

## **SUBMISSION OF PAPER TO THE JOURNAL OF THE NORTH ATLANTIC (JONA)**

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### **Furs, Fish and Ivory – Medieval Norsemen at the Arctic Fringe**

#### **DECLARATION:**

This paper was originally written after a discussion at a conference in Aberdeen in 2004, and was submitted for publication in the Proceedings of that conference in 2005.

For reasons unknown to me, the Proceedings were never published, but the manuscript had been submitted and I needed a confirmation that I could submit it for publication elsewhere. This confirmation was finally received this fall (September 2008).

The text has now been upgraded and relevant literature published since 2005 added, hopefully making it a completely up-to-date paper suited for publication. All the illustrations have been drawn by me.

#### **CONTENTS**

The paper sees the Norse colonization of Greenland and the exploratory journeys on the Canadian East Coast as resulting from an adaptation to the European luxury market for furs and ivory. The Norse expansion into the Western Arctic is compared to the Norse expansion into the territories of the Sámi and Finnish hunter-gatherers North and East of Scandinavia. The motivation for this expansion was what is often called the coercion-and-extortion racket, aimed at extracting furs from the local tribes (called “taxation”) for the commercial markets in Western Europe and in the Middle East.

The Norse adventures in the West Atlantic are seen as expressions of the same economic strategy. Icelanders were, after all, quite familiar with the Norse economic activities North and East of Scandinavia.

This comparative approach is original, and it makes the Norse expansion in the West Atlantic appear less exotic and more “in character with the Norse” than normally expressed in the academic literature.

In medieval times the stockfish-trade develops in North Norway and Iceland, leading to further Norse expansion into Sámi territory. The fur-and ivory trade continues in Europe until near-modern times, while Greenland drops out of sight in the fifteenth century.

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**Abstract:** Christian Keller, IKOS, University of Oslo. Why did the Norse Icelanders colonize Greenland in the late tenth century A.D., and why did they explore the coasts of Labrador and Newfoundland? Was it a desperate search for farmland at the margins of the known world or was it a market driven economic strategy applied to virgin territory?

To address these questions, the author gives a brief introduction to the Norse expansion and economic strategies in three regions; The Sámi territory in Northern Scandinavia, the Finnish and Russian territories east of Scandinavia, and Greenland and Labrador. The purpose of the expansion north and east of Scandinavia was to buy or extort furs from the hunter gatherer communities. This strategy is unthinkable without a European and even Middle Eastern demand for furs, and must generally be seen as market-driven. The author suggests that the Norse explorations of Labrador and the colonization of Greenland was equally market driven, with walrus tusks as the most successful export commodity. In the twelfth century the Norse economy transformed from a Viking Period, high-status trade with luxury articles to a low-status, bulk trade with foodstuffs. Stockfish from the north was exchanged for grain from the south. Norwegian stockfish export started ca A.D. 1100, while Iceland commenced a small century later. This caused structural changes to both Norwegian and Icelandic economies, and must also have affected the Norse Greenland economy.

The author recommends that the regional and national investigations that have dominated the research lately, be supported with studies of the North Atlantic cash- and trade economies, spanning from acquisition to consumption.

**Key words:** North Atlantic, Norse, trade, walrus ivory, fur, fur trade, stockfish, commercial fishing, Viking, Viking Period, Middle Ages.

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## Introduction

Why did the Norse inhabitants of Iceland go to Greenland to set up a colony towards the end of the tenth century AD? And why were the Norse Greenland colonies abandoned 400 years later?

Nineteenth century Danish and Icelandic scholars blamed the abandonment on the Norwegian government, by pointing to the submission of Iceland and Greenland to King Hákon Hákonsson 1262-63, and the royal trade monopoly (Originally promoted 1838 in GHM I:VI). The latter was an embargo on all foreign trade North and West of Bergen, introduced to harness the expansion of the Hanseatic traders (Helle 1982:484-485, 731, 806, Stefánsson 1986:81).

Modern authors have tended to see the failure of the Norse Greenlanders as evidence that the Norse did not understand the nature of their new homeland, that they overreached ecologically, and that they succumbed when the climatic conditions turned against them. In contrast, the Inuit hunters are often promoted as the true masters of the Arctic environment (Diamond 2004:212-213, 219-221, 246-247, 261-276), surviving the climatic fluctuations which (some argue) brought the Norse to their knees.

This paper takes a totally different view upon the *raison d'être* of the Norse Greenland colonies:

In line with the medieval written sources, scholars have normally assumed that the Norse went to Greenland to live from pastoral farming, although they were obviously prepared to replenish their supplies with fish, seals, and caribou. In addition, the walrus hunts up north brought the necessary tusks to purchase certain commodities from Europe.

To modern people, the idea of leaving Iceland to become a farmer in Greenland around 1000 A.D. borders on the insane. It also defies logic: Iceland was settled from the 870s A.D., and the Icelanders could hardly have reached a level of overpopulation and demographic stress as early as A.D. 1000.

More likely, the colonization of Greenland was politically or economically motivated: at the time, the Norse in Northern Norway had already expanded into Sámi territory, and had performed exploratory journeys to the White Sea for pelts and walrus ivory. The period for chiefly and later royal export of furs from Norway to the European market has traditionally been reckoned to 300 years, from the late 800s to the early 1200s A.D. (KLNLM (Nordic Encyclopedia for the Middle Ages) vol.15:529).

Before A.D. 800, traders from eastern Sweden had entered the Gulf of Finland and the river Neva to plug into the trade-networks of the Russian river systems. Both groups were extorting tribute in furs from the Sámi and Finnish speaking hunter gatherers. What was initially a peaceful trade developed during the Viking Period to a typical coercion extortion cycle (for definition, see Bagge 1989 with reference to Finer 1975). This must have been a response to an increasing demand for furs on the European luxury market.

The colonization of Greenland, and the exploratory journeys down the coast of Labrador and Newfoundland (Ingstad, A.S. 1977, Ingstad, H. 1985), must have had similar purposes; to locate sources for luxury items that could be exported to the European market. The Greenland input to the European luxury trade was obviously the walrus ivory from the Disko Bay area, while we do not know whether furs from Greenland and Labrador were traded as well. Compared to walrus ivory, furs have a low archaeological visibility.

Around A.D. 1100, only a century after the voyages to Newfoundland, the economic systems in Scandinavia transformed, and Norway started to export huge amounts of dried cod – stockfish – to the European market (KLNLM vol. 4:366-370, Krivigorskaya et al 2005a, Krivigorskaya et al 2005b, Amundsen et al 2005, Perdikaris and McGovern 2007, Perdikaris and McGovern 2008a, Perdikaris and McGovern 2008b). In Iceland, stockfish was produced from very early on for home consumption and distribution. This is clear from the zoo-

archaeological evidence from the sites of Sveigakot, Hrísheimar, Hofstaðir and Selhagi, all in the Mývatn region, 50-60 km from the coast (Perdikaris et al 2004a, Vésteinsson et al 2002, Amundsen et al, 2005). Zoo-archaeological analyses also confirm that Iceland started commercial export of stockfish from the West Fjords to Europe ca A.D. 1200 (Edvardsson et al 2004, also Edvardsson and McGovern 2005). With this, the number of European ships in the West Atlantic increased.

The climatic instability from the fourteenth century brought hardships to both Icelandic and Greenlandic farming, but even more so, to the access to the northern hunting grounds in Disko Bay in Greenland: ice-core analyses suggest increased ice cover in the Strait of Davis (Dugmore et. al. 2006). Drift-ice and/or fixed sea ice may simply have barred access to the walrus hunting grounds, which may have had a devastating effect upon the export economy.

The present work is an attempt to see the Norse Greenland colonies, and their fate, in a larger context than that of pastoral farmers trying to survive in a country less than suited for animal husbandry. The walrus hunt in North West Greenland is seen as a market-driven activity, and so is the eleventh century exploration of the Canadian east coast.

Early Iceland is not seen as a simple, self-supplied agricultural community which could only attract some imports by exporting *vaðmál* (woolen cloth). It is also seen as a nation dependent on marine resources and an entrepreneur wanting to access the Arctic to export furs and ivory to the European luxury market. The colonization of Greenland was just a logical step in this strategy.

## 1. The Norse in Iceland and Greenland

Iceland was settled in the late ninth century A.D. by Norse immigrants, either directly from the Norwegian west coast, or indirectly from the areas with Norse settlers in Ireland and Scotland (Sawyer 2000). This was part of a larger expansion from Scandinavia during the Viking and Middle Ages.

The Norse immigrants brought with them the traditional European host of domestic plants and animals, and established farms based on pastoral farming. Cereal production was tried in Iceland, but apparently never became much of a success. Wild resources, such as berries, salt- and freshwater fish, marine mammals (including whales), eggs, and birds were harvested from the start.

Once the initial pioneering was over, the Icelanders must have enjoyed a comfortable subsistence economy. Iceland itself did not, however, have much in terms of export-friendly commodities. Without goods to attract traders, Iceland would suffer a degree of isolation.

Medieval written records tell that a century after the original *landnám*<sup>1</sup>, a small fleet of ships left Iceland to set up a colony on the west coast of Greenland<sup>2</sup>, establishing a thriving community which at some point comprised maybe 2-3,000 souls, a cathedral at *Garðar*<sup>3</sup>, and quite a few churches (Gjerland and Keller forthcoming).

The seemingly tragic disappearance of the Norse Greenlanders some 400 years later has been a recurring mystery in the literature, recently discussed in an international perspective by Jared Diamond (2004:178-276, Seaver 1996, and Gulløv 2004).

Why were the Greenland colonies established in the first place? Did they seriously believe that Greenland would offer a better life as pastoral farmers and part-time hunters than would for instance Iceland? The sagas describing the venture seem to indicate so, but they were written centuries after the colonization and are hardly accurate. Some sources mention the

<sup>1</sup> Landnám – literally 'the taking of land', i.e. the act of colonization. It also exists as a noun, indicating 'the section of land taken', i.e. a person's land claim.

<sup>2</sup> This story is according to the Icelandic 'Landnámabók' – The Book of Settlement – (Benediktsson 1986:132).

<sup>3</sup> In present-day Igloolik

elusive *Norðrsetur*, the northern hunting grounds. With reasonable certainty, this has been identified with the Disko Bay area with its walrus populations (Gulløv 2004:211-213, but see McGovern 1985).

