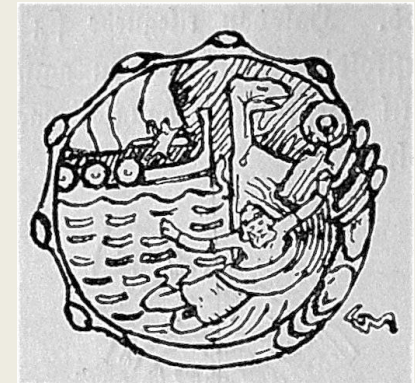
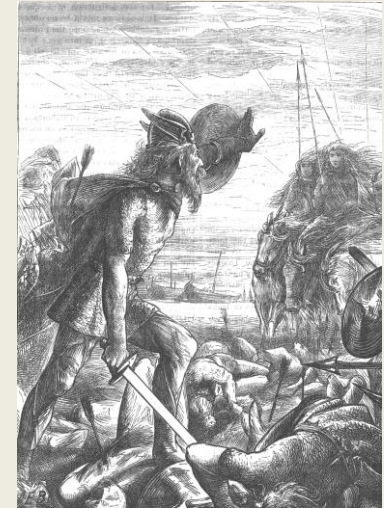


# A Viking Voyage: Trading, Raiding or Emigrating?



Dr. P. A. Baer, Department of Medieval Studies, University of Victoria, B.C., Canada.  
Lecture online for Journey Middle School, Shirley, British Columbia. Nov. 17, 2020.

Introduction: Dr. Trish Baer  
UVic Speaker's Bureau  
Department of Medieval Studies



## **1. Ships**

- Drop spindle
- Warp weighted loom
- Ship sails
- Ship building - archaeological finds - Viking Ship museums
- 1. Norway
- 2. Norway
- 3. Norway
- 4. Denmark
- - high seat pillars, sun stones, Oseberg ship jewelry, cushions, silver jewelry, tents, sword, Viking tents at Lejre,

## **2. Turf Houses and household items**

- 1. excavation in Greenland
- 2. drawing of turf church in Greenland
- 3. turf houses in Iceland
- - wooden food containers, carved wooden lamp, iron knife, cattle horn spoon, drinking horns, glass objects, shoes, jewelry, board game,

# **The Vinland Sagas: Two 13<sup>th</sup> Century Icelandic Texts**

## **Eirik the Red's Saga (ER)**

**- preserved in two mss:**

**Hauksbók – early 14<sup>th</sup> century**

**Skálholtsbók – early 15<sup>th</sup> century**

**- both based on a ms written after 1263, which was itself based on an early 13<sup>th</sup> century ms.**

## **The Saga of the Greenlanders (GR)**

**- preserved Flateyrarybók ms c.1387**

**-part of a larger work on King Olaf Tryggvasson**

**The texts differ but both describe the discovery and colonization of Greenland and the discovery and attempted colonization of North America at a site that has been identified as L'Anse aux Meadows in Newfoundland.**



# Age of Poetry 800–1100

The oldest preserved Norse literature is verse, especially the Edda poems and court poetry. Poems continued to be composed in later periods, but after around 1100 the Icelanders took to writing in a big way and developed new forms of literature of their own.



# The Saga-Writing Age 1100–1350

Writing developed and changed significantly during this period, reaching its high point in the second half of the 13th century. From the earliest historical writings, a unique form of literature emerged known as the sagas of the Icelanders or the Icelandic family sagas. These sagas, along with the earlier Edda poems, have been a fertile source of inspiration to writers, painters and composers, as in the operas of Wagner and the fantasies of Tolkien. The sagas have been translated into countless languages and continue to be read widely today. Their lasting popularity is the reason why Icelandic, the mother tongue of only 300,000 people, is taught at over a hundred universities around the world.



# The Saga-Writing Age 1100–1350

The first Icelandic prose is learned rather than literary. The first Icelandic prose we know of is Ari the Learned Thorgilsson's (1067–1148) *Book of the Icelanders* (*Íslendingabók*), written about 1130, a short, factual account of the history of Iceland from the settlements up to his own times.

## The Book of Settlements

*Landnámabók*, chronicling the beginning of settlement, is essentially an inventory of the 400 or so who seized or otherwise acquired land in Iceland, usually accompanied by a description of the location and extent of their estates. The genealogy of the settlers is often also covered, and their progeny always mentioned.

## The First Grammatical Treatise

Initially the Icelanders wrote in Latin, but early in the 12th century they began to use the Latin alphabet to write their own language. Around 1150 an unknown author set out to create a new alphabet for the Icelanders. His essay – *The First Grammatical Treatise* – is one of the most remarkable works of linguistic history.

## Grágás

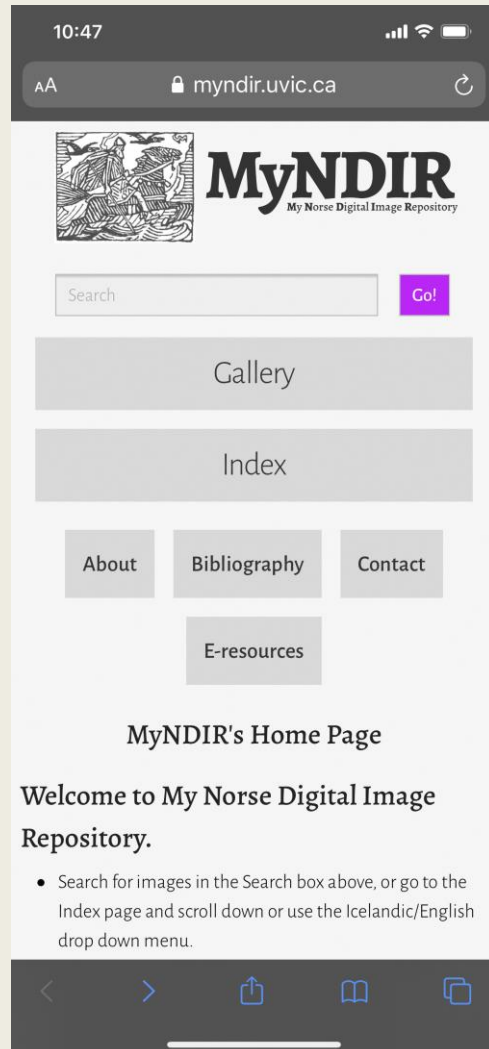
The codification of laws in Iceland began in the winter of 1117–1118. Two practically undamaged vellums from the Commonwealth era (930–1262) have been preserved, containing collections of contemporary law as well as some smaller excerpts. These laws from the Commonwealth era are referred to as *Grágás* (Grey Goose Laws).



# MyNDIR (My Norse Digital Image Repository)


Myndir means “pictures” in Icelandic.

