

The development of Scandinavian bound definiteness marking and the clitic-affix distinction*

Kersti Börjars and Pauline Harries

The University of Manchester

Abstract

All Scandinavian languages have a morphologically bound element which can fill the same function as the definite article in other Germanic languages, cf Swedish *grodan* ‘frog.DEF’ vs Dutch *de kikker* ‘DEF frog’. This phenomenon has been well-studied, descriptively and theoretically as well as diachronically and synchronically. Still, there appears to be scope for disagreement both on empirical and theoretical grounds, as a recent exchange between Faarlund (2007) and Abraham & Leiss (2007) shows. In this paper, we argue that both the proposed analyses fail to capture the facts. We provide evidence to show that the differences between Old Norse and Modern Norwegian are not as striking as Faarlund assumes. Furthermore, the close connection made between formal properties and functional properties leads to misinterpretations of the data. We then provide an analysis which does not assume such a close relation.

1. Introduction

The historical development of the Scandinavian bound definiteness marking has been the subject of many studies, ranging from thorough traditional philological work, as exemplified by Noreen (1892) and Seip (1958), to work informed by more recent approaches to linguistic analysis, see for instance Dyvik (1979) and Perridon (1989), or indeed analyses couched within a specific syntactic theory such as Faarlund (2007) and Abraham & Leiss (2007). In spite of this attention, the exact details of the origin and development of the bound definite marker are not entirely clear as the disagreement between Faarlund (2007) and Abraham & Leiss (2007) makes clear. Both provide analyses of the definite ending and its development within Minimalist theory, but disagree about the data and about how to interpret and analyse the development. In this paper, we will show that the disagreement is partly down to theory-internal issues and that the assumption that there are two distinct categories, ‘clitics’ and ‘affixes’, which can be neatly distinguished also leads to difficulties, in particular when this formal distinction is assumed to go hand in hand with a difference in function. We will show that the data instead point towards the need for a more subtle distinction. We will consider data from Old Norse and from all the modern Scandinavian languages and show that the modern languages do not divide into two distinct sets with respect to the formal and functional properties of their definiteness markers, nor with respect to their development from Old Norse. Hence a distinction into two categories is unlikely to do the data justice.

We will start in section 2 by providing an overview of what is known about the early development of the bound definiteness marker. In section 3, we consider the theoretical analyses of the different stages of development which Faarlund (2007), Abraham & Leiss (2007) and others provide. In section 4, we will then review the criteria Faarlund (2007) applies to distinguish between affix and clitic status, argue that some criteria from the literature have been misinterpreted and show that if a broader range of data is considered,

* This work has partly grown out of a project funded by the *Arts and Humanities Research Council* (119317) and we gratefully acknowledge their support. As always, conversations with colleagues at Manchester University have helped shape our ideas. In this case, we are particularly grateful to Ricardo Bermúdez-Otero, David Denison and John Payne. We are grateful to Helge Dyvik, who obligingly sent us a copy of a paper unavailable to us here by return of e-mail.

different conclusions can be drawn. Our own conclusions about morphological categories, the status of the definite ending in the Scandinavian languages at different stages of historical development and how to analyse them are presented in section 5.

2. Historical development of Scandinavian bound definiteness

Before we start our discussion, a word about language names and terminology is in order. Collectively all the older forms of the modern Scandinavian languages can be traced back to common Old Norse, the language spoken in Mainland Scandinavia before its divergence into two distinct dialects: West Norse, which subsequently developed into Old Norwegian and Old Icelandic; and East Norse, which developed into Old Swedish and Old Danish.¹ The term Old Norse (ON) as used in many of the grammars and primers offering an introduction to the language usually refers almost exclusively to Western Norse, viz the language of Norway, Iceland and all Western Norse settlements from around the ninth to the fourteenth century. Given the geographical spread and the extended period we are dealing with, there can be little doubt that the language we think of as Western Norse must comprise of a number synchronic and diachronic variants. Despite this, the two forms are thought to be close enough, certainly in written literary form, to justify treatment as a single unified language. The term Old Norse itself, as used by Faarlund (2007), is often used interchangeably in the literature with Old Icelandic, as used by Abraham and Leiss (2007). In the present paper, following Faarlund, we will adopt the term Old Norse as it is the more neutral of the two terms. When referring other historical data, we will use the same description used in the original source, e.g. Old Swedish rather than East Norse. For the modern varieties, we just use the name, e.g. Danish rather than Modern Danish. We will make a distinction between the two types of Norwegian, *Nynorsk* and *Bokmål*, only when it is motivated, for generalisation over the two, we will use Norwegian. In order to avoid committing to a particular analysis of the definiteness markers, either as articles or as agreement markers, or as clitics or affixes, we will refer to the free marker as FREE-DEF and to the bound one as BOUND-DEF. Throughout the period we are considering here, two elements have functioned as FREE-DEF and we shall use this term to refer to both of them when further detail is not relevant.

The earliest attestation of BOUND-DEF is generally agreed to be one found in a runic inscription in Uppland, Sweden, from around 1040.² There are also a number of early examples from Norwegian inscriptions, but only one example has been found in Denmark (and that one is assumed to have been carved by a Norwegian).³ The first attestation of FREE-DEF is generally held to be in an inscription on the *Rök* stone from the 9th century. This might be interpreted as evidence that the bound element developed from the free one. However, data is sufficiently scant from this time not to allow any certain conclusions. We will, however, argue that there is indirect evidence to support this conclusion.

BOUND-DEF remains rare even in later inscriptions and also in the earliest texts. It is generally assumed that as an innovation, it is likely to have been more common in the spoken language. With reference to the written language, Jónsson (1901:80) states: ‘It is thus clear that it is not until the 12th c that the article has become firmly attached to a noun’, but adds ‘However, in the daily language this must have happened some way into the 11th c...’ (see discussion in Wessén (1956:30–32), in Seip (1958:235), who also refers to similar views expressed by Sijmons (1906:CLXXXVIII) and in Perridon (1989:136–137), who cites Neckel

¹ Faroese is most likely to be a descendant of West Norse, but little is known about the early development of this language (1994:190)

² Though see Perridon (1989:137) with reference to Neckel (1924) for a possible earlier example from Norway.

