"Gender and declension mismatches in West Nordic"

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Gender and declension mismatches in West Nordic

Abstract:

There has been a diachronic tendency to align gender and declension in

West Nordic (Bjorvand 1972; Enger 2004), making it particularly interesting

to consider "mismatches" that go against this general trend. This paper

addresses such cases and discusses possible causes of the mismatches as

well as the interaction between phonological and morphological changes in

their diachronic development. It appears that the diachronic interaction of

gender and declension forms complex patterns of processes related to

semantics, phonology, and morphology. The West Nordic development

corroborates the view that the connection of an inflection class to some

extramorphological property, for instance a semantic or phonological one, is

a favoured development (Wurzel 1989; Carstairs-McCarthy 2000).

**Key words:** gender, inflection class, morphology, Norwegian, Icelandic,

Old Norse.

**Running head:** Gender and declension mismatches in West Nordic

1 Introduction

In all Germanic languages, nouns are classified according to gender and

declension (nominal inflection class), although the complexity of the

systems and the degree of correlation between the two vary (Kürschner and

Nübling 2011). In Proto-Germanic, most declensions comprised words of

several genders, and inflectional endings then offered no clue as to the

gender of a given word. There has been a diachronic tendency to align the

two systems in several languages, and Modern Norwegian offers a very

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clear link between gender and declension, often in such a way that a certain ending indicates the gender.<sup>1</sup>

Nonetheless, there are exceptions to this general trend, and the present contribution will discuss apparent "mismatches" between gender and declension in the history of West Nordic (Old Norse and its descendants, Norwegian and Icelandic; Faroese is only briefly mentioned). The discussion addresses possible reasons for these mismatches and what phonological and morphological changes were involved in the various developments. The main outcome is that some extramorphological property is important to maintain a declension, yet this property need not be gender, and thus, the alignment of gender and declension is just part of a more general trend.

Section 2 discusses the identification of NOM.SG -r as a marker of masculine gender in (pre-)Old Norse, as suggested by Bjorvand (1972). This explains the split of old i-stems, where the masculines retained their NOM.SG ending, whereas it was lost in feminines. However, Þórhallsdóttir (1997) points out that the supposedly masculine NOM.SG -r was kept in  $ij\bar{o}$ -stems. This class includes many female proper names and other words denoting something female, and the semantic property of "female" has been strengthened in Icelandic since Old Norse.

Section 3 discusses plural endings, primarily in Norwegian, and some other signs of gender and declension alignment. The main tendency, as pointed out by Bjorvand (1972) and Enger (2004), has been to link gender and declension; masculines now increasingly take the plural suffix -ar and feminines -er.<sup>2</sup> On the other hand, the difference between two classes of

There are two standardised written forms of Norwegian, Nynorsk and Bokmål. Unless otherwise specified, "Modern Norwegian" refers to the Nynorsk standard, which is closer to the dialects than the Bokmål standard derived from Danish.

Old Norse had the unstressed vowels /a, i, u/ that appear as <a, i, u> in normalised spelling as well as in Modern Icelandic. Medieval manuscripts often have <a, e, o>, and in Modern Norwegian these vowels (or reflexes of them) are spelled <a, e, o>, to the

neuters in Old Norse appears to have been reinforced (Enger 2014). These classes are traditionally called "strong" and "weak", according to their inflection and phonological form (cf. Section 1.2). Interestingly, in a number of dialects the small class of weak neuters has attracted former strong neuters, although the strong class generally is the productive one. Many dialects still maintain a distinction between weak and strong feminines as well, and in some of the dialects the weak feminines are now inflected exactly like weak neuters in the plural, thus blurring the distinction between feminine and neuter, contrary to the general trend of aligning gender and declension.

Various processes that contributed to these developments are discussed and compared in Section 4. It is evident that shared semantics and shared phonological form are two extramorphological properties that affect the development of inflection classes, although general sound changes and analogical levellings have also played a part in the development of such classes in Norwegian. Section 5 summarises the findings, both regarding the languages under scrutiny and their relevance to the general theoretical discussion.

### 1.1 Inflection classes

Genders are traditionally defined as "classes of nouns reflected in the behavior of associated words" (Hockett 1958: 231). Inflection classes, on the other hand, are defined as classes of lexemes that share a set of "inflectionally realised morphosyntactic properties" and "the inflectional markers" that realise them (Carstairs-McCarthy 2000: 630). According to these definitions, inflectional suffixes such as the enclitic definite article in

degree that they are preserved. Unstressed vowels have merged in many dialects and their phonetic realisations vary.

Modern Norwegian are not exponents of gender. However, the article originated as an independent word agreeing with the noun, and because of its history there is a correlation between the definite suffix and gender, so it should be analysed as a gender exponent (Enger 2004: 65). It will be argued here (Section 3.4) that the development of a similar inflection for two inflection classes has facilitated gender change, and this also points to the relevance of inflectional endings for gender, contrary to the traditional definition.

It is well established that there is a connection between inflection class membership and extramorphological characteristics, which can be of a syntactic (such as gender), semantic (e.g. animacy), or phonological (e.g. a certain ending vowel) nature (Carstairs-McCarthy 2000: 633). This is an important point for Wurzel (1989) in his discussion of inflection class stability, where he claims that the language learner tries to generalise "relations between the independent extramorphological and the morphological properties of words" (Wurzel 1989: 113). He divides these extramorphological properties into two groups: phonological (e.g. the ending of the basic form or the vowel of the basic morpheme) and semantico-syntactic (e.g. gender or semantic features like "person"), or combinations of such characteristics. We will return to these issues in Section 4.

