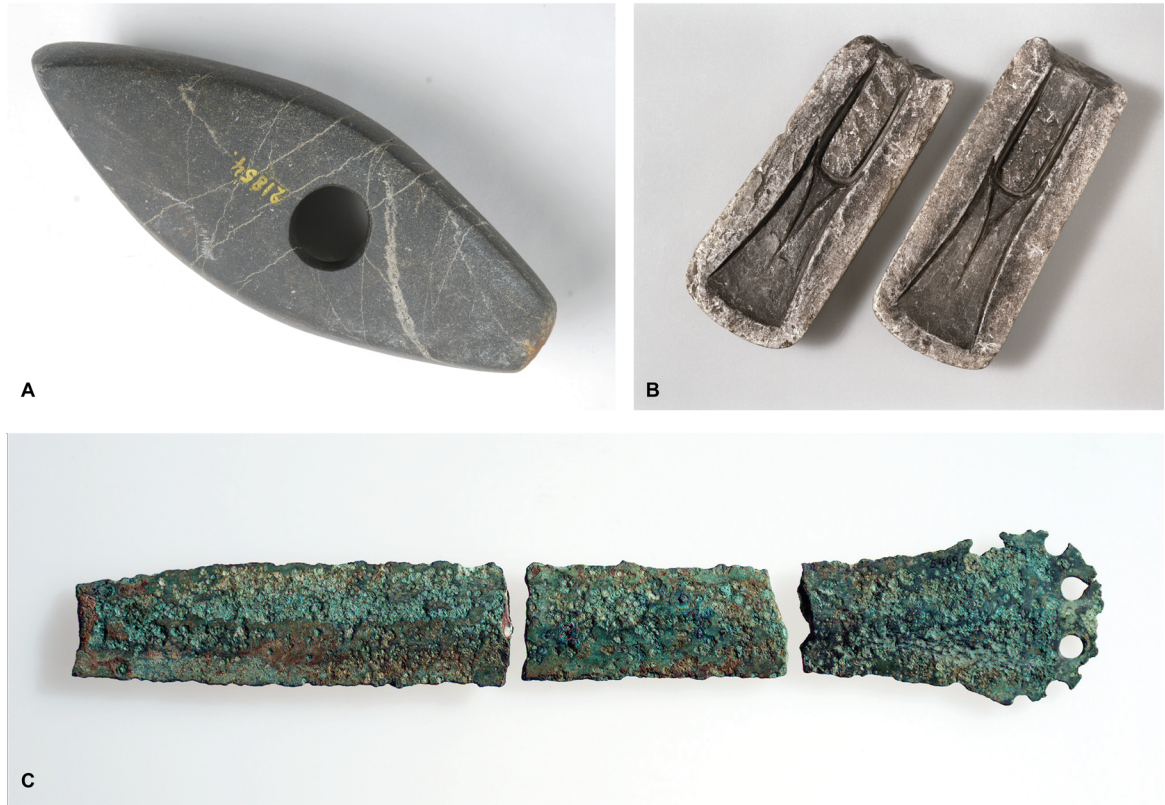


Figure 3: Various artefacts located in or nearby the settlement site at Lista. **(A)** Simple shaft-hole axe. Photo: Brynjar Sandvoll, reproduced by permission from © Museum of Cultural History, University of Oslo. **(B)** Soapstone vessel for casting a palstaves and chisel. Photo: Åse Kari Hammer, reproduced by permission from © Museum of Cultural History, University of Oslo. **(C)** Sögel-type sword. Photo: Svein Skare, reproduced by permission from © Museum of Bergen, University of Bergen.

