# Sound laws, inflectional change and the autonomy of morphology

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## 1. Introduction

This paper addresses a familiar issue; reduction of case in a European language. Old Norse, which is an idealized version of the language that we suppose to have been spoken on Iceland, the Faroe Isles and in Norway around 1200, had four cases on nouns, as Table 1 illustrates:

Table 1: Two Old Norse masculines, indefinite singular only

| | ARMR | GRANNI |
|---|---|---|
| Nom | armr | granni |
| Acc | arm | granna |
| Dat | armi | granna |
| Gen | arms | granna |

By contrast, most Scandinavian dialects today have no case opposition on nouns. So far, data have been simplified, but not distorted; Mørck (2005: 1130) says that "T*he central theme in the history of the nouns is the loss of case inflexion in the Mainl. Scand. languages*". So the question is logical: Why – and how – does the change from four cases to none happen? If there is anybody who thinks that we already know the answer, and that phonology is all, they are in for a surprise.[1] My main claim is that morphology must have some independent role to play.

The rest of this paper is structured as follows. Section 2 gives an outline of a relatively widespread account of the morphological change, in which phonology is "the prime mover". In section 3, we look at some arguments against this traditional and essentially Neogrammarian account. Section 4 is shorter, and the topic is not case, but gender. In some dialects, the number of genders has been reduced from three to two. This change is perhaps not as fully understood as the loss of case, but I suggest that a purely phonological account is not entirely satisfactory for gender, either. In the final section, some theoretical implications are suggested.

## 2. The traditional explanation

The question why case is lost has been addressed many times before. A widespread view is that the loss of the case opposition is triggered by phonology. Compare the following

[1] Thanks to the audience at the MMM 7 in Nicosia, and to Arne Torp and Andrew Carstairs-McCarthy.

quotation from a contribution to a handbook by Delsing (2002: 939), who addresses the closely related languages – or dialects – Old Danish and Old Swedish:[2]

> "*During this period [1100–1350] the morphological system of ODan [Old Danish] and OSw [Old Swedish] started on its way towards the simpler [NB] modern system.* ***The causes of this simplification are to be found primarily within the phonological system.*** *The weakening of unstressed vowels in suffixes and the dropping of final –R [corresponding to the suffix -r in Table 1 above, HOE], which starts during this period, beginning in ODan., reduce many case, gender and number distinctions in the nominal system.* ***These changes are accompanied by analogical processes internal to the morphological system*** *[...] The true loss of case and gender distinctions belongs to a later period, but the changes during this period are crucial to the ensuing changes*" p. 939 [emphasis added here, HOE]. Delsing also says that "*weakening of vowels in unstressed syllables causes severe reductions in the morphological system*" ... "*All gender and case distinctions disappear among the weak nouns in the sg. […] In the weak adjectival paradigm all case, number and gender distinctions are lost*" p. 937.

The reasoning is not always made quite as explicit as here, but that is not particularly surprising, within the vexed field of 'explanations' in diachronic linguistics. Let us first look at two examples where phonology would seem to provide us with sufficient explanation; I just repeat Delsing's points. The opposition between nominative *armr* and accusative *arm* can be lost due to what one may call *r*-deletion. There is evidence for this *r*-deletion in other categories in Danish, notably the plural of nouns.[3] Similarly, the opposition between nominative *granni* and oblique *granna* can be lost due to "neutralisation" or "vowel weakening". All word-final (unstressed) Old Danish vowels /i, a, u/ come out as *e* in Modern Danish. Considering that the formal opposition between *granni* and *granna* shows up in the final vowel, it is not terribly surprising that this "weakening" should have consequences.

The idea, in both cases, is that the phonological change removes so many of the relevant exponents that the case opposition comes to be something of a lexical irregularity, something that is so numerically weak that it cannot be upheld, and is lost by analogical means. I do not think anybody has ever suggested any numerical limit as to how many per cent of the nouns, which have to express a certain opposition for the opposition to prevail. But there is already considerable syncretism elsewhere in the nouns. Old Norse feminines and neuters given in Table 2 illustrate this:

Table 2: Two Old Norse feminines, indefinite singular only

[2] The relation between Old Norse, Old Danish and Old Swedish is tricky, but we cannot go into the issue here.