#### 1.2 West Nordic declensions

I mostly identify declensions by their Proto-Germanic (PGm.) stem suffixes, following the tradition in diachronic grammars of older Germanic languages. These labels both convey etymological information and serve as labels for the synchronic classes. The distinction between strong and weak declensions, a terminological inheritance from Jacob Grimm, is also

relevant in Old Norse (ON) and has become more important in the organisation of inflection classes in Norwegian. The strong nouns show more formal differentiation (more possible word-forms of each lexeme) and generally correspond to the PGm. vocalic stems. Because of the syncope of final unstressed vowels, these words all end in a consonant in NOM.SG in ON, except for neuter *ija*-stems, which end in -*i* (e.g. *s&ti* 'seat').

Weak nouns conversely had stem suffixes ending in a consonant that was lost, and hence the ON singular forms all ended in a vowel.<sup>3</sup> Root nouns (and the few r-stems) complicate this division between weak and strong, as they lacked a stem suffix and ended in a consonant.<sup>4</sup> Diachronic grammars thus sort them with the consonant stems, whereas they clearly belong to the strong nouns in later language stages, as opposed to the weak nouns that came from the n-stems (cf. Krahe and Meid 1969: 35). I use the term "root (noun)" and treat them with the vocalic declensions, as all examples of analogical influence show that they belonged there already in ON.

# 2 Old Norse strong feminines

ON strong feminines are usually divided into four main classes (Table 1). Three of these had much syncretism in the singular with no ending in NOM/ACC.SG and usually none in the dative either. The pattern of identical NOM/ACC.SG seems to have originated in the i-stems and root nouns when the NOM.SG -r-ending was lost (Myrvoll 2012: 29–30). Subsequently, the  $\bar{o}$ -stems adjusted to this pattern by dropping their ACC.SG ending (cf. the strong adjectival inflection, which preserved -a in ACC.SG.F). Interaction between the various classes thus led to the generalisation of NOM/ACC

<sup>3 &</sup>quot;All singular forms" excludes the neuter *ija*-stems, which had GEN.SG -s.

<sup>4</sup> The term "root noun" is not entirely precise, but serves our purposes here (cf. Ringe 2006: 197).

syncretism. The DAT.SG usually had an endingless form too, although words of all stems occasionally occurred with DAT.SG -*u* of disputed etymological origin (Myrvoll 2015). The *ijō*-stems showed a very deviant pattern, as illustrated in Table 1. The details of the diachronic development from Proto-Nordic, let alone PGm., are far from clear, yet Myrvoll (2012) suggests a coherent picture of the various phonological and analogical changes involved.

**Table 1: Old Norse strong feminines** 

	i-stem	ō-stem	<i>ijō</i> -stem	root
Nom.sg	tíð	laug	ermr	bók
Acc.sg	tíð	laug	ermi	bók
DAT.SG	tíð	laug	ermi	bók
GEN.SG	tíðar	laugar	ermar	bókar
Nom.pl	tíðir	laugar	ermar	bǿkr
Gloss	'time'	'bath'	'sleeve'	'book'

Since the singular inflection was the same in all these cases, assignment of feminines to the respective classes is based, along with comparative evidence, on their plural form (only the nominative is given in Table 1). The stem suffix was reanalysed as part of the inflectional ending -ir/-ar in i- and  $(ij)\bar{o}$ -stems, whereas the root nouns showed umlaut of the root vowel; the same endings were also found in masculine nouns (cf. Section 3 with Table 2 below).

# 2.1 Gender and declension change

Both root nouns and *i*-stems had an etymological -*r* suffix in the NOM.SG (< PGm. \*-z) that was mostly lost before the emergence of ON texts.<sup>5</sup>

In the case of root nouns there is some doubt; the PGm. NOM.SG "should have been \*-z [...] but the forms have been remodeled in all the daughters" (Ringe 2006: 279).

Exceptions usually showed doublets, e.g. the i-stem  $nau\delta(r)$  'need'. Other lexemes joined the  $ij\bar{o}$ -stems (i.e. changed their ACC/DAT.SG ending), e.g.  $br\dot{u}\delta r$  'bride' (< PGm. \* $br\bar{u}di$ -), ACC/DAT.SG  $br\dot{u}\delta i$ .<sup>6</sup> And still other lexemes kept the NOM.SG suffix, but became masculines (e.g.  $bur\delta r$  'birth' < PGm. \*gaburdi- f.). Bjorvand (1972: 210–212) explains this as a "Tendenz zur formalen Unterscheidung der Genera", and NOM.SG -r was "[d]as primäre Genusmerkmal" for masculines. The loss of the nominative ending was a prime factor in establishing the NOM = ACC pattern in the singular of strong feminines (cf. above).

A converse example is ON tqnn f. 'tooth' (Bjorvand 1972: 212). This is a masculine u-stem, from PGm. \*tanpu- m., and the cognate words are masculine in Gothic and West Germanic, yet feminine in all Nordic varieties except Old Gutlandic tandr m. (Bjorvand and Lindeman 2007: 1129). By regular sound change, \*np was assimilated to \*nn and the stem suffix syncopated in the transition to Old Norse; the NOM.SG -r was then assimilated to the stem ending in -n (cf. Noreen 1923: § 275, § 277 4 b). This deprived the word of its "Genusmerkmal", leading to reanalysis as a feminine. The gender change was probably also facilitated by the alternation in the root vowel between NOM.SG  $q \sim NOM.PL$  e; this was found in the masculine u-stems, which were relatively few, but was otherwise typical of feminine root nouns (e.g.  $hqnd \sim hendr$  'hand'; cf. Section 3).