³ For a more thorough discussion of the earliest occurrences of the bound definiteness marker, see Seip (1958:233–240) in Norwegian, or Perridon (1989:135–142) in English.

(1924) making the same point). In the early texts, definiteness is not explicitly marked as frequently as it is in modern Scandinavian languages. There is evidence that explicit marking of definiteness is used mainly when the definite noun phrase occurs in an environment that would normally be associated with indefiniteness (Leiss 2000) and when it is marked, a separate article is used more frequently than the bound form. Interestingly, the bound element is more frequent in texts where the style can be assumed to have been influenced by the spoken language.⁴ In a discussion of a particular definite form, Kock (1919:87–8) argues that for Wessén’s hypothesis about its development to be correct, BOUND-DEF would have to have developed by the beginning of the 7th century or even earlier and he describes this assumption as ‘bold’ or ‘audacious’. Both Wessén’s assumptions and the basis of Kock’s criticism of it are, however, quite speculative and we will not go further than to consider it established that the development had started before our earliest remaining sources.

According to Wessén (1956:32), at least in the earliest sources for Old Swedish and Old Danish, BOUND-DEF and FREE-DEF derived from *sá* were used in very similar contexts, so that no clear distinction was made between the noun phrases in each example in (1).

- | | | | | | |
|-----|----|----------------|---|-----|------------|
| (1) | a. | iorþin | – | þe | iorþ |
| | | earth/soil.DEF | | DEF | earth/soil |
| | b. | barnit | – | þät | barn |
| | | child.DEF | | DEF | child |

Though many controversial issues still remain in this debate, we can conclude that the early emergence of BOUND-DEF predates our earliest remaining sources. It is then unlikely that incontrovertible evidence of its origin and development can be found, only its spread can be studied on the basis of the sources. Instead, hypotheses about its origin and development will have to be based to a great extent on what we know about linguistic change in general and the development of definiteness markers in particular.

It seems most likely to us that the development of BOUND-DEF took place in Proto-Nordic, rather than as independent developments in the daughter languages.⁵ Seip (1958:233) argues that this is not a necessary conclusion, since there are other developments, like the loss of case or the loss of person marking on the verb, which have happened independently in the Scandinavian languages. Our conclusion may not be a necessary one, but it seems to us the more plausible one. The development of a bound definiteness marker is of course not unique to the Scandinavian languages, but it is a relatively unusual phenomenon (see Lundebj 1965; Dahl 2007b for brief overviews).⁶ The loss of case or person marking, on the other hand, is a more general phenomenon and has taken place in a number of other Germanic languages. It seems improbable to us then that the Scandinavian situation would have arisen as a number of independent changes or even as a contact phenomenon (this is also the view taken by

⁴ See for instance Seip’s (1958:235–6) summary of arguments that the more frequent occurrence of the bound article in one part of the *Edda, Hárbardsljóð*, is due to attempts at achieving stylistic effects such as youth of the speaker or everyday language.

⁵ The only varieties of the Scandinavian languages which do not have a bound definiteness marker are those spoken in Southern and Western Jutland (Wessén 1956:32–33; Delsing 1993).

⁶ In a sample of 566 languages, 84 are deemed by Dryer (2005) to have a definite article which takes the form of an affix. Bound articles which are deemed to be clitics rather than affixes are considered ‘definite words’, not affixes. To distinguish the two types, Dryer goes mainly by position and selectivity, so that bound definite elements which are phrase final and can attach to categories other than the head noun are deemed to be clitics. All Scandinavian languages included in the survey are classed as ‘affix’ languages. Dryer does admit the difficulty in making the distinction and considers it possible that some of the ‘definite affix’ languages would be better considered ‘definite clitic’ languages and hence ‘definite word’ languages.

Delbrück (1911) and Hansen (1927), but for a different view, see Kock (1919:89–91)). Our argument in this paper does not hinge on this view of things, however.

As Perridon (1989:129) points out, many early grammars assume that the indefinite article and BOUND-DEF are actually the same element and this idea is taken up in Nilsson (1968). This hypothesis would have to be said to lack support from philological evidence, however. Perridon (1989:129–135) sums up the more plausible hypotheses about the possible origin of BOUND-DEF. In these, the bound marker is assumed to have developed from a free demonstrative element, but there is some dispute as to the details of the development.

The two most plausible hypotheses of how BOUND-DEF arose in the Scandinavian languages derive it from the demonstrative (*h*)*inn*.⁷ In one case the relation is indirect and in the other less indirect. The two developments can be sketched as in (2).

- (2) a. noun (h)inn (def)adjective → noun-inn adjective
 b. noun (*h*)*inn* (DEM) → noun-*inn*

Under (2a), the demonstrative is assumed to have grammaticalised to a free definite article. This article is used especially when the noun phrase contains an adjective and since word order is still relatively free, FREE-DEF and the adjective frequently follow the noun. Examples of both orders are provided in (3).⁸

- (3) a. hin bezste riddarä (Söderwall 1891)
 DEF best knight
 b. spāghil hin skäraste (Wessén 1956:42)
 mirror DEF clearest

The assumption is then that from examples such as (3b), the prosodically weak definiteness marker ends up attaching to the preceding noun. Evidence to support this hypothesis comes from early examples with the same order as in (3b), where the definiteness marker is attached to the noun, as in (4).