[3] Though only after vowels. Thus, what in Old Norse would be *bøkr* 'books' is, in Modern Danish, *bøger*, with no deletion. This indicates that the deletion account is more problematic than it seems at first. We return to this point below.

| | BYGÐ | LAND |
|---|---|---|
| Nom | bygð | land |
| Acc | bygð | land |
| Dat | bygð | landi |
| Gen | bygðar | lands |

There are also some masculines (e.g. NAGL) that do not evince any formal differentiation between the nominative and the accusative. And some do not evince any formal differentiation between the dative and the accusative (GESTR). Some few types of non-masculine nouns do not evince any case distinctions in the singular at all (fem. ELLI, neut. HJARTA). (See e.g. Haugen 1995 for further detail.)

Now, the idea that phonology must ultimately be responsible for the case loss seems appealing, for at least three reasons:

1) The morphological change and the phonological change are close in time. By the Neogrammarian account, they are not two independent innovations that just happen to take place at almost the same time. They are related in a way that makes sense. Phonological reduction is also a process that is not only relevant for suffixes; it happens with a host of consonants, and appears to be more general.
2) The case opposition is expressed mainly by suffixes in Old Norse, as are indeed most inflectional oppositions in that language, and the tendency for phonological change to eliminate word-final syllables is familiar in North Germanic, which has become less "inflectional". The changes from Old Norse to modern Norwegian hence fit in a larger picture; unstressed syllables and inflectional suffixes have been dropped before.
3) This is a fairly traditional Neogrammarian scenario (and hence well-established) – phonology is seen as the 'prime mover', morphology as merely 'reactive'. This may fit with our picture of *Lautgesetze* vs. analogy in diachronic linguistics in general.

The theoretical view outlined above is perhaps particularly linked to the Neogrammarians, but it is, I would emphasise, accepted – at least in part – up to the present day.[4] The quote from Delsing illustrates this for Old Swedish and Old Danish, and similar views are expressed for other languages. Compare Trask (1996: 128):

> "*The elaborate case-systems of Latin and Old English depended crucially upon distinctions in the final syllables of inflected nouns; as phonological changes began to reduce and to obliterate those final syllables, prepositions came to be used more frequently to reinforce the case distinctions which were beginning to get lost; the increased use of prepositions made the case-endings less significant than previously, and so there was less reason to hang onto the remaining case-endings. Consequently, English and the modern descendants of Latin, like Spanish, French, and Italian, have lost their earlier case-systems completely (except in a few pronouns), and replaced them with analytical (isolating) constructions involving prepositions*".

The very same words can be read in the 2007 edition.

[4] Also Wetås (2008: 22) notes that in the literature, the loss of case inflexion is often presented as primarily phonological changes with secondary morphological consequences.

## 3. Against the traditional Neogrammarian scenario for case

A number of problems with the traditional Neogrammarian conception outlined in 2 have been pointed out in the Norwegian literature. I shall survey these problems, drawing heavily on research carried out by previous scholars.

### 3.1. The genitive suffix –*s*

To begin with, nobody has ever claimed that the main genitive suffix *-s* is lost due to sound law. There simply is no diachronic process of *s*-deletion, equivalent to that of *r*-deletion, in Norwegian, nor in other North Germanic languages[5]. Nevertheless, the genitive case is lost even in Faroese, which is a fairly conservative variety, retaining the three other cases. It is only in Icelandic that the genitive suffix *-s* has remained fairly unchanged. Many Norwegian dialects have got rid of the genitive *-s* entirely. Admittedly, there are a few Norwegian dialects (and many Swedish ones) that retain an element *-s* indicating possession up to the present day (see e.g. Torp 1973, Gunleifsen 2009), but this element does not behave grammatically as Old Norse *-s* did. Its present status is a matter of much dispute (see e.g. Börjars 2003, Norde 2006 and further references therein). My point is only that there are too many dialects in which it seems implausible to operate with a general phonological rule of *s*-deletion – and still they have no genitive *-s* today.