Some instances of possible gender change may be inconclusive. Bjorvand (1972: 211) includes the ON masculine *máttr* 'might, power' (cf. Gothic *mahts* f.), whereas Kroonen (2013: 347) explains *máttr* as continuing a *tu*-stem rather than a *ti*-stem like its Germanic cognates, including Old Swedish (OSw.) *vanmæt* f. The same applies to *skurðr* 'cutting' < PGm.

<sup>6</sup> But still pl. *brúðir* with the *i*-stem ending. This points to relatively independent systems for the two numbers, although the plural of this particular word was probably never very frequent for pragmatic reasons.

<sup>7</sup> Kroonen (2013: 509–510) gives both genders for PGm., presumably because of the Nordic forms, yet a gender change in Proto-Nordic is probably a better explanation.

\**skurdi*-, which Kroonen (2013: 451) takes as a masculine on the basis of ON *skurðr* and Old Frisian *skerd*, yet OSw. has *skyrþ* f. and *ti*-stems are always feminine (in contrast to masculine *tu*-stems, see e.g. Krahe and Meid 1967: 151 or Ringe 2006: 61).

The OSw. forms provide a strong argument in favour of Bjorvand's account of gender change in ON, since we would assume that their common ancestor (Proto-Nordic) inherited the same gender from Proto-Germanic. It is more economical to assume a change of gender in ON than to project two genders back to Pgm., particularly as this explanation seems clear-cut for e.g.  $bur\tilde{o}r$  m. < PGm. \*burdi- f. In my opinion, it seems clear that Bjorvand's account of NOM.SG -r as a marker of masculine gender is correct. This makes it important to explain why the feminine  $ij\bar{o}$ -stems did keep this ending.

# 2.2 *Feminine* ijō-stems

Originally a subgroup of the  $\bar{o}$ -stems, this class is often called heavy  $i\bar{o}$ -stems. The  $ij\bar{o}$ - and  $j\bar{o}$ -stems were originally the same class, but got separated by Siever's law, according to which the stem suffix was consonantal -j- after a light root syllable and vocalic -i(j)- after heavy roots (Ringe 2006: 118–122). Because the form of the suffix determined the outcome of a number of sound changes (umlaut and syncope), the two classes were clearly separated on synchronic grounds in ON. The NOM.SG -r of this class is not etymological, but was most likely transferred from the i-stems before those in turn lost it, i.e. in Proto-Nordic. Nonetheless, the prehistory of the  $ij\bar{o}$ -stems is far from clear; see Pórhallsdóttir (1997: 49–51) for a discussion.

Many members of this declension denote female beings, either as female proper names (including compounds, e.g. in  $-(f)ri\delta r$ ) or common

nouns like *ylgr* 'she-wolf', although the inflection class also includes a number of other common nouns. The semantic property "female" was strengthened by the gender changes discussed above, and the class attracted female words from other declensions, e.g. *Auðr* (proper name) and *brúðr* 'bride'. Their lack of umlaut betrays their origin, as true *ijō*-stems show umlaut in all forms (Noreen 1923: §384 n. 1). The female property of this class has been further strengthened in Icelandic; non-female words like *ermr* 'sleeve' and *heiðr* 'heath, moor' now have NOM.SG *ermi* and *heiði* – yet not as part of compound names such as *Ragnheiður*. Hence, the class now comprises a semantically coherent group of words and is closely connected by extramorphological means in Modern Icelandic.

The change of NOM.SG  $hei\delta r > hei\delta i$  in Icelandic can be explained in two ways: first, the structure-defining property (Wurzel 1989; cf. Section 4) that feminines have the same form in NOM/ACC/DAT.SG; and second, the analogy of weak  $\bar{\imath}n$ -stems which had full syncretism, e.g.  $gle\delta i$  'joy' (cf. Pórhallsdóttir 1997: 52). This has been a long process, as Vigfusson (1864: XXXVII) reports that some non-female words still had NOM.SG -r in the Breiðafjörður area in northwestern Iceland in his time. The few feminine nouns that officially (in the codified standard) preserve the ending cause confusion among present-day Icelanders, and Pórhallsdóttir (1997: 41, 53) notes that many native speakers are insecure about the gender of e.g.  $\alpha \delta u r$  f. 'female common eider' because of its NOM.SG. -ur < ON -r.

The preservation of -r in female names means that the association between grammatical and natural gender (*genus* and *sexus*, respectively) is weaker than the inflection class; the class-defining -r has been preserved in female proper names although -r generally marks masculine nouns. It appears that an inflection class tightly defined by a semantic criterion may resist the gender–declension alignment. This may be compared with the Latin second declension (usually exemplified by *servus* 'slave'), which

consists of masculine and neuter nouns — yet words in this class denoting cities, islands, countries and trees are feminine (cf. Carstairs-McCarthy 2000: 634). Perhaps an even clearer example is the Latin first declension, where words denoting professions or activities mostly performed by males (e.g. *nauta* 'sailor') are masculine, yet most other members of the class are feminine. A tightly defined semantic category may override general tendencies of gender and declension alignment; semantic cohesion is indeed enough to maintain an inflection class that otherwise stands out in the synchronic system.

