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Per Kristian Madsen
Preface 9

Hans Christian Gulløv
Introduction 11

I. LANDSCAPES
Peter Emil Kaland
Heathlands – land-use, ecology and vegetation history as a source for archaeological interpretations 19

Use and traces
Ditlev Mahler
Shetland – the Border of Farming 4000-3000 BC 49

Alison Sheridan
Shetland, from the appearance of a ‘Neolithic’ way of life to c. 1500 BC: a view from the ‘mainland’ 67

Christian Koch Madsen
Norse Pastoral Farming and Settlement in the Vatnahverfi Peninsula, South Greenland 95

Cosmos and perception
Flemming Kaul
The northernmost rock carvings belonging to the Scandinavian Bronze Age tradition 115

Lars Jørgensen
Norse religion and ritual sites in Scandinavia in the 6th-11th century 129
Ulla Odgaard

Clash of Concepts – Hunting rights and ethics in Greenlandic caribou hunting 151

Environment and changes

Morten Fischer Mortensen, Peter Steen Henriksen, Charlie Christensen,
Peter Vang Petersen and Jesper Olsen

Late glacial and early Holocene vegetation development in southeast Denmark
– palaeoenvironmental studies from a small lake basin close to the Palaeolithic site of Hasselø 169

Kevin Edwards

Early farming, pollen and landscape impacts from northern Europe
to the North Atlantic: conundrums 189

Richard Oram

From ‘Golden Age’ to Depression: land use and environmental change
in the medieval Earldom of Orkney 203

Noémie Boulanger-Lapointe and Claudia Baittinger

Studies of the growth of arctic willow (Salix arctica)
and arctic bell-heather (Cassiope tetragona) in the High Arctic 215

II. INTERACTIONS

Charlotte Damm

Interaction: When people meet 227

Networks and communication

Christina Folke Ax

Good connections – Networks in the whaling and sealing community on Rømø
in the 18th century 241

Einar Østmo

Shipbuilding and aristocratic splendour in the North, 2400 BC-1000 AD 257

Anne Lisbeth Schmidt

Skin Clothing from the North – new insights into the collections of the National Museum 273

Peter Andreas Tofte

Small things forgotten – Inuit reception of European commodities in the Historic Thule Culture 293

Objects and exchange

Anne Pedersen

Skagerrak and Kattegat in the Viking Age – borders and connecting links 307

Helle Winge Horsnæs

Appropriation and imitation – A Barbarian view on coins and imitations 319
**III. DYNAMICS**

*Christian Wichmann Matthiessen and Richard D. Knowles*

**Continental and insular imports in Viking Age Denmark**
- On transcultural competences, actor networks and high-cultural differentiation

*Maria Panum Bastrup*

**Preservation and decay**

*Martin Nordvig Mortensen, Inger Bojesen-Koefoed, David Gregory, Poul Jensen, Jan Bruun Jensen, Anne le Boëdec Moesgaard, Nanna Bjerregaard Pedersen, Nataša Pokupčić, Kristiane Strætkvern and Michelle Taube*

- Conservation and drying methods for archaeological materials modified for use in northern areas

*Henning Matthiesen, Bo Elberling, Jørgen Hollesen, Jan Bruun Jensen and Jens Fog Jensen*

- Preservation of the permafrozen kitchen midden at Qajaa in West Greenland under changing climate conditions

*Einar Lund Jensen*

**Mobility and organization**

**Settlement policy in a colonial context – discussions on changing the settlements structure in Greenland 1900-1950**

*Einar Lund Jensen*

**A synthesis of the history of third millennium north-western Scandinavia**

*Christopher Prescott*

**Farmers on the move – The expansion of agrarian societies during the Neolithic and Bronze Ages in Scandinavia**

*Lasse Sørensen*
Around 1000 years ago, southern Greenland was settled from the south and west by Norsemen looking for more land. The settlement lasted about 500 years, and the Norsemen lived as traditional farmers in the North Atlantic. Thanks to favourable preservation conditions in Greenland, the material culture from the Norse period is well-preserved, and among other things we are presented with a goldmine of inscriptions in the national museums in Greenland and Denmark, which give us a unique opportunity to describe the tradition of writing as it looked in a rural society in the Middle Ages. Most of the inscriptions were executed in runes, while a small percentage was executed in Latin letters. In this paper, I will present some ideas for how to deal with the use of runes and the tradition of writing in an agrarian society. To do so, I will connect the inscriptions to their archaeological context in an effort to view the inscriptions as a part of the Norse material culture.