- (4) handinæ hælhu (Kock 1919:98–9)
 hand.DEF holy

Under (2b), the link between the demonstrative and BOUND-DEF is more direct.⁹ The demonstrative is frequently placed after the noun, as Perridon (1989:143–4) puts it ‘In Scandinavian the position after the noun came to be the regular position for unstressed (*h*)*inn*.’ As an argument against the model in which the adjective positioning was significant, Perridon (1989:146) cites an investigation by Musonowicz (1911) which showed that the vast majority of the instances of the structure in (2a) contained a proper noun, rather than a common noun. Since the environment required for (2a) would then not be sufficiently

⁷ See Perridon (1989:145–9) for an account of a third, to our mind less plausible, potential explanation, one which has not been taken up in the literature.

⁸ Throughout this paper, we will gloss any pure definiteness marker as DEF and any demonstrative marker as DEM, so as to avoid making a distinction between different types of marking. We will also often omit glossing features that are not directly relevant to our point. This will make the reading of the glossing easier and will make it easier to focus on the point at hand. In many instances the features cannot be deduced from isolated examples, for instance with ambiguous case endings. The following glosses will be used: SG singular, PL plural, M masculine, NT neuter, F feminine, C common, NOM nominative, ACC accusative, DAT dative, GEN genitive.

⁹ See Kuteva & Heine (2008–22) for a description and discussion of a similar change: the historical relation between a demonstrative which is prenominal in Modern Bulgarian and a postnominal bound definiteness marker.

Abraham & Leiss (2007) quite explicitly assume that it is not an example of downward movement.

Faarlund (2007) follows the Scandinavian tradition reviewed in section 2 and assumes that BOUND-DEF in Old Norse developed from the free definite/demonstrative marker. In his analysis, which is expressed within Minimalism, this does, however, involve a downward movement diachronically and hence degrammaticalisation theoretically. Abraham & Leiss (2007), on the other hand, assume that the preposed FREE-DEF developed from the postposed BOUND-DEF. Empirically, this would then be an example of degrammaticalisation since a bound element develops into a free element. Oddly, Abraham & Leiss (2007:17) claim that their assumption ‘that the preposed article developed from the postposed, enclitic one ... has the advantage of bringing in line the probing directions as well as the grammaticalization cline.’ We are not aware of any interpretation of the grammaticalisation cline in which a development from a clitic to an independent word would not be viewed as counter-directional to grammaticalisation. The main argument to support their unorthodox position provided in the paper is that under this view of the data, a theoretical analysis can be provided within Minimalism which does not involve diachronic downward movement. It is not, however, entirely clear from the paper how this particular historical change is captured in their analysis. As we shall see, they assume that the demonstrative developed into a definiteness marker through diachronic movement from specifier to head, but no details are given for the alleged development from a postnominal bound marker to a pronominal free marker of definiteness. Regardless of the detail, theoretically, Abraham & Leiss’ analysis would then not involve degrammaticalisation as defined within the models of Roberts & Roussou (2003) and van Gelderen (2004a).

We then have the paradoxical situation that Faarlund (2007) assumes that empirically the development of the definite marking is standard grammaticalisation clitic>affix, but theoretically it is not since it involves downward movement diachronically. In Abraham & Leiss’ (2007) analysis, this is standard grammaticalisation theoretically, but in order to achieve this, they have to make the assumption that it is degrammaticalisation empirically, namely a shift from a clitic to an independent element. As we have shown above, the timing of the change is such that it is unlikely that we will be able to settle the dispute on the basis of reasonably unambiguous data. We will then consider the theoretical analyses which give rise to this paradox.

For a basic noun phrase consisting of just a definite noun in Old Norse, like *hestinn* ‘the horse’, Faarlund (2007:31) assumes the structure in (7).¹²

(7) [_{DP} [_D hestr-inn [_{IP} [_I ~~hestr~~ [_{NP} [_N ~~hestr~~]]]]]]]

The noun root is Merged in N, but moves up to I in order to check its number feature.¹³ The bound definiteness marker *-inn* is Merged in D, much like an independent word would be, but because of its status as a phonologically dependent element, it requires a host. The noun then raises from I to D to satisfy the requirement for a host for *-inn*. In this analysis, *hestr* then does not have a definiteness feature at all, the definiteness of *hestinn* derives entirely

¹² We have added brackets to Faarlund’s representations when one side of the bracket is missing or when the addition of brackets to our mind makes the representation clearer.

¹³ It is impossible in a paper such as this to make the Minimalist terminology used by Faarlund and Abraham & Leiss clear to someone not familiar with the approach. Neither article defines their assumptions within Minimalism very clearly. However, we will attempt to clarify some notions in footnotes, at the risk of sounding naïve to those working within Minimalism. The fact that the noun is ‘Merged in N’ means that this is the category under which the noun enters the tree. Lexical elements will generally move from the position in which they are initially merged. In the analyses referred to here, this will be for one of two reasons: to check a feature or to support a prosodically weak element.

from the bound element found in D. As we shall see, this is assumed to be different for Norwegian.

For a noun phrase containing an adjective, like (8a), Faarlund (2007:32) assumes the structure in (8b).

- (8) a. hinum kærsta sýni
 DEF.DAT dearest son.DAT
 ‘the dearest son’
 b. [_{DP} [_D hinum [_{αP} kærsta [_{IP} [_I sýni [_{NP} [_N sýni]]]]]]]]]

In (8b), the free definite article is Merged in D and since it is independent, there is no requirement for a host and no motivation for movement of the noun up to D. The noun then only moves to I; as in (7) it does so to check its number feature. One issue that arises is what prevents the free definite article from combining with a noun when there is no adjective present, which Faarlund assumes to have been ungrammatical in Old Norse, though see our example (1). Faarlund assumes a selectional restriction stating that the free determiner cannot combine directly with an IP, but only with an αP.