<https://myndir.uvic.ca>



10:47

AA myndir.uvic.ca



**MyNDIR**  
My Norse Digital Image Repository

Search  [Go!](#)

Gallery

Index




About Bibliography Contact

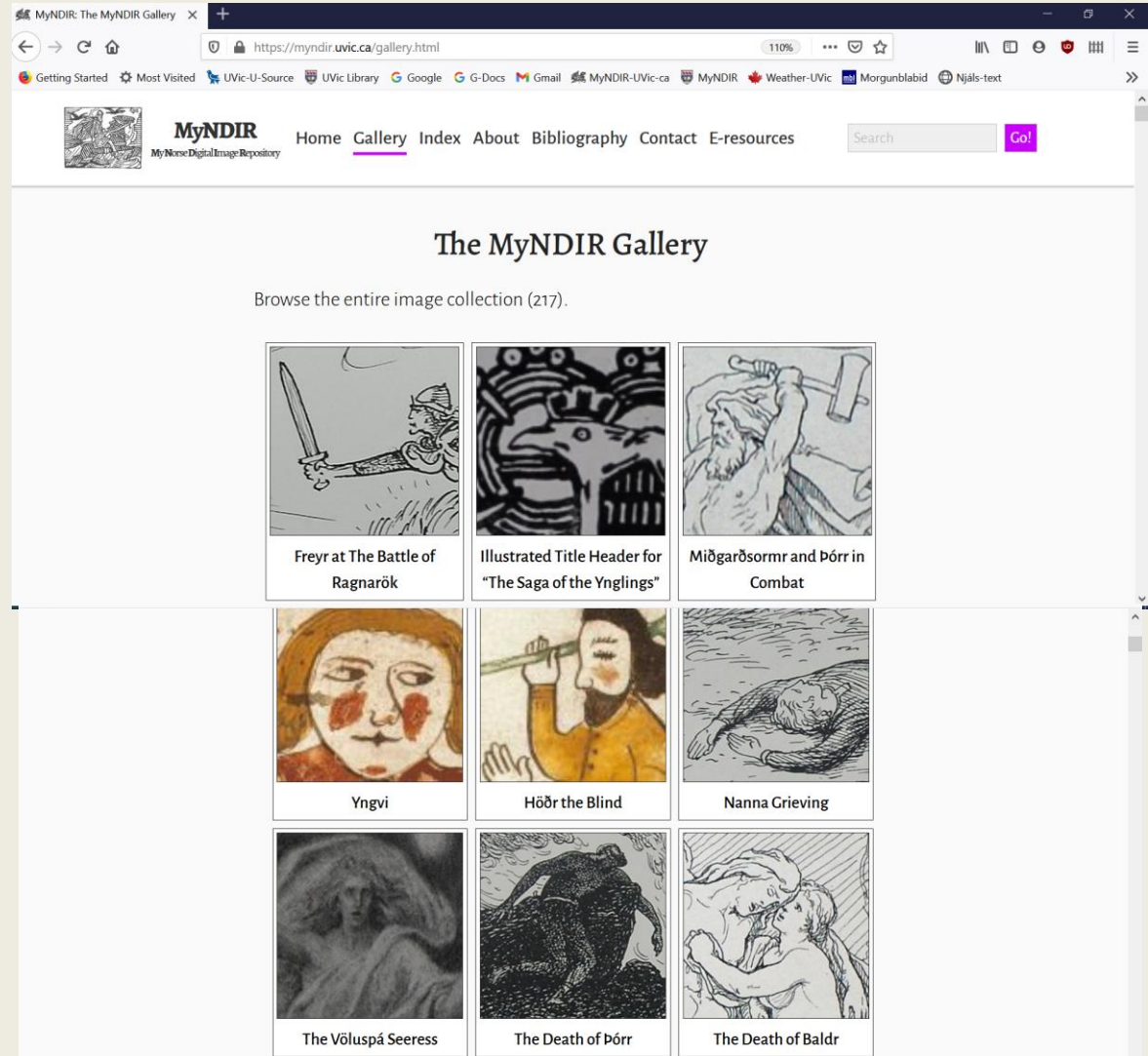
E-resources

MyNDIR's Home Page

Welcome to My Norse Digital Image Repository.

- Search for images in the Search box above, or go to the Index page and scroll down or use the Icelandic/English drop down menu.

< >   



MyNDIR: The MyNDIR Gallery

https://myndir.uvic.ca/gallery.html

Getting Started Most Visited UVic-U-Source UVic Library Google G-Docs Gmail MyNDIR-UVic.ca MyNDIR Weather-UVic Morgunblaid Njals-text










**MyNDIR**  
My Norse Digital Image Repository

Home Gallery Index About Bibliography Contact E-resources

Search  [Go!](#)

## The MyNDIR Gallery

Browse the entire image collection (217).

		
Freyr at The Battle of Ragnarök	Illustrated Title Header for "The Saga of the Ynglings"	Miðgarðsormr and Þórr in Combat
		
Yngvi	Höðr the Blind	Nanna Grieving
		
The Völuspá Seeress	The Death of Þórr	The Death of Baldr



**Halfdan Egedius 1877-1899**  
Pen and ink illustration.



Trish Baer 2020  
Needle felting.

**My Norse Digital Image Repository:**

<https://myndir.uvic.ca>

<https://myndir.uvic.ca/SKng-1899-Oslo-190-01.html>



Needle felting: Trish Baer  
"The Death of Erling."  
Erik Werenskiold 1855 - 1938