Many of the theories concerning the collapse of the Norse Greenland society in the fourteenth to fifteenth centuries take for granted that the primary cause was the climatic deterioration of the Little Ice Age (Dugmore et al 2006), and that it was the subsistence economy that suffered. Indeed an increased climatic instability seems to have occurred, although the precise consequences to South West Greenland are difficult to estimate. It is, however, not hard to imagine that cattle-breeding and sheep-farming would be vulnerable to increased cold. This may well have been the case, but there are other aspects to consider:

A useful approach is to look at Iceland and Greenland as two economically interdependent societies. To put it simply: prior to A.D. 1200, Iceland had a sufficient subsistence economy but an insufficient export economy. In the pastoral economy, sheep yielded *vaðmál* (woollen cloth); a labor intensive export commodity for which Iceland was famous (KLNLM vol.19:409-412, Þorláksson 1991). Greenland's subsistence economy must have been considerably more marginal than Iceland's, but with a better access to seals rather than fish. Its access to walrus tusks it had the potential for a viable export economy. Cooperation between the two countries would make perfect sense.

The colonization of Greenland may therefore be seen as an attempt by the Icelanders to establish an export economy based on walrus ivory and perhaps furs from the Greenland west coast. We do know that the walrus ivory was keenly sought, and that it fetched high prices on the European market (Goldschmidt 1914-1926, Tegengren 1962, Gaborit-Chopin 1978, Liebgott 1985, St. Clair and McLachlan 1989, McGovern 1992, Sawyer and Sawyer 1993:144, 153, Roesdahl 1995, 2000, 2005, Seaver 1996:30-31, 48, 57, Gulløv 2004:277-278). Considering the large number of sheep in the Norse Greenland economy, it is quite possible that *vaðmál* was also exported from there.

In A.D. 1327, a load of walrus tusks from Greenland was sold in Bergen (Munch 1864:45). This was the Peter's Pence and the six-years' tithe, a crusade tax which eventually helped finance King Magnus Eiriksson's 1340ies crusade against Novgorod (Christiansen 1997:189-195). (Magnus was King of Norway and Sweden from 1319, but came of age only in 1322-23 A.D..) The load of tusks may be estimated to 802 kilograms, suggesting ca 520 tusks representing some 260 animals (McGovern 1985 writes 668 kilograms based on Gad 1967:168, but Gad probably used an incorrect weigh-unit, see Keller 1989:278 with reference to Steinnes 1936/1982:29).

According to Kåre Lunden (1978:95) Norwegian prices A.D. 1306-1337 were quite stable. Recalculated to early fourteenth century Norwegian currency, the value of the tusks can be estimated to 260 marks of "burnt silver" (Keller 1989:279), basically one mark per pair of tusks, each equaling the value of 3 cows. This does not sound like much, but the computed value of the 520 tusks from A.D. 1327 runs into something like 780 cow equivalents, or nearly 60 metric tons of stockfish.

To put this in a perspective: After the Norwegian king took over Iceland and Greenland in the 1260ies, each Icelandic farmer was to pay an annual tax of 20 ells of *vaðmál*. The Faroes paid a similar tax, and Greenland also promised to do so, but the details concerning the Greenland payments are not preserved. Half was going to the King, and half to the local officials.

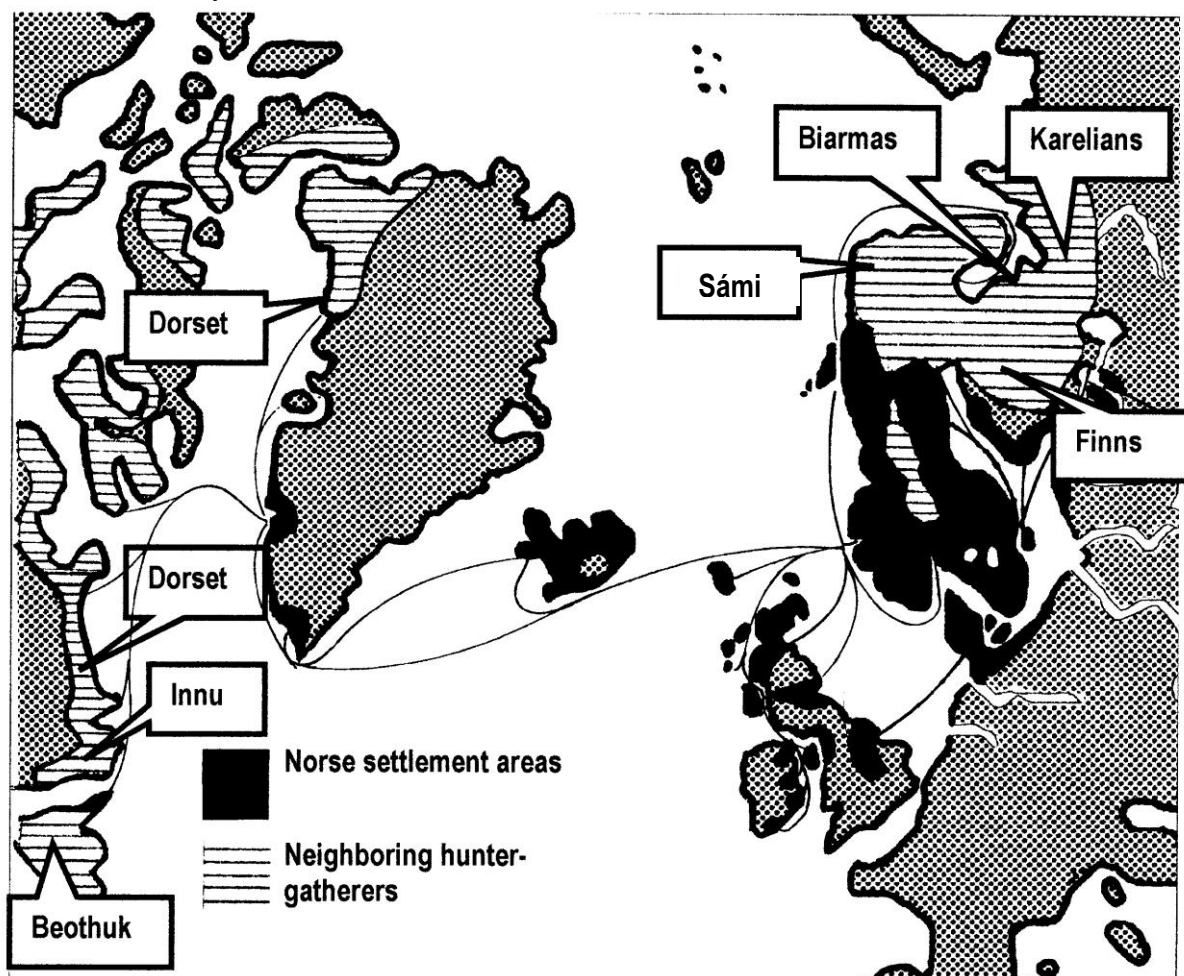
A record from A.D. 1311 shows that a total of 3,800 Icelandic farmers paid their 20 ells of *vaðmál*. The value that went to the king has been estimated to 317.5 cow equivalents, making the total payment twice as much, i.e. 635 cow equivalents (from Helle 2005:13, with reference to Stefánsson 1993:312, and Helle 1974:198-199).

Thus the value of the Greenland tusks from A.D. 1327 (representing the six years' tithe) was worth more than the annual tax from nearly four thousand Icelandic farmers<sup>4</sup>.

A walrus weighs 1 – 2 metric tons. In addition to its valuable skin which was used for rope etc. it yields 2-5 barrels of blubber (oil) (Sivertsen 1980:346); an essential source of light in the Greenlandic winter.

A small coaster such as the Danish Viking ship *Skuldelev 3* had a cargo capacity of 4.5 – 5 metric tons. Being a light 14 meter vessel it was mainly propelled by sail, but up to 7 oars could be used. Built in the 1040ies A.D. it was typical for a class of small coastal traders that were active from the mid-tenth to the mid twelfth centuries. (Christensen 2000:93, Crumlin-Pedersen and Olsen 2002:195-243, in particular 240-241)<sup>5</sup>. What types of vessels were used to get to *Norðursetur* is not known, although “six-oared boats” are mentioned.

Although written records of walrus ivory export are far between, the archaeological evidence for ivory extraction is not.



**MAP 1**

**The Norse settlement areas in the Viking and Early Middle Ages (in black). Neighboring hunter-gatherers and potential trading partners are named in call-outs, their settled**

<sup>4</sup> Of course the two taxes cannot be compared directly; the Icelandic payment is an annual tax, the Greenlandic payment a special crusade tax. Still it is a safe assumption that the population in Iceland was at least ten times the size of the population in Greenland; the Faroes and Greenland were more comparable in size. There is a good chance that the price of the walrus tusks increased tremendously on their way across the North Atlantic. Still, the examples give an indication of the value of tusks in Europe.

<sup>5</sup> In comparison the near contemporary *Skuldelev 1* was a fully fledged ocean-going cargo ship with a length of 16 meters, i.e. only 2 meters more than *Skuldelev 3*, but with an estimated cargo capacity of ca. 36 tons (Crumlin-Pedersen and Olsen 2002:97-140, in particular 136-137).

**areas suggested by horizontal hatching. Known Norse voyages are indicated. (Based on Fitzhugh and Ward 2000:198, and Hansen and Olsen 2004:58, 81, 137.)**

Perdikaris and McGovern wrote (2008a):

*The Norðursetur hunters seem to have transported only limited portions of the walrus back to the home farms, as walrus bone finds from both the Western and Eastern settlement areas are made up almost entirely of fragments of the maxilla from around the deep rooted tusks.*

The walrus ivory does, in other words, have a better archaeological visibility than furs, despite the fact that the tusks themselves were never found on any Norse sites. The maxillary chips are the signatures of a large tusk production.

It is hardly accidental that the Norse houses at L'Anse aux Meadows in Newfoundland were erected within the same generation as the initial settlements in Greenland. It is tempting to see these activities as expressions of the same, i.e. efforts to establish a supply of exotic commodities for export to Europe, from the edge of the Arctic world.

Was this a unique historic situation, or did the Icelanders simply emulate economic strategies known from other parts of the Norse culture area, north and east of Scandinavia?