The inflection of the  $ij\bar{o}$ -stems was more resistant to change in Icelandic than in Norwegian. Norwegian runic inscriptions show that female  $ij\bar{o}$ -stem names lost their NOM.SG -r before c. 1200, albeit with a few later exceptions,<sup>8</sup> and names in  $-ei\tilde{o}r$  and  $-(f)ri\tilde{o}r$  often lacked -r already in the oldest manuscripts (Noreen 1923: §384 n. 2). The two occurrences of common nouns in NOM.SG in Norwegian manuscripts before c. 1250 (Holtsmark 1955) preserved the -r, however:  $byr\tilde{o}r$  'burden' and merr 'mare'. In Swedish,  $ij\bar{o}$ -stems lost the -r around 1100, except female proper names in -hildr and -alfr (Peterson 1981: 66). Semantic cohesion and phonological form (these two frequent suffixes in female names) worked together to maintain the inflection in Swedish.

### 2.3 Male and female variants of proper names

The female names preserving NOM.SG -r in Icelandic show that the ending may have been a "Genusmerkmal" yet not a "gender marker", keeping grammatical and natural gender strictly apart. Nevertheless, the association of *genus* and *sexus* is clear in many other names. ON and Modern Icelandic

<sup>8</sup> The inscriptions are available and searchable in the Samnordisk runtextdatabas <a href="http://www.nordiska.uu.se/forskn/samnord.htm">http://www.nordiska.uu.se/forskn/samnord.htm</a> (last accessed 20 October 2016).

examples with weak nouns are *Helgi* and *Ingi* (masculine/male) versus *Helga* and *Inga* (feminine/female), inflected like masculine *an*-stems and feminine *ōn*-stems, respectively. There are also a number of similar compounds with a suffix of varying gender, e.g. *-leif(r)* and *-laug(r)*: Male names inflect like masculine *a*-stems (e.g. *-leifr.NOM, -leif.ACC, -leifi.DAT, -leifs.GEN)*, and female names like regular strong feminines ending in *-ing* (*-leif.NOM, -leifu.ACC/DAT, -leifar.GEN*). In these cases the inflection of the proper names reflects the natural gender of the name bearer, whereas grammatical gender generally is an intrinsic property of a noun. Norwegian has lost the case inflection and thus the means to make a distinction between such names, and they have become regularised such that *-leif/-leiv* is now only used in male names and *-laug* only in female ones.

## 3 Plural endings

The nominative plural suffix of masculine and feminine nouns with PGm. vocalic stems was -ar or -ir in ON, whereas root nouns formed their plural with -r and umlaut of the root vowel. Examples of the most common strong inflection classes are given in Table 2, which shows that all three plural formations were found in both masculine and feminine nouns, while the genders differed in NOM.SG where the masculines had an -r. There were many more feminine than masculine root nouns, and although the plural formation is still essentially the same, the umlaut has been better maintained in feminines; there are also examples showing that this class has been productive and feminine  $\bar{o}$ -stems have an umlaut plural (Bjorvand 1972: 198 and passim). A Modern Norwegian example is trapp 'stair', which in some dialects has the same vowel alternation as hand (< ON hond), i.e. trapp - treppe(r) as hand - hende(r) (see NO s.v. trapp). In Modern Icelandic an umlaut plural like fætur 'feet' is "frequently interpreted as a feminine form"

(Thráinsson et al. 2012: 410 n. 27). This must be due to the fact that many more feminine than masculine nouns form their plural in this way.

**Table 2: Plural formation** 

	N	MASCULIN	ES	FEMININES			
	a-stem	i-stem	root	root	i-stem	ō-stem	
Nom.sg	hestr	veggr	fótr	bók	bǿn	gjǫf	
Nom.pl	hestar	veggir	fǿtr	bǿkr	bǿnir	gjafar	
Gloss	'horse'	'wall'	'foot'	'book'	'prayer'	'gift'	

## 3.1 *Masculine and feminine gender-declensions*

There has been a diachronic tendency in Norwegian for masculines to take - *ar* and feminines to take -*er* as their plural suffix, i.e. to establish a one-to-one relationship between gender and declension, and in some dialects (similarly in Swedish dialects) this is almost without exception (cf. Bjorvand 1972: 206–207). This is also allowed in standard Nynorsk, with the general exception that feminines in -*ing* have pl. -*ar* (cf. below). A more conservative distribution of the plural allomorphs, with some masculines having plural -*er* and some feminines -*ar*, is also possible and in accordance with written tradition.

Many feminine  $\bar{o}$ -stems showed both endings already in ON (e.g. *gjafar*  $\sim gjafir$  'gifts'; Modern Icelandic only *gjafir*). It seems that Norwegian masculines generally preserve -ir better than feminines preserve -ar (e.g. still both *veggar* and *vegger* 'walls'). There is a similar tendency in Icelandic as well, albeit to a lesser degree. The -ar ending has become less

<sup>9</sup> Some  $\bar{o}$ -stems even switched to the root nouns and developed plural forms like  $br\'uar \sim br\'yr$  'bridges'. This also happened to the old u-stem hond 'hand', pl. hendr, whose DAT.SG hendi is the only trace of u-stems in ON feminines. But root nouns could also take on the expansive -ir-ending. See in general Bjorvand (1972) on the variable plural formation of feminines.

frequent for feminines, yet -*ir* still holds a strong position for masculines, i.e. the same asymmetry holds as in Norwegian. This means that in both languages -*ar* has become prototypically masculine, whereas -*ir* is more loosely connected to feminine gender. The association of plural -*ar* with masculine gender may be responsible for the change of the plurale tantum *páskar* 'Easter' from feminine to masculine (Bjorvand 1972: 209; there are also medieval examples in which the feminine gender was preserved but the ending changed, i.e. *páskir*). Faroese plurals in -*ar* are occasionally interpreted as masculine, even though their singular form is always feminine (Thráinsson et al. 2012: 410 n. 27), showing the same association between plural -*ar* and masculine gender.

