

ELDAR HEIDE

# The early Viking ship types

BERGEN 2014

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SÆRTRYKK FRA  
SJØFARTSHISTORISK ÅRBOK 2012

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## 1. Introduction

The Viking ship, a world-famous icon, is known to us from ship finds, iconography, and written accounts, especially Old Norse sagas. Most of the research, however, has focused on the material remains. There is reason to believe that a more extensive utilization of the textual evidence can substantially increase our understanding. For example, we need the texts if we want to know not only what the ships were like, but also what people called them. In this article the author attempts to sift out the early Viking Age terms for ship types from Old Norse (ON) written sources and link them to actual ships and ship depictions from that period. The author argues that *knørr*, *beit*, *skeið*, *kjóll*, *askr*, and *elliði* were the main ship types of the early Viking Age in Scandinavia, at least in the west, and that *knerrir* referred during this period to warships like Oseberg and only later to cargo ships like Skuldelev 1. 'A ship with a backwards curved stem' seems to have been the original meaning of *knørr*. *Kjólar* were heavy, all-round ships like Gokstad, and *beit* were very early ships with angular stems known from depictions. *Skeiðar* were low, narrow ships like Ladby. *Askar* were also very early, small, light ships with stitched planking, whereas *elliðar* were combined inland / sea vessels, originally Eastern European.

Most introductions to Old Scandinavian ship types, such as *knørr*, *snekkja*, or *karfi* etc., are problematic and the majority of the above-mentioned terms are prob-

The Oseberg ship at the Viking Ship Museum in Oslo. (Photo: BSJ)

*Osebergskipet på Vikingskipshuset i Oslo. (Foto: BSJ)*

ably unfamiliar even to most Viking ship enthusiasts. In fact, much of the literature on Old Scandinavian ships still understands High Medieval terms as referring to (early) Viking Age ships, despite the fact that maritime technology underwent a radical change in the intervening period, developing from fleets of many swift, small craft suitable for beach landings into fewer, much larger 'floating castles' for sea battles.

The shortcomings of existing literature, however, do not necessarily reflect poor scholarship, but a lack of in-depth research. Interest in Viking ships has been considerable from the nineteenth century onwards and, since the 1960s, groups of scholars have conducted full-time archaeological and ethnographical research into Viking ships; but thus far, there still has not been any dedicated, systematic attempt to cross-reference the ship types that we know from Scandinavian medieval texts (runic inscriptions and manuscripts) with the finds and depictions of ships that date to this period.<sup>1</sup> I would argue there are several reasons why this has not been done:

- i. The information in our written sources is scarce and very scarce in the earliest periods. The texts frequently touch upon maritime aspects, but they hardly ever mention anything resembling definitions. We always have to infer indirectly from information supplied for other reasons, even in material relating to the High Middle Ages.
- ii. Our richest sources – the prose narratives of the High Middle Ages – present ships and shipping from the entire Old Norse period as more or less the same, with terms from across the period frequently mixed together. But the period lasted half a millennium and, during this time, Scandinavian maritime technology underwent

<sup>1</sup> I am now attempting to fill this gap in the scholarship through a series of articles.

an enormous development. Accordingly, the texts give us a deceptive image of the early ships, which must have been very different from those of the High Middle Ages, which the authors knew.

- iii. Even if this impression may in principle be corrected by the poetry that probably originated in the Viking Age and was transmitted orally until it was recorded in the High Middle Ages, the information provided by poetic sources is very limited.
- iv. Both the maritime technology and its terminology were international in nature, with borrowing back and forth, in and out of languages, and this complicates reasoning, especially with regards to etymologies.
- v. Some of the relevant terms were in use for such long periods of time that their referents changed considerably, causing confusion.
- vi. Both finds and depictions of ships from the Middle Ages are hard to interpret. The depictions are conventionalised or coarse, while the ships are only partly preserved, which means that defining details may be beyond our reach.
- vii. The finds of Viking ships are so few that we lack archaeological information about even major ship types.
- viii. In order to combine the written material, linguistic and etymological reasoning with the archaeological, iconographic and ethnographic material, it is necessary to take an interdisciplinary approach and so combine a level of practical and scholarly knowledge that is very hard for any person to attain.

As is customary, I will use the term 'warship' even when 'all-round ship' would often be more precise. Before the development of specialised cargo ships (probably during

the course of the tenth century), cargo was transported on ships that were also used for warfare and which we therefore tend to call ‘warships’. I exclude small boats from the discussion because the topic of ships and large vessels is more than difficult enough on its own, and because it seems possible to separate boats from ships in the material. Two terms are excluded because they refer to small vessels, *eikja* and *noðkvi* (§ 3 here), which designate boats for only one or two persons. Even the Viking ‘ships’ were often quite small by modern standards.

## 2. Identification of the early Viking Age terms

The key problem is described in point ii. in the above list. If we fail to decode the mixing together of information from diverse periods within the five centuries in question, we will never be able to correlate the ship-type terms with actual ship types revealed through material finds and depictions. The different periods used different types of ships referred to by terms that in most cases underwent significant changes. Hjalmar Falk (1912) was unaware of this problem and was consequently unable to say much about the developments across the Old Norse period (late eight to the fourteenth century) or about differences between various parts of the Old Norse period. Rikke Malmros (1985, reprinted in 2010) pointed out that the Viking Age skaldic poetry gives an impression of ship types different to the one given by the High Medieval prose in which the poetry has come down to us, and Judith Jesch (2001b) has taken this approach a long way forward by comprehensively examining all the late Viking Age skaldic poetry and runic inscriptions. Narve Bjørge (1965) has examined the material at the opposite end of the time-scale, namely the contemporary (High Medieval) kings’ sagas, and presented a specific picture from that period. Nonetheless, much remains to be done in terms of categorising the Old Norse ship terms by



period. For example, Detlev Ellmers, Kim Hjardar and Vegard Vike are still mixing terms and information from across the Old Norse period.<sup>2</sup>

In this article, I attempt to look at terms from the early Viking Age – here defined as the period from the late eighth century to the mid-tenth century. The contemporary source material from Scandinavia is limited to a few brief runic inscriptions. Still, there is material that we can use. I will base my arguments on the following types of primary sources:

- a. Terms mentioned in runic inscriptions from the early Viking Age.
- b. Terms found as loanwords or cognates in Northern European countries that have written traditions earlier than Scandinavia and that were recorded during or before the early Viking Age.
- c. Bynames of people believed to have lived in the early Viking Age.
- d. Terms occurring in skaldic poems that date from the early Viking Age.
- e. Terms occurring in Eddic poetry.
- f. Terms that occur only in Old Norse poetry and are not found in prose.

This combination of source types, and source type e. and f., are my ideas. The material compiled in order to investigate points a., d., e., and f. can be found in the appendix (§10), together with information on how it was selected.

Contemporary Viking Age information written down in other Northern European countries (b.) probably has quite a significant information value – especially when the ship type terms are borrowed from Scandinavian and/or refer exclusively to Scandinavian ships, but in other cases, too, because it seems that the maritime technology was international in nature and

<sup>2</sup> Ellmers 2004: 19–20; Hjardar and Vike 2011: 136–52.

spread rapidly between countries, in the Viking Age as in later periods. The bynames (c.) are handed down to us in manuscripts several hundred years younger than our period of study. But the bynames in question were borne by some of the first settlers in Iceland or their children, which means that they form part of the essential memory of the founding of the Icelandic nation, and therefore they can be taken as quite reliable.

Source type d. is dependent on Finnur Jónsson's dating based upon the High Medieval tradition, which is obviously problematic. However, there is broad agreement, even among strictly source-critical scholars such as Claus Krag and Annette Lassen, that most of the allegedly early skaldic poetry is authentic, and there is now a trend to verify the outlines of Finnur's dating.<sup>3</sup> For my purposes, it is advantageous that Finnur rejected many poems – especially from the sagas of Icelanders and the legendary sagas – as 'fake' because this reduces the risk of mistaking late terms as early ones. As source material, skaldic poetry also creates problems due to its *heiti* system of 'synonyms', which allows any term belonging to a semantic category to be replaced by another. Because of this, it is hard to know whether a skald really meant a *knǫrr* or a *skeið*, for instance, or whether these terms just represent the category 'ship'. Still, if a term was used, it was apparently known and in the cases where a ship-type term occurs with a characterising adjective we can assume that the ship type really was intended, because if not then the characterisation would miss its mark. Source type e. is very uncertain as Eddic poems are even harder to date than skaldic verse. Still, most of these poems are widely understood as pre-Christian, i.e. from before or around 1000 AD, although this is impossible to know and the forms handed down to us from High Medieval manuscripts may deviate from the pre-Christian

<sup>3</sup> E.g. Bergsveinn Birgisson 2008 and Myrvoll 2009. For Krag and Lassen, see e.g. Krag 2000: 45 and Lassen 2011: 178.

forms.<sup>4</sup> I do not emphasise evidence from Eddic poetry except in the discussion of the term *kjóll* (§ 6).

Source type f. is based upon the fact that poetic words are often survivors from earlier everyday language (e.g. the Modern Icelandic poetic terms *ver* m. and *höldur* m., ‘a man’, and *mögur* m ‘son’, all of which were common prose words in Old Norse). Therefore, given the size of the Old Norse prose corpus and its extensive references to ships and sailing, ship-type terms found in poetry, but not in prose, probably belong to the earlier stages of the Old Norse language. This assumption seems to be confirmed by the cases of *askr*, *elliði*, and *kjóll*. The former two ship types are mentioned many times in poetry, but never in prose – with the exception of a few occurrences in the late legendary *fornaldarsögur*, where the narratives take place before the settlement of Iceland (see § 7 and 8) and where the use of these terms can most easily be understood as deliberate archaisms. It thus seems that writers in the High Middle Ages understood these ship types as belonging to ancient times and, in both cases, the antiquity of the terms in question is supported by independent material (§ 7, 8). A similar circumstance is found in connection with *kjóll*, see § 6. Etymology can also sometimes demonstrate that a certain term existed at some point in the past; but this does not necessarily mean that the term’s referent did, because new referents may be added (see § 4.2, 5, 7). For this reason, I have not included etymology on the list above, although it is useful for some of my arguments.

Most of the information that I use to identify the earliest terms for Viking ship types is problematic and some scholars will perhaps argue that only source type a. is acceptable. But such a limitation would yield a less reliable result for the present study since we would then certainly lack major terms. The matching of ship terms and ship types, and the considerations that can help

<sup>4</sup> See e.g. Meulengracht Sørensen 1991; Fidjestøl and Haugen 1999; Sävborg 2004.

us in that regard, require that all terms for major ship types are included in our list of candidate terms. We should therefore be content with *probable* information and collect as much of this as possible in order to see how it *combines* before any potentially valuable primary material is discarded. Many less reliable pieces of information can, when taken together, form a structure that becomes believable if several such pieces independently point in the same direction.<sup>5</sup> In the discussions below, there are many examples both of this and of the rejection of isolated pieces of information.

### 3. The ship-type terms of the early Viking Age

The terms gathered with the help of the above criteria are listed in the appendix in § 10, to which the following discussion will refer, except with regards to etymology, bynames, and the loanwords, which are added in the discussion. The following discussion will refer to this material. In alphabetical order, the terms are *askr* m., *barði* m., *bátr* m., *beit* f., *dreki* m., *eik* f., *eikja* f., *elliði* m., *ferja* f., *flaust* n., *fley* n., *herskip* n., *karfi* m., *kjóll* m., *knorr* m., *langskip* n., *lung* n., *naðr* m., *nór* m., *nokkvi* m., *regg* n., *skeið* f., *skip* n., and *snekkja* f. Certainly not all of these actually belong to the early Viking Age. Firstly, the attestation of *karfi* in the *lausavísa* attributed to Egill Skallagrímsson in 934 is isolated; the next is found in Sigvatr's *Austrfararvísur* from 1019,<sup>6</sup> and only in High Medieval prose does *karfi* become common. As Foote points out, the circumstances of the *lausavísa* attributed to Egill are not convincing.<sup>7</sup> Finnur Jónsson's earliest example of *snekkja* (Guttormr sindri, tenth century) may be false, too, as one manuscript variant reads *skeið*. Russell Poole prints *snekkjum*, the reading of his

<sup>5</sup> Cf. Heide 2009, Heide 2012.

<sup>6</sup> Finnur Jónsson 1912–15 BI: 220.

<sup>7</sup> Foote 1978: 59.

main manuscript K<sup>x</sup> and the other *Heimskringla* manuscripts, noting that most editors have favoured this reading because it yields a regular internal rhyme (*aðal-hending*) with the second syllable of *Eirekr* (bǫðsœkir helt bríkar, / brœðr, sínum, ok flœðu / undan, allar kindir / Eireks, á haf snekkjum).<sup>8</sup> At the same time he notes that *skeiðum* is also possible since the rhyme *r : ð* (*Eireks* – *skeiðum*) is permissible and is paralleled in st. 5/5 of the same poem.<sup>9</sup> One could argue that *skeið* should be preferred because the unusual rhyme (*r : ð*) makes it the *lectio difficilior*.<sup>10</sup> This would fit better with the fact that there seems to be no other evidence of *snekkja* at this early stage. The first quite certain Old Norse example is from 1014 and it is recorded a number of times in contexts from the mid-eleventh century.<sup>11</sup> In Germany and England, the related *snacgun* and *snacc* are not attested until around 1020 and the mid-eleventh century respectively.<sup>12</sup> There are several indications that the ship type *snekkja* is younger than *skeið* and that it largely replaced it (as I will argue elsewhere).

With regard to the rest of the terms, I see no reason why they cannot all be early Viking Age, although I will only argue that some of them actually are. Many will be excluded because of insufficient evidence. In fact, the evidence only allows us to connect depictions and ship finds with the major terms for specific types of ships. Generic terms are *skip* ‘a ship’, *bátr* ‘a boat’, *far*, literally ‘a means of transport’, and probably *flaust* and *fley*, both of which literally mean ‘something floating’<sup>13</sup>. *Herskip*

<sup>8</sup> Whaley 2012: 166–168.

<sup>9</sup> Kuhn 1983: 79. Thanks to Diana Whaley and Russell Poole for help with this stanza.

<sup>10</sup> A rule in textual criticism is that where different manuscripts conflict on a particular reading, the more unusual one is more likely the original, because scribes would tend to replace odd words and uncommon sayings with more familiar and less controversial ones, rather than vice versa.

<sup>11</sup> Finnur Jónsson 1912–15 BI: 203; Jesch 2001b: 126.

<sup>12</sup> *Summarium Heinrici* 1974: 361; Thier 2002: 34, 147. It is possible that *snac* is also mentioned in the late tenth-century Exeter Book, in Riddle 19 (Williamson in Bitterli 2009: 89).

<sup>13</sup> Falk 1912: 86; de Vries 1962: 129, 131; Ásgeir Blöndal Magnússon 1989: 188, 191.



‘warship’ and *langskip* ‘longship’ also covered several types of warships (for example, *landvarnarskip* / *leiðan-grsskip*, attested later), and there is no evidence linking these terms to the early Viking Age. Much the same may be said of *naðr* ‘a snake, dragon’, as well as the similar *dreki* and *ormr*.<sup>14</sup> The High Medieval sources indicate that these three words were additional terms – if a *skeið*, for example, was adorned with a dragon head, it was a ‘dragon’, but it still also remained a *skeið*.<sup>15</sup> We have many depictions of ships with dragon heads from the early Viking Age, but our written material is too sparse to tell us whether the terms *naðr*, *dreki* and *ormr* can be dated so early.

Some of the terms occur only once or twice in the appendix material and thus seem not to have referred to major ship types: *barði*, *eik*, *regg*, *lung*, *nór*, *ferja*, and *elliði*. For some of these, there are additional reasons to omit them from further discussion. *Eik*, literally meaning ‘oak’ and never referring to a ship in prose, is not necessarily a term for a ship type at all; it may be a metonymical use where the material the ship is made of refers to the ship. *Lung* is not securely attested until 1001 (Hallfreðr) and is used only a handful of times after that. It is never used in prose and this indicates that it is early, but it seems not to have been among the major types. It may be an early synonym for *langskip* since it is believed to be an early loanword from Old Irish *long* ‘a ship’,

<sup>14</sup> Today, we would distinguish fairly sharply between the creatures referred to as ‘dragon’, ‘snake’ and ‘worm’ and would not expect them to be used synonymously. But it seems that our distinction between snake and dragon was not made in Old Norse. *Óláfs saga Tryggvasonar* in *Heimskringla* 1941 (I: 327) tells of the ship that King Óláfr allegedly confiscated from the chieftain Rauðr hinn rammi just prior to 1000 AD: *Þá tók Óláfr konungr dreka, er Rauðr hafði átt .... Þat skip kallaði konungr Ormínn, því at þá, er segl var á lopti, skyldi þat vera fyrir vængi drekans*: ‘It was a dragon, and the king named it the Snake because when its sail was aloft, it resembled the wing (sic) of the dragon’. *Ormr* and *naðr* never occur in prose descriptions of ships with the exception of *ormr* in the ship names *Ormrinn* (*skammi*) and *Ormrinn langi*; these words seem to be poetic synonyms for *dreki*.

