

The Earliest Wave of Viking Activity? The Norwegian Evidence Revisited

AINA MARGRETHE HEEN-PETTERSEN 

*Department of Historical Studies, Norwegian University of Science and Technology,
Trondheim, Norway*

This article discusses the chronology and nature of the earliest Viking activity, based on a group of early burials from Norway containing Insular metalwork. By focusing on the geographical distribution of this material and applying the concept of locational and social knowledge, the importance of establishing cognitive landscapes to facilitate the Viking expansion is highlighted. It is argued that the first recorded Viking attacks were only possible after a phase in which Norse seafarers had acquired the necessarily level of a priori environmental knowledge needed to move in new seascapes and coastal environments. This interaction model opens the possibility that some of the early Insular finds from Norway may represent pre-Lindisfarne exploration voyages, carried out by seafarers along the sailing route of Nordvegr.

Keywords: Early Viking Age, Vikings, Insular, Norway, *Nordvegr*, maritime mobility

INTRODUCTION

For over a century, the earliest Viking activity in Britain and Ireland (the ‘Insular area’ referred to in this paper) has been the topic of intense scholarly discussion. The written and archaeological evidence have been regularly reviewed, most recently by Emer Purell (2015) and Clare Downham (2017) who have studied the first generation of Vikings in Ireland and the written sources for the earliest Viking activity in England, respectively.

The purpose of this article is to consider the Norwegian evidence in light of the current discussions into initial direct contact across the North Sea. First, it reviews the chronology and geographical distribution of 16 early burials containing Insular metalwork, including new finds

and data which have not been included in previous debates about the earliest Viking activity. Second, the article examines the nature of the initial phase of contact with a focus on maritime mobility and environmental knowledge, which must have been vital aspects but remain under-investigated components of the initial phase of contact. Finally, the article brings together these elements and proposes a model of movement and maritime communication for the earliest voyages across the North Sea.

THE EARLIEST RECORDED RAIDS AND THE BEGINNING OF THE VIKING AGE

Over the years, many scholars have expressed different views about when the earliest direct contact between Norway

and the Insular world took place and the nature of this interaction. The relationship between the archaeological evidence and information recorded in the Irish annals and the Anglo-Saxon Chronicle has been central to these discussions.

The first written record of a Viking attack on Insular land took place in Portland, Dorset, in AD 789—or sometime during the reign of King Beorthric of Wessex between AD 786 and 802 if we base the dating on a cautious use of the sources (Dumville, 2008: 356). According to the Anglo-Saxon Chronicle, three ships of Northmen arrived near a royal residence, where they killed the king's reeve who rode out to meet them. While the earliest source refers to the Northmen as 'Dani' (a general term for Scandinavians), later versions of the Chronicle (Versions D, E, and F) identify the ships as originating from Hordaland in the western part of present-day Norway (Dumville, 2008: 356, Downham, 2017: 1). Possibly after the altercation in Portland, the earliest Viking raid on an ecclesiastical location is the well-known attack on the monastery on Lindisfarne in north-eastern England in June 793, recorded in the Northern recension of the Anglo-Saxon Chronicle, versions D and E (Downham, 2017: 2).

In the following decade, the Insular sources record repeated raids around the shores of Britain and Ireland. This includes the sacking of the monastery at the 'mouth of the River Don' (possible Jarrow, or a monastery in South Yorkshire) and raids throughout the Hebrides in AD 794, on the islands of Iona, Inishmurray, Inishbofin, and Rechru (probably Lambay Island, Co. Dublin) in AD 795, while mainland Scotland (Argyll) and Ireland were targeted from AD 796 onwards (Dumville, 2008; Downham, 2000). While the annals and Chronicle show an emphasis on early raids on Ireland and northern Britain, other written

sources including letters, foreign chronicles, and charters, suggest that large parts of southern England were also targeted by 'pagans' around the same time. These accounts are however somewhat suppressed in the Chronicle, which mainly records the Vikings as a regular threat to southern England from c. AD 830 and onwards. It appears that the Anglo-Saxon Chronicle is somewhat biased towards King Alfred and his family by playing down the impact of the Vikings before the reign of King Ecgberht, King Alfred's grandfather (Downham, 2017: 12).

Since the early twentieth century, the earliest recorded raids have generally been regarded as the starting point of contact across the North Sea. By tradition, this has led to the widespread notion that any Insular metalwork could only have reached Scandinavia after these events. This principle is often referred to as the 'Shetelig axiom' and has been both influential and much debated. While early researchers were also open to the idea of direct pre-Viking contact, this topic became the subject of lively scholarly discussion in the 1990s. Instead of viewing the Lindisfarne attack as the first time the 'Norwegian' Vikings entered the Insular world, it was strongly argued that a pre-Viking phase of migration and trade to Atlantic Scotland took place from the early to mid-eighth century or even earlier (e.g. Myhre, 1993, 1998, 2000; Weber, 1994, 1996; Solli, 1996). This view is sometimes referred to as the 'Myhre' model because of Bjørn Myhre's influential role in these discussions. As summarized elsewhere (see Barrett, 2008: 418–21), the debate principally centred around four aspects of the archaeological evidence: 1) Viking graves with early types of brooches or weapons in Scotland; 2) early combs from Orkney made of Scandinavian reindeer antler; 3) pollen analysis on Faroe indicating a pre-Viking presence; and 4) early Insular

objects in Norwegian graves. The first of these pieces of evidence has since been largely dismissed because the early brooches show clear signs of wear and repair and because of the difficulties of dating Scottish graves on the basis of Norwegian typologies (e.g. Morris, 1998: 88; Owen, 2004). The presence of Scandinavian reindeer antler from Orkney has also been reviewed and has shown that the arrival of this material cannot be securely dated to before the early ninth century (Ashby, 2009; von Holstein et al., 2014). The evidence for a pre-Viking Age presence on the Faroes has recently been confirmed by new pollen evidence and dates. These results are interpreted as ‘firm evidence for the human colonisation of the Faroes by people of unknown geographical and ethnic origin some 300–500 years before the large-scale Viking colonisation of the ninth century’ (Church et al., 2013: 231–32). While not forming part of the original discussion, an early date from a site in Norwick, Shetland, obtained in 2003, has also been used to suggest Norse settlement before AD 793 (Ballin Smith, 2007). However, the date was obtained from carbonized food deposits and could easily be a result of marine reservoir effects on cooked fish, or even statistical chance, since the remaining dates from the site largely suggest a later settlement date (Barrett, 2010: 291). At present, there is little archaeological evidence to support the hypothesis of a Norse settlement in the Scottish Isles before the mid-ninth century (see Barrett, 2008, 2010).

As shown above, much of the Insular evidence of possible pre-Viking contact has been thoroughly reviewed, and in some cases dismissed, in the last two decades. In the following section, I shall focus on the fourth, and perhaps least studied, element of evidence for early Scandinavian activity in the west: Insular metalwork found in early burials in Norway.

THE EARLIEST INSULAR METALWORK: COMPOSITION

Over forty years ago, Egil Bakka discussed the chronology of a group of eleven early graves from Norway with Insular metalwork, all of which also contained brooches of the late Vendel/Merovingian periods or transitional types that survived into the Early Viking Age (Bakka, 1973; see also Wamers, 1998: 51–54). To this group, five further finds, from Ytre Kvarøy, Skei, Geite, Myklebost, and Farnen, can be added (Figure 1 and Table 1).