This is all the more noteworthy, because in late Old Norse, after 1200, the genitive marker *-s* was particularly productive (as noted by both Wetås 2008 and Knudsen 1967); just as it was in late Old Swedish (Wessén 1969: 136). Thus, it spread to masculines that, originally, did not have it (cf. late Old Norse *sons* vs. the older *sonar*) and even to feminines. In other words, in the late mediaeval language, the suffix *-s* is what Natural Morphologists refer to as a "super-stable marker". Such markers are characterised by spreading even though no associated class change occurs (Wurzel 1984: 139). That is, even if masculines from other declensions than ARMR get the genitive suffix *-s*, which they previously did not have, they do not join the paradigm wholesale. Interestingly, Dammel & Nübling (2006) suggest that a super-stable marker is indicative of a breakdown in the inflexional system. They use Scandinavian *-s* as one of several examples.

### 3.2. The definite dative

So far, we have focussed on the indefinite singular. There is, however, also a definite singular. Compare Table 3.

Table 3: The definite singular of two masculines

| | | |
|---|---|---|
| Nom | armrinn | granninn |
| Acc | arminn | grannann |

[5] Already Knudsen (1967) argues that the loss of *-s* is not plausibly attributed only to phonology.

| | | |
|---|---|---|
| Dat | arminum | grannanum |
| Gen | armsins | grannans |

By traditional accounts (e.g. Enger 1993, Haugen 1995), the opposition between indefinite and definite is inflectional in Old Norse; the exponent of definite is thus an inflectional suffix.[6] So far, we have seen that the case inflection as a rule is lost in the indefinite. In the definite, however, the dative has stood its ground better – in fact, up to the present day in many dialects, while the nominative was by and large lost by 1500. To be sure, the definite dative is being lost today (see e.g. Sandøy 2000), but that is another story; the point is that it stayed on for so long – and its geographical distribution. Venås (1993: 262) notes as an "interesting geographical aspect" of the case reduction that "the dative is lost almost everywhere in that area that perhaps has retained the Old Norse phonological structure best, South-West Norway" [my translation]. So, in the South-West, /e/ and /a/ do not merge, most old /a/s are faithfully retained, quite unlike Danish. If what triggers the morphological change – dative loss – is the change away from Old Norse phonological structure, one would expect there to be less such loss in the area where the old phonological structure is best retained; but this is simply not what we find.

Making the case for phonology even worse, Knudsen (1967: 12ff) points out that the dative case has been retained in many Norwegian dialects that in general have had much phonological reduction in the final syllable. So the definite dative has been retained better where one might expect it to be lost on purely phonological grounds.

Knudsen (1967:13) argues that the retention of the dative "*is not primarily decided by the effects of the sound laws, but follows other lines: a tendency to retain the dative in inland dialects that preserve the older system with richer formal categories [his example is inland East Norway]; loss of dative in coastal (and town) dialects where more traffic […] has given the preconditions for a language with less formal distinctions*" [my translation].

This brings up the sociolinguistic factors. Contact apparently plays a role, as noted by several Scandinavian scholars (Knudsen 1967, Wessén 1967: 185, Torp & Vikør 2003). I have already quoted Trask's *Historical Linguistics* above. In the more recent 2007 edition, these lines remain the same (p. 159), but Robert McColl Millar has added an extra sentence: "*Many would claim, however, that language contact at least encouraged the developments involved*". These are words of wisdom, and another example in favour of this view will be brought up in the discussion of gender in section 4 below. But even when the factor of contact or sociolinguistics has been added, the phonological account does not quite hold, as the demise of the Faroese genitive makes clear (cf. 3.1 above). It is hardly plausible to attribute this development to contact.

### 3.3. How phonological is it really?

[6] According to Faarlund (2009), it should be considered cliticisation, but this issue is a large one and not essential for present purposes.

In the very same volume as Delsing, Wurzel (2002: 258) questions – or rather dismisses – the phonological motivation for the loss of case:

> "*The first stage of this development [loss of formal distinction nominative-accusative in Swedish] sees the strong masculine forms of the type OSw. nom.sg. hund-er – acc.sg. hund [dog] losing the nominative marker -er.* ***This cannot be a phonological reduction****, as the change affects neither stem-internal -er, as in OSw. biter, viter > Mod.Sw. bitter, vitter ['bitter', 'wise', both adjectives, HOE], nor the plural marker -er as in OSw. bok – nom.pl. bök-er, nat – nom.pl. nät-er > Mod.Sw. bok – böcker, natt – nätt-er [book, night]*".