In line with Julien (2005), Faarlund assumes that the adjective phrase itself fills the Specifier of αP and that the head α is obligatorily empty. The assumption that the head of αP is empty is crucial to his analysis of Old Norse noun phrases such as those in (9), where the definite noun has raised from I to D, past the adjective in αP. This would not be possible under standard assumption about movement and blocking in Minimalism if the head of αP had been filled by any material, including a trace or a copy of a moved element.

- (9) orminum langa
 snake.DAT.DEF long

Under this analysis of Old Norse noun phrases, there is a BOUND-DEF and a FREE-DEF, both of which are merged in D, above the inflectional node I. There is then no inflectional definiteness in Old Norse and no agreement (the weak/strong marking is excluded from the discussion).

A further characteristic of Old Norse is that the demonstrative *sá* can co-occur with FREE-DEF (*h*)*inn* as in (10), where *þau* is a form of *sá*.

- (10) a. þau in stóru skip
 DEM.PL DEF big ship
 b. sá hinn blindi maðr
 DEM DEF blind man

These are the only two determiners that can co-occur and they always occur in this order, so that one might expect an analysis in which there is a DemP which takes a DP as its complement. However, Faarlund analyses this as DP recursion since this has the perceived advantage that all noun phrases are DPs. He comments that he considers ‘the question of whether the higher projection is a DemP or a DP a rather insignificant terminological one.’ (Faarlund 2007:33) This does not seem an entirely appropriate description to us. If there

is assumed to be DP recursion, then there need to be specifications to ensure the correct order, so that **in þau stóru skip* is not generated alongside (10).¹⁴

There does, in fact, appear to be more variation in the ordering of elements within the DP than is acknowledged by Faarlund. Thus, according to Barnes (2004:85), examples can also be found in which independent syntactic elements, i.e. demonstrative, definite article, and adjective are postposed in Old Norse as demonstrated in (11). Some form of stylistically motivated movement would have to be assumed to account for such examples within Faarlund’s analysis. However, the crucial point here is that the generalisation that *sá* always precedes *(h)inn* does hold.

- (11) maðr sá hinn blindi
 man DEM DEF blind
 ‘the blind man’

A further potential issue with the recursive DP analysis is that we cannot see directly what would prevent the free definite article *(h)inn* or indeed *þau* from co-occurring with *-inn*. Still Faarlund assumes that double definiteness — i.e. the co-occurrence of BOUND-DEF with FREE-DEF, see section 4.6 — only arises in Norwegian; indeed this is one of the major differences for which he wants his analysis to account. The existence of double definiteness in Norwegian is one of the factors motivating the distinction he makes between clitic in Old Norse and affix in Norwegian. As we shall see in Section 4.6, though double definiteness is uncommon in early forms of the Scandinavian languages, there are examples from different varieties of earlier forms of Scandinavian languages in which BOUND-DEF and FREE-DEF co-occur. In fact, Barnes (2004:85) states that double definiteness is attested most frequently in Norwegian, as opposed to Icelandic, sources of Old Norse. If Faarlund’s assumption that double definiteness is essentially a modern phenomenon is true, so that the early examples of double definiteness are disregarded for the purposes of modelling the noun phrase, the free elements *þau* and *sá* must be prevented from co-occurring with BOUND-DEF. Presumably, additional restrictions would also be required to rule out *(h)inn* combining with noun phrases like (9), where the definite noun has moved to D. As we shall see below, if a free determiner is used with this order, it follows the noun and precedes the adjective. The distinction between DemP and recursive DPs then seems more than just a terminological issue.

Let’s consider now Faarlund’s analysis of Norwegian and the changes that have taken place. Faarlund assumes that the analysis needs to capture the following changes to definiteness marking which have taken place between Old Norse and Norwegian; (i) BOUND-DEF has changed from being a clitic to being an affix, (ii) double definiteness has arisen and (iii) the possibility of combining two free determiners has been lost. Given Faarlund’s assumptions about the relation between form and function, change (i) implies a change also in function, from a determiner to an inflection. We will argue in section 5 that this is not a necessary conclusion.¹⁵ The third of the changes leads to the conclusion that DP is no longer recursive and since the bound ending is no longer assumed to be merged under D, change (ii) can still be accommodated. Empirically, the independent *(h)inn* has been lost, but it has been replaced as a FREE-DEF by a form of the originally demonstrative *sá*, *den*. This is the case in all Mainland Scandinavian languages and Faroese, though in Faroese *hinn* survives in formal written language. In all these languages, *den* also survives as a demonstrative. An

¹⁴ As always in historical work, the asterisk means ‘unattested’, rather than ungrammatical. However, given the wealth of data from these languages, it seems reasonably safe to assume that the absence is structural rather than accidental.

¹⁵ It is also not a necessary conclusion within the Minimalist framework, as witness the fact that Embick & Noyer (2001:560) describe the clitic-affix distinction as irrelevant to their purposes.

independent definiteness marker, be it FREE-DEF or a demonstrative, is required when the noun is preceded by an adjective phrase, as in Old Norse, but this element standardly co-occurs with the definite form of the noun in Norwegian, unlike in Old Norse.

Constructions with two free determiners, as in (10) are, according to Faarlund and Abraham & Leiss, no longer permitted. However, examples of combinations of a demonstrative and FREE-DEF can still be found in Norwegian, as in (12a) and (12b), from Bokmål and Nynorsk, respectively.¹⁶ A similar example from Swedish is provided in (13).