<sup>15</sup> This is most clearly demonstrated in *Hákonar saga Ívarssonar* (1952: 23): *Lét konungr þá setja upp þöfuð þau hin gyltu; mátti þá kalla skipit hvárt er vildi skeið eða dreka*: ‘The king then had the golden dragon heads put up; then one could call it *skeið* or *dreki* according to one’s wish’.

allegedly derived from the Latin *navis longa* ‘longship’, but this is uncertain.<sup>16</sup> *Regg* is also attested exclusively in poetry, but only once (early eleventh century) in addition to in *Þulur*.<sup>17</sup> *Nór* is reflected in the name of the god Njörðr’s residence, *Nóatún* – literally ‘ship farmyard’ – which indicates that it is old, and this can also be seen from its etymological relation to Latin *navis* ‘a ship / boat (in general)’.<sup>18</sup> But it is found only twice in the poetic corpus: in the kenning *brandnór* ‘hearth ship’, ‘house’ §10.1; and in the *Þulur*.<sup>19</sup> In prose, *nór* is only attested twice, both times in the meaning ‘a trough’.<sup>20</sup> With regards to *ferja* ‘a ferry’, etymological cognates in other Germanic languages indicate that the word is ancient, but it is difficult to attest in Scandinavia in the early Viking Age as it occurs only twice in Old Norse poetry.<sup>21</sup> This may be because *ferja* was a primitive, low status boat type and the term was therefore unsuitable in skaldic verse, which was highly sophisticated in style. In prose from the High Middle Ages, *ferja* is very common. – *Eikja* and *nokkvi* appear to be boats; there seems to be no Old Scandinavian attestations where they necessarily mean ‘ship’ and, in later times, they refer to small (primitive) boats.<sup>22</sup> Both *eikja* and *nokkvi* seem to be really small, only fitted with one or two pairs of oars.

<sup>16</sup> Falk 1912: 89, 101.

<sup>17</sup> (*Nafna*)*þulur* is a subsection of Snorri Sturluson’s *Edda*, the last part of *Skáldskaparmál*. It is a listing in verse of terms that may be used in poetry for various items, such as gods, giants, people, animals, and weapons. The *þulur* are thought to be a later addition to Snorri’s original composition from the 1220s and are therefore sometimes omitted from editions and translations of his *Edda*.

<sup>18</sup> Simek 2006: 304; Falk 1912: 85.

<sup>19</sup> Finnur Jónsson 1913–16: 59, 668.

<sup>20</sup> <http://dataonp.hum.ku.dk/>. This is the only meaning it has in Modern Icelandic and the normal meaning in Modern Norwegian, but in eastern Norwegian, the meaning ‘a primitive rowing boat’ existed until the twentieth century (Sigfús Blöndal 1920: 581; Aasen 1873: 538, 542; Refsum 1933).

<sup>21</sup> Falk and Torp 1903–06: 207; Finnur Jónsson 1913–16: 129.

<sup>22</sup> Fritzner 1883–96 II: 858; Aasen 1873: 126; *nokkvi*: Sigfús Blöndal 1920: 585; *Nachen*: Grimm and Grimm 1854–1961 13: 44. For *nokkvi*, there is one exception in *Edda Snorra Sturlusonar* 1931: 65 and one in Þorbjörn hornklofi’s *Glymdrápa*, see §10.1 below. The former may be ironic and the latter is found in a corrupt half stanza; Finnur Jónsson 1913–16: 611

*Barði* is only mentioned twice in the appendix; and the latest attestation – by Einarr skálaglamm – seems to be copied from the earliest – by Bragi gamli – which may imply that only Bragi's use of the term has information value for actual ships. On the other hand, Einarr's allusion to Bragi may be taken as a confirmation; in the late tenth century, Einarr apparently understood Bragi's poem as evidence that there was an old ship type *barði* (which is significant as the kenning *borðróinn barði* is somewhat irregular, because if *barði* alone means 'a ship', the determinant *borðróinn* would not be necessary to give the meaning 'a ship'). Finnur Jónsson lists two more attestations of (\*)*barði*, but points out that they may instead be the genitive plural of *barð* n.,<sup>23</sup> 'the transition piece between the stem and the keel', in which case the term is a *pars pro toto* for 'a ship (in general)'. The rest of the certain attestations of *barði* as a ship type seem to date from the late tenth and early eleventh centuries. In Old English, probably at this time, there are a handful of attestations of *barð* and *barða* as a term for a ship type, borrowed from Old Norse.<sup>24</sup> In Old Norse sources, the attestations of *barði* at this time all refer to the famous ship (*Jarn*)*barði*(nn), owned by Earl Hákon and his son Eiríkr. Both Tindr Hallkellsson around 987 and Halldórr Ókristni around 1010 refer to this ship in poetry and it is mentioned several times in later prose.<sup>25</sup> Even Einarr skálaglamm's *borðróinn barði* refers indirectly to *Jarnbarðinn* (because the earl does not accept him, he threatens to enter the *barði* of the earl's rival.) Scholars understand Bragi's *barði* and the earls' (*Jarn*)*barði*(nn) as examples of the same ship type, but this is problematic. In both cases, *barði* apparently derives from the common noun *barð*, but hardly in the same way. There are 150 years between them and, according to

<sup>23</sup> Finnur Jónsson 1913–16: 35.

<sup>24</sup> Pers. comm. from Katrin Thier 21.6.2011; Thier 2002: 51.

<sup>25</sup> Finnur Jónsson 1912–15 BI: 137, 193; Falk 1912: 37. *Hömlubarði* in *Konungs skuggsjá* in all probability does not refer to a ship but to 'rocky ground', see Schnall 2004.

High Medieval tradition, the ship (*Jarn*)*barði*(*nn*) was so named because it was reinforced with bands of iron across the *bprð* (pl.) and other parts of the bows. This clearly relates to technological innovations of the late tenth century (which I will discuss in a forthcoming article), so this can hardly be the background of Bragi's early or mid-ninth century ship. Bragi's use of *barði* is therefore left quite isolated, a fact indicating that it was not a major ship type. But see § 4.2 even so.

Assuming that the reasoning here is correct, we are left with *askr*, *beit*, *elliði*, *kjóll*, *knorr*, and *skeið* (which are therefore given in bold type in § 10). *Kjóll*, *knorr*, and *skeið* seem to have been major ship types because they are mentioned many times in the appendix material. *Ask*, *beit*, and *elliði* are not, but regarding these, there is additional material indicating that they are significant and early ship types (see below). Accordingly, these are the terms that we should attempt to connect with the finds and depictions of ships from the early Viking Age – and this will be the main focus in the rest of the article. The terms will be discussed in the order that I expect will make the reasoning easiest to follow.

#### 4. Ship characteristics, terms, etymology, and stem profiles

When attempting to identify terms for ship types with actual ships and depictions, it is important to try to uncover the original meaning of the terms – their etymology. However, these etymologies need to connect to traits that seem to have characterised the ship types in question (during the Viking Age or at an earlier stage). Many of the etymologies suggested are either so general that they would fit any ship, or refer to characteristics that the ship types in question can hardly have had, see for example *askr*, *skeið*, and *kjóll* in § 5, 6 and 7.

Terms for ship types may refer to all kinds of characteristics, as can be illustrated through some transpar-

ent terms for boat types known from eighteenth to nineteenth-century Scandinavia, particularly the west coast of Norway:

- Characteristics of hull: *snidbetning* 'boat with aslant planks in the bottom', *veng(je)båt* 'boat with a *veng* (a particular kind of cabin)', *gavlboat* 'boat with a *gavl* (blunt rear)'.<sup>26</sup>
- Building materials: *e(i)ka* '(boat) of oak', *äsping* '(boat) of aspen'.<sup>27</sup>
- Boat usage: *skötbåt* 'boat for net (*sköt*) fishing', *straumbåt* 'boat for the Saltstraumen tidal current', *lofotbåt* 'boat used by the Lofoten fisheries'.<sup>28</sup>
- Cargo capacity: *lestabåt* 'a boat that can hold twelve barrels', *bunkerømming* 'a boat with a *bunkerom*, or extra space for cargo'.<sup>29</sup>
- Size: *storbåt* 'big boat', *sjun* 'the smallest type of Nordland boat', literally: 'something barely visible' (= Old Norse *sjón* f. 'sight, vision').<sup>30</sup>
- Vessel size expressed by the number of strakes (Old Norse *borð* n.): *tribor(d)ing*, *firbor(d)ing*, *fembor(d)ing*.<sup>31</sup>
- Vessel size expressed by the number of oars: (Old Norse) *feræringr*, *sexæringr* etc. (> Modern Norwegian *færing*, *seks[æ]ring*).
- Area of origin: *nordlandsbåt*, *åfjordsbåt*, *oselvar*, *strandebarmar*, *tanabask*, etc.<sup>32</sup>
- Stem profile. See below.

<sup>26</sup> Færøvik 1987: 124, 126 ff., 16–17.

<sup>27</sup> Falk 1912: 92; Korhonen 1982.

<sup>28</sup> Ahlbäck and Bonns 1986; Klepp 1983: 31;

<sup>29</sup> Godal and Eldjarn 1990: 148; Klepp 1983: 26, 30, 31.

<sup>30</sup> Eldjarn 1990, Fritzner 1883–96 III: 269; Aasen 1873: 256.

<sup>31</sup> Aasen 1873: 151, 157, 833. Hustad and Klepp 1982 (cf. Klepp 1983: 35) argue that *fembor(d)ing* derives from a hypothetical Old Norse *\*fimbryðingr* 'a swift, small cargo ship', but this is improbable when we take into account the parallel terms *tribor(d)ing* and *firbor(d)ing* and the fact that *fembor(d)ingar* with five strakes are known from eighteenth and nineteenth-century drawings and photographs (Eldjarn 1990: 248–49).

<sup>32</sup> Færøvik 1987, Klepp 1983.



It is important to realise that any type of craft may be referred to using alternative terms. For example, a *straumbåt* (use) is also a *nordlandsbåt* (area of origin) and (usually) a *færing* (number of oars). A *tribør(d)ing* (number of strakes) may be an *oselvar* or a *strandebar-mar* (area of origin) and at the same time for example a *færing* or a *seksæring* (number of oars). A *snidbetning* (hull characteristic) is often synonymous with *sunn-mørsbåt* (area of origin) and at the same time for example a *færing* or an *åttring* (number of oars). Such variation is not specific to boat terms: in much the same way, *back-country skis* (Norwegian *fjellski*) are also *wooden skis* (*treski*) or *fibreglass skis* (*glasfiberski*), while an *SUV* can also be an *off-roader* and either a *diesel* or a *petrol car*. It is also important to bear in mind that designs change over time, in many cases substantially, so a term's connection to the original characteristic may be lost. For example, a *fembør(d)ing* has had more than five strakes for a long time, while a *tendring*, from Old Norse *teinæringr* 'a boat with 10 oars' (probably borrowed from Low German), is in modern times a sailing craft with hardly any oar propulsion at all. Such changes are a major problem to the study of Old Norse and other early terms for ship types.

Ship graffiti from the Viking Age give important information of ship characteristics from the period; more important, I believe, than has been realised. They are far from unproblematic because they may be conventionalised or inaccurate. However, the alternative is ship finds, which with few exceptions lack the stems and profiles that seem to have been important in the naming of the different ship types (see below). I will therefore start with the graffiti and attempt to identify some major ship types from them. These graffiti show a strong interest in ships' stems and so do other graffiti from the Middle Ages.<sup>33</sup> A similarly keen interest in stems can also be identified in Old English poetry, especially in

<sup>33</sup> E.g. Blindheim 1985.



Figure 1

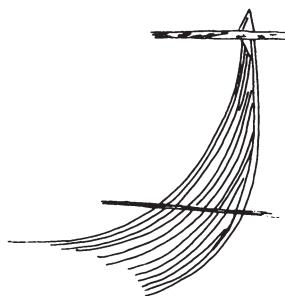


Figure 2

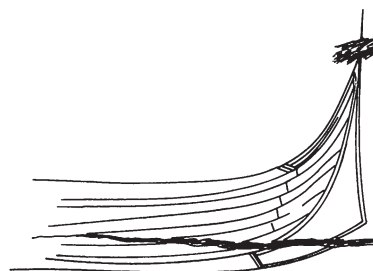


Figure 3

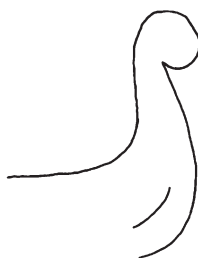


Figure 4

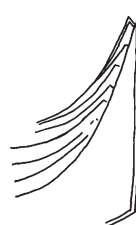


Figure 5



Figure 6

Figures 1–6: Graffiti from the Oseberg find, between 820 and 834 AD (some have been rotated to make the gunwale or keel horizontal). (Christensen 1992: 140)

*Figur 1–6: Graffiti frå Oseberg-funnet, mellom 820 og 834. (Christensen 1992: 140)*

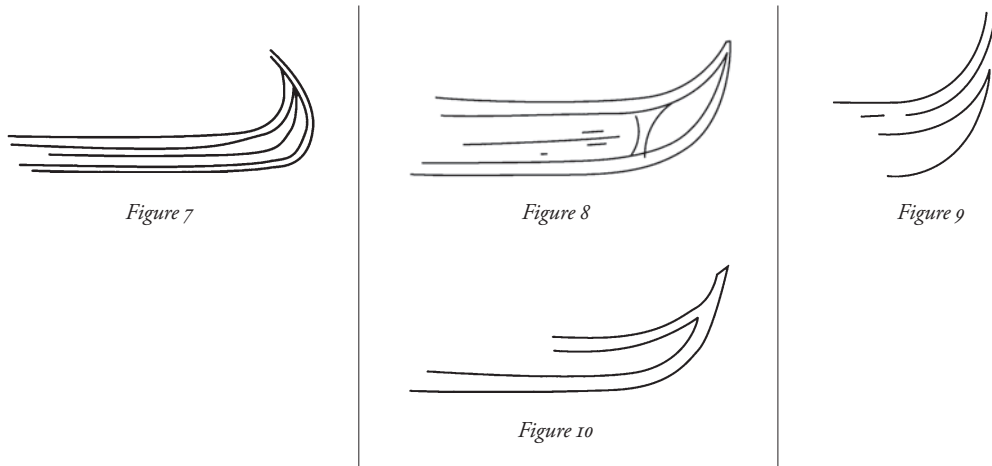
the late eighth-century poem *Andreas*.<sup>34</sup> I believe that the reason for this interest is that the profile of the stem and bow characterised ship types to a much higher degree in the Viking Age than in later periods. From the late Middle Ages onwards, many ship types were distinguished by the number and the type of their masts and sails, e.g. barque, schooner, and brig. Before this there was only one type of mast and sail and only one mast and sail on each ship. This implies that the profile of the stem was one of the few traits that made it possible to identify ships from a distance. As should be expected from this, we can see in the sources that stem types and stem profiles really did serve to categorise ships. A good example is a Norwegian diploma from 1365. It records that the farmers of Sande in Eastern Norway are going to build a new levy (*leiðangr*) ship and that the king gives them the choice of whether to make it *buttu stemfnt* or *holka stemfnt* ‘with a stem like a *búza* (²/bu:tsa/) or with a stem like a *holkr*’.<sup>35</sup> This implies that people at the time conceived of two major categories of ships distinguished by their stems – although not only by their stem *profiles*, there were also fundamental differences in construction.<sup>36</sup> Stem profiles are also reflected in several of the Old Scandinavian terms for ship types. The clearest example is the High Medieval term *skúta* f., which refers to some kind of small all-round ship. The term is closely related to the verb *skúta* ‘to jut’ and to the masculine *skúti* ‘a jutting rock’, which seems to imply that a *skúta* had a jutting stem, like Skuldelev 3 – which seems reasonable because small ships more often than bigger ships had projecting stems.<sup>37</sup> The term *knorr* also seems to be a quite certain example of a term reflecting a stem profile (§ 4.1).

<sup>34</sup> Krapp 1932, e.g. line 274.

<sup>35</sup> *Diplomatarium Norvegicum* 1847–1995 II: 305; cf. *Norges gamle Love* 1846–95 V: 293; Falk 1912: 88; Hødnebo 1972: 66.

<sup>36</sup> See Greenhill 2000.

<sup>37</sup> see e.g. the Bayeux tapestry; Heide 2003: 58; Falk 1912: 95; and § 4.1 here.