Information from an eleventh century source suggests that the Icelanders at the time were actively exploring new land: An agreement between the Icelanders and Norwegian King Ólafr Haraldsson (died A.D. 1030) is recorded in a version which Helgi Þorláksson suggests might stem from the 1080s A.D. (Þorláksson 2001:85). It concerns the Icelanders' duty to pay tax on arrival in Norway, *unless they were going to Greenland* [i.e. from Iceland] *or were looking for new land, or drifted from Iceland* [literally: *from taking ships between harbors in Iceland*]. “Ef þeir menn verða sähafa i noreg er vart hafa til græn landz eða fara í landa leitan. eða slitr þa út fra islandi þa er þeir vilde færa scip sin mille hafna.” (Published in Bagge et al 1973:13-15, Norwegian translation 12-14. My underlining.).

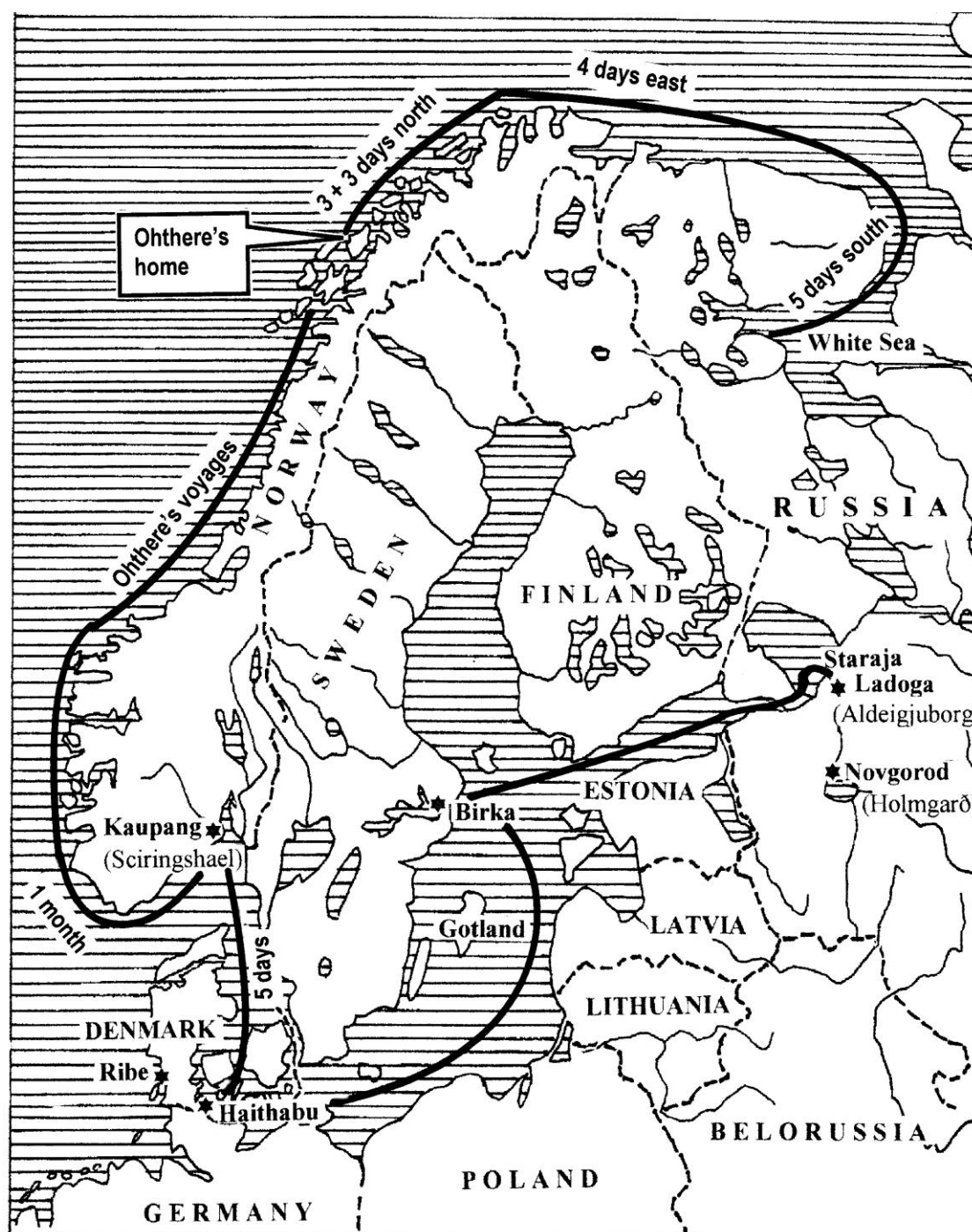
The words in the agreement may be contemporary with the Norse ruins at L'Anse aux Meadows in Newfoundland; or somewhat later. There seems to be no doubt that the Icelanders of the eleventh century were active explorers. Why?

As mentioned, the Scandinavian Norse explored the land of the Sámi, lying north and east of their own land. This implied interaction with the indigenous populations, and extortion of tribute. To what extent the Icelanders ever took a similar approach to the natives of the West Atlantic is not known. Extortion would hardly have been beyond them, but there were more peaceful alternatives: For the Norse explorers, it would have been potentially dangerous to approach a group of Native Americans on their own turf.

A way to minimize the risk of unfriendly encounters is *silent trade*: The Islamic scholar Abu Hamid visited Bulgar A.D. 1135-36, and described how the merchants “*bring goods with them, and each merchant puts his property down in a separate place, makes his sign on it and goes away. Then after a while they return and find goods that are needed in their country. And each man finds some of these things near his own goods; if he agrees [to the exchange], then he takes them; if not, he gathers his own things and leaves the others and no exchange takes place. And they do not know from whom they are buying these goods.*” (Martin 1986:22 and notes 176-177). She quotes a similar description from the 1320s (op.cit.:29).

## **2 The Sámi/Norse fur trade**

The Norse colonization of Greenland should be seen as the ultimate extent of the Norse colonization of the North Atlantic. While the settlements further east and south in the Atlantic were motivated by the opportunities for fishing and pastoral farming, the push into the Greenland/Canadian Arctic should be compared to the Norse expansion into the northern parts of Scandinavia (i.e. the northern parts of present-day Sweden and Norway),



Map 2

The modern Baltic and Scandinavian states, with some ninth century towns indicated. Ohthere, who according to Orosius lived “furthest north of all Norwegians”, travelled to the “Land of the Biarmas” in 15 days, and to Sciringshael (Kaupang in Vestfold) in 1 month. His voyages took place towards the end of the ninth century. His voyages are indicated in line with the common interpretation of his tale, but the description contains some logical inconsistencies, and may be subject to debate.

The Baltic route from Birka (earlier from near-by Helgö) to Staraja Ladoga was established at least one hundred years earlier, from the end of the eighth century. This route gave access to the great trade systems on the Russian rivers, opening up for two centuries of cash-flow from the oriental silver mines to the Scandinavian countries.

and to the east (into present-day Finland and the northern parts of European Russia). Way before the Viking Period, these areas were inhabited by Sámi- and Finnish-speaking hunter-gatherers.

The Iron Age Norse lived in hierarchic farming societies, and in the Viking Period their settlements stretched as far north as the present-day town of Harstad, north of the Lofoten/Ofoten archipelagos. This northern settlement limit has often been regarded as the *ecologically determined agricultural boundary*, i.e. it coincided with the northern limit for cereal cultivation. More and more, it is also being regarded as the old *ethnic boundary* between the Norse and the Sámi (Hansen and Olsen 2004:77-82, with special reference to Schanche 1986, but see Hansen 1990 for an extensive discussion of the issue). Cereal production was not vital to the Norse farmers, except for production of beer for ritual (?) purposes (KLN vol. 20:689-698). Pastoral farming (Icelandic style) was probably common in most of *Hålogaland* (i.e. the coast north of *Trøndelag*<sup>6</sup>) and sufficient to sustain sedentary farming way outside the climatic limits for cereal cultivation.

The Sámi, mentioned in Medieval sources as *Finns* or *Scriðfinnas*, were mainly hunter-gatherers and reindeer pastoralists. Their land was called *Finnmørk*, and during the ninth and tenth centuries a profitable trade between the Sámi and their neighbours developed from older, more symmetric exchange systems. The Sámi provided furs to the Scandinavian Norse, and to peoples of the Baltic, Karelia, and North-West Russia (Hansen and Olsen 2004:136-139). Another popular trade item was blubber oil, produced in stone-lined pits in Sámi territory.

The production of this commodity dropped during the eleventh century (loc. cit. with reference to Henriksen 1995:90-93), possibly substituted by cod liver oil from the Lofoten fisheries. Incidentally, the Old Norse word *lýsi* means oil, and is related to *ljós* – light.

The Norse chief *Ohthere*, who visited King Alfred's court in Wessex some time at the end of the ninth century, told that lived in *Hålogaland*, and furthest north of all Norwegians. He described the *Finns* (Sámi), and a journey he had taken to the north and east (around the Kola Peninsula to the White Sea), to a people he called the *Beormas*. [The form *Biarmas* is used in this paper]. This is consistent with the descriptions of *Biarmaland* in later sources<sup>7</sup>.

Modern research suggests that the Biarmas were identical to the Baltic-Finnish tribe called the *Veps* or the *Ves*. They might be among the tribes named *Čuds* or *Tsjuds* (i.e. “stranger” in pre-Slavonic) by the Novgorodians (Hansen and Olsen 2004:159, while Mervi Koskela Vasaru suggests a Baltic Finnish group of Häme origin). Then Ohthere's account goes on: *His main reason for going there, apart from exploring the land, was for the walruses, because they have very fine ivory in their tusks --they brought some of these tusks to the king – and their hide is very good for ship-ropes* (Lund 1984:19-20).