The best example of a fruitful interplay between text and context – philology and archaeology – is a little wooden stick, which is often referred to as Gudveig’s stick (fig. 1). The inscription reads ‘This woman, who was called Gudveig, was laid overboard in the Greenland sea.’ From the text, we can deduce a couple of things. With all probability the inscription was carved in Greenland. However, it seems that the rune carver was Norwegian. The orthography in the inscription presents an ð-rune used for the spirant g-sound in the name ‘Gudveig’, which is quite in keeping with Norwegian finds. The only example in Norse Greenland for this phe-
nomenon is the Gudveig inscription (Stoklund 1993: 533). The text also tells us that the woman must have been on board a ship when she died, and she did not have a proper funeral. If the stick had been a stray find like so many other artefacts, we would not have been able to learn more about this situation, but luckily the stick was found in the bottom of a coffin in the churchyard at Herjolfsnes (fig. 2). Apparently, the coffin was empty – the only object found in the grave was this wooden stick with the inscription. So it seems that the object served as a substitute for the woman who died at sea – to guarantee the resurrection of the body and eternal life. The body was viewed as a temple for the Holy Spirit, and the body was to be inhumed – not cremated or eaten by fish – in order to resurrect. It tells us that medieval Norsemen took the word of the Bible seriously, and we would not have come quite as far in these conclusions if the stick and its context were not preserved.

The distribution of script

The Norse settlements in Greenland were separated in two colonies, the Eastern and Western settlements respectively (fig. 3). The Eastern settlement was the larger of the two with roughly 500 farms, whereas the Western settlement comprised approximately 75 farms.

We have a fairly good overview of the geographical distribution of the Norse farms, as they are in many cases still visible as ruins in the landscape (fig. 4), but archaeological investigations have been carried out in only a small percentage of the ruins. In an attempt to find out how widespread script was in the community, I have done a small investigation into where one could expect to find runes in Norse Greenland. Taking the Western settlement as an
Fig. 4. The well-preserved ruin at Tingimiut, the Eastern settlement. Drawing: The National Museum of Denmark.

Fig. 5. The number of ruins in the western settlement (indicated with red dots), and the investigated ruins of the western settlement (indicated by blue dots). Illustration: The author on the background of Gulløv et al. 2004.

Fig. 6. The number of ruins in the western settlement (indicated by red dots), and the sites where runic inscriptions have been found (indicated by blue dots). Illustration: The author on the background of Gulløv et al. 2004.
example, it is evident that runic inscriptions have been unearthed in almost every case where investigations have taken place (fig. 5 and 6). And in some instances, runic inscriptions have been collected as stray finds, even in cases where only field surveys have been carried out.

This leads to two observations: it seems that runic writing was a rather widespread phenomenon in the medieval Norse community in Greenland, and that it can be expected that runic inscriptions will be found at almost every future archaeological excavation of a Norse settlement in Greenland.

In fact, the excavations in Gardar in the summer of 2012 carried out by a co-operative of researchers from Greenland, Iceland, the United States, and Denmark, revealed seven new runic inscriptions on small pieces of wood. They were found in a part of the farm where preservation conditions were extremely good – in a layer of debris.

**The material**

The number of artefacts with runes in Greenland is constantly increasing. We have already heard of seven new inscriptions in Gardar but finds of runes can also be retrieved from the archives, where they have led an unnoticed life; these are mostly artefacts with single runes or bind-runes. The number of inscriptions depends on what should be classified as ‘an inscription’. More than half of the material is not very interesting from a linguistic point of view, consisting of single runes (fig. 7) and fragments of inscriptions (fig. 8). Still, they are important aspects of the tradition of writing and should be incorporated in the analyses. They might indicate which groups of artefacts were more important in the tradition of writing, and they are crucial components in the aspects of the social distribution of script. At present, 170 objects with runes – single runes and longer inscriptions – can be detected in the Greenlandic material, but it is possible that many more are yet to be found. In any case, the 170 objects with runes is only a small percentage of what was originally there.

