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Old Norse loanwords in modern Irish

Semantic domains, polysemy and causes of semantic change

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Abstract

This study questions the received wisdom that surviving Old Norse loanwords in modern Irish are fewer than 50 in number and are mostly shipping-related. The eventual goal is a complete survey of all Old Norse loanwords still “in common use in modern Irish” (Greene 1976: 80), since nothing of the sort has been found in the literature. In the interim, this study proposes a list of 67 words, extant in modern Irish only insofar as they are attested in the principal modern dictionaries, and which in light of available evidence are “of probable Old Norse origin” by direct borrowing. For quantitative purposes, these are counted on the basis of one Irish word per Old Norse etymon and are categorised into semantic domains according to the framework of the Loanword Typology Project (Haspelmath and Tadmor 2009), itself an adaptation of the semantic domains proposed in Buck (1949). It is demonstrated that Old Norse loanwords in Irish overwhelmingly belong to the broad category of “culture vocabulary” but are not majoritarily connected with shipping. The main study is followed by a qualitative description of patterns of formal and semantic change observed in the data. These include derivational developments, diachronic semantic changes since Middle Irish, cross-domain semantic shifts and synchronic polysemies in modern Irish. The discussion focuses on extra-linguistic causal explanations for change, but also suggests that some mainstays of cognitive lexical semantics such as prototypicality and radial networks are better-equipped than fixedly categorial semantic domains to account for change after borrowing.

Keywords: Irish, Middle Irish, Old Norse, loanwords, semantic domains, lexical borrowing, Vikings, prototypicality, radial networks, semantic change.

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Abbreviations

Eng.	English
Ir.	Irish
Lat.	Latin
ME	Middle English
MIr.	Middle Irish
MLG	Middle Low German
OE	Old English
OIr.	Old Irish
ON	Old Norse
OS	Old Saxon
PCelt.	Proto-Celtic
PGm.	Proto-Germanic
PIE	Proto-Indo-European
ScG	Scottish Gaelic.

AEW	De Vries. <i>Altnordisches Etymologisches Wörterbuch</i>
CDB	Buck. <i>A dictionary of selected synonyms in the principal Indo-European languages</i>
DIN	Dinneen. <i>Irish-English dictionary</i>
EDIL	<i>Dictionary of the Irish Language based mainly on Old & Middle Irish materials</i>
FGB	Ó Dónaill. <i>Foclóir Gaeilge- Béarla</i>
GK	Kroonen. <i>Etymological Dictionary of Proto-Germanic</i>
OED	<i>Oxford English Dictionary</i>
ONO	Jonsson. <i>Oldnordisk Ordbog</i>
RB	Beekes. <i>Etymological Dictionary of Greek.</i>
RM	Matasović. <i>Etymological Dictionary of Proto-Celtic.</i>

<	inherited from, or derived from
←	borrowed from
>	becomes, changes to, derives.

1 Introduction

1.1 The problem

We have more than 1300 years of philological data from Irish (Russell 1995: 26), starting with the introduction of writing during a period of intense contact with Latin. From the very earliest Irish glosses on religious manuscripts, the inherited lexicon was augmented with Latin words related to revolutionary cultural imports: words “connected with reading and writing” (Dillon 1954: 16) and with theological and church-related concepts; but also with imported southern commodities such as wine (Greene 1976: 25-26) – in short, new words, both abstract and concrete, that were imported along with new concepts, skills, belief systems, commodities and artefacts.

Lexical borrowing from other influential cultures has continued ever since. Most loanwords present in Irish today come from Latin, English or French, in roughly equal proportion (Greene 1966: 26). These three strata of borrowings relate to three periods of language contact in Irish history, one of them still ongoing, which differ in their date, duration, societal context and results.

There is also a much smaller set of loans from Old Norse. Their relative scarcity in Irish, despite four centuries of contact, is an anomaly in a language which has retained many borrowings from other languages.

In recent decades, two unsubstantiated claims have been widely repeated as fact. First, that there are fewer than fifty Old Norse loans in Irish. Second, that these few words are mostly sea-related:

As is well known, the most important category of Norse loans in Irish pertain to navigation (Greene 1976: 79).

We have (...) identified more than twenty words of Norse origin in common use in modern Irish... A more diligent investigation might turn up a few more, but it is improbable that there could be as many as fifty (*ibid*: 80).

The effects on Irish were limited to lexical borrowings, mainly connected with seafaring (Ó Dochartaigh 1992:13).

The Norse contribution to Irish is modest... well under fifty words (Ó Corráin *nd*: 39).

As one might expect, they relate chiefly to seafaring and fishing (Ó Murchu 1992: 36).

The surviving Old Norse contribution to Irish amounts to fewer than fifty words, many connected with shipping... and trade (Holman 2007: 80).

The immediate source of this received wisdom is the above-cited Greene (1976), a conference paper discussing the etymologies of some 30 words. Greene never claims to have counted all Old Norse loans, or to have categorised them in semantic domains. He merely surmises in

passing that there are fewer than fifty. Since 1976, however, this round figure has become accepted as fact, and the same few loanwords have been cited again and again.

Surprisingly, no attempt at a complete list of Old Norse loanwords has so far been found in the literature. Everything suggests that the topic has been perfunctorily dealt with and forgotten about.

1.2 Purposes of the study

The first aim of this study is to make a list of Old Norse loanwords extant in modern Irish. An interesting project from a lexicographical point of view, this should also serve to corroborate or falsify the claim that there are fewer than fifty such items. The first research question is as follows:

1. What Old Norse loanwords are attested in modern Irish? How many are they?

A second aim is to test the claim that Old Norse loanwords in Irish are mainly connected with seafaring. In order to measure what a collection of words is “mainly connected with”, we need to somehow quantify the aboutness of words. This is done by categorising words into a number of semantic domains according to their meaning. Inevitably, then, this study is not only concerned with borrowed lexical items, but also with their referents in the real world. We can state the second research question as follows:

2. How are Old Norse loanwords in Irish distributed across semantic domains?

During data-gathering, it has become apparent that the Old Norse lexicon in Irish has been affected over the centuries by certain so-called “lexicogenetic” (Geeraerts 2010: 23) or word-creating processes. Apart from the act of borrowing, itself a lexicogenetic event, these word-creating processes are of two kinds. Firstly, those which have increased the number of forms present in the language: derivation mainly, although compounding is also frequent in Irish. Secondly, those which have multiplied, displaced and otherwise altered the original or prototypical meanings of borrowed words: in other words, polysemy and semantic change.

These formal and semantic changes are of no relevance to the quantitative research questions outlined above: if anything, they represent a methodological challenge to that work. Nonetheless, the unexpected discovery of so much diachronic change in the data is thought-provoking and interesting in its own right, as well as being rich in historical, cultural and linguistic implications.

I propose first to answer my original research questions within the well-defined quantitative framework of Haspelmath and Tadmor’s Loanword Typology project (see Section 2.1 below). The post-results discussion section will move beyond the quantitative framework to discuss general trends of formal and semantic change in the Old Norse loanwords without attempting to quantify these perceived trends. I will also speculate about the cultural and historical implications of these changes.

1.3 Principal dictionary sources

Among the many data sources used for this study are a number of dictionaries. This section introduces the main dictionaries, which will subsequently be referred to by abbreviations.

Dinneen, Patrick (1904, expanded second edition 1927) *Foclóir Gaedilge agus Béarla: an Irish-English dictionary, being a thesaurus of the words, phrases and idioms of the modern Irish language, with explanations in English* (hereafter DIN), is the oldest of the Irish dictionary sources used here. It draws on obscure small dictionaries made during the 18th and 19th centuries, including manuscript dictionaries, and on field-work conducted in Irish-speaking districts in the late nineteenth and early twentieth century. Dinneen's 1904 preface emphasises "words used in the living Irish language" (DIN: 2); but with one foot in the nineteenth century, Dinneen captured a "modern Irish" that was in decline. His dictionary appears to be the only source for many obscure terms, including some possible Old Norse loanwords which may have survived in the spoken language for centuries. DIN is notoriously all-inclusive, which means that it has been a valuable resource for this study.

There is no etymological dictionary of modern Irish in publication. The nearest substitute we have is the Royal Irish Academy's 1976 *Dictionary of the Irish Language, Based Mainly on Old and Middle Irish Materials* (hereafter EDIL). This troubled project began in the 1850s, passed through the hands of many editors, and was published in fascicles, one letter at a time, between 1913 and 1976. Most of the great Celtologists of the last nineteenth and early twentieth century were involved at some stage, particularly Carl Marstrand and Kuno Meyer. They contributed many proposed etymologies, but the dictionary remains unfinished.

De Bhaldraithe, Tomás (1959) *English-Irish dictionary* (hereafter DBH) was a response to the State's requirement for a modern Irish lexicon of administration and technology. The stated aim of the dictionary is that of "providing Irish equivalents for English words and phrases in common use" (DBH 1959: v). The editor states that "many thousands of words and phrases in current use in the Gaeltacht" are not included, and that the dictionary should not be seen as "an exhaustive word-store of modern literary Irish or of the current spoken language" (DBH 1959: v). Thus, the lexicographical policy is very different to that of DIN, and the lexical abundance of Irish as attested in DIN is diminished. DBH omits many older borrowings, as well as much of the hoard of derivations and semantic extensions that will be discussed in Section 6 of this study. Lexicogenetically, there is a preference for noun-adjective open compounds. For example, English terms for specific types of boat are translated with open compounds composed of Ir. *bád* plus an adjective. Few of the Old Norse boat terms are listed. Where it is necessary to borrow new culture vocabulary (for new technology, or commercial, bueraucratic or legal concepts), DBH is very accepting of neologisms recently borrowed from English. On the other hand, words whose original referents were medieval curiosities sometimes receive modern senses related to mid-twentieth century technology.

Ó Dónaill, Niall (1977) *Foclóir Gaeilge-Béarla* (hereafter FGB) is the most important modern Irish-English dictionary. De Bhaldraithe was a consulting editor, but there is no sign of DHB's lexical restrictiveness. The focus was different here. FGB is very thorough, but not as all-inclusive as DIN. This is a very useful difference between the two generations of dictionaries.

Where items are attested in DIN (1904, 1927) but not in DBH (1959) and FGB (1977), the conclusion drawn in this study is usually that the word in question is no longer current in modern Irish. Several Old Norse loanwords are excluded from the figures reached here for this reason alone.

De Vries, Jan (1977) *Altnordisches etymologisches wörterbuch* (hereafter AEW) is the standard reference work for Old Norse etymology. Definitions in AEW are in German, and have not been translated. Jonsson, Erik (1863) *Oldnordisk Ordbog* (hereafter ONO) supplies attestations for a small number of words that were not found in AEW.

Oxford University Press (1989) *Oxford English Dictionary* (hereafter OED) is very detailed in its treatment both of cognate relations between Old English and Old Norse, and of words borrowed into English from Old Norse. As such, it can be helpful for distinguishing between alternative possible etymologies in Irish. Finally, two volumes from the Brill *Indo-European Dictionary Series* are useful in situations when it is necessary to clarify relations between Old Norse and Old English lexemes, or between Proto-Germanic and Proto-Celtic items, or the possibly inherited status of Irish words. These are Kroonen, Guus (2013) *Etymological Dictionary of Proto-Germanic* (hereafter GK) and Matasović, Ranko (2009) *Etymological dictionary of Proto-Celtic* (hereafter RM).

2 Theory

A number of issues arise in relation to the research questions. This section hopes to address these with help from the following sources. First and foremost, Haspelmath & Tadmor (2009) and Haspelmath (2009) are the main sources of methodological and theoretical support for the quantitative part of the study. Geeraerts (2010) does not concern my research questions, but his cognitive linguistic perspective on lexical semantics provides an alternative framework suitable to the discussion of polysemy and related issues that will feature in the post-results Discussion (Section 6).

2.1 The Loanword Typology Project

The Loanword Typology Project (hereafter LWT) was a typological study of lexical borrowing across 41 languages, led by Martin Haspelmath and Uri Tadmor, and conducted between 2004 and 2009. The study sought empirical answers to the question of borrowability, or “the relative likelihood that words with particular meanings would be borrowed” (Haspelmath & Tadmor 2009: 1). LWT sought to “go beyond the descriptive goal of identifying particular loanwords and their histories, towards the goal of explaining (at least partially) why certain words but not other words have been borrowed from one language into another language” (Haspelmath 2009: 35).

The quantitative study relies heavily on LWT for operational matters (see Section 3). In addition, the following working definitions of concepts such as lexical borrowing, loanwords and inherited lexicon are influenced by the “taxonomy of borrowings” in Haspelmath's theoretical chapter (Haspelmath 2009: 38ff). This study also diverges from the LWT framework on certain points which will be discussed below.

2.1.1 Contact, bilingualism, borrowing

Language contact occurs wherever different speech communities live side-by-side (Hickey 2010: 7), which makes it a very common phenomenon. Possible effects and outcomes of contact are many and diverse. Outcomes are said to depend to a great extent on extralinguistic factors (Matras & Sakel 2007: 2). Potentially determinant factors include the use of one language in a particular domain, such as Old Norse in the marketplace of a Norse settlement; or demographic details, such as the number of speakers of one or other language, the number of multilinguals in one or other speech community, and so forth. (Schendl 2012: 522). Relative status, because it is rooted in the social power of a dominant group over a dominated group, is a wholly extralinguistic factor which can play a determinant role in contact outcomes (Hickey 2010: 7; Schendl 2012: 522).

Bilingualism constitutes both an instance and an effect of language contact. Weinreich famously said that “the true locus of language contact is the bilingual individual” (Weinreich

1953; quoted in Matras 2010: 66). It is probably a given that the borrowing of structural features such as inflections, grammatical forms or sentence structures can only occur as a result of some degree of bilingualism (Matras & Sakel 2007: 2). However, this does not necessarily hold for mere lexical borrowing. The borrowing and dissemination of culture terms, in particular, manifestly does not require bilingualism; and we will soon see that the corpus of Old Norse loanwords in Irish consists largely of culture terms. Instead, the borrowing of cultural vocabulary can be linked to the introduction of new and better technologies, tools or practices in a language contact situation. In the context of Norse settlements in Ireland, we would expect on this basis to find lexical borrowings reflecting the different areas of contact between Irish speakers and speakers of the *dǫnsk tunga*: warfare, shipping, trade; but also the urban space, the settlement, food and basic commodities. The broader historical and sociolinguistic context of Irish – Norse contact is relevant to this study's aims, but due to space limitations I will focus on lexical matters only.

2.1.2 Loanwords

The term is used here in a broad sense to refer to any lexeme that “at some point in the history of a language entered the lexicon as a result of borrowing” from another language (Haspelmath 2009: 36). An important stipulation is that borrowing must be direct from “source language” to “recipient language” (Durkin 2009: 140). This has emerged as a major issue in the present study, because words of Norse provenance have entered Irish indirectly via other languages in the region: Old and Middle English, Scots, Old Norman French, and possibly also Anglo-Norman and Welsh. There is a sizable and frustrating subset of Germanic words whose exact path into Irish remains unknowable. For example, it is not certain that Ir. *graeipe* is an Old Norse loan, although it is of Norse origin:

Ir. *graeipe* ‘manure fork’ ← ON *greip*, or
Ir. *graeipe* ← ME *graip* ← ON *greip*.

Conversely, the following word of well-known Latin origin is an Old Norse loanword:

Ir. *margadh* ‘market’ ← ON *markaðr* ← Lat. *mercātus*.

Uncertainty concerning the exact path into Irish of Norse words is compounded by the nature of prehistoric relationships between Celtic, Germanic and Italic, which underwent convergences and divergences as peoples migrated across central and western Europe.

A possible exception to this rule concerns Old Norse loanwords found in Scottish Gaelic or Manx as well as in Irish, where the path of borrowing into Irish is thought to be indirect via one or these other languages. Given that the Goidelic languages were only beginning to diverge in the period in question (Russell 1995: 9-10), there is a strong case to be made for treating such items as the reflexes of loanwords in a common Middle Irish, as expressed by Ó Buachalla: “The present-day fragmentary pattern of the Gaelic speaking districts should not obscure the fact that historically we are dealing with a linguistic continuum from Cape Clear to Lewis, within which there were only transitions between gradually differentiated dialects” (Ó Buachalla 1977: 96, cited in Russell 1995: 61).