4.1.2 Burial Mounds

The burial mounds in the region are generally of a monumental character situated along the coast that would have been clearly visible by travelers coming from South Scandinavia (Figure 2). The mounds are constructed both as earthen barrows but also as large cairns. The objects recovered show no clear distinction between the two construction types, though there was a general change from smaller composite cairns and barrows in the Late Neolithic over to more grand earthen barrows in the Early Bronze Age (Austvoll, 2019). However, there is evidence that suggest that the region adopted a continental burial practice early on. This is seen at Brastad where two slab-lined cist was uncovered in a small composite barrow, which contained a flint sickle, pressure-flaked arrowheads, ceramics and a stone axe (Østmo, 2011). The burials are archetypal of the Late Neolithic and as Einar Østmo (2011, p. 119) fittingly points out, they are situated in an area where several barbed and tanged Bell Beaker arrowheads have been discovered. Another burial mound with a characteristic Bell Beaker expression is a small composite mound at Klokkehammer, not far from the settlement site of Arctanderjordet. In the mound, a twisted spiral ring in gold was recovered. Lene Melheim (2015, pp. 31–32) has pointed out the ring's clear diagnostic similarities to other spiral coiled

rings from the Continent, which are typically dated to the Late Neolithic. The so-called *Noppenringe* are commonly associated with the Únětice Culture of Central Europe. In addition, at Lundevågen, a couple of kilometers from Klokkehammer, a tin awl was recovered in a small cairn which was radiocarbon dated to the Late Neolithic, pointing to obvious contacts with the Continent at an early stage (Melheim, 2015). Later in the Early Bronze Age, there seems to be an increase in monument building. For example, mounds are erected in a line at Hasslneset, at the southernmost point of Lista, which would have been easily noticed by incoming ships. A similar pattern with rows of burial mounds is also seen further north, for example at the rich burial site Reheia on the island of Karmøy (Nordenborg Myhre, 1998). The burial mounds seem to clearly conveying an outward expression of power to ships trying to cross the narrow strait between the island and the mainland. Moreover, one could easily postulate that if payments were not made coercive force would follow. Finds that may suggest a more coercive strategy at Lista are also seen in the material itself, most prominent perhaps is a bronze sword typologically dated to Period III found in cist made of standing stone slabs in an earth-constructed mound. The mound is not situated in close proximity to the sea or waterways; instead it is placed on a rising hill overlooking large parts of the Lista landscape and the coast, not far from where Nazi occupants during World War II built the fort “festung Lista” for overlooking and controlling the coastal sea route.

Other burial mounds include a cairn at Kviljo (tentatively dated to the Early Bronze Age) as well as two burials at Hananger (dated to Late Neolithic II and the Early Bronze Age). At Hananger, one can also find the only rock art site at Lista with ship motifs that can be typologically dated to the Early Bronze Age. Interestingly, some of the ships show typological resemblance with ships found on the slates from Mjeltehaugen, argued to be one of the very earliest depictions of ship motifs in the Nordic region, possibly from the Late Neolithic (Fett & Fett, 1941; Mandt & Lødøen, 2005, p. 246; Sand-Eriksen, 2017).

4.2 The Region of Tananger

The peninsula of Tananger is a decidedly coastal landscape situated at the northern end of the Jæren-region, approximately 115 km north of Lista (Figure 4). The peninsula is made up of a low-lying hill, forming the southern side of the Hafsfjord inlet. It stretches northward from the district of Sola and is exposed to the North Sea on its western side with small protective skerries and sheltered bays. The soil is made up of nutrient rich phyllite (Prøsch-Danielsen, Prescott, & Holst, 2018, p. 54), well suited for cereal cultivation. Deforestation can be identified from pollen samples with an initial deforestation phase around 4000–3600 cal. BCE. This is recognized in the pollen diagrams with an increase in *Sphagnum* spores and charcoal particles, together with a noted decrease in arboreal pollen (Prøsch-Danielsen & Simonsen, 2000, p. 16). During this period, the landscape was still a mosaic landscape consisting of deciduous forest, open areas, and marshland. Around the transition to the Late Neolithic, 2500–2200 cal. BCE, a second wave of deforestation happened. Interestingly, there is a pronounced sub-stage (c. 2300 cal. BCE) with an increased and intensified deforestation phase that is visible in approximately 60% of the pollen diagrams. This would effectively have opened up most of the landscape; there is also a concurrence with an expansion of the heathland pointing to pastoral activity and active use of the landscape for grazing. By the third phase (1900–1400 cal. BCE), approximately 80% of the pollen diagrams point to deforestation. Also here, a notable sub-stage (c. 1900 cal. BCE) is visible (Prøsch-Danielsen & Simonsen, 2000, p. 23), which incidentally transpires just before we see an accumulation of longhouse building in the region. As with Lista, the sea level would have been approximately five to seven meters higher than it is today (Prøsch-Danielsen, 2006), effectively transforming Tananger into an island, or a landmass connected to the mainland only by a narrow stretch of land. Archaeologically, the region contains several well-preserved settlement sites and rich burial mounds of a monumental scale.