Needle felting: Trish Baer  
"Ragnhild's Dream."  
Erik Werenskiold 1855 - 1938



# A Viking Voyage: Trading, Raiding or Emigrating?



*Leif Eiriksson discovers North America by Christian Krohg (painting c. 1893)*



**“Nordmenne lander pa Island.” (1877)  
National Gallery, Oslo: Oscar Wergeland (1844 – 1910)**

# The Vikings' Voyage to the New World

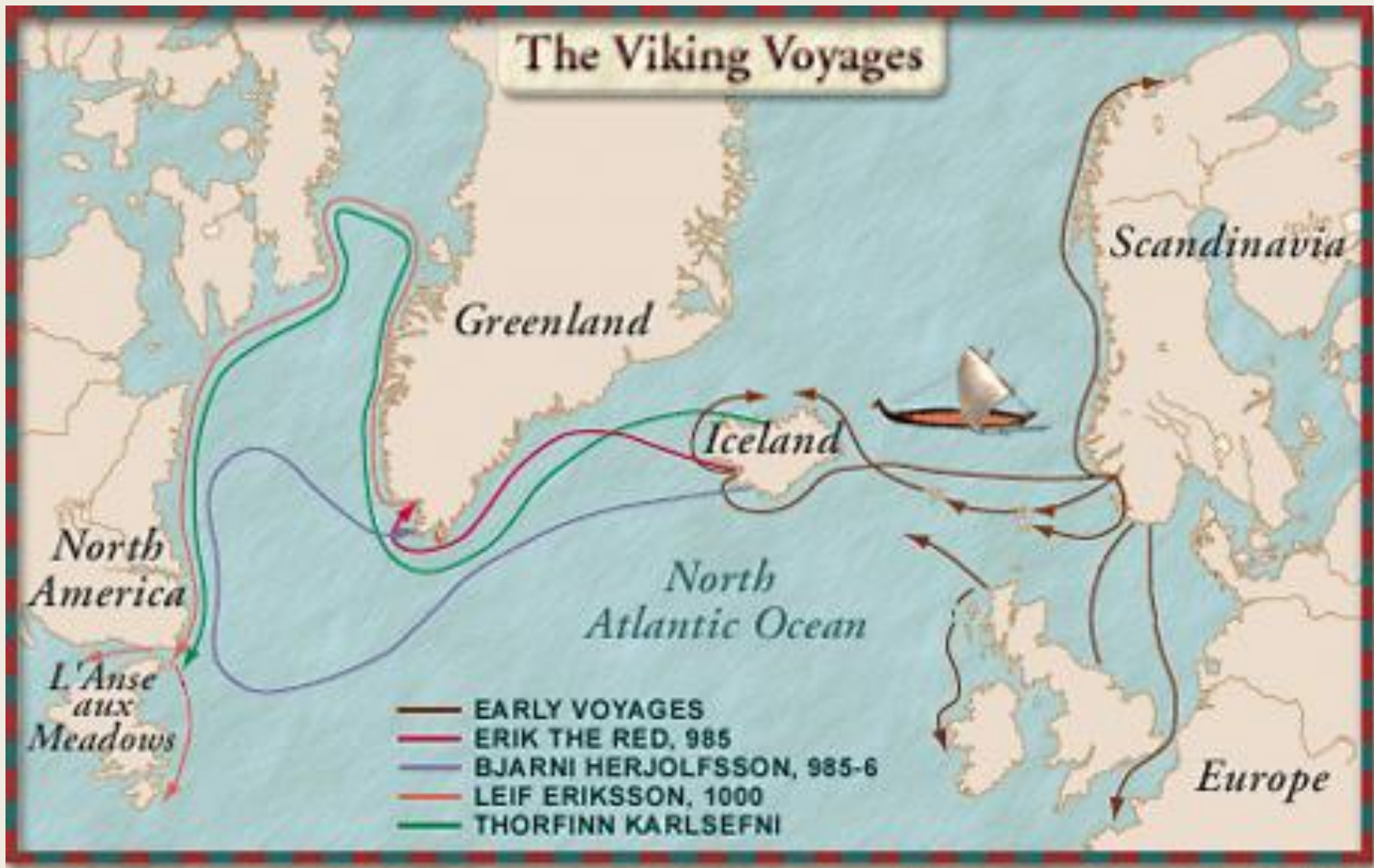


## Leif Erikson and Vikings in Canada

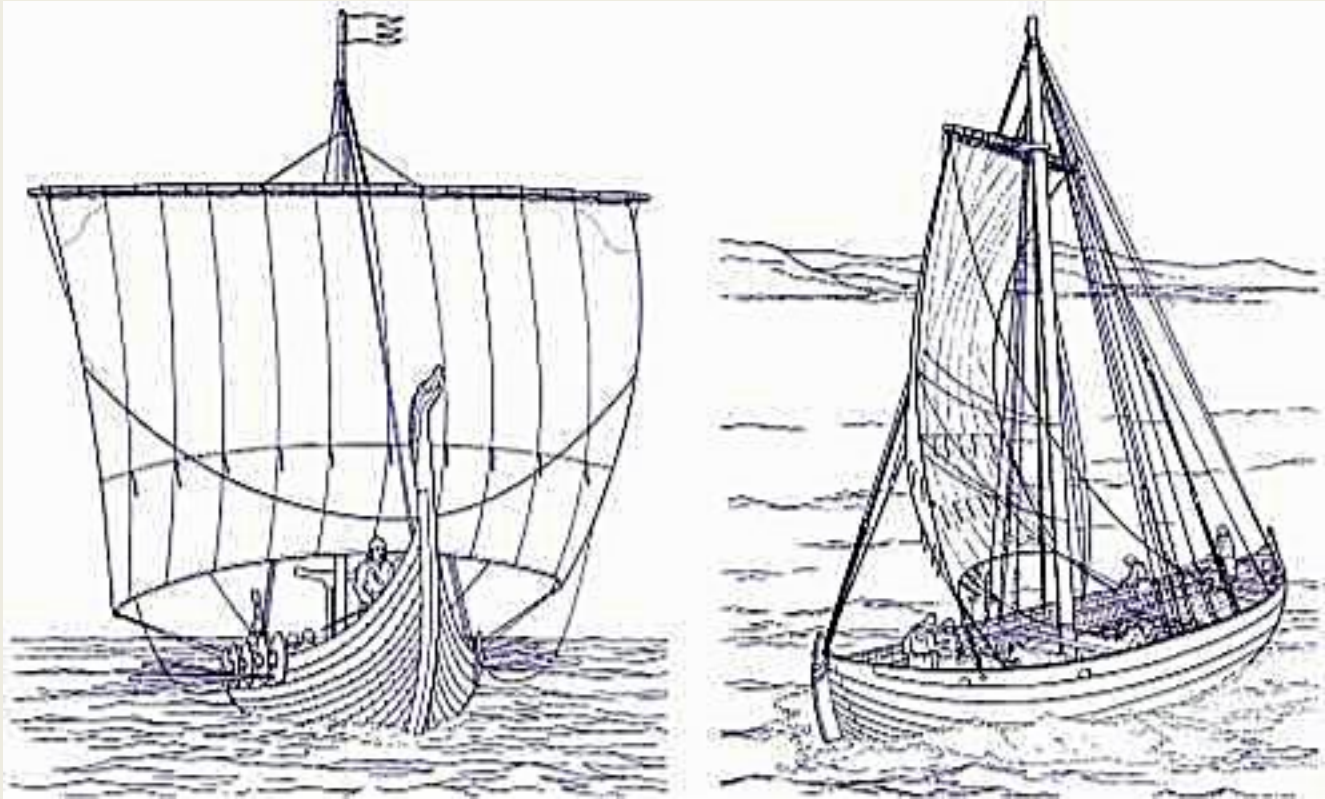
<https://cdnhistorybits.wordpress.com/2015/12/08/leif-erikson-vikings-canada/>

Carmen Cadeau

# The Viking Voyages



## 2) Viking Ships



“In the 1970's, five 11<sup>th</sup> century ships were found and recovered from the Skuldelev narrows in Denmark, giving us more examples of the variety of ships used in the Viking age. These ships had been intentionally scuttled, probably to block the channel during a raid. Two different classes of Viking era ships were found: warships called *langskip* (left) and merchant ships called *knörr* (right).”

[http://www.hurstwic.org/history/articles/manufacturing/text/norse\\_ships.htm](http://www.hurstwic.org/history/articles/manufacturing/text/norse_ships.htm)