- (12) a. denne den første snøsamlingen siden august
 DEM DEF first snow.collection.DEF since August
 ‘this the first collection of snow since August’
 b. denne den svakaste stunda mi
 DEM DEF weakest moment.DEF my
 ‘this my weakest moment’
- (13) a. denna den tredje valkampanjen på ett år
 DEM DEF third election.campaign on one year
 ‘this the third election campaign in one year’
 b. dessa de minsta av våra bröder
 DEM.PL DEF.PL small.SUPERL of our brother
 ‘these the poorest of poor’

It is indeed true that such examples are rare in modern varieties of the languages, but the construction is still reasonably productive; the example in (12a) is from a 1996 newspaper report on cross-country skiing and (13b) is from a recent blog (fotolasse.se).¹⁷ It would be quite plausible to analyse the examples in (12) and (13) as some kind of apposition, consisting of two separate noun phrases, with the demonstrative being used pronominally, so that DP recursion is not required. However, this would then also be an option for Old Norse, so that we would not want to see this as a clear difference between Old Norse and Norwegian, or indeed other modern varieties of the Scandinavian languages.

In order to accommodate the change in (i) above, Faarlund assumes that the definiteness feature realised by *-inn* occurs in I in Norwegian, rather than in D as in Old Norse, and hence it has been “lowered” diachronically. The formal representation of Norwegian is as in (14) (Faarlund 2007:40), compare with (7).

- (14) $[_{DP} [_D \{+DEF\}] [_{IP} [_I \text{hest} \{\alpha DEF\}] [_{NP} [_N \text{hest}]]]]]$

¹⁶ The examples in (12) are from corpora at *Tekstlaboratoriet*, the University of Oslo and those in (13a) from *Språkbanken*, available at Gothenburg University. We are grateful to the Universities and relevant funding bodies for providing this resource and to Janne Bondi Johannessen for her help with accessing *Tekstlaboratoriet*.

¹⁷ The example used by both Faarlund (2007:36) and Abraham & Leiss (2007:28–9) is the one in (i)

- (i) *dei dei store skipa
 DEM DEF large ships

Abraham & Leiss state in a footnote that Christer Platzack and Marit Julien have pointed out to them that examples with a demonstrative and a free definite marker are grammatical in Modern Swedish and Modern Norwegian and suggested that the ungrammaticality of (i) is down to haplology. However, they ‘would like to maintain [their] position until this fact has received further clarification.’ (2007:28) Given the ease with which data such as (12) and (13) can be found and the minimal pronunciation differences between the two determiners in (i), theirs seems to us to be the wrong conclusion to draw from the data.

According to Faarlund, the noun is merged in N with an unvalued definiteness feature.¹⁸ It moves from N to I, this time to check both definiteness and number. The feature is then finally valued through an AGREE relation with the valued definiteness feature belonging to a covert determiner in D. Unlike some previous analyses of Scandinavian definite noun phrases, the definite noun does not move to D. Compared to the analysis of Old Norse, the noun does have marking for definiteness in Norwegian, but this is now an agreement feature. In a noun phrase like *hesten* ‘horse.DEF’, the referential definiteness comes from a covert determiner in D, not from the definite noun. To support this analysis, Faarlund (2007:37–39) argues that the bound inflectional definiteness marker in Norwegian is not as strongly referential as it was in Old Norse, when it had the status of a clitic.

When the noun phrase contains an adjective, as in *den gamle hesten* ‘the old horse’, the +DEF feature in D has to be realised phonetically, by *den*. It is not clear which properties of the covert determiner or of *den* force this distribution with respect to adjectives, but possibly, given Faarlund’s assumptions about Old Norse, the covert determiner is associated with selectional restrictions which mean it can only combine with an IP, not with an α P. Just like in (14), it is the determiner in D which values the definiteness feature, the definiteness on the noun is only an agreement feature. Since Faarlund assumes that a noun never moves beyond I, he does not have to account for the fact that the definite noun cannot move to D when there is pre-modification. This has been a perennial problem for analyses of Scandinavian noun phrases.

To sum up; in Faarlund’s analysis, the feature which is realised as a BOUND-DEF is associated with D in Old Norse and with I in Norwegian, this is assumed to directly related to the alleged change from a clitic to an affix. When the definiteness feature is found in I, it is an agreement affix only and hence will appear in all definite noun phrases, giving rise to the double definiteness characteristic of Norwegian and Swedish. We can then assume that Danish, which does not have double definiteness, would be different in this analysis in not having definiteness in I. Under Faarlund’s assumptions, this ought to entail that the Danish bound definiteness marker is less affix-like. We are not aware of any such evidence.

Turning now to Abraham & Leiss’ analysis, they assume a development in the opposite direction: ‘the preposed article developed from the cliticized articles’ (2007:39) and state that ‘The empirical basis for this venture is the fact that there is no clear, convincing evidence that the pre-posed demonstrative-derived article occurred before the clitic definite article.’ (2007:18) As we argued in §2, this is indeed true, since both the free and the bound element appear to have arisen before the earliest remaining sources. However, the (near) unidirectionality of grammaticalisation, that is the fact that there are many examples throughout history and across languages of free elements becoming bound and that there are very few convincing examples of development in the opposite direction, we would expect positive evidence to be required to assume a development of the latter kind. The traditional philological literature also supports this position, see for instance Lundeby (1965:14–6), who argues with reference to Heinrichs (1954) and Hodler (1954), that there is clear evidence that the FREE-DEF with adjectives is an older development than BOUND-DEF.

¹⁸ There are different approaches to feature checking within Minimalism. In earlier versions it was essentially done by matching; for the kind of features we are dealing with here (uninterpretable features) an element entered the tree (the numeration formally) with a feature and a value which needed to be eliminated before the semantic interpretation. The way in which it was eliminated was by movement, overt or covert, to a functional category carrying the same feature and value. This was referred to as ‘checking’ and it allowed the feature to be deleted. In more recent approaches, this is replaced by a process of ‘valuing’. An element enters the tree with an unvalued feature, e.g. [DEF:], this feature then needs to be valued by an element which has the same feature, but valued, e.g. [DEF: ±]. This process is described as AGREE and does not require movement. We understand Faarlund’s approach to be unorthodox in that he combines the two: the unvalued feature is checked in I, but remains unvalued and hence needs to be valued by D

It is not straight forward to tease out what the details of Abraham & Leiss' (2007) analysis are, nor indeed the basis for their criticism of Faarlund (2007). Abraham & Leiss (2007:22), reproduce Faarlund's (2007) (25) (our (14) above), but they refer to Faarlund (2004), in which different assumptions were made, in particular that there was a category R, for Referential, and say about Faarlund's analysis 'as soon as the clitic becomes an affix in the modern stages of Scandinavian, a different feature related category is in place: not R(eference)P, but Infl(ection)' (Abraham & Leiss 2007:22). However, as we have seen, Faarlund (2007) does not assume a category R at all and he does not assume that the change lies in the nature of the category below D, but that it can be attributed to the position of the DEF marker, originally in D and later further down, in I.

