

I. ROZPRAWY I ANALIZY

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The semantic development of Germanic **steur-*: poles, rudders, anchors, withies and retractable keels

Rozwój semantyczny germańskiego **steur-*:
pale, stery, kotwice, pręty łożyny i chowane kile

Abstract: This article discusses the relationship between the Old Germanic words for ‘a rudder’: Old Norse *stýri* / *stjórn*, Old High German *stiura*, Old English *steor*, etc., and Old Norse *staurr*, ‘a (pointed) stake’. These words in all probability stand in an ablaut relation to each other but it is difficult to tell what the cognitive link might be. The standard answer is that a *stýri* etc. originally was a beam/log/pole, understood as something similar to an oar, used to steer a ship. But it is difficult to steer a ship with a beam, log or pole, and a steering oar does not look much like these things. My suggestion is that a *stýri* etc. originally was more or less the same as a *staurr*, namely a pole which goes down into a substance that provides resistance and which thus anchors something. On the earliest depictions of ships with *stýris* etc. in Northern Europe, which are rowing ships, it seems that the function of the *stýri* was not to give the ship direction but to prevent it from drifting sideways on the water. On a *stjóri* ‘primitive anchor’ (Old Norse), the decisive element is a pointed transverse at the bottom end which digs into the ground. Similarly, a *stjóri* in Faroese is a rope or fastening whereby people and goods are pulled ashore through the surf. Norwegian *stjor(e)* also have meanings that are fundamentally similar to this. The essential argument for the proposed understanding is that it allows *stýri/stjórn/stiura* etc. to have an original meaning close to that of Old Norse *staurr*, which the etymological relatedness demands. Our semantic complex surrounding *to steer*, *steuern*, etc., probably co-evolved with the directional *stýri* etc. that accompanied the evolution of the Northern European sailing ship during the Merovingian age.

Key words: Iron Age sailing; rowing ship; rudder; steering; etymology; Wörter und Sachen

Old Norse *stýra* vb., *stýri* n. ‘(side-)rudder’ and *stjórn* f. ‘(side-)rudder, steering’ – from Germanic **steurijan*, **steurija* and **steurnō* – in all probability stand in an ablaut relation to (Old Norse) *staurr* m., ‘stake, thin (pointed) pole’ (Falk and Torp 1903–1906: 825, 855, Pokorny 1959: 1009, de Vries 1962: 557, Ásgeir Blöndal Magnússon 1989: 981, Bjorvand 2020: 46), from Germanic **stauraz*.¹ Words formed from the same ablaut series are normally close to each other in meaning. This can be illustrated by the fact that Old High German *stiura* f. – formed from the same ablaut grade as *stýri* and *stjórn* – means both “Ruder” and “Stab” (Latin *baculus*; Schützeichel 2004 IX: 233–240), i.e. something close to *staurr*. Similarly, Gothic *Stiuri* f. means both “Pfahl” and “Steuerung” (Köbler 1989: 502). Thus, there cannot be much doubt that there is a cognitive link between *stýri* and *stjórn* on the one hand, and *staurr* on the other. The corresponding verb *stýra* ‘to steer’ should etymologically mean ‘to use a *staurr* \approx *stjóri*’. It is difficult to tell, however, what the cognitive link might be.

The answer most often suggested is that a *stýri* ‘rudder’ “originally was a beam or oar used to steer a ship”² – here in the words of Ásgeir Blöndal Magnússon (1989: 981; similarly in e.g. Pokorny 1959: 1009, Grimm and Grimm 1854–1961 XVIII: 2608 and Bjorvand 2020: 46). Sometimes words like “log” or “pole” are used instead of “beam”. But it does not work very well trying to steer a ship with a beam, log or pole. Nor does a steering oar look much like these things in that it is flat and wide for most of its length. In the very oldest period, the wide part constituted a shorter section of a steering oar (see Rieck and Crumlin-Pedersen 1988: 108), so that it was more like a normal oar. But no one compares ordinary oars to logs or poles. If we are to explain the overlap in meaning suggested above, we have to be able to point out a line of thinking that allows ‘(side) rudder’ and ‘pole’ to be linked in some other way. The suggestion made by Falk and Torp hones in on the Old High German *stiura* meaning “Steuer” (‘tax, duty’): “The original meaning of *stýri* [‘rudder’] is [...] ‘support, helping-oar to support the passage of the vessel’” (“fartøiets gang”; Falk and Torp 1903–1906: 855). This is no apt description of how a rudder works. I am yet to encounter anything similar in reference works or technical presentations of ships. Such texts normally emphasise that the function of the rudder is to change the boat’s direction (e.g. *Store norske leksikon* [‘Great Norwegian Encyclopedia’], <https://snl.no/ror>).