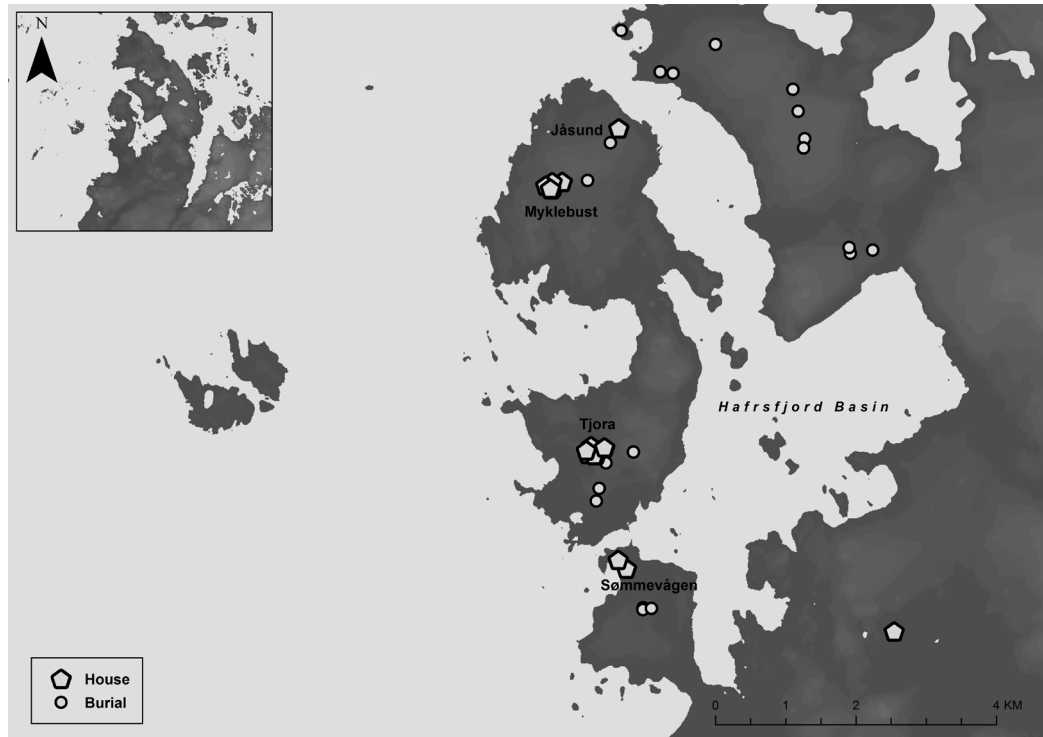


Figure 4: Map of Tananger and adjacent districts with archaeological sites and constructions. Sea level set to 5 m asl.