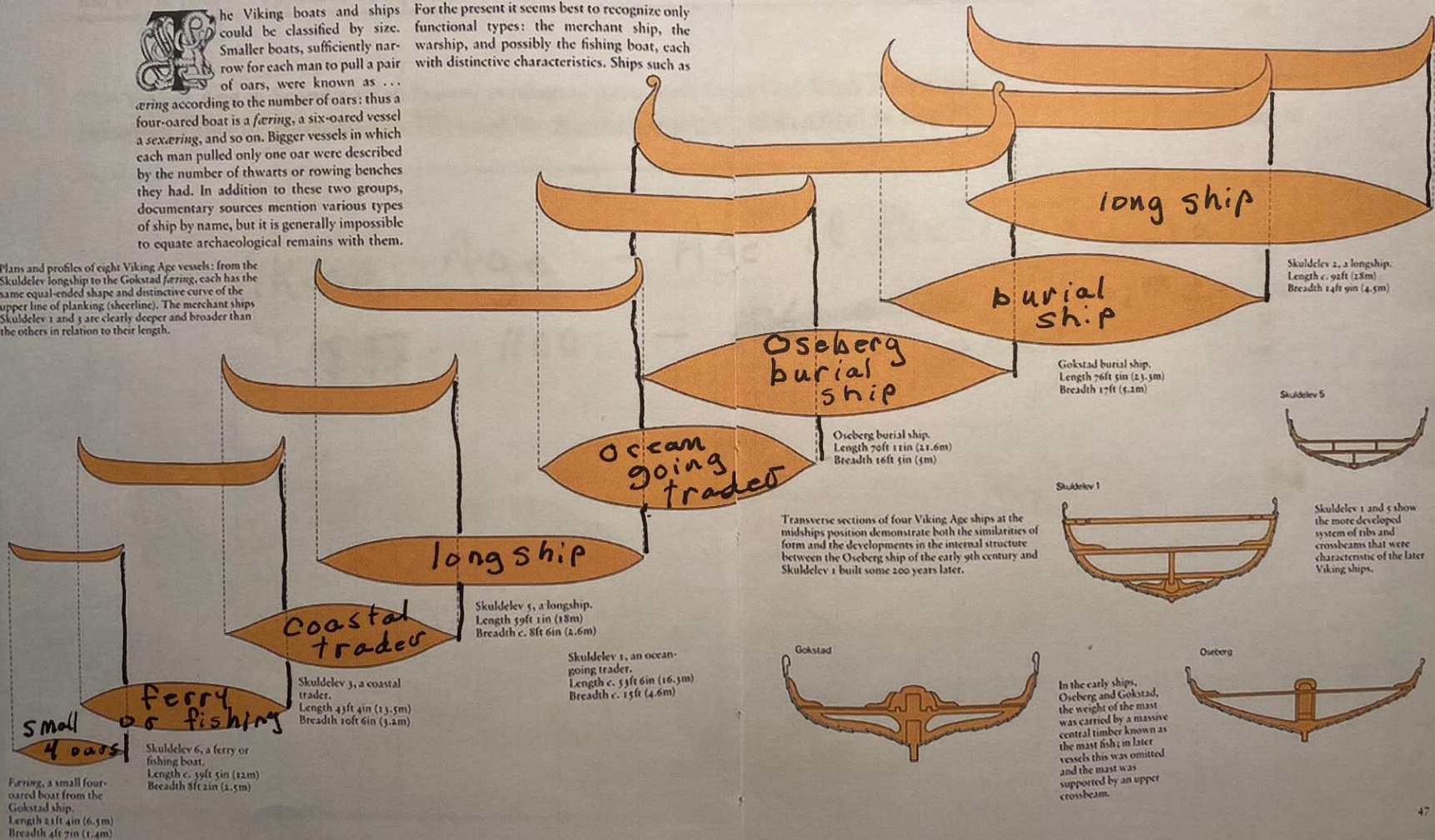
## Ship sizes &amp; shapes



he Viking boats and ships could be classified by size. Smaller boats, sufficiently narrow for each man to pull a pair of oars, were known as ... *æring* according to the number of oars: thus a four-oared boat is a *færing*, a six-oared vessel a *sexæring*, and so on. Bigger vessels in which each man pulled only one oar were described by the number of thwarts or rowing benches they had. In addition to these two groups, documentary sources mention various types of ship by name, but it is generally impossible to equate archaeological remains with them.

Plans and profiles of eight Viking Age vessels: from the Skuldelev longship to the Gokstad *færing*, each has the same equal-ended shape and distinctive curve of the upper line of planking (sheerline). The merchant ships Skuldelev 1 and 3 are clearly deeper and broader than the others in relation to their length.

For the present it seems best to recognize only functional types: the merchant ship, the warship, and possibly the fishing boat, each with distinctive characteristics. Ships such as



*Færing*, a small four-oared boat from the Gokstad ship.  
Length 21 ft 4 in (6.5 m)  
Breadth 4 ft 7 in (1.4 m)

Skuldelev 6, a ferry or fishing boat.  
Length c. 39 ft 5 in (12 m)  
Breadth 8 ft 2 in (2.5 m)

Skuldelev 3, a coastal trader.  
Length 43 ft 4 in (13.5 m)  
Breadth 10 ft 6 in (3.2 m)

Skuldelev 5, a longship.  
Length 59 ft 1 in (18 m)  
Breadth c. 8 ft 6 in (2.6 m)

Skuldelev 1, an ocean-going trader.  
Length c. 53 ft 6 in (16.3 m)  
Breadth c. 15 ft (4.6 m)

Oseberg burial ship.  
Length 70 ft 1 in (21.6 m)  
Breadth 16 ft 5 in (5 m)

Gokstad burial ship.  
Length 76 ft 5 in (23.3 m)  
Breadth 17 ft (5.2 m)

Skuldelev 2, a longship.  
Length c. 92 ft (28 m)  
Breadth 14 ft 9 in (4.5 m)

Transverse sections of four Viking Age ships at the midships position demonstrate both the similarities of form and the developments in the internal structure between the Oseberg ship of the early 9th century and Skuldelev 1 built some 200 years later.

Skuldelev 1

Skuldelev 5

Skuldelev 1 and 5 show the more developed system of ribs and crossbeams that were characteristic of the later Viking ships.

Gokstad

Oseberg

In the early ships, Oseberg and Gokstad, the weight of the mast was carried by a massive central timber known as the mast fish; in later vessels this was omitted and the mast was supported by an upper crossbeam.

# The Viking ship: a visual glossary

This visual glossary illustrates the parts of a Viking ship and explains the terms used in the chapter. The cutaway ship is a composite drawing including details taken from more than one vessel. In order to show the main structural features, many of the internal timbers have been omitted.

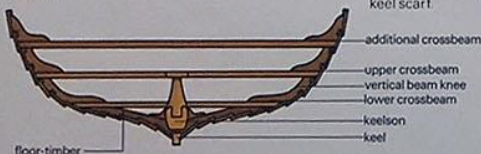
The shape and size of Viking ships varied with their function, as cargo vessel, warship or royal

yacht, and there were also variations during the 300 years of the Viking Age, but they all had certain distinctive characteristics in common. The hull was symmetrical at the ends, with a slightly curved keel blending into a curved fore-stem and after-stem at the bow and stern. The top line of planking (the sheerline) had a distinctive curve, being higher at the ends than amidships. The hull was built with clinker-laid

This body plan shows the characteristic shape of the Viking ship, with round bottom and flared sides. The light draft – resulting from the thin planking – allowed the ship to go close in to the shore before grounding and to be taken far inland up shallow rivers, while the deep keel and steeply angled lowest planks reduced sideways drift (leeway) caused by the wind.



The curved fore- and after-stems were each carved from a single piece of wood and might be marked as here to simulate an effect of overlapping planks – the real planking being fastened to the stems some way back from the bow and stern. Other Viking Age stems were of simpler design. The base of each stem was nailed to the keel at the keel scarf.



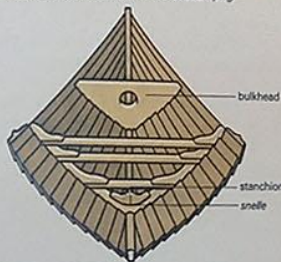
A cross-section (looking towards the bow) shows the internal supporting system of floor-timbers and crossbeams. The slender floor-timbers were individually chosen to match the curve of the hull, as were the beam knees used to attach the crossbeams to the planking beneath. In a warship the upper crossbeams could be used as rowing benches, with the rowers' feet resting on bottom boards at lower crossbeam level. In a cargo ship decks might be laid on the upper beams at either end of the vessel with an additional layer of crossbeams used as rowing benches.

strakes (overlapping planks), which were fastened to the 'back-bone' of keel and stems. Internal supporting timbers were added only after the bottom planking had been completed. The evenly spaced floor-timbers were attached to the planking but not to the keel, producing a flexible structure, and the system of crossbeams above each floor-timber could be used to support decking or rowing benches.

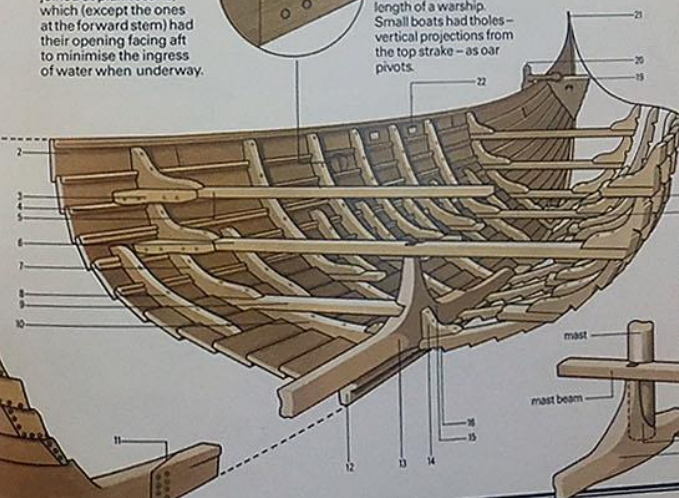
- |                                |                             |
|--------------------------------|-----------------------------|
| 1 fore-stem                    | 12 keel                     |
| 2 top strake                   | 13 keelson                  |
| 3 horizontal beam knee         | 14 keelson knee             |
| 4 stringer or beam shelf       | 15 mast step                |
| 5 additional crossbeam         | 16 first strake or garboard |
| 6 upper crossbeam or mast beam | 17 snelle                   |
| 7 vertical beam knee           | 18 stanchion                |
| 8 side-timber                  | 19 bulkhead                 |
| 9 lower crossbeam              | 20 rudder with tiller       |
| 10 floor-timber                | 21 after-stem               |
| 11 keel scarf                  | 22 oarport                  |

The lower edge of each strake of planking overlapped outside the one below it. Individual planks in a strake were joined at plank scarfs, which (except for the ones at the forward stem) had their opening facing aft to minimise the ingress of water when underway.