As shown in Table 1, the Insular metalwork comprises twenty-three objects from sixteen graves representing fourteen female and two male burials. The most significant piece is the complete reliquary from a woman’s burial in Melhus (see Figure 6), one of only twelve largely complete Insular house-shaped shrines to have survived in Europe. The grave contained a further Insular find in the form of a reworked ecclesiastical mount, which was probably used as a brooch to fasten the deceased’s fur cloak (see Heen-Pettersen & Murray, 2018 for a recent presentation of this find). Such decorative and gilded copper-alloy mounts are by far the most common object type in the early Insular material, with fifteen pieces known from fourteen locations. Three of these, from Oseborg (Møre and Romsdal county) (Figure 2), Grande, and Fosse are harness mounts, all of which were reworked into dress accessories (Wamers, 1985: 93–96). While the metalwork from Store Kongsvik cannot be ascribed to an identified parent object, the remaining examples were probably once mounted on ecclesiastical objects. This includes an Anglo-Saxon book mount from Bjørke (Figure 2) that served as a pendant suspended from a bead-necklace worn by the deceased (Wamers, 1985: 95).

The metalwork from Sanddal, Farnen, and Myklebust is identified as hinges from

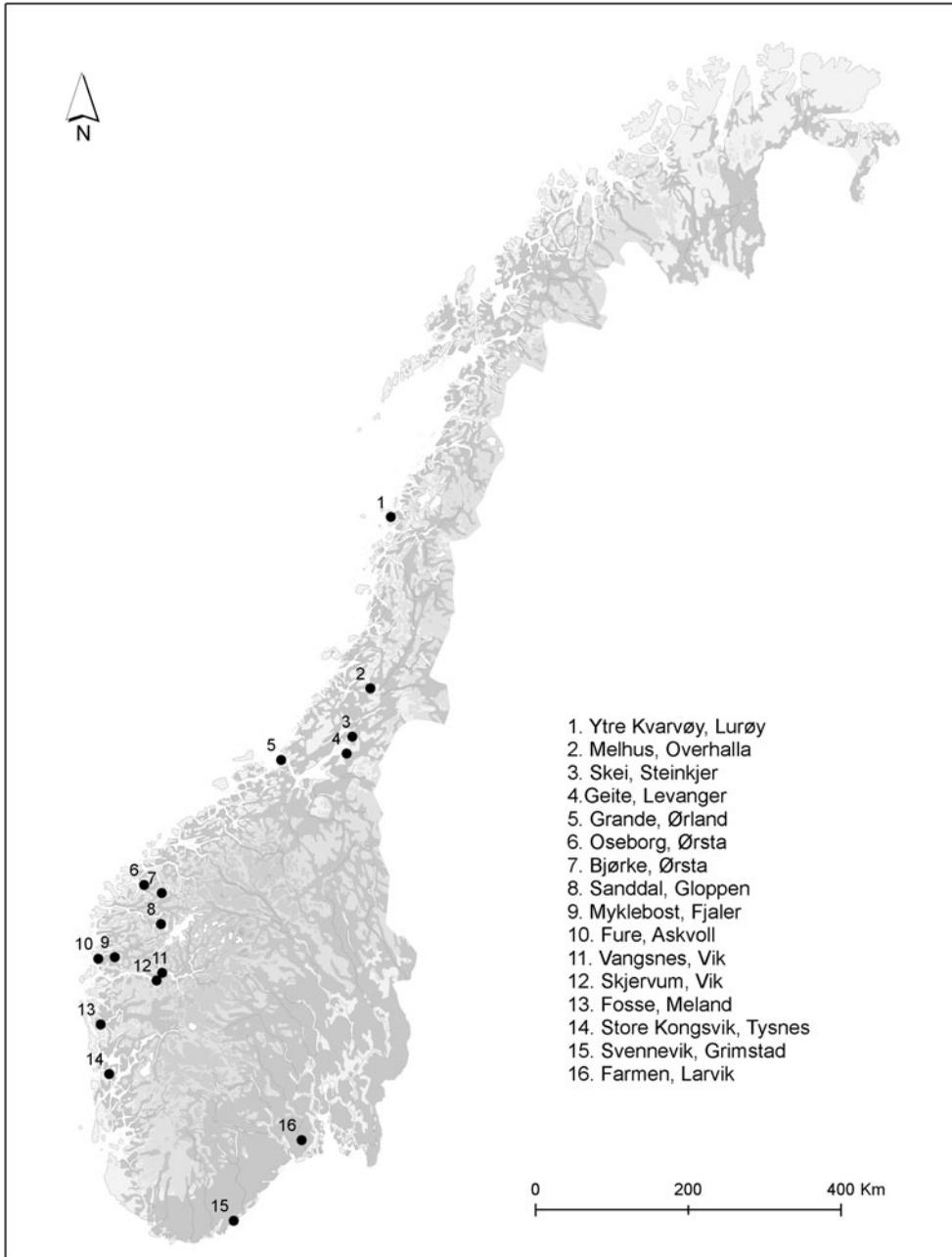


Figure 1. *Distribution of the earliest Insular finds found in Norway.*
 Map by Astrid Lorentzen, Trondheim University Museum.

reliquary shrines (Wamers, 1985: 19, 95; Aannestad, 2015: 80). Further pieces from either reliquary shrines or other reliquaries are represented by the mounts from

Skjervum, Melhus, Skei, and Svennevik. On five of these pieces, secondary perforations, sometimes associated with the remains of pin fittings and/or textiles,

Table 1. Overview of the early burials containing Insular material.

Site	Type of Insular object	Diagnostic grave-goods
Ytre Kvarøy, Lurøy	Copper-alloy bowl	Sword, Petersen special type 1
Melhus, Overhalla	Reliquary shrine, copper-alloy mount (ecclesiastical)	Button-on-bow brooch, R643A x 2
Skei, Steinkjer	Copper-alloy ladle, hanging bowl, bucket, 2 copper-alloy mounts (ecclesiastical)	Berdal 1A
Geite, Levanger	Copper-alloy bowl, 2 drinking horn terminals	Animal-shaped brooches of the 'Stor-Skogmo' type
Grande, Ørlandet	Harness mount	R640 x 2
Oseborg, Ørsta	Harness mount	R640 x 2
Bjørke, Ørsta	Copper-alloy mount (book mount)	R640 x 2
Sanddal, Gloppen	Hinge of a reliquary shrine	R643A x 2
Myklebost, Fjaler	Hinge of a reliquary shrine	Axe (JP type A or B)
Vangsnes, Vik	Copper-alloy mount (ecclesiastical)	JP7
Skjervum, Vik	Copper-alloy mount (ecclesiastical)	R640 x 2, R643 x 1
Fure, Askvoll	Copper-alloy mount (ecclesiastical)	Button-on-bow brooch
Store Kongsvik, Tysnes	Copper-alloy mount, original function uncertain	R640 x 2
Fosse, Meland	Harness mount	R643A x 2
Svennevik, Grimstad	Copper-alloy mount (from reliquary shrine)	R641 x 2
Farmen, Larvik	Hinge of a reliquary shrine	JP17



Figure 2. Left: back and front of harness-mount from Oseborg, Ørsta. Right: Anglo-Saxon book mount from Bjørke, Ørsta.