Bjorvand (1975) explains the occasional spread of the weak feminine plural -ur to old  $\bar{o}$ -stems in a similar vein: -ur was exclusively feminine and hence marked the gender, as opposed to the increasingly masculine -ar. This analogical extension of the weak plural is found in Swedish dialects as well as West Nordic and points to further tendencies to align gender and declension, making gender being predictable on the basis of declension (cf. the general discussion in Enger 2004).

Feminines ending in -*ing* still have -*ar* in the plural both in Norwegian and Icelandic, but they at least form a phonologically coherent group (Enger 2004: 73). There are also masculine nouns in -*ing*, e.g. *dumming* 'idiot', and if the feminines were to change their plural ending according to a gender-declension model, the ending would no longer be predictable from the phonological form, and the change would then introduce more complexity into the system (*loc. cit.*). Nonetheless, such a development is indeed possible (cf. Section 3.4).

A similar tendency to align gender and declension concerns the genitive singular in Icelandic, where the prototypical ending for masculines is -s and for feminines -*ar*. Some masculines that occurred with both -*s* and -*ar* in

ON now only take -s, e.g. eiður 'oath', garður 'yard, fence', heiður 'honour', sigur 'victory', and vindur 'wind' (Iversen 1972: 46). This change increased the correlations between masculine gender and GEN.SG -s on the one hand, and feminine gender and GEN.SG -ar on the other; these now hold for the great majority of Icelandic nouns.

#### 3.2 Neuters

There seems to be a clear tendency to align gender and declension when it comes to masculines and feminines. However, the neuters in Norwegian do not fit with the neat idea of gender and declension alignment. Furthermore, many dialects maintain the weak feminines as a separate inflection class, and there has even been a lot of interaction between weak feminines and neuters, leading both to similar inflections and gender changes.<sup>11</sup>

There were three classes of neuters in ON: the strong *a*- and *ija*-stems and the weak *an*-stems. The inflection of both strong classes can be treated as the same, with only phonological rules affecting the surface form, for instance when *kvéði* 'poem' + DAT.PL -*um* gives *kvéðum*, not \*\**kvéðium* or \*\**kvéðjum*. The ON NOM/ACC forms are compared to Modern Norwegian in Table 3, where some regular sound changes are included. For the sake of comparison I include definite forms but leave case out, as case is less important in Modern Norwegian.

**Table 3: Neuters in Old and Modern Norwegian** 

a-	a-stem		ija-stem		-stem	Regular sound
ON	MN	ON	MN	ON	MN	change

<sup>10</sup> Modern Icelandic forms according to *Beygingarlýsing íslensks nútímamáls* (BÍN) at http://bin.arnastofnun.is/forsida/. Last accessed 13 December 2016.

<sup>11</sup> The following discussion must be rudimentary, focussing on general trends and interesting cases; a more thorough examination of gender and declension in Norwegian dialects is in preparation.

Gloss	'he	ouse'	's	eat'	'ey	⁄e'	
DEF.PL	húsin	husa	sætin	seta	augun	augo	$-in > -a^{\dagger}$ ; $-n > \emptyset$
INDEF.PL	hús	hus	sæti	sete	augu	augo	
Def.sg	húsit	huse(t)*	sætit	sete(t)*	augat	auga	$-t > \emptyset$
INDEF.SG	hús	hus	sæti	sete	auga	auga	

<sup>\*</sup> The "(t)" in DEF.SG is written, but not pronounced.

The presentation in Table 3 holds for the standard language, but diachronic changes have made the difference between neuter ija- and a-stems in many Norwegian dialects clearer – the inflection classes have been reinforced, as Enger (2014) puts it. Enger uses data from southeastern dialects, where the ija-stems now have INDEF.PL -er (as in standard Bokmål). This difference in one paradigm slot is predictable on the basis of phonological form: Neuter nouns with an INDEF.SG form ending in a vowel get INDEF.PL -r.

The *an*-stems were relatively few, and in standard Nynorsk (with support from a few conservative dialects) they number only three: *auga* 'eye', *øyra* 'ear', and *hjarta* 'heart'.<sup>12</sup> This means that the class has been reinforced and now share both phonological form and a semantic property (body part) (Enger 2014: 164). However, Enger oversimplifies the dialect situation somewhat, and this pattern is actually fairly rare. A noun that quite frequently belongs to this class in dialects that maintain a separate class of weak neuters, but which does not denote a body part, is *nysta* 'skein (of wool)'.

In many dialects *ija*- and *an*-stems are inflected similarly, in opposition to *a*-stems. Their shared INDEF.PL ending in southeastern dialects is *-er*, and Enger (2014: 167–168) discusses whether this may be due to language contact (*in casu* Danish influence) or analogy from the feminine. In cases where the ending is *-er* it may well be the result of contact; however, in

<sup>†</sup> The vowel quality changed due to nasalisation when the /n/ was lost.

<sup>12</sup> In standard Nynorsk these three words may also be inflected like neuter *ija*-stems, e.g. *auge*, *auge*, *auge*, *auge*.

quite a few dialects the plural suffix is -o, which means that the shared ending is clearly taken from the *an*-stems. Despite the low number of original members of this class, it has been productive. Furthermore, in other dialects the plural endings are analogically based on weak feminines (Beito 1954: 86–89; cf. below). These three inflection classes shared the phonological property of being disyllabic, in opposition to most noncompound nouns, and this extramorphological property must be the reason for the emergence of a similar inflection.