Previous philologists, notably Marstrander and Greene, have maintained a clear distinction between Irish and the other Goidelic languages. One valid reason to do the same is the uncertainty surrounding the dates at which items such as ScG. *seis* ‘comrade’ or *sgarbh* ‘cormorant’ may have transited into Irish. Many Old Norse items in Irish are unattested until the twelfth century or later (Holman 2007: 80), and some words examined for this study appear not to have entered the written medium until the eighteenth or nineteenth century. For this and other reasons, the present study has not made an exception for Norse words which entered Irish via other Goidelic languages. Further studies may revisit this decision.

2.1.3 Inherited lexicon

Haspelmath and Tadmor distinguish between loanwords and words that are considered “native” and “inherited” because they can be traced back to the earliest known stage of a language (Haspelmath 2009: 38). This distinction is necessary if we are to talk about the phenomenon of lexical borrowing; but it must be remembered that any purportedly inherited item in the languages under discussion here may have been borrowed at a prehistoric stage, whether from a substrate language or from another Indo-European language. The prehistoric divergence and convergence of Indo-European languages in migration across western Europe means that direction of borrowing cannot always be determined. For an example, see the discussion of OIr. *seól*, ON *segl* and OE *segel* ‘sail’ in Section 4.1.3 below.

In practice, the prehistoric origins of words are not an important issue in the present study, which needs only distinguish between those words that entered Irish directly from Old Norse, and those that did not. The more problematic aspects of the data are instead found at a lesser time-depth, subsequent to borrowing.

2.2 Problem: analysable forms

In Haspelmath and Tadmor’s framework, derivations from loanwords are considered “native” rather than borrowed, since such items are “created by speakers of the language rather than borrowed from some other language” (Haspelmath and Tadmor 2009: 12). This includes all “analysable” or morphologically complex items containing borrowed elements: derivations, compounds, verbal paradigms where the borrowed word is not a verb. For statistical purposes “such words were not considered loanwords, even when they contained borrowed elements” (Haspelmath and Tadmor 2009: 12). Curiously, they make no such strictures where phonological changes are concerned, though such processes are presumably still more certain to be enacted by native speakers of the borrower language.

This blanket exclusion is a blunt instrument. If applied in the present study it will affect a number of 1000-year-old loanwords that happen to have survived into modern times in suffixed form only:

Ir. *maróg* ‘pudding’ < MIr. *mar*, *maróg* ‘sausage, pudding’ ← ON *mǫrr* ‘talg, eingeweidefett’ (*mar* & dimin. suff. *-óg*)

LWT allows exceptions to be made for root forms of morphologically analysable borrowed

verbs, on the basis that “the added morphemes (are) ... part of the word’s normal citation form” (Haspelmath and Tadmor 2009: 15). For the present study, this kind of exception is extended to morphologically complex borrowings in other word classes if they are unattested in monomorphemic forms. Section 4.2 discusses a number of such items which have been included in the final total as “probable Old Norse loans in modern Irish”.

This study therefore differs from the LWT framework on this theoretical point.

2.3 Problem: well-foundedness of etymologies

The main problem facing this study is this: on what basis, what authority, is it asserted that a given Irish word is an Old Norse loanword?

This is a delicate matter because the study has strayed from its original purpose, which was to survey dictionaries and other sources. Had it been possible to simply list all Old Norse loanwords, then responsibility for these etymologies would rest with the philologists cited. Unfortunately, the sources disagree. The watershed moment was the discovery of Ó Muirthe (2010), a remarkably flawed book of popular lexicography which contains many errors concerning the Old Norse lexicon in Irish. It was impossible to proceed without making judgements.

What has emerged can be described as a critical survey of possible and probable Old Norse loanwords in Irish. Each proposed Old Norse loanword is regarded as a hypothesis to be corroborated or falsified, though cases of definitive falsification are rare, and definitive corroboration rarer still. A case-by-case evaluation is attempted based on the “balance of probabilities” (a term borrowed here from the vocabulary of Irish and British civil law). For example, where the consensus among scholars is that a word is borrowed from Old Norse, and no evidence argues against this view, then the word in question is deemed to be “probably borrowed from Old Norse”. Many other items have a reasonably good claim, but fall short of a high degree of probability for one reason or another. These are “perhaps borrowed from Old Norse”. Items regarded as “probably borrowed from Old Norse” are counted as *de facto* Old Norse loanwords for the purposes of this study. Items “perhaps borrowed from Old Norse” are not included in the figures that will be given in answer to the research questions. This study will not claim that any given word *is* a loan from Old Norse.

I borrow here from LWT, where the distinction between “perhaps borrowed” and “probably borrowed” is determinant. LWT’s resolution of this issue is purely methodological. As such, the topic will be addressed again in Section 3.1.

Another problem which is easily resolved in terms of methodology, if not theoretically, is this: what does it mean to affirm that a word is “attested in modern Irish”? This is discussed in Section 3.2.

2.4 Quantifying aboutness

2.4.1 Categorisation and semantic domains

This study's second research question is posed in response to the claim that the Irish language's Old Norse loanwords are mostly related to shipping. The way to address this claim is to categorise Old Norse loanwords according to semantic domain. It is mainly for this reason that the LWT framework is used.

LWT's data-gathering tool is a pre-established list of 1,460 lexical meanings categorised in LWT into 24 semantic domains ("semantic fields" in Haspelmath and Tadmor's terminology, which the present study does not adopt). The list is a slightly enlarged adaptation of the 1,310 meaning list of the Intercontinental Dictionary Series (IDS), which in turn is an adaptation of the set of 1200 headwords that constitute Carl Darling Buck's *Dictionary of Selected Synonyms in the Principal Indo-European Languages* (1949). LWT's 24 semantic domains mostly correspond to the chapter divisions in Buck (1949), although some are renamed. Two categories have been newly added: THE MODERN WORLD and MISCELLANEOUS FUNCTION WORDS (Haspelmath and Tadmor 2009: 6).

For the present study, it is necessary to modify the framework yet again by creating one more category: SHIPPING. In LWT, IDS, and Buck (1949), most of the relevant shipping-related items are categorised under the broader heading of BASIC ACTIONS AND TECHNOLOGY. Given my research questions, it is difficult to avoid this alteration of the framework. The new category will be experimentally reabsorbed into BASIC ACTIONS AND TECHNOLOGY once the required numerical results are obtained: this merger will take place in Section 5.3.3.

In terms of the research question, the new category SHIPPING stands in binary opposition to the other 24 as a bloc. Many objections can be made concerning the processes and decisions by which words will be categorised within or outside its boundaries. In practice, the main problem facing categorisation in the pre-results phase of the study is that many items that are not prototypically shipping-related can still be linked to the sea, particularly given the maritime culture of Norse settlements in the Kingdom of the Isles and the Irish Sea area. Clearly, the category can expand or contract depending on the inclinations of the person who categorises. Even to modify the category's name will change its shape and size. Haspelmath and Tadmor have little to say about this issue, beyond admitting that "the grouping of the words is somewhat arbitrary, and alternative groupings are possible" (Haspelmath and Tadmor 2009: 7).

The most objective solution that could be found here is firstly, to choose the sense perceived to be closest to the meaning of the Old Norse etymon; and secondly, to respect the boundaries of the other 24 categories. The LWT framework provides strong support, since Haspelmath and Tadmor's (non-exhaustive) list of 1,460 meanings is already categorised. Items that are not part of the original list can usually be placed according to precedent and family resemblance. For example, the walrus is an animal, so Ir. *rosualt* 'walrus' ← ON *hrosshvalr* belongs in the semantic domain of ANIMALS along with other (arguably non-prototypical) animals that live in or near the sea, such as the seagull, the fish and the dolphin, all of which were placed in that category by Buck. Even if we rename the new category as SEA, SHIPPING AND SHIPBUILDING, these creatures still have their place in the ANIMALS category.

Thus, a moderately narrow interpretation of what is SHIPPING-related applies when categorising the data. For the sake of balance and objectivity, Section 5.3.2 will compare the result with that obtained by a broader interpretation.

2.4.2 Problem: categorisation in the face of polysemy and semantic change

As a methodological tool, LWT's categorisation into semantic fields is suitable for answering my second research question. However, the data shows a multiplicity of forms and meanings, as previously stated in Section 1.3; and this inevitably raises theoretical questions. The quantitative and statistical goals of the current project require that category boundaries be fixed, while LWT's format obliges me to demarcate the world without ambivalence into these categories. This is the "fundamentally structuralist" conception of "category membership as a digital, all-or-none phenomenon... categories [as] logical bounded entities" (Rosch and Mervis 1975, quoted in Geeraerts 2010: 186).

It is probably as a result of the framing of the research questions that this issue arises. The study seeks Old Norse loanwords in modern Irish, which means that modern reflexes of old loanwords will be counted and categorised on a one-to-one basis in relation with their Old Norse etyma – in effect, at point-of-entry. Modern Irish reflexes of these loans show the effects of centuries of diachronic change, both formal and semantic. This mixing of synchronic and diachronic perspectives has accidentally highlighted phenomena that may well be more interesting than the original object of study.

Questions of derivation, semantic change and polysemy have no place in the quantitative study envisaged here; but they are interesting in their own right, and so they will be addressed in a qualitative and speculative manner in the post-results discussion (Section 6). Some elements of a different theoretical framework are required before we proceed.

2.5 Lexicogenesis and cognitive semantics

Lexicogenesis is the totality of "mechanisms for introducing new pairs of word forms and word meanings" (Geeraerts 2010: 237). As first stated in Section 1.2, many words collected for this study have been affected either by derivational increases in the number of forms, or by polysemy and semantic changes. These processes are sometimes known as onomasiological and semasiological change respectively (see Geeraerts 2010: 23). The blanket term lexicogenesis has the advantage of reminding us that the two processes are closely connected. If we accept the principle that there are no true synonyms (Traugott and Dasher 2004: 283), then onomasiological processes such as derivation and compounding must always have the effect of creating new meanings. Conversely, "semasiological extension of the range of meanings of an existing word is itself one of the major mechanisms of onomasiological change" (Geeraerts 2010: 23). The discussion of specific instances of lexicogenesis that will follow in Section 6 is interested primarily in polysemy and semantic change – semasiological aspects of changes in the data; but derivation must also necessarily be discussed.

2.5.1 Semantic change

Semantic change has been classified and categorised in various ways. Summaries of these classifications can be found in McMahon (1994), Campbell (2013), Geeraerts (2010) and elsewhere. Most descriptions of semantic change categorise processes or mechanisms of change: specialisation, generalisation, metonymy and metaphor, the four kinds of “non-analogical change of denotational meaning” (Geeraerts 2010: 26). The data gathered for this study is rich with instances of all four processes. What is rarer in discussions of semantic change is analysis of causes.

Meillet made a categorisation of causes of change under the headings historical, linguistic and social (Meillet 1912: referenced in McMahon 1994: 179-80). In semantic change caused by social factors, a word acquires a new meaning “due to its use by a particular social group, or a word used in a specific sense by some group comes into common currency with an extended meaning” (McMahon 1994: 180). Bréal, Meillet’s former teacher, had underlined in the 1897 *Essai de Sémantique* his view that the causes of semantic change are societal (Bréal 1995: 31). Historical causes “involve a change in the material culture” (McMahon 1994: 180). Meillet’s third category, that of linguistically-caused change, refers to purely language-internal processes and is usually exemplified by grammaticalisation (McMahon 1994: 180). There are no examples of this process in the present data. However, the intriguing phenomenon that Bréal called *recul* or retreat can arguably be seen as a language-internal process which may be due partly to historical factors. *Recul* occurs when a word that is out-competed by a newer item loses its primary sense but survives in once-marginal extended senses (McMahon 1994: 178). Instances can be found in the data.

In the case of Old Norse loanwords in modern Irish, societal and historical causation overlap considerably. This point will be developed further in Section 6.3.

2.5.2 Prototypicality and radial networks

The cognitive model of category structure draws on prototype theory, associated with the psychologist Eleanor Rosch. Briefly, not all entities in a category are equal, since items are not all equally in possession of a defining shared set of criterial features (Geeraerts 2010: 186). Instead there are degrees of membership. Some members are exemplary and central, some are less central and others are marginal. A category is best exemplified by its central, “prototypical” members, which exhibit what we subjectively feel are salient features of the category. The best exemplars are also the most obvious. They are at the focal point where the ontological nature of the category is in sharp definition. Name a fruit: apple. Name a predator: tiger. It is as if the prototype and the category clarify each other.

Any category of concepts or objects is likely to be “fuzzy at the edges but clear in the centre” (Geeraerts 2010: 183). Marginal exemplars are located somewhere in the periphery; other language users may place them in other categories. Is the acorn a fruit? Is the wren a predator? We may find, subjectively, that the wren does not exemplify any salient features of the category of predators; so it flits to the hazy edges of the category, or beyond. Marginal cases highlight the uncertain nature of categorial boundaries: “Instead of clear demarcations... one finds marginal areas between categories that are only unambiguously defined in their focal points” (Geeraerts 2010: 185). But if categorial boundaries resist definition, then LWT’s digitised, pre-furnished semantic domains are an absurdity: “the tendency to define categories in a rigid way clashes with the actual psychological situation” (Geeraerts 2010: 185).

Cognitive semantics offers an alternative in the form of “radial set networks”. As a system of categories, networks suffer from no vagueness of boundaries because they have no boundaries *per se*. Their boundary zones may overlap. It is possible to re-imagine the semantic domains of the present study as 25 networks loosely interlaced in three dimensions, rather than, for example, one pie chart cut into 25 geometrically precise sectors. Categories in a radial network may consist mostly of clusters, but there may also be outliers. Gradedness is a feature of category structure.

No major problem need arise if an object, by polysemy or ambiguity or historically-motivated semantic change, seems to belong in several categories. When we accept such a flexible model of categorial structure then we are much better equipped for the troublesome realities of polysemy and diachronic change.

2.5.3 Radial networks and polysemy

Not only does the radial set network model offer an alternative to rigid categorial structures, it is also suitable for the description of polysemy. Geeraerts evokes “clusters of mutually interrelated meanings, concentrating around a core reading” (Geeraerts 2010: 132). Relations between senses are imagined spatially. Again we have the prototypical core, the cluster of closely-related items near the core, and the more distant outliers.

Items display “degrees of typicality”; they “exhibit a family resemblance structure” (Geeraerts 2010: 187). This analogy originates with Wittgenstein, who suggested that the various referents of a word need not share all common features, as long as each referent has one element in common with the next, as follows: AB, BC, CD, DE (Geeraerts 2010: 187). Family resemblance accounts for polysemous connectedness between distant senses of a single word, but it also serves to describe the relatedness of discrete items within semantic categories. Like the 3D spatial relationship between core, cluster and outliers, family resemblance recurs on a higher level.

2.5.4 Radial networks and diachronic change

The present data is marked by formal and semantic change over time. Once again, the model described in the preceding paragraphs appears suitable for description or even graphic representation of the phenomenon.

Diachronic change in the present data starts from a single point and blooms over time into a cluster of smearing points. The first point represents a single Middle Irish form with a single sense at the time of borrowing. This first meaning, let’s assume, is close to or identical with the Old Norse source. It is, diachronically speaking, the core of a radial set of modifications that spreads and smears outwards over time. When they are visualised in this way, it is obvious that there are structural similarities between synchronic polysemy and diachronic change.

Some brief final points: non-prototypical outliers may also interact and interconnect, for example by metonymy. Prototypicality can be displaced, so that outliers become the core of new clusters, a process which is not uncommon in the present data. The prototypical synchronic meaning of a word is sometimes far removed from its first borrowed meaning,

such that categorisation is likely to involve a change of semantic domain: Mlr. *scálán* ‘hut, improvised shelter’ > Ir. *scáthlán lampa* ‘lamp-shade’.

The imagery of radial set networks is very well suited to the reality of semantic extensions, morphological derivations and clusters of related senses that can be found growing out from under headwords in the Irish dictionaries. As such, cognitive semantics is the framework that best reflects the nature of the Old Norse corpus in Irish as this study has found it to be.