4.2.1 House Structures

There are four excavated settlement sites with house structures from the Late Neolithic–Early Bronze Age at Tananger (Dahl, 2014; Fyllingen, 2012b, 2015; Eilertsen, 2016). This paper will focus on the largest of these sites: Tjora, which was excavated from 2008–2009. The site contained at least 12 different house structures from the Late Neolithic and Early Bronze Age (Fyllingen, 2012b). A total of nine two-aisled longhouses, two three-aisled longhouses, as well as a hybrid construction consisting of both a two and a three-aisled part were identified (Fyllingen, 2012). The site gives the impression of being a very active site with a temporal gap only in Period II, similar to the settlement site at Arctanderjordet, Lista. Due to excellent preservation conditions, most of the house structures are intact and the construction evidence is substantiated by traces of clay near the walls of several houses (Fyllingen, 2012b). This, together with the many smaller post-holes, would support a wattle-and-daub technique (Ethelberg, 2000; Bech & Olsen, 2013, p. 10). Based on the heavy deforestation present during this period it would seem natural that the inhabitants needed to adapt to these conditions by building longhouses with less timber. Several of the house structures seem to have been contemporary (Fyllingen, 2012b, 2015).

Most of the finds connected to the house structures consist of lithic debris. However, several houses contained charred cereal grains. In House 15 at Tjora, 456 individual grains were discovered in a single posthole. Around half of these were identified as emmer, which is relatively uncommon in the Late Neolithic, especially in such large quantities (Fyllingen, 2012b). Moreover, a large piece of quern stone was discovered in association with House 4 at Tjora, which supports an economy reliant upon cereal production.

Several two-aisled houses at Tjora contained pieces of ceramics, including houses 9, 13, 15, and 16. House 9 contained an astounding 117 pieces of ceramic sherds. Several of them were discovered in a hearth, possibly as an intentional deposition (Fyllingen, 2012b, p. 34). In the western end of House 15, stones were arranged in a circular formation; in and around this structure several pieces of worked flint were discovered as well as three pressure flaked arrowheads, ceramics, burnt bones and a quartz crystal,

indicative of a confined area with high levels of activity. Evidence of internal cooking pits from House 14 further could be indicative of communal activities, perhaps in the consolidation of certain households' power within the political economy. In addition, a spindle whorl was found at Tjora where one of the loom-weights was discovered. Other finds indicative of textile production from house structures include scrapers and drills. Exploitation of wool in Rogaland could potentially have been an important part of the economy. Kristin Armstrong Oma (2018) makes good arguments for such an economic basis in a recent publication. An interesting point is the region's lack of byres in houses. Instead, one would have penned sheep as opposed to stalling them in byres as you do with cattle (Armstrong Oma, 2018). Grazing herds of sheep would naturally have required a lot of space as well as land for winter fodder, which would effectively minimize the land available for crop cultivation. Still, there are ample traces of a mixed economy built around both animal husbandry and agriculture in the region (Prøs-Danielsen et al., 2018).

4.2.2 Burial Mounds

Tananger and its neighboring districts contain the largest concentration of burial mounds from the Late Neolithic–Early Bronze Age in northwestern Scandinavia (Figure 4). One of the few burials with a Late Neolithic date is a collective grave found in a burial mound during the clearance on a farm in 1931 (Høgestøl, 2003), and a recently excavated mound at the farm of Tjora next to the settlement site (Fyllingen, 2012a). Both barrows and cairns are present in the Tananger landscape, though barrows dominate. The largest burial mound in the region is called Sothaug, situated on the Jåsund farm (Figure 5). Measuring 40 m in diameter and 5–6 m high, it would have required a large work force to complete. Inside the mound was an Ottenjann's type B sword, two bronze buttons and pieces of cloth, which was thought to be wool (Myhre, 1981). The sword type is particularly interesting with a noteworthy concentration in the Thy region in South Scandinavia (Ottenjann, 1969), suggestive of close ties. The mound is strategically placed on the highest point in the landscape overlooking the northern inlet into the Hafrsfjord Basin as well as the outer coastal route. South of Sothaug is a similar mound named Myklebusthaugen. Excavated in 1878, the mound was mainly constructed of boulders with approximately 1 m layer of outer turf (Helliesen, 1901, p. 56). The central cist was made of standing stone slabs and contained ceramic sherds and sea-shells (*littorina littorea*), which could be interpreted as representation of the symbolic and economic importance of the sea (Anfinset, 2016). Interestingly, the cist also contained an ornamented stone slab with three pairs of footprints and 12 cup-marks (Helliesen, 1901, pp. 56–57), a common feature within the region's burial practice (Syvertsen, 2005).