There has been a similar development in Faroese. The neuter *ija*-stems (e.g. *dømi* 'example') "usually [have] an *-r*-ending in modern spoken Faroese", and this also applies to weak neuter *an*-stems such as *eygur* 'eyes' (Thráinsson et al. 2012: 84–85). Despite the spelling, the ending in *eygur* is usually pronounced [II] just as in *dømir* (*loc.cit.*). The disyllabic neuters have innovated in the same direction, making them more different from the monosyllabic *a*-stems. As in Norwegian, influence from weak feminines like *tungur* 'tongues' may have played a role. Weak feminines are written with *-ur*, but merger of unstressed /i/ and /u/ is widespread in spoken Faroes, particularly in the plural endings *-ir* and *-ur* (Hagström 1968). This leaves these three classes of disyllabic words with the same plural ending.

### 3.3 Weak feminines

Weak feminine  $\bar{o}n$ -stems like  $si\delta a$  'side' had NOM/ACC.PL -ur (e.g.  $si\delta ur$ ); see the full inflection in Table 4. Definite forms are not shown, but note that NOM.SG.DEF was formed by adding -n, e.g.  $si\delta an$  'side.DEF'. Comparing Table 4 and Table 1, it is clear that weak and strong feminines have very different inflections.

**Table 4: Old Norse weak feminines** 

	SG.	PL.
Nom	síða	síður
Acc	síðu	síður
Dat	síðu	síðum
GEN	síðu	síðna
Gloss	'side'	

Through the regular loss of final unstressed /n/ and /r/ in many Norwegian dialects, several forms became identical to weak neuters (cf. Table 3): ON DEF.SG síðan > MN sida = auga and ON INDEF.PL síður > MN sido = augo. In the later language development there has been considerable interaction between weak feminines and weak neuters in many dialects, as mentioned above. It is particularly common to find the DEF.PL suffix transferred from the feminines to the neuters, giving plural forms like augon. All declensions in Modern Norwegian except the neuter an-stems have an /n/ (or /p/, depending on dialect) as a DEF.PL marker, and the DEF.PL is always distinct from the INDEF.PL form. This can be considered a system-defining structural property, i.e. a general characteristic of the inflectional system in the sense of Wurzel (1989), and this change in the DEF.PL of weak neuters hence increases system congruity.

The weak feminines have to a certain extent been productive. In parts of North Gudbrandsdal, for instance, *kanine* 'rabbit' (from Low German) and *appelsine* 'orange' (from Dutch; literally 'China-apple') are feminine and follow the regular pattern for weak feminines, although they are masculine and lack the final *-e* in most varieties of Norwegian. Nedrelid (1997) discusses this phenomenon in the dialect of Jostedalen (Sogn og Fjordane county) and explains the indefinite form by "system pressure" (*systemtvang*): strong feminines in the dialect have the definite ending *-i* (e.g. *tidi* 'time.DEF'). A loanword with the DEF.SG ending *-a* must thus be

weak, and weak nouns cannot end in a consonant in the indefinite singular, hence they get an innovative form such as *ei appelsine* 'an orange' rather than standard Norwegian *ei appelsin*. It follows, then, that such words were borrowed in the definite form and then had their paradigm filled out according to the dialect grammar. This explanation also works for North Gudbrandsdal with a DEF.SG ending *-e* in strong feminines. Nedrelid (1997: 118) further suggests that some words have been borrowed from Bokmål plurals in *-er*, e.g. *bananer* 'bananas' (in standard Nynorsk a masculine noun, pl. *bananar*). The *-er*-ending suggests feminine gender in the Jostedal dialect (cf. above on plural endings), and if the form is interpreted as feminine, the word can easily be placed in the weak feminine class and given an INDEF.SG form in *-e* such as *banane*.

#### 3.4 A weak macroclass

As a result of both phonological and morphological change as described above, feminine  $\bar{o}n$ -stems, neuter an-stems, and neuter ija-stems now have the same plural inflection in some dialects, with the suffixes INDEF.PL -o, DEF.PL -on/-op. The INDEF.SG form has been identical since ON, and they thus only differ in DEF.SG. In the sense of Carstairs-McCarthy (2000: 634), they form a macroclass where their DEF.SG ending is predictable on the basis of lexical gender. This analysis takes declension as primary rather than gender, in line with traditional ON grammars but contrary to grammars of Modern Norwegian, which always start with gender and then note different inflection classes for each gender (usually strong and weak).

The similarity in inflection among these feminines and neuters has also facilitated gender change; e.g. *auga* 'eye' (neuter *an*-stem) has often become

<sup>13</sup> Some southern dialects preserve final unstressed /r/ and transfer this ending to the neuters (cf. Section 3.2), but we limit the present discussion to one example.

feminine, as has *eple* 'apple' (neuter ija-stem) in many places, especially in Trøndelag. Beito (1954: 97, 102–104) observes that this has happened to all neuter *an*-stems in many dialects, and ija-stems often follow the *an*-stems. <sup>14</sup> It is not change in inflection because of gender change, as gender change is sporadic and affects different words in different dialects, whereas the changes of the inflectional endings are systematic. The loss of word-final *-r* in the INDEF.PL of feminine  $\bar{o}n$ -stems, for instance, is a general sound change, and the analogical /n/ or /p/ in the DEF.PL also applies to all members of the inflection class, even in dialects where the words have not changed gender.

The theoretical implication of this seems to be that endings are clearly associated with gender, contrary to Hockett's traditional definition (cf. Section 1.1). If gender only were "reflected in the behavior of associated words", one would not expect changes in the inflectional paradigm of a noun to trigger change of gender, although that seems to be the case when disyllabic neuters become feminines. This change is mainly found in dialects in which these words share the same plural inflection, and, as pointed out above, gender change seems to be dependent on changes in the paradigm, not the other way round. Hence, there is a close connection between inflectional patterns and gender assignment (cf. Enger 2004: 65 with references).