The overlapping strakes were fastened with iron nails (a), the ends hammered flat over a rove (washer) to hold them. A caulking of tarred animal hair between the planks kept the hull watertight. Floor-timbers were either lashed on to cleats left standing proud of the strakes (b) or fastened by treenails, wooden pegs driven through strake and floor-timber (c) and jammed in position by a wedge hammered into the inboard end of each peg.



Oarports were cut at either end of a merchant ship or along the full length of a warship. Small boats had tholes – vertical projections from the top strake – as oar pivots.



The mast slotted into a hole or mast step cut in the keelson, a heavy piece of wood resting on the keel, which distributed the weight of the mast and had a vertical projection to support it.

Oslo, Norway





# The Viking Ship Museum in Bygdøy, Norway



# Norway: Oseberg Ship



A 9<sup>th</sup> century ship that was recovered early in the 20<sup>th</sup> century in Oseberg, Norway.

**The ship was part of a very rich burial and is now on display near Oslo.**

The Oseberg ship was once thought to be more representative of a royal yacht, rather than a true war ship, but more **recent research suggests she was quite capable of sailing in open ocean.**





# Viking Ship Museum in Roskilde, Denmark: Skuldelev 2 ship

## *Havets fuldblod genopstår* A thoroughbred of the sea rises again



Skuldelev 2 blev genskabt i fuld størrelse på byggepladsen ved museets bådeværft. Alle detaljer blev tildannet efter studier af det originale materiale. Bådebyggerne vendte ofte tilbage til det originale skib for at undersøge konkrete løsninger. Det færdige skib, *Havhingsten fra Glendalough* er vores bedste bud på, hvordan det originale skib så ud som nyt.

Skuldelev 2 was reconstructed in full-scale at the museum's Boatyard. All details were fashioned from studies of the original material. The boat builders often returned to the original ship to study specific details. In our opinion, the finished ship – the *Sea Stallion from Glendalough* – has the closest possible resemblance to the original ship when new.

## Roskilde, Denmark: Skuldelev 2 ship











Værktøjet må ikke berøres, tak Please do not touch the tools





Værktøjet må ikke berøres, tak Please do not touch the tools



### **3) How to Make a Sail: Shearing Sheep, Spinning, Weaving, Sewing, Waterproofing.**





# Icelandic sheep fleece



1. → 2. = 3. Pel and Tog



Pel

Tog

# Drop Spindle

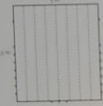


# Warp Weighted Loom





# Uldsejl Wool sails



Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv. Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

- Hvilken form har du på din sejl?
- Hvilken størrelse har du på din sejl?
- Hvilken størrelse har du på din sejl?
- Hvilken størrelse har du på din sejl?

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Material	Color	Weight
Wool	White	100g
Wool	Black	100g
Wool	Red	100g
Wool	Blue	100g
Wool	Green	100g
Wool	Yellow	100g
Wool	Purple	100g
Wool	Pink	100g
Wool	Orange	100g
Wool	Brown	100g
Wool	Grey	100g
Wool	Black	100g
Wool	White	100g



Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

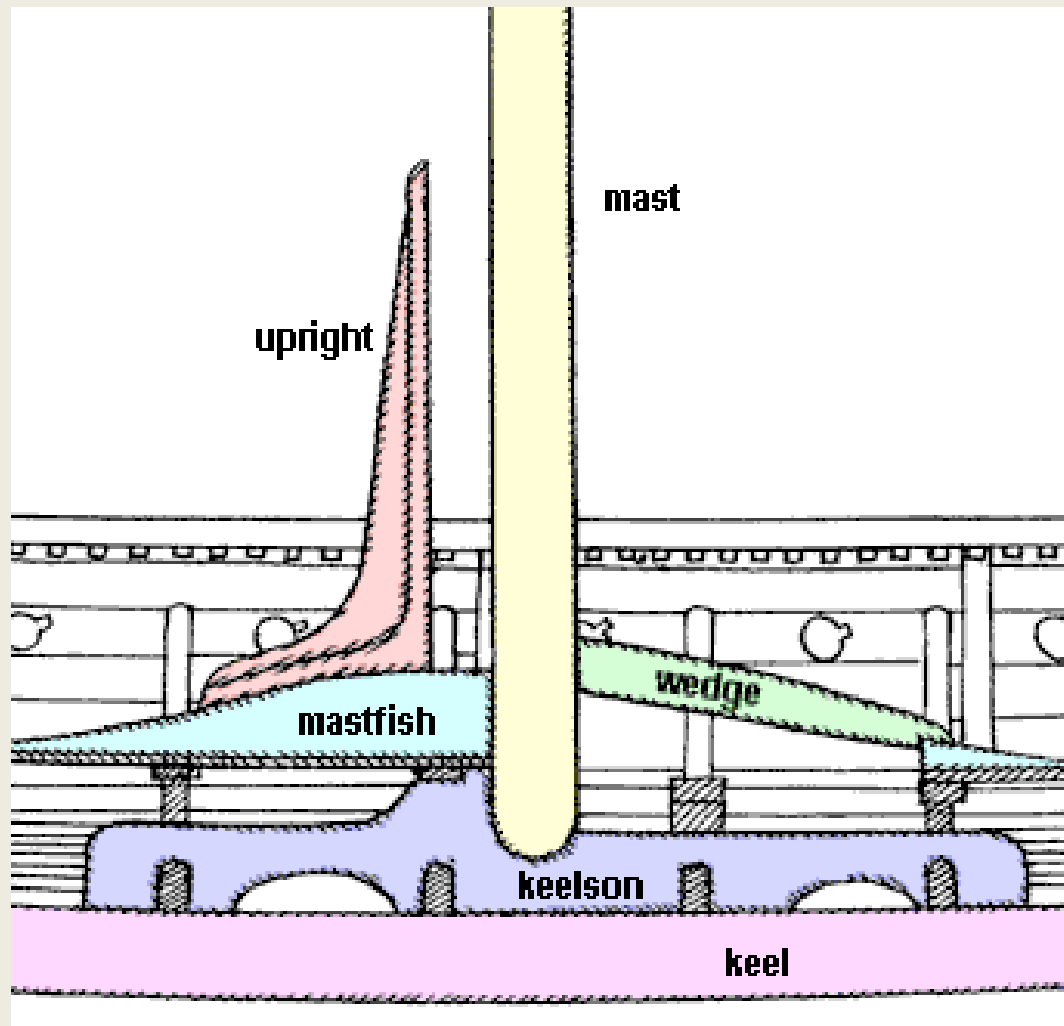
Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

Uldsejlskonstruktøren følger et fastlagt mønster og fremstiller Ankerbøjling og breg af uld. Sammenføjtes mønster, dørstik og hanker vævning, tekstil og klæbteknik samt de forskellige materialer som: uld, bomuld, lin, jern, træ, sølv, sølv og sølv.

DO NOT TOUCH THE WEAVER  
PLEASE DO NOT TOUCH THE LOOM





The keelson rested on the keel, attached to four ribs. The mastfish rested on four crossbraces, and on a raised portion of the keelson. A wedge in the mastfish helped hold the mast in place, but could be removed when the mast was to be unstepped

# 4) Navigating without a map or tide charts...



## The Far Side<sup>®</sup> January

1003

Vikings begin a three-year visit to the northern continent in the Western Hemisphere. (Indigenous people thought it was going to be only for a couple of weeks.)