Photograph by permission of University Museum of Bergen/Svein Skare.

suggest that these were adapted for use as brooches (see Stenvik, 2001: 33; Aannestad, 2015: 307). The remaining

ecclesiastical pieces belong to a group of mounts which may originally have been altar or tabernacle decorations, or

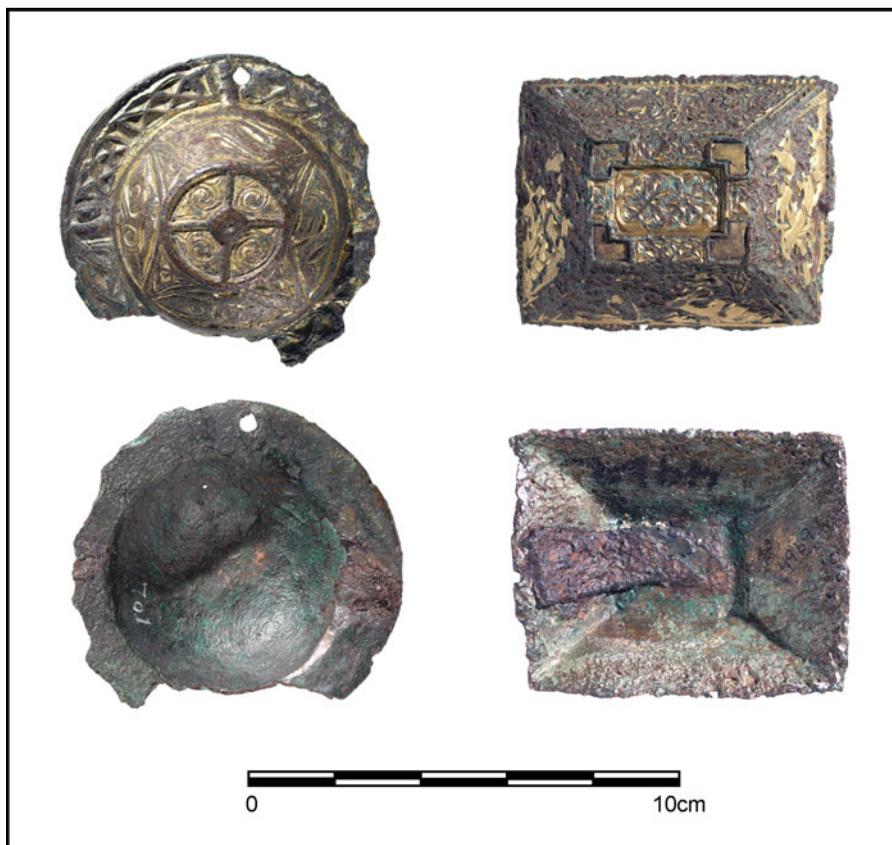


Figure 3. Left: the flanged boss from Vangsnes, Vik. Right: the mount from Fure, Askvoll. Photograph by permission of University Museum of Bergen/Svein Skare.

decorations on processional crosses. This includes the hemispherical and flanged boss from Vangsnes and the metalwork from Fure (Figure 3). The latter belongs to a group of hollow, cast mounts in the shape of a truncated pyramid, similar to the mounts decorating the ‘Antrim Cross’. These two pieces were also reworked and probably worn as dress ornaments (Wamers, 1985: 96).

Finally, the Insular finds from Ytre Kvarøy, Geite, and Skei were various items used for serving food and drink. The only hanging-bowl from this corpus comes from Skei, where it formed part of a fine set of serving equipment, together with a large bronze ladle and a small,

bronze-bound bucket (Stenvik, 2001). The large Insular bowls from Ytre Kvarøy (see Figure 7) and Geite belong to a group of copper-alloy vessels, which can be isolated from the hanging-bowl series since they lack suspension devices. The Geite grave also included two drinking horn terminals of Insular origin.

CHRONOLOGICAL DIFFICULTIES

The material from the earliest burials, which provides the best indication of deposition dates, consists of decorated dress ornaments and weapon types, since other plain and undiagnostic finds are

more difficult to place within a narrower time frame (see e.g. Bakka, 1973; Stenvik, 2001; Heen-Pettersen & Murray, 2018 for details about these further grave goods). As for beads, the work of Callmer (1977) still forms the main typology for the Norwegian material. However, in our case, the problem with using his classification is the fact that Callmer explicitly used the ‘Shetelig Axiom’ when building his chronology and, therefore, presumed a post-Lindisfarne date for beads found with early Insular material (see e.g. Callmer, 1977: 77). Likewise, when Bakka discussed the early graves with Insular metalwork in 1973, he had to deal with the ‘problem’ of early styles of ornamented brooches in burials with imports. His solution was to propose that the styles continued in use until around AD 800 and that the deposition of Insular metalwork, therefore, largely corresponded with the ‘Shetelig Axiom’ (Bakka, 1973: 16–17). Since then, a number of researchers have studied and suggested various chronologies for the brooches of late Vendel-period Scandinavia, including transitional types surviving into the early Viking Age (e.g. Shetelig, 1927; Ørnes, 1966; Jansson, 1985; Myhre, 1993; Klæsøe, 1999; Rundkvist, 2010). The difficulties within a fine chronology have yet to be resolved, especially since these brooches were in use in the decades before and after the first recorded overseas raids.

Five of the graves in this study contained pairs of thin-shelled brooches of R640/JP 4 type (Figure 4). While older research grouped these brooches collectively under the type name R640, it is now generally agreed that they can be divided into two main types: The Small Plain type and the Large Plain brooches. All our examples belong to the latter group, with a suggested deposition date of *c.* AD 770–840 (see Rundkvist, 2010: table 10). A further four burials contained pairs of type



Figure 4. Oval brooches of R640 type from Bjerke, Ørsta.

Photograph by permission of University Museum of Bergen/Svein Skare.

R643 brooches. This group is also believed to date to the late eighth and early ninth century (see Rundkvist, 2010: 135). A similar date is suggested for the animal-shaped brooches of the rare ‘Stor-Skogmo’ type found in the richly-furnished cremation burial from Geite, which has recently been confirmed by radiocarbon dates (see below).

Two further pairs of oval brooches from Vangsnes and Farnen (types JP7 and JP17) are classed as ‘transition types’ (TT) (Rundkvist, 2010: finds catalogue). Petersen (1928) certainly suggested a slightly later manufacturing sequence for the Norwegian TT examples compared with the simple, thin-shelled R640 and R643 brooches. While he regarded JP7 as an early type going back to the end of the eighth century, JP17 was defined by Petersen as one of the earliest Viking-age types based on the ‘gripping beast’ motif. Rundkvist has however suggested a bipartition of this decoration, where the beasts used on the earliest types (such as JP17) may pre-date the Lindisfarne raid by a few decades (Rundkvist, 2010: 159–60).

A late eighth-century production date is also argued for the late types of button-on-bow brooches from Melhus and Fure

Table 2. *Geite, Levanger: calibrated dates.*

Sample code	Radiocarbon age (BP)	$\delta^{13}\text{C}$ (‰) - AMS	Calibrated date (95.4% probability) using OxCal 4.2.4 (Bronk Ramsey, 2013)
TRa-12567 (a)	1255 ± 20	-19.1 ± 0.8 ‰	AD 676–776 (95.4%)
TRa-12567 (b)	1190 ± 30	-18.7 ± 2.1 ‰	AD 727–738 (1.7%) AD 768–896 (91.2%) AD 928–942 (2.4%)
TRa-12567 (c)	1230 ± 20	-22.0 ± 0.4 ‰	AD 692–747 (36.9%) AD 762–780 (14.8%) AD 787–876 (43.7%)
<i>TRa-12567 (average)</i>	<i>1225 ± 25</i>	-	<i>AD 693–746 (51.0%)</i> <i>AD 763–779 (18.9%)</i> <i>AD 791–867 (25.5%)</i>
TRa-12568 (a)	1230 ± 20	-19.7 ± 0.4 ‰	AD 699–747 (36.9%) AD 762–780 (14.8%) AD 787–876 (43.7%)
TRa-12568 (b)	1205 ± 20	-26.7 ± 0.4 ‰	AD 769–887 (95.4%)
TRa-12568 (c)	1220 ± 15	-25.4 ± 0.4 ‰	AD 720–742 (13.2%) AD 766–879 (82.2%)
<i>TRa-12568 (average)</i>	<i>1220 ± 15</i>	-	<i>AD 725–739 (7.9%)</i> <i>AD 766–780 (14.6%)</i> <i>AD 787–877 (73.0%)</i>

(Gjessing, 1934; Glørstad & Røstad, 2015: 186–88). Finally, while representing a slightly later find, an early date is also indicated by the find of a Berdal type 1a brooch with a gripping beast ornament from Skei. It has been suggested that production of this brooch type began during the mid-eighth century, based on the finds of moulds in Ribe, Jutland (Myhre, 1993: 186). There has, however, been considerable debate regarding the chronology of the layers associated with these finds. Feveile and Jensen (2000: 17–18) have reassessed the dating evidence and argued that the date of the earliest occurrence of Berdal brooches in Ribe must be adjusted to *c.* AD 780–790.