Figure 5: The Sothaug mound from the northwest. The largest burial mound in the district (40 m in diameter and 5–6 m high) situated on an elevated location with views towards both the outer coastal sea route and the entrance into the Hafrsfjord inlet. Photo by author.

Closer to the settlement site of Tjora is a relatively large mound measuring 25 m in diameter and 3.5 m high. The mound, which is traditionally called Store Melhaug (Big Melhaug), is situated on a rising hill in a relatively flat surrounding landscape. Excavated in 1878 by Anders Lorange (1879), the mound was made by a composition of sand and turf with a central cist in its center. A stone kerb inside the outermost layer and three secondary cists suggest that the mound had been expanded upon at the later date, perhaps as a result of a kinship-type structure. A smaller mound close to the Store Melhaug named Lille Melhaug (Small Melhaug) contained, in its central cist, a bronze button, some bronze fragments, and a bronze knife typologically dated to Early Bronze Age Period III (Engedal, 2010, p. 60). Also, three secondary cists were uncovered there (Nicolaysen, 1876, p. 187).

Other barrows in Tananger hold little contextual information, although it is worth mentioning a barrow at the Tjora settlement site which was recently excavated and radiocarbon dated to the Late Neolithic with a secondary cist most likely with an Early Bronze Age date (Fyllingen, 2012a). This corresponds well with the timeframe of the settlement site. Nordenborg Myhre (2004, p. 103) has also tentatively dated several more burials to the Early Bronze Age based on size and location in the landscape. They are all situated on rocky outcrops, following a line that faces Risevigen Bay further north. Elhaugen is particularly interesting as a spearhead was supposedly discovered in the mound sometime in, or before 1885 (Helliesen, 1885, p. 140; Nordenborg Myhre, 2004, p. 103). However, a recent review of the artefact has it catalogued as a razor from the Late Bronze Age. Nevertheless, the find could stem from a secondary cist, which seems to be a common feature of the region's burial practice.

Summing up, the burial mounds at the Tananger Peninsula are of a monumental character and they seem to be connected to the settlement sites close by. They are often situated on elevated locations in order to accentuate their monumentality, something that could be related to an expression of power to travelers taking the sea route up and down the coast. The presence of a collective burial is interesting as it may point to a violent society (Høgestøl, 2003). However, what the burial actually represent is more difficult to construe. Though a society reliant on slaves or a lower class could be one interpretation, that would offer an alternate explanation for several of the smaller huts with hearths that were uncovered in connection with some of the longhouses in the region (Dahl, 2014; see also Ling et al., 2018).

5 Discussion

The archaeological record gives insight into a region that is operating in the peripheral part of a wider interaction network. Nevertheless, the coast of northwestern Scandinavia provides evidence that suggests that at least certain well-placed regions were able to operationalize and utilize their strategic locations to participate in a 'European Bronze Age'. Two key factors help elucidate this supposition; namely the introduction of house structures (i.e. longhouses) and burial mounds. According to Lévi-Strauss (1982), in a 'house society' it is the house that is the dominant institution. Based on the long-term settlement sites at Arctanderjordet and Tjora, the centrality of the longhouse as an organizational unit is seen as an important part in the socio-political development of its inhabitants and as a structuring element in the validation of kinship ties and power. However, key in this development was the reliance on the sea, and its role as an active aggrandizer in the establishment of more coercive societies along the coast. It is suggested that this was only possible through a combination of ecological potential locally, alliance ties and when needed through coercive force. This combination would only have been possible in certain favorable regions that could capitalize on the coastal landscape as a bottleneck.