If the duration of the settlement was around 500 years and the number of inscriptions is 170, one inscription would have been carved every third year. It is evident that the tradition of writing cannot be kept alive for centuries if the knowledge and know-how is not used and practiced on a weekly or even a daily basis. Of course, the original number of inscriptions must have been much higher, maybe thousands. René Derolez made some numerical estimates on the first three centuries of runic writing (c. 150-450 AD) and has reached the conclusion that the surviving
material amounts to no more than between 10 and 20 inscriptions per century, or one every five to ten years (Derolez 1981: 19). This very much resembles the picture with the Greenlandic inscriptions. Derolez goes on to speculate on the original number of inscriptions. It is impossible to sort out how many rune writers there were at work in Scandinavia (and parts of the Continent) in the Iron Age, but if there were a dozen carving an average of one inscription a month, they must have produced more than 40,000 inscriptions in three centuries (ibid.: 20).

Of course, there would have been skilful and less skilful rune carvers in any given rune writing society; there would have been people who had practised writing a lot, and people who practised only little or never learned how to write. A skilful rune carver would have produced many inscriptions in order to practise, and skilful rune carvers were at work in Norse Greenland, indeed. Turning to these inscriptions, we can also find evidence that the actual number of inscriptions must have been huge. Some of the inscriptions are carried out so meticulously or are written with such great knowledge of runic writing that the rune carver must have practised his or her writing continuously before ending up with a beautiful result. This is the case with the wooden stave, maybe a wooden lid, with a woman's name Bjôrg (fig. 9). The inscription is carried out as knot runes or band runes, which points toward some practising beforehand. Also a barrel's stave from Sandnes suggests practising (fig. 10). It carries two different names evidently written in two different hands, indicating that two different rune carvers have been at work. The first rune carver has written his name with ordinary medieval runes talkr Dalkr, but the second carver has started off with a cryptic or an encoded rune 3/6 = k and spelled out the rest of his name k(3/6)uttorm Guðþormr. The reasons for carving with cryptic or encoded runes are debatable, but it seems that they were used to draw attention to a special part of the text and to underline that the rune carver was rather skilled (cf. Barnes 2012: 144). The presence of cryptic or encoded runes shows that skilled rune carvers were

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Fig. 9. Wooden lid for a box(?) from The Farm beneath the Sand in the western settlement with the woman’s name Bjôrg written on it. Note the meticulously carved runes carried out like knots on a rope. Drawing: The author.
interactions – objects and exchange

uncovered as stray finds thanks to the portable antiquities legislation and the skilled and experienced people using metal detectors. The Greenlandic inscriptions fill an important gap in the find situations for runic inscriptions from farming societies at the locations where they have been created and used. This is why the Greenlandic inscriptions are so important, not only in contributing to the history of the Norse settlement in Greenland, but also as a contribution to the understanding of medieval runic writing in general.

dating

The chronology of artefacts from medieval Greenland is not well established. Many of the sites were excavated in the 19th and beginning of the 20th century, where modern excavation techniques were unknown. Stratigraphic excavations were not in common use, as many excavations exclusively focused on finding the dwelling in order to retrieve as many finds as possible. Additionally, many of the artefacts have been found during surface surveys with no trace of their original location. During the 1990s and 2000s, there have been two major excavations, namely The Farm beneath the Sand and E34, Qorlortup Itinnera, in the western and eastern settlements respectively. These excavations have revealed a number of runic inscriptions which can be dated archaeologically, but the majority of inscriptions must be dated by means of typology. Generally,
the preserved material first and foremost originates from the 13th and 14th centuries.

The earliest inscriptions are few; for example the wooden shaft from Sandnes with a man’s name Helgi (fig. 11). It has been dated to the 11th or 12th century by means of typology and archaeology. The animal’s head is very similar to the heads on the gaming pieces ‘The Lewis Chessmen’, which have been dated to the second part of the 12th century (Robinson 2004: 14). Another indication of the age of the object is that it was found in the very lowest layers of the settlement, which is believed to have been founded around 1000 AD. This is confirmed by 14C datings. Another early inscription from Greenland is a little carved piece of wood with a rather long text. Part of the text is comparable to a known lausavísa from the Faroe Islands (Stoklund 1998: 10) (fig. 12a, b). It was found during the excavation of Qorlortup Itinnera and has been dated to the 12th or 13th century by means of archaeological stratigraphy and 14C (Georg Nyegaard, personal comment). It presents the first evidence of poetic writing in Greenland and reveals some of the oral tradition, which is difficult to grasp by archaeological methods. Most of the inscriptions belong to the 13th and 14th century; the inscriptions mostly have a religious character, like the prayer stick from Sandnes with an inscription that says ‘Hail Mary, full of grace’ (fig. 13a, b). This particular object has been dated by the comparison of the inscription with other objects. In Northern Europe, rosary beads are connected to the Dominican monks, and therefore it is hardly suitable to place these kinds of inscriptions before c. 1200 AD.