This macroclass has become type-frequent enough to attract loanwords like feminine *avis* 'newspaper' (from French).<sup>15</sup> In some dialects in Sør-Trøndelag county it has also attracted neuter *bilde* 'picture, photo' (a Danish

<sup>14</sup> I have not been able to verify Beito's claim when it comes to *hjarta* 'heart'; for all other *an*-stems the change to feminine gender is well attested. This is probably due to the fact that *an*-stems like *auga* 'eye' and *øyra* 'ear' often occur in the plural, where these two classes in the relevant dialects have the same inflectional endings, as described above.

<sup>15</sup> Aasen (1873 s.v. *avisa*) gives this word as a weak feminine, i.e. ending in a vowel, and this is the form in e.g. Lom (North Gudbrandsdal) and Inner Sogn. That, then, may explain the plural inflection also in dialects where the INDEF.SG form is now *avis*.

loan replacing older *bilete*) and even feminines in *-ing*, which in the Nynorsk standard have plural *-ar*. This can be seen as a way to avoid the "masculine" *-ar*-ending for feminine nouns, and at the same time testifies to the productivity of the new macroclass. This only applies to the plural forms, though; in the singular, the *-ing*-words inflect like other strong feminines. This is the case in my own dialect (Meldal, Trøndelag county), but since all feminines have *-a* in the DEF.SG, the only difference is in the DAT.SG, where strong feminines, including *-ing*-words, have *-(e)n* versus the *-op* of the weak feminines. Ross (1907: 45) reports similar plural endings of *-ing*-words from Vågå (Oppland county). In these dialects, then, the plural suffix of these words is not predictable from the phonological form of the word any more, but instead is dependent on gender: masc. *dumminga* 'idiots' vs. fem. *kjerringo* 'women, wives' (cf. Section 3.1).

A theoretical point here is that it is high type frequency that makes a class productive, as high token frequency rather makes the frequent tokens "autonomous" (Bybee 1985: 132–134). By combining the ideas of Bybee and Wurzel, one may say that token-frequent word forms have a separate lexical representation and do not take (as much) part in the implicational relationships of paradigms. Through the emergence of the macroclass described above, the combined type frequency of three former inflection classes has become strong enough to attract new lexemes, making the new macroclass productive.

Beito (1954: 92) notes the widespread "merger and confusion" ( $samanfall\ og\ samanblanding$ ) between feminine  $\bar{o}n$ -stems and neuter ija-and an-stems, which means that the formal differences between feminine and neuter gender are smaller than those between masculine and neuter. This contrasts with adjectives and determiners, which often have one masculine/feminine form and one neuter. The main argument of Enger (2004: 75) is that "mismatches between gender and declension are ironed"

out, leading to a better correlation between the two." The widespread confusion between weak feminines and weak neuters and the emergence of a weak macroclass comprising words of both genders indicate that this trend is not as general as claimed by e.g. Kürschner and Nübling (2011: 374).

#### 4 Factors at work

It is clear that a number of mechanisms have been at play in the reorganisation of the West Nordic nominal inflection. In this section, I will try to sum up the main tendencies described above and separate various factors that have had an impact on the processes of change. Although phonological change has played a role, e.g. in making the weak feminines and the weak neuters more similar, it should be emphasised that most of the changes discussed in this article are of a morphological nature.

## 4.1 Alignment of gender and declension

The convergence of the strong feminines is mainly pre-literary, resulting for most of them in a uniform inflection in the singular. This came about through the loss of NOM.SG -r in i-stems and root nouns, and the loss of ACC.SG -a in the  $\bar{o}$ -stems. It seems clear that the status of NOM.SG -r as an increasingly clear marker of masculine gender was an important reason for this reorganisation, and it is also likely that the loss of -r happened first and established the pattern of NOM = ACC (cf. also the plural, where feminines always have NOM/ACC syncretism), which the  $\bar{o}$ -stems then joined.

A change in the same direction affected the GEN.SG of masculines, where the *a*-stem ending -s has spread. Many words that occurred with either -s or -*ar* in ON have only -s in Modern Icelandic. This development is

harder to trace in Norwegian, since there are fewer preserved texts and the genitive was lost altogether in Norwegian by c. 1400 (Berg 2015).

In the plural, the endings -ar and -ir have to a certain extent become masculine and feminine, respectively. This association of plural ending and gender is clear in Modern Norwegian, and there are similar tendencies in Icelandic, albeit to a lesser degree. Taken together, a number of changes have led to a much tighter connection between gender and declension, with fewer exceptions from the most frequent pattern. This applies to both Norwegian and Icelandic, yet more consistently to the former. From a typological point of view, it may be noted that correlation between declensional type and gender is "not unusual" in Indo-European languages (Corbett 1991: 39).

#### 4.2 Semantic cohesion

Despite the tendency for NOM.SG -r to become a marker of masculine gender, the  $ij\bar{o}$ -stems kept their ending in Old Icelandic, and I suggest that this was possible because the class was held together by semantic cohesion: most of the members were words denoting something female, especially female proper names. This, for one thing, shows that -r as a marker for "masculine" (gender) did not mean "male"; cf. in this respect the critical view of Bjorvand's account taken by Þórhallsdóttir (1997: 53–54), partly because she does not make this distinction between *genus* and *sexus* clear. In Modern Icelandic the few members of this class not sharing the female property have lost the nom.sg -r, e.g.  $hei\delta i$  'heath, moor' vs.  $Ragnhei\delta ur$ . This makes the semantic cohesion even clearer. According to this account, the ON non-female  $ij\bar{o}$ -stems like ermr and  $hei\delta r$  were just lagging behind in the gradual loss of NOM.SG -r in feminine nouns, perhaps because these words were token-frequent (and hence autonomous in Bybee's terms) in

pre-modern society, although this explanation is not totally satisfactory.