Of the depictions shown above, we can distinguish between three main types based on the stems and bows of the ships:

- A. Ships with backward curved stems.
- B. Ships with curved stems that project; some with a horizontal top.
- C. The same as in B – and a triangle ‘filling’ the space below the curve of the stem, making the stem appear straight and vertical.

The same three profiles – and not others, it seems – can also be found in other depictions and ship finds from the Viking Age (the depictions on the Skomrak beater could be (small) boats rather than ships, but as there are other depictions as well this makes little difference).<sup>38</sup>

I will begin the discussion by arguing for a connection between stem-type A and the term *knørr*, and between stem-type C and the term *beit*. The remaining terms seem to derive from other traits of the ships than the stem profiles. With regards to stem-type B., there are no particular reasons to believe that a certain term

Figures 7–10. Details from the Skomrak beater in Figure 11 (Some have been rotated or flipped).

*Figur 7–10: Detaljar av vevsverdet frå Skomrak som er vist i figur 11.*

<sup>38</sup> Lindqvist 1941–42; Varenus 1992; Felbo 1999.

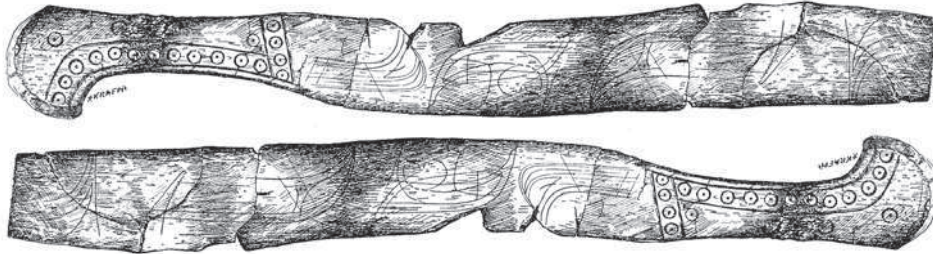


Figure 11: Whale-bone weaving beater from Skomrak, Vest-Agder, southern Norway, early Viking Age. (Gjes-sing 1925: 71)

Figur 11: Veisverd frå Skomrak i Vest-Agder, tidleg vikingtid. (Gjessing 1925: 71)

was derived from it, but it probably belonged to the traits that defined some of the types. This is because the major term *knørr*'s very probable connection with a backward-curved stem only makes sense as a contrast to other stem profiles and there seems to have been an awareness of this connection throughout the Middle Ages, even into modern times in local traditions.

#### 4.1 Knørr

Evidence of at least two kinds indicates that the term *knørr* m. (pl. *knerrir*) existed in the ninth century. Firstly, *knørr* is attested in Þorbjörn hornklofi's *Haraldskvæði* 7 (§10.1), which is widely believed to be genuine and composed shortly after the Battle of Hafrsfjord in the 870s, which the poem describes.<sup>39</sup> The occurrence is supported by alliteration – *knerrir kómu austan / kapps of lystir* – but not by internal rhyme. Secondly, *cneor* is attested (twice) in Old English soon after 937, in the *Anglo-Saxon Chronicle, Battle of Brunanburh*.<sup>40</sup> If the dating of these occurrences is trustworthy, the term *knørr* / *cneor* was established before these dates. In addition, a woman – Þorbjörg Gilsdóttir – whom the sources provide with the byname *knarrarbringa* 'knørr chest' was probably born in the 870s or 880s (her father was probably born before 850 AD; he was among Iceland's first settlers (see further below)).<sup>41</sup> Regrettably, there is reason to doubt the authenticity of Þorbjörg's

<sup>39</sup> Krag 2000: 45.

<sup>40</sup> *Two Saxon chronicles* 1892: 108–09; Livingston 2011: 40, 42, 44, 46.

<sup>41</sup> *Landnámabók* 1968: 160, 130, 161, 163, and other sources; see Jesch 2001b: 51.



byname *knarrarbringa* (see below), but the mentions of *knorr* / *cnear* in *Haraldskvæði* and *The Battle of Brunanburh* nonetheless give quite firm ground for an early dating of *knorr* / *cnear*.

However, in the case of *knorr*, it is not enough to document an early existence of the term, because it seems to have had two phases with distinctly different meanings. In the High Medieval prose, *knorr* is common in the meaning ‘(ocean-going) cargo ship’. But Malmros has pointed out that in the poetry composed prior to and around the year 1000, *knorr* in all clearly defined examples refers to ships used for warfare (cf. §10.1 here).<sup>42</sup> The warship meaning also seems to fit with the majority of the runic occurrences, of which six exist from eleventh-century Sweden, one possibly from the late tenth century.<sup>43</sup> In addition, the warship meaning is the only one in Old English where *cnear* is mentioned several times in the tenth century. The English meaning seems to reflect Scandinavian usage, because *cnear* refers to Scandinavian ships exclusively and was in all likelihood borrowed from Old Scandinavian (as can be seen from the form).<sup>44</sup>

Etymology may help us understand the term *knorr* and the development of the ship type it refers to. Several etymologies have been suggested. One cluster is based upon a root *knarr-* meaning something akin to ‘a knot in wood, a gnarl’, as in Middle English *knarre*. Falk argues that *knorr* ‘referred originally to a gnarled tree-root used as a prow’.<sup>45</sup> De Vries and Ásgeir Blöndal Magnússon both favour de Vries’ essential idea: The stems were made of knotty wood.<sup>46</sup> Sayers combines this etymological root with an Old English phrase *nægled cnear* ‘*knorr* with planks nailed together’ (attested soon after 937) and suggests that ‘knobbed, gnarled’ and the term

<sup>42</sup> Malmros 1985: 103.

<sup>43</sup> §10.2 here, Jesch 2001a: 128, Varenius 1992: 107–09, cf. 105.

<sup>44</sup> Bosworth and Toller 1898: 161; Thier 2002: 43.

<sup>45</sup> Shetelig and Falk 1937: 375.

<sup>46</sup> De Vries 1962: 323; Ásgeir Blöndal Magnússon 1989: 486.

*knørr* refer to 'the nail-studded outer hull' of this kind of ship, because he assumes that a *knørr* was a cargo ship which would have higher sides and so show more nails than other types of vessel.<sup>47</sup> Varenius suggests that *knørr* refers to the squeaking sound of the hull in the sea, apparently taking the Swedish verb *knarra* 'to squeak' as his point of departure.<sup>48</sup> None of these etymologies, however, are convincing.<sup>49</sup>

When searching for a more plausible etymology, we should have early Viking Age ships used for warfare rather than later cargo ships in mind and we should try to connect them with a root *knarr*- that is found in connection with ships. Such a root has been mentioned by two scholars, but for some reason little has been made of it. In 1912, Falk mentioned the Norwegian adjective *knarrstemnd*,<sup>50</sup> which literally means 'with a stem like a *knørr*', and refers to stems that are backward curved in the stem ('tilbagebøiet i Stavnen' – from Helgeland, Northern Norway). This shows what the shape of a *knørr*'s stem had been like, Falk said, but he ignored this observation in his etymology of *knørr*. However, Ahlbäck has pointed out (apparently unaware of Falk) that the shape of the stem must be the etymological meaning of the term.<sup>51</sup> Ahlbäck says this in a discussion of the traditional Ostrobothnian term and type *knarr* / *knärr*, but the Old Norse term is the same word.

There are several reasons to believe that *knørr* originally meant 'a ship with a backward-curved stem'.<sup>52</sup> Firstly, terms that seem to correspond formally to *knørr*,

<sup>47</sup> *The Battle of Brunanburh, Two Saxon chronicles* 1892: 108–09; Livingston 2011: 42, 46; Sayers 1996: 283–84.

<sup>48</sup> Varenius 1992: 109.

<sup>49</sup> For details, see Heide 2003: 60.

<sup>50</sup> Falk 1912: 108–09.

<sup>51</sup> Ahlbäck and Bonns 1986: 99.

<sup>52</sup> For details, see Heide 2003: 60. It is unclear how this 'backward-curved' meaning of *knørr* / *knarr*- relates to the other meanings. It is conceivable that the different roots *knarr*- are in fact one and the same; but a semantic connection is not immediately apparent. However, this question does not matter for the present study.

and that mean ‘with a steep or backwards-tilting neck or stem’ or similar, can be found throughout Scandinavia:

- Adjectives: *knerren*, *knerr* (Southern Norway), *knarr*, *knärr* (Sweden), *knarreistur* (Iceland) ‘holding one’s head high’, ‘stiff in the neck’; *knärrog*, *knärrnackog* (Swedish Ostrobothnia, Finland) ‘with a backwards tilting head’; *knerrhava* ‘on runners or skis with steep and high tips’; *kner-rut* (Dalarna, Sweden) ‘haughty, with a straight posture’.
- Verbs: *knärra* (*nacken*) (Dalarna, Sweden; Swedish Ostrobothnia, Finland) ‘turn up one’s nose, be proud or haughty’, *knerre* (Norway) ‘to straighten one’s neck, pull in one’s chin and then raise one’s head’ – and others.
- Nouns: *knärr* (m., Swedish Ostrobothnia, Finland) ‘stiffness in the neck that makes one carry one’s head so it is tilting backwards’; *knerre* (m., Norway) ‘person with a straight posture’; *knärr-kälke* (m., Swedish Ostrobothnia) ‘a sled with steep and high runner-tips’.

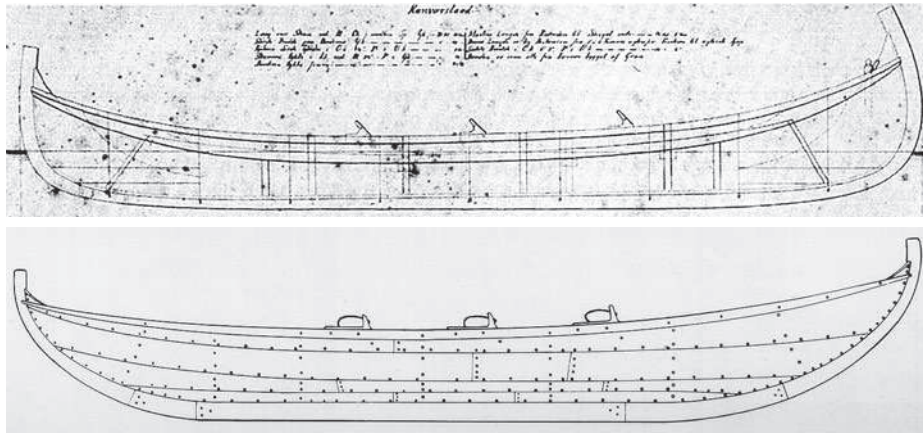
This set of terms also refers to boats. The Northern Norwegian adjective *knarrstemnd* has been mentioned above. In Swedish Ostrobothnia, a *knärrstam* m. is a steep stem on which the upper end sometimes tilts back slightly. If a boat is *knärrog* (adj.), it is blunt in the bow, with a steep stem. The fact that most of the mentioned words have the vowels *e*, *æ* (*ä*) and *a* rather than *ø* does not imply a problem. The paradigm of Old Norse *knǫrr* includes three different vowels: *knǫrr* (nominative singular), *knarrar* (genitive singular), and *knerri* (dative singular) or *knerrir* (nominative plural). The *ø* and *e* are derived from the *a* as a result of mutation, *knǫrr* from *\*knarruR*, and *knerrir* from *\*knarrīR*. Thus, the above-mentioned modern Scandinavian words do correspond to Old Norse *knǫrr*. The *knarr*- forms contain

the original vowel; the *knerr-* (*knärr-*) forms represent the *i*-mutated vowel; and *knørr* shows the *u*-mutated form of the word. If we were to take the word *knørr* and use it to construct an English adjective ‘\**knørry*’ or a verb ‘to \**knørr*’, modern Scandinavian adjectives like *knerren* / *knärrog* / *knerrut* and verbs like *knerre* / *knärra* would correspond formally to these.

Secondly, modern Scandinavian boat types termed *knorr* / *knarr* / *knärr*, in Northern Norway and Swedish Ostrobothnia, have steep or backwards-curved stems and they contrast with boat types that have projecting stems. The Northern Norwegian form is *knorr* (*knørr* in some dialects) and *-or(r)* (*-ør(r)*) is the standard equivalent of Old Norse *-orr*. The Ostrobothnian form is *knarr* / *knärr*, which is also equivalent to *knørr* (but derived from Old Swedish \**knarr*, as *u*-mutation was unusual in Old Swedish).<sup>53</sup>

A Northern Norwegian *knorr* is shown in Figure 12. The backward-curved stem is pronounced. It therefore makes good sense to deduce from the set of terms discussed above that *knorr* has the basic meaning of ‘steep or backward-curved’. This understanding seems to be confirmed by a comparison with the boat type prevalent in Trøndelag, the neighbouring area to the south of where the *knorr* was the traditional boat type. Until the early nineteenth century, the Trøndelag boat probably was the *geitbåt*, which is shown in Figure 13. It has a prominently projecting stem. The term *geitbåt* literally means ‘goat boat’ and is most easily explained as a comparison with a goat, which has a prominently projecting front part (a long neck). When viewed in light of the contrasting stems, both terms seem very characterising. In Ostrobothnia, we find a similar circumstance. A *knarr* / *knärr* / *knärrbåt* is shown in Figure 14 and has a stem that is quite similar to (albeit less pronounced

<sup>53</sup> It seems that eighteenth-century Shetland Norn also had the term *knørr*, referring to a small boat in local tradition, but we have no information about what characterised this boat (*knorin* definite form; Low 1879: 106, cf.; Thowsen 1970: 168 and Rendboe 1987: 56–57).



than) that of the northern Norwegian *knorr*. The other local boat type is the *jullbåt*, seen in Figure 15. The same stem contrast as on the western Norwegian coast is apparent.

The fact that we find these contrasts in geographically distant areas strengthens the argument. The geographical separation means that the parallel can hardly be explained as a late borrowing and therefore rather derives from a common, medieval origin.

Thirdly, the modern Norwegian adjective *knarrstemnd* ‘with a backward-curved stem’, literally ‘with a stem like a *knarr*’, has to be explained from the Old Norse linguistic stage because in Norwegian tradition there is no boat type *\*knarr* (and there never was). Had the word *knarrstemnd* been formed from *knorr* in late tradition, it would have been *\*knorrstemnd*, but that form is unknown. The word-form *knarrstemnd*, with an *-a-*, can only be explained from the Old Norse stem form *knarr-*, which was used in compounds (and retained the original *a* because in the stem form it was not followed by a mutation-causing *u*. The modern Scandinavian form *knarr* is a late borrowing from such compounds found in names of natural harbours where *knerrir* would lie: *Knarrvik[a]*, *Knarrlagsundet* etc.). This means that the term *knarrstemnd* originates from

Figure 12 (top): Eighteenth century *knorr* from Northern Norway. (Klepp 1983: 28)

Figur 12 (øverst): 1700-tals knorr frå Nord-Noreg. (Klepp 1983: 28)

Figure 13 (above): Nineteenth or twentieth-century *geitbåt* ‘goat boat’ from Nordmøre, Norway. (Færøyvik 1987: 142)

Figur 13 (over): 18- eller 1900-tals geitbåt frå Nordmøre. (Færøyvik 1987: 142)

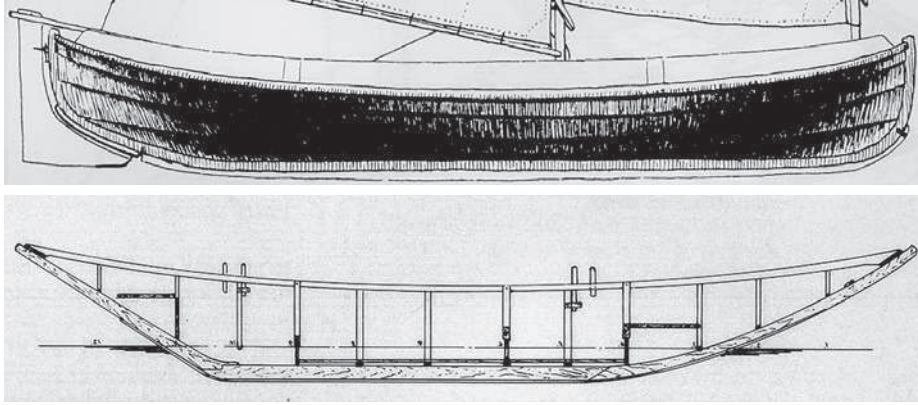


Figure 14 (top): Nineteenth-century *knarr* / *knärr* from Swedish Ostrobothnia, Finland. (Ahlbäck and Bonns 1986: 103)

Figur 14 (överst): 1800-tals knarr / knärr från svensk Österbotten, Finland. (Ahlbäck and Bonns 1986: 103)

an unattested Old Norse form – *\*knarrstefndr* – and consequently indicates that a backward-curved stem was considered a distinctive feature of a *knørr* in the Middle Ages.