¹ I am grateful to Terje Torgilsteit and Terje Planke for commenting on drafts of this article.

² Quotations in Scandinavian languages are translated into English by the author (E.H.) without further notice.

I have a different suggestion. This entails that *staurr* has a different fundamental meaning than what we normally envisage, but one which is nonetheless well known, and that ‘rudder’ and ‘steering’ are derived from this fundamental meaning in a different way from what has been imagined. The essence of my approach is to examine what the referents to Old Norse *stjór-* have in common with stakes.

My approach is inspired by the early 20th century movement *Wörter und Sachen*, which argued that the etymology of words should be studied in close contact with the study of the artefacts and cultural concepts that the words had denoted. Many of the principles and the theories of the movement have since been incorporated into modern historical linguistics such as the practice of cross-referencing with archaeological data. It may seem, however, that the inherited pre-modern material culture recorded by ethnographers in modern times is not equally often taken into consideration. In this form of culture and its terminology we frequently find what may be called cultural fossils that can give us valuable information about past cultural stages. It is also a question whether it is customary to go deeply enough into this kind of material in etymological studies today. In the case of *stýri*, *stjóri-* and *staurr* I believe we need to:

1. examine more closely than has hitherto been done what the terms *staurr*, *stýri* and *stjóri* referred to,
2. examine more closely what other attested Old Germanic word forms derived from the Germanic root **steur-* / *staur-* referred to, and
3. examine more closely what the **steur-* / *staur-* words only recorded in later times refer to.

This will take us on a tour through ancient anchors, rowing ships, northern Europe’s earliest rudders and sailing ships, fences, haymaking, grain harvest, withies, taxation, pre-Christian sacrifices at posts, and more. The examination will be based upon dictionary entries, medieval and classical texts, ancient iconographic materials, ship finds, and my practical experience with sailing Viking ship replicas and their successors in vernacular Scandinavian traditions. *Stýri* and the corresponding Old Norse verb *stýra* ‘to steer’ have cognates in all the Germanic languages. I focus on the Old Norse forms because the medieval vocabulary is best recorded in this language.

Old Norse *stjóri* m., is a “a sort of anchor for smaller vessels” (“Dreg, Krabbe, et Slags Anker til mindre Fartøier”; Fritzner 1883–1896 III: 551). The word exists in Modern Icelandic with the same meaning. Here, Sigfús Blöndal explains *stjóri* as “Stone used as anchor (for smaller boats)” and “anchor” (also “Sinker in the corner of a fishing net or on a fishing line” and “mooring line”; Sigfús Blöndal 1920: 803, cf. Lúðvík Kristjánsson 1982:

190–192). An Icelandic *stjóri* = *stjórasteinn* ('*stjóri* stone') looks like the image in Figure 1.

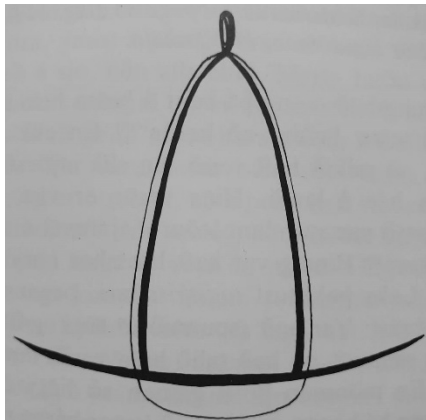


Figure 1. Drawing of an Icelandic *stjóri* = *stjórasteinn*. From Lúðvík Kristjánsson (1982: 191, cf. 190, 192)

Figure 2 shows a Norwegian example from the 1700s of the same sort of anchor, in Norwegian often called a *krake* or *krabbe*. It is included here to make Figure 1 comprehensible. The drop-shaped outline in Figure 1 is the cross section of a wide, flat stone enclosed in a frame. At the lower end of the frame there is a transverse with points at either end; these are to dig into the sea bottom. At the upper end there is a fastening for attaching a rope. The function of this wide, flat stone is to lend gravity to the anchor and turn the frame so that one of the sharp, tapered ends will always point towards the bottom. The frame enclosing the stone is set in a groove cut into the stone to ensure that the frame does not slide off. On the Icelandic example, frame and points are made of iron, on the Norwegian one wood is used, which must be an older solution.³ The wooden version is constructed in such a way that the ends of a cleft piece of wood are fastened into a transverse. The iron variety in principle has the same construction so that one piece constitutes the transverse at the bottom while another piece constitutes the rest of the frame.