Recall from section 2 above that Delsing used Old Danish to make his point, and *r*-deletion is a better candidate for a regular phonological change in Danish than in Swedish. In fact, however, *r*-deletion probably is not a regular phonological change in Danish, either, for two reasons. Firstly, in the verbs, *-r* is not deleted. If an *-r* is deleted as a plural marker, while the homophonous present tense marker is not, this is not a regular phonological change. Secondly, in nouns, the plural marker *-r* is apparently deleted depending upon declension (sic!). Thus, while Danish has *hæste* 'horses' with deletion, it has *gæster* 'guests' without; the reason being that the latter noun belonged to the Old Danish *ir*-declension, the former to the *ær*-declension.

But let us return to Wurzel's point: In Swedish, the deletion process cannot be purely phonological. Norwegian dialects are also interesting here: There are some (e.g. Western) dialects that also have *r*-deletion in the plural of nouns and elsewhere in verbs, and this would at first seem to fit the phonological picture, just as in Danish. But in some other dialects (mainly South-Eastern), *r*-deletion is neither attested in the plural nor in the verbs, so these dialects are essentially like Swedish, as described by Wurzel here. The problem for the phonological account is that the nominative suffix is not retained any better in dialects that do not display (phonological) *r*-deletion. If *r*-deletion is not squarely phonological in all those dialects where case is lost, then *r*-deletion cannot be a necessary condition for the loss of case.

So both with the nominative suffix *-r* and the genitive suffix *-s*, a phonological account seems to lead to at least partly wrong expectations. The same seems to be the case for the dative suffix rendered as *-i* in Old Norse in Table 1. Barðdal (2009) observes that its cognate, the dative /e/, and a verbal suffix /e/ behave very differently in Swedish. Barðdal concludes that the motivating factor for the case loss is squarely non-phonological.

In a fairly recent thesis, Wetås (2008) also presents important arguments against the idea that the loss of case is only phonologically triggered. On the basis of an empirical study of charters from West Telemark, she argues that;

> 1) the change in case inflection behaves differently for proper nouns than for common nouns; proper nouns lose case inflection earlier
>
> 2) morphologically complex proper names behave differently from simplex proper names; case is lost earlier with complexes

3) the case reduction behaves differently for person names than for place-names; case is lost earlier with person names

Wetås suggests that all three observations follow from a parameter we may call 'naminess' (or propriality): In general, person names are more 'name-y' than are place-names, morphologically complex proper names are more name-y than are simplex names.

So far, I have quoted others. Finally, let me add an observation of my own, which has to do with epenthetic vowels. In many varieties of Scandinavian, an epenthetic vowel *-e* is inserted quite early before *r*. Thus, we find, in certain West Nw. dialects, for example, a change from *armr* to *armer*. It is not quite clear (at least not to me) exactly when this epenthesis takes place, but the 13th century seems to be a reasonable guess. The loss of the epenthetic vowel cannot, at least not in all the dialects, be attributed to regular phonological change: In the dialect of Jæren, in the South West, the epenthetic vowel is retained in the adjectives (as in the verbs), but not in the nouns. We find, for example, *ein sjuge hund* 'a sick dog' < late Old Norse *ein sjuge hunder*. The epenthetic vowel is presumably not lost by regular phonological change, since it respects the grammatical categories. In other words, there is no phonological reason why this dialect does not have *hunde*. But then, *hunde* is just as clearly a nominative as *hundr*. Jæren is probably representative of most West Norwegian on this point.

There are also Norwegian dialects that have retained the epenthetic vowel even in the nouns (West Telemark, Setesdal, Sunnfjord, parts of Nordfjord, parts of Sunnmøre, cf. Skjekkeland 2005: 62), so that we find *hunde, arme*, going back to the old nominative. The formal opposition to the accusative could thus easily stay on, phonologically speaking. But none of these dialects have retained the case system.

### 3.4. Phonology cannot be all: Knudsen (1967)

The upshot so far is that phonology can hardly be all. This is also the conclusion of Knudsen (1967), who argues explicitly against the Neogrammarian scenario. He says it may be too simple to assume that the sound laws alone decide: The "sound laws alone are as a rule not capable of making old grammatical categories disappear, although they certainly can speed up the development to a very high degree" (my translation).