None of the above burials has previously been dated by radiocarbon analysis. In connection with this study, two samples were obtained from cremated animal bones from the base of the Insular bowl in the Geite burial. Since no collagen was preserved, the results were obtained by measuring the carbonate fraction in cremated bones (bio apatite). Each of the two

samples was tested three times (see Table 2 and Figure 5) and the best estimates for the age are the average of the three measurements (at 95.4% probability): cal AD 693–867 (Tra-12567) and cal AD 725–877 (Tra-12568). However, a closer look at the individual results indicate a narrower timeframe. Only one measurement gave an early date of cal AD 676–776 (95.4% probability), while three samples provided very similar results of cal AD 768–896 (91.2% probability), AD 769–887 (95.4% probability) and cal AD 766–879 (82.2% probability). A deposition date of sometime after AD 766 therefore seems most likely, but the results also underline the methodological difficulties in obtaining the necessarily chronological resolution to confidently date burials to before or after the first recorded raids.

While this group of finds represents the earliest evidence of direct contact across the North Sea, it is also clear that both the typological and radiocarbon dates are coarse and offer us room to interpret the finds as either supporting or speaking

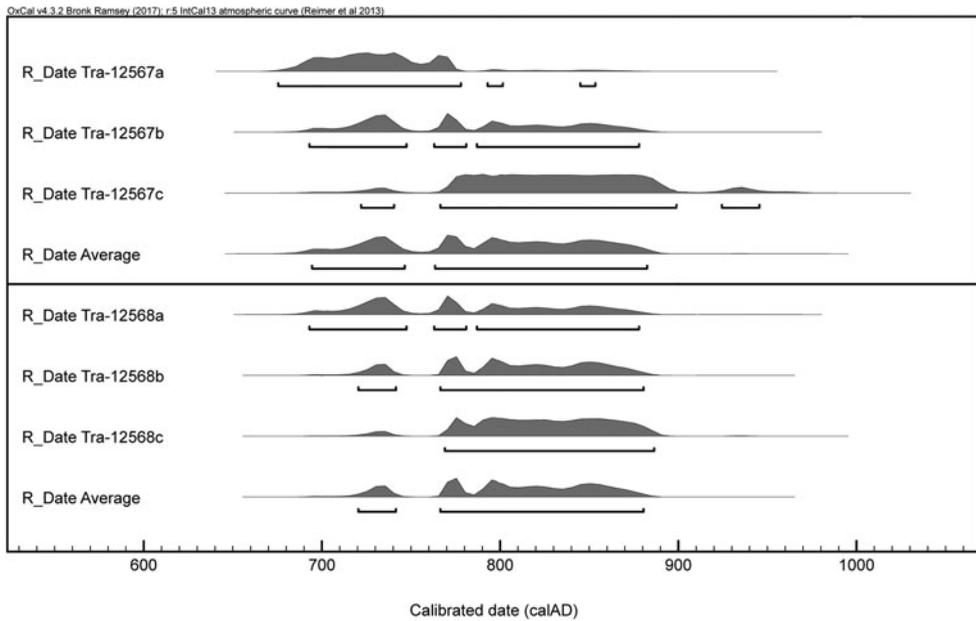


Figure 5. *Geite, Levanger: calibrated dates using OxCal 4.2.4 (Bronk Ramsey, 2013; Reimer et al., 2013).*



Figure 6. *The reliquary from Melhus, Overhalla, (length: 118 mm; height: 83 mm) is one of only twelve complete Insular house-shaped shrines to have survived in Europe. Photograph by permission of Norwegian University of Science and Technology Museum, Trondheim/Åge Hojem.*



Figure 7. *The large bowl from Ytre Kvarøy, Lurøy, is the most northerly find of early Insular metalwork from Norway. Bowl diameter: 31 cm. Photograph by permission of Tromsø University/Mari Karlstad.*

against the ‘Shetelig axiom’. Since it is difficult to achieve fine-grained dating, the methodological and theoretical framework

against which the imports can be interpreted becomes essential. This is especially true for interaction models, which have implications for the chronology and characterisation of the earliest Norse activity in Britain and Ireland.

MODELS OF MOVEMENT

Today, there is general agreement that some form of pre-Lindisfarne contact must have existed (e.g. Barrett, 2010: 297), but there have been few attempts to suggest new models of how this interaction took place since the discussions led by Myhre. Since the 1990s, the evidence to support a pre-Viking period of well-established connections has been significantly weakened, especially by Ashby's (2009) dismissal of the reindeer comb evidence which was used as one of the principal pieces of evidence in these models. The main problem is still the lack of archaeological evidence for such early activity on either side of the North Sea. Admittedly, John Hines has argued convincingly for a phase of small-scale immigration from western Norway to south-eastern England in the fifth and sixth centuries, based on parallel stylistic elements found on square-headed brooches and other types of dress jewellery in these two areas (Hines, 1992, 1996). This contact does, however, not seem to have continued into the following centuries (Hines, 1996: 27). Moreover, the small amount of western glassware in early eighth-century Scandinavian contexts are generally believed to have reached Scandinavia through the continental route (Myhre, 1993: 189 and citations therein).

While there are indications that the continental route to southern England may have been known, I follow Ashby (2009: 27) in believing that 'we still lack the smoking gun' of early contact between Norway and the Insular world of northern Britain and Ireland. This calls for a revision or certainly a modification in the characterisation of the earliest, direct Norse activities. The following section focuses on the geographical distribution of the Norwegian material, acknowledging the revised status of other archaeological evidence for early contact in an attempt to search for and propose a model of

movement for the earliest Norse voyages across the North Sea.

FINDS DISTRIBUTION AND THE SIGNIFICANCE OF THE *NORDVEGR*

The location of early Insular material is often considered to be an indicator of where the first Vikings originated (Wamers, 1998: 52; Barrett, 2010: 293; Baug et al., 2018). Most early Insular finds are found in western Norway, in Hordaland to Sunnmøre, but there is also a number of notable finds from further north, including Trondheimsfjord, Melhus in Overhalla (Figure 6), and Kvarøya in Lurøy (see distribution in Figure 1). These finds show that the earliest oversea voyages were not exclusively a western-Norway phenomenon.

The overall finds concentration falls within the geographical area of Norway traditionally referred to as '*Nordafjells*', representing the area north and west of *Langfjella*, a mountain chain on the southern Norwegian peninsula. These mountains separated the *Nordmenn*—the men from the north—from the *Austmenn*, the men from east of the mountains. This geographical division probably stems from at least the Viking Age (Skre, 2014: 34–35). Apart from two finds from Farnen and Svennevik, the area 'east of the mountains' is remarkably lacking in early Insular finds. The overall distribution pattern clearly strengthens the impression that these objects reached Norway along a direct route over the North Sea, rather than via Denmark and continental Europe. This is further supported by the lack of early finds of Insular metalwork from Denmark (see Baastrup, 2013).