On the basis of the above, it is very probable that *knørr* originally meant ‘a ship with a backward-curved stem’. This characteristic fits well with the ships to the left in §4 (Figure 1, Figure 4, Figure 6, Figure 7. Note the close resemblance between Figure 12 and Figure 7.), so it can be assumed that they were *knerrir*. This understanding of the term *knørr* may also explain how its meaning could shift from ‘warship’ to ‘cargo ship’. This shift is not a problem if *knørr* originally referred to the profile of the ship’s stem. In that case it did not originally express anything about cargo capacity, but a backward-curved stem could have become a characteristic of the big, ocean-going cargo ship when it emerged, because it is easier to build a broad, chubby hull if the stem is steep or backward-curved.<sup>54</sup> Skuldelev 1 (Figure 17) from 1030–1050 AD is a fully developed ship of this type. It is widely considered to be a *knørr* (probably first suggested by Crumlin-Pedersen).<sup>55</sup> The reconstruction

<sup>54</sup> I have consulted several boat builders in the Norwegian west coast tradition on this.

<sup>55</sup> Crumlin-Pedersen 1970: 486.



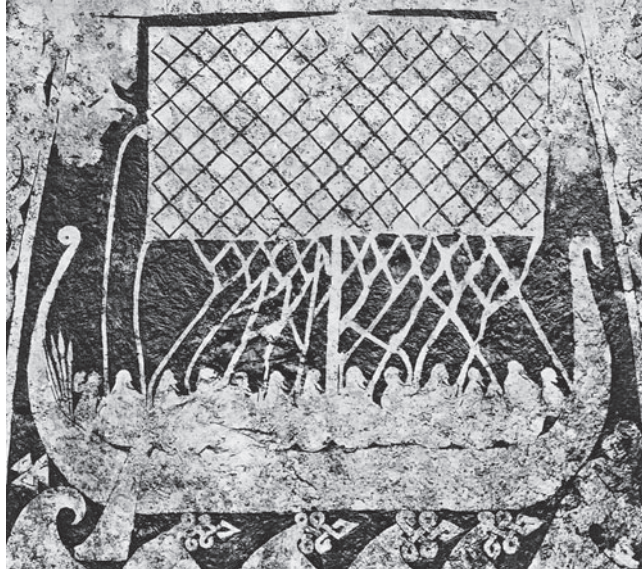
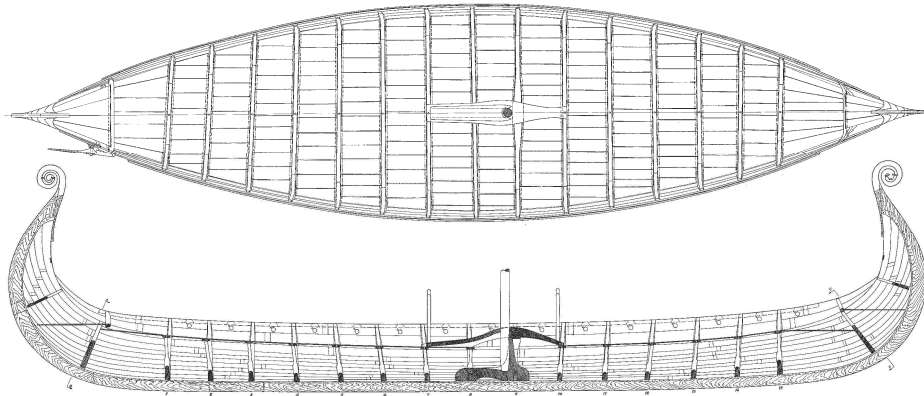


Figure 16: Probable *knørr* I-s. Left: warship on a Viking Age-pictorial stone from Gotland. (Hejnum Riddare, Lindqvist 1941–42 no. 80). Below: the Oseberg ship, Vestfold, Norway, 820 AD (poster published by the Museum of Cultural History, Oslo. Drawing by Lundin, 1954).

*Figur 16: Sannsynlege skip av typen knørr 1. Til venstre: krigsskip på vikingtids bilestein frå Gotland (Hejnum Riddare, Lindqvist 1941–42 nr. 80). Under: Osebergskipet, frå 820 (plakat publisert av Kulturhistorisk museum, Oslo. Teikning av Lundin, 1954)*



of the stem profiles shown in Figure 17 seems plausible,<sup>56</sup> and if so, it is \**knarrstefnt*. But it should be stressed that, in all probability, the term *knørr* only came to refer to cargo ships such as this as a secondary meaning. We should distinguish between ‘*knørr* I’, which would be ships like those in Figure 16 and those to the left in § 4; and ‘*knørr* II’, which would be the later cargo ships like Skuldelev I (Figure 17).

<sup>56</sup> ...except that I doubt the basis for making the stem tops so short on the reconstruction.

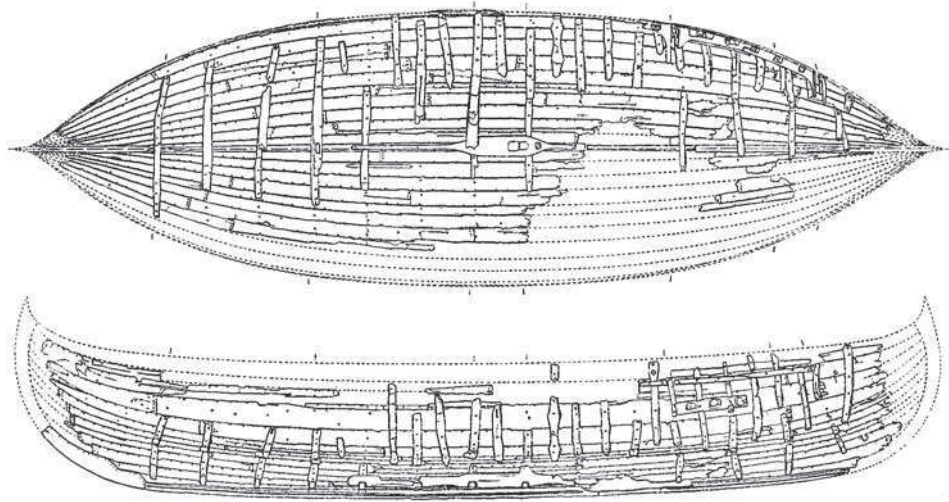


Figure 17: Probable *knørr* II. Cargo ship from 1030–1050 A.D, found in the Roskilde fjord. (Skuldelev I. Crumlin-Pedersen and Olsen 2002: 124)

*Figur 17: Sannsynleg skip av typen knørr 2: Skuldelev I, frakteskip frå 1030–50. (Skuldelev I. Crumlin-Pedersen and Olsen 2002: 124)*

The understanding of *knørr* as ‘cargo ship’ probably became an alternative meaning at some point during the tenth century, before eventually becoming the dominant meaning. This chronology seems to parallel that of Old English *cēol*. The meaning of this term also changed from ‘warship’ to ‘cargo ship’, the first certain example of the ‘cargo ship’ meaning dates from around 1000 AD and it is therefore likely that it developed in the tenth century (see § 6). This analogue supports the evidence of the two meanings of *knørr*, as well as the impression that specialised, ocean-going cargo ships in Northern Europe developed during the tenth century, whether they were referred to as *knerrir*, *cēolas*, or with other terms.

The ‘cargo ship’ meaning of *knørr* never eradicated the other meanings. As we have seen, *knørr* survives as a term for traditional *knarrstemnd* vessels in Ostrobothnia and Northern Norway, whereas the ‘warship’ meaning of the word is still found in Faroese ballads, dating from the High Middle Ages or later (*knørrur*, *knørir*).<sup>57</sup> It is hard to tell when ‘cargo ship’ became the dominant

<sup>57</sup> Hammershaimb 1891 II: 154, I e.g. 262, 270.

meaning, but it seems that an understanding of *knørr* as ‘warship’ survived for quite some time in skaldic poetry. The skald Steinn Herdísarson, probably around 1070 AD, mentions *steindir knerrir* ‘painted *knerrir*’ among the gifts King Óláfr kyrri gave his followers.<sup>58</sup> As paint was very expensive, it is unlikely that cargo ships would have been painted, so these *knerrir* probably were warships – which also makes better sense in the context. Of the six eleventh-century Swedish runic inscriptions to mention *knørr* (above), none clearly refer to cargo ships and the majority refer to warlike situations.<sup>59</sup> In the High Medieval Swedish manuscripts, the term is not attested. This suggests that *knørr* never developed the meaning ‘cargo ship’ in Swedish (nevertheless, see the discussion in Jesch 2001a: 128.).

The two meanings of *knørr* complicate the understanding of the byname *knarrarbringa*. It is usually understood as a comparison between a ship with a broad fore, as in Figure 17, and a woman with a large, heavy, round bosom. This is unproblematic with regards to Ásný knarrarbringa, who lived in the High Middle Ages.<sup>60</sup> However, the above-mentioned Þorbjörg knarrarbringa allegedly lived in the ninth century and at that time it is very improbable that *knørr* referred to this kind of ship. Diverse and robust evidence indicates that a *knørr* in the ninth century was of the Oseberg type, which has a narrow fore. It is conceivable that *knarrarbringa* could also be derived from the appearance of this type, if it compares the posture of a woman bending backwards to compensate for her really heavy bosom with the *profile* of a *knørr* I, but this seems rather unlikely. It is therefore tempting to doubt the authenticity of the byname *knarrarbringa* in the ninth century. It could be a later construction. If there was a tradition that Þorbjörg was exceptionally well endowed, the

<sup>58</sup> Finnur Jónsson 1912–15 B I: 379, 382; Jesch 2001a: 130.

<sup>59</sup> Varenius 1992: 107–09.

<sup>60</sup> See Jesch 2001b.

comparison of her father's nose to a *skeið* could have motivated her own later comparison with a cargo ship or *knørr* II once it developed, much like Ásný and presumably other women not mentioned in the sources. This explanation of Þorbjörg's *knarrarbringa* byname may look like 'data massage', but it is less problematic to doubt the authenticity of the byname than to argue for the 'cargo-ship' meaning of *knørr* already in the ninth century, because that would contradict many independent pieces of evidence.

It is possible that the term *knørr* arose even before the Viking Age because we know of a distinct contrast in stem profiles before that time and because the other words of the type that *knørr* belongs to (e.g. *ffjörðr*, *skjöldr*) are generally inherited at least from proto-Scandinavian (cf. the vowel shift above). The Norwegian Kvalsund ship from around 700 AD and the Migration Period rowing ships on pictorial stones from Gotland and Häggeby, Uppland, Sweden could thus be *knerrir* whereas the early seventh-century Sutton Hoo ship from England and the Nydam Ship, c. 320 AD, from southern Jutland would be the *geitbåt* type.<sup>61</sup> These stem contrasts would actually be far more prominent than those we can observe in the Viking Age and it would thus make better sense if the term *knørr* were pre-Viking Age. However, our material does not allow any conclusions on the earliest days of the term *knørr*.

#### 4.2 Beit

*Beit* f. (pl. *beit*) does not occur in skaldic poetry, in bynames or in English or German sources from the early Viking Age. The term is mentioned nine times in the Old Norse poetic corpus, but none of these occurrences can reasonably be dated to before 1000 AD.<sup>62</sup> Still, I believe *beit* refers to an early Viking Age ship type,

<sup>61</sup> Lindqvist 1941–42 no. 11 etc.; Åkerlund 1963: 137; Nylén and Lamm 1987: 22; Engelhardt 1865; Rieck 1994; Gøthche 2000.

<sup>62</sup> Finnur Jónsson 1913–16: 40, cf. §10 here.

because it never occurs in prose (see § 2) and because it seems to be the only term that makes sense with a certain, very characteristic early ship type – namely the one with angular stems to the right in § 4 (see Figure 3, Figure 5, Figure 9). In Heide and Planke, manuscript 2012, I suggest this type was the *beit*, for three principal reasons:

- The extensions under the stems appear simultaneously with the first sails, probably because sailing requires a better capacity to avoid leeway (when sailing upwind), and adding such triangles is the easiest way to achieve this on a rowing ship. This has been pointed out by Crumlin Pedersen, and the argument can be supported with Dutch tradition where exactly this kind of ‘skeg’ (in the fore of the ship; its potential place in the aft is occupied by the rudder because side rudders are abandoned) serves exactly this purpose.<sup>63</sup>
- In modern Norwegian, *beit* refers to a ship’s ability to avoid leeway and this is probably related to the Old Norse verb *beita* ‘to sail upwind’, which seems to derive from an idea of the keel cutting through the sea, which in turn would fit well with this type of ship type and its extensions.<sup>64</sup>
- The Dutch ‘skeg’ is called a *loefbijter*, literally ‘windward biter’, and the verb *beita* is the transitive form of *bíta* ‘to bite’. The essential meaning of *bíta* is ‘to cut’ (and *beita*, which is causative to *bíta*, means ‘to make / cause to bite’). Thus, the term *loefbijter* seems to support the connection between the term *beit*, the triangular extensions and sailing upwind.

The argument for the identification of *beit* is far weaker than that given for *knørr* above or *skeið* below, but it

<sup>63</sup> Crumlin Pedersen (1997b: 174–75; see Kruyskamp 1961: 1127. Thanks to Gerbrand Moyes for information on the Dutch *loefbijter*.

<sup>64</sup> For details, see Heide and Planke, manuscript 2012.



seems that this is the best option. No example of a ship with angular stems has yet been found, but due to the many depictions of them there is broad agreement that such ships really existed – some very detailed, as we have seen.<sup>65</sup> If this ship type existed, there must have been a term for it and, as it seems to have existed by the early Viking Age, it would be surprising if this term was not preserved in poetry. Of the candidate terms in the poetry, *beit* not only seems to be the only fitting alternative; it also makes good sense. The reason why *beit* is not mentioned in the earliest sources may be that it was a less important ship type and that this type predates virtually all of the preserved skaldic poetry. Our depictions of it are from the Merovingian period and the very earliest part of the Viking Age (the ship type seen on eleventh-century Swedish and Danish pictorial stones such as Ledberg and Törnevalla seems to be something else). Therefore, it fits well if *beit* only exists in our texts as a poetic term surviving from earlier times. It is conceivable that the very early attested *barði* (§ 3) was an alternative term for this type of ship: apparently, it literally means ‘a ship characterised by its *barð*’ and the *barð*, defined as ‘the transition piece between the stem and the keel’, comes close to the part of the ship in question. However, it is uncertain whether *barði* is an early term because there is only one probable early attestation of it.

## 5. Skeið

We have two indications that the term *skeið* f. (pl. *skeiðar* and *skeiðr*) existed in the ninth century. It is reflected in the byname *skeiðarnef* ‘*skeið* nose’, which was given to Þorbjörg knarrarbringa’s father Gils, who as earlier mentioned was probably born before 850 AD (§ 4.1). If authentic, his daughter’s byname indicates

<sup>65</sup> See Heide and Planke, manuscript 2012.

that *skeiðarnef* really is a comparison with the ship type. But there is reason to doubt the authenticity of Þorbjörg's byname *knarrarbringa* (§ 4.1), and therefore the *skeiðarnef* byname could originally have been a comparison with a weaving beater, which was also called a *skeið* f. (see Figure 19). Even so, a comparison with a ship seems the more plausible alternative and *skeið* is also mentioned in the Danish runic inscription from Tryggevælde, dated to c. 900; the term, accordingly, was established before that.<sup>66</sup> In the inscription, *skeið* is believed to refer to a ship setting, but as no ship setting is known in this place, it might be taken to refer to a racecourse, also called a *skeið*, instead. However, in the racecourse-meaning, *skeið* was neuter, whereas it was feminine when referring to a ship and in the inscription there is a congruence between *skeið* and a determinative that cannot be neutral: *skaip þaisi* (accusative). The whole sentence reads, normalised: 'Ragnhildr, systir Ulf's, setti stein þenna ok gerði haug þenna ept, ok skeið þessa (*skaip þaisi*), Gunnulf, ver sinn, glömulan mann, son Nerfis...', 'Ragnhildr, Ulv's sister, placed this stone and made this mound – and this ship setting (*skaip*) – in memory of Gunnulfr, her husband...'.<sup>67</sup> Accordingly, by far the most probable explanation would therefore be that *skeið* on the Tryggevælde inscription refers to a (stone) ship (which is now lost) and accordingly that a ship type *skeið* was established before c. 900 AD. The impression that *skeið* is an early type is supported by the fact that it is attested in tenth-century skaldic poetry (§ 10.1) and is rare in the (prose of the) contemporary sagas written in the thirteenth century.<sup>68</sup>

Crumlin-Pedersen suggests that the 29.5 m long Skuldelev 2 (built in 1060, Figure 18) and the perhaps 31 m long Hedeby 1 (built in 985) are *skeiðar*.<sup>69</sup> This seems very likely (supported also by Simek 2005), and I

<sup>66</sup> Nielsen 2006: 301; Crumlin-Pedersen (1991: 75, 1997a: 190)

<sup>67</sup> Moltke 1985: 226, my normalisation.