Fig. 11. The wooden handle from Sandnes with a man’s name Helgi. It is dated to the 11th or 12th century. Drawing: The author.

Fig. 12a and b. Wooden stick from Qorlortup Itinnera with a long inscription. Part of it can be compared with a Faroese lausavísa. It is dated to the 12th or 13th century. Photo: The National Museum of Denmark.
Objects and inscriptions

Most of the material is runic, but a few Latin letter inscriptions have been uncovered. These are mainly found on the large farms at Herjolfsnes and Gardar. Although few in number, Latin letter inscriptions should be included in the analysis of the tradition of writing. The Latin letter inscriptions reveal for us a tradition of writing in constant movement, and they are important in that they demonstrate that the two writing systems were in parallel use well into the Middle Ages.

The runes were employed for expressing both the vernacular and the Latin language. The Latin texts are always phrases from the Bible or Christian prayers, sometimes misunderstood like the inscription on the little wooden fish from Umarviiarsuk (fig. 14a, b) (see further in Imer 2012 and Stoklund 1994: 156). Only one of the inscriptions in Latin...
In the tradition of writing in Norse Greenland – writing in an agrarian community

‘Hail Mary’ formula is known only as Ave Maria, and in the world wide runic corpus there is no version of it in the vernacular.

Inscriptions were put on all kinds of domestic utensils, wooden bowls and tools. They were put on objects belonging to the religious sphere, like amulets, crosses and grave stones, all this indicating that writing was an integral part of daily life. But one thing that is striking is the number of runes on objects used in textile production. They account for more than 60 objects, which is more than one third of the material. This particular tradition is clearly medieval; in the Iron and Viking Ages runes practically never appear on objects for textile production. Generally, the inscriptions on these objects in Greenland are religious, or they are combined with religious symbols like crosses. It might indicate that spinning and weaving was connected to religious beliefs, and that this task was protected by religious formulae and symbols. The making of cloth was an important part of the daily chores; not only was it necessary to produce cloth for dressing, cloth was also indispensable for sails, for the packing of...
placed on daily life objects, such as loom weights and spindle whorls with Latin texts like ‘Pray for us’ and *Ave Maria*, or steatite potsherds with single words like *Ave*. This indicates that religion influenced every part of daily life, from the daily chores to the consuming of meals. Other texts are not in any way religious, but they show the vital importance of religion, namely the inscriptions that are put on household utensils in connection with a cross or any other kind of Christian symbols, e.g. the Tree of Life.

Now, the question remains if we are not to interpret the damaged inscriptions or single runes and crosses on other utensils – first and foremost the loom weights and spindle whorls – on the basis of these religious objects and inscriptions. Many of the loom weights carry single *m*-runes, maybe short for the Virgin Mary, whose name is found on so many other objects. Other loom weights carry complicated bind-runes that can be interpreted as abbreviations of *Ave* (fig. 17) (Imer 2011).

**Contacts with the outside world**

The Norse Greenland was not an isolated society (cf. Stoklund 1993). Several inscriptions tell us about the contacts across the North Atlantic – not only in their textual content, but in the way the runes are carried out. One example is one of the newly discovered inscriptions from the 2012 excavation at Gardar; an amulet with an *Ave Maria* inscription (fig. 18). The runes are carried out as very complicated ligatures – meaning that two or more runes share one main stave. This way of writing runes is quite rare,
The tradition of writing in Norse Greenland – writing in an agrarian community