The sailing route which connected the lands north of the mountains was called *Nordvegr*, 'the northern way' and stretched for more than 1000 km from Rogaland in

the south-west to Lofoten, north of the Arctic circle (Skre, 2014: 35). In this part of Scandinavia, seafarers mastered ‘ship-building, seamanship and naval warfare to a level that was difficult to match for anyone in Northern Europe’ (Skre, 2014: 43). The most northerly find in our finds group, a bowl from a cemetery at Ytre Kvarøy (Figure 7), is located just to the south of where the traveller *Othere*, who visited the court of King Alfred in the late ninth century, is reported to have come from (Storli, 2007: 81–84). This may also be one of the earliest finds in the current study, based on the early type of decorated sword (Petersen special type 1) found together with the bowl in a plough furrow. The sword is discussed by Vinsrygg (1979: 67–69), who has identified it as a probable import from the Frankish Rhine area and suggests a deposition date towards the middle or late eighth century. This date fits well with the other eleven graves from this cemetery which are typologically dated from the late sixth to the end of the eighth century (Vinsrygg, 1979: tables I–VIII). Further imported finds from Ytre Kvarøy included cowry shells from the Maldives, a piece of gold-plated metalwork with a Latin inscription, as well as beads and brooches probably produced in southern Scandinavians towns such as Ribe and Birka (Vinsrygg, 1979: 67–70; Sindbæk, 2011: 58–59). These finds show that the population of a small northern Norwegian island had the means, seafaring skills and connections to acquire objects from far-away places.

The early maritime mobility of these parts of Norway is further emphasized by the presence of reindeer antler, used for comb making which was recovered from early town layers in Ribe, indicating the existence of direct trade links already from the late eighth century (Ashby et al., 2015). Likewise, Baug et al. (2018) have recently shown how there was a ‘steady

supply’ of ‘Mostadmarka’ type whetstones from Trøndelag to markets in southern Scandinavia from at least the early eighth century. These results also suggest increasing economic activity in the North Sea area which drew large parts of Norway into supra-regional networks in the decades before and after the first recorded Viking attacks (as underlined by Myhre, 1993, and Baug et al., 2018). Frisian Tating ware is found as far north as Borg in Lofoten (Holand, 2003: 203–09), and seventh- and eighth-century Frankish coins were recently recovered in excavations at Ranheim, Trøndelag (Grønnesby & Heen-Pettersen, 2015: 176). Further, the Skei burial mentioned earlier contained fragments of rare Frankish textiles as well as a Berald 1A brooch probably produced in Ribe (Stenvik, 2001: 31–37). Through such long-distance voyages, Scandinavians along the *Nordvegr* became well aware of the Insular lands, either first-hand (as demonstrated by the incident in Dorset, *possibly* carried out by men from Hordaland), or through information gained second-hand on their journeys to continental Europe. This activity not only moved goods, it also facilitated the movement of knowledge and improved navigational ability, which ultimately may have encouraged voyages of exploration further west over the sea (see Sindbæk, 2011: 58–59).

ENVIRONMENTAL KNOWLEDGE AND THE EARLIEST NORTH SEA CROSSINGS

An awareness of the Insular land through increased interaction with continental Europe would not have been enough to transform the North Sea passage from a body of water to ‘the highway to the Irish Sea’ (to borrow an expression used by Barrett, 2010: 297). This process also involved a phase where people along the

Nordvegr started to travel in unfamiliar maritime environments and, therefore, had to acquire and make use of new environmental knowledge. This issue is often implied in discussions concerning the earliest Viking activity but is rarely considered as a primary factor in the origin of the Viking Age. Rockman (2003: 4–9) has emphasized the need to examine the importance of different types of environmental knowledge when constructing general models of movement in archaeological research; and, in the following, I will consider the importance of two of these aspects: locational and social knowledge (Rockman, 2003: 13–14). While primarily developed as a tool in colonisation archaeology, a modified version of this model may prove fruitful as a framework for conceptualizing the nature of the earliest North Sea crossings.

Locational knowledge refers to knowledge of the spatial and physical characteristics of new landscapes and particular resources present in new environments. It includes the ability to find places and resources again after their initial discovery (Rockman, 2003: 4–5). For the earliest Viking raiders, this included locational information of desired resources and favourable locations to attack, such as lightly defended places with accumulated portable wealth and potential slaves. It also comprised the right maritime skills and nautical knowledge needed to cross the North Sea and move around in the challenging coastal waters of the Northern British Isles. Locational knowledge is closely linked to social knowledge, where the latter may be understood as the processes and experiences that serve as a means of transforming unfamiliar environments into a social landscape, for instance through the attribution of names, meaning, and experiences to landscape features in a new environment (Rockman, 2003: 5–7). This approach is comparable

to Sindbæk's concept of 'routinisation' in the Viking Age, which emphasizes how establishing geographical routes was very much a matter of social practice that had to be experienced and 'worked out' (Sindbæk, 2005: 32, 274–75).

For Scandinavians in the eighth and early ninth centuries, expeditions to the west must have been daunting experiences, when 'relatively small open vessels, in the beginning probably with quite limited ability to survive severe weather, carried fairly small groups of men with few provisions' (Bill, 2010: 38). The passage from western Norway to the Northern Isles is approximately 170 nautical miles long and, with the use of sail in good weather conditions, the crossing could have taken a day or two (Wamers, 1998: 52). The question of when the sail was adopted in the Norse homelands and how this affected the beginning of the earliest overseas voyages has been hotly debated. Some scholars support the idea that sails were used in Scandinavia long before the Viking Age, while a mid to late eighth-century date has been the generally accepted opinion (see Bill, 2010; Westerdal, 2015: 18). One of the two vessels discovered at Salme in Estonia in 2008 and 2010, dates to around AD 750 and is the earliest evidence of a combined rowing/sailing vessel used by the Scandinavians (Price et al., 2016). For Norway, the use of sail is not archaeologically attested before the Oseberg ship which was constructed in AD 820 (Bill, 2010: 27–28), although it is unlikely to have been the first sailing vessel in Norwegian waters. Nevertheless, the introduction of the sail and developments in shipbuilding technology during the Viking Age in this setting should be regarded as improvements and adaptations in response to new uses rather than the result of revolutionary inventions (Barrett, 2010: 290).

While Denmark and continental Europe could largely be reached by sea

passages in sight of land, the situation was quite different when crossing the open North Sea, where land could at times remain out of sight for days. Undertaking such a journey represented a far greater risk and required different skills and methods for estimating a ship's position and speed, such as latitude sailing achieved by using the sun and the stars to estimate direction. Successful landings and return voyages also involved knowledge of the northerly coastline and the behaviours of the North Sea currents to avoid drifting off course or arriving in hostile environments (Van de Noort, 2011: 141). This was very much a cognitive and personal experience: 'Memorized characteristics of coasts and waters, helped along by descriptive toponyms, were essential navigation aids, and pilots with local knowledge were always valuable' (Bill, 2008: 178–79). This practice is especially visible in Orkney and mainland Scotland, where a large number of Norse landmarks are named after their distinctive features visible from the sea (see Jesch, 2009 for examples). Many of these probably reflect 'the voyages that preceded settlement' and expresses the visual perception and geographical knowledge of the early Norse seafarers (Jesch, 2009: 78). Maritime-oriented communities, such as the *Nordvegr*, must have been especially receptive to the cognitive character of such environmental learning (Bill, 2008: 179; Van de Noort, 2011: 136–42).