Words like  $hei\delta i$  now share another property of feminine nouns: syncretism with no suffix in the NOM/ACC/DAT.SG. Since this applies to most strong feminines (as well as the weak  $\bar{l}n$ -stems with full syncretism), it is a system-defining property of the Icelandic inflectional system (Wurzel 1989). There are thus dual pressures pushing towards the loss of NOM.SG -r: it increases the internal consistency of the inflectional system by avoiding the masculine ending and adhering to the general inflectional pattern of strong feminines. In a similar vein Old High German  $\bar{o}$ -stem feminines changed from having a separate dative form versus the rest, to one NOM/ACC form versus one DAT/GEN form (Wurzel 1989: 92).

The remaining  $ij\bar{o}$ -stems have syncretism in the ACC/DAT.SG. Feminine nouns ending in *-ing* have also changed to this pattern in Icelandic and have an ending *-u* in the ACC/DAT.SG, whereas they had no ending in the NOM/ACC.SG in ON. This made for two main patterns of syncretism in the strong feminines.<sup>16</sup> Hence, the number of possible paradigms has been reduced.

# 4.3 The importance of phonological form

Although non-female  $ij\bar{o}$ -stems have adapted to the general pattern of strong feminines by changing their NOM.SG form, a word like  $hei\delta i$  still stands out with its disyllabic form ending in a vowel like a weak noun. To name a few examples from Harðarson (2001: 259–260) of Icelandic words where the NOM.SG form gives no clue as to the gender, there are weak masculines like  $lei\delta i$  'boredom' and strong neuters like  $sei\delta i$  'stock, extract' with similar phonological forms – incidentally, there is also a neuter  $lei\delta i$  'tomb'.<sup>17</sup>

<sup>16</sup> A few lexemes still have -*u* in the DAT.SG, but this is not systematic according to etymology or predictable in any way and must be regarded as lexically specified.

<sup>17</sup> Harðarson writes *seiði*, yet the word is normally spelled *seyði*; the pronunciation of *ei* 

Phonological form is irrelevant in these cases.

Nonetheless, phonological form has been decisive with regards both to the development of inflection classes as well as gender change in Norwegian. PGm. differed between vowel and consonant stems. This was inverted by regular sound change, yet the neuter *ija*-stems still ended in a vowel (-i) in ON, the only strong inflection class to do so. During the later history of Norwegian, these neuters to a large degree joined the other class of disyllabic neuters ending in a vowel, the weak *an*-stems, based on their shared phonological form. Despite the general tendency in Norwegian to align gender and declension, strong and weak neuters still differ in their inflectional endings in many dialects. The two neuter classes have been reinforced (Enger 2014: 163–172), but the disyllabic *ija*-stems have changed inflection class based on their phonological properties. The particular solution may differ among dialects, yet the main tendency remains the same in many varieties of Norwegian, notwithstanding a few conservative dialects that maintain the ON system.

Phonological form has been much less important in Icelandic, and one reason for the difference between the two languages in this respect may be the more complex inflection of Icelandic: With four cases there are more forms that can identify an inflection class, whereas the lack of case in Norwegian (except a definite DAT.SG in some dialects) makes the distinction between number (singular and plural) and definiteness the only inflection. It may be that the simpler inflection makes phonological form more important when language learners are looking for clues as to the inflection class and gender of a given word – and two clues are better than one, as Enger (2014) tells us.

and *ey* is in any case identical in Modern Icelandic.

#### 5 Conclusions

Changes of gender and/or declension have an impact on our understanding of inflection classes. Gender has through time become more important as an organisational principle of the inflection classes of Icelandic and Norwegian. This is a diachronic tendency in the morphology of both languages. However, there are "mismatches", or cases that do not follow the main tendency.

Icelandic female names show how semantic cohesion can override such morphological tendencies. They still keep their "masculine" NOM.SG -r despite their "feminine" semantics, a practical example of the independence of *genus* and *sexus*. This depends on a closely connected inflection class based on the semantic criterion of "female", as shown by the later change in Icelandic of words like *heiði* that do not share this property.

The connection between gender and declension is particularly notable in Norwegian, although not as clear-cut as has sometimes been suggested. In most dialects the disyllabic neuter *ija*-stems have joined the *an*-stems while the difference between weak and strong neuters has been maintained or even reinforced. Furthermore, there has been a lot of interchange between the weak feminines and neuter *ija*-and *an*-stems, with individual lexemes changing gender and inflectional affixes spreading to new classes. In particular, there is a new DEF.PL ending in weak neuters conforming to a general property of Norwegian nominal morphology: DEF.PL is characterised by containing an /n/. The reason for the interaction of just these three stem types is a shared phonological property: they are all disyllabic.

In some dialects it is even possible to establish these three inflection classes as a single macroclass, where their different suffixes in the definite singular are predictable from their gender. This goes against the tendency to align gender and declension. It is also noteworthy that the weak inflection

has been productive and attracted new loanwords.

It is evident in all cases discussed here that declensions align with extramorphological properties, be they semantic or phonological. This is in line with general tendencies in inflecting languages, and probably derives from a basic tendency to make more order out of the chaos present in many aspects of inflection classes. Nonetheless, the particular solution in each individual case depends on questions of system congruity and may take different directions in different languages or dialects.

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