The use of single runes also shows that the Norse Greenlanders preferred some variations over others, for example, the dotted t-rune which occurs in two general variants /t/ and /d/. The latter is found in all the Greenlandic inscriptions, apart from one single inscription on a gravestone in Gardar, which has the variant /d/ (in the

but it is found on an object in a completely different part of the world, namely in Sigtuna in Sweden on a piece of bone with a ‘play on words’ kind of inscription sis=a=sik=s=ais=a=sik=s=ais. What leaps to the eye is the repetition of the sequences sa and sik. In English, the inscription reads: ‘Look! He who saw himself in the tub, he saw himself in the ice’ (Källström 2010). Interestingly, this kind of play on words is also found in one of the Greenlandic texts, namely on the famous wooden stick from Narsaq with the text o : sa : sa : sa : is : o sa : sat ‘On a tub saw he, who sat on a tub’ (fig. 19) (Helgasson 1977). Again, the repetition of the sequence sa is used. The pun in the inscriptions is the use of the word sa sá, which has different meanings: sá ‘saw’ (past tense of sjá), sá ‘he’ or ‘it’, and sá ‘tub’ (acc. of sár).

Concerning the form of runes, there is also some evidence of contact. On the wooden spoon from Narsarsuaq (fig. 20), the runes are carried out as complicated knots. It has parallels all over Scandinavia, e.g. in the Borgund stave church in Norway, on a rune stone fragment in Gästrikland in Sweden and other items (cf. Knirk 1994: 201).
name Vígidís), and it seems that the Norse Greenlanders, like the Icelanders, preferred the variant where the dot is placed on the rune’s main stave. In Norway, however, the preferred variant was the one with the dot placed between the main stave and the branch, and it is tempting to see a connection between the buried woman in Gardar and Norway. Being the bishop’s seat in Greenland, Gardar must have had a closer contact to Norway than the rest of the Greenlandic farms could have had.

All these examples of similar use of runes and play on words are evidence of continuous contact with the outside world, not only in the North Atlantic but in the Scandinavian countries as well. The contact is reflected in the use of runes as well as in the oral tradition exemplified by the play-on-words inscriptions. They bear witness to a common tradition of writing in large areas of the Northern Worlds, and this evidence fits well with the knowledge we have of cross-Atlantic contact in Greenland (Arneborg 2004: 268).

Conclusion
The Greenlandic runic material gives us an idea of what the tradition of writing was all about in daily life in the countryside. The material is handed down to us thanks to the preservation conditions, which are better in Greenland than anywhere else. The distribution of inscriptions shows that there was a rather widespread knowledge of writing, since objects with runes have been found at even the smallest farms. Furthermore, comparing the preserved number of inscriptions with the duration of the Norse settlement tells us that the original number of inscriptions must have been much higher and counted in thousands. This is also clear from the textual contents and the technical outline of certain inscriptions; the best rune carvers must have practised regularly in order to produce the finest inscriptions.

The dating of Norse material in Greenland is difficult and so is the dating of the inscriptions. However, most of the inscriptions belong to the 13th and 14th centuries, so in reality we are presented with a glimpse of the tradition of writing in the High Middle Ages, whereas we have only a couple of inscriptions preserved from the earliest settlement period. The language used was the vernacular. Latin was almost only used in phrases and quotations from the Bible in personal adornment and similar. Writing included practice inscriptions, name tags, and verses, but the paramount use of writing was religious. The number of religious inscriptions by far
exceeds the inscriptions with other intentions. Even those inscriptions that are not religious in themselves have associations with religion, as they are furnished with crosses or similar symbols. The most frequent type among the religious inscriptions is the Marian inscriptions which appear on household utensils of various kinds, but most frequently on objects from textile production, which was one of the most important fields of work in Norse Greenland. Both the textual contents and the way the runes are carried out show similarities with finds from other parts of the North Atlantic and Scandinavia. This is evidence of a lively contact, which is also witnessed from other sources, e.g. archaeology. The language and the rune forms both demonstrate a uniform development in the Norse society in Greenland and other Nordic agrarian communities. From social anthropological studies (e.g. Halbwachs 1992), we know that identity is created and maintained through, for example, language and religion. The tradition of runic writing in Greenland reflects the preservation of a traditional farmer’s set of values, as we would expect to find them in other parts of the North Atlantic and in Scandinavia, and in this set of values, Christianity played the leading role. The runic inscriptions reflect a part of the social memory that was vital for maintaining the traditional community in a corner of the world, which must have been desolate and remote, if not from the Norse Greenlanders point of view, then at least from a southern perspective.

References


THE TRADITION OF WRITING IN NORSE GREENLAND – WRITING IN AN AGRARIAN COMMUNITY 351