"Everyone can just put down their loot and plunder, and Sven here—yes, old Sven, who was in charge of reading the tide chart—has something to say to us all."

<https://www.vikingskibsmuseet.dk/en/professions/viking-ships-on-voyages/bigger-voyages/the-voyage-2008/armchair-comments/show/viking-age-thoughts-on-navigation>

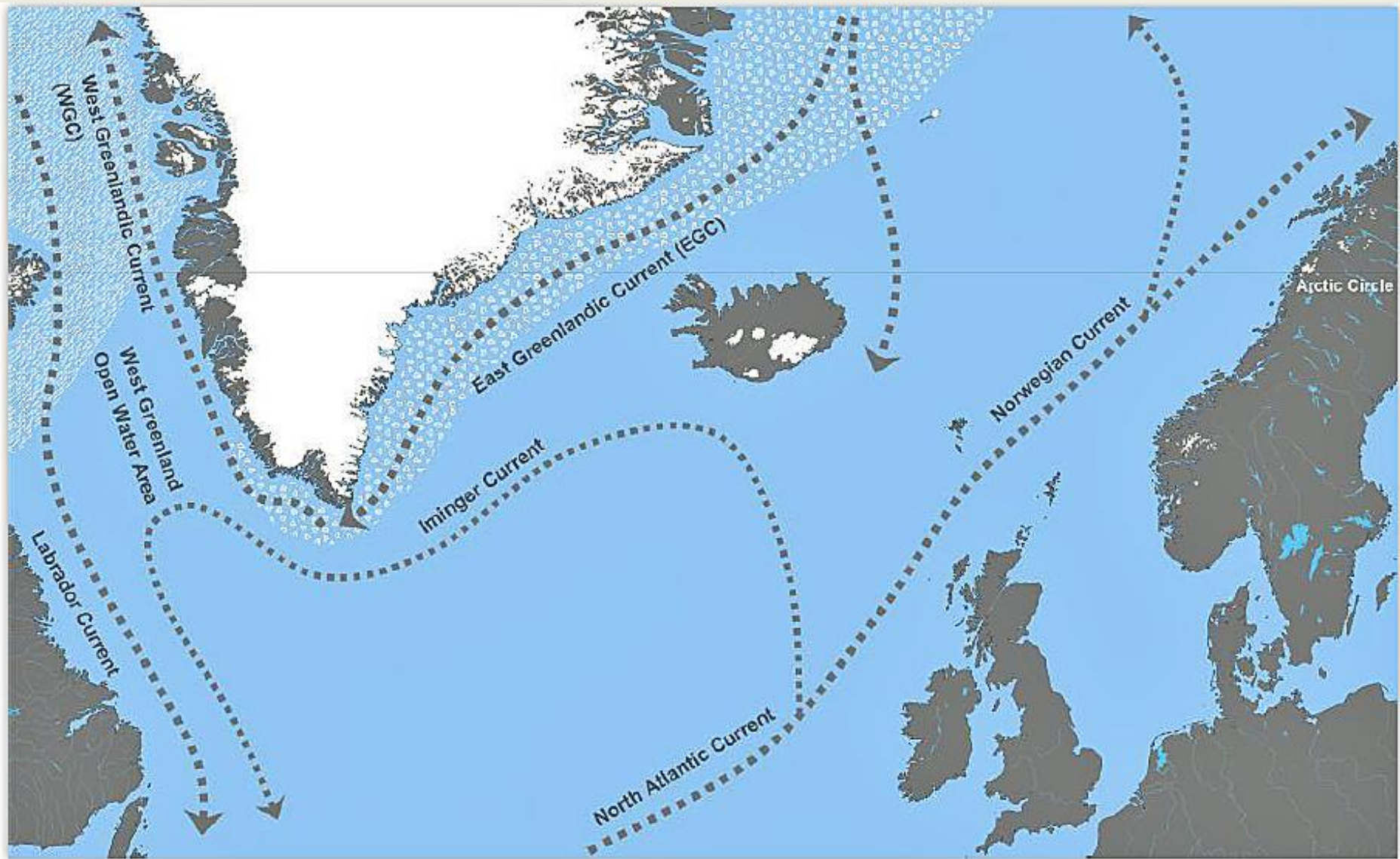
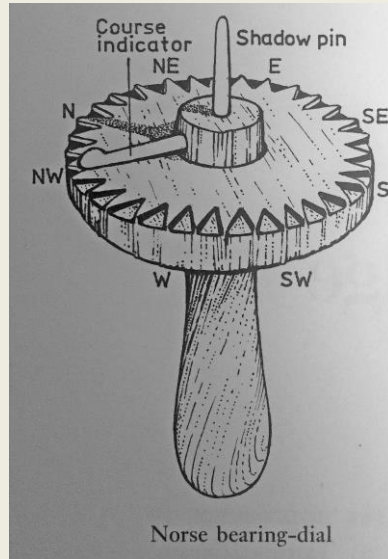


Fig.3.4 The main sea currents of the North Atlantic and normal sea-ice conditions around Greenland at its maximum extent in April-May: triangles indicate the summer drift ice ('storis'), cross-hatching the west ice ('vestis') (modified after Born and Böcher 2001:Fig.5.2, 5.5).

# Navigation Tools ?

## Sun Compass



## Sunstone - Icelandic Calcite



**“The wooden fragment discovered in Uunartoq, Greenland, in 1948 has long been thought to be a sun-compass used to determine direction...**

**However, this has recently been disputed and it may have had nothing at all to do with navigating.**

<https://phys.org/news/2013-04-errors-viking-sun-compass-hint.html>

**Icelandic Calcite** has “a property known as birefringence, which splits light beams in a way that can reveal the direction of their source with a high degree of accuracy. Vikings may not have grasped the physics behind the phenomenon, but that wouldn't present a problem.” **However, “no such crystals have ever been recovered from Viking tombs or ships.”**

<https://phys.org/news/2013-03-fabled-sunstone.html>

**Norse navigators understood the relationship between latitude and the sun's height at noon.**

Chapter 2 of *Grænlandinga saga* describes the motion of the sun in winter as observed in Vínland in an apparent attempt to fix the latitude of the site.”

In sailing from Iceland to Greenland, **departing ships used the highest mountain on Iceland's west coast, Snæfell** (1446m, about 4700ft), as a landmark.

On approaching Greenland, **they looked for the highest mountain on Greenland's east coast**, which is called *Bláserkr* (black shirt) in some versions of the sagas, and *Hvítserkr* (white shirt) in others (3360m, about 11,000ft).

The voyage was about 560km (300 nautical miles), yet under conditions of good visibility, **sailors were out of sight of one mountain or the other for less than a day.**

**Once the destination mountain was spotted on the horizon, course corrections could easily be made.**

# Navigation: Thor the Wind Raiser etc.



**The Eyrarland Statue** “is a bronze statue of a seated figure (6.7 cm) from about AD 1000 that was recovered at the Eyrarland farm in the area of Akureyri, Iceland” circa 1816. It is thought to represent the god Thor and may have been a gaming piece.