<sup>68</sup> Björge 1965: 16; Malmros 1985: 102.

<sup>69</sup> Crumlin-Pedersen 1991: 75; 1997a: 190.



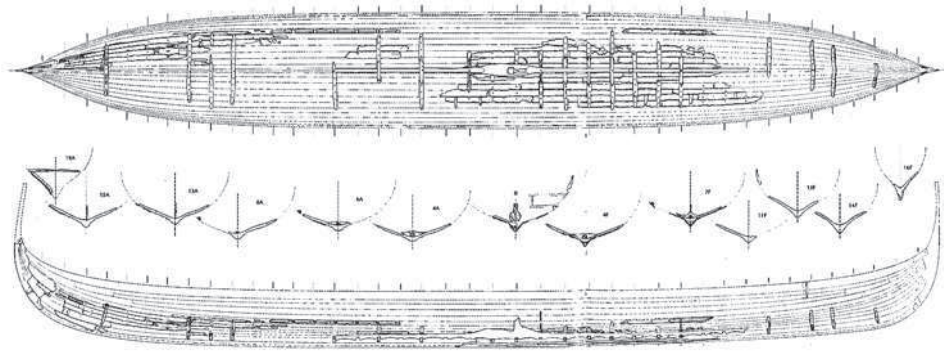


Figure 18: Probable but late *skeið*: Skuldelev 2, 1060 AD. (Crumlin-Pedersen and Olsen 2002: 174–75)

*Figur 18: Sannsynleg, men sein skeið: Skuldelev 2, 1060. (Crumlin-Pedersen and Olsen 2002: 174–75)*

would like to add the 36 m long Roskilde 6, built after 1025 and found in 1997.<sup>70</sup> But Crumlin-Pedersen hardly gives arguments for the identification of *skeið* with these ships, although such arguments can be made. Firstly, a few skaldic poems, mostly from the late Viking Age, contain information that *skeiðar* are long and slender and this would fit with the Skuldelev 2 type, as pointed out by Jesch: they are *langar* ‘long’, *súðlangar* ‘with long strakes’, *mævar* ‘slender’, and *punnar* ‘thin’ (1262 AD).<sup>71</sup> Secondly, the byname *skeiðarnef* can most easily be interpreted as referring to a very long nose, which implies that *skeiðar* were long, too (but see below). Thirdly, from England, where the term in question was borrowed from Scandinavian, we have a mention of a *scegð* (pronounced /*skeið*/) with 64 oars, in bishop Ælfwold’s will from 1008–1012 AD.<sup>72</sup> That makes 32 pairs – two more than on the reconstruction of Skuldelev 2, the Sea Stallion, which probably should have fewer oars given how difficult it has proved to row it fully manned.<sup>73</sup> Accordingly, a *scegð* /*skeið* could be a very long ship. Fourthly, the only plausible etymology of *skeið* is that it is a comparison with something long and narrow. Falk suggested that *skeið* is borrowed from Byzantine Greek

<sup>70</sup> Bill et. al. 1998 and 2000: 224; Gøthche 2006.

<sup>71</sup> Jesch 2001b: 50; Jesch 2001a: 124; Finnur Jónsson 1912–15 B II: 114; Bjørge 1965: 18.

<sup>72</sup> Thier 2002: 32.

<sup>73</sup> Information from Tora Heide and others from the crew, September 2009.



*skhedía* ‘a light ship’, but this is rejected by de Vries and Ásgeir Blöndal Magnússon because the word is attested in Scandinavian too early.<sup>74</sup> It has also been suggested that *skeið* means ‘a wave-splitting ship’ or ‘a ship made of planks made from split logs’, in both cases derived from the Germanic verb *\*skaiðan*, ‘to split’.<sup>75</sup> However, this is not convincing (as Ásgeir Blöndal Magnússon points out) because all ships’ planks were made from split logs (before the saw), and all ships split the waves. Instead, Ásgeir Blöndal Magnússon suggests that *skeið* as a term for a ship type is a ‘re-use’ of a term *skeið* that referred to something long and narrow because the ship type in question had a similar shape. This seems plausible because the most striking feature of the ship type exemplified in Figure 18 is its extreme length and slenderness and we should expect that this would be reflected in a term designating this characteristic.<sup>76</sup> Ásgeir Blöndal Magnússon’s suggestion is that *skeið* as a term for a ship type is a comparison with *skeið* in the meaning ‘(sword) sheath’.<sup>77</sup> This is certainly possible, but perhaps even more plausible would be *skeið* in the meaning of ‘weaving beater’ (see Figure 19).<sup>78</sup> I conclude

Figure 19: Viking Age *skeiðar* ‘weaving beaters’. (Rygh and Lindberg 1885, no. 439)

Figur 19: Skeiðar ‘veusverd’ frå vikingtida. (Rygh and Lindberg 1885, nr. 439)

<sup>74</sup> Falk 1912: 105; de Vries 1962: 487; Ásgeir Blöndal Magnússon 1989: 835. The explanation for the likeness may be borrowing in the opposite direction.

<sup>75</sup> See de Vries 1962: 487.

<sup>76</sup> In principle, this term could also be *dreki* because the ships in question are long and slender like snakes, which came close to dragons in the Old Scandinavian mindset (footnote 14). But we have no indication that the term *dreki* is older than the eleventh century and, as I argued above, it seems that *dreki* was an additional rather than a basic term.

<sup>77</sup> Foote is on to the same, 1978: 237.

<sup>78</sup> *Sheath* is cognate with *skeið*. The connection to splitting is that a sheath was originally made by splitting a thin log, then hollowing-out the two pieces before tying them together. A weaving beater appears to ‘split’ the two layers of warp.

that the Skuldelev 2 type, which we know from several ship-finds from the eleventh and late tenth centuries, most probably is the *skeið*.

However, because the term *skeið* seems to have existed in the ninth century, the outlined understanding necessitates that long and slender ships also existed at that time. At first glance, this seems not to have been the case. Ole Crumlin Pedersen has pointed out that early Viking Age warships such as Tune and Gokstad are much broader compared to length than the eleventh-century warships that we know of, and he has suggested that this is due to the need to 'provide sufficient stability at the initial stage' of sailing.<sup>79</sup> Only in the late Viking Age did warships return to the pre-Viking narrowness, Crumlin-Pedersen says. If this is correct, the term *skeið* could in theory derive from the long and slender rowing ships of the pre-sail era (like the 27-meter Sutton Hoo [Evans and Bruce-Mitford 1975] and the ships that were presumably stored in the well over 30 m long pre-Viking boat houses.<sup>80</sup> But this is speculation and not necessary, because our material does not permit the conclusion that no early Viking Age warships were slender. Unfortunately, the graffiti that show ships from the side give no information of how wide they were, but the Danish Ladby ship from 900–925 AD was 21,5 m long and had a length-to-breadth ratio of 7,4, which is quite close to Skuldelev 2's 7,8 and which is contrasted by Gokstad's 4,7 and Oseberg's 4,2.<sup>81</sup> Thus, Ladby not only fits the understanding of *skeið* outlined above, but is also early Viking Age (Ladby is now dated 25–50 years earlier than when Crumlin-Pedersen published his article). To be sure, no such slender ship from the ninth century has been found, but this may very well be a coincidence as only two ships – Gokstad and Oseberg – definitely date from that century.

<sup>79</sup> Crumlin Pedersen 1997a: 189–90.

<sup>80</sup> Myhre 1976; Grimm 2001; Stylegar and Grimm 2005.

<sup>81</sup> Based upon Crumlin-Pedersen and Olsen 2002: 173; Sørensen 2001: 41, 109 ff..

Even if *slender* warships did exist in the early Viking Age, there may be something to Crumlin-Pedersen's idea. These ships were still a lot *shorter* than the longest rowing age ships, and really long ships did not return until the late Viking Age. Because the forces inflicted upon the hull by (the speed of) sailing is far greater than the force produced by rowing, the longest rowing ships would hardly have withstood full-fledged sailing without fundamental changes to how they were constructed. But such changes cannot be made overnight, so the easy solution would be to make the longest ships shorter.<sup>82</sup> To judge from the ship finds, it seems that designs for a sufficient longitudinal stiffness for sailing ships of great length and slenderness only emerges with the probable *skeiðar* from the late tenth and early eleventh centuries.<sup>83</sup> This development may be part of the reason why the *skeið* seems to become more important in the late Viking Age. It is not mentioned in Old English sources until then and it does not dominate the skaldic corpus' references to warships until then.<sup>84</sup>

It is also probable that (comparatively) broad warships went out of use in the late Viking Age (even if they were not the only type in the early Viking Age). This would fit in well with the specialisation of ship types that happened throughout the Viking Age. In the ninth century there were probably no specialised cargo ships, defined as ships with a large cargo capacity, virtually no rowing ability and just the crew to handle the ship.<sup>85</sup> The reason for this was probably partly that such ships had not yet had the time to evolve from the slender rowing ships after the introduction of the sail only one or two centuries before, and partly also that the Northern European states in the early Viking Age

<sup>82</sup> Whether this really happened or not would probably become clear from the many Western Scandinavian boathouses, but, regrettably, too few of them are excavated and dated.

<sup>83</sup> See e.g. Bill, et. al., 2000: 222.

<sup>84</sup> Thier 2002: 32; compare §10.1 with Jesch 2001a: 123 ff.

<sup>85</sup> First pointed out by Christensen 1982.

did not yet have a monopoly on violence, as Crumlin-Pedersen points out.<sup>86</sup> This would mean that a large, armed crew was needed in any case to protect the cargo and, consequently, that ships capable of making use of the rowing power of a large crew would be preferred. In the late Viking Age this was different and this development could lead to the abandonment of combined ships like Gokstad – warships with a large cargo capacity (in the High Middle Ages, this specialisation was reversed in some respects and new, heavy ship types used for both trade and warfare emerged).

Here, I have adopted my predecessors' view that (length and) slenderness were the main characteristics of *skeiðar*. From this, we cannot tell which of the ships in § 4 are *skeiðar* because these characteristics cannot be seen from the depictions. However, in light of the arguments presented in § 4, 4.1 and 4.2, there is reason to believe that the *skeið* also had a distinctive stem profile. At least it is probable that the *skeið* had a different stem profile from the *knorr*, because if not, the term *knorr* would probably not make sense since it requires a contrast. If the term *skeið* really is a 're-use' of *skeið* in the meaning 'weaving beater' or 'sword sheath', this could imply that the ship type *skeið* originally had a projecting stem, because weaving beaters and sword sheaths are pointed, as was in all likelihood the long nose of Gils *skeiðarnef*. If so, the vessel in Figure 10 could be an early *skeið*, as it has the most projecting stem of the known depictions from the early Viking Age. Its low freeboard would fit the slenderness of a *skeið*, because slenderness is normally connected to a low freeboard. However, our material is too limited to tell us whether the *skeið* originally had a projecting stem.

<sup>86</sup> Crumlin-Pedersen 1997a: 188.

## 6. Kjóll

The term *kjóll* m. (pl. *kjólar*) is well documented in the West Germanic languages in the early Viking Age and even earlier. From England, *cēol* (pl. *cēolas*) is mentioned by Gildas in a Latin text as early as in the sixth century, referring to the long ships (*longis nauibus*) that first brought Saxons to England in the fifth century.<sup>87</sup> The later *Anglo-Saxon Chronicle* (ninth century and later) also refers to these first ships as *cēolas* or long ships and dates the event to the year 449.<sup>88</sup> In eighth-century poetry – for example *Beowulf* and *The Fates of the Apostles* – *cēol* is common, as it is throughout the Viking Age.

In Old High German and Old Saxon, *kiol* appears in glossaries many times in the Merovingian and Viking Ages. In Old Norse, *kjóll* is mentioned as early as in Þorbjörn hornklofi's *Haraldskvæði* (st. 5) from the 870s or 880s (§ 4.1) and in Þjóðolfr ór Hvini's *Ynglingatal* (st. 4) as well as a *lausavísa* by Þórir snepill, both probably from around 900 AD (§ 10.1). Altogether, *kjóll* is mentioned some fifteen times in Old Norse poetry.<sup>89</sup> Norwegian farm names and the Old Norse form *kjóll*'s final, geminate *-ll* indicates that it existed in Proto-Scandinavian and thus that *\*keul(az)* was a common North-West Germanic term in the Migration Period or even earlier.<sup>90</sup> *Kjóll* is not found in Old Norse prose, however, with two exceptions that clearly or probably refer to English High Medieval (cargo) ships.<sup>91</sup> *Kjóll* therefore seems to support the assumption that terms only found in poetry are survivals from the everyday language of an earlier period (cf. § 2) – only that this particular term seems to have been re-connected in the High Middle Ages with the English cognate, which

<sup>87</sup> Williams 1899, ch. 23. Gildas' spelling is *cyulis*, with a Latin dative plural.

<sup>88</sup> McCusker 1966: 288; Ellmers 1972: 47.

<sup>89</sup> Finnur Jónsson 1913–16: 337.

<sup>90</sup> Heide manuscript 2012.

<sup>91</sup> Falk 1912: 88; Olsen 1931.

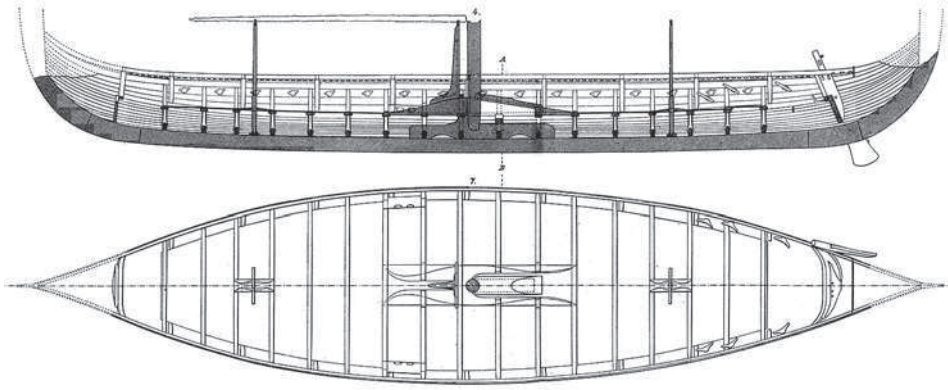


Figure 20: Possible *kjóll*: the Gokstad ship, built c. 890 AD. (From Nicolaysen 1882)

*Figur 20: Mogeleg kjóll: Gokstadskipet, bygd ikr. 890. (Frå Nicolaysen 1882)*

survived in English as a prosaic term for an English ship type at the time.<sup>92</sup>

It is commonly thought that the term *kjóll* / *cēol* / *kiol* is the same word as ‘keel’, ‘the bottom beam of a ship’, Old Norse *kjǫlr* m., but this is not correct; these words are not related, even if they merged in Middle English and the Middle German languages.<sup>93</sup> The *cēolas* of the Saxon settlers obviously were all-round ships – used for military attack, but fitted with a cargo capacity substantial enough to transport whole tribes across the North Sea. In the English poetry believed to date from the eighth century, *cēol* always refers to ships used for warfare.<sup>94</sup> However, dating this poetry is not easier than that of Eddic poetry, and since most of the poetic contexts in which *cēol* is used refer to warfare, this usage does not necessarily tell us much about what the *cēolas* were used for. But a connection between *cēol* and warfare in the early Anglo-Saxon era seems to emerge from Anglo-Saxon personal names like *Cēolbald* ‘*cēol* warrior’, *Cēolhere* ‘*cēol* ruler’, *Cēolward* ‘*cēol* guard’ etc.<sup>95</sup> However, from the late tenth century, possibly some-

<sup>92</sup> Thier 2002: 39.

<sup>93</sup> Heide manuscript 2012.

<sup>94</sup> McCusker 1966: 288; Ellmers 1972: 50; cf. Bosworth and Toller 1898: 151.

<sup>95</sup> Ellmers 1972: 48.



what earlier, *cēol* / *kēle* started to refer to cargo ships.<sup>96</sup> On the continent it also seems that this word referred to warships in the Merovingian and Viking ages. In Old High German and Old Saxon, *kiol* appears in glossaries, translating Latin *trieris* ‘a galley with three banks of oars (on each side), trireme’, *durco* ‘big vessel’, and *nauis magna* ‘the same’, and *celox* ‘a swift vessel suitable for war service’. It also occurs in the meaning *ratis* ‘a raft, boat’, *classis* ‘a fleet’, and once, in the tenth century, in the meaning *liburna*, which in the Middle Ages referred to cargo ships.<sup>97</sup> According to Ellmers, *kiol* most often translates *trieris*, especially in the earliest period, the eighth and ninth centuries (the Old High German period goes to the mid-eleventh century).