## 4. Gender

We now leave the issue of case, and turn to another issue, that of gender. This is a different, but related topic, in that in many dialects of Scandinavian, the masculine and the feminine "merge". Again, one may wonder why.[7] And again, I shall try to argue that phonology does not quite suffice.

For illustration, let us consider a recent paper by Duke (2009). This paper is in fact so good that it is unfair to use it here, but even Duke, to my mind, illustrates what might be

[7] This territory is less well charted than that for case. But a familiar example is from the Bergen dialect, where Jahr (e.g. 2009) and Nesse (2002) take the merger to be due to contact; Perridon (2003) does not.

called "the Neogrammarian bias". Her focus is on gender in Swedish, which – in the standard language – has been reduced from a three-way opposition to a two-way opposition. For the adjectives, Duke suggests that if the final syllable, i.e. the epenthetic vowel and /r/ be lost from the Old Swedish nominative masculine singular *langer*, then the difference between the masculine and the feminine is thereby considerably weakened. The implication is that phonology accounts for the merger.

To be sure, Duke advances her argument for Old Swedish. If we try to transfer it to the next dialect down the road, i.e., Old Norse, the argument turns out to be problematic, however. The important empirical argument against transferring Duke's idea to Old Norse can be found in the dialects. In the Jæren dialect of Norwegian, the final /r/ has been lost from adjectives, and there is indeed a phonological rule of general *r*-deletion in this dialect. The epenthetic vowel is retained in the adjectives, but not in the nouns (cf. 3.3 above). The opposition between the feminine and the masculine is retained in many other categories, but the originally masculine adjective *sjuge, lange* is transferred analogically to the feminine adjectives as well. Thus, when the formal differentiation between feminine and masculine adjectives is lost, this has absolutely nothing to do with loss of phonological marking, only with analogy from the masculine. In this dialect, then, we find, just as in Modern Swedish, there is syncretism between masculine and feminine of the adjectives.[8] But the point is that the masculine-feminine merger comes about by other means than phonology. Furthermore, the loss of gender opposition in the plural, which is general in Scandinavian, simply cannot be accounted for by phonology alone (Enger 2010).

Note also that in the Romerike dialect of East Norwegian, unlike Jæren, there is no general phonological *r*-deletion. This is shown by the present of strong verbs (*kommer*), but also by some adjectives, such as, traditionally, *blår, bakketer* (cf. Refsum 1954). Again, the traditional masculine form is transferred to the feminines – for these adjectives. Thus, there is a masculine – feminine merger here too, and phonology cannot be the reason.

## 5. Conclusions

I suggest several conclusions:

**1) Phonology cannot be the sole prime mover**

I am not saying that phonology has no role to play.[9] When the dative is retained better in the definite singular than in the indefinite (cf. 3.2), this must have to do with the phonological difference – the simple observation that there was "more" phonological expression in the definite (e.g. Venås 1993: 262). The indefinite is otherwise usually taken to be unmarked in comparison to the definite, so it is hard to see any purely morphological account for that difference. But it seems impossible to believe that phonology is the only prime mover. There is nothing revolutionary in this conclusion,

[8] Though this does not happen for so many adjectives in the Jæren dialect as in Swedish.

[9] On this point, my account differs from that of Barðdal (2009).

which may be rather trite to some specialists in Norwegian, cf. the following quotations from Torp & Vikør (2003: 96):

> "*...But this much is certain:* ***Phonological development cannot alone be responsible*** *for the fact that most of the Old Norse morphology has been lost on the way towards Modern Norwegian, for there are very many forms that ought to have been different in Modern Norwegian if sound laws alone had had control.* ***Perhaps the most plausible hypothesis is that several tendencies have worked simultaneously****: Phonological development has no doubt worked so that a good many different forms had to merge. But at the same time, we find innumerable examples that the same sounds develop entirely differently in different grammatical surroundings.... The full and complete answer as to why exactly these changes happened [...] may never be found. But partial insight is not to be scorned*" Torp & Vikør, p. 96f. [emphasis added here].

In a similar vein, also Venås (1993/1971: 262) holds both morphology and phonology responsible for the case loss. In this picture, morphology is not merely reactive.