The region of Lista holds a favorable position in terms of access to South Scandinavia. Situated at the southernmost tip of the Norwegian coast, the region would most likely have been one the earliest land sighting by travelers coming from South Scandinavia. Moreover, the extremely dangerous stretch of sea around the peninsula would periodically have restricted access further north (Kvalø, 2007), which is why several of the strategic harbors would have allowed for much needed rest and recuperation for travelers.

Alternatively, the outer stretch of sea could have effectively been circumvented by sailing through the inner fjord, which would have functioned as a protective strait with a short portage for crossings further

north up the coast. As such, the peninsula's role as a staging ground for crossings either further north or south is seen a crucial factor in the region's wealth (see Prescott et al., 2018). Local groups could have easily exploited these potentials to procure wealth. However, it would have required a strategy that was both alliance-dependent but also coercive when needed. Based on the accumulation of archaeological material at Lista compared to other parts of the county, it is unquestionably a region that was able to maintain a long-term engagement with foreign contacts. This hypothesis is strengthened by an early introduction of Late Neolithic burial mounds with a 'foreign' expression and imported metal artefacts (Melheim, 2015). The subsequent presence of monumental burial mounds in the Early Bronze Age with a rich material assembly of imported products reinforces the region as an important central nodal point. Some objects like the Period I Sögel blade (the only one of its kind in the region) point to contacts beyond South Scandinavia, to the Elbe and Eider rivers where the Sögel-Wohlde tradition is concentrated. Although not connected to the Lista region, it is worth mentioning a Period I sword from Blindheim further up the coast at Møre og Romsdal, which has been argued by Ørjan Engedal (2010) to share its closest parallel with Period I swords in the Central European Alps. The long-distance objects must be seen in relation to socio-political developments. The investment in longhouses most likely triggered a kinship-based organization that allowed local elites to maintain alliances with regional and interregional groups. In order to maintain such a structure, it is reasonable to think that feasting formed an important part in the maintenance of these alliances (Dietler & Hayden, 2001; Hayden, 2014), as well as gift giving (e.g. Mauss, 2016 [1925]), and, when these strategies failed, coercive force.

Further north, on the Tananger Peninsula, the settlement site at Tjora would have had a similar strategic position. Here travelers would have had to pass through the narrow strait into the protective Hafrsfjord Basin or they could alternatively have tried to circumvent the outer stretch of coast where several harbors could have been utilized for safety. The ability to control harbors and straits in order to provide safe haven for travelers is an important factor that would have helped link distant societies together (Earle et al., 2015).

Even though both Lista and Tananger point to long-term activity, it is evident from the archaeological record that Tananger was not able to concentrate its wealth in the same way as seen in Lista. This is due to neighboring districts that exhibited a similar expression of wealth and power, seen in both house structures, burial mounds, and artefact assembly (e.g. Møllerop, 1963; Myhre, 1981; Nordenborg Myhre, 2004). This could indicate a more unstable society where conflict between concurrent groups was a constant treat. Archaeologically, the burial mounds at Tananger with a typologically datable material are concentrated in Early Bronze Age Period III. This may correspond with the settlement structures as well, where building activity peaked around Late Neolithic II and Early Bronze Age Period I, before a notable peak emerged once again around Early Bronze Age Period III (Austvoll, in press). Neighboring regions, particularly the districts of Sola and Klepp, have the majority of their graves typologically dated to Period II. Further north from Tananger (separated by 25 km of open sea) is the other prominent region of Karmøy, where considerable activity during Early Bronze Age Period III also took place (Nordenborg Myhre, 1998, 2004; Austvoll, 2019). Thus, the development at Tananger could be interpreted as a regional change or movement of power, in which power shifted from the southern to northern part, either as a consequence of local competition, or as a voluntarily response to developments further north at Karmøy. For leaders in Tananger, gathering support from locals would have been critical. This could have involved distributing goods, organizing feasts, providing protection, and perhaps even helping with the allocation of resource zones for effective exploitation of local subsistence (see Prøsch-Danielsen et al., 2018). The organization seen in Tananger is, thus, a complicated causality that is reliant of trade and long distance contacts. However, local support would have been a necessary precondition for the continued development seen in the archaeological record.