Because Gildas mentions *cēolas* in the sixth century, Ellmers and Thier connect the term *cēol* with the Germanic ships that we know from the age of the Germanic conquest of and immigration to England, this applies to the Nydam ship from around 320 AD, the Sutton Hoo ship from the early seventh century and the Snape and Ashby Dell ships.<sup>98</sup> This seems plausible, and we should probably add the Migration Period rowing ships of the Gotland pictorial stones and the Kvalsund ship from Western Norway.<sup>99</sup> There is agreement that an original form *\*keul-az* with near certainty can be reconstructed on the basis of *cēol* / *kiol* / *kjöll*, but in Heide manuscript 2012 I reject the idea that the original meaning was ‘a broad and high ship’, ‘a ship compared with a pot’, or similar, because such ships were not possessed by North-

<sup>96</sup> Ellmers (1972: 52–57) argues that *cēol* could refer to cargo ships as early as in the eighth century, but the argument is not convincing. As pointed out by Thier (2002: 40), the example from *Andreas* rather refers to a warship. The wine barrel riddle from the *Exeter Book* is hard to date. The earliest certain evidence of a cargo *cēol* seems to be the information from around the year 1000 about the toll rate that *cēolas* were to pay (Falk 1912: 88; Thier 2002: 40).

<sup>97</sup> Ellmers 1972: 52; Karg-Gasterstädt and Frings 1952-V: 182; Gallé 1903: 174; Holthausen 1954: 41.

<sup>98</sup> Ellmers 1972: 49; Thier 2002: 40; Engelhardt 1865; Rieck 1994; Gøthche 2000; Evans and Bruce-Mitford 1975.

<sup>99</sup> Lindqvist 1941–42 no. 11 etc.; Åkerlund 1963: 137; Nylén and Lamm 1987: 22; Shetelig and Johannessen 1929.

ern Germanic peoples until centuries later. Instead, I suggest a more general meaning of ‘container’, as the closest related terms are Old Norse *kýll* ‘a sack, bag’, and Old High German and Old Saxon *kiula* ‘a bag’, both from *\*keul-*. This meaning would make sense because the ships that brought the Saxon settlers across the North Sea were obviously the best cargo carriers that they had, even if by later standards they carried little because rowing ships must be low and slender. In that case, *\*keulaz* could be a generic term covering several designs of large, long-distance rowing ships, as the early Germanic ships include both the *knorr* and the *geitbåt* stem profiles (§ 4.1), and it would be surprising if they were not designated with additional terms indicating this.

However, the focus of discussion here is the *kjólar* of the early Viking Age and as specialised sailing ships they must have been quite different from the rowing ships of the Migration Period. Accordingly, we have to study the information that we have on the early Viking Age *kjólar*. It is quite limited, but may still be sufficient: according to *Haraldskvæði* 5 (§ 10.1), the *kjólar* used in the battle of Hafrsfjord in the 870s were *djúpir* ‘deep’. This indicates that a comparatively high freeboard and so a comparatively large cargo capacity was a characteristic of *kjólar*. Stanza 51 in the Eddic poem *Völuspá*, generally assumed to have been composed around the year 1000,<sup>100</sup> points in the same direction, because it says that a *kjóll* carries all the world’s *jotnar* to the Ragnarök battle (alliteration with *koma* in the next line supports the assumption that *kjóll* really belonged to the early version of the poem). It also corresponds to the fact that the English *cēol* developed into a cargo ship (§ 4.1), because this development is easiest understood if its starting-point was an all-round ship with a large cargo capacity (although the case of *knorr* reminds us that the continuity behind the term could be represented by another trait than cargo capacity). In fact, the *cēol* seems to have

<sup>100</sup> E.g. Simek and Hermann Pálsson 1987: 397.

been conceived of as *the* cargo carrier in pre-Viking times (even if it must then have been low and slender compared to later times), judging by the etymology and the fact that it was chosen for the conquest and settlement of England across the North Sea. Taking everything into account, there are quite a number of indications that seem to point to an early Viking Age *kjóll* having a comparatively high freeboard and a comparatively large cargo capacity. If this is correct, the best candidate for identification is the Gokstad ship, built around 890 AD. Gokstad has a hull of the type in question and its stem profile is ‘vacant’, cf. § 4.1 and 4.2. The depictions in Figure 2 and Figure 8 may also be of this type.

The results of this discussion indicate that the *kjóll* was the ship type that primarily brought the settlers to Iceland with their livestock in the late ninth century and the early tenth century, as the *kjóll* seems to have been the ship most suitable for overseas cargo transport in the period before specialised cargo carrier *knerrir*, like Skuldelev 1 in Figure 17, was developed – but see § 8.

In Scandinavia, the term *kjóll* fell out of use. It is hard to know when this happened, but it is natural to relate it to the development of the cargo carrier *knorr*. In that case, the term went out of use because its referent was replaced by a new ship type, the *knorr* II, which was broader and higher – and was *knarrstemnd* (§ 4.1). This may have happened between the mid-tenth and the mid-eleventh centuries.

## 7. Ask

The term *askr* m. (pl. *askar*) is only attested twice in Old Norse poetry, in skaldic poems dated to the late tenth century (§ 10.1), which is quite early.<sup>101</sup> In prose there is a handful of occurrences in two texts, *Hervarar saga ok Heiðreks* (1954, ch. 3) and *Örvar-Odds saga* (1954, ch. 13),

<sup>101</sup> Finnur Jónsson 1913–16: 16–17.

which are accounts of the remote past. This indicates that the *askr* was not a major type, but still early, and that the term was no longer in use in everyday speech in the High Middle Ages. At first glance, the prose occurrences seem to indicate the opposite, but as *askr* is never found in the contemporary sagas the instances where it is used are most easily understood as deliberate archaisms (cf. § 2), like the poetic term *satré* ‘sea tree’ / ‘a ship’ used in prose in one of these sagas, *Örvar-Odds saga* (ch. 19). Seemingly, the authors of these sagas understood *askr* as an ancient type of ship. This interpretation is supported by West Germanic sources where cognates of *askr* are recorded before and during the (early) Viking Age.<sup>102</sup> The sixth-century Frankish law *Lex Salica* (earliest manuscript c. 770 AD) mentions the Latinised form *ascus* and states a substantially higher fine for the theft of a locked-up *ascus* that was hanging up for inspection than for an ordinary boat (*navis*). Accordingly, an *\*asc* was valuable and light.<sup>103</sup> Kuhn understands the *\*asc* as a river vessel – its lightness would fit with that, the Salian Franks were a continental people living around the upper Rhine and the upper Danube (present-day Bavaria and Baden-Württemberg), and when the *\*asc* reappears in sources in the Late Middle Ages (as *asch*) it is a river boat in this area. In Old English, *æsc* is attested in all of the three early glossaries (*Corpus*, *Épinal*, and *Erfurt*) and therefore probably existed already in the assumed source for these glossaries, in the early seventh century.<sup>104</sup> Here, *æsc* translates *cercylus*, which was a light and swift vessel, thus similar to the Frankish *\*asc*. Therefore, and because *æscas* are never mentioned in connection with the Migration Period invasion of England, Kuhn argues that the indigenous English pre-Viking *æsc*

<sup>102</sup> It may also be supported by a certain Oddbjørn’s byname *askasmíðr*. He is mentioned in *Landnámabók* (1968: 348) and *Egils saga* (1933: 59, footnote) among the first two generations in Iceland and the byname is most easily understood in the meaning ‘builder of *askr* ships’, as a parallel to *knarrarsmíðr* and *skipasmíðr*, but it could also mean ‘spear-maker’ or ‘bentwood box maker’.

<sup>103</sup> Kuhn 1973; Thier 2002: 43.

<sup>104</sup> Kuhn 1973; Thier 2002: 42.

was a river vessel, like the Frankish *\*asc*.<sup>105</sup> In the Viking Age, however, *æsc* exclusively refers to Scandinavian warships in English sources. In this meaning, it is mentioned two times already in the ninth century (870 and 897), but only a few times altogether. Still, Kuhn argues that it must have been a major type in the early Viking Age because *ascmann* ‘a Scandinavian pirate’ (literally: ‘*\*asc* man’),<sup>106</sup> parallel to Old English *æscman* (921 AD), is also attested in the Low Countries and Northern Germany, in the late Viking Age.<sup>107</sup> If so, the reason for the few mentions of *æsc* / *\*asc* / *askr* is that early Viking Age sources in the vernacular are few and that the oceangoing *æsc* / *\*asc* / *askr* fell out of use after the early Viking Age (although the compound *æscman* / *ascmann* lived on in the secondary meaning of ‘Viking, Scandinavian’).

All of Kuhn’s considerations seem plausible, but the *askr* still remains confusing. The etymological identity of *askr*, *\*asc*, and *æsc*, and the early attestations of the West Germanic forms, as well as the geographical separation between them, all point to *\*askaz* having been a common Northwest Germanic type in the Roman Iron Age and the Migration Period. This is not contradicted by the fact that the Scandinavian version was oceangoing, while the West Germanic versions seem to have been river vessels, because the Scandinavian version is recorded later and may have been more developed at that point. But in that case, why did the English still identify the Scandinavian ships with their own (probably) river-going *æscas*, and why did the *æsc* / *askr* seemingly go out of use after the early Viking Age?

The commonplace etymology does not help us answer these questions. It claims that the term *æsc* / *askr* reflects the building material: this ship type was built of ash wood. But this is very unlikely because ash wood was only exceptionally used for shipbuilding (as many

<sup>105</sup> Kuhn 1973.

<sup>106</sup> Kuhn 1973. The cognate *askmaðr* is found as a byname in Old Norse (Fritzner 1883–96 I: 76), but it seems to give no information of the ship type *askr*.

<sup>107</sup> Kuhn 1973.



Figure 21: Norwegian *sveipask* / *øskje* with a lid, both sewn together with roots. (Photo: Arctandria, Tromsø)

Figur 21: Sveipask / -øskje, sydd i hop med rottøger. (Foto: Arctandria, Tromsø)

scholars point out), because it is hard to split into material for planks.<sup>108</sup> But ash is very suitable for bentwood containers, which are made by bending a (green or steamed) thin board, to form the wall of the container and stitching it together (before putting a bottom inside of it), see Figure 21.

This technique and the ash wood's suitability for it is probably why a wooden container could be called 'an ash' from very early on in Germanic. The alternative – that ash wood was preferred for carving out bowls – is unlikely because ash wood is quite difficult to carve. In Norway, the connection between the term *ask* and the bentwood technique is still preserved.<sup>109</sup> The form and distribution and early attestations of several of the 'ash' terms for a wooden container indicate that *\*askaz* in this meaning existed in Northwest Germanic: *askr* m. in Old Norse, *asc* (with variants) in the Middle German languages, *eski* n. in Old Norse and *øskje* in modern Norwegian (< *\*askijōn*).<sup>110</sup>

The relationship between the meanings of *\*askaz* as container and boat is usually explained as the former being derived from the latter, because a wooden container resembles a boat.<sup>111</sup> However, it is rather the other way around: the starting-point is the suitability of ash wood for bentwood boxes; the ship term *\*askaz* is a 're-use' of the term for a bentwood box<sup>112</sup> and it referred to ships with (some of) the planks sewn together (like on a bentwood box) rather than joined with iron rivets. This stitching is a major characteristic of sewn boats and it is easily visible, even at a distance, as can be seen in

<sup>108</sup> Ásgeir Blöndal Magnússon 1989: 27; Kuhn (1973); Thier (2002: 42; Osborn 2003; Sayers 2006.

<sup>109</sup> Aasen 1873: 14.

<sup>110</sup> Fritzner 1883–96 I: 352; Kluge and Seebold 2002: 63.

<sup>111</sup> E.g. Kluge and Seebold 2002: 63.

<sup>112</sup> Sayers also suggests that the 'container' meaning is the starting-point, but he is unaware of the connection between *askar* and the bentwood type of wooden container, so he suggests that the ship type *askr* resembled a shallow bowl, which seems unfounded (Sayers 2006: 203).



Figure 22, so we should not be surprised if this characteristic gave rise to a term for a ship type.

This explanation of *askr* may initially seem unlikely because it is commonly assumed that sewn ships went out of use before the Viking Age. But the picture is more complicated than that. It is true that already the Nydam ship from 320 AD was riveted and that all the famous Viking ships are riveted. Still, sewn boats and ships have remained in use in Northern Europe up to modern times.<sup>113</sup> The technique of sewing survived longest on river boats because it is lighter than riveting, which is an advantage when passing portages, but sewn ocean-going cargo carriers are known as late as in the seventeenth and eighteenth centuries, from the Baltic and the Barents Seas.<sup>114</sup> In the period from which we have evidence, the sewing technique was pushed back towards the east and north in Northern Europe, with long periods of transition, and sewing and riveting often combined on the same boat or on different types.<sup>115</sup>

Figure 22: Sewn boat: replica of a *sahnjaka* from the Kola peninsula – 11.5 metres long original from c. 1910 at the Norwegian Maritime Museum, Oslo. (From <http://www.sewboat.narod.ru/shnjaka/>)

Figur 22: *Kopi av sahnjaka frå Kolahalvøya. Original frå ikr. 1910. (Frå <http://www.sewboat.narod.ru/shnjaka/>)*

<sup>113</sup> Westerdahl 1985b, 1985a.

<sup>114</sup> Westerdahl 1985b: 46 ff.; Westerdahl 1985a: 129, 141; Tanaka 2010.

<sup>115</sup> In the western Scandinavian languages, the clinching of a ship's board is still called a *súð* / *su* 'sewing', and a boat rivet a *saumr* 'seam' (in Danish, *søm* has even assumed the general meaning 'a nail').



In Viking Age Scandinavia, we know of several (partly) sewn boats from the coast of Nordland and Troms counties, Northern Norway; the largest being the Bår(d)set boat from 850–895 AD, probably c. thirteen metres long and with seven pairs of oars.<sup>116</sup> But sewn boats are also known from southern parts of Norway and Sweden at that time: eighth-ninth century Västmanland, central Sweden; mid-ninth century Sunnmøre, Western Norway (a sewn repair, Fjørtoft); and eleventh-century Trondheim, Central Norway.<sup>117</sup> The term *taghbænda* mentioned in the provincial law of Västergötland, South-western Sweden, anchors the sewing technique to this area, too, as late as in the thirteenth century.<sup>118</sup> An account in *Heimskringla* mentions two sewn ships with twelve pairs of oars built by the Sami in Nordland as late as in 1138–39. Some of the Norwegian archaeologically found sewn boats, especially those from Northern Norway, have been interpreted as Sami because they are sewn (see footnote 117). This may be right, but they are found in Germanic contexts and, in the Viking Age, the sewing technique was not yet restricted to the Sami, but was used by the Germanic population even in Southern Sweden and Southern Norway. In 1189 a Greenlandic ship ‘held together with wooden pegs and baleen or sinew lashing’ came to Iceland.<sup>119</sup> There probably is reference to sewn ships even in the Old English poem *Beowulf*<sup>120</sup> (line 215–16: *guman ūt scufon, / weras on wilsīð wudu bundenne*, ‘the fellows shoved off / men on a desired voyage, in a bound ship’, possibly line 1910: *bundenstefna*, ‘bound prow’).<sup>121</sup> This

<sup>116</sup> Westerdahl 1985b: 52, 1985a: 130 ff.; Pedersen 2002: 9, 49–52.

<sup>117</sup> Tuna, Badelunda, Westerdahl 1985b: 52, 1985a: 130–31; Nordeide 1989: 154. In the book, Nordeide mentions that according to Arne Emil Christensen, boats were sewn in Sami tradition, thus implying that this boat was Sami. But Christensen also said that it was divided into *roms* (Old Norse *rúm*) according to Norwegian rules (personal communication from Nordeide January 2011).

<sup>118</sup> *Äldre Västgötalagen* 1919: 61, cf. Steen 1934: 284; Westerdahl 1985a: 129.

<sup>119</sup> Ólafur Halldórsson 1978: 52, 66, 268–69.

<sup>120</sup> Thanks to Katrin Thier for pointing this out to me.

<sup>121</sup> Westerdahl 1985b, 1985a; Fulk et. al. 2008: 10, 130; clxix, 64, 131, 221; Thier 2002: 77.

indicates that this technique was still known in eighth-century England, but these phrases could also be taken to reflect an earlier technology, preserved in the conservative, poetic language.