Abraham & Leiss (2007) then argue against Faarlund's conclusion: 'The crucial insight of all of this (counter to Faarlund 2007) is that R(eference)P for clitic definiteness in Old Norse cannot host inflectional features of gender, case and number etc. that appear to belong to NumP and the respective other feature complexes this being simply for the fact that the probing categories for reference and for grammatical features are in crucially different locations.' (Abraham & Leiss 2007:23). Given that Faarlund (2007) does not assume a category R, the criticism is not entirely appropriate. With respect to the different locations of features, Faarlund (2007) does assume for Old Norse that the referentiality is situated in D, where the clitic is found. As shown above, one possible interpretation of Faarlund's analysis of Norwegian, is that BOUND-DEF does not express true referentiality, but that this is found in D. Since the non-referential features, like number, are found in I, he does separate the two types of features. Given the difficulties in interpreting Abraham and Leiss' (2007) criticism of Faarlund, we will not discuss it further here.¹⁹

A crucial difference between Abraham & Leiss (2007) and Faarlund (2007), apart from, but related to, the hypothesis about the direction of the change, lies in the assumption of the location of the true referential definiteness. As we have seen, Faarlund (2007:37–9) argues that BOUND-DEF in Norwegian is not fully referential, as it was in Old Norse, but that it is now just a "grammatical feature". Abraham & Leiss (2007:19–21), on the other hand, argue that BOUND-DEF in Norwegian marks the real definiteness in their preferred sense of marking known referents, it is 'the thema continuant'. The prenominal article, on the other hand, since it can occur only when the noun is preceded by pre-modification, is described as a 'set-choice marker in the sense that it singles out those Ns that have the property of the attributed adjectival.' (2007:20) It is interesting at this point to compare with the conclusions Dahl (2007b; 2007a) draws from a study of different types of definiteness marking in general and the marking of definiteness in standard and non-standard varieties of Scandinavian in particular. Dahl (2007b) concludes on the basis of typological data that noun phrases containing adjectival modifiers have at least as much definiteness marking as, and often more than, NPs without modification and that where there is such extra modification, it occurs adjacent to or on the adjective. He then suggests that the grammaticalisation of definiteness markers may start in noun phrases with adjectival modifiers, or restrictive relative clauses; 'As a possible explanation of such a development, consider the fact that an adjective or a relative clause (used restrictively) commonly singles out a subset within the set denoted by

¹⁹ There does appear to be further profound misunderstandings of Faarlund's work, however, as in 'Since by all diachronic accounts, double definiteness marking was not common in the oldest stages of Scandinavian (Faarlund 2004:56–8) and that **the proposed article derived from the postposed bound clitic morpheme (Faarlund 2004, 2007), ...**' (Abraham & Leiss 2007:21, our emphasis). This seems to be the exact opposite of what Faarlund argues. Indeed, Abraham & Leiss (2007:19–20) also say 'Not only is there a postposed article form, which developed from an Old Norse clitic to gain morphological affix status in Modern Norwegian (Faarlund 2004, 2007; see also Lohndal 2007).' This would appear to contradict the previously quoted statement.

the head noun, contrasting it to its complement set.’ (Dahl 2007b:152) This does not, however, lead Dahl to the same conclusions as Abraham & Leiss with respect to semantic differences between types of definite elements in languages which have double definiteness marking. Dahl also shows that there is evidence from Swedish dialects that the bound definiteness marker is semantically more grammaticalised than its free counterpart, that is its use has broadened beyond the clear definiteness contexts, for instance to use in generics and non-delimited (“partitive”) uses. Julien (2005:66) makes a similar point with respect to the use of the definite nouns in the vocative, which would be an indication of grammaticalisation beyond a standard definiteness marker; Danish would not use the definite form in such phrases, e.g. *store pige* ‘big.WK girl’ ‘you big girl’, whereas Swedish would, as in *lilla gubben* ‘little.WK man.DEF’ ‘you dear little boy’. This is then evidence that BOUND-DEF has grammaticalised further than the free article.²⁰ As we saw in section 2, one hypothesis about the origin of BOUND-DEF is indeed that it developed from the free marker associated with an adjective phrase.

In terms of the detail of the analysis, Abraham & Leiss agree with Faarlund that there is no movement of N to D in Norwegian. However, they also argue that it may be advantageous not to assume such movement in Old Norse either: ‘Given the different referential potentials of the preposed and the postposed articles, late merge of the preposed set-choice article would do the same job in a more plausible way.’ As we saw in the discussion of examples (12) and (13), Abraham & Leiss agree with Faarlund that Norwegian does not permit two free determiners, whereas Old Norse did. Their analysis of Old Norse double free determiners does, however, differ from that of Faarlund. They account for the co-occurrence by assuming that the demonstrative is in SpecDP of the DP headed by the free definite article, giving the analysis in (15b) of (10a), repeated here as (15a).

- (15) a. þau in stóru skip
 DEM.PL DEF big ship
 b. [_{DP} þau [_D in [_{CP} stóru [_{RP} [_R skip [_{NP} [_N skip]]]]]]]]

This difference is described by Abraham & Leiss (2007:29) as ‘a minor technical point’. As we saw above, Faarlund describes the difference between a recursive DP and a DemP with a DP complement also as a minor difference, though we argued that different predictions are made about the data under the two assumptions.