The Neogrammarian model has been tremendously influential in diachrony (cf. Bynon 1977: 15), and for good reasons, to be sure. Yet the over-reliance on phonological accounts may be a mistake.

**2) Multiple motivation**

A reasonable account of the loss of case seems to involve 'multiple motivation'. Phonology cannot be all, neither can contact (compare e.g. the Faroese genitive). We should beware of the 'exclusionary fallacy', as Langacker (1987) reminds us: "*The gist of this fallacy is that one analysis, motivation, categorization, cause, function or explanation necessarily precludes another. From a broad, pre-theoretical perspective, this assumption is gratuitous and in fact rather dubious, in view of what we know about the multiplicity of interacting synchronic and diachronic factors*" (p. 28) "*Finally, it can be noted that diachronic questions are often posed in dichotomous terms [...] Did construction C arise internally or was it borrowed from a neighboring language? By now most scholars recognize that questions like these are simplistic*" (p. 30). This is explicitly recognised in the quotation from Torp & Vikør above.

The change from four cases to none is one of perhaps three classical chestnuts studied over and over again in Norwegian diachrony, by generations of scholars. If we are left we a partial account of multiple motivations here, this suggests (at least to me) that multiple motivation is plausible in general.

**3) The value of dialectal evidence**

A methodological point that I hope to have shown is the value in consulting dialectal evidence, simply because our data base is broadened (cf. also Harnisch 2000, Nübling 2005, Ralli 2009). As long as we consult one standard language only, say Danish, the putative relation between phonological and morphological change seems reasonable enough. But it is well known that standard languages are also '*the least interesting kind of language for anyone interested in the nature of human language*' (Hudson 1996: 34). It is

also well known that the distinction between language and dialect is quite problematic in a Scandinavian context; thus, Norwegian as spoken in Oslo is probably more intelligible to a Stockholm speaker of Swedish than is a conservative Northern Swedish dialect. It has been necessary to look into details in a number of dialects in order to show what is wrong with the postulated diachronic connection between phonological loss and case loss.

**4) Our view of morphology**

By a standard Neogrammarian view, morphology does not really change ”by itself”, it changes in response to changes elsewhere. Morphology is merely “reactive”. If, however, morphology really – at least to some extent – is ”by itself” (Aronoff 1994, Carstairs-McCarthy 1994, 2001, Maiden 2004, 2005), then one would not expect the classical and essentially Neogrammarian scenario to be *the whole* truth. And in fact, it is not.

Other authors have also advanced accounts of a more purely morphological kind (Barðdal 2009, Wurzel 2002). It remains to be discussed in further detail how convincing these accounts really are. My main point today has been to go against the more familiar, Neogrammarian scenario.

In synchronic studies, morphological phenomena have over and over been described as ‘really’ phonology; but in recent years, we have come to recognise the aprioristic assumption that morphology should be reduced to phonology as mistaken (e.g. Lass 1984, Comrie 1986, Carstairs 1988, Anderson 1992, 2008). We should beware of subjugating morphology to phonology (Maiden 2009). Perhaps we need to think more about this in relation to diachrony as well; also in a diachronic perspective, there is some autonomy to the morphological component.

**5) What about other languages?**

The conclusion we have reached on Norwegian diachrony opens for the possibility that the phonological account is not really entirely adequate for other Germanic or Romance languages, contrary to what Trask implies. For German dialects, Nübling (2008: 313) observes that although the case loss is partly due to phonological change, the phonological developments do not imply that the morphology is unable to resist phonology (see also her p. 322). In contemporary Standard German, Harnisch & Nübling (2004: 1906) observe a tendency to use proper names uninflected, that is, in the nominate even where the syntactic context would seem to require something else (*in einem Bericht des “Neuer Tag”* instead of *des “Neuen Tags”*). This corresponds to the relevance of ‘naminess’ that Wetås found for Norwegian (cf. 3.3 above). This factor appears to be relevant also in French; Schøsler (2001) reports a clear tendency for nouns that denote humans to retain their old declension longer than nouns denoting non-humans – “[p]roper nouns, however, are an exception: they lost their case marking early” (p. 172). Also Barðdal (2009) questions the phonological account for Germanic.