He also described how the Finns (Sámi) paid him tribute in marten skin, reindeer pelts, bear-skin, otter-skin, feathers, whale-bone (probably walrus ivory) and ship-ropes (i.e. from walrus) (loc.cit.). Voyages to Biarmaland are often described in the medieval sources: In the *Saga of The Sons of Eiríkr* (i.e. the sons of Eiríkr Bloodaxe who ruled A.D. 959-974), Snorri Sturlusson describes King Haralðr's voyage to Biarmaland and a battle at the *Dvina* estuary, i.e. at the location of present-day Archangel on the eastern shores of the White Sea (Hollander 1999:140). Snorri explains Haralðr's nickname *Gráfelldr* – a literary translation is difficult; *grey fleece*, or a *coat made from pelts*, perhaps even squirrel skins - with an anecdote that

<sup>6</sup> The region around the Trondheims Fjord and the city of Trondheim (medieval Nidarós)

<sup>7</sup> Lee Hollander boldly translated Ohthere's *Biarmas* and *Biarmaland* to *Permia/Permians* in the English version of the text (Hollander 1999:140), suggesting a link with the fur trade network in the Perm/Bulgar region, much further east (see section 4, below). This is an unlikely connection probably based on sound-alike names (Perm/Biarm).

Haralðr got a sheepskin cloak from an Icelandic merchant (Hollander 1999:136, for translation see Fritzner 1954 vol. I:401). Scholars have suggested the nickname rather reflected Haralðr's interest in the north-eastern fur trade.

According to Lars Ivar Hansen and Bjørnar Olsen, the last Biarmaland expedition took place A.D. 1222, but A.D. 1310-11 the King's representative *Gissur Galle* undertook an expedition to extort tribute from the Sámi (Hansen and Olsen 2004:154, for details op.cit.:219 with reference to Bratrein 2001:1). However, as late as in A.D. 1611 the Dano-Norwegian King Christian IV declared war on Sweden, because Sweden wanted to transform the old rights (to tax the Sámi) to territorial claims in present-day Finnmark; the Kalmar War.

During the Viking and Middle Ages, the Sámi and other peoples on the supply-side of the fur-trade became subject to harsh and violent extortion of "tax", i.e. tribute, often from three countries at the same time. The conversion of the neighboring Norse and Karelian societies to Christianity during the tenth and eleventh centuries provided an excuse for a ruthless exploitation of the pagan Sámi. The development of the Scandinavian kingdoms with their central authorities had a similar effect, as the old chieftains along the borders were replaced by representatives of the king, who were given the royal privilege of *Finnkaup* – trade with the Finns/Sámi. This increased the asymmetric relationship with the Sámi as the weaker party, which again propelled an extremely profitable fur-trade based on extortion, first by the Scandinavian Norse, later by the Karelians, eventually with Novgorod as the hub of the High and Late Medieval fur trade (see, Brisbane 1992, Martin 1986, Birnbaum 1996, Christiansen 1997, Brisbane and Gaimster 2001).

The Sámi/Norse fur trade of the ninth to the twelfth centuries with products meant for the European market, can be classified as belonging to the *Viking Period type of trade*. Typical for this system was a long-distance trade with expensive commodities, run by and for the upper echelons of society.

The suggestion promoted earlier is that when the Norse people of Iceland decided to colonize South West Greenland sometime around A.D. 1000, it was not due to a shortage of farmland in Iceland, but in order to establish base-camps for the Norðrsetur cash hunts. Whether they intended to actively emulate the Sámi/Norse fur trade and extortion racket is hard to tell, but in the European delivery end they eventually plugged into the same networks and markets.

The Greenland Norse collected walrus ivory in the Disko area. Whether they ever traded with or extorted walrus ivory and/or furs from the pagan *Skrælings* (i.e. the Dorset and/or later Thule cultures) is not known (but see Seaver 1996:37-38). Extortion would not have been beyond them, with potentially dangerous and unknown consequences, but there were peaceful alternatives, provided they had something to give the *Skrælings* in return.

Furs are hard to track archaeologically, and are only mentioned briefly in a thirteenth century (?) written record: In the Saga of the Greenlanders, the *Skrælings* of Vinland come to trade furs – *grávara*, *safvali* (squirrel and sable) and other pelts (The Complete Sagas I:28). These furs were not native to Iceland or Greenland, but were well-known commodities on the Scandinavian and European markets, originating from the Sámi territories and from the Novgorod fur trade, as far back as the eleventh century (Martin 1986:52). The skins (or at least their names) must have been known to Norse traders, and apparently also to the saga scribes in Iceland.

It is quite likely that the Norse exploration of Greenland and eastern Canada were attempts to find furs and other exotic commodities that could be sold on the European market. The radiocarbon dates from L'Anse aux Meadows from ca A.D. 1000 – 1030 (Nydal 1977), suggest the houses were contemporary with the initial settlement of Greenland, and the Icelanders' agreement with King Ólafr Haraldsson about exploration dates from about the same time. Perhaps they were even looking for people from whom they could collect tribute?

In *Íslendingabók* – the Book of Icelanders (Benediktsson 1986b) – Ári fróði suggests that the traces of people that the Norse settlers observed when they first came to Greenland, must have been from the same kind of people they had met in Vínland (i.e. the Dorset, the Beothuk or the Innu, see Map 1). These people were called *Skrælingar*. The meaning of this name is not totally clear, but scholars indicate a degenerative; an unhealthy or pitiful person (*skral*, *skrælling* "svakelig person" in Falk and Torp 1992:735-736, 743). The etymology is uncertain, and maybe there is room for some speculation: The Old Norse word *skrá* means a hard, dry skin (Heggstand et al 1997:386), which might relate to their dress, their looks, or their activity. Vowel-mutation is common in Old Norse.

It is not known for certain whether the characters in the thirteenth century Vínland sagas, such as Leiv Eiriksson and Þorfinn Karlsefni, ever existed (Þorláksson 2001, Halldórsson 2001, also Keller 2001), but archaeology certainly confirms that some Norse people did go to L'Anse aux Meadows in Newfoundland ca A.D. 1000. There is little doubt they came from Iceland or Greenland.

This was only a little more than a century after the North Norwegian Ohthere performed his exploratory journey to the White Sea. Both Ohthere and the L'Anse aux Meadows Norse crossed ethnic and climatic boundaries. Both groups must have been aware of indigenous people; and both were far from home. Ohthere certainly managed to acquire goods suited for the European market; less is known about the revenue of the L'Anse aux Meadows Norse.

### 3 The Norse and the stockfish I.

Another commodity in North Norway was the stockfish. Stockfish is cod which has been freeze-dried without the use of salt; either hanging on racks or spread on cobble-stones. It can only be processed within a limited climatic window, when the temperature fluctuates regularly around the point of freezing. The best climatic conditions for this process are found in the late winter at the Lofoten and Ofoten archipelagos in North Norway, which are also the spawning grounds for the *skreið* – the Barents Sea cod.

The production of stockfish seems to go back to the Old Iron Age, as indicated by Sophia Perdikaris' studies of fish-bones from Iron-Age middens in Northern Norway (Perdikaris 1998). The early dates for professional fishing seem to be supported by recent archaeological discoveries of Migration Period fishing booths in *Nusfjord*, recently reported in a popular historical journal (Lundebye 2005:9). The early stockfish was apparently traded commercially within the region. The stockfish does not seem to have entered the international commercial market as an export commodity as early as the furs in the ninth to tenth centuries: it was only in the Middle Ages that the trade between Scandinavia and Europe came to involve bulk commodities and large amounts of foodstuffs. The commercial fishing and stockfish production in Lofoten did not take off until the mid twelfth century. It was then exported to Europe by way of *Nidaros* – present-day *Trondheim* – and *Bergen* (KLNLM vol. 4:366-370, for zoo-archaeological evidence see Perdikaris 1996, 1998, 1999).

Before this time, the stockfish was produced for local storage and consumption, and probably also for regional trade. It may be attributed to the Viking Period type of trade. As already mentioned; in this system, expensive, low volume commodities traveled far, while large volume foodstuffs were typically exchanged regionally, but not long-distance. Still, storable foods could have vital importance as strategic resources.

Already during the Late Iron Age, the stockfish made its impact on North Norwegian economics and politics. It is the perfect staple food, it preserves well (four to six years), and it could feed armies. The Viking Period chieftains of the Lofoten and Ofoten regions (see Näsman and Roesdahl 2003:292-294) thus occupied a unique geographical location with access to two major sources of power: the Sámi trade and a steady supply of stockfish. Not without reason, the Lofoten and Ofoten regions feature a number of court-sites and chieftain's

seats. The site at Borg in the island of Vestvågøy is a house-hold name to northern archaeologists, due to the excavations of a hall of 80 meters plus – the largest *skáli*<sup>8</sup> in Scandinavia (Munch et al. 2003). It is important to understand that this hall did not symbolize the fringe of the “civilized world”, but was an economic focal-point in its own right, representing a surplus of a very different nature than the agrarian surplus of South Scandinavia.

Readers of Snorri Sturlusson’s *Heimskringla – The sagas of the Norwegian kings* (Hollander 1999) – will recognize that members of the aristocratic families of Northern Norway were powerful agents in the politics leading to a unified Norwegian kingdom. Politically speaking, what was eventually to become the State of Norway consisted of several centers of gravity:

The *South West Coast* was the starting-point of the unification process, and the engine in the political development. The decisive (and semi-mythical) battle allegedly stood at Hafrsfjord, near present-day Stavanger some time 870-900 A.D.. There were two challenges to this West Norwegian claim to supreme kingship. One came from the north, from *Hålogaland* and *Trøndelag*. The other came from the east and south, from *Viken* and from Denmark/England. *Viken* was the name of the larger Oslo fjord, which was periodically subject to the Danish kings, being part of or close to the Danish home waters.

*Hålogaland* was the name of the coastal region north of Trøndelag. Chiefs from *Bjarkey* (the northernmost chieftain’s seat and court-site) and the *Håloyg chiefs* (i.e. from Hålogaland) were active in the quest for royal supremacy in Norway. The Håloyg chiefs moved south to settle at *Lade* on the Trondheimsfjord, and at times allied with Danish kings to rule as their vassals. They appear in the sagas as the *Earls of Hlaði (Lade)*, based in Trøndelag, but they originated in North Norway (Hansen and Olsen 2004:152). A famous character was Eirik of Lade, a warrior chief who joined Danish King Svend forkbeard in his A.D. 1014 conquest of England, and an ally of Svend’s son Cnut the Great (A.D. 1014-1035) (Haywood 1995:121). Ólafr Haraldsson, Norwegian King A.D. 1015-1028 and the later Patron Saint of the Norwegian Church, was killed in the battle of Stiklestad A.D. 1030 (in Trøndelag) when challenging the Dano/English King Cnut the Great, who was King of Norway from A.D. 1028. Cnut’s Norwegian allies were the Earls of Lade.