Abraham & Leiss (2007:29) then argue on the basis of ‘the referential potentials of the preposed and the postposed articles’ that neither Old Norse nor Norwegian has N to D movement and conclude: ‘The only grammaticalizing process to be considered would be Spec-to-head (van Gelderen 2004) — i.e. in particular, no “downward grammaticalization” would have to be assumed — no small methodological advantage, it appears.’ (2007:29) As we saw at the beginning of this section, Late Merge captures the Minimalist idea of grammaticalisation as frozen upward movement. The potential status of Spec-to-Head as downward movement was also discussed at the beginning of the section, it is clear from this quote that Abraham & Leiss assume that a diachronic move from Spec-to-Head is not an example of downward movement. This argument would then refer only to the grammaticalisation of demonstrative *sá* (of which *þau* in (15) is a form) to the prenominal definite article of Norwegian. The assumption appears to be that the status of the bound *-inn* has not changed over time. As far as we can tell, the formal analysis does not capture the

²⁰ Of course the bound definiteness marker is also more grammaticalised in that it is an affix, rather than a free form.

historical relation between *-inn* and *(h)inn*, where as we have seen, Abraham & Leiss assume that the latter developed from the former.

As will have become clear, it is difficult to define unambiguously exactly how the formal analysis proposed by Abraham & Leiss captures their disagreement with Faarlund's analysis. However, their general idea is that, historically, the prenominal FREE-DEF has developed from postnominal BOUND-DEF. Though this development goes against the traditional grammaticalisation cline, the theoretical analysis then does not involve movement downwards in the tree and hence this is not degrammaticalisation theoretically. The only change that could be described as downwards is that of the demonstrative, which is assumed to originate in SpecDP, but when it has developed into a pure definiteness marker, an article, it is found in the head, D. However, this is not assumed to constitute downward movement in the technical sense. We have argued that there are problems with both analyses, but empirically, we believe that Faarlund's characterisation of the diachronic development are correct.

4. Affix-clitic criteria as applied to the Scandinavian bound definiteness marking

Faarlund (2007:25–30) applies four criteria to BOUND-DEF in Old Norse and Norwegian and concludes on the basis of the outcome that the element was a clitic in Old Norse and is an affix in Norwegian. Though we are in agreement with his interpretation of the general direction of the change, we will dispute some of the detail and come to a different conclusion. In particular, we will argue that a simple dichotomy between 'clitic' and 'affix' misrepresents the data and that the difference between Old Norse and Norwegian is not as big as Faarlund's interpretation of the data would imply. We will broaden the data set to include all the modern Scandinavian languages and show that if only two categories are assumed, the subtly different development that have taken place cannot be captured.

Generally, the criteria used by Faarlund (2007) form part of a tradition that started with Zwicky (1977) and of which Zwicky & Pullum (1983) is the most commonly referred to exponent. The criteria proposed within this tradition are based on a particular model of grammar, in which the Principle of Lexical Integrity is a corner stone, that is that syntax is blind to morphology. It follows from a linear approach to grammar, in which elements in the lexicon may be combined by morphology. The resulting complete words then enter the syntax as units, with any internal structure obscured to syntactic processes. Clitics are then assumed to be added in the syntax, not in the morphology and from this follows a number of properties, like the fact that there can be no arbitrary gaps in clitic-host combinations; arbitrariness of that nature exists only in the lexicon and the morphology. It should be pointed out that the theoretical framework within which Faarlund formulates his analysis, does not normally assume the Principle of Lexical Integrity and does not recognise a difference between morphology and syntax in a way that makes the notions of affix and clitic useful (for a very explicit refutation of the distinction within Minimalism, see Embick & Noyer 2001:560).

4.1 Morphophonological changes in the host

Zwicky and Pullum (1983) argue in their Criterion C that morphophonological idiosyncracies are more characteristic of affixed words than of clitic groups. This follows from their assumption that irregularities can only arise in the morphology and clitics are attached to their hosts in the syntax. Faarlund (2007:27) rephrases it as clitics not normally causing morphophonological changes to the host and argues that there were no such changes in Old Norse, but that they do occur in Norwegian. Faarlund's formulation is in line with the spirit of Zwicky & Pullum (1983), but it crucially omits 'idiosyncratic'. In Zwicky and Pullum's

terms, only changes that are arbitrary would indicate affix status. We would argue that the examples Faarlund provides are in fact not arbitrary, but are predictable, either generally or on the basis of some subset of nouns. This does not mean that they are evidence that the bound element in Norwegian is a clitic, they are just not evidence of affix status. In fact, we think there is more evidence from Old Norse of this type of “irregularity” than is clear from Faarlund’s account. This in turn means that the difference between Old Norse and Norwegian is not quite so striking either.

The examples Faarlund (2007:27–8) gives from Norwegian are provided in (16) and (17).

- (16) a. hestar+ne → hestane ‘horse.PL.DEF’
 b. ætter+ne → ættene ‘pea.PL.DEF’

- (17) a. soge+a → soga ‘story.SG.DEF’
 b. esel+et → eslet ‘donkey.SG.DEF’
 c. gyger+a → gygra ‘giantess.SG.DEF’

He contrasts such examples with the Old Norse data in (18).

- (18) a. saga+in → sagan ‘story.SG.DEF’
 b. gýgr+in → gýgrin ‘giantess.SG.DEF’

The issue is then what this set of data shows, about clitic-affix status and about differences between Old Norse and Norwegian. To our mind, (16) and (17) are not examples of idiosyncracies, but rather of regular simplifications. As for the Old Norse data in (18), the fact that the regular simplification in (18a) is by means of deletion of the vowel in the ending rather than the stem, as in (17a) hardly seems significant. In (18b), since the stem lacks the vowel compared to Norwegian (17c), the fact that there is no change is not surprising. We will return to such examples below.