Obviously, case loss in Germanic and Romance is a large question, and it cannot be answered here. Nevertheless, observations like those made by Nübling, Harnisch & Nübling, Schøsler and Barðdal may make us wonder if the phonological account really is adequate.

**Envoi**

One of the major virtues of the Neogrammarian account is that the morphological change does not emerge as an independent, isolated observation; rather, it follows from something else, with which it is connected. So, an obvious drawback with the account advocated here is that the morphological change no longer necessarily had to follow from something else, and that it is one out of several changes. In one sense, the phonological account is so much more elegant, so much more appealing than what I have suggested here. The only defense I can offer here is to quote Anderson (1992: 346):

"it is important not to let one's æsthetics interfere with the appreciation of fact."

The Scandinavian case and gender reduction can hardly be attributed only to phonology.

## References

Anderson, S.R. 1992, *A-morphous morphology,* Cambridge University Press, Cambridge.

Aronoff, M. 1994, *Morphology by itself*, MIT Press, Cambridge, Mass.

Barðdal, J. 2009, The development of case in Germanic. Barðdal, J. & Chelliah, S.L. (eds), *The Role of Semantic, Pragmatic and Discourse Factors in the Development of Case,* John Benjamins, Amsterdam.

Börjars, K. 2003, Morphological status and (de)grammaticalisation: the Swedish possessive. *Nordic Journal of Linguistics* 26, Cambridge University Press, Cambridge, pp. 133-163.

Carstairs, A. 1998, Some implications of phonologically conditioned suppletion. *Yearbook of Morphology 1988*, Foris, Dordrecht, 1988, pp. 67-95.

Carstairs-McCarthy, A. 1994, Inflection classes, gender and the Principle of Contrast. *Language* 70, Linguistic Society of America, Baltimore, pp.737-788.

Carstairs-McCarthy, A. 2001, Umlaut as signans and signatum, *Yearbook of Morphology 1999*, Kluwer, Dordrecht, pp. 1-23.

Comrie, B. 1986, The Maltese Pharyngeal. *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung* 39, Akademie-Verlag, Berlin, pp. 12-18.

Dammel, A., Nübling, D. 2006, The Superstable Marker as an Indicator of Categorial Weakness? *Folia Linguistica* XL, Mouton de Gruyter, Berlin, pp. 97-113.

Delsing, L.-O. 2002, The morphology of Old Nordic II: Old Sw. and Old Dan. Bandle, O. et al. (eds), *The Nordic Languages*, *volume I.* Mouton de Gruyter, Berlin, pp. 925-40.

Duke, J. 2010, Gender reduction and loss in Germanic: three case studies. Nübling, D., Dammel, A., Kürschner, S. (eds.), *Kontrastive Germanistische Linguistik*. Olms, Hildesheim

Enger, H.O. 1993, Morfemet i beskrivelsen av bøyingsmorfologien til norrøne substantiv – utfordring eller hindring? *Maal og Minne*, Det norske samlaget, Oslo, pp. 12-28.

Enger, H.O. 2010, Gender and contact: a Natural Morphology perspective. Siemund, P. (ed), *Universals and Variation*. Mouton de Gruyter, Berlin.

Faarlund, J.T. 2009, On the history of definiteness marking in Scandinavian, *Journal of Linguistics* 45, Cambridge University Press, Cambridge, pp. 617-639.

Gunleifsen, E. 2009, *Prototypiske attributive possessive uttrykk*, Ph.D. thesis, University of Agder, Kristiansand, 2009.

Harnisch, R. 2000, Morphologische Theorie und dialektale Empirie. *Sprachwissenschaft* 25, Carl Winter Universitätsverlag, pp. 367-386.

Harnisch, R., Nübling, D. 2004, Namenkunde. Booij, G.E. et al. (eds): *Morphologie/Morphology,* vol. 2, Mouton de Gruyter, Berlin, pp. 1901-1910.

Haugen, O.E. 1995, *Grunnbok i norrønt språk*, Gyldendal Ad Notam, Oslo.

Hudson, R.A. 1996, *Sociolinguistics*, 2nd edn., Cambridge University Press, Cambridge.

Jahr, E.H. 2009, *Språkhistorie og språkkontakt*, Novus, Oslo.

Knudsen, T. 1967, *Kasuslære*, Universitetsforlaget, Oslo.