Eventually, the Earls of Lade and the local chiefs in Lofoten and Ofoten lost out to the Norwegian king, and their control with the Sámi fur trade was passed on to the king’s representatives (Hansen and Olsen 2004:153-155).

The Icelanders must have been familiar with the value of the Sámi trade and its potential for the European market. If we are to believe the *Landnámabók – The Book of Settlements* (Benediktsson 1986a) – distinguished people from Lofoten migrated to Iceland in pagan times. The *Melabók* says (in translation): *Ólafr Tvennumbruni went to Iceland from the island named Lófót, it lies close to Finnmark*. Other manuscripts (*Hauksbók* and *Sturlubók*) have longer entries, describing that Ólafr settled at *Ólafsvöllur, at Skeið, between Þiorsá and Sandlækur*. (Translation in Nielsen 2003:278, slightly modified by me). The link between Lofoten and the land of the Sámi was, in other words, worth noting.

The crucial element here is the geographical setting of these Norse peoples, on the Arctic fringe, near the boundaries between sedentary farmers and mobile hunter gatherers. The position allowed them to harvest Arctic and sub-Arctic resources, either directly or indirectly, and profit from the distribution of these goods to the high end of the European luxury market. This was possible due to a stratified social structure and the existence of a viable European trade network.

Margins and ethnic boundaries are often scenes of conflict, but also of profit. When the Icelanders pushed west into regions dominated by Arctic drift-ice and the Greenland ice-cap

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<sup>8</sup> Skáli = Norse traditional long-house

ca A.D. 1000, they too crossed ecological and ethnic boundaries. They too came in contact with pagan hunter-gatherers, the *Skrælings*. They too could harvest extreme riches from the sub- and high- Arctic regions.

In the delivery end they plugged into the same European markets as did the fur traders from North Norway, Sweden, Staraja Ladoga, and Novgorod. And they probably obtained roughly the same type of goods in return. In the Early Middle Ages, the Norse Greenland walrus hunts were therefore not a unique phenomenon, just another arena for the European harvesting of the Arctic (see and Perdikaris and McGovern 2008b).

In A.D. 985 or 988 (i.e. contemporary with the official colonization of Greenland), the Arab geographer and resident of Jerusalem, Al-Mukadassi, wrote a treatise on geography where the trade-goods from Bulgar (on the Volga bend) were described: (...) *sables, miniver, ermines, and the fur of steppe foxes, martens, foxes, beavers, spotted hares, and goats; also wax, arrows, birch bark, high fur caps, fish glue, fish teeth, castoreum [a perfume fixative derived from beaver glands], prepared horse hides, honey, hazelnuts, falcons, swords, armor, khalanj wood, Slavonic slaves, sheep and cattle. All these come from Bulgar...* (quoted from Martin 1986:12, also notes 46 and 47 op.cit. p. 179, my underlining).

“Fish teeth” was a common medieval term for walrus tusks (Sawyer and Sawyer 1993:146). Even in the Norwegian medieval work *The King's Mirror*, the walrus was classified as a fish, although its nature as a whale or a seal was subject to debate. (GHM III:320-321, or Larsson 1917).

Christian Europe was, in other words, not the only market for walrus ivory.

#### 4. The fur trade in the east

*Mälardalen*, the lake- and valley-system west of present-day Stockholm, was the location of the Viking Period trading center of *Birka* mentioned in Rimbert's *Vita Ansgari*; a fortified, nucleated settlement in line with other Scandinavian *emporium* – ports-of-trade – such as *Heiþabu* (written Haithabu in this work) (Callmer 1994, Clarke and Ambrosiani 1995:46-89). The pagan cemetery at Birka contained ca. 1,600 graves. Birka was the gateway from Middle Sweden to the eastern trade routes.

By the end of the eighth century A.D., Norse people sailed into the Gulf of Finland (to where St. Petersburg was built much later), and up the river Neva to Lake Ladoga, where the trading center *Staraja Ladoga* or Old Ladoga developed - called *Aldeigjuborg* by the Norse (Kirpichnikov and Gubchevskaya 2002, Sawyer and Sawyer 1993:146). The purpose of this expansion was to plug into the already existing trade networks that connected Eastern Europe to the Middle East and the Orient by way of the large rivers.

The Icelandic and Norwegian name for Sweden was *Svíþjóð*, while a similar term – *Svíþjóð hin mikla*, i.e. “Greater Sweden” – sometimes refers to Scythia in South East Europe, sometimes to the land of the Rus' in the region between Ladoga and Kiev. Another contemporary term, *Garðaríki*, also indicated the Novgorod/Kiev region, but went out of use during the thirteenth century.

The Scandinavians in the east were known by two names: The *Rus'* and the *Varjagr* – (the English term Varangians is used in this paper). The etymology and exact meanings of the terms are unclear. The *Rus'* may initially have been Swedes, or Scandinavians in general, but they were soon assimilated by other groups, so the term came to refer to an ethnically diverse crowd. The Varangians, on the other hand, seems to be associated with armed forces, particularly mercenaries (Schmidt 1971, Stalsberg 1988, Noonan 1997:135-138). Perhaps Varangian was the closest parallel to the Western European term Viking.

The furs were not the primary interest of the Norse; those they could have acquired closer to home. Their ultimate interests were the Oriental silver coins and the exotic luxury goods from

the east (Martin 1986:60). During the Viking Period, these commodities were shipped in in great quantities from the Sassanid Empire by way of The Caspian Sea, Volga and Bulgar, and ended up all over Scandinavia. Countless finds of *Perm* type silver rings, *Cufic coins*, and *hacksilber*<sup>9</sup> bear witness that the east Scandinavians emulated Oriental weight systems (Hårdh 1996:169-170, see also Noonan 1997:145-147).

When the Norse first entered these regions, in the late eighth or early ninth centuries, they mostly encountered Finnish speaking tribes. Janet Martin makes this presentation of the early Scandinavians: *The market in Bulgar [on the Volga bend, my comment], where fur contributed by the Bulgar populace, their neighbors, and the Ves', was sold, attracted one final group of suppliers, the Rus'. Almost as soon as they arrived in eastern Europe, they became the most prominent fur suppliers in Bulgar's fur trade network (...) The Rus' took their captives and other booty they seized from the native Slav and Finn tribes, conducted them to Bulgar, and sold them. Among the booty was precious northern fur. In this manner the Rus' entered the fur trade.* (Martin 1986:8-9). She then describes how the Rus' settled and started extorting tribute on a regular basis. The Viking Period Norse did not do this to acquire furs for the market in the west, but shipped them to the east in exchange for Oriental silver. Sawyer and Sawyer make the observation that by the ninth and tenth centuries, Scandinavians traded with the Muslims more than with the Byzantine Christians (1993:146).

The main written source on early Russia is the *Primary Chronicle* – or *the Account of the bygone Years*, also known as the *Nestor Chronicle*. In its early, semi-legendary part it states that in the year 6367 (reckoned from Adam in the Russian Orthodox chronology, equaling AD 859 in Roman Catholic terms), *the Varangians came from the other side of the ocean and extorted tax among the Čud', and Slovenians, among Merja and Vepsians plus the Krivičians. The Kozars extorted tax from the Poljanis, the Severs, and the Vjatičians; they demanded one white squirrel per household.* (From Svane 1983, my translation from Danish).

The Norse first settled at *Aldeigjuborg* – *Staraja Ladoga* on the river Volkhov. The function of this town was to service the eastern trade, especially the Bulgar trade network. The first hoard of Islamic dirhams was deposited at Staraja Ladoga in the 780s A.D., but there are also finds of glass-bead production, meant for trade with the Finnish tribes (Noonan 1997:142).

The history of the Scandinavian(?) Rus' has been politically touchy. This academic controversy is known as *The Normanist Debate*, and the issue is whether the Russian State was originally established by people of Norse descent, or by Slavic peoples (Noonan op.cit.:138, Stalsberg 1988, see also Schmidt 1971). Whatever their background, the Rus' probably married into local families after a few generations and was absorbed, but linguistically their legacy prevailed in the name *Russia*.

Anyway, a state was established, with Rjurik (A.D. 862-879) as sovereign. Different manuscript versions of the Chronicle suggest that he either settled at Staraja Ladoga, or at Gorodišče (named *Holmgarðr* by the Norse); the original fortress 2 kilometers upstream from later *Novgorod* (see Map 2). Novgorod means *the new fortress* and appeared only in the mid tenth century.

Novgorod proved vulnerable to attacks, and the center of the Rus' state was moved south, to Kiev in present-day Ukraine.