3 Methods

First, let us return to three problems raised in Section 2, which are addressed here with quick methodological fixes.

3.1 Problem: well-foundedness of etymologies

On what basis does this study affirm that a given Irish word is of Old Norse origin? LWT dealt with this issue, methodologically if not theoretically, by asking contributors to rank each word on the following five-point scale:

0. No evidence for borrowing
1. Very little evidence for borrowing
2. Perhaps borrowed
3. Probably borrowed
4. Clearly borrowed (Haspelmath and Tadmor 2009: 13)

When a contributor deemed that a word was either “probably borrowed” or “clearly borrowed” (Haspelmath and Tadmor 2009: 18, Figure 2 - see Field W9), additional information was sought, of a kind specifically relevant to loanwords (Haspelmath and Tadmor 2009: 19, Figure 3). In the case of words deemed “perhaps borrowed”, this additional data was not required and could not be submitted (Haspelmath and Tadmor 2009: 15). The nuance between *perhaps* and *probably* thus determined whether or not a given word was regarded as a loanword for statistical purposes. Haspelmath and Tadmor 2009 says nothing concerning the theoretical basis upon which this judgement was to be made, and it is unclear if the project’s 41 contributors applied any commonly-held framework when they made their judgements, or even any common definitions of *perhaps* and *probably*. This odd situation is a consequence of LWT’s digital format and quantitative goals. It nonetheless highlights the uncertain nature of etymology, which is not an exact science and must often depend on informed judgement. There is no litmus test that will infallibly detect an Old Norse loanword in Irish.

I reiterate: in the present study, words that are deemed “Probably borrowed from Old Norse” count for the purpose of answering the research questions. Words that are judged to be “Perhaps borrowed from Old Norse” are not counted, though some merit further investigation.

3.2 Problem: common use in modern Irish

Greene refers to “words of Norse origin in common use in modern Irish” (Greene 1976: 80). The concept of “common use” is in any case vague, but it becomes still more problematic in the case of Irish because of the endangered status of the language. How much use, how often, and by how many speakers? It is impossible, without building a corpus of contemporary spoken and written Irish, to form an idea about how much of the lexicon is employed with any frequency. The Norse component of the language, as we will see, includes everyday terms like *fuinneog* ‘window’, *cnap* ‘button’ and *bróg* ‘shoe’, alongside obscure words that are only

uttered occasionally by Irish-speaking medievalists and archaeologists.

In resolution of this issue, I underline that this is not a study of language use, but rather a critical survey of lexicological sources. It gathers words that are attested in modern Irish: that is, those Old Norse loans that the modern dictionaries deem not to be archaic or obsolete.

What constitutes “modern”? There is a good case to be made for a broad definition of the modern period beginning in 1727 with the publication of DIN’s earliest lexicographical source and spanning exactly 250 years until the publication of FGB (1977), the most recent dictionary used here. However, the above-cited Greene (1976) clearly refers to the synchronic state of the language at that time. A narrower definition of the modern period is appropriate. To my regret, words attested in DIN but left out of FGB must be excluded, as they may be obsolete. Words attested in FGB only have a stronger case for inclusion.

3.3 Problem: how to count (or discount) polysemous senses

If we are to categorise Old Norse loans in Irish, then there has to be some policy in place to deal with the polysemous nature of much of the data.

If more than one semantic reflex is counted per Old Norse etymon, then obviously the numbers will be affected. A further problem is that polysemous items can potentially be counted in several semantic domains. A rule therefore applies to the effect that a given Old Norse etymon can only be attested once; that is, that every Irish word listed must have its own distinct Old Norse etymon. This is the surest solution from a numerical point of view, though it doesn’t resolve the question of how to represent polysemy in a quantitative lexical study.

The decision to count each Old Norse etymon only once means that the present study is more restrictive than LWT on one point at least; but this restrictiveness is appropriate to the research questions. The same restriction is implicit when Greene says that he has counted “more than twenty words of Norse origin in common use in modern Irish... it is improbable that there could be as many as fifty” (Greene 1976: 80), since the inclusion of polysemes would greatly increase the final figure.

3.4 Databases and lists

The study gathered partial lists of alleged Old Norse loans wherever they could be found. The sources included several dictionaries, which have been listed in Section 1.4 above. The first partial set collected consisted of 27 words which Greene found “in common use in Modern Irish” (Greene 1976: 80). In parallel, a much larger list of Middle Irish words was established, mostly from EDIL. The rest of the data was collected piecemeal from many sources of variable trustworthiness: Bugge (1912), Marstrander (1915), Walsh (1922), Dillon (1954), Sayers (2001), Byrne (2005), Ó Muirthe (2010); and from the various Irish dictionaries.

The material, after study and classification, is presented in the following lists:

LIST1: Middle Irish words of Old Norse origin

LIST2: Modern Irish words of probable Old Norse origin

LIST3: Qualified exclusion from LIST2.

3.4.1 LIST1: Middle Irish words of probable Old Norse origin

LIST1 is of secondary importance, since the object of the study is Modern Irish. It is a simple list of etymologies, against which all proposed Old Norse loanwords in Modern Irish have been checked. For this reason, LIST1 is nothing more than a basic word-list, in alphabetical order, offering the minimum of information. The basic format is as follows:

MIr. headword – ON source word – primary meaning in the borrower language
ábur ON *háborá* oar-hole

The main source was EDIL (which merely collates etymologies proposed by earlier scholars such as Marstrander or Bugge). If a lexeme was found elsewhere then that source is stated.

3.4.2 LIST2: Modern Irish words of probable Old Norse origin

LIST2 took the form of a spreadsheet divided into 25 semantic domains, following Haspelmath and Tadmor 2009. For each lexeme, the following data was sought (the numbers correspond to columns in the spreadsheet).

1. Semantic field.
2. Headword. The form as found in FGB (since this 1977 dictionary follows the orthographical reforms of the 1950s).
3. The older orthographical form of the headword, as found in DIN.
4. In DBH, what English words are translated with this term?
5. Primary sense of this headword according to DIN or FGB.
6. ON etymon as it appears in AEW (or ONO, in two cases), followed by its primary sense in Old Norse (definitions in AEW are in German and have not been translated).
7. Variant forms in Irish, particularly Middle Irish forms as found in EDIL.
8. References for Old Norse origin.
9. References for survival in Irish; namely, attestation in modern dictionaries.
10. Notes.

Words had to fulfil two criteria before they could be included in LIST2. Firstly, they must be attested in Modern Irish. In practice this meant that they must appear in one or more of the dictionaries of modern Irish used in the study. As stated above, inclusion in DIN only is probably insufficient, since it covers a wider, earlier period: approximately 1727 to 1927. DIN is also notoriously all-inclusive. Therefore, any word found in LIST2 is, at the very least, attested in FGB (1977); almost all are found in both DIN and FGB; and most are found in DIN, FGB and DBH. Inclusion in DBH is very significant, since that dictionary took an explicitly reductive and modernist approach: “many thousands of words and phrases in common use in the Gaeltacht... will not be found here, because they are not the equivalents of common English” (DBH 1959: v).

Secondly, sufficient corroboration of Norse origin must be found. This could not be done with direct reference to the modern dictionaries, since no dictionary of Modern Irish discusses etymologies. All candidates were instead cross-checked against LIST1. Items not found in LIST1 were cross-checked directly against EDIL, the main source of LIST1 etymologies. This process incidentally unearthed more Middle Irish loanwords that previous searches had missed, and these were duly added to LIST1. By this process, most candidates for LIST2 were linked to specific Old Norse etymologies proposed in EDIL.

Jan de Vries' *Altnordisches Etymologisches Wörterbuch* (1963, hereafter AEW) supplied spelling, gender and primary sense of the relevant Old Norse lexemes. In many cases, the relevant entries in AEW included reference to the Irish loanwords. This was duly noted in LIST2. In two cases where a lexeme was not found in AEW, corroboration from Erik Jonsson's 1863 *Oldnordisk Ordbog* (ONO) was acceptable.

Not being found in EDIL or AEW was not in itself grounds for exclusion from LIST2. Greene 1976 (published after EDIL and AEW) proposes certain previously unidentified borrowings from Old Norse: for example Ir. *leag* 'knock down' ← ON *leggja*. In the absence of evidence or arguments to the contrary, these suggestions have been accepted.

The data included further items of interest which were not so well corroborated. These had to be weighed up on a case-by-case basis. Some were added to LIST2, most ended up in LIST3.

3.4.3 LIST3: Qualified exclusion from LIST2

There are many borderline cases that, on the balance of available evidence, are excluded from LIST2. Several are of uncertain status and cannot yet be definitively excluded from consideration. These fall into four categories:

1. Probably obsolete: Old Norse loanwords that appear to have fallen into disuse relatively recently. Usually they are attested in DIN but not in FGB or DBH. If the parameters of the study extended to common use in the nineteenth century then these items would all pass muster.
2. Ir. ← ? < PGM.: Loanwords of Germanic origin where sufficient corroboration of Old Norse origin was not found. In effect, the donor language is either Old Norse or English.
3. Ir. ← ? ← ON: Loanwords of Norse origin, but (probably) not borrowed directly from Old Norse.
4. Possibly inherited items: Possible prehistoric borrowings between Celtic and Germanic; Celtic-Germanic-Latin isoglosses of obscure origin. In practice, few items classifiable in this way can still be considered of possible Old Norse origin.

LIST3 was created for these cases of qualified exclusion. These items are not counted for purposes of answering this study's research questions. Nonetheless, this is an interesting set of data in its own right. Inclusion in LIST2 was determined on the basis of consensus among several reference sources. It was appropriate to err on the side of caution. The relegation of a lexeme to LIST3 may simply mean that more corroboration of Old Norse origin is needed.

3.4.4 Definitive exclusion

Several categories of data were rejected conclusively: Irish words inherited from Proto-Celtic and which have cognates in Old Norse and other Germanic languages (*brod* 'a goad', *cró* 'gore'); words attested in Irish texts of a period earlier than the Norse migrations (*coire* 'a cauldron', *rín* 'a secret'); confirmed Old Norse loanwords which are wholly unattested in Modern Irish (*piscarcarla* 'a fisherman', *portcaine* 'a prostitute'); Old Norse loanwords found in Scottish Gaelic but apparently not in Irish (*buta* 'a buoy, a pail', *sgarbh* 'a cormorant'); derivations of other alleged loanwords (*scingeadóir* 'a skinner' < *scing* 'animal skin'); words for which no evidence of Old Norse origin could be found apart from unsubstantiated claims (*fáspróg* 'a gull', *glioscarnach* 'a sparkle', *griscín* 'a slice of meat for broiling').

4 Processes

Before we get to the results (Section 5), it may be useful to take a closer look at the selection or rejection of data. Section 4.1. demonstrates the kind of processes that are followed in order to distinguish between probable and possible loans from Old Norse. Section 4.2. presents eight morphologically complex Irish words that have been counted as Old Norse loans, despite LWT's prohibition of such items.

4.1 Case studies

It is impossible to describe a standard methodological process by which data was examined for this study. Each case is different. This section takes six words to exemplify the most common issues that had to be weighed up in order to reach a decision based on balance of probabilities.

4.1.1 *laom* 'blaze': multiple possible etymologies

Ir. *laom* m. 'a blaze of fire or light' < MIr. *láem* is a possible loan from ON *ljóma* v. 'scheinen, strahlen' or its derivative *ljómi* m. 'glanz, licht; schwert; zwerg (poet.)' (AEW). The word is also found in Scottish Gaelic: *laom* m. 'blaze of fire, sudden flame, gleaming'. The Scottish Gaelic word is said to be a loan from ON *ljómi* 'ray' (Henderson 1910: 215).

There is no suggestion that these are inherited from Proto-Celtic. GK gives cognates in Germanic and Latin only, although they are built on the ubiquitous Proto-Indo-European stem **leuk-*:

ON *ljómi* 'flash of light, radiance' / OE *lēoma* m. '(beam of) light, radiance' / OS *liomo* m. 'shine' < PGm. **leuhman-* m. 'beam of light' < PIE **léuk-mon-*;
Lat. *lūmen* n. 'light' < **leuk(s)-men-* (GK).

Here are the most plausible etymologies:

ScG *laom*, Ir. *laom* < MIr. *láem* ← ON *ljóma*, *ljómi*
(common inheritance from a single loanword).

Ir. *laom* < MIr. *láem* ← ON *ljóma*, *ljómi*; ScG *laom* ← ON *ljóma*, *ljómi*
(borrowed separately).

Ir. *laom* ← ScG *laom* ← ON *ljóma*, *ljómi*
(borrowed from Scottish Gaelic).

Ir. *laom* < MIr. *láem* ← OE *lēoma* or ME *leome*
(not of Old Norse origin).

As discussed in Section 2.1.2, words of Norse origin which entered Irish via Scottish Gaelic or Manx may arguably be regarded as the descendants of loanwords in a common Middle Irish. This is a policy which is not implemented in the present study. At any rate, it would not suffice in the case of Ir. *laom*, since there is still the possibility that the word was borrowed from English. In the absence of further evidence, Ir. *laom* can only be regarded, for now at least, as possibly ← ON *ljóma*, *ljómi*.

4.1.2 *ruma* ‘bilge’: coincidence of formal and semantic differences

Ir. *ruma* m. ‘bilge; hold, floor of a boat’ ← ON *rúm* n. ‘raum, platz, bett’ (AEW); ‘space, interior space in a building, seat, the space between the frames in a ship’ (*Oxford English Dictionary*, hereafter OED).

ON *rúm* is cognate with OE *rūm*. The earliest attestations of OE *rūm* have the broad sense of ‘space in general’ as well as ‘a (short) period of time’. In Middle English, the more specific senses 1. ‘a space or compartment lying between the timbers of a ship’s frame, the thwarts of a boat’ and 2. ‘a compartment within a building enclosed by walls or partitions, floor and ceiling’ are not found until the 15th century. The ship-related sense occurs in Old Norse and is continued in Icelandic, Faroese and Norwegian. This sense may have reached Middle English “partly from the unattested Norn reflex of the early Scandinavian word represented by ON *rúm* ‘space between the frames in a ship’.” (OED).

Middle Irish borrowed certainly one and probably both of these Germanic cognates. MIr. *rúm*, *ruma* ‘room, interior space, apparently used... of the hold or interior of a sailing-vessel’ is attested slightly earlier than the same specialised senses in Middle English, and is treated in EDIL as a single lexeme derived “from ON and AS *rúm*” (EDIL). FGB, conversely, records two different lexemes that differ neatly both in form and meaning:

rúm m. gs. *rúma*, pl. *rúmana* ‘room; (floor) space’; variant *rúma* m.
ruma m. gs. *ruma*, pl. *rumaí*. ‘(nautical) bilge’.

The conjunction of phonetic, morphological and semantic differences argues for two different instances of borrowing. If this is so, then it is more likely that borrowing from Old Norse occurred earlier. There is a strong case for the nautical sense being of Old Norse origin, not only because of the Norse relationship with ships, but also because, as stated above, Norn and thence Middle English are thought to have borrowed that sense from the same source. One can also argue that Irish could have borrowed all senses of the Old Norse etymon. A later borrowing from Middle English would then have overlaid senses that were already present, at a time when Norse cultural influence in Ireland was at an end.

4.1.3 *seol* ‘sail’: ON origin disproven on chronological grounds

Ir. *seol* ‘sail’ < OIr. *séol* is of uncertain etymology. In the traditional view, the Celtic words (OIr. *séol* and Welsh *hwyl*) were of Germanic origin and were borrowed early, either from OE *segel* (according to Thurneysen), or from ON *segl* (Marstrander). The ulterior origin of the Germanic root remained obscure: “No certainly equivalent form is known outside Germanic” said OED (1909).

Thier (2003 & 2010), matching linguistic evidence with archaeology and history, argues convincingly for “loan of word and object from Celtic to Germanic at an early stage” (Thier 2003: 187). The crux of the argument is that Celts and Romans are known to have used sail centuries earlier than the first references to their use in Germanic northern Europe. The protoform **siglo-* is proposed for both Celtic and Germanic (Thier 2010: 189).