What we see in Figure 1 and Figure 2 are the typologically oldest form of anchor that we know, apart from stones with rope around them or through them. In Mediterranean countries, these have been known since the Bronze

³ Many primitive anchors have two sets of this wooden construction joined together so that the beams at the bottom cross each other. These are typologically speaking a younger type. In Icelandic, this type is generally called a *kraka* f. or *kraki* m. (Lúðvík Kristjánsson 1982: 190–192), while both types seem to be called both *krabbe* and *krake* in Norwegian (see <https://digitaltmuseum.no/>).

Age (Wachsmann 2009: 262; 2009 [1995]: 335, 340), and there is no reason to imagine anything other than it being very old also in the North.

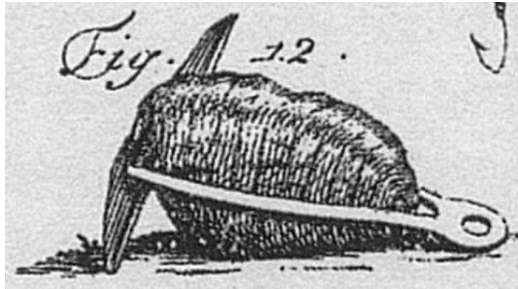


Figure 2. Krake, from Strøm (1762 I), table III

When it comes to comparing the referents of *stjóri* and *staurr*, I would like to point out that a *staurr* is not just any elongated piece of wood. Modern Norwegian *staur* is defined as a “slender pole or rod which has been sharpened at one end so that it can be placed into the ground [...]” (*Norsk Ordbok* 1966–2016 X: 1204). This links up with the Norwegian verb *støyre* (with *-øy-* from *-au-* with *i*-mutation), “to put a stake, pole or the like into the ground” (*Norsk Ordbok* 1966–2016 XI: 41), and Icelandic *staura* ‘the same’ (Sigfús Blöndal 1920: 793). A *staura* f., which in Modern Icelandic is “a darning needle” (Sigfús Blöndal 1920: 793) is also pointed in order be able to enter something.

Accordingly, there is a fundamental difference between *stauragarðr* ‘staur fence’ and *skíðgarðr* ‘split log fence’ in Old Norse (Fritzner 1883–1896 III: 316, 531). A *stauragarðr* is attested in only one place but may look like a palisade. Compare Modern Swedish *störgård*: “fence consisting of vertical beams hammered down into the ground (closely) next to one another” (*Ordbok över svenska språket* 1898-, vol. 32: 14225; common Scandinavian *-au-* became *-ö-* in Swedish). A *skíðgarðr*, on the other hand, is dominated by the *horizontal* split logs.

This understanding of *staurr* corresponds to the Gothic verb *stiurjan*, cognate with *stýra* (and Modern English *steer*). It means “aufstellen, geltend machen, feststellen” / “establish as governing, make determinative, set up as a guidepost” (Köbler 1989: 502). These meanings make sense as ramifications of an essential meaning ‘to erect a pole by ramming it into the ground’.

Pointing in the same direction are a number of words from languages further afield, which etymologists believe to be formally linked to *staurr* and *stýri/stjórn*: Sanskrit *sthāvarás* “dick, feststehend, beständig”, Latvian *stāws* “stehend, aufrecht”, Old Slavic *staviti* “einsetzen” and Greek *staurós*

(*σταυρός*; De Vries 1962: 544, Pokorny 1959: 1009). One meaning of *staurós* is “upright pale or stake” and it is used among other things about poles hammered into the bottom of a lake for foundations (Liddell et. al. 1940: 1635). The connection between these meanings and *staurr* has been pointed out by scholars many times before. But the aspect that a *staurr*, *staurós*, etc. is anchored, rammed into the earth, and is not just any pole, seems to be overlooked. This “anchorage” aspect goes well with other word forms that etymologists have highlighted within this complex: Avestan *stūra* “umfangreich, stark, derb”, Sanskrit *sthávistha-*, “der Stärkste, Derbste, Größte”, Sanskrit *stháviman-* “Breite”, etc. (Pokorny 1959: 1009). Etymologists believe all forms to derive from an Indo-European root with the meaning of ‘to stand, something standing’, or the like (e.g. Watkins 2000: 84).