On the background of the above, it is plausible that some or many of the ships used by the Scandinavians in the first phase of the Viking raids were sewn. To be sure, no sewn (ocean-going) ship from the early Viking Age has been found in Southern Scandinavia, but this may be the result of accidental archaeological preservation. Our material is so limited that it reflects only a fraction of past reality and sewn ships must be underrepresented. In many Viking Age ship finds, virtually the only thing to survive is the rust from rivets. If these boats had been sewn it is unlikely that they would ever have been found, since the stitching would leave no more trace than the wooden planks of the boat it held together. In addition, it is likely that riveted ships were preferred as grave goods because iron was expensive and thus reflected a higher status. As all the ships so far found from the early Viking Age have been grave ships, this may have made a big difference. It is also worth bearing in mind that many of the ships that were used for warfare in the early Viking Age must have been smaller than Oseberg and Gokstad, which we tend to understand as 'typical' early Viking Age (war)ships. Both are so big that they have oar-holes rather than oarlocks with oar-grommets, but according to Þorbjörn hornklofi's *Haraldskvæði* (st. 17) oarlocks and oar-grommets were broken on ships during the battle of Hafrsfjord in the 870s (*hǫmlur at slíta / en hái at brjóta*).<sup>122</sup> This points to quite small ships, perhaps as small as the Bår(d)set boat, and the Scandinavian *æscas* / *askar* recorded in England were small (see below).<sup>123</sup>

<sup>122</sup> Finnur Jónsson 1912–15 B I: 24, cf. § 10.1.

<sup>123</sup> According to de Vries (1962: 15), Old Scandinavian *asker* was borrowed into Byzantine Greek *askós* 'a ship', but in the dictionaries, there is no trace of a ship *askós*, so it cannot help us (thanks to Gjert Vestrheim for this information).

If the *\*askaz* was a sewn boat or ship and the term derives from a comparison with bentwood boxes (which are sewn), the term in all likelihood emerged with the invention of riveted ships, to make it possible to distinguish between vessels built with the two joining techniques. If so, *\*askaz* would be an additional term, referring to a ship's building technique rather than its design, and an *\*askaz* could at the same time be referred to with other terms that designated other characteristics, such as *\*keulaz*, or, in the Viking Age: *knorr*, *beit*, or other (cf. § 4).

One point in favour of this theory that goes above and beyond the evidence discussed so far is the fact that it can provide answers to many questions. Firstly, if (Scandinavian) *askar* were ships with sewn planking, it could explain why the English probably identified them with an English type of river boat: this is not problematic if both types were characterised by the sewing technique although they were different in other respects. This understanding presupposes that, by the early Viking Age, no oceangoing craft were sewn in England, but that (some) river boats still were. This seems a fair assumption given that the technique was gradually being pushed back to the north and east, that sewn ships are probably mentioned in *Beowulf*, that the technique is attested in much of Scandinavia at this time, but alongside the riveting technique, which dominated; and that the sewing technique invariably survived longest on river craft that needed to be light because of portages. Secondly, this theory can explain why the Frankish *\*asc* was so light that it was commonplace to hang it up for inspection (its high value suggests that it was still quite large and stately, perhaps resembling the late Roman warships that we know from the Rhine).<sup>124</sup> Thirdly, if the *askar* / *æscas* were sewn, this could explain the problematic term *nægled cnear* in the *Anglo-Saxon Chronicle* entry from shortly

<sup>124</sup> See Höckmann 1993; we know that Charlemagne kept a fleet on the Rhine and the Danube in the eighth and ninth centuries [Hausen 2000].

after 937 (§4.1 here): after a battle, the Vikings ‘put out in their *nægled cnears* [nailed *cnears*] on to the sea’.<sup>125</sup> Why would the poet want to tell us that the Vikings’ *cnears* were nailed? The explanation may lie in what King Ælfred did some 40 years earlier (897 AD): he gave instructions that a new type of warship was to be built *ongen ða æscas* ‘against the *askar*’.<sup>126</sup> These ships ‘were almost twice as long as the others, some had sixty oars, some more; they were both swifter, steadier, and with more freeboard than the others’. This implies that the *æscas* / *askar* were small, and the king’s action inevitably would trigger an early phase of the arms race that was to accelerate in the High Middle Ages, with an increasing focus on bigger and higher ships specialised for sea battles<sup>127</sup> rather than beach landings, which the Vikings could without any obstruction have given priority up to this point. The Vikings would have to respond and this would have forced them to give up the smallest ships, those most suitable for beach landings and consequently also for the sewing technique, which is only applicable to small ships. Therefore, it could be worth mentioning 40 years later that (now) the *knerrir* were nailed (and not sewn any more; they were no longer *æscas*). Finally, this would explain why the *askar* fell out of use after the early Viking Age.

## 8. Elliði

*Elliði* m. (pl. *\*elliðar*) is rare in the Old Norse corpus. In poetry, it is only attested in a *lausavísa* by Kormákr Ögmundarson from 955–70, in Eilífr Goðrúnarson’s *Pórsdrápa* 14 from around 1000 AD (§10.1) and in Eddic-metre poetry in the late *Friðþjófs saga*.<sup>128</sup> In prose it is attested in *Landnámabók* and in late sagas about the legendary past: *Hversu Noregr byggðist*, *Friðþjófs saga*,

<sup>125</sup> *Battle of Brunanburh*, Livingston 2011: 42, 46, cf.; Whitelock et. al. 1961: 70.

<sup>126</sup> *Two Saxon chronicles* 1892: 90.

<sup>127</sup> See *Sverris saga* 2007.

<sup>128</sup> *Friðþjófs saga* 1954 ch. 3.

and *Sörla þátr*.<sup>129</sup> In *Landnámabók*, *Friðþjófs saga* and *Sörla þátr*, *Ellði* is a proper noun, in the latter two texts referring to Friðþjófr's magical ship.<sup>130</sup> Such meagre evidence could suggest that *elliði* should be ignored in this discussion because the type was marginal or did not belong to the early Viking Age. But there is additional material indicating that it was not all that marginal as well as many indications that it was early. With regards to the latter: firstly, the fact that *elliði* / *Ellði* is mentioned in several legendary sagas, even if it never occurs in the contemporary sagas or High Medieval poetry, indicates that the writers of the legendary sagas understood *elliði* as a ship type belonging to ancient times. Secondly, the High Medieval Icelandic tradition connects *elliði* / *Ellði* with the first two generations of Icelanders: according to *Landnámabók*, *Ellði* was a ship owned by Ketilbjörn gamli Ketilsson, who settled in South-western Iceland.<sup>131</sup> *Ellða*-Grímr was the son of Ásgrímr Qndóttsson, who settled in Eyjafjörður.<sup>132</sup> Álf *elliðaskjöldr* 'elliði shield' was the daughter of Ásgerðr Asksdóttir, who settled in the south-west of Iceland.<sup>133</sup> Thirdly, *elliði* occurs in quite a number of Icelandic place names, many of them mentioned in Old Norse texts,<sup>134</sup> and as *elliði* seems not to have been in common use in the High Middle Ages, it is likely that these names were given before that. One of them, *Ellðaárrós* 'elliði river mouth' in present-day Reykjavík, supports the tradition of Ketilbjörn gamli and his *Ellði*, because according to *Landnámabók* this is where he landed.<sup>135</sup> *Ellðaey* 'elliði island' in Breiðafjörður is also mentioned in connection with the settlement.<sup>136</sup> Combined, these

<sup>129</sup> *Landnámabók* 1968: 384; *Hversu Noregr byggðist* 1954, ch. 1; *Friðþjófs saga* 1954, in numerous places; *Sörla þátr* 1860: 277.

<sup>130</sup> *Friðþjófs saga* 1954, ch. 21.

<sup>131</sup> *Landnámabók* 1968: 384.

<sup>132</sup> *Landnámabók* 1968: 59, 264, 267, 358; *Njáls saga* 1954 in many places.

<sup>133</sup> *Landnámabók* 1968: 77, 212, 343–44.

<sup>134</sup> Svavar Sigmundsson 2008.

<sup>135</sup> *Landnámabók* 1968: 384.

<sup>136</sup> *Landnámabók* 1968: 153.

arguments give quite strong reason to believe that the ship type *elliði* was in use when Iceland was settled. The place-names and bynames indicate that it cannot have been that unusual either.

The question remains as to what kind of a ship the *elliði* was. Falk argues that the term *elliði* is borrowed from Slavic peoples and compares it to Old Church Slavonic *alūdiĭa*, *ladiĭa* ‘a boat’ and Lithuanian *eldija*, *aldija* ‘a barge, a lighter’.<sup>137</sup> Old Norse *leðja* f. has the same origin and is a variant of *elliði*, according to Falk. In Old Norse, *leðja* is only attested in the Icelandic thirteenth-century *Pulur* list of terms for ship types, with no meaning given, but it is attested around the same time in Old Swedish, where *lādhia* / *lodhia* / *lydhia* / *lydhugia* has the meaning of ‘some kind of flat-bottomed boat used by the Russians’.<sup>138</sup> In Medieval Novgorod, a *lodija* was a ‘Russian river, lake and sea vessel’.<sup>139</sup> In Middle Low German, a *lod(d)ie* or *lod(d)ige* was a small cargo ship mainly used in transportation on the Neva and Volkhov rivers (up to Novgorod) and along the coast to Riga, or ‘a shallow vessel, a barge’.<sup>140</sup> In Late Medieval and Early Modern Swedish, *lodja* refers to ‘some kind of flat-bottomed rowing vessel used on shallow waters, particularly in Russia and Finland’.<sup>141</sup> In Estonia, the *lodi* was an extremely broad, slow cargo carrier used on rivers and lakes into the early twentieth century (Past 1946). In Norwegian dialects *lorje* / *lørje* refers to ‘a (big), open, flat-bottomed boat, a barge’.<sup>142</sup> Early Modern Danish *lorje* refers to ‘a small, flat-bottomed boat or barge in particular used as a cable ferry’.<sup>143</sup>

Most scholars agree with Falk that the *elliði* and the *leðja* are borrowed from Slavic peoples and / or other

<sup>137</sup> Falk 1912: 88.

<sup>138</sup> Footnote 17; Finnur Jónsson 1912–15 B I: 668; Söderwall 1884–1918: 775, 788, 789, 793.

<sup>139</sup> Sorokin 2000: 39, cf. 1997: 109. The spelling *lodija* from de Vries 1962: 349.

<sup>140</sup> Cordes et. al. 1928- II: 838; Schiller and Lübken 1875 II: 713.

<sup>141</sup> *Ordbok över svenska språket* 1898 - 16: 1026.

<sup>142</sup> *Norsk Ordbok* 1966- 7.

<sup>143</sup> *Ordbog over det danske sprog* 1918–56 12: 1184.

peoples east of the Baltic Sea – for good reasons. The formal linguistic connection between *leđja* / *lođja* and Russian *lodija* seems very probable. The connection between *elliði* and *alūdija* / *eldija* also seems plausible and there is no better explanation for *elliði*. It has been suggested that it derives from *\*ein-liði* ‘solo sailor (because it is so fast)’,<sup>144</sup> but this seems rather far-fetched and there is no indication that the *elliði* type was particularly fast. *Leđja*, however, can hardly be a variant of *elliði*. It is rather a later loan from the same source, because *leđja* / *lođja* does not seem to be older than the thirteenth century (in Scandinavia), while *elliði* appears to belong to the early Viking Age, as we have seen.

Falk does not discuss why the Scandinavians would borrow a term for a ship type from the Slavs (and / or the Balts), but if we want to get closer to the *elliði*, this question is essential. At first glance, this borrowing is surprising because loanword studies teach us that if the Scandinavians borrowed a term for a ship type, they most likely also borrowed the ship type. During the period in question, however, the Scandinavians dominated Northern European maritime technology and it seems that only exceptionally did they borrow technical solutions and terms, while other peoples frequently borrowed from them. On closer inspection, however, we should expect that the (Northern) Slavs were the foremost experts on river vessels because they lived in vast expanses of land mostly connected via boat travel on enormous river systems. Accordingly, it should not surprise us if the Scandinavians borrowed lake and river boat types or combined river / sea vessel types from the Slavs, and of this we have examples: the type *prámr* (today *pram*) m., first attested in Old Norse in *Þulur*, was ‘a flat-bottomed rowing boat; a barge’, and the term is borrowed from Slavic.<sup>145</sup> It is likely that so, too, was the term *karfi*, which seems to have referred to a com-

<sup>144</sup> Alexander Jóhannesson 1923: 89 in de Vries 1962: 100.

<sup>145</sup> Finnur Jónsson 1912–15 B I: 668; Falk 1912: 89.



bined inland / ocean-going vessel in the Scandinavian High Middle Ages.<sup>146</sup> The *leðja* and the *elliði* seem to be two more examples. As we have seen, the Russian *lodiya* was a combined inland / sea vessel and the Medieval Swedish and later Scandinavian *lodja* / *lorje* was a flat-bottomed craft suitable for shallow or sheltered waters. There are also indications that the *elliði* was such a combined vessel, namely in the tradition connecting the *elliði* to the Namdalseidet isthmus between Trondheimsfjorden and Løgnin / Namsenfjorden to the north-west, in Central Norway. Ketilbjørn gamli is said to have come to Iceland with the ship *Ellði* from this area (Namdalen) and, according to *Hversu Noregr byggðisk*, the legendary King Beirir fixed an *elliði* to a sled in mid-winter and sailed across this isthmus because he had been promised all the land to the port side of his ship as he sailed north up the Norwegian coast.<sup>147</sup> This is unhistorical of course, but there is reason to believe that inherited oral tradition lies behind the tale, and why state that the king used the unusual ship type *elliði* in this operation? Was it because *elliðar* were especially suited for isthmus crossings?<sup>148</sup> The isthmus is not dry all across; for most of the journey one would let the vessel float in a small river with the telling name *Ferja* ‘the ferry’ – provided one had a relatively flat-bottomed vessel that was small enough to suit this kind of combined journey. Namdalseidet is by far the widest of the frequently used isthmuses on the Norwegian west coast – it is now close to twenty kilometres across (after one more millennium of post-glacial rebound) – and there is sea on either side, rather than a lake to one side, as is the case with the major isthmuses in Eastern Norway. Close to the isthmus on the north side is the mouth of one of Norway’s longest rivers, *Namsen*, Old Norse \**Nauma*

<sup>146</sup> As I will argue in a forthcoming article, cf. Falk 1912: 94 and Korhonen 1987.

<sup>147</sup> *Flateyjarbok* 1860–68 I: 22, *Hversu Noregr byggðist* 1954, ch. 1.

<sup>148</sup> According to *Orkneyinga saga* (1965: 98–99), King Magnús Barefoot did the same trick on the west coast of Scotland in the latter part of the eleventh century, with a *skúta*, which was a small and light ship (common in the High Middle Ages) and thus also suited for this use.

(the valley in which it flows was called *Naumudalr* ‘\**Nauma* valley’), which probably means ‘the boat river’ (from *nau-* as in Old Norse *naust* ‘boat house’ and Latin *navis* ‘a boat’).<sup>149</sup> For these reasons, Namdalseidet is the place in Norway most likely to support a specialised ship type for the combination of sea, river, and isthmus dragging. This may be why Ketilbjørn gamli owned an *elliði*: it was more useful for him than for most others since he lived in an area that called for such a vessel, and therefore he sailed to Iceland in one (I find it more plausible that Ketilbjørn had an *elliði* than that he had a ship named *Elliði*; when *elliði* was a ship type, this term could hardly have functioned as a proper name without some kind of addition – rather like naming a ship \**Tanker* or \**Cruise Ship* today. Therefore, there is reason to believe that the *elliði*, traditionally connected to Ketilbjørn gamli, was reinterpreted as a proper name once this ship type fell out of use; this *Elliði* may have inspired the name of Friðþjófr’s ship). If the *elliði* was a combined river / sea vessel, this may also explain why it is so rare in Old Norse poetry: such vessels are often considered ugly and not proper boats or ships, whereas skaldic poetry shows great preference for high status topics. This understanding fits in well with the only two skaldic references to *elliðar*; they are both found in the context of mocking. The *Elliði* of *Friðþjófs saga*, on the other hand, is highly praised, both in the prose and the Eddic-metre poetry, but it is hard not to see this as a product of fantasy at a time when the memory of actual *elliðar* had faded.

From this discussion, it seems that the *elliði* can with some probability be understood as a rather flat-bottomed vessel that combined both river and sea use and that was not uncommon in the early Viking Age. Yet it seems impossible to give more detail and to identify Viking Age ship depictions or finds as *elliðar*.

<sup>149</sup> Sandnes and Helander 1997. See Finnbogi Guðmundsson (1965: 6, footnote 5), about the variant *Naumsi*, which does not necessarily contradict the essence of the above.

## 9. Conclusion

All the results presented in this article have some degree of uncertainty to them and, because of the source situation, it is unlikely that we will ever reach complete certainty with regard to these questions. Even so, the study is valuable, because the results on *knørr* and *skeið* are quite certain, and because what should be required from research is only that it presents understandings that are more probable than existing alternatives, by being based on as firm evidence as possible. Our view of the Early Viking Age ship types should be based upon collection and systematisation of all the available data, however insufficient it may be, not on guesswork and High Medieval misconceptions.