GK is cautious in the face of this evidence: “If OIr. *séol* was not adopted from Germanic, as is often assumed, the etymon represents a Germanic-Celtic isogloss” (GK: **segla-*).

Even if we accept that the Proto-Germanic item is of Proto-Celtic origin, it is still theoretically possible that Ir. *seol* could represent a reborrowed OE *segel* or ON *segl* (whether Irish speakers needed a new word for ‘sail’ is a moot point). However, a borrowing from Old Norse at least can be categorically ruled out. Thier states that OIr. *séol* is “first attested in a gloss on the book of Armagh in 808; it can, however, be pushed back in time to the composition of the poetry of Beccan in the 7th century, which for metrical reasons must have remained unchanged since it was composed” (Thier 2003: 183). This is obviously too early for any reborrowing from Old Norse to have occurred.

4.1.4 *balc* ‘downpour’: a homonymous and polysemous complex

Here is an apparent case of *loan meaning extension*: “an extremely common (and often unnoticed) process whereby a polysemy pattern of a donor language word is copied into the recipient language.” (Haspelmath 2009: 39). Consider the following lexemes:

- (1) Ir. *balc* m. (gs. & npl. *bailc*). ‘balk, beam; hard substance; knob’.
- (2) Ir. *bailc* f. (gs. *bailce*, pl. *bailceanna*) ‘downpour’. Variant: *balc* m. ‘id.’.
- (3) Ir. *balc*, *bailc*, *bailceach* adj. ‘strong, stout’ and noun: *balc* ‘strength, firmness, vigour’.

There is some vague semantic common ground, but the relationship between these words is far from straightforward. According to Matasović, (3) is inherited: Ir. *balc*, *bailc*, *bailceach* ‘strong, stout’ < OIr. *balc* ‘stout, strong, vigorous’ < PCelt. **balko-* ‘strong’ < PIE **bhel-* ‘swell’ (RM). Germanic cognates include ON *ballr* adj. ‘dangerous’, OE *beald* adj. ‘brave’, etc.

Concerning (1) and (2): morphological differences may indicate that we are dealing once again with more than one lexeme, although *balc* and *bailc* are given as variants of each other in old and new sources. Form and meaning suggest borrowing from some or all of the following closely-related Germanic sources (etymologies are based on GK):

ON *bjalki* m. ‘beam’ & OE *balca* m. ‘beam, bank, ridge’ < PGm. **belkan-* m. ‘beam’ < **bhélǵh-on-*

ON *balkr*, *bǫlkr* m. ‘partition, section’ < **balku-* < **balk(k)uns* m. ‘beam’ < **bholǵh-n-ús* (acc. pl.)

OE *bolca* m. ‘gangway, duckboard’ < **bulkan-* < **bulk(k)az* m. ‘beam’ < **bhǵh-n-ós* (gen.)

ON *bjalki* would give Ir. **belc* (see Marstrand 1915: 121). According to AEW (citing Craigie 1894), Ir. *balc* (1) is from ON *balkr*. Based on Marstrand’s analysis of vowel changes, Ir. *balc* can come from either ON *balkr* or *bǫlkr* (Marstrand 1915: 61, 74). For semantic reasons however it is more likely to be from OE *balca* or ME *balk* (in which OE *balca* and ON *balkr* may have merged, according to OED). Marstrand says Ir. *balc*, *bailc* is from Middle English, and says nothing further.

Note, however, that sense (2) is found in both Irish and Old Norse, but unattested in Britain: Ir. *balc* m., *bailc* f. ‘a downpour’; *bailc* v. ‘pour down, rain heavily’; *balcadh* vn. ‘a downpour’ (FGB).

ON *bálkr* or *bólkr* m. ‘vedvarende Uveir’; *veðra-bálkr* ‘Uveirsafsnit, Uveirsperiode, Uveir, Storme, som uafbrudt vedvare nogen Tid’ (ONO).

This sense at least is probably borrowed from Old Norse.

4.1.5 *maois* ‘measure’: Inference based on distribution and phonology

Ir. *maois* f. ‘a pack, a bag; a hamper, a kind of basket; a measure, especially of herrings; a heap (of potatoes)’ ← ON *meiss* m. ‘korg’ (AEW); with influence in some senses of ON *meisild* f. ‘herring sold in baskets of a fixed size’ (Bugge). Note also Ir. *maois éisc* ‘a measure of fish’ (ie, five ‘long hundreds’ of fish in a large basket) and *maoiseog* ‘a little pack or bag’.

It was Bugge who first suggested that this word was of Norse origin (Bugge 1912: 300). The principal point to be made in corroboration is that, for once, there seems relatively little likelihood that the word entered Irish from English. Let us consider the origins of Eng. *mease*. Although the word is of Germanic origin, there is no inherited form in English. ME *mease* ‘large basket; measure of herrings’ is first attested (barely) in the 14th century and was borrowed either via Middle French or directly from a Germanic language, in practice either from Holland or Scandinavia.

Old Norse looks like the most plausible source language if we consider geographical distribution of English variants. Eng. *mease* is attested today in Scotland, Ireland, and South-West England (OED); while related forms are found in Orkney (*maise*), Shetland (*mesi*, *maeshie*) and the Isle of Man (*mesh*, *meash*). Thus, the word survives above all on the shores of the western Norse cultural area in the Irish Sea, though apparently not in areas of Danish influence in eastern and north-eastern Britain.

Next, a phonological detail appears to distinguish forms descended from an unattested Old Norse loanword in Middle Irish. The sibilant in most forms is pronounced [s]. This is true of Welsh *mwys* f. ‘a hamper; five score of herring’, Eng. *mease*, as well as the above-cited forms from Orkney and Shetland. In Middle Irish, the final /s/ of ON *meiss* must have given a “slender” or palatalised /s/, realised as [ʃ]: compare Ir. *maois*, ScG *maois* f. ‘a large basket or hamper; a certain number of fish; five hundred herring; a quantity of seaweed collected and bound together and floated to any desired place’, and Manx English *mesh*, *meash*, which “probably reflect[s] the influence of a Manx Gaelic form (compare Irish *maois*) borrowed directly from early Scandinavian” (OED 2001).

The Goidelic languages were only beginning to diverge during the Viking era (Russell 1995: 9-10), so since we have forms with final [ʃ] in the Goidelic languages it is reasonable to conclude that this item was probably borrowed into Middle Irish in the whole Irish Sea area, in the social context of marketplaces in Norse coastal settlements. There is no grounds for imagining any subsequent reborrowing into Irish from Middle English.

4.1.6 *bord* ‘side of a ship’: ON influence cannot be excluded

Today the primary sense of Ir. *bord* is ‘table’, but MIr. *bord* is first attested in the broad sense of ‘edge’ – of terrain, the shore, a building – and particularly in the specialised nautical sense ‘side, gunwale, bulwark’ of a boat (EDIL).

Marstrander regarded all meanings of MIr. *bord* as a single lexeme “from Anglo-Saxon” (Marstrander 1915: 121), though elsewhere (43) he implies otherwise. The history of this word shows an extremely complex relationship between two lexemes across all Germanic languages. EDIL may be closer to the truth: “Old English loanword with influence in some usages of Old Norse”, though it is difficult to demonstrate this conclusively.

Bugge gives the following senses of ON *borð*: 1. ‘plank, side of a ship’ 2. ‘table’ (Bugge 1912: 292). The same combination of senses is attested in both Old English and Old Norse, and can be traced back to two originally distinct Germanic nouns, one of which was strong neuter while the other was “originally strong masculine but often also (by confusion...) neuter” (OED). As with *rúm / ruma*, there are grounds for believing that two distinct lexemes reached Irish, but in this case the merging of forms is complete.

Ir. *bord* ‘table’ is either ← ON *borð* 2. n. or ← OE *bord* 1 n. ‘board, plank, shield, table’, both of which diverged from the same “Common Germanic strong neuter noun” (OED) before converging again some centuries later in Britain and Ireland. It seems impossible to say more. Concerning Ir. *bord* ‘side of a ship’, I opt for the view, like Bugge, that Ir. *bord* ‘gunwale’ is probably borrowed from ON *borð* 1 n. ‘rand, kante, besonders Schiffsrand’; and like de Vries, that the latter is “probably not the same word as ON *borð* 2. ‘brett, speisetisch’.” (AEW). The hypothesis that Ir. *bord* ‘side of ship’ is a distinct lexeme of Old Norse origin is consistent with the influence of Scandinavian shipping technology in Ireland and the prominence of Old Norse shipping terms in Irish. It is significant that the boats of the Irish were not plank-built. Their wooden-framed *curracha* had hulls of stitched hide (Wilson 1984: 2). The common element linking ‘side of a ship, gunwale’ with ‘table’ is the plank.

In non-nautical contexts Irish has the inherited generic word *clár* ‘board’ which could have served to describe the sides of a ship, given that it was already used to describe the sides of a cart or chariot in Old Irish: *clár clé* ‘the left-hand side’ of a chariot (Greene 1972: 69). The fact that the language already had this adequate native term supports the hypothesis that *bord* was introduced in the specifically nautical context; which in turn is circumstantial evidence for Norse origin. Thus, some senses of this lexeme have their place in LIST2, as probable Old Norse loanwords. Note also the modern nautical sense ‘deck’ (in DBH).

4.2 Inclusion of analysable forms

Nearly all words in LIST2 are monomorphemic and non-analysable in Irish, even when their Old Norse etyma are morphologically complex: Ir. *rosualt* ‘a walrus’ ← ON *hrosshvalr* ‘horse-whale’. This is a distinguishing feature of loanwords crosslinguistically, although exceptions occur (Campbell 2013: 63-4); some exceptions will be discussed in a moment.

Haspelmath and Tadmor made non-analysability the first criterion for assessing possible loanword status, on the grounds that analysable words are “created... rather than borrowed from some other language” (Haspelmath and Tadmor 2009: 12). This rule would force me to pointlessly exclude some or all of the following items. Firstly, four cases of so-called “folk-etymology” - that is, loanwords which appear to have been mis-analysed by speakers of the borrower language (Campbell 2013: 64):

fuinneog ‘a window’ < MÍr. *fuindeóc* ← ON *vindauga* ‘wind-eye’. As can be better seen from the Middle Irish form, ON *auga* has been mis-analysed as the Middle Irish diminutive suffix -*óc*, the modern form of which is -*óg* (“omformet efter deminutiverne paa -óc”, says Marstrander 1915: 91). The modern form, however, is monomorphemic.

builín ‘a small loaf’ ← ON *bulmingr*, *bylmingr*: here too the Irish reflex has a diminutive suffix because the phonological resemblance of part of the Old Norse etymon to the Irish diminutive suffix -*ín* has been mis-analysed. Modern Irish also has *búlóg* ‘a loaf’ (DBH), where the misidentified diminutive suffix -*ín* has been replaced with -*óg*, confirming that the word is analysable for native speakers. The suggestion is of a bigger **búl*.

ispín m. ‘a sausage’ (pl. *ispíní*). Mystery surrounds the Old Norse form from which this was borrowed: either *ispen* f. ‘Endetarmen af Kvæg’ (ONO), or *speni* m. ‘brustwarze, zitze’ (AEW). In any case, there has been mis-analysis by Irish-speakers. Firstly, the singular *ispín* may have been back-formed from pl. *ispíní* on the basis that ON *speni* resembles an Irish plural. What is certain is that speakers take *ispín* to be an analysable form, since the supposed diminutive suffix -*ín* is replaced by -*án* in the variant form *úspán* (DIN), which suggests a bigger sausage (also ‘a shapeless mass, lump, or heap; a clumsy fellow’).

In the case of Ir. *callaire* ‘loud-speaker’ < MÍr. *callaire* ‘a herald’ ← ON *kallari* < ON *kalla* V. ‘nennen, sagen, rufen’, Marstrander says that the etymon was ON *kallari* (Marstrander 1915: 133). If so, then we can infer that the Old Norse agentive suffix -*ari* was mistaken for the Irish agentive suffix -*aire*. Here too, then, the Irish etymon as cited in LIST2 is analysable, but it is precisely this form that seems to have been borrowed. If ON *kalla* ‘to call’ was ever borrowed, we have no record of it, though Eng. *call* has been borrowed in Modern Irish.

Apparently, then, the above four words have either been misinterpreted as complex forms at the time of borrowing, or have actually been transformed into *de facto* complex forms by native speakers. For LWT these are not loanwords; but this study considers them to be loanwords. Monomorphemic forms of them have presumably never existed in Irish.

In the case of four other analysable words included in LIST2, monomorphemic forms are attested in Middle Irish but were not found in the modern Irish sources. The complex forms are the closest extant forms to the Old Norse etyma, and have been listed on that basis. Three of them acquired suffixes many centuries ago, while the fourth is an Irish-Norse compound attested in various forms in Middle Irish and still in use today:

maróg ‘a sausage, a pudding’ < MÍr. *mar*, *maróc* ← ON *morr*
atán ‘a cap’ < MÍr. *atán* ‘a garland, a wreath’ (with suffix *án*) < MÍr. *att* ‘hat’ ← ON *hattr*
scálán ‘a hut’ < MÍr. *scál*, *scálán* ← ON *skáli*
clogad ‘a helmet’ < MÍr. *clocat* < OIr. *cloc* ‘a bell’ + ON *hattr*.

Atán and *clogad* are the only items in LIST2 which share the same Old Norse etymon. There seemed to be no better option than to list both, since MIr. *att* is obsolete while both of its analysable and formally distinct reflexes are still attested. ON *hattr* consequently appears twice in LIST2, although for statistical purposes it is counted only once. This principle of a one-to-one correspondence between Old Norse etyma and modern Irish reflexes is implicit in the statements cited in Section 1.1, and it is an explicit requirement of LWT.

5 Results

5.1 Numerical totals for LIST1 and LIST2

LIST1: Middle Irish words of Old Norse origin contains 197 words.

LIST2: Modern Irish words of Old Norse origin contains 67 items, which are broken down as follows in Table 1 below. There are 67 modern reflexes of Middle Irish forms probably borrowed from Old Norse, corresponding to 66 individual Old Norse etyma, and sufficiently well-attested in the mid-to-late twentieth century. Before sorting, these items were part of a shortlist of 118 words. Thus, 51 items have been eliminated and consequently removed to LIST3, for various reasons. Several of the 51 rejected words could plausibly have been included in LIST2, but the study has erred on the side of caution.

For 62 forms in LIST2 there is a corresponding medieval form in LIST1. Exceptionally, the following items have no attested Middle Irish forms:

práinn ‘hurry’ ← ON **bráðung* (considered ‘modern’ in EDIL)
saián ‘a coalfish’ ← ON *seiðr*
ispín ‘a sausage’ ← ON *íspen* or *speni*
maois ‘a quantity of fish’ ← ON *meiss*
sciobadh ‘to grab, to snatch’ ← ON *skipa* (attested in O’Connell’s dictionary, 1826, which is one of DIN’s sources).

The figures show that approximately two thirds of the known Old Norse lexicon of Middle Irish has fallen into obsolence. It should be borne in mind that LIST1 can only account for words that have been (a) documented, because found in extant texts, and (b) identified as being of Old Norse origin.

Table 1: Old Norse loanwords in modern Irish

Middle Irish words of ON origin attested in LIST1	197
Items in LIST1 that are not attested in LIST2	- 135
Subtotal: items attested in Middle Irish & still in use today	62
Subtotal:	62
Items in LIST2 that have no attested Middle Irish form in LIST1	+ 5
Modern Irish words of Old Norse origin attested in LIST2	67

5.2 Modern Irish words of Old Norse origin by semantic domains

In Figure 1, the 67 items in LIST2 are categorised by semantic domain.