On an anchor *stjóri*, the transverse at the bottom end has in common with a *staurr* that it is a thin, elongated piece of wood that has been sharpened at one (or both) end(s) in order to dig into the ground. Additionally, a *staurr* will often anchor something the same way as a *stjóri* does, see below. I believe the transverse on the *stjóri* constitutes the link between a *stjóri* and a *staurr*.

A function similar to that of an anchor *stjóri* is found in Norwegian *stjor(e)* recorded in modern times. In *Norsk ordbok* [‘Norwegian Dictionary’], *stjor* m. is explained thus: “stump (stem, twig or small trunk) left after felling or cutting, e.g. after grain harvest”, “thick, leafless end (including root) on a severed twig, stem or on a withy”, and “(stripe of) fresh wood in (or on the outside of) an otherwise rotten tree”. *Stjore* m. can be the same as *stjor*, but is otherwise defined as: “stem [...], stalk; [...] twig”, “soft *risle* [which is a large branch or top of a deciduous tree, sometimes twisted in order to be used as a rope] [...] of birch with which to carry hay or the like”, and “corner of a sack or cloth” (*Norsk Ordbok* 1966–2016 X: 1354).

This is not much to go on, but on the basis of the dictionary cards behind this (<http://usd.uib.no/perl/search/search.cgi?tabid=436&appid=8>), we can obtain a clearer picture. Among other things, it says more clearly that a *stjor(e)* is “the root end of something that has been cut off, the opposite of the top” (card ID 2908125 = Hermundstad 1952: 188; correspondingly in card ID 2036049, 2036062 and 2036045). Several cards note that a *stjore* is “The un-twisted thicker end of a withy” (Forsand, card ID 2036049; cf. card ID 2036062 and 2036050). The example on the first card is: “When I was to button up the load, I happened to wriggle the *stjore* right off, so that the whole lot came tumbling out” (Forsand, card ID 2036049). Another card says: “when you tied up the band on the bundle of leaves [= a bundle of twigs with leaves used as fodder for animals], you put the *stjore* inside the band so it wouldn’t disintegrate” (Forsand, ID 2036045). A third one:

A *stjore* is a “Soft *risle* [...] for carrying e.g. hay. From the thin twigs at the top you made a loop and through this you threaded the *stjore* stalk itself, so that the whole thing worked as a rope around a burden” (Vegårdshei, card ID 2036048). As we can see, a central meaning of *stjor(e)* is ‘the stiff (un-twisted) end of a withy or similar’, see Figure 3.



Figure 3. Withy (withy buckle). From Stavrum (1978: 28). Original accompanying text: “The dark part, which has not been stripped of bark, is the locking mechanism itself”. In order to lock together the two ends, you stick the right-hand loop into the left-hand one from below and slip it onto the unstripped, stiff end, the *stjore*.

Stjorar of this type have much in common with those of the type seen in Figure 1 and Figure 2. For both types, the central feature is a transverse which anchors the pulling forces of a rope. The sense of ‘anchoring’ is also possible to detect behind this meaning of *stjor(e)*: “stump (stem, twig or small trunk) left after felling or cutting, e.g. after grain harvest”. The earthbound part constitutes the anchorage. Compare Faroese *stjóri* m., which is a “rope or fastening whereby people and goods are pulled ashore through the surf” (Jacobsen and Matras 1961: 414). The Norwegian meaning of “corner of a sack or cloth” fits to the same key when seen in relation to Modern Icelandic *stjóri* m., “Sinker in the corner of a fishing net” (Sigfús Blöndal 1920: 803). The fresh remains of a rotten trunk can also be regarded as an anchoring point if, for example, you need to fasten a rope to something – a boat at sea, nets in a lake, a clothesline etc.

To me it seems that also the meanings of ‘steering, rudder’ from Old Norse *stjórn* f. and *stýri* n. derive from a fundamental meaning of ‘anchoring stake’. To us a rudder is a device that gives a boat direction. But this was probably not the main function of rudders in northern Europe originally. A number of Swedish picture stones from the period 400–600 feature images of rowing ships with steering oars at both ends (i.a. Stenkyrka, Västkinde Björkome, Bro; Lindqvist 1941–1942 I figure 7, 11; Åkerlund 1963: 137).