The North Sea was very much a fluctuating and unpredictable force, which was given an 'other-than-human' agency with its own will, intentions, and emotions (Van de Noort, 2011: 231–33). After navigating this open seascape, the shortest and most direct route would take the Norwegian seafarers to the archipelagic waters of Shetland or Orkney, an area with persistent sea fogs, strong tidal currents, and many skerries and submerged

reefs (Crawford, 1987: 19–23). Some of the dangers of sailing in northern waters are expressed in a number of eleventh- to thirteenth-century poems and sagas which describe the hazardous conditions facing seafarers, as well as the wrecks of ships and ships caught in storms (see Jesch, 2015). For instance, the waters of the southern tip of Shetland are known as *Dynrøst* (roaring whirlpool), where tidal currents and strong winds have caused difficulties for many sailors. According to *The Saga of Håkon Håkonsson*, this is where Harald Olavsson, King of Man, and his bride Cecilia (the daughter of King Håkon Håkonsson) probably drowned when their ship was lost in AD 1248 (HHS: 295, chp. 261). The seafarers who sailed south from Orkney to mainland Scotland also had to avoid the whirlpool *Svelkie* in the Pentland Firth, one of the most powerful tidal currents in the world. Many ships are known to have been lost there, possibly also that of Earl Håkon of Lade, which *The Saga of Olaf Haraldsson* tells us disappeared in this area when returning to Norway from England in AD 1029 (Crawford, 1987: 21; OHS, chp. 184).

Without doubt, there must have been many other Scandinavians who met a similar fate along the coasts of Britain and Ireland, and the success of the earliest wave of Vikings must have depended on an intimate knowledge of the maritime landscape along the northern coastline. Wayfinding based on such cognitive mapping was not a skill acquired overnight, but emerged over time as a dynamic process where new information was gradually added in the minds of individuals (see Golledge, 2003: 31–33). Consequently, and following Rockman (2003: 4–5) and Sindbæk (2005: 30–33), as more knowledge was accumulated and natural features in the new land named and understood, the journey became routinized and the Insular land was gradually

transformed from an unfamiliar territory to a socialized landscape.

A revised model of movement

Do the observations made above allow us to propose a revised model of movement and maritime communication for the earliest voyages to northern Britain and Ireland?

First, regarding chronology, it is clear that we still lack the methods and conclusive archaeological material that would provide a fine dating of the earliest evidence of Viking North Sea crossings. However, it is argued here that the revised status of the 'reindeer comb evidence' should be incorporated into a current model of contact.

Second, concerning the importance of maritime communication, the distribution analysis has shown that most of the early Insular finds are found in areas along the *Nordvegr*, which indicates early maritime mobility and sometimes early links with urban networks further south in Scandinavia. This observation is in accordance with Sindbæk's (2011) and Baug et al.'s (2018) suggestions that pre-Viking journeys to such urban markets may have facilitated the movement of knowledge and improved maritime mobility, which ultimately led to the Viking expansion.

Finally, it has been argued here that the earliest recorded Viking attacks were only possible after a phase in which people along the *Nordvegr* had acquired a sufficient level of environmental knowledge to navigate in new seascapes and coastal environments. It also included the ability to re-locate places with accumulated wealth and resources after their initial discovery. As Purcell (2015, 54) puts it, the questions involved were 'where the target sites were in relation to one another; how to get there; how long it would take; what supplies were necessary to conduct the attack and to ensure sufficient resources to

complete the return journey, or indeed to make it to the next target.'

When constructing a model of maritime movement, these observations may be formalized, although somewhat simplified, as a suggested process involving three main stages:

1. *Information stage*: Seafarers along the *Nordvegr* became increasingly informed about the Insular land on their journeys to markets further south in Scandinavia and continental Europe (around ad 750/770)
2. *Environmental learning*: Consequently, this activity triggered maritime expansion, ultimately leading to voyages of exploration further west over the sea, where some seafarers gained first-hand experience with the sea routes and maritime landscape along northern Britain and Ireland (around ad 770/790)
3. *The earliest recorded raids*: The attack on Lindisfarne and other targets off the coast of Ireland and Britain from AD 793 onwards could only have happened after a period of reconnaissance and preparation. This necessarily involved a level of *a priori* environmental knowledge and perhaps also a conceptual 'conquest' of the open seascape.

While the nature of the second phase of 'environmental learning' would leave few traces in the archaeological material, it also opens the possibility that some of the earliest Insular metalwork may have reached Norway as a result of such contact, presuming that this stage could involve small-scale exchange or even plunder. While clearly favouring the notion of pre-Lindisfarne communication, this model does however not suggest that there was a long period of well-established migration and trade between Norway and the northern Insular areas from as far back as the early to mid-eighth century.

Through these early voyages, seafarers developed the necessary environmental knowledge, which, in addition to a range of social and political causes (see Barrett, 2010; Ashby, 2015; Baug et al, 2018 for recent summaries or discussions), must have been a vital precondition for the successful attacks from the last decade of the eighth century onwards. These experiences were materialized in distinctive foreign goods brought back to the Norse homelands, creating a visual distinction between families involved in overseas ventures and others within their community (Aannestad, 2015).

Concluding thoughts

While this article has proposed an interaction model which opens up a period of Pre-Viking contact, it is primarily with the first recorded raids from AD 793 onwards, that the Viking activity on Insular land becomes visible. Indeed, much of our modern image of the earliest interaction across the North Sea is affected by the numerous references to the devastation and chaos caused by ‘Gentiles’, ‘Northmen’ and ‘Danes’ in the late eight and early ninth centuries. However, the written sources concerning the ‘earliest wave’ of Viking activity give the impression of well-organized attacks were at least some of the crewmembers must have had first-hand experience with the sea route across the North Sea, the northerly coastline and favourable locations to attack. As such, the success of the earliest raids was not purely the result of superior warfare techniques and ship technology, but also very much a matter of maritime mobility and environmental knowledge where open-sea crossings were encouraged by ‘motivation and the related human factors such as people’s knowledge of the sea, their skills, willingness to embrace risk and

desire to explore’ (Dugmore et al., 2010: 213). As shown by the distribution of the earliest Insular finds from Norway, such motivation seems to have been particularly strong amongst the seafaring communities along the *Nordvegr*.

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REFERENCES

Primary sources

- HHS = Håkon Håkonssons Saga*, by Sturla Þorðarson. Translated and revised by Anne Holtmark (2008). Trondheim: Aschehough & Co.
- OHS = The Olaf Haraldsson Saga*. In: Snorre Sturluson, *Snorres Kongesagaer* (Heimskringla). Translated and revised by Anne Holtmark & Didrik Seip (1985). Gjøvik: Gyldendahl.

Secondary sources

- Aannestad, H. L. 2015. Transformasjoner. Omforming og bruk av importerte gjenstander i vikingtid. Unpublished PhD dissertation, Oslo University.
- Ashby, S.P. 2009. Combs, Contact and Chronology: Reconsidering Hair Combs in Early-Historic and Viking-Age Atlantic Scotland. *Medieval Archaeology*, 53: 1–33. <https://doi.org/10.1179/007660909X12457506806081>
- Ashby, S.P. 2015. What really caused the Viking Age? The social content of raiding and exploration. *Archaeological Dialogues*, 22: 89–106. <https://doi.org/10.1017/S1380203815000112>
- Ashby, S.P., Coutu, A.N. & Sindbæk, S.M. 2015. Urban Networks and Arctic