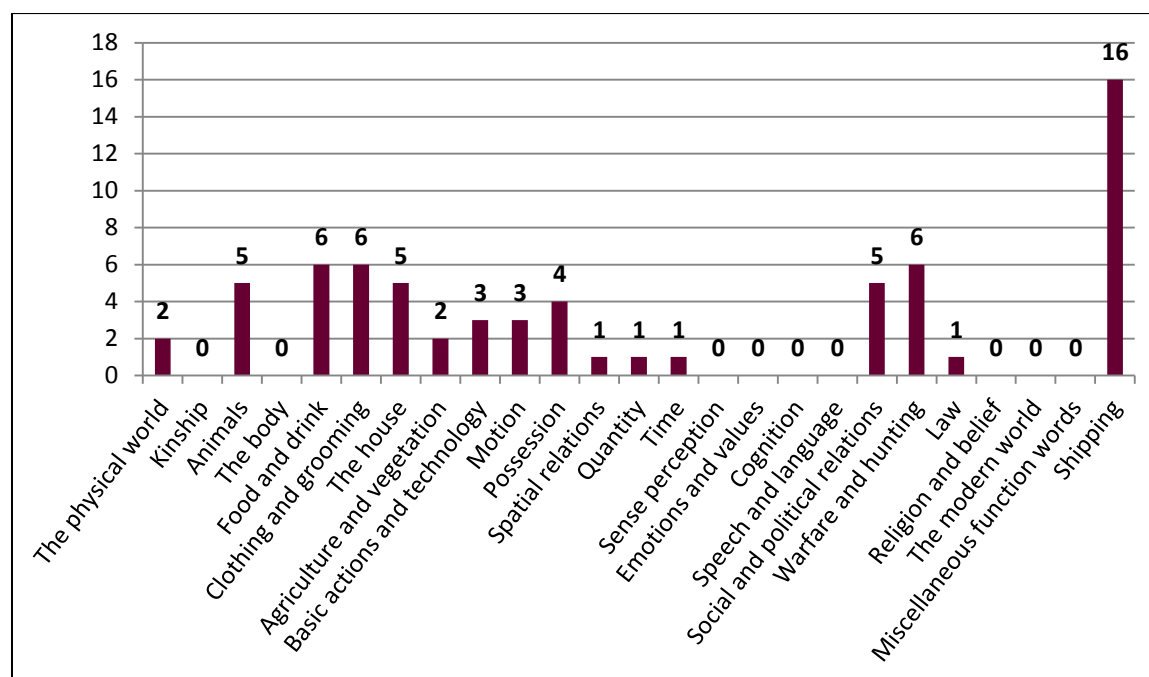


Figure 1: Loanwords by semantic domain

5.3 Comments

5.3.1 Relating the results to the research questions

If the selection of items for inclusion in LIST2 has been sound, then these results falsify the “received ideas” cited in Section 1.1.

A reminder of the research questions:

1. What Old Norse loanwords are attested in modern Irish? How many are they?
2. How are they distributed across semantic domains?

The study has identified 67 modern Irish words that are judged to be probably borrowed directly from Old Norse. This figure is at least 33.3% higher than the received view. Although the judgements that led to this figure were probabilistic, the margin is comfortable. On the basis of these results, it is almost certainly untrue that there are fewer than fifty Old Norse loanwords in modern Irish.

In answer to the second research question: categorisation into semantic domains shows that Old Norse loanwords are majoritarially unconnected with seafaring. The 67 items are distributed in 16 domains (the specially created SHIPPING domain plus 15 others), leaving empty 9 domains, or 37.5% of Haspelmath and Tadmor’s original 24.

The semantic domain of SHIPPING is the biggest category by far, with 16 items. The next-largest are FOOD AND DRINK, CLOTHING AND GROOMING, and WARFARE AND HUNTING, with 6 items each. The median value, taking into account only the 16 non-empty domains, is 3.5 words. The average is 4.2 across 16 categories, or 2.7 across all 25 categories. Modal values are 1, 5 and 6. SHIPPING is the only category that is markedly bigger than the others. Indisputably it is “the most important category of Norse loans in Irish” (Greene 1976: 79). Nevertheless, SHIPPING only accounts for 23.9% of the loanwords collected in LIST2, as shown in Figure 2. Thus, the large majority relate to domains other than shipping.

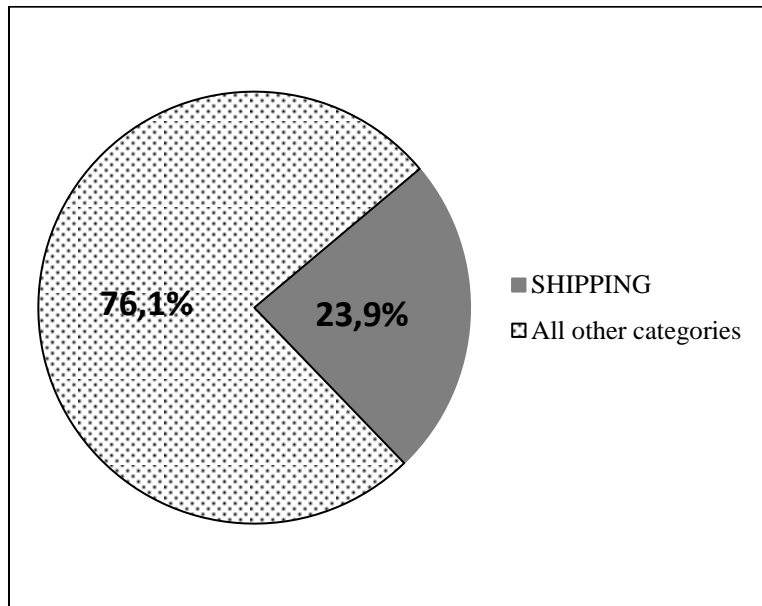


Figure 2: SHIPPING v. other categories

5.3.2 Broader definition of the semantic domain of SHIPPING

The results as given above closely reflect LWT’s categorisation of meanings. But what happens to the figures if the SHIPPING domain is widened to encompass (for example) SEA, SHIPPING AND SHIPBUILDING at the expense of other LWT semantic domains?

Four marine species in the ANIMALS AND FISH domain can be re-categorised as sea-related, as can *dorg* ‘fishing line’ which, following LWT, I have categorised in WARFARE AND HUNTING. The two items *í* and *sceir* in THE PHYSICAL WORLD are marine features. The QUANTITY term *maois* denotes five hundred herring as a marketable commodity, among other senses, so that too could be reclassified. Finally, the carpentry terms *balc* and *sparra*, here categorised in THE HOUSE, were probably also used in the context of shipbuilding, though this reclassification is harder to justify since nothing suggests that the Old Norse etyma were specifically ship-related. However, even if we adopt this broader definition of the boundaries of one semantic domain to the detriment of others, we still only arrive at a final figure of 26 shipping terms, or 38.8% of the dataset as shown in Figure 3. No matter how we slice the pie-chart, Old Norse loanwords in modern Irish are majoritarilly unconnected with seafaring.

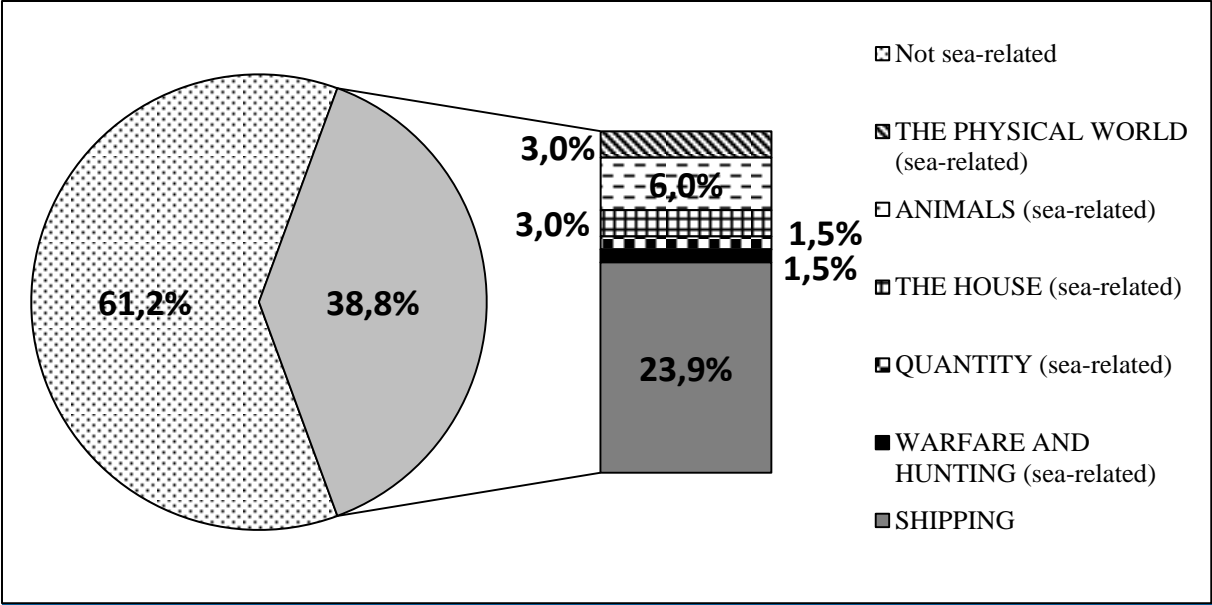


Figure 3: Broader definition of the semantic domain of SHIPPING

5.3.3 Merging SHIPPING with BASIC ACTIONS AND TECHNOLOGY

The SHIPPING category is not part of the LWT framework, but was created in response to the research questions. An optimally faithful categorisation of the Old Norse loanwords studied here would instead have placed most or all shipping-related items in the semantic domain of BASIC ACTIONS AND TECHNOLOGY. The results would then have been as shown in Figure 4.

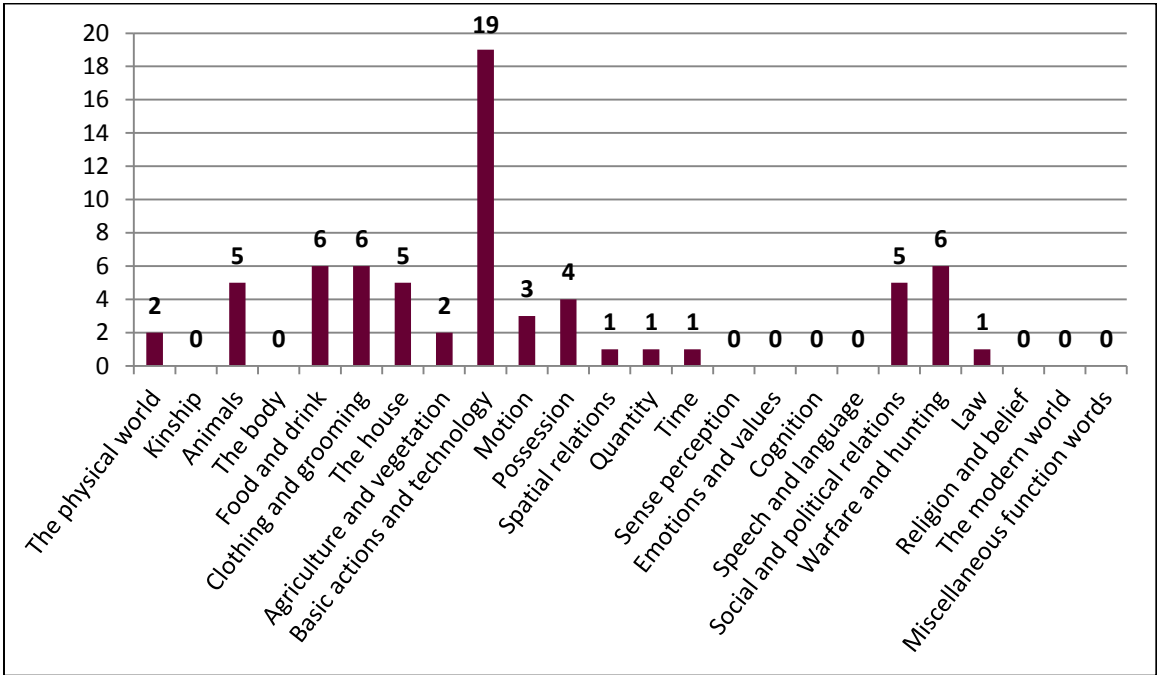


Figure 4: SHIPPING recategorised in BASIC ACTIONS AND TECHNOLOGY, in keeping with the Loanword Typology Project framework.

In Figure 4, the integration of shipping terms means that BASIC ACTIONS AND TECHNOLOGY is by far the largest semantic domain in the data. This highlights the extent to which almost all technical vocabulary borrowed into Irish from Old Norse is related to shipping.

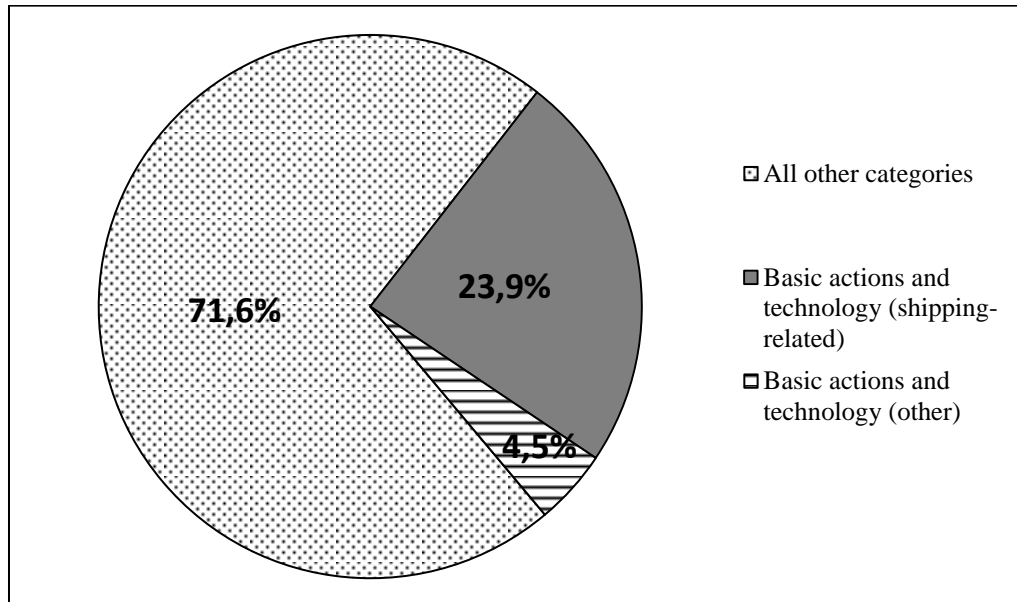


Figure 5: Shipping terms as the great majority of items in the semantic domain of BASIC ACTIONS AND TECHNOLOGY, making this the biggest category of Old Norse loanwords in modern Irish according to the framework of the Loanword Typology Project.

5.3.4 Culture vocabulary

In the context of lexical studies of culture words, these are interesting findings, because we see that the Norse contact with Irish is in several areas of activity. The referents of nearly all items in LIST2 are tangible and countable things in the everyday, material world of work. This is reflected in the uneven distribution of the data across semantic domains. Almost half of Haspelmath and Tadmor’s categories remain empty, among them the more cerebral or abstract domains like COGNITION, or EMOTIONS AND VALUES, or RELIGION AND BELIEF. So-called “basic” or “core vocabulary” domains like KINSHIP and THE BODY also remain empty. What we have instead is “culture vocabulary” - words related to the material culture of the Norse settlements.

The temptation is strong to make inferences about the culture of Norse settlements in Ireland based on these findings. This interesting possibility requires a lot more background information from history and archaeology, and will have to wait for another study. However, a cultural and historical perspective underlies the following discussion of post-borrowing lexicogenesis in the data.

6 Discussion: the afterlife of loanwords

The quantitative part of this study has concluded with the identification of 67 proposed loanwords. Many of these items have undergone further processes subsequent to their borrowing. This section will discuss these phenomena in a non-quantitative and admittedly speculative way.

The majority of Old Norse loanwords attested in Middle Irish have become obsolete. Section 5.1. shows that two thirds at the very least have fallen into disuse.

Among the survivors, lexicogenesis is the rule rather than the exception. A quick examination of the raw data suggests that, of the 67 words in LIST2, about 43 have undergone derivation and/or addition of new senses. Some of these survivors have had a rich and varied history in the lexicon of generations of Irish speakers, if we are to judge from their multiple forms and senses (*cnap* ‘a button’ is a notable example). Cases of “cross-domain shift” (Geeraerts 2010: 217) are commonplace, where the modern word cannot reasonably be classified in the same semantic domain as its medieval etyma.