This dynasty, and the Kiev state, was Christianized when Grand Prince Vladimir converted to Orthodox Christianity (Noonan loc.cit.), but many of the Finnish speaking tribes further north remained pagans. The Varangians and Rus' were familiar with the extortion of "tax" from the Sámi, and the Kiev state developed the same technique to extract furs from the Finnish speaking tribes. Competition about the "right" to extort furs from the Sámi and Finns

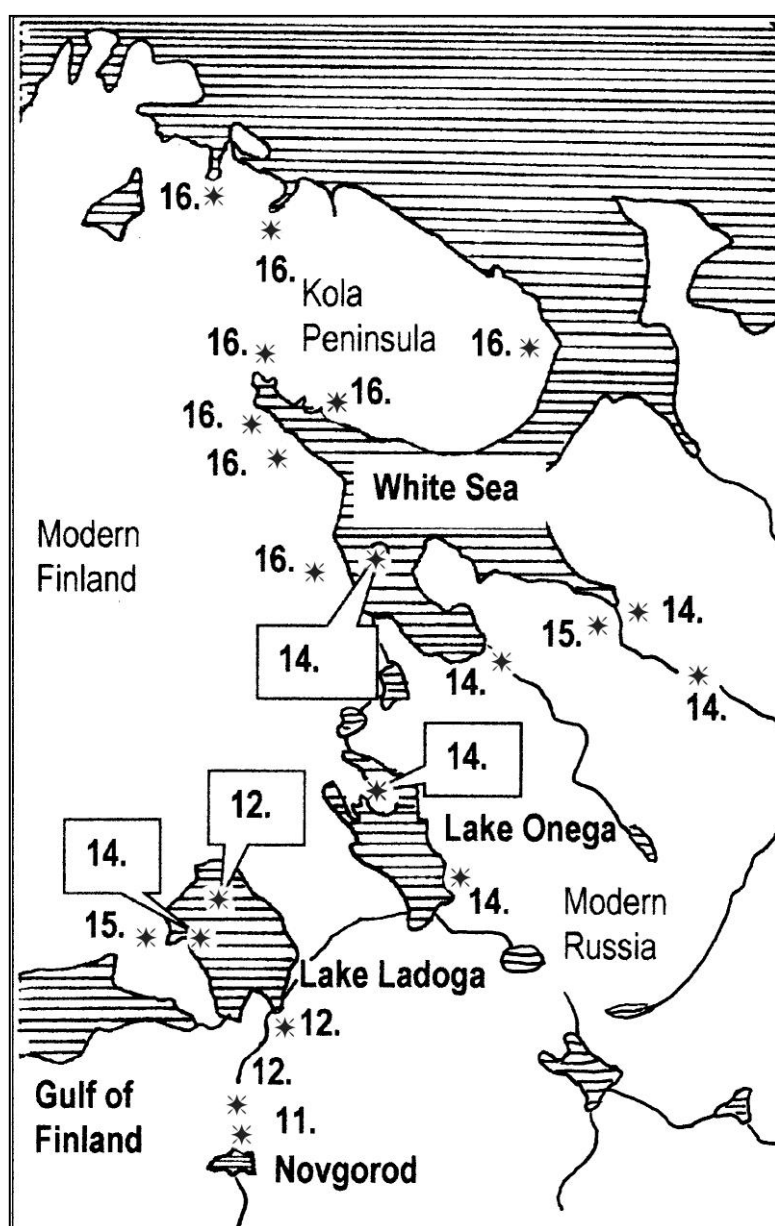
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<sup>9</sup> Pieces of silver jewelry or coins cut into small bits, often corresponding to local weight units of the time, see Hårdh 1996 for regional distribution.

triggered a series of confrontations between the Scandinavian countries and the Kiev State, later even with Kiev's political successors Novgorod and Moscow.

Kievan Sovereign Jaroslav the Wise (lived 978-1054) might have anticipated the competition from Scandinavia. He converted the Karelian tribes *en masse* to Orthodox Christianity, in order to create a Christian buffer against the recently converted Roman Catholic Norse. It was a curse disguised as a blessing; in the long term, it brought disaster. With the Great Schism in A.D. 1054; i.e. the permanent separation of the Roman Catholic and the Greek Orthodox churches, the Karelians became the eternal border-population between East and West. Jaroslav's strategy of using Christianity to defy attacks from the West became a two-edged sword.

The extortion of the hunter gatherers by the Norse, the Karelians, and the Slavs was the basis of the cash-crop economy in the region east of the Baltic. As a trade system, it belonged to the Viking Period type of trade.



During the Middle Ages, the Karelians established themselves as the primary collectors of furs from the Sámi and Finns, partly on behalf of Novgorod, partly on behalf of the Scandinavians. They also launched armed attacks on Northern Norway to stall Norwegian tax collectors, for example in A.D. 1278 and 1322-26 (which included abductions) and in A.D. 1349. In A.D. 1323 they burned the estate of Bjarkøy in Ofoten. It had previously been the northernmost seat of the Norse chieftains, but by A.D. 1323 the owner was *Erlingr Víðkunns*, regent for the child-King Magnús Eiríksson. He retaliated by launching an unsuccessful crusade against Novgorod in the 1340ies A.D., ending with a peace treaty (Christiansen 1997:189). (On the Bjarkøy estate, see Holmsen 1980:37-44). The Novgorodians were saved by the bell when the Black Death hit Scandinavia A.D. 1349.

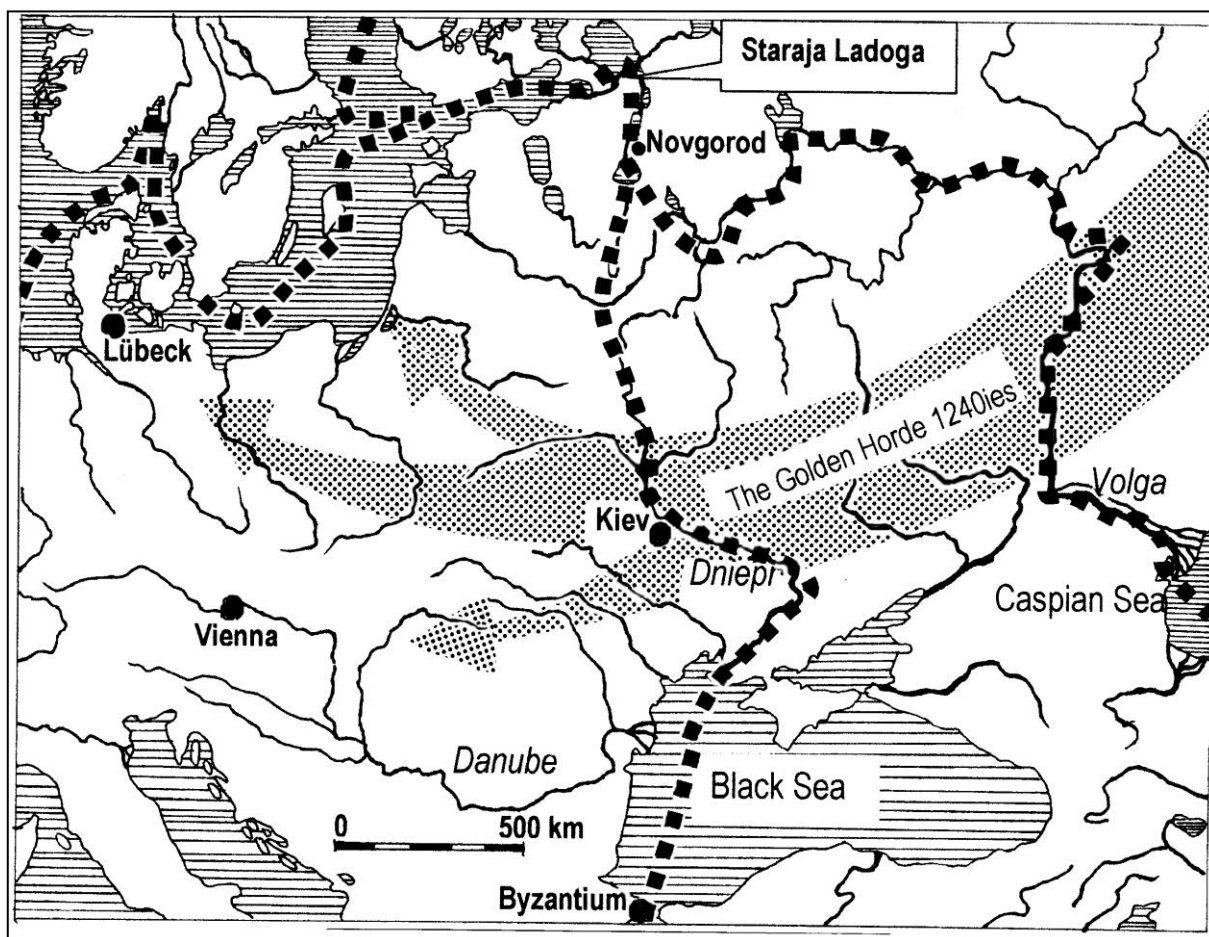
MAP 3

**The northern expansion of Orthodox monasteries (shining stars) into Finnish and Sámi territories, from the eleventh to the sixteenth centuries. The numbers indicate the century in which each monastery was founded. The economy of the monasteries was closely linked to the fur trade. (Redrawn from Hansen and Olsen 2004:221 plate 44, who reference Storå 1977).**

All in all, Scandinavian kings and German orders launched a series of crusades and invasions south and east of the Baltic, from A.D. 1142 to 1349 (see Christiansen 1997 for a full presentation). The official purpose was conversion of the pagans, but control of the taxation and the Baltic trade was equally important.

The fact that the Sámi and many of the Finnish tribes were pagans was used to entice the Pope's support for what were in part trade wars. Orthodox Christians were not spared from attacks, and so the Baltic became the battlefield between the Roman Catholic and the Orthodox worlds.