- Outlands: Craft Specialists and Reindeer Antler in Viking Towns. *European Journal of Archaeology*, 18: 679–704. <https://doi.org/10.1179/1461957115Y.0000000003>
- Baastrup, M.P. 2013. Continental and Insular Imports in Viking Age Denmark, Distribution and circulation. *Zeitschrift für Archäologie des Mittelalters*, 41: 85–205.
- Bakka, E. 1973. Eit gravfunn frå Fosse i Meland, Hordaland og det arkeologiske periodiskiljet mellom merovingertid og vikingtid. *Suomen Muinaisnuistoyhdistyksen Aikakauskirja*, 75: 9–17.
- Ballin Smith, B. 2007. Norwick: Shetland's First Viking settlement? In: B.B. Smith, S. Taylor & G. Williams, eds. *West Over Sea: Studies in Scandinavian Sea-borne Expansion and Settlement before 1300*. Leiden: Brill, pp. 287–98.
- Barrett, J.H. 2008. The Norse in Scotland. In: S. Brink & N. Price, eds. *The Viking World*. London & New York: Routledge, pp. 411–27.
- Barrett, J.H. 2010. Rounding up the Usual Suspects: Causation and the Viking Age Diaspora. In: A. Anderson, J.H. Barrett & K.V. Boyle, eds. *The Global Origins and Development of Seafaring*. Cambridge: McDonald Institute for Archaeological Research, pp. 289–302.
- Baug, I., Skre, D., Heldal, T. & Ø.J. Jansen. 2018. The Beginning of the Viking Age in the West. *Journal of Maritime Archaeology* (2018). <https://doi.org/10.1007/s11457-018-9221-3>
- Bill, J. 2008. Viking Ships and the Sea. In: S. Brink & N. Price, eds. *The Viking World*. London & New York: Routledge, pp. 170–80.
- Bill, J. 2010. Viking Age Ships and Seafaring in the West. In: I.S. Klæsøe, ed. *Viking Trade and Settlement in Continental Western Europe*. Copenhagen: Museum Tusulanum Press, pp. 19–42.
- Bronk Ramsey, C. 2013. Recent and Planned Developments of the Program OxCal. *Radiocarbon* 55: 720–30. <https://doi.org/10.1017/S0033822200057878>
- Callmer, J. 1977. *Trade Beads and Bead Trade in Scandinavia ca. 800–1000 AD* (Acta Archaeologica Lundensia Series, 40). Bonn: Rudolf Habelt.
- Church, M.J., Arge, S.V., Ascough, P.L., Bond, J.M., Cook, G.T., Dockrill, S.J. et al. 2013. The Vikings Were Not the First Colonizers of the Faroe Islands. *Quaternary Science Review*, 77: 228–32. <https://doi.org/10.1016/j.quascirev.2013.06.011>
- Crawford, B. 1987. *Scotland in the Early Middle Ages 2: Scandinavian Scotland*. Leicester: Leicester University Press.
- Downham, C. 2000. An Imaginary Viking Raid on Skye in 795? *Scottish Gaelic Studies*, 20: 192–96.
- Downham, C. 2017. The Earliest Viking Activity in England? *The English Historical Review*, 132: 1–12. <https://doi.org/10.1093/ehr/cex066>
- Dugmore, A., Casely, A.F., Keller, C. & McGovern, T.H. 2010. Conceptual Modelling of Seafaring, Climate and Early European Exploration and Settlement of the North Atlantic Islands. In: A. Anderson, J.H. Barrett & K.V. Boyle, eds. *The Global Origins and Development of Seafaring*. Cambridge: McDonald Institute for Archaeological Research, pp. 213–28.
- Dumville, D.N. 2008. Vikings in Insular Chronology. In: S. Brink & N. Price, eds. *The Viking World*. London & New York: Routledge, pp. 350–67.
- Feveile, C. & Jensen, S. 2000. Ribe in the 8th and 9th Century: A Contribution to the Archaeological Chronology of North Western Europe. *Acta Archaeologica*, 71: 9–24.
- Gjessing, G. 1934. *Studier i norsk merovingertid. Kronologi og oldsakformer*. Oslo: Det Norske Videnskaps-Akademi.
- Glørstad, Z.T. & Røstad, I.M. 2015. Mot en ny tid? Merovingertidens ryggknappspenner som uttrykk for endring og erindring. In: M. Vedeler & I. M. Røstad, eds. *Smykker. Personlig pynt i kulturhistorisk lys*. Trondheim: Museumsforlaget, pp. 181–210.
- Golledge, R. 2003. Human Wayfinding and Cognitive Maps. In: M. Rockman & J. Steele, eds. *Colonization of Unfamiliar Landscapes: The Archaeology of Adaptation*. London: Routledge, pp. 44–58.
- Grønnesby, G. & Heen-Petersen, A. 2015. Gården i yngre jernalder – et spørsmål om erkjennelse? Belyst ved utgravningen av et yngre jernalders gårdstun på Ranheim. *Viking*, 169–88.
- Heen-Petersen, A.M & Murray, G. 2018. An Insular Reliquary from Melhus: The

- Significance of Insular Ecclesiastical Material in Early Viking-Age Norway. *Medieval Archaeology*, 62: 52–81. <https://doi.org/10.1080/00766097.2018.1451522>
- Hines, J. 1992. The Scandinavian Character of Anglian England: An Update. In: M.O.H. Carver, ed. *The Age of Sutton Hoo*. Woodbridge: Boydell Press, pp. 315–29.
- Hines, J. 1996. Tidlig kontakt over Nordsjøen og de baken –forliggende årsaker. In: J.F. Kroger & H. Naley, eds. *Nordsjøen: Handel, Religion og Politikk*. Stavanger: Dreyer Bok, pp. 19–30.
- Holand, I. 2003. Pottery. In: G.S. Munch, O. S. Johansen & E. Roesdahl, eds. *Borg in Lofoten. A Chieftain's Farm in North Norway*. Trondheim: Tapir Academic Press. pp. 199–213.
- Jansson, I. 1985. *Ovala spännbuclor, En studie av vikingtidens standartsmücken med utgångspunkt från Björkö-fyndet*. Uppsala: Institutionen för arkeologi.
- Jesch, J. 2009. Naming and Narratives: Exploration and Imagination in the Norse Voyages Westwards. In: K. Dekker, K. Olsen & T. Hofstra, eds. *The Worlds of Travellers. Exploration and Imagination*. Leuven: Peeters, pp. 61–80.
- Jesch, J. 2015. The Threatening Wave: Norse Poetry and the Scottish Isles. In: J.H. Barrett & S.J. Gibbons, eds. *Maritime Societies of the Viking and Medieval World*. Wakefield: Maney, pp. 320–32.
- Klæsøe, I.S. 1999. Vikingetidens kronologi – en nybearbejdning af det arkæologiske materiale. *Aarbøger for Nordisk Oldkyndighed og Historie*, 1997: 89–142.
- Morris, C.D. 1998. Raiders, Traders and Settlers: The Early Viking Age in Scotland. In: H.B. Clarke, M. Ni Mhaonaigh & R. Ó Floinn, eds. *Ireland and Scandinavia in the Early Viking Age*. Dublin: Four Courts, pp. 73–103.
- Myhre, B. 1993. The Beginning of the Viking Age – Some Current Archaeological Problems. In: A. Faulkes & R. Perkins, eds. *Viking Revelations*. Birmingham: Viking Society for Northern Research, pp. 182–216.
- Myhre, B. 1998. The Archaeology of the Early Viking Age in Norway. In: H.B. Clarke, M. Ni Mhaonaigh & R. Ó Floinn, eds. *Ireland and Scandinavia in the Early Viking Age*. Dublin: Four Courts, pp. 3–36.
- Myhre, B. 2000. The Early Viking Age in Norway. *Acta Archaeologica*, 71: 35–47.
- Ørsnes, M. 1966. *Form og stil i Sydskandinaviens yngre germanske jernalder* (Nationalmuseets skrifter, Arkæologisk-historisk række 11). København: Nationalmuseets.
- Owen, O. 2004. The Scar Boat Burial – and the Missing Decades of the Early Viking Age in Orkney and Shetland. In: J. Adams & K. Holman, eds. *Scandinavia and Europe 800–1350. Contact, Conflict and Coexistence*. Turnhout: Brepols, pp. 3–34.
- Petersen, J. 1928. *Vikingtidens smykker*. Stavanger: Dreyers grafiske anstalt.
- Price, T., Peets, J., Allmæ, R., Maldre, L. & Oras, E. 2016. Isotopic Provenancing of the Salme Ship Burials in Pre-Viking Age Estonia. *Antiquity*, 90: 1022–37. <https://doi.org/10.15184/aqy.2016.106>
- Purcell, E. 2015. The First Generation in Ireland, 795–812: Viking Raids and Viking Bases? In: H.B. Clarke & R. Johnson, eds. *The Vikings in Ireland and Beyond. Before and After the Battle of Clontarf*. Dublin: Four Courts, pp. 41–55.
- Reimer, P.J., Bard, E., Bayliss, A., Warren Beck, J., Blackwell, P.G., Bronk Ramsey, C., et al., 2013. IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 Years cal BP. *Radiocarbon*, 55: 1869–87. https://doi.org/10.2458/azu_js_rc.55.16947
- Rockman, M. 2003. Knowledge and Learning in the Archaeology of Colonization. In: M. Rockman & J. Steele, eds. *Colonization of Unfamiliar Landscapes: The Archaeology of Adaptation*. London: Routledge, pp. 3–24.
- Rundkvist, M. 2010. Domed Oblong Brooches of Vendel Period Scandinavia. *Uppåkrastudier*, 11: 127–80.
- Shetelig, H. 1927. Tidsbestemmelser i vikingetidens stilhistorie. In: C.A. Nordman, ed. *Nordiska arkeologmøtet i Helsingfors 1925*. Helsinki: Suomen Aikakauskirja, pp. 106–12.
- Sindbæk, S. 2005. *Ruter og rutinisering. Vikingetidens fjernhandel i Nordeuropa*. København: Multivers.
- Sindbæk, S. 2011. Silver Economies and Social Ties: Long-Distance Interaction, Long-term Investment – and Why the Viking Age Happened. In: J. Graham-