The minority of loanwords that survive unchanged includes, it should be pointed out, some items that are still attested in the sense that they denote specific medieval technologies: see for example the very detailed discussion of Norse-Irish boat structures in Sayers (2001).

In some cases a loanword is obsolete but its derivatives are still attested. For example, Ir. *seiseacht* n. ‘comradeship’ is still in use but Ir. *seise* ‘a comrade’ ← ON *sessi* ‘benchmate’ was too obscure for inclusion in LIST2. It is as if the loanword reproduced and then died, like a salmon.

It is tempting to see a functionalist aspect in this apparently random pattern of extinction versus expansion and adaption. Why do so many loanwords die out? Why do others survive? Why do survivors tend not to remain unchanged? However, this is not the place to tackle such vast questions. The remaining pages of this study will merely exemplify the lexicogenetic tendencies in the Old Norse loanword data. In line with this study’s categorisation of lexemes in semantic domains, I am particularly interested in semantic change and the creation of meanings. Of course, it is virtually impossible to dissociate the semasiological side of the equation from the creation of forms. Accordingly, there now follows a brief discussion of derivational processes exemplified in the data.

6.1 New forms

6.1.1 Derivation

In Irish, the derivation of new words from existing items is most often achieved by suffixing. Derivation can create new words in any open word class, whether the same class as the etymon or a different one. In the present data, new formations within the same word class are more common, but since 61 of the 67 items in LIST2 are nouns it may be just as meaningful

to say that formation of new nouns is the most frequent occurrence.

Within the class of nouns, typical processes of word-formation include derivation from a concrete noun to an abstract noun (i and ii); derivation from a concrete noun denoting an object to one denoting a person who uses that object; and derivation from the person to the skill (iii):

(i) ON *sessi* ‘benchmate’ > Ir. *seise* ‘a comrade’ > *seiseacht* n. ‘comradeship’.

(ii) ON *kallari* > Ir. *callaire* n. ‘a crier, a herald’ > *callaireacht* n. ‘proclamation’.

(iii) ON *bogi* > Ir. *bogha* n. ‘bow’ > *boghdóir* n. ‘archer’ > *boghdóireacht* n. ‘archery’.

The order in which specific derivations occurred can often be inferred on formal grounds. (iii) is a case in point.

6.1.2 Person nouns and cross-domain shifts

In terms of categorisation in semantic domains, derivation may place a new word close in meaning to its etymon, but this is not always the case. Some of the most salient instances of domain-shifting derivations in the present data are nouns that denote people or human attributes. Some are perfectly predictable: *garraí* ‘a garden’ > *garradóir* ‘a gardener’; *bogha* ‘a bow’ > *boghdóir* ‘an archer’. Others add some sort of attribute, without necessarily straying beyond the semantic domain of their etymon: *margadh* ‘a market’ > *margachán* ‘a haggler’. In many cases, however, extension from object to person is by metaphor or metonymy, often humorous or insulting. Seen in terms of radial networks, these derivatives are often far-flung from their derivational core. Some examples follow:

gadhar ‘a hound, a hunting dog’ > ‘a bully’

gadhar ‘a hound, a hunting dog’ > *gadhairseach* ‘a slut, a bawd’

crapadh vn. ‘contracting, shrinking’ > *crapadóir*, *craplachán* ‘a cripple’

bróg ‘a shoe’ > *brógach* ‘a tramp, a vagabond’

maróg ‘a pudding, a sausage’ > ‘a paunchy person’

sreang ‘a string’ > *sreangaire* ‘a tall, thin person’

clogad ‘a helmet’ > *clogadán* ‘a stupid person’

stiuir ‘a rudder’ > *stiúrthóir* ‘a steersman, a pilot’ > *Árd Stiúrthóir* ‘Director General’.

Even in cases of cross-domain shift, new words such as the above generally have “a transparent semantic relationship with the bases on which they are formed” (Durkin 2009: 95). This is due in part, perhaps, to a widespread tendency crossculturally to apply all kinds of attributes metaphorically to people.

6.1.3 New verbs

The most complex and far-reaching derivational process exemplified in the present data is the creation of verbs from nouns. A new verb means an entire new paradigm, including the creation in almost every verb of an associated verbal noun. The new verbal noun may in turn develop an ever-wider repertoire of polysemies:

ON *sparri* ‘sparren, balken, pflock’ > Ir. *sparra* ‘a spar or rafter’ > *sparraim* v. ‘I fasten, I drive, I nail, I rivet, I clinch (a nail), I bar or bolt or secure a door, I batten down’ but also ‘I push forward, I enforce, I inculcate’ > *sparraidh* vn. ‘fastening, nailing, bolting, barring,

battening down, clinching a nail, enforcing an argument', etc.

Verbal nouns “do not carry tense, aspect, mood or person and must therefore be employed with an auxiliary verb... their function and formation are similar to ordinary nouns” (Ó Siadhail 1989: 195). Thus, derivation of a verb from a newly borrowed noun is a chain of lexicogenetic processes which ends up back in the nominal word class where it started; except that the new verbal noun is part of an extensive paradigm. Unlike the orphaned loanword from which it derives, the verbal noun is rooted and naturalised in the morphology of the language.

The verbal noun is such a fundamental part of the Irish lexicon that some nouns have derived verbal nouns without any other verbal forms: *fead* n. ‘a whistle’ > *feadail* vn. ‘(act of) whistling’; **feadaim* v. ‘I whistle’ (Ó Siadhail 1989: 195). Verbal nouns are also likely to undergo further derivational processes to make abstract nouns and agentive nouns.

Verbal nouns may enjoy a high frequency of use, since the form is found in a wide variety of applications:

- periphrastic aspectual phrases (the continual, prospective and perfective) formed by use of the substantive verb plus verbal noun (Ó Siadhail 1989: 294);
- all non-finite clauses;
- common idiomatic structures consisting of “primary verbs” (cf. Dixon 2012: 25) followed by verbal nouns, where the lexical load is on the verbal noun: *bhain sí tarraingt* ‘she gave a pull’, rather than *tharraing sí* ‘she pulled’;
- nominal uses, often as abstract nouns.

I see this extensive morphological integration of certain loanwords as indicative of their success in a process of natural selection. All the more reason to study the afterlife of loanwords, rather than dismissing derived forms on theoretical grounds because they have been “created by speakers of the language rather than borrowed” (Haspelmath and Tadmor 2009: 12).

6.2 New meanings

So far this brief discussion has glanced at the formal aspect of lexicogenesis, by which new words are derived from existing forms. We turn now to polysemy and semantic change, processes by which forms take on new meanings. For simplicity’s sake, these forms should be understood to include brand-new derivatives.

The main problem faced in delving into this material is that in most cases I can’t show that two formally similar words are etymologically related. Every unsourced case of alleged polysemy may be homonymy. Consider the following:

MIr. *sciggire* (obsolete) ‘shaggy-bearded Faroe-islander’ ← ON *Skeggjar* ‘the Faroe Islands’ < ON *skegg* ‘beard’ (EDIL, OM);

Ir. *scigire* ‘a buffoon, a mocker, a derider, a scorner, a taunter, a wag’ (DIN).

Sadly, these are homonyms, according to Marstrander (1915: 92).

6.2.1 Semantic change

Section 2.5.1 referenced Meillet's causes of semantic change: historical, linguistic and social. We also noted Bréal's statement that the causes of semantic change are societal. The present study mixes diachronic and synchronic approaches and consequently permits a slightly different perspective on the causes of semantic change. It is apparent that societal and historical causation have overlapped considerably, in the eight or ten centuries since borrowing took place.

Semantic changes in the present data reflect certain social and historical changes, much as strata of rubbish and broken ceramics tell the archaeologist something about past material cultures. To properly relate semantic change in this data to history will require that we widen the discussion enormously to take in extra-linguistic and sociolinguistic matters: history and archaeology; the social context in which the Middle Irish loanwords from Old Norse were borrowed, evolved, and either vanished or survived until the modern era; questions of acrolect and basilect; the role of the highly artificial Bardic form of written Irish in the early modern era. These discussions will have to wait for another day, but a few well-chosen examples may at least suggest why semantic changes undergone by the corpus of Old Norse loanwords merit a wider historical, cultural and social perspective.

Structurally, the following discussion is based on Meillet's categories: social, historical, linguistic. Each of these causes of semantic change is briefly introduced, following which some examples are presented. I repeat that this is all speculation. To minimise the risk of errors, I focus on cases where a plausible sequence of semantic and morphological changes can be posited to link items back to the original loanwords. That is to say, plausible in both form and meaning. For example, ON *stýri* n. 'rudder' is borrowed as Ir. *stiúir* 'a rudder', and by various easily imaginable semantic extensions it comes to mean also 'a guide, a rule; the helm, the stern of a boat'. Derivatives arise, still with a transparent semantic connection with the core: *stiúraidheacht* 'direction, obedience'. Then we have the sense *stiúir* 'appearance, aspect, esp. rakish appearance', which lies well outside the cluster of meanings surrounding the core, but still feels plausibly connectable via some sort of dynamic and visual analogy. The semantic relationship with the etymon is never completely obscured. Conversely, other interesting items are so odd that one might doubt whether there is any connection: *trosc* n. 'a cod' > *trosc* adj. 'leprous'. These must be avoided, tempting though they are.

6.3 Social causes of semantic change

As noted in Section 2.5, semantic change caused by social factors entails the acquisition by a word of some new meaning "due to its use by a particular social group, or a word used in a specific sense by some group comes into common currency with an extended meaning" (McMahon 1994: 180). The most interesting occurrences of semantic change found in the present data are of this kind.

There is a tendency for words associated with the Norse culture to migrate by semantic extension towards the native Irish culture. This means that words (or senses of polysemous words) migrate from one semantic domain to another: from the town and marketplace to the country; from warfare to agriculture; from the sea to the land; and generally speaking, from the Norse culture to the Irish culture.

6.3.1 From the sea to dry land

Two words for sea-fish, Ir. *langa* ← ON *langa* and Ir. *trosc* ← ON *þorskr*, are first extended by part-whole association to denote fish scraps, discarded fishy leftovers, and so on. This mirrors the metamorphosis that fish undergo between the sea and the plate. These new metonymic senses are then generalised on dry land, particularly in the AGRICULTURE domain:

langa ‘a ling’ > *langán* ‘spent fish’ > *langán* ‘what remains of a potato when seed sets are cut from it’ (DIN).

trosc ‘a cod’ > *turscar* ‘produce, stuff, refuse (as of hay, straw, etc.), a by-product; giblets’.

A word for fishing line, Ir. *doru* ← ON *dorg* migrates from the sea to the land, becoming ‘a line used for measuring or marking off drains, fences, potato-beds’. Several compounds attest to a variety of uses to which fishing line may be put by non-fishermen, suggesting that these land-related senses have been prototypical for many speakers: *dorú grinnill* ‘ground line’; *dorú pluma* ‘plumb line’, *dorú talún* ‘marking line for trenching’. Especially interesting is the compound *coirdín dorú* ‘light rope’, where *dorú* is attributive, effectively a category of rope.

The bench on which Norse oarsmen sat, Ir. *seas* ← ON *sess* becomes ‘a gangplank between ship and land’. Nicely symbolic for the current discussion, but hardly surprising. However, the word is also attested in an agricultural context: *sess* ‘a bench made on a hayrick by cutting off a part of the hay’ (Bugge 1912: 294). This is arguably too specific to have been the only dry-land usage of the word.

Ir. *ancaire* ‘an anchor’ ← ON *akkeri* has the sense in Donegal Irish of ‘a handy implement’ (DIN). Polysemy or homonymy? It is tempting to think that the word was taken from the SHIPPING domain and generalised onland, among people who found other uses for the object. This would make *ancaire* a fit translation for Eng *yoke* in its prototypical Hiberno-English sense: no longer “a contrivance by which two animals are coupled together for drawing a plough or vehicle” (OED), but rather “any article, contrivance, or apparatus” (Joyce 1910: 352). An anchor is a handy yoke, even on land.

6.3.2 From war to peace

Following a long period of war in the ninth century, the Norse in Ireland turned to trade and permanent settlement. Words in the WARFARE AND HUNTING domain acquire metaphorical senses that are more pastoral:

Ir. *clogad* ‘a helmet’ > ‘a head of cabbage’.

Ir. *meirge* n, ‘banner, standard’ > *meirge ceo* ‘blanket of fog’.

Ir. *bogha* ‘an archer’s bow’ > ‘a ring, a circle, a curve’; *boghaite* ‘bow timbers of a boat’; *bogha fidile*, ‘fiddler’s bow’; *boghshábh* ‘bow-saw’; *bogha naomhóige* ‘bow of a coracle’; *boghaisín* ‘a rainbow’ > ‘a ring, a circle, an arc’.

Ir. *scálán*, *scáthlán* ‘hut, shelter’ < MIr. *scál* ← ON *skáli* was originally a military term for a temporary shelter (Marstrander 1915: 35). From the military domain it migrated to the world of subsistence farming and gave shelter to sheep.

Ir. *dánar* ← ON *danir* in the sense ‘a Dane’ is attested only twice in Middle Irish (Greene 1976: 77). It was instead a very negative term for a foreign brute. The prototypical sense was located somewhere inside the following cluster: ‘a cruel and ferocious foreigner or barbarian, a robber, a pirate, a bandit’ (Greene 1976: 77). There is also the compound *diansmacht* < MIr. *dansmacht* which means literally ‘Danes’ rule’ but in usage translates as ‘tyranny’. Many other derivatives of Ir. *dánar* are attested, mostly in the same warlike semantic domain. They mellow with time, however, and extend to gentler senses in modern Irish:

danartha ‘cruel, barbarous’ > ‘unsocial’.

danarthachán ‘a cruel person’ > ‘an inhospitable person’.

danarthacht ‘cruelty, barbarity’ > ‘unsociability, inhospitality’ (FGB).

This might be described as a cross-domain shift from WARFARE to SOCIAL RELATIONS, specific to a rural Irish culture which placed a high value on sociability and hospitality.

6.3.3 From the town and marketplace to the countryside

The main Norse settlements at Dublin, Wexford, Waterford, Cork and Limerick were the first towns in Ireland, excluding large monastic centres like Kildare (De Paor 1976: 29). These coastal settlements presumably had features for which Irish lacked precise terms.

Street is *sráid* in Irish (“ ← Lat. *strata* through Old English or Old Norse” according to EDIL). This has been extensively generalised to mean various kinds of space near houses in non-urban settings: ‘a passageway between houses, a farmyard, the space round a house, a village esp. of one street’. Also *sráidbhaile* ‘village’; *sráideánach* ‘villager’ and so forth. Eng *street* in the sense of ‘farmyard, level (surfaced) ground around house’ is still common in parts of Ireland and unknown in other parts. Obviously this sense owes nothing to English. It is best explained by the hypothesis of a cultural borrowing into a profoundly non-urban culture.

One writer (Dillon 1954: 20) mentions an Irish word for ‘pavement’ borrowed from Old Norse, but the word in question cannot be identified.

builín ← ON *bulmingr*, *bylmingr* m. ‘in der asche gebackenes brot’. Defined as a ‘small loaf of shop bread, as opposed to home-made bread’ (DIN27), other senses are ‘a potato roasted in the ashes’ (FGB) or ‘a biscuit-like cake baked in hot ashes’ (DIN27): a semantic change which may reflect a migration from Norse marketplace to Irish domestic hearth, though to say more about this shift would require more cultural and historical information.

6.3.4 From agriculture to money

A crossculturally common type of socially-motivated semantic change is “the monetarisation of transactional” and agricultural terms (McMahon 1994: 180), exemplified by OE *feoh* ‘cattle’ > ‘money’ (cf. ‘fee’). In the present data we find the following possible instances of this kind of extension in both directions.

An agricultural term used in a fiscal context:

ON *bundin* ‘garbe, bündel’ > Ir. *punann* ‘sheaf (of corn)’ > ‘a tithe’ (from *deichmheadh punnan* ‘tenth sheaf’).