This would be odd if the main function were to steer the ship, because rowing ships do not have a greater need for a directional rudder than sailing ships, quite the opposite. You can easily steer the boat with the oars. At the same time, we see that the first generations of sailing ships, from the 600s through to the early 800s, feature some triangular boards as fillings under the slanting stems (picture stones from Hunninge in Klinte + När Rikvide + Stenkyrka IV, Lindqvist 1941–1942, no. 428, 466, 498; graffito from Oseberg, Christensen 1992: 106; weaving sword from Skomrak, Gjessing 1925: 71). Some of the images depicting this are very detailed and realistic, so there is good reason to believe that such ships actually existed.

Crumlin-Pedersen suggested in 1997 that the hull profile was changed in this way due to “the need for increased lateral resistance of the hull when going under sail. In the first phases this could have been accomplished by building out a ‘skeg’ at each end to fill the triangle” (Crumlin-Pedersen 1997: 174–175). Rowing ships are round and flat bottomed, with no real keel (Åkerlund 1963, Evans and Bruce-Mitford 1975). This is because it is important to minimise resistance when the ship is driven forward by muscle power alone. The keel needed by sailing vessels to reduce leeway when sailing into the wind would constitute a meaningless brake on a rowing ship. An actual keel was added to Nordic ships as part of the development of specialised sailing ships during the Late Iron Age.

Terje Planke and I came up with the same idea about the triangular boards on the earliest sailing ships as Crumlin-Pedersen, independently of him, and we have strengthened the argument by pointing out that the same modification of the keel/stem, with the intention of reducing leeway, is known from several later boat types, which have developed independently of one another (Heide and Planke 2019: 12–13). So, it looks as if there is a direct developmental line from rowing ships with steering oars at both ends to primitive sailing ships with leeway-minimising triangular boards under the stems at both ends. This means that the arrangement with a steering oar both fore and aft on a rowing ship was intended to prevent leeway rather than lend the vessel direction. Reducing leeway can also be needed on a rowing ship, but to a lesser degree than on a sailing ship and for less of the time. The advantage of steering oars when you have only a moderate need of reducing leeway is that they can be taken out of the water when you do not need them, whereas the keel is there, slowing you down regardless. The principle is the same as with centreboards and leeboards in modern times, which are solutions developed for transport or for boats that have to sit on the bottom at low tide in areas with a great tidal range. It therefore seems that the steering oars were originally a kind of retractable keels – that

came to be built into the hull when sailing took off and speeds increased to a point where having a steering oar at the fore became dangerous (Heide and Planke 2019: 8–13).

Steering oars with this function anchor the boat in the water and, in this way, its function overlaps with that of *stjórar* as those in Figure 1 and Figure 2. In fact, the construction is quite similar, see Figure 4. At the upper end, a steering oar looks like a hefty *staurr* and around the middle it is fastened onto the ship with a strong withy through a rounded, wooden block protruding from the hull. The lower end of a steering oar is sharp like an anchor fluk. A *stjórn/stýri*, then, can be understood as the kind of transverse *staurr/stjóri* (*stjore*) that we see in Figure 1, Figure 2 and Figure 3, and which is placed crosswise in order to anchor the pulling force of a rope withy. Admittedly, the rope part of this only goes for one side of the steering oar, but this does not affect the visual impression.

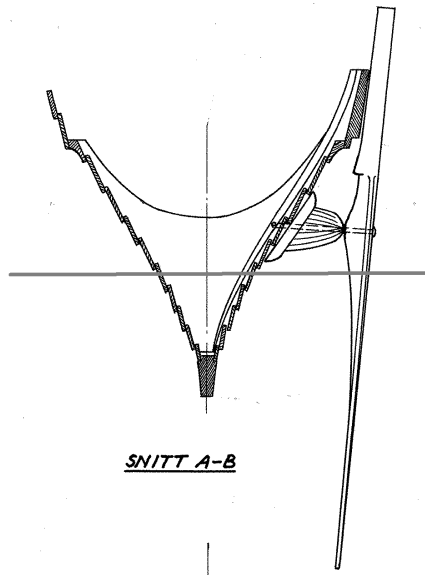


Figure 4. Stýri / stjórñ on the Oseberg ship. Poster printed by Museum of Cultural History (Kulturhistorisk museum), Oslo. Drawing by Lundin, 1954, based on drawings by ship engineer Johannessen. The horizontal line has been added by the author to indicate the water level.

At the same time, there are clear correspondences between what we see in Figure 4 and a Faroese *stjóri*, “fastening whereby people and goods are pulled ashore through the surf”. Firstly, we have to replace water with land in order for this to occur. If we do that, then what we see in Figure 4 is a pole rammed down to anchor the pulling forces of a rope.