- Campbell, S.M. Sindbæk & G. Williams, eds. *Silver Economies, Monetisation and Society in Scandinavia, AD 800–1100*. Aarhus: Aarhus University Press, pp. 41–66.
- Skre, D. 2014. Norðvegr – Norway: From Sailing Route to Kingdom. *European Review*, 22: 34–44. <https://doi.org/10.1017/S1062798713000604>
- Solli, B. 1996. Narratives of Encountering Religions: On the Christianization of the Norse Around AD 900–1000. *Norwegian Archaeological Review*, 29: 89–113.
- Stenvik, L.F. 2001. *Skei – et maktsenter frem fra skyggen*. Trondheim: Tapir Akademiske Forlag.
- Storli, I. 2007. Other and his World – A Contemporary Perspective. In: J. Batley & A. Englert, eds. *Obthere's Voyages: A Late 9th-Century Account of Voyages along the Coasts of Norway and Denmark and its Cultural Context*. Roskilde: Viking Ships Museum, pp. 76–99.
- Van de Noort, R. 2011. *North Sea Archaeologists*. Oxford: Oxford University Press.
- Vinsrygg, S. 1979. *Merovingartid i Nord-Noreg. Studie i utvalt materiale frå gravfunn*. Unpublished Masters dissertation, Bergen University.
- Von Holstein, I.C.C., Ashby, S.P., van Doorn, N.L., Sachs, S.M., Buckley, M., Meiri, M. et al. 2014. Searching for Scandinavians in pre-Viking Scotland: Molecular Fingerprinting of Early Medieval Combs. *Journal of Archaeological Science*, 41: 1–6. <https://doi.org/10.1016/j.jas.2013.07.026>
- Wamers, E. 1985. *Insularer Metallschmuck in wikingerzeitlichen Gräbern Nordeuropas*. Neumunster: Wachholtz.
- Wamers, E. 1998. *Insular Finds in Viking Age Scandinavia and the State Formation of Norway*. In: H.B. Clarke, M. Ni Mhaonaigh & R. Ó Floinn, eds. *Ireland and Scandinavia in the Early Viking Age*. Dublin: Four Courts, pp. 36–72.
- Weber, B. 1994. Iron Age Combs: Analyses of Raw Material. In: B. Ambrosiani & H. Clarke, eds. *Developments Around the Baltic and the North Sea in the Viking Age*. Stockholm: Birka Project for the Swedish National Heritage Board, pp. 190–93.
- Weber, B. 1996. Handel mellom Norge og Orknøyene før norrøn bosetning? In: J.F. Kroger & H. Naley, eds. *Nordsjøen: Handel, Religion og Politikk*. Stavanger: Dreyer Bok, pp. 31–40.
- Westerdahl, C. 2015. Sails and the Cognitive Roles of Viking Age Ships. In: J.H. Barrett & S.J. Gibbons, eds. *Maritime Societies of the Viking and Medieval World*. Wakefield: Maney, pp. 14–24.

BIOGRAPHICAL NOTE

Aina Heen-Pettersen is a PhD student in the Department of Historical Studies, Trondheim University in Norway. Her research focuses on Insular-Scandinavian interaction in the Viking Age and the use of Insular artefacts after they arrived in the Norse homelands.

Address: Aina Margrethe Heen-Pettersen, Department of Historical Studies, The Norwegian University of Science and Technology, Trondheim, Norway. [email: aina.pettersen@ntnu.no]

Une première vague d'activité viking ? Un réexamen de données norvégiennes

Un groupe de sépultures en Norvège de l'époque viking précoce contenant des objets en métal de type insulaire sert de base à la présente étude sur la chronologie et la nature des premières activités des Vikings. La répartition géographique de ce matériel et l'application de concepts liés aux connaissances sociales et aux connaissances des lieux permet de mettre l'accent sur l'importance de la mise en place de paysages cognitifs facilitant l'expansion viking. L'auteur soutient que les premières attaques vikings connues n'ont été possibles qu'à la suite d'une phase dans laquelle les navigateurs scandinaves avaient acquis un niveau suffisant de connaissances sur l'environnement maritime pour pouvoir se déplacer dans de nouveaux paysages marins et environnements côtiers. Ce modèle d'interaction permet de penser que certains objets précoces de type insulaire découverts en Norvège soient parvenus en Norvège au terme

d'expéditions d'exploration avant le pillage de Lindisfarne menées par des navigateurs le long de la voie maritime connue sous le nom de Nordvegr. Translation by Madeleine Hummler

Mots-clés: époque viking précoce, Vikings, objets de type insulaire, Norvège, *Nordvegr*, mobilité maritime

Die erste Welle der Wikingerbewegungen? Eine Neubewertung von norwegischen Angaben

In diesem Artikel werden die Chronologie und die Eigenschaften der frühen Wikingerbewegungen aufgrund einer Gruppe von frühen Bestattungen mit Metallgegenständen insularen Typus aus Norwegen untersucht. Das Verbreitungsbild dieses Metallhandwerks und die Anwendung von Konzepten, die mit räumlichen Kenntnissen und sozialem Wissen verbunden sind, verdeutlichen, wie bedeutend die Erschaffung von kognitiven Landschaften für die Ausdehnung der Wikingerwelt war. Es wird hier vorgeschlagen, dass die ersten Wikingerangriffe erst nach einer Phase, in welcher die altnordischen Seefahrer den erforderlichen umweltlichen Kenntnisstand, neue Seelandschaften und Küstenbereiche zu befahren erreicht hatten, stattfanden. Bei diesem Interaktionsmodell ist es möglich, dass einige frühe insulare Funde aus Norwegen auf Entdeckungsreisen von Seefahrern entlang der Nordvegr Schifffahrtsroute in einem Zeitraum vor der Plünderung von Lindisfarne hinweisen. Translation by Madeleine Hummler

Stichworte: frühe Wikingerzeit, Wikinger, Metallhandwerk insularen Typus, Norwegen, *Nordvegr*, Seeverkehr