A monetary term used in an agricultural or butchery-related context:

ON *penningr* or *pengr* > Ir. *pinginn* ‘a penny’ > ‘a sheep's second stomach’ (FGB).

Such a polysemy seems inexplicable, but compare Eng. *fardel* ‘a ruminant's third stomach’, which I believe to be cognate with *farthing* ‘a quarter of a penny’ although OED says otherwise; and Ir. *sparán na bhfeoirlingí* ‘purse of the farthings’, ie, the reticulum or second stomach (FGB). There’s more here than meets the eye.

Note also *gadhar* ‘a hunting dog’ > *gadharín* ‘a guinea piece’, another mysterious connection between the ANIMAL domain and that of money. Note that a greyhound figured on an Irish coin in the early years of the Irish Free State, although it was not a guinea coin but something of much lesser value. However, this might be a clue.

6.4 Historical causes of semantic change

Historical causes “involve a change in the material culture” (McMahon 1994: 180). Just as semantic change in the Norse loanwords can be said to reflect some sort of migration from one culture to another, so also the lexical data changes as it moves through history from the middle ages to the modern era.

The most obvious instance of a very old change reflects changes in how people dressed:

ON *brók* f. ‘hose, beinklader’ > MIr. *bróc* pl. ‘greaves, leggings, hose’ > Ir. *bróg* ‘a shoe’.

ispín ‘a sausage’ > *ispineachas* ‘botulism’, a learned translation of the medical term directly from Lat. *botulus* ‘sausage’ (FGB). This is an unusual case, since the word has entered a learned domain where Norse words are rarely found.

More recent changes reflect the relatively fast-paced technological changes of recent centuries, when old words were fitted with new meanings:

MIr. *clogad* ‘a helmet’ > Ir. *clogad* ‘a belljar’.

MIr. *callaire* ‘a herald’ > Ir. *callaire* ‘a loud-speaker’.

MIr. *scál* ‘a military shelter, a hut’ > Ir. *scáthlán lampa* ‘a lamp-shade’.

MIr. *sreng* ‘a bowstring’ > Ir. *sreang* ‘string’ > *sreang* ‘electrical cable’.

The verb *scagaim* (from a Norse verb meaning ‘to shake’) offers a fine case study in how the spread of derivatives from a single item vastly extend the semantic range of the item in response to the coming of new technologies:

ON *skaka* ‘schwingen, schütteln’ > Ir. *scagadh* ‘to strain’ > ‘to filter, cleanse, separate’

> *scagaire* ‘filter, screen: filterer, refiner’

> *scagbheathóir* ‘filter feeder’

> *scagdhealaigh*, *scagdhealú* ‘dialysis’; *scagdhealaitheoir* ‘dialyser’

> *scaglann* ‘refinery’

> *scagháipéar* ‘filter paper’.

The more information we have on past material cultures, the more historical semantic change will reveal itself. An Irish native speaker who is unaware of conditions in medieval Norse settlements might reject the use of *fuinneog* ‘a window’ to refer to a sooty ventilation hole in the thatch of a windowless hut, and yet that is precisely what the word must have meant in Norse Dublin. Did the prototypical meaning shift? Or is it truer to say that the prototypical referent in the real world changed beyond recognition while the word remained stable?

6.5 Retreat

The phenomenon that Bréal called *recul* or ‘retreat’ occurs when a word that is out-competed by a newer item loses its primary sense but survives in once-marginal (or previously non-existent) extended senses (McMahon 1994: 178). In practice this requires an intermediate period of polysemy. The pattern of inclusions and exclusions in De Bhaldraithe’s *English – Irish Dictionary* (1959) shows how Old Norse loans have retreated to the margins in the face of more recent loans from English.

ON *mǫttull* > MÍr. *mattal* ‘a cloak’ > ‘a cloak, a mantelpiece’ (1819) > *matal* ‘a mantelpiece’ (1959)

The newer extended sense ‘mantelpiece’, probably influenced by a similar development in Eng *mantel*, is attested since O’Connell’s dictionary, published in 1819 (DIN). In DBH (1959), however, *matal* has lost its primary sense (replaced by *clóca* ← Eng *cloak*), while it is the only term given in translation of Eng *mantelpiece*.

Ir. *targa* ‘a shield’ ← ON *targa* appears to have been generalised from its original meaning to include the less specifically warlike and archaic meaning ‘a target’. By 1904 *targa* has become *targáid*, possibly (but not necessarily) re-analysed by analogy with Eng. *target*; this new form retains both the original meaning of MÍr. *targa* and the newer sense. By 1959, however, *targáid* has lost the medieval sense, keeping only the newer sense ‘a target’:

MÍr. *targa* ‘shield’ > Ir. *starga* ‘target’ (1814) > *targáid* ‘shield, target’ (DIN, 1904) > ‘target’ (DBH, 1959).

For ‘shield’, DBH gives *sciath*, an inherited word. So, rather than being pushed out by a newer loanword, *targa* ‘a shield’ has gone out of fashion; after all, the language already had an alternative term.

7 Conclusion

This study had its origin in the realisation that no complete list could be found of the reputedly very small corpus of Old Norse loans in Irish. Most writers limited themselves to the claim that Old Norse loanwords in Irish are fewer than fifty in number and mostly shipping-related. Some offered a few examples, always the same few. Eventually their common source was identified as Greene (1976), a short qualitative discussion of some thirty etymologies which in turn draws heavily on Marstrander (1915). It seemed that the Old Norse corpus in Irish had been perfunctorily dealt with and was apparently of no further interest.

Firstly, a quantitative study set out to identify all extant Old Norse loanwords in common use in modern Irish and to categorise them by semantic domains, in order to test the received wisdom that they were all shipping-related. The framework adopted was that of Martin Haspelmath and Uri Tadmor's Loanword Typology Project (Haspelmath and Tadmor 2009), which is an adaptation of the semantic domains proposed in Buck (1949). The study posed two simple research questions of a quantitative nature:

1. What Old Norse loanwords are attested in modern Irish? How many are they?
2. How are Old Norse loanwords in Irish distributed across semantic domains?

A lexicographical survey rather than a study of language in use, this study started by collecting loanwords wherever they could be found in the literature: from partial lists and passing references. The data was remarkably scattered and not always reliable. A considerable number of proposed Old Norse loanwords could be excluded outright for one reason or another, most typically because they were in reality inherited rather than borrowed.

For reference purposes, a list of proposed Old Norse loanwords in Middle Irish (LIST1) was also made: a necessary step since there is no etymological dictionary of modern Irish in publication.

The simple lexicographical survey approach was doomed to failure because of the extent to which previous studies contradict each other. It was impossible to proceed without making judgements, and so the study evolved into a critical evaluation of proposed etymologies.

The process of data-gathering resulted in a final shortlist of 118 items which (a) appeared to have a good claim to be Old Norse loanwords, and (b) were apparently still attested in Irish in the mid-to-late twentieth century when Greene (1976) and the main modern dictionaries were published. Next, the evidence for and against each proposed loanword was considered with a view to either accepting or rejecting it. Following the Loanword Typology Project's methodological framework, items could be classified as "certainly borrowed from Old Norse", "probably borrowed from Old Norse" (both of these categories counted for the quantitative purposes of the study) or "perhaps borrowed from Old Norse" (these did not pass muster).

The probabilistic evaluation of proposed Old Norse loanwords weighed any relevant information. In many cases, evaluation was a simple matter of verifying that consensus existed among previous scholars. More complex cases required the weighing-up of opposing views. For example, Marstrander (1915) disputes many suggestions made by earlier scholars, often with reference to regular sound change.

Extra-linguistic factors were also taken into consideration. For example, the undeniable importance of shipping in the culture of Norse settlements in Ireland is a relevant extra-linguistic consideration when one attempts a probabilistic judgement involving a Germanic shipping term borrowed early into Middle Irish. The earliest attested occurrence of a word is another factor which, where known, can be determinant in one case but irrelevant in another.

An incidental finding of this phase of the study was that many loanwords of undoubted Germanic origin could not be positively identified as direct borrowings from Old Norse, for either one of two reasons. In the first scenario, the donor language was either Old Norse or English but it was not possible to say more. In the second scenario, loanwords were ultimately of Norse origin, but the exact path of borrowing was unclear. There was a strong possibility that such items were borrowed via English, Scottish Gaelic or Scots, rather than directly from Old Norse. Finally, several words “probably borrowed from Old Norse” appeared to have fallen into disuse in modern Irish; these also had to be excluded.

The quantitative part of the study concluded by identifying 67 words as “probable Old Norse loanwords in common use in modern Irish”. These were categorised in semantic domains (in the so-called LIST2) as per the Loanword Typology Project’s framework. The result of this categorisation was that Old Norse loanwords in modern Irish were found to be majoritarily unconnected with seafaring.

Following presentation of these results, the Discussion section of the study deviated from the Loanword Typology Project’s quantitative approach. The post-Results Discussion (Section 6) was a description of formal and semantic changes that the Old Norse loanwords identified in LIST2 were found to have undergone after borrowing.

What has this study achieved? A list of loanwords has been proposed. It is at least 35% bigger than received wisdom predicted it would be. This still represents a very small part of the Irish lexicon, but it is one which has been under-researched. To date, no more thorough survey of Old Norse loanwords in modern Irish has been found in recent literature.

This study should not be seen as a finished task. It must be underlined that the method is probabilistic and has resulted in a list of probables, which should be challenged and tested further. Further work on these loanwords might focus on sound change in Irish, English and Old Norse, probably using Marstrander (1915) as a point of departure. Another goal would be to ascertain dates of earliest attestation for as many of these items as possible. Several loanwords that were categorised here as “possibly borrowed from Old Norse” need to be examined more closely.

The special status of Norse words which may have entered Irish indirectly via another Goidelic language was touched upon in Section 2.1.2, and again briefly in Section 4.1.1. The present study has made no exception for these items. As a result of this position, several words were excluded, either because they seemed to have entered Irish from Scottish Gaelic, or because they now survive only in Scottish Gaelic and Manx. It could be interesting to re-

evaluate this data with slightly different parameters.

Another sub-category of loans has been identified in the data, namely those Germanic items whose precise origin and/or provenance could not be ascertained. Since it was not the object of the study, this interesting category of words is open-ended and incomplete. However, to have noticed it as a category may be the starting point for further examination of divergence and reconvergence, both within the Germanic branch and between Celtic and Germanic.

In the author's view, the most interesting results of this study are to be found in Section 6's description of some instances of post-borrowing derivation, polysemy and semantic change. This was a chance discovery during data-gathering: the framing of the research questions necessarily led to the mixing of synchronic and diachronic perspectives, which in turn highlighted the extent to which most surviving Old Norse loanwords have changed and multiplied both formally and semantically over the centuries. This aspect of the data appears to be incompatible with the Loanword Typology Project's theoretical framework. The experience of these unquantifiable clusters of derivatives and polysemies made more sense when Rosch's prototypicality and Wittgenstein's family resemblances entered the picture. Geeraerts (2010) on cognitive semantics was a significant discovery at a late stage in this study. The effect on this study was fairly minor, but may be more consequent in future work.

Meillet's categorisation of causes of semantic change suggests the importance of historical and cultural context in any analysis of the processes described in Section 6. Similarly, the initial borrowing of these loanwords, which has been studied here only in terms of the data itself, should now be reconsidered from a broad historical and cultural perspective.

Further work points in several different directions. The present study evolved into two investigations that were tenuously linked by their common subject matter, but which had little in common theoretically or methodically. Further work will have to choose one among all the different directions that are now on offer.

8 Appendix: word-list

This study reached a figure of 67 probable Old Norse loanwords attested in modern Irish. This figure is likely to change with any adjustment of parameters in further studies. In the meantime here is a list, in a simple dictionary format, of the 67 words in question.

accarsóid f. ‘anchorage, harbour, shipping road’ < MÍr. *accarsóit* ← ON *akkerissát*, *akkerissæti* f. ‘anchorage’, compound of *akkeri* n. ‘anker’ and *sát* f. ‘sitz, stand’. Still in use in Kerry in the early twentieth century, as overheard by Marstrander.

accaire or **ancaire** m. ‘an anchor’ < MÍr. *accaire*, *ancaire* ← ON *akkeri* n. ‘anker’ ← Lat. *ancora* f. ‘anchor’ ← Gr. ἄγκυρα f. ‘anchor’. EDIL distinguishes between *ancaire* m. ← Lat. *ancora* & *accaire* ← ON *akkeri*. Note also Ir. *ingir* m. ‘a mason's line, a carpenter's rule; an anchor’ (DIN) < OIr. *ingor* ‘an anchor; a line used by carpenters or masons’ ← Lat. *ancora* (EDIL).

atán m. ‘cap’ < MÍr. *atán* ‘garland’ < *att* ‘hat’ ← ON *hattr*, *hōttr* m. ‘hut, kapuze’. This loanword survives in analysable forms only in modern Irish: in addition to the diminutive form *atán*, there is also the old compound *clogad* ‘a helmet’. See Section 4.2 of this thesis.

bád m. ‘a boat’ < MÍr. *bát* ← ON *bátr* m. ‘schiff, boot’.

balc m. or **baile** f. ‘wooden beam; strength; downpour’ < MÍr. *balc* (?) ‘strength, firmness, vigour’ ← ON *balkr* m., *bōlkr* m. ‘scheidewand, abteilung’. Marstrander says the Irish word is from Middle English. However, Ir. *balc*, unlike ME. *balk*, shares with ON *bálkr* the additional sense of ‘downpour’, which argues for some Old Norse influence. The etymology remains incomplete, particularly with regard to the relations between senses at different historical stages. See Section 4.1.4 of this thesis.

beoir or **beoil** f. ‘beer’ < MÍr. *beóir* (EDIL) ← ON *bjórr* m. ‘bier’.

birling f. ‘a barge’ < MÍr. *beirling* ‘plank of a ship; plank-built ship’ ← ON *byrði* n. ‘schiffsbord; brettei in der schiffswand’. Marstrander (1915: 21-2) argues on both semantic and formal grounds that MÍr. *beirling* is borrowed from ON *byrði* n. ‘schiffsbord; brettei in der schiffswand’, rather than ON *byrðingr* m. ‘frachtschiff’, as Bugge had previously suggested. The earliest sense of MÍr. *beirling* is ‘a part of a ship’, more specifically a board (Marstrander 1915: 22; Sayers 2001: 39). Also translates Eng. ‘galley’ in DBH.

bogha m. ‘a bow (weapon)’ < MÍr. *boga* ← ON *bogi* m. ‘bogen, blutstrahl’.

bord m. ‘side planking of a ship’ < MÍr. *bord* ← ON *borð* n. ‘rand, kante, bes. schiffstrand’. “OE loanword with infl. in some usages of ON”. Also translates Eng. ‘deck; brink’ in DBH. Not to be confused with Ir. *bord* ‘table’, which is the primary modern sense of the word. See Section 4.1.6 of this thesis for a discussion of the complex relations between various senses of this word.

bosán m. ‘purse (obsolete); scrotum’ < MÍr. *bossán* ← ON *posi* m. ‘beutel’. Also Norn *pos* ← ON *posi* (AEW). Compare modern Ir. *peas, peasán* ‘purse’ (possibly a newer borrowing from Eng. *purse*) which has replaced *bosán* in that sense, leaving only the (presumably secondary) sense ‘scrotum’.

bróg f. ‘shoe’ < MÍr. *bróc, brócc; -braici* ‘shoe, sandal; (in plural) greaves, leggings, hose, trousers’ ← ON *brók* f. ‘hose, beinklader’.

builín m. ‘loaf; a small loaf of shop bread’ < MÍr. *bulbing* ← ON *bulmingr, bylmingr* m. ‘in der asche gebackenes brot’. “Clearly a loanword, and the probability that it comes from Norse is very strong” (Greene 1976: 80). See Section 4.2 of this thesis.

cába m. ‘cloak, cape’ < MÍr. *cába, cápa* ← ON *kápa* f. ‘mantel mit kapuze’ ← LLat. *cappa* f. ‘cape’. Also translates Eng. ‘collar’ in DBH.

callaire m. ‘a herald’ < MÍr. *callaire* ← ON **kallari*. Perhaps from an unattested derivative of ON *kalla* v. ‘nennen, sagen, rufen’. Also translates Eng. ‘bell-man; crier, ranter; loud-speaker’ in DBH. See Section 4.2 of this thesis.

carb or **carb** m. ‘a ship; a plank, a bier’ < MÍr. *carb*, gs. *cairbhe* ← ON *karfi* m. ‘schiff für die binnenfahrt’ ← Lat. *cārabus* ‘crab; small boat’ (It. *caravella*, Fr. *caravelle*, Sp. *carabela*, Pt. *caravela*) ← Gr. *káραβος* m. ‘a prickly crustacean; whence metaph. a light canoe; a horned beetle’, from a Pre-Greek (ie., non- Indo-European) *(s)karab- (RB). Compare also Eng. *scarab* ‘beetle’ ← Fr. *scarabée* < Lat. *scarabaeus*. Archaic and literary in modern Irish (FGB).

clogad m. ‘a helmet’ < MÍr. *at-cloc, at-cluic, clocat, clocc-att*: compound of MÍr. *clog* m. ‘a bell’ & ON *hattr* m. or *hōttr* m. ‘hut, kapuze’. Also translates Eng. ‘cabbage’ (DIN), ‘bell-jar’ (DBH). See Section 4.2 of this thesis.

cnap m. ‘button; lump; blow’ < MÍr. *cnap, cnaipe* ← ON *knappr* m. ‘knopf’.

crap, crapadh v. ‘twist’ < MÍr. *crapad, crapaid, craptha*: cf. ON *krappr* adj. ‘eng, schwierig, unangenehm’. No verbal form attested in ON. Also translates Eng. ‘to shrink, contract, etc.’ in DBH.

danar m. ‘a Dane; a cruel foreigner’ ← ON *danir* ‘de Danske’ (ONO).