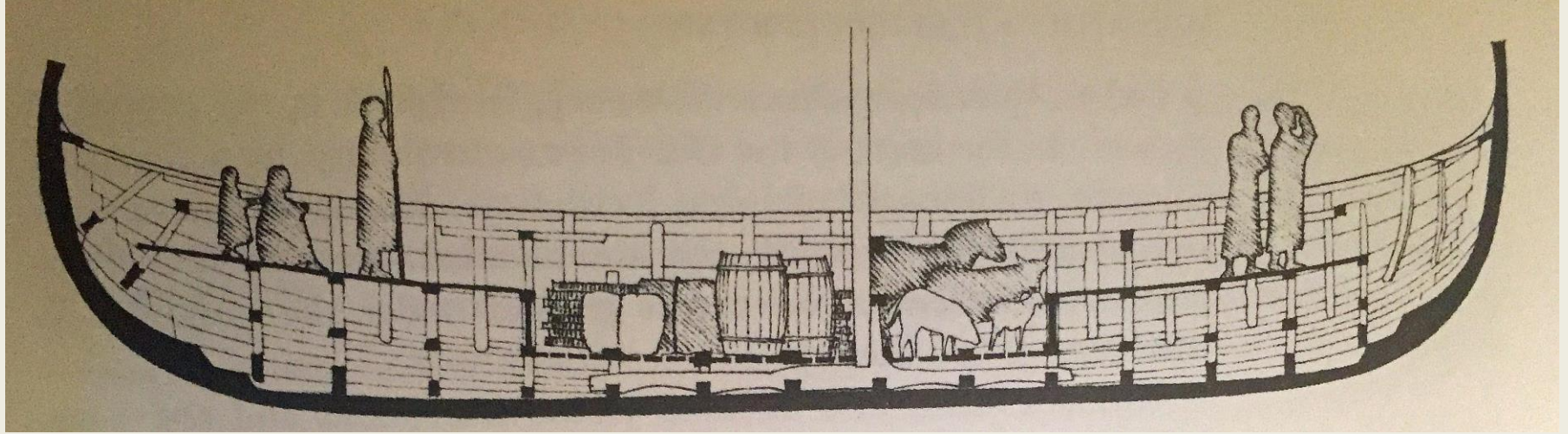
However, Richard Perkins in his book *Thor the Wind-Raiser and the Eyrarland Image* (2001) **makes a convincing case that it was a wind amulet.**

## **Landnámabók, Part 2 Chapter XII**

**Helgi the Lean** was one of the four hundred settlers of Iceland named in *The Book of Settlements*.

**His faith was said “to be very much mixed: he believed In Christ but invoked Thor when it came to voyages and difficult times** (Hermann Palsson’s translation 1972, p. 97).

## 5) Packing for the voyage







**N.B.: glass packed in a barrel, bird cage, soapstone bowl?**



**N.B.: tent, polar bear skin,**



# Hnefatabl: The King's Table



By Andreas Zautner - de.wikipedia.org: 19:39, 20. Jan 2004 . . Rumpnisse (Diskussion) . . 532 x 399 (45060 Byte)  
(Königszabel)http://www.leikmot.net/deutsch/dHnefatafl.html, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=626940>



## 6) Tents and Turf Houses





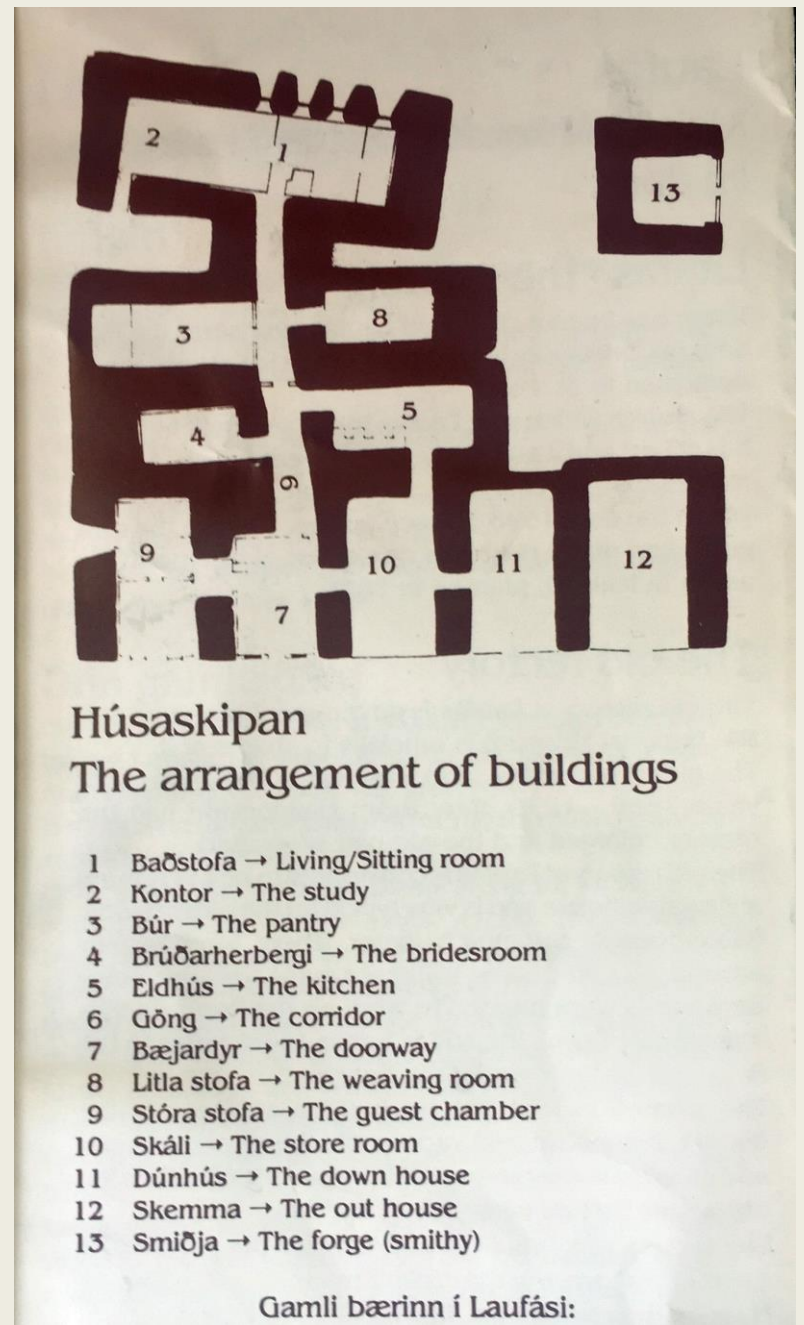
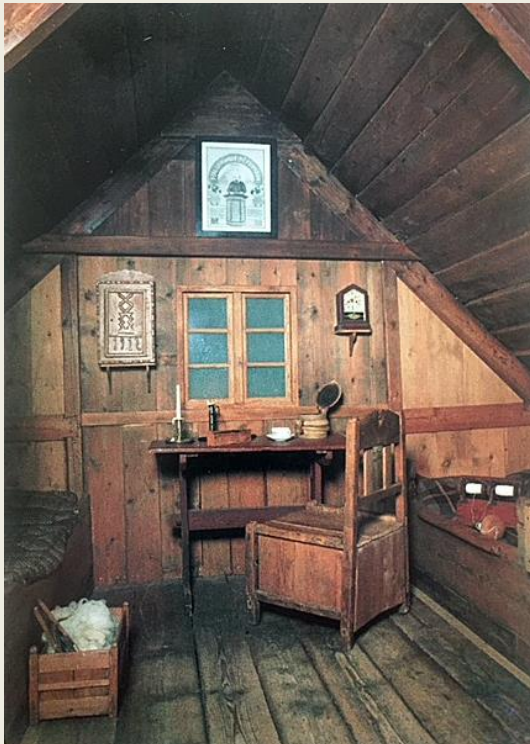
