What we can hope for to improve the source situation is more ship finds, especially from the Baltic Sea, which has hitherto not had shipworms, because of the brackish water, so gunwales, stems, and other term-defining traits may still be intact. Denmark took the lead in Viking ship research after the find of the Skuldelev ships in the 1960s, but this position ought to be taken by the countries around the northern Baltic because they have the best natural conditions for the preservation of wrecks. To my knowledge, wrecks of Viking Age ships have already been identified on the Swedish coast, but lack of interest from funding bodies blocks examinations – and now a new type of shipworm is spreading rapidly, so time may be running out.

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## 10. Appendix. The earliest Scandinavian evidence of terms for ship types

Compare the discussion in § 2. Although I define the middle of the tenth century as the end of the early Viking Age, I include attestations up to around 1000 AD, to make sure that all relevant attestations are included and as a background for the discussion. Attestations from the second half of the tenth century have not been used as part of the basis for conclusions. The terms given in bold type are those with which the discussion in § 3 concluded.

### 10.1 Ship types and ship designations in Old Norse skaldic poetry until 1000 AD

The list was compiled by:

- going through the normalised and corrected volume (B I) of Finnur Jónsson's edition of the skaldic poetry (1912–15), up to 'The 11<sup>th</sup> century' (p. 177.),<sup>150</sup>
- consulting all the ship type terms mentioned by Falk (1912) in Finnur Jónsson's *Lexicon poeticum* (1913–16) and checking these attestations in the edition (B I),<sup>151</sup>
- checking in the variant volume (A I) that the occurrences are valid.

*kennings*, such as *drasill sunða* 'waterway steed' and *brimdýr* 'surf animal', are not included. *Naðr* and *Ormr* 'snake, dragon' are not listed when they are short names for the ships *Ormrinn langi* and *Ormrinn skammi*.

<sup>150</sup> I use Finnur Jónsson's edition because the on-going Skaldic Project had not reached the oldest poems when the compilation was done and does not present the skaldic corpus chronologically.

<sup>151</sup> Falk 1912: 85 ff.

FJ page		FJ's dating	Name of poem	Term / quotation	Comment
4	Bragi gamli Boddason		<i>Ragnarsdrápa</i> 17	The sea referred to as the road of a <i>borðróinn bardí</i> 'a ship rowed on both sides'.	
4	Bragi gamli	800–850	'Ubestemmelige vers'	<i>Pars sem lofðar lita lung váfaðar Gungnis</i> 'it was as if the men saw Óðinn's <i>lung</i> '.	Uncertain. We have no information that Óðinn had a special ship, so we should rather expect that <i>lung</i> here refers to his horse, Sleipnir.
7	Þjóðolfur ór Hvini	(Late?) 9 <sup>th</sup> c	<i>Ynglingatal</i> 4	'House' = <i>Arinkjöll</i> 'hearth ship'.	
11	–"	–"	–" 24	'House' = <i>brandnór</i> 'hearth ship'.	
11	–"	–"	–" 24	'House' = <i>toptar nokkvi</i> 'toft ship'.	
19	–"	–"	<i>Lausavísa</i> 2	'Sea' = <i>flatvöllr fleya</i> 'the flat field of ships'.	
20	Þorbjörn hornklofi	c. 900	<i>Glymdrápa</i> 2	'Fleet of warships' = <i>rsinaðr</i> 'splendid dragon' and <i>nokkvar</i> (pl.).	
20	–"	–"	–" 3	'Warship' = <i>skip</i> .	
22	–"	870s or 880s?	<i>Haraldskvæði</i> 5	'Warships' = <i>kjólar</i> (pl.).	Finnur dates Þorbjörn, to 'around 900'. See § 6.
23	–"	–"	–" 7	'Warships' = <i>knerrir</i> (pl.).	–"
29	Þórir snepill	c. 900	<i>Lausavísa</i>	'Warrior' = <i>kjola keyrir</i> 'driver of ships'.	
31	Egill Skalla-Grímsson	936	<i>Hofuðlausn</i> 1	'Ocean-going craft' = <i>eik</i> .	
31	–"	–"	–"	'Head' = * <i>munknorr</i> 'mind ship'.	Manuscripts <i>míns knorr</i> .
34	–"	960	<i>Sonatorrek</i> 3	<i>Nokkvi?</i>	Corrupt stanza.
41	–"	962	<i>Arinbjarnarkviða</i> 21	'House' = <i>legvers knorr</i> 'bed ship'.	
42	–"	c. 907	<i>Lausavísa</i> 1	'Warship' = <i>fley</i> and <i>knorr</i> .	
47	–"	934	<i>Lausavísa</i> 22	'Craft' = <i>karfi</i> .	
55	Guttormr sindri	10 <sup>th</sup> c.	<i>Hákonardrápa</i> 2	'Warships' = <i>skeiðar</i> (pl.).	
56	–"	–"	<i>Hákonardrápa</i> 7	'Warships' = <i>snekkjur</i> / <i>skeiðar</i> (pl.).	Variants in the manuscripts. Dated to before 960 by Jesch (2001a: 126, footnote 18).
65	Glúmr Geirason	Before 950.	'Kvad om Erik blodøkse'	'Sea' = <i>ferju bakki</i> 'hill of the ferry'.	

64	Eyvindr skáldaspillir	c. 965	<i>Lausavísa</i> 9	'Shield' = <i>Ullar kjóll</i> 'Ullr's ship'.	The god Ullr's ship was named <i>Skjoldr</i> 'shield'.
71	Kormákr Ögmundarson	955–970	<i>Lausavísa</i> 4	'Game board' = <i>húnknorr</i> 'game piece ship'.	
83	–"	955–970	<i>Lausavísa</i> 57	'Some ship in the king's fleet' = <i>elliði</i>	
99	Gísli Súrsson	970s	<i>Lausavísa</i> 15	'Sea' = <i>braut fleya</i> 'the road of ships'.	
115	Vígfúss Víga- Glúms-son	c. 986	'Digt om Hakon jarl (?)'	'Warship' = <i>knorr</i> .	
116	Brúsi Hallason	2 <sup>nd</sup> half of 10 <sup>th</sup> c.	<i>Lausavísa</i>	'Shield' = <i>fleygarðr</i> 'ship fence'.	
117	Einarr skálaglamm	c. 986	<i>Vellekla</i> 2	'Shield' = <i>Ullar askr</i> 'Ullr's ship'.	See comment to 64.
–"	–"	c. 986	–" 3	'Warrior' = <i>orþeysir flausta</i> 'driver of ships'.	
–"	–"	c. 986	–" 6	'Poem' = <i>fley berg-Saxa</i> 'ship of the dwarfs'.	Two dwarfs saved themselves from a skerry by giving away the (mead of) poetry; it thus functioned as a ship.
124	–"	c. 986		A warship referred to as a <i>borðróinn barði</i> 'a ship rowed on both sides'	
126	Björn Breiðvíkingakappi	c. 1000	<i>Lausavísa</i> 5	'Atlantic-going craft' = <i>flaust</i> .	
128	Steinunn Dalksdóttir	c. 999	<i>Lausavísa</i> 2	'Atlantic-going craft' = <i>knorr</i> .	
131	Eysteinn Valdason	c. 1000	'Et digt om Tor' 2	'Two-man rowing boat' = <i>flaust</i> .	
134	Þorleifr jarlsskáld	c. 990	<i>Lausavise</i> 5	'dinghy' = <i>bátr</i> .	
–"	–"	–"	–"	'Atlantic-going cargo ship' = <i>knorr</i> x 2.	
137	Tindr Hallkellsson	c. 987	'Drape om Hakon jarl' 4	'Warships' = <i>skeiðar</i> (pl.).	
137	–"	–"	–" 5	'Warships' = <i>skeiðar</i>	
138	–"	–"	–" 9	'Warships' = <i>skeiðar</i>	
138	–"	–"	–" 10	'Warships' = <i>skeiðr</i>	
142	Eilífr Goðrúnarson	c. 1000	<i>Þórsdrápa</i> 14	'Breast' = <i>hlátr-elliði</i> 'laughter ship'.	FJ understands <i>Ellidi</i> as a name.
147	Hallfreðr vandræðaskáld	c. 990	<i>Hákonardrápa</i> 1	'Shield' = <i>Ullar askr</i> 'Ullr's ship'.	See comment to 64.
148	–"	996	<i>Óláfsdrápa</i> 1	'Warships' = <i>herskip</i> .	
151	–"	1001	<i>Óláfsdrápa, erfdrápa</i> 6	'Warships' = <i>skeiðar</i>	

153	-"	-"	-"- 14	'The warship <i>Ormrinn langi</i> 'the long serpent' = <i>et langa lung</i> 'the long ship'.	-"
158	-"	996	<i>Lausavisa</i> 4	'Atlantic-going craft' = <b><i>knorr</i></b> .	
158	-"	c. 1000	<i>Lausavisa</i> 5	'Poem' = <i>nokkvi Austraburur</i> 'ship of the dwarf'.	See comment to 117–3.
162	-"	c. 1000	<i>Lausavisa</i> 24	'A splendid, beautiful (war?)ship' = <i>fley</i> .	
162	-"	-"	-"	'A splendid, beautiful (war?)ship' = <b><i>skeið</i></b> .	
163	-"	-"	<i>Lausavisa</i> 26	'Atlantic-going ship' = <b><i>knorr</i></b> .	
167	Anonymous	10 <sup>th</sup> c.	<i>Oddmjör</i>	'Warship' = <b><i>skeið</i></b> .	
169	Anonymous	996	'Om Stefnirs skib'	'Atlantic-going ship' = <b><i>knorr</i></b> .	
169	Anonymous, 'nokkvamaðr'	c. 999	<i>Lausavisa</i>	'Single-man rowing boat' = <i>nokkvi</i> .	
172	Anonymous	10 <sup>th</sup> c.		'Craft in general' = <i>bátar</i> (pl.).	
173	Anonymous	10 <sup>th</sup> c.		'Poem(s)' = <i>skip dverga</i> 'ship of dwarfs'.	See comment to 117–3.
174	Anonymous	10 <sup>th</sup> c.		'Sea' = <i>flausta ferill</i> 'the road of ships'.	
176	Anonymous	c. 980	<i>Lausavisa</i>	'Warships' = <b><i>skeiðar</i></b> .	

## 10.2 Terms for ship types in runic inscriptions before 1000 AD

Selected from Jesch 2001a (: 123 ff.). Unspecified terms like *skip* are not mentioned.

Location of inscription / name	Code	Term / text	Dating	Comment
Tryggevælde, Zealand, Denmark	DK Sj 82	<i>raknhiltr ... sati stain þansi auk karpi hauk þansi ... auk <b>skaip</b> þansi</i> 'Ragnhildr ... placed this stone and made this mound ... and this <b>skeið</b> (stone ship) ...'	c. 900	Refers to a stone ship setting (now lost) of which the rune stone was probably a part. Nielsen 2006: 301
Fresta church, Uppland, Sweden	U 258	<i>....on trabu nurminr o <b>kniri</b> asbiarnaR</i> '...The Norwegians killed him on Ásbjörn's <b>knorr</b> '	980–1015	<i>Samnordisk runtextdatabas</i> , <a href="http://www.nordiska.uu.se/forskn/samnord.htm">http://www.nordiska.uu.se/forskn/samnord.htm</a> , 12.05.2011 / Gräslund 2006: 126.



### 10.3 Terms for ship types in Eddic poetry

The list has been compiled by looking up all the ship type terms mentioned by Falk (1912) in Finnur Jónsson's *Lexicon poeticum* (1913–16), checking the attestations in Bugge's edition (1867) of the Eddic poems and searching for the terms in a digital text file of the Eddic poems from <http://heimskringla.no> [address checked 20 November 2012].<sup>152</sup>

<i>Völuspá</i> 51	A <b>kjóll</b> carries the giants to Ragnarök.
<i>Hávamál</i> 74	Mention of <i>skip</i> s <i>ráar</i> 'ships' sail yards'.
<i>Hávamál</i> 82	Mention of <i>skip</i> in connection with speed.
<i>Hávamál</i> 154	'Some craft' = <i>far</i> .
<i>Grímnismál</i> 43–44	'Freyr's Skíðblaðnir' = <i>skip</i> .
<i>Hárbarðsljóð</i> 7	'Rowing boat' = <b>eikja</b> .
-“- 39	'Ocean-going craft' = <i>skip</i> .
-“- 53	'Rowing boat' = <i>bátr</i> .
<i>Rígsþula</i> 48	'A kings' ship' = <b>kjóll</b> .
<i>Hymiskviða</i> 19	'A warship' = <b>kjóll</b> .
-“- 33	'Brewing container' = <b>ølkjóll</b> 'ale ship'.
<i>Völundarkviða</i> 33	Mention of <i>skip</i> s planking.
<i>Helgakviða Hjörvarðssonar</i> 12, 18, 19, 23, 28	'Warships' = <i>skip</i> (pl.).
<i>Helgakviða Hundingsbana</i> I, 23	'Warships' = <b>beit</b> (pl.) and <i>skip</i> (pl.).
-“-, 24	'Warships' = <i>skip</i> (pl.).
-“-, 30	'Warships' = <i>far</i> .
-“- 31	'Fleet of warships' = <i>flaust</i> (pl.).
-“-, 49	'Warships' = <b>kjólar</b> (pl.).
<i>Helgakviða Hundingsbana</i> II, 5, 6	'Warships' = <i>fley</i> (pl.).
<i>Helgakviða Hundingsbana</i> II, 13	'Warships' = <i>langskip</i> (pl.).
<i>Helgakviða Hundingsbana</i> II, 19	'Warships' = <i>skip</i> (pl.).
<i>Helgakviða Hundingsbana</i> II, 32	'Unspecified ship' = <i>skip</i> (pl.).
<i>Helgakviða Hjörvarðssonar</i> 14	'Warship' = <b>beit</b> .
<i>Sigurðarkviða in skamma</i> 53	'Some craft' = <i>far</i> .
<i>Gudrúnarkviða in forna</i> 16	'Splendid warship' = <i>skip</i> .
<i>Atlamál</i> 98	'Long-distance ship' = <i>skip</i> .
<i>Atlamál</i> 103	'Burial ship' = <b>knörr</b> .

<sup>152</sup> Falk (1912: 85 ff.

#### 10.4 Terms for ship types only used in poetry

*Beit* n., *eik* f., *flaust* n., *lung* n., *nór* m., *regg* n. In addition, *askr*, *elliði* and *kjóll* have very limited use in prose; see the discussions above. The list is made by comparing Falk's list of Old Norse terms for ship types (1912) with Finnur Jónsson's *Lexicon Poeticum*, Fritzner 1883–96, and *A Dictionary of Old Norse Prose*, <http://dataonp.hum.ku.dk/>, whose database has been very useful in other parts of the study, too.<sup>153</sup> Terms only occurring in *Pulur* (footnote 17) are not included.

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<sup>153</sup> Falk 1912: 85 ff.

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## Samandrag

Dei skipstypene vi kan lesa om i Heimskringla og resten av den norrøne litteraturen – korleis såg dei ut? Er det mogeleg å kople dei til skipsfunna og skipsbileta som vi kjenner frå vikingtida og mellomalderen? Denne artikkelen er eit forsøk på å gjera eit slik kopling når det gjeld tidleg vikingtid. Eit grunnleggjande kjeldeproblem er at den norrøne prosaen, som er frå 12–1300-talet, skildrar den skipsteknologien forfattarane kjende frå si samtid, også når dei fortel om hendingar mange hundre år tidlegare, då andre skipstypar og andre tekniske løysingar var i bruk. Likevel inneheld det norrøne tekstkorpuset nemningar på eldre skipstypar og sporadiske opplysningar om dei. Forfattaren prøver å sile ut det eldste laget av opplysningar, med hjelp av skaldedikt traderte i lang tid fram til dei vart nedskrivne, runeinnskrifter, utanlandske tekstar, poetiske nemningar, etymologi, jamføring med båttypar kjende frå seinare tradisjon, m.m. Han kjem fram til at *knørr*, *beit*, *skeið*, *kjóll*, *askr* og *elliði* var dei viktigaste skipstypene i Skandinavia tidleg i vikingtida, i alle fall i vest, og at nemninga *knørr* på den tida vart brukt om krigsskip eller kombiskip som Oseberg og fyrst seinare om frakteskip som Skuldelev 1. ‘Skip med attoverbøygd stamn’ ser ut til å ha vore den opphavlege tydinga til *knørr*. *Kjólar* ser ut til å ha vore dryge allroundskip som Gokstad, og *beit* slike skip med trekanta utfyllingar under kvar stamn som vi kjenner frå svært tidlege skipsbilete. *Skeiðar* var etter alt å dømme lange og slanke, representerte av Ladbyskipet. *Askar* er ein annan svært tidleg type, og nemninga kan vise til at borda på den typen var sydde saman, som på ein sveipask. *Ellidrar* ser ut til å ha vore ein kombinert elve- og sjøgående type, opphavleg austuropeisk.