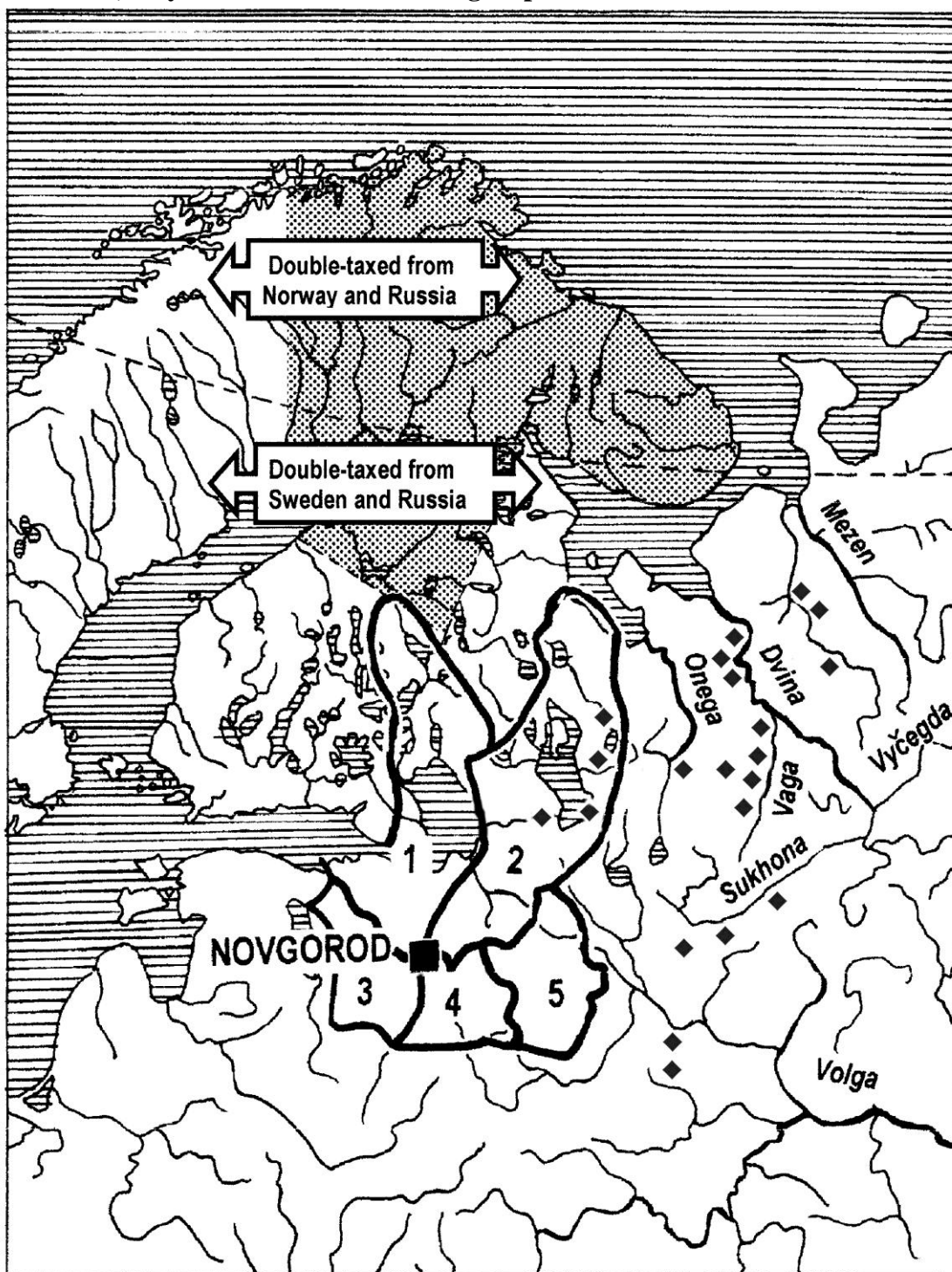
The decline of Byzantium and the disruption of the river trade routes by the Mongols in the thirteenth century (Map 4) triggered a shift of focus. Novgorod had previously exported furs in three directions: to Bulgar in the east, to Kiev in the south, and to the Baltic in the west. Janet Martin writes: *In response to the demands of all three markets, Novgorod extended its realm, carved out new trade routes across northern Russia, and subjected non-*



**MAP 4**

**The major trade routes (dotted lines) from the Baltic to the Black Sea, Byzantium, and the Caspian Sea. By establishing Staraja Ladoga in the late eighth century, the Norse plugged into this vast trade network.**

When Kiev was overrun by the Golden Horde (grey shaded arrows) in A.D. 1241, opportunity knocked at the gates of Novgorod. Finding themselves independent of the Kiev State, they established a fur trading empire that reached to the Barents Sea.



**MAP 5**

Novgorod's five administrative districts (numbered) and its network of fortified support points (black diamonds) for trade and tax-collection. The grey shaded area up north indicates the region that was double-taxed from Norwegian-Russian and Swedish-Russian sides respectively. (Based on Hansen and Olsen 2004:156 Fig. 28).

*Russian tribes to tributary status. From those tribes Novgorod collected luxury fur. From the northern population in districts subject to direct Novgorodian administration it collected squirrel pelts.* (Martin 1986:60) (See Map 4).

The northern crusades are less known than the Levantine ones, and although smaller in scale they were numerous and far more successful. Beginning in the twelfth century, they imposed the Roman Catholic belief upon the Baltic and Finnish populations, and secured a Western European outlook and political culture which was to leave trace till this day (See Christiansen 1997 for overview).

From the 1260s A.D. two German orders (The Livonian Knights and the Teutonic Knights) launched crusades against Prussia, Lithuania and Livonia (in present-day Estonia and Latvia), and thereby gave the German merchants a leverage in the Baltic trade. By the fourteenth and fifteenth centuries, the German Hanse had merchant houses in the Peterhof District of Novgorod, and *de facto* controlled the trade in the Baltic (Martin 1986:61-62). Trade wars were fought and blockades were commonplace. The countries on the Baltic rim were, on the other hand, totally dependent on the Hanseatic trade, and modern Finland owes much of its western orientation to the Hanse.

The western Europeans were not the only ones to use religion as an excuse for territorial expansion: from the eleventh to the sixteenth centuries Orthodox monasteries were “colonizing” the regions north of Lake Ladoga, up to the White Sea and westwards on the Kola Peninsula to Petsamo (Hansen and Olsen 2004:220-223), see Map 3.

Around A.D. 1240 Mongols led by *Batu Khan* (Djenghis Khan’s grandson) invaded Eastern Europe through Russia (see Map 4). They sacked Poland, Schlesvig, and Hungary, only to pull back to the Volga later on. This huge Khanate or state was called *The Golden Horde* after its main camp. It survived until A.D. 1360, when it started deteriorating.

Kiev was overrun in A.D. 1241, and Novgorod suddenly found itself independent of the Kiev State. This allowed Novgorod to create its own “fur trading empire” by expanding north, all the way to the Barents Sea. They collected tax from Sámi territory, way into what is present-day Norway and Sweden, and even brought walrus tusks from the White Sea to the market (see Map 5). Raids and trade-wars with the Scandinavian countries followed. The Karelians became their tax-collectors and go-betweens, even more than before.

In the 1250s A.D., an agreement between the Norwegian *King Hákon Hákonsson* and the *Principal of Novgorod Alexander Nevsky* was negotiated, giving the Norse the rights of free passage “as before”.

A Swedish-Norwegian peace treaty with Novgorod at *Nöteborg* (German name: *Schlüsselburg*) in A.D. 1323 was followed by the two *Agreements of Novgorod* from A.D. 1326, between Sweden and Novgorod, and between Norway and Novgorod (Hansen and Olsen 2004:169-175, Sawyer and Sawyer 1993:68-69).

As the result, the peoples of Finnmark and the Kola Peninsula were double-taxed by fur traders from both Novgorod and Norway/Sweden between A.D. 1326 and A.D. 1493 (Map 5). Novgorod accepted the sovereignty of Moscow in A.D. 1478, but the interest in taxation of the Sámi did not evaporate.

Novgorod did not only control the fur trade to Western Europe, but also to the Middle East, using the same river routes as the Norse had done during the Viking Period. From the mid-fourteenth century the German Hanse established an office in Novgorod, and in principle controlled the Western European fur trade (KLNLM vol. 6:199-200).

Despite the fact that the fur trade to a great extent was a luxury trade, it developed to something like an industry during the Middle Ages, with a typical “medieval” system of coercion and extortion; proto-capitalism and feudal style militarism working hand in hand.

The fact that the Hanse was running the European delivery end of the trade makes it belong to the high medieval type of trade, with its highly sophisticated exchange networks.

## 5. The Norse and the stockfish in Norway

With the coming of a different economy during the Middle Ages, the Viking trade gave way to low status bulk-trade with foodstuffs such as grain and fish. This allowed the stockfish from the Lofoten archipelago to enter the European market, where it became a popular commodity, not the least because it was an acceptable food during lent.

The first written evidence of commercial export of stockfish is a court order in the *Frostaping Law*<sup>10</sup> from ca A.D. 1115. Additional sources indicate that the commercial fishing and stockfish export increased throughout the century.

*Vágar* in present-day Vestvågøy was a short-lived town in the Lofoten archipelago, created as a shipping- and taxation point. It declined during the fourteenth century, as other towns took over as taxation-points further south (Bertelsen 1985:168-181):

*Nidaros* – present-day Trondheim – became the center of the newly established Norwegian archdiocese from A.D. 1153, and was a thriving town for national and international trade. The archbishop himself was engaged in the stockfish trade. Some of the stockfish was shipped by way of *Nidaros*, but the location of this town was not altogether favorable for the larger fish trade.

The town *Bergen* on the Norwegian west coast had much better location, close to the sailing-routes and with a generous harbor. From the late thirteenth century, official Norwegian policy was to concentrate all foreign trade to the towns, and Bergen became the official staple town for the stockfish trade. From A.D. 1294, foreign ships were not allowed to sail north of Bergen to buy fish, and A.D. 1361 King Hákon VI confirmed that the burghers of Bergen had the unique privilege to trade on all Norway, including the Norwegian tax-lands, i.e. the Faroes, Iceland, and Greenland.

It sounded better than it was. After the 1320s A.D. most of the Norwegian fish to Europe went on German ships. From A.D. 1344 the Hanse had a permanent “kontor” in Bergen (as it did in London, Brügge, and Novgorod, with Lübeck as the hub). As mentioned the Hanse ships were not allowed north of Bergen, which became the fiscal point for the king and the church, as well as the major international transit harbor.

The economic structure behind the power of the Hanse was the imbalance of resources between the Baltic and Northern Norway: A surplus of grain in the south was exchanged for a surplus of fish in the north.

This had consequences for the settlement pattern and the cultural landscape in Northern Norway; subsequently also in Iceland. While a sort of local subsistence economy was always maintained, the market economy demanded more and more labor to be invested in the fishing. Labor-intensive tasks in the subsistence economy such as cereal cultivation were greatly abandoned, creating an increased dependency on imported grain. (Based on KLNLM vol. 4:366-370).

It is interesting to note that furs and *lýsi* (lamp oil, which at this point in time was almost certainly made from cod liver) were often riding with the stockfish cargoes. Not all furs were luxury items, some were simple pelts for lining, bedding, etc. i.e. ordinary consumption goods. (KLNLM loc.cit.).

During the Middle Ages the old ethnic boundary between the Norse and the Sámi was overrun. Norse fishermen settled in fishing-stations on the outer coast, often in locations devoid of vegetation (and pasture), in what was previously Sámi territory, all the way east to the Varangerfjord (Hansen and Olsen 2004:165-169). By A.D. 1307 Norwegian King Hákon

<sup>10</sup> The regional law of the Trøndelag, the area around the Trondheim Fjord in mid-Norway

V. Magnusson erected a fortress *Vardöhús* at the entrance to Varangerfjord<sup>11</sup>, to block Karelian attacks.

This territorial expansion was motivated both by the fur trade and the commercial fishing alike. This could not have happened without solid backing from the international trade network, which provided these northerly regions with a steady supply of grain in exchange for furs and fish. A long-distance inter-dependency between ecologically diverse regions had been created.