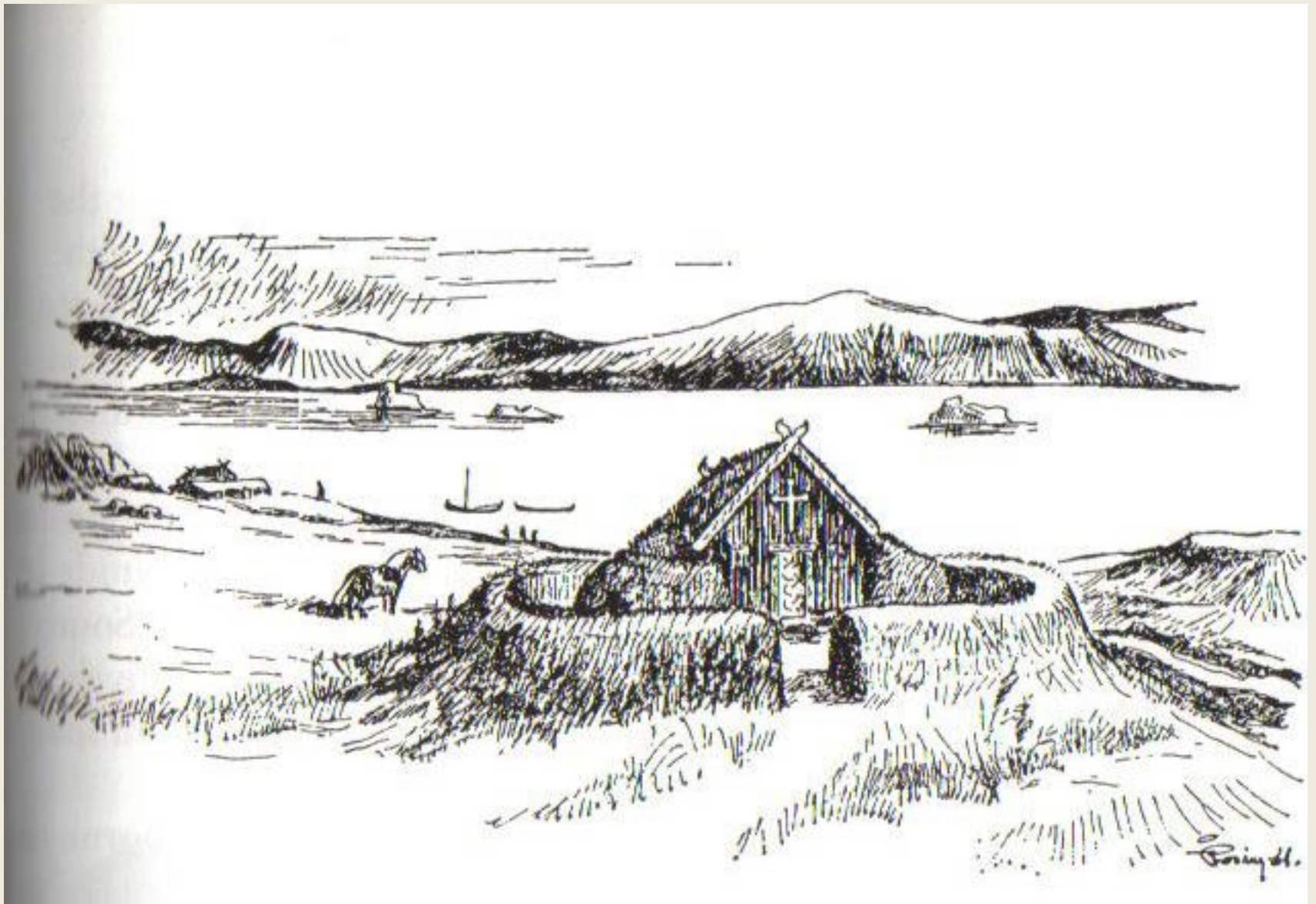
ΣΑΥΤΑΚ  
Σταυτάκι, ορεινό χωριό της Πίνης  
στη βορειοανατολική οροσειρά  
της Πίνης, στην περιοχή της  
Μεσοποταμίας.









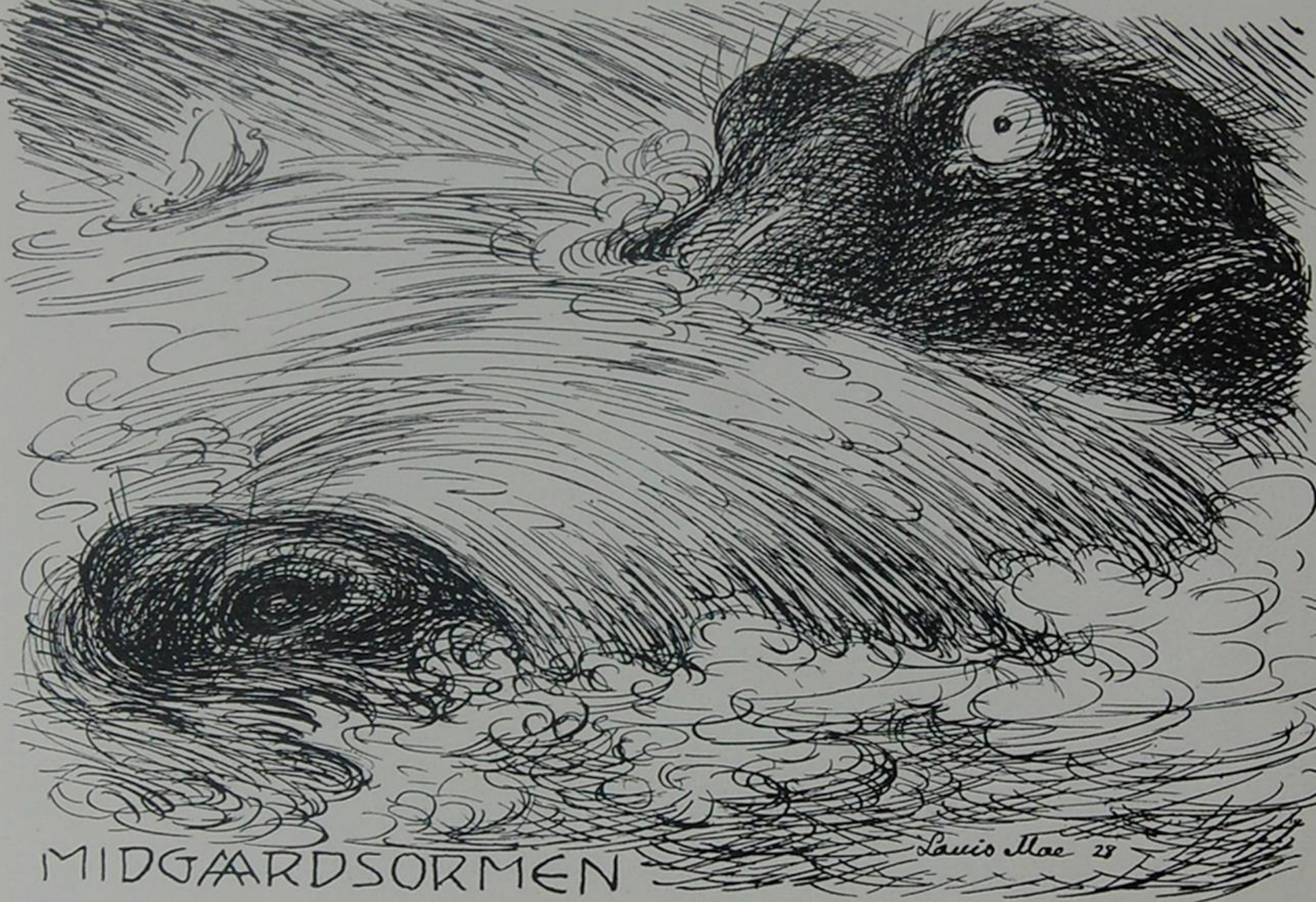








<https://myndir.uvic.ca/SKng-1899-Oslo-163-01.html>



Louis Moe, *Ragnarok: En Billeddigtning*, 1929 [45].