The semantic overlap between a *staurr* and a *stýri* / *stjór-* may be that they all refer to stakes or similar that anchor something by reaching down into a substance that provides resistance. This fits very well with the fact that Old High German *stiura* is also attested in the meaning “nagel” (Latin *clavus*; Grimm and Grimm 1854–1961: X,II,II column 2603; Schützeichel 2004: 233).

The time has come to gather all the threads. My suggestion is that a *stýri* / *stjörn* is more or less the same as a *staurr*, i.e. a pole which goes down into a substance that provides resistance and which thus anchors something. The original function of a *stýri* probably was to anchor a vessel to prevent it from drifting sideways on the water. On a *stjóri*, ‘primitive anchor’, the decisive element is the beam which goes crosswise and hooks into the ground in a semi-upright position, thus anchoring the boat. On a *stjore*, ‘withy buckle’, the crucial element is the un-twisted, thick end that goes crosswise and anchors the other end of the withy.

I believe that what I am outlining can provide a better explanation of the German meaning of *Steuer* ‘tax, duty’, which comes from Old High German *stiura*. This meaning is usually explained as deriving from the *stiura* meaning “Stütze” (Latin *fulcimen*; Schützeichel 2004 IX: 233), understood as “stütze, stützender stab, stützendes fundament”, which has then acquired an allegorical usage (e.g. Grimm and Grimm 1854–1961 XVIII: 2608). I find this a bit flimsy. To support is surely a voluntary act, whereas taxes and duties are not. Moreover, it seems to me that the Old High German *stiur-*meanings having to do with ‘support’ should be understood as deriving from a pole rammed into the ground.

Falk and Torp mention something that opens up a different avenue of interpretation, which is the fact that the Latin *stips* ‘duty’ derives from *stipes* ‘stake, pole, stick’ (Falk and Torp 1903–1906: 855; Steinnes and Vandvik 1965: 758). The term *stips* is widely used in cultic contexts, about sacrificing money, food and drink on an altar (Cancik and Schneider 1996–2003 11: 1002). With this in mind, I find it plausible that the development from ‘pole’ to ‘sacrifice, duty’ came about because the original idea concerned sacrificial gifts laid down by a cultic pole. This is a custom known from many religions, such as Sami (e.g. Kildal 1945 [1730 and later]: 141, Solander 1910 [1726]: 23, 25), Old Norse (e.g. Montgomery 2000: 9–10 about Swedish Vikings on the Volga) and indigenous religions in Russia and Siberia (Holmberg [Harva] 1922: 12–14).

Provided this is correct, a similar development may explain how Old Norse *stjóri* m. / **stjórr* m. (the strong form only attested in Modern Icelandic, Sigfús Blöndal 1920: 803), Old High German *stior*, Old English

steor, etc., means ‘a bull (steer)’. The starting point may be that oxen are often tethered to poles that have been rammed into the ground. But the meaning of ‘ox’ may also have arisen from the similarity between the yoke and the pole for a span of oxen and an anchor of the type in Figure 1 and Figure 2 with the *staurr* crosswise. Middle Persian *stōr* “Zugtier, Roß” (Pokorny 1959: 1010) could point in this direction.

The essential argument for the understanding of Old Norse *stýri* / *stjórn* / *stiura* etc. that I suggest is that it allows the words to have an original meaning close to that of Old Norse *staurr*, which the etymological relatedness demands. The reason why this explanation has not been suggested before may be that we are blinded by what to *stýra*/*styre*/*steuern*/*steer* means in the Modern Germanic languages. To us, this verb has no connotations in the direction of a stake rammed into the ground. Even so, the meaning that we know may be caused by a secondary development that has removed the concept of “steering” very far from the starting point. Such things happen over time in the interaction between language and culture. In this case, it seems that the change in material culture that caused the change in the concept was the probable evolution of the *stýri*/*stiura*/*steor* in Northern Europe from a retractable keel on a rowing ship to a device that gives a craft direction.