In both cases, organization seems to come from a reliance on the seaway that enabled political economy based on coercive force to control travel and trade. For example, in Early Bronze Age Period III the introduction of more warrior-oriented objects such as flange-hilted swords began to emerge along the entire coast of northwestern Scandinavia. No flange-hilted swords have been uncovered in the region of Lista. However, neighboring districts both south and north of Tananger have flange-hilted swords. The swords are often associated with a Continental warrior expression that can be identified not only in Scandinavia but also as far south as the Mediterranean (Suchowska-Ducke, 2015; Kristiansen & Suchowska-Ducke, 2015).

However, a system based only on coercive force and trade is usually not very stable as it generates a system where groups constantly compete for power and increased wealth-accumulation (e.g. Junker, 1999). However, by relying (in part) on the stable subsistence economy like cereal cultivation and animal husbandry the two regions could have alleviated some of the stress factor that is usually present in coercive societies. This may have been an important contributing factor for the two regions success.

As a closing example, I wish to point to two identical burial mounds from Meberg, Lista (Marstrander, 1950) and Jåsund, Tananger (Myhre, 1981). Erected 135 km apart, both burial mounds were constructed as earthen mounds with a single cist constructed of standing stone slabs. Inside both cists were identical bronze swords with hafts of Ottenjann's type B dated to Early Bronze Age Period III (Engedal, 2010) – the only two of its kind in northwestern Scandinavia. Furthermore, both burial mounds were erected in proximity to the excavated settlement sites Arctanderjordet and Tjora. How are these two burial mounds connected? Perhaps they are simply the result of regional trends, but another explanation could be related to kinship and alliance of an elite network. This is substantiated by the fact that Karmøy, a region north of Tananger emerges as a new hierarchical power in this period (Austvoll, 2017; Nordenborg Myhre, 1998). Therefore, the need to maintain alliances with other groups must have been critical. An important addition as to why the region of Lista was able to maintain such a long-term political economy is therefore understood through a combination of the region's strategic location (which functioned as a link between South Scandinavia and the rest of northwestern Scandinavia) as well as through the local elites' maintenance of social power exercised through the longhouses and rich material assembly. Similarly, Tananger capitalized on its coastal position by easily controlling traffic around the peninsula or through the Hafrsfjord inlet. In all likelihood, the combination of land well-suited for both cereal cultivation and animal husbandry contributed to building and consolidating the political economy of the region. However, it was most likely the threat of a coercive force that was the prime mover in the region's accumulating wealth. The result was a peripheral region that was able to actively engage in Continental developments.

6 Concluding Remarks

This paper has focused on a coercive strategy. Its success relied on the utilization of the coastscape, but this is only possible if the social and political organization is structured in such a way that it can strategically manipulate and force travelers and locals to participate in said structure. To do this, it is argued that some societies along the northwestern coast of Scandinavia relied on a combination of local subsistence, ecology and landscape potential, coercive force, and long-distance alliance ties. Of course, a coercive strategy is not the only strategy identifiable in the archaeological record along the northwestern coast of Scandinavia, and the success of one strategy needs to be seen in a complex interdependence with others that are more cooperative in nature (see Austvoll, in press). Irrespective, the implications of a coercive strategy are distinct, yet clearly an important part of the reason why we see such rich material assemblies at specific nodal points along the coast of northwestern Scandinavia. By beginning to identify specific organizational strategies in prehistoric societies, we are able to delve deeper into the specific factors that generate change or coherence. Rather than seeing the coast of northwestern Scandinavia as dichotomous towards Continental developments the identification of organizational strategies can present us with explanatory models that look into how prehistoric societies actively worked toward participation in wider networks.

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