With time, however, more and more of the furs from the Sámi area went to the south-east, to the Bay of Bothnia. From the fourteenth century, the Bothnian trade became increasingly directed towards Stockholm and Åbo (Turku in present-day Finland) as the export harbors (KLNLM vol. 4:358). At the same time more and more of the fish from Lofoten and Finnmark went to the south west, to Bergen and Western Europe. With the risk oversimplifying, one might say that the furs were headed for the Hanse in the Baltic, while the stockfish was headed for the Hanse in Bergen (Hansen 1990).

## 6. The Norse and the stockfish in Iceland

Among historians, the traditional view has been that the Icelanders fished for domestic trade, but did not start commercial export of stockfish until the fourteenth century (KLNLM vol. 4:370-371).

Over the last couple of decades, systematic efforts to identify the archaeological signatures of commercial fishing in the North Atlantic have been made (Amundsen et al 2005, Krivigorskaya et al 2005a, Krivigorskaya et al 2005b, Perdikaris and McGovern 2007, Perdikaris and McGovern 2008a, Perdikaris and McGovern 2008b).

Zoo-archaeological investigations under the NABO (North Atlantic Bio-cultural Organization) cooperative have yielded evidence that Icelanders were involved in stockfish production already from the initial settlement before A.D. 900. This was partly done for local consumption and partly for regional exchange.

Commercial fishing for international export seems to have started in the Icelandic West Fjords around A.D. 1200, bringing Iceland in contact with the medieval trade systems of Europe (Edvardsson et al 2004, Edvardsson and McGovern 2005, Krivigorskaya et al 2005, Krivigorskaya et al 2005b). This was a transition from the Viking Period type of trade with its emphasis on chiefly endeavors, as celebrated (retrospectively) in so many Icelandic sagas. Iceland had joined the production end of the medieval bulk trade with foodstuffs.

Compared to this development in medieval Iceland, the Norse Greenland society with its dependence on the northern cash-hunts looks a bit dated.

After the 1260ies A.D. the stock-fish from Iceland was formally required to be shipped by way of the Norwegian fiscal point in Bergen. Still, it did not take long before foreign ships started illegal trade-runs directly on the Icelandic fishing stations to pick up their cargo, without paying dues to the Danish-Norwegian king.

In the thirteenth to the fifteenth centuries, the Icelanders owned only few ships of their own, and despite a substantial stock-fish production they became hostage to foreign traders; to the Norwegians in the fourteenth century, to the English in the fifteenth century, and to the Hansards from the 1470s A.D. (KLNLM vol. 4:370-371). During this time, few items were taken abroad on Icelandic keel. Accordingly, even Norse Greenland was beyond reach of the Icelanders.

Like in North Norway, the increased stockfish export must have had consequences for Icelandic agriculture and its cultural landscape. Iceland was probably never self-supplied with grain, but cereal imports may still have reduced the investment in grain production. From the

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<sup>11</sup> In the present-day town of Vardø, not far from the present-day Russian-Norwegian border

fourteenth century cereals were imported to Iceland in larger quantities (KLNLM loc. cit. and vol. 9:155-156), while at the same time the climate in the North Atlantic was becoming less favorable for local cereal production.

It is possible that the escalating fishing industry in Iceland might have left the Norse Greenland colonies in a backwash. It has been argued that ivory was no longer in fashion in European small art, or that it could be obtained from alternative sources, such as the White Sea (Roesdahl 2000:146) or from African elephants (Tegengren 1962).

This may have been the case, but it is just as likely that the increased traffic on the Icelandic West Fjords lead to an increased number of ships in the Denmark Strait, from where Greenland was in plain sight. It is possible, therefore, that foreign ships trading illegally in Iceland may have paid occasional (and equally illegal) visits to Norse Greenland. If they did, they had all the reasons in the world to keep quiet about it. On the other hand the climatic records suggest increased drift-ice in Greenland waters from the mid-fourteenth century, making it difficult to cross the Denmark Strait (Dugmore et al 2006).

The KLNLM vol. 3:665 says: *The English commenced their navigation on Iceland in ca. 1408, first in search of fishing banks, but trade started from ca. 1412. The English trade in Iceland was a violation of the trade privilege of the Bergen burghers, and a threat against the King's income from Iceland.* (My translation from Norwegian). The King in question was *in casu* the Danish-Norwegian King Erik of Pomerania, who accordingly was also the King of the Faroes, Iceland and Greenland. It is worth noting that the contemporary "wedding at Hvalsey Church" A.D. 1408 which was well documented in Iceland, represents the latest recorded contact with Norse Greenland (Seaver 1996:155-156).

## Conclusions

The basic idea in this paper is that there was nothing extreme about the Norse colonization of Greenland, even though establishing pastoral farming in the Arctic is unusual by any standards. Nor were the exploratory journeys to L'Anse aux Meadows in Newfoundland all that extreme when compared to other, well documented exploratory journeys conducted by the Norse in the same period, north and east of Scandinavia.

Such voyages were not made for king and country as the nineteenth and twentieth century Arctic explorations, but were typical for a period when luxury trade was combined with extortion of the (often pagan) hunter-gatherers. The expeditions to the Arctic fringe of the North American Continent must be seen as a quest for furs and commodities that could be exported to the European luxury market, rather than attempts to establish permanent settlements based on animal husbandry.

The colonization of Greenland as well as of Sámi and Finnish territories were probably triggered by the same type of economic thinking. Traditionally, the feudal economies in Central Europe, where the liege lords combined military obligations with large-scale land-ownership and extortion, has been regarded as the archetype of the predatory medieval economy.

The so-called coercion extortion cycle (Bagge 1989) was not limited to agricultural societies, and the commodities obtained need not have been agricultural produce. Luxury articles such as furs, ivory, falcons and live polar bears were probably among the first commodities in the Norse world to be paid in cash, albeit the coins were silver dirhams from the Samanid and Sassanid empires. (Ransom and Dane-geld to pay off Viking armies are not regarded as "trade" in this context).

It is typical that the supply of such luxury articles was obtained at the margins of the "civilized" world; "civilized" in this context meaning societies that were hierarchically organized, with a certain military capacity, and above all, with established trade networks, and a proto-capitalistic market.

With the development of commercial fishing throughout the Middle Ages, Sámi territory was again invaded, but this time it was the Norse themselves who settled to harvest the ocean for its riches in cod. In present-day Finnmark in Northern Norway, this colonization continued into the sixteenth century.

From the Viking Period till today, the developed World has raped the Arctic for commercial reasons. The local hunter-gatherers were in turn taxed, exploited, displaced, converted, and enslaved. Travelers to the Arctic will find the Arctic landscape a junk-yard for past economic adventures, spanning from sixteenth century whaling stations to twentieth century oilrigs, gas-pipes and strip-mines. Abandoned installations from the Cold War as well as older conflicts are found in unexpected places.

Norway in the Viking Period was a typical example of a land with a dual economy; a consumption-based agricultural economy in the south, and an export-based fur trade economy in the north. It is almost a paradox that these northern economies were more tied to the commercial sphere and the monetary exchange system of Central Europe than were the agricultural economies further south.

However, when the opportunities for commercial fishing arose within the Scandinavian economies during the twelfth century, the Norse entered the European sphere of large-scale food-production for the first time. On dry land, whether Arctic or Sub-Arctic, the marginal ecology simply could not produce enough biomass to sustain anything but a scattered population, not to mention food export. The Arctic Ocean on the other hand, with its generous ecosystems teeming with life, offered opportunities both to local communities and for food export. Large quantities of fish that fed and grew in distant waters could be harvested at the spawning grounds. This is what the Norse people of the Lofoten archipelago exploited, and this is what the Icelanders did in the West fjords.

The Norse Greenlanders may go into history as the first Europeans to penetrate the North American Arctic for commercial reasons, in order to acquire the furs and ivory which, at the time, was fancied by the European elite. The Norse colonies in Greenland were founded for such a purpose, and when the European craving for walrus ivory faded, or the supplies dried out, or the trade routes collapsed, the Greenlanders had to close the shop.

As such, the history of the Greenlanders may symbolize the activities of the civilized world in the Arctic; economic adventures ending with collapse.

In this paper, the transition from a Viking Period luxury trade to a high medieval bulk trade with foodstuffs has been emphasized. It has also been simplified. The arguments can be expressed in two points:

One - that Iceland appeared to have had limited resources for export prior to the A.D. 1200 development of the stockfish trade. Their main alternative - *vaðmál* - was a labor-intensive export commodity based on sheep. It is therefore tempting to see the colonization of Greenland and the exploration of the Canadian east coast as initiated from Iceland, with exports for the European luxury market in mind.

Two - that with the change of the European trade economy, and the establishment of large-scale commercial fishing in the Icelandic West Fjords, the economic framework that Norse Greenland was a part of, transformed with disastrous consequences. The demographic and economic impact of the Black Death in Europe, and the increased climatic instability in the North Atlantic (Dugmore et al 2006), must have hurt both the local subsistence economy and the European market for walrus ivory. Besides, the competition of ivory and furs from Novgorod after ca. A.D. 1250 has probably been vastly underestimated.

As previously emphasized the trade with expensive goods continued through the Middle Ages. It was an upper-class phenomenon, but eventually even the upper classes got involved in bulk trade with foodstuffs, leather, skins, cloth, beer, and semi-industrial products. The

actual exchange took place in towns, under royal and ecclesiastical control, often regulated by privileges.

Compared to Scandinavia proper, the development of the trade in the North Atlantic demonstrates a *delay*. The Greenland tusk trade became a dinosaur, and since the Greenlanders had no more ships than the Icelanders, they were in fact hostage to foreign merchants who had no obligation to (and were not even allowed to) trade in Greenland.

For North Norway and Iceland, the king tried at least periodically to maintain a food-for-food balance, in order to prevent a negative export of food in times of starvation (KLNK vol. 4:366-372). There are no indications that the Norse Greenlanders were ever subject to a similar policy.

The punch-line is as simple as it is banal; the Norse expansion into the North Atlantic from the eighth to the fourteenth centuries was not solely a quest for new land. It took place within the framework of a growing European market economy, it was subject to international politics, and was vulnerable to the structural changes within the European economy.

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