References

- Åkerlund, Harald. 1963. *Nydamskeppen. En studie i tidig skandinavisk skeppsbygnadskonst*. Göteborg: Sjöfartsmuseet.
- Ásgeir Blöndal Magnússon. 1989. *Íslensk orðsifjabók*. Reykjavík: Orðabók Háskólans.
- Bjorvand, Harald. 2020. Stjørdalselva. *Namn og nemne* 37: 37–49.
- Cancik, Hubert and Helmuth Schneider. 1996–2003. *Der Neue Pauly. Enzyklopädie der Antike*. Stuttgart: Metzler.
- Christensen, Arne Emil. 1992. Skipet. In Arne Emil Christensen et. al. (eds.) *Osebergdronningens grav. Vår arkeologiske nasjonalskatt i nytt lys*. 138–153. Oslo: Schibsted.
- Crumlin-Pedersen, Ole. 1997. *Viking-Age ships and shipbuilding in Hedeby/Haithabu and Schleswig*. Ships and boats of the North 2. With contributions by Christian Hirte, Kenn Jensen and Susan Möller-Wiering. Schleswig: Archäologisches Landesmuseum der Christian-Albrechts-Universität.
- Evans, A. C. and R. Bruce-Mitford. 1975. The ship. In Rupert Bruce-Mitford (ed.) *The Sutton Hoo ship-burial 1. Excavations, background, the ship, dating and inventory*. 345–435. London: British Museum Publications.
- Falk, Hjalmar and Alf Torp. 1903–1906: *Etymologisk ordbog over det norske og det danske sprog*. 2 band med løpende paginering. Kristiania: Aschehoug.
- Fritzner, Johan. 1883–1896. *Ordbog over Det gamle norske Sprog* 1–3. 1. utg. Christiania 1867. Kristiania: Den norske Forlagsforening.

- Gjessing, Helge. 1925. Vest-Agder i forhistorisk tid. In G. Midttun (ed.) *Vest-Agder*. Norske bygder II. 33–75. Bergen: John Grieg.
- Grimm, Jacob and Wilhelm Grimm. 1854–1961. *Deutsches Wörterbuch*. 32 volumes. Leipzig: Hirzel.
- Heide, Eldar and Terje Planke. 2019. Viking ships with angular stems – Old Norse *beit?* *Mariner's Mirror* 105(1): 8–24.
- Hermundstad, Knut. 1952. *Ættarminne. Gamal Valdreskultur*. Norsk folkeminnelags skrifter 70. Oslo: Norli.
- Holmberg [Harva], Uno. 1922. *Der Baum des Lebens*. Suomalaisen tiedeakatemia toimittuksia. Sarja B 16:3. [Helsinki].
- Jacobsen, M. A. and Chr. Matras. 1961. *Føroysk-donsk orðabók. Færøsk-dansk ordbog*. 2. útgáva nógv broytt og økt. Tórshavn: Føroya Fróðskaparfelag.
- Kildal, Jens. 1945 [1730 and later]. Afdruerets Dempelse og den Sande Lærdoms Fremgang [...]. *Norlands og Troms finner i eldre håndskrifter*. Nordnorske samlinger 5, 2. Utgåve Marie Krekling. Oslo: Brøgger. 97–152.
- Köbler, Gerhard. 1989. *Gotisches Wörterbuch*. Leiden, New York, København, Köln: Brill.
- Liddell, Henry George et. al. 1940. *A Greek-English Lexicon*. Ninth edition with a revised supplement. Oxford: Clarendon.
- Lindqvist, Sune. 1941–1942. *Gotlands Bildsteine*. 2 volumes. Kungl. Vitterhets historie och antikvitets akademien. Archäologische Monographien. Gesammelt und untersucht von Gabriel Gustafson und Fredrik Nordin mit Zeichnungen von Olof Sörling. Photographien von Harald Faith-Ell. Nach erneuter Durchsicht und Ergänzung des Materials herausgegeben von Sune Lundqvist. Stockholm: Wahlström & Widstrand.
- Lúðvík Kristjánsson. 1982. *Íslenzkir sjávarhættir II*. Reykjavík: Bókaútgáfa Menningarsjóðs.
- Montgomery, James E. 2000. Ibn Fadlān and the Rūsiyyah. *Journal of Arabic and Islamic Studies* 3: 1–25.
- Norsk Ordbok*. 1966–2016. Ordbok over det norske folkemålet og det nynorske skriftmålet. Oslo: Det Norske Samlaget.
- Ordbok över svenska språket* 1898–. Utgiven av Svenska akademien. [*Ordbok öfver svenska språket / Svenska akademiens ordbok*]. Lund: Gleerup.
- Pokorny, Julius. 1959. *Indogermanisches etymologisches Wörterbuch*. 2 volumes. Bern: Francke.
- Rieck, Flemming and Ole Crumlin-Pedersen. 1988. *Både fra Danmarks oldtid*. Båd og skib i Danmark 1. Roskilde: Vikingskibshallen.
- Schützeichel, Rudolf. 2004. *Althochdeutscher und Altsächsischer Glossenwortschatz*. Bearbeitet unter Mitwirkung von zahlreichen Wissenschaftlern des Inlandes und des Auslandes. Tübingen: Niemeyer.
- Sigfús Blöndal. 1920. *Íslandsk-dansk Ordbog. Íslensk-dönsk orðabók*. Reykjavík: I kommission hos Verslun Þórarins B. Þorlákssonar.
- Solander, Carl. 1910 [1726]. Kort relation, om den danske Missions tilstand uti Norrige [...]. In Edgar Reuterskiöld (ed.) *Källskrifter till lapparnas mytologi*. 18–27. Stockholm: Ivar Hæggströms boktryckeri.
- Stavrum, Einar. 1978. *Forming i naturmaterialer*. Oslo: Universitetsforlaget.
- Steinnes, Asgaut and Eirik Vandvik. 1965. *Latinsk ordbok*. 2. utg. Fyrste utgåva 1958, men rettingar i 1965. Oslo: Det Norske Samlaget.
- Strøm, Hans. 1762. *Physisk og Oeconomisk Beskrivelse over Fogderiet Søndmør, beliggende i Bergens Stift i Norge*. Oplyst med Landkort og Kobberstykker 1. Sorøe / Kiøbenhavn: Jonas Lindgren / Rotheske Boglade.