Kusters, W. 2000, Morphological simplification: more than erosion? Gilbers, D., et al. (eds), *Languages in Contact*. Rodopi, Amsterdam, pp. 225-231.

Langacker, R.W. 1987, *Foundations of Cognitive Grammar, volume 1*, Stanford University Press, Stanford.

Lass, R. 1984, *Phonology*, Cambridge University Press, Cambridge.

Maiden, M. 2004, Into the past: Morphological change in the dying years of Dalmatian. *Diachronica* 21, John Benjamins, Amsterdam, pp. 85-111.

Maiden, M. 2005, Morphological autonomy and diachrony. *Yearbook of Morphology 2004*, Springer, Dordrecht, pp. 137-175.

Maiden, M. 2009, 'Suppletion in diachrony: a new case-study', paper read at the MMM conference Nicosia.

Mørck, E. 2005, Morphological developments from Old Nordic to Early Modern Nordic. Bandle, O. et al. (eds), *The Nordic Languages, volume 2,* pp. 1128-1149.

Nesse, A. 2002, *Språkkontakt mellom norsk og tysk i hansatidens Bergen*, Novus, Oslo.

Norde, M. 2006. Demarcating degrammaticalization: the Swedish s-genitive revisited. *Nordic Journal of Linguistics* 29, Cambridge University Press, Cambridge, pp. 201-239.

Nübling, D. 2005, Forschungsperspektive zur Nominalmorphologie deutscher Dialekte. Eggers, E., et al. (eds), *Moderne Dialekte – Neue Dialektologie*, Franz Steiner Verlag, Stuttgart, pp. 45–87.

Nübling, D. 2008, Was tun mit Flexionsklassen? Deklinationsklassen und Ihr Wandel im Deutschen und seinen Dialekten, *Zeitschrift für Dialektologie und Linguistik* LXXV, Franz Steiner Verlag, Stuttgart, pp. 282-331.

Perridon, H. 2003, Language contact and grammatical change: the case of Bergen. *Tijdschrift voor Skandinavistiek* 24, Skandinavisch Seminarium, Amsterdam, pp. 235-256.

Ralli, A. 2009, Morphology meets dialectology: insights from Modern Greek dialects. *Morphology* 19, pp. 87-105.

Refsum, H. 1954, *Romeriksmålet*, Romerike historielag, Oslo.

Sandøy, H. 2000, Vitnemål frå ein dativbrukar. Elmevik, L. (ed): *Dialekter och folkminnen. Hyllningsskrift till Maj Reinhammar den 17 maj 2000.* Sällskapet för svensk dialektologi, Uppsala, pp. 231-240.

Schøsler, L. 2001, From Latin to Modern French: Actualization and markedness. Andersen, H. (ed): *Actualization: Linguistic Change in Progress.* John Benjamins, Amsterdam, pp. 169-186.

Skjekkeland, M. 2005, *Dialektar i Noreg*, Høyskoleforlaget, Kristiansand.

Torp, A., Vikør, L.S. 2003, *Hovuddrag i norsk språkhistorie,* 3 edn, Ad Notam Gyldendal, Oslo.

Trask, R.L. 1996, *Historical Linguistics,* Arnold, London, 1996.

Trask, R.L. 2007, *Trask's Historical Linguistics*. 2nd edition, revised by Robert McColl Millar, Hodder Arnold, London.

Venås, K. 1993/1971, Eit oversyn over dei viktigaste endringar i språkstrukturen frå gammalnorsk til nynorsk Jahr, E.H. & O. Lorentz (eds), *Historisk språkvitenskap/Historical Linguistics*, Novus, Oslo, , pp. 253-266.

Wessén, E. 1969, *Svensk språkhistoria*. Almqvist &Wiksell, Stockholm.

Wetås, Å. 2008, *Kasusbortfallet i mellomnorsk*, Unipub, Oslo.

Wurzel, W.U. 1984, *Flexionsmorphologie und Natürlichkeit*, Berlin, Akademie-Verlag.

Wurzel, W.U. 2002, Nordic language history: Semiotics and the history of naturalness. Bandle, O. et al (eds), *The Nordic Languages, volume* 1, Mouton de Gruyter, Berlin, pp. 253-262.