Danmhairg f. ‘Denmark’ < MÍr. *Danmairg* (EDIL), *Danmargg* (Gre.) ← ON *Danmörk* ‘Dänemark’.

dorú or **dorúgha** m. ‘fishing line’ < MÍr. *doruba, dorubha* (EDIL) ← ON *dorg* f. ‘angelschnur’. DIN adds the following senses: ‘a line used for measuring or marking off drains, fences, potato-beds, etc.’ Also translates Eng. ‘ground-line, plumb-line, etc’ in DBH.

fuinneog f. ‘window’ < MÍr. *fuindeog* ← ON *vindauga* n. ‘fenster’, compound of *vindr* m. ‘wind’ and *auga* n. ‘eye’. See Section 4.2 of this thesis.

gadhar m. ‘hound; hunting dog’ < MÍr. *gadar, gadhar, gagar* ← ON *gagarr* m. ‘hund’ (poet.).

garraí or **gardha** m. ‘fenced vegetable garden’ < Mlr. *garrda, garrdha* ← ON *garðr* m. ‘zaun, hof, garten’.

í f. ‘island’ < Mlr. *í* ← ON *ey* f. ‘insel’. Only in placenames, for example *Í Chaluim Chille* ‘Colmchille’s island (Iona)’.

iarla m. ‘an earl’ < Mlr. *erll, erell* ← ON *jarl* m. ‘jarl, häuptling’.

ispín or **uispín** or **uspán** m. ‘sausage’ ← ON *íspen* f. ‘Endetarmen af Kvæg’ (ONO), or *speni* m. ‘brustwarze, zitze’ (AEW). Unattested in Middle Irish? Compare ScG *isbean* ‘sausage’ ← ON *íspen* (Henderson 1910: 215). See Section 4.2. of this thesis.

langa m. ‘ling’ < Mlr. *langa, long, longa* ← ON *langa* f. ‘fischart, gadus molva’.

leag v. ‘lay down, knock down’ < Mlr. *laigid, llaig, laiges* ← ON *leggja* v. ‘legen, stellen’.

lochta or **lofta** m. ‘loft’ < Mlr. *lota, lofta, labta* ← ON *loft, lopt* n. ‘obergemach im haus’.

lonna m. ‘oar-shaft’ < Mlr. *lonn* (Marstrander), *lunnta* (EDIL) ← ON *hlunnr* m. ‘schiffsrolle’. Also *lonn* f. ‘timber skate used in launching boats’ (DIN).

mál m. ‘excise’ < Mlr. *mal* ‘tribute’ ← ON *máli* m. ‘übereinkunft; lohn, pacht; rede, bitte’.

maois f. ‘a bag, a hamper; a quantity, a mease (*maois éisc*, 500 fishes); a heap (of potatoes)’ ← ON *meiss* m. ‘korb’; compare also *meisasild* ‘herring sold in baskets of a fixed size’. No attested Middle Irish form, but compare ScG *maois*, and Manx English forms *mesh*, *meash*, which “probably reflect the influence of a Manx Gaelic form... borrowed directly from early Scandinavian” (OED 2001).

margadh m. ‘bargain; market; agreement’ < Mlr. *marggad* ← ON *markaðr* m. ‘markt’ ← OS *market* ← VLat. *marcātus* < Lat. *mercātus*.

maróg f. ‘a pudding; a paunch’ < Mlr. *mar, maróc* ← ON *morr* m. ‘talg, eingeweidefett’. See Section 4.2. of this thesis.

matal m. ‘cloak; (later also) mantelpiece’ < Mlr. *mattal* ← ON *mottull* m. ‘mantel, ärmelloses obergewand’ ← MLG *mantel* ← Lat. *mantellum* n. ‘cloak’.

meirge f. ‘a battle standard’ < Mlr. *meirge, merci, mergi, mergge, merci* ← ON *merki* n. ‘kennzeichen, merkwürdigkeit, heerzeichen’. Later: *meirge ceo* ‘a blanket of fog’. Also translates Eng. ‘banner; colours, flag, ensign, standard’ in DBH.

pingin f. ‘penny’ < Mlr. *pinginn, penginn, puingin, puincne* ← ON *penningr* or *pengr* m. ‘kleine münze’. The Old Norse word is loaned from OE *penning* or MLG *pening*.

pónaire or **ponar** f. ‘beans’ < Mlr. *pónair* ← ON *baunir* pl. of *baun* f. ‘bohne’. “A collective deriving from the ON plural” (Greene 1976: 79).

práinn or **práidhinn** f. ‘hurry’ < Mlr. *práidhinn* ← ON **bráðung* ‘haste’. Also translates Eng. ‘exigence, instancy, urgency’ in DBH. AEW gives *bráðr* adj. ‘schnell, hurtig’. “We must also note T. F. O’Rahilly’s brilliant explanation of modern Ir. *práidhinn* ‘press of business, distress, etc.’ as deriving from ON *bráðung* ‘haste, hurry.’” (Greene 1976: 80). EDIL

lists the word but gives no etymology and describes it as “modern”, possibly in response to O’Rahilly.

punann f. ‘sheaf (of corn); gerb’ < MÍr. *punnann* ← ON *bundin* n. ‘garbe, bündel’ < *binda* v. ‘binden’, cognate with MÍr. *buinne* m. ‘wattle, wickerwork’.

ransaigh v. ‘search, rummage, ransack’ < MÍr. *rannsaigid* (EDIL), *ransu* (Gre.) ← ON *rannsaka* v. ‘haussuchung halten’: compound of *rann* n. ‘haus’ and *saka* v. ‘verletzen, beleidigen’.

rosualt m. ‘walrus’ < MÍr. *rosualt*, *rochuad*, *rossal* ← ON *hrosshvalr* m. ‘walart’: compound of *hross* n. ‘pferd’ and *hvalr* m. ‘wal’. Translates Eng. ‘morse, sea-horse, walrus’ in DBH. Note also Ir. *rasmaol* ‘sea-calf, seal’ < MÍr. *rasmael*, *rosmael* ← ON *rosmhvalr* ‘walross’, attested in DIN but not in FGB or DBH, and consequently presumed to be obsolete.

ruma m. gs. *ruma*, pl. *rumaí* ‘hold or floor of a boat, bilge’ < MÍr. *rúm*, *ruma* ← ON *rúm* n. ‘raum, platz, bett’. Not to be confused with Ir. *rúm* m. gs. *rúma*, pl. *rúmana* (variant *rúma*) ‘room; (floor) space’. See Section 4.1.2 of this thesis.

runga or **ronga** m. ‘a joining spar, the timbers or ribs of a boat; rung (of a ladder)’ < MÍr. *rung* ← ON *røng*, *røng*, *vrøng* f. ‘spante; etwas krummes’. Also translates Eng. ‘banisters’ in DBH. Possible Eng. influence in some senses: EDIL has *ronga* m. (late Eng. loan-word?) ‘a rung (of a ladder), cross-bar’; but the association with the semantic domain of shipping is older and is due to borrowing from Old Norse. Compare Fr. *varangue* f. ‘floor-timbers of a ship’ < ON *vrøng*.

saían or **saoidhean** m. ‘coal-fish, especially the young of the coal-fish’ ← ON *seiðr* m. ‘kohlfisch’ (AEW) or **seiðingr* (Marstrander). Not found in EDIL: apparently unattested in Middle Irish. However, OED has Eng. *seythe* ‘the mature coal-fish’ (Scotland) ← ON *seið-r*, and comments: “compare ScG *saigh*, *saighean* (*saoidhean*, *saoithean*) ‘coal-fish’, Ir. *saoidhean* (Dinneen) ‘the young of any fish, especially of the codfish or coal-fish’. FGB has *saoidheán* = *saían* ‘young coal-fish’ and comments: “cf. Modern Norwegian *seid*, *sei*, Icelandic *seið*, *seiði* ‘fry of codfish’. Note also Eng. *sheathfish*, which may be related: “It is called Shetland, because in old time, there were many Sheath-fish caught about its Coast” (OED).

scag v. ‘filter’ < MÍr. *scacaid*, *scag* ← ON *skaka* v. ‘schwingen, schütteln’. Translates Eng. ‘strain, filter, cleanse, separate’ etc. in DBH.

scálán or **scáthlán** m. ‘shelter, open hut or shed’ < MÍr. *scálán*, *scál* ← ON *skáli* ‘scheune’. No longer in use, claimed Marstrander (1915: 35); but DBH gives several newer senses: ‘screen, cot, lamp-shade’. See Section 4.2 of this thesis.

sceir f. ‘sea-rock’ < MÍr. *sceir* ← ON *sker* n. ‘klippe, die kaum über die wasserfläche sich erhebt’. Also in placenames, for example Skerries, near Dublin. Translates Eng. ‘ledge, reef, ridge, skerry’ in DBH.

scilling f. ‘shilling’ < MÍr. *scilling*, *scillic*, *sgillinn* ← ON *skillingr* m. ‘münze’. EDIL feels that the word is borrowed from OE *shilling*, on the grounds that it resembles MÍr. *scildei*, *scilte* ‘name of a coin’ < OE *scill* “and is used in the same text” (EDIL). Greene disagreed:

"The Norse as merchants ... their introduction of coinage brought with it *pinginn* 'penny' and *scilling* 'shilling' (Greene 1976: 79).

sciob v. 'snatch' ← ON *skipa* v. 'ordnen, einrichten'. *Sciobadh* "derives phonetically from ON *skipa* 'to arrange' but semantically from a native Irish word, cognate with W. *chwyfu*, which would have been **sciobhadh* in modern Irish" (Greene 1976). Also translates Eng. 'clutch, grab, whip, etc.' in DBH.

scód or **scod** m. 'sheet (naut.); rope; corner of a sail' < MÍr. *scót* ← ON *skaut* n. 'ecke, zipfel (AEW); skjöde, hjörne' (ONO). A word with several metonymous boat-related senses.

scor or **scoradh** m. 'notch' < MÍr. *scor* ← ON *skor* f. 'einschnitt; spalte'. Also translates Eng. 'cut, gash, slash' in DBH. In a rare etymological comment, DIN warns against confusing the two lexemes *scor* and *scór*, which share most of their meanings in common but not the sense *scór* 'twenty', which is borrowed from English, he says. EDIL has *scór* 'twenty', described as an "Eng. loan-word". Eng. *score* 'twenty' is inherited from Late Old English *scoru* strong feminine, itself a borrowing from Old Norse *skor* strong feminine 'notch, tally, the number of twenty' < Germanic type* *skurā*, < **skur-*, weak grade of **sker-* to cut (OED). The latter should not be confused with ON *skora* 'notch', weak feminine. GK has PGM. **skeran*, "a strong verb with a European distribution". This is far from straightforward. But see Marstrander (1915: 143) for clarification.

seas or **seis** m. 'a thwart, a seat or bench in a boat' < MÍr. *sess* ← ON *sess* m. 'sitz, ruderkbank'. Translates Eng. 'bank (nautical)' in DBH.

sparra m. 'rafter, spar; door-bolt, nail' < MÍr. *sparr*, *sparra*, *spairre* ← ON *sparri* m. 'sparren, balken, pflock'.

sreang f. 'string; a bowstring' < MÍr. *sreng*, *srang* *sreang* ← ON *strengr* m. 'streng, seil, bogensehne'. Translates Eng. 'lead (electrical, engineering)' in DBH.

stagh m. 'a stay (of a ship)' < MÍr. *stag* ← ON *stag* n. 'stag, tau'. Translates Eng. 'stay' with wider applications (construction, mechanics, electrical) in DBH. DIN has *staid* pl. 'the stays of a ship': a derivative of the verb *stad* 'stop'? Or a variant of *stagh*?

stéig or **stéidhg** f. 'a slice of meat; a steak' < MÍr. *staíc*, *staéc*, *staci* ← ON *steik* f. 'braten'. Also ScG *staoig*.

stiúir v. 'steer, guide, direct' < MÍr. *stiurad* ← ON *stýra* v. 'steuern, regieren, besitzen'. Compare *stiúir* n. 'rudder': Marstrander and others seem to suggest that verb and noun were borrowed separately. Also translates Eng. 'command, control, direct, manage, navigate, pilot' in DBH.

stiúir f. 'a rudder' < MÍr. *stiúir* ← ON *stýri* n. 'steuerruder' < *stýra* v. 'steuern, regieren'. Translates Eng. 'inclination, posture, attitude' as well as 'direction, control; helm' and 'guide (mechanics, engineering)' in DBH.

targaid f. 'a shield' < MÍr. *targa* (EDIL), *starga* (Walsh 1922, Marstrander 1915) ← ON *targa* f. 'rundschild, schildrand'. Translates Eng. 'target' in DBH. See Section 6.5 of this thesis.

tile or **tileadh** or **teile** m. ‘board, plank; sheets; poop’ < MÍr. *tile* ← ON *þilja* f. ‘diele, planke, ruderbank’.

tlú m. ‘tongs; a pair of tongs’ < MÍr. *clobhadh* ← ON *klof* n. ‘kluft, riss, spalt’. Compare DIN: “*clobh* m. ‘a pair of tongs’: commonly *tlobh* or *tlú* in spoken language”. The variant forms now appear to be obsolete.

tochta m. ‘thwart of a boat’ < MÍr. *tophta* ← ON *þopta* f. ‘ruderbank’. EDIL says: ← ON *topt*, but this etymology is wrong.

tráill f. ‘a slave, a wretch, a thrall’ < MÍr. *tráill* ← ON *þráll* m. ‘sklave, diener’. Perhaps referring particularly to female slaves: note feminine gender; and also the extended definition in DIN: “thrall, wretch, time-server, dirty old woman”. Attested as early as the tenth century.

trosc m. ‘cod’ < MÍr. *trosc*, *trosg* ← ON *þorskr* m. ‘dorsch’.

uiging m. ‘a pirate fleet; a Viking, a pirate’ < MÍr. *ucing*, *uicing*, *uiging* ← ON *viking* f. according to Greene, though this etymon cannot be found in AEW) or *vikingr* m. ‘seeräuber’ (AEW). “There is no certain example of MÍr. *uicing* in the meaning ‘a viking’ ... its meaning is rather ‘maritime expedition, fleet’, that is to say, it represents ON *viking* f. rather than *vikingr* m.” (Greene 1976: 78). Compare modern Ir. *uigingeach* m. ‘viking’ (FGB).

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