- Vries, Jan de. 1962. *Altnordisches etymologisches Wörterbuch*. Zweite verbesserte Auflage. Fyrste utgåve 1961. Leiden: E.J. Brill.
- Wachsmann, Shelley. 2009. *Seagoing ships and seamanship in the Bronze Age Levant*. London: Chatham Publishing.
- Wachsmann, Shelley. 2009 [1995]. *The Sea of Galilee boat*. College Station: Texas A&M University Press.
- Watkins, Calvert. 2000. *The American heritage dictionary of Indo-European roots*. Second edition. Boston: Houghton Mifflin.

Rozwój semantyczny germańskiego **steur-*: pale, stery, kotwice, pręty łożyny i chowane kile

Streszczenie: Autor omawia relację między starogermańskimi słowami oznaczającymi ster, czyli staronordyjskim *stýri* / *stjórn*, staro-wysoko-niemieckim *stiura*, staroangielskim *steor* itd., oraz staronordyjskim *staurr* '(zaostrzony) słup'. Słowa te najprawdopodobniej łączy wymiana samogłosek (ablaut), trudno jest jednak ustalić kognitywny związek między nimi. Zazwyczaj twierdzi się, że słowa *stýri* i in. pierwotnie oznaczały podobną do wiosła belkę, kłodę lub słup, których używano do sterowania statkiem. Trudno to jednak robić przy pomocy tego typu przedmiotów, a wiosło sterowe nie wygląda jak żaden z nich. W artykule stawia się zatem tezę, iż *stýri* (i inne wymienione wyżej słowa) pierwotnie znaczyły mniej więcej to samo, co *staurr*, czyli słup wprowadzany w stawiające opór podłoże i kotwiczący dany obiekt. Z najwcześniejszych przedstawień północnoeuropejskich staków ze *stýris* (czyli staków wiosłowych) wynika, iż funkcją *stýri* nie było nadawanie statkowi kierunku, lecz zabezpieczenie go przed bocznym dryftem. Na *stjóri* (co w staronordyjskim znaczyło 'prymitywny rodzaj kotwicy') kluczowym elementem jest znajdujący się w dolnej części zaostrzony element wbijany w dno. Podobnie w języku farerskim, *stjóri* to lina lub zapięcie, przy pomocy którego wyciągane są z morza na brzeg ludzie i towary. Podobne znaczenie mają norweskie słowa *stjor/stjore*. Kluczowym argumentem przemawiającym za stawianą tu hipotezą jest to, iż *stýri* / *stjórn* / *stiura* itd. mają oryginalne znaczenie bliskie staronordyjskiego *staurr*, jak wskazują na to związki etymologiczne między nimi. Istniejący obecnie kompleks semantyczny *to steer* (ang.), *steuern* (niem.) itd. prawdopodobnie ewoluował wspólnie ze *stýri* (i innymi słowami), towarzysząc rozwojowi północnoeuropejskiego statku żaglowego w okresie dynastii Merowingów.

Słowa kluczowe: żeglarstwo w epoce żelaza; statek wiosłowy; ster; sterowanie statkiem; etymologia; Wörter und Sachen