The type of change illustrated by (17b) and (17c) happens regularly in the Modern Scandinavian languages. It is a simplification which does not happen across word boundaries, but it is quite regular. Examples to show that this happens also with other affixes in Norwegian are provided in (19) and similar examples from Swedish are given in (20).

- (19) a. segel + e → segle ‘to sail’
 sail INF
 b. regel + er → regler ‘rules’
 rule PL

- (20) a. mögel + a → mögla ‘to go mouldy’
 mould INF
 b. spegel + ar → speglar ‘mirrors’
 mirror PL

Icelandic, which is the modern Scandinavian language which shows closest affinity with Old Norse, displays a similar simplification process, as does Faroese. This is illustrated in (21a) for Icelandic and (21b) for Faroese.

- (21) a. lifur + in → lifrin
 liver.SG.F
 b. reiður + ið → reiðrið
 nest.SG.N

One could argue the issue of whether the underlying form ends in Cl / Cr and has a vowel inserted in certain environments or whether there is an vowel in the underlying form, which is deleted, as in the examples provided here.

There are also similar examples from Old Norse of changes of the type which Faarlund uses for Norwegian to illustrate the affix status of Norwegian BOUND-DEF. For instance in a sequence ‘Cr’, the ‘r’ tended to be lost when BOUND-DEF was added, as in (22) (Valfells & Cathay 1981:369).

- (22) a. veggr + inn → vegginn
 wall
 b. hrammr + inn → hramminn
 bear’s paw

The crucial point here is that the process cannot be described as irregular and there also appears to be no clear difference between Old Norse and Norwegian in this regard.

In Old Norse, as in Icelandic, an ‘m’ is irregularly deleted in dative plural e.g. *hest-um* ‘horse.PL.DAT’ and *hestu-num* ‘horse.PL.DAT.DEF’. Faarlund recognises this as a potential problem for the clitic analysis of Old Norse BOUND-DEF, however, he dismisses it by pointing out that ‘this is a single instance among 17 distinct cells of definite forms’ (2007:27). We will not assign any great significance to this example, but in a sense it is a more plausible example of idiosyncrasy exactly because it is just in one cell.

With respect to the examples in (16), it is interesting to note that in Swedish, the ‘r’ remains in the orthography, as in (23).

- (23) a. hästar+na → hästarna
 b. ärtor+na → ärtorna

Would it really be appropriate to take this as evidence that the Swedish BOUND-DEF is less grammaticalised as an affix than its Norwegian counterpart? It would seem not, but presumably this would be the consequence of Faarlund’s argumentation.

Going beyond the orthography, in many Mainland Scandinavian varieties which have an alveolar /r/, a cluster of /r/ and one of the dental consonants /t, d, n, l, s/ will be realised as a retroflex version of the dental [ɽ , ɖ , ɳ , ʎ , ʂ]. This is a regular feature which happens also across word boundaries, as (24) illustrates for Swedish.

- (24) a. kör nu /çø:r/ + /nʌ:/ = [çø:ɳʌ:]
 drive.IMP now
 b. kör långt /çø:r/ + /lɔŋt/ = [çø:lɔŋt]

To native speakers, the retroflex is most likely to be perceived as a version of the corresponding dental rather than as a combination of two sounds, or indeed a version of /r/. The Norwegian spelling can be seen as an illustration of this. The simplification illustrated in

(16) is then certainly regular and could be seen to reflect the reflexive pronunciation and hence a regular assimilation process.

Furthermore, there would appear to be similar cases of the final ‘r’ of the stem being lost before the ‘n’ of BOUND-DEF in the orthography in older forms of Swedish of a similar phenomenon; the example in 25a is from Wessén (1956:35) and 25b from Noreen (1892:143). Naturally, this does not say anything about Old Norse, but given the Swedish orthography, as illustrated by 23 and the conclusions Faarlund draws from Norwegian orthography, it is interesting that at least Old Swedish could display this simplification also.

- (25) a. pänningar + na → pänningana
money.PL
b. stædher+ne → stædhene (or stædherne)
town.PL

Our conclusions with respect to this criterion is then that the older forms and the modern forms of the Scandinavian languages behave in quite similar ways. There are some simplifications across the boundaries which may affect elements of the stem, but they are of a regular nature. There appears to be no evidence of the kind of idiosyncratic changes that Zwicky and Pullum (1983) had in mind, for instance vowel changes in the root or a suppletive root being used. This must, however, not be taken as counter evidence to the hypothesis that Norwegian is an affix, it is just that this criterion does not help us define the status of BOUND-DEF in either earlier or modern forms. What we can say is that there is no evidence of a change having taken place.

4.2 *Arbitrary gaps*

With respect to arbitrary gaps, Faarlund (2007:28) writes ‘Among the clitics there is a certain group, first termed special clitics by Zwicky (1977), which have their own special syntax. This means that the clitic attaches to a certain class of hosts. In the case of BOUND-DEF, this is the noun. This means that as long as BOUND-DEF is a clitic, we expect it potentially to attach to any noun, which also seems to be the case [in ON KEB/PH].’ This seems to us a misinterpretation of Zwicky (1977). We will return to the categories of clitics recognised by Zwicky (1977) in section 4.4 and show that ‘special clitics’ are not the only type with special syntax. More importantly at this point, as we interpret Zwicky’s discussion of ‘special syntax’, it still assumes that a clitic is positioned with respect to a phrase, it is only that the rules that govern this particular positioning are different from those rules of the language in question which position full words. We would then not conclude on the basis of Zwicky (1977) that a special clitic would be expected to attach to a special class of hosts, rather, it should display the “promiscuity” that is indeed a criterion for general clitic status in Zwicky & Pullum (1983).

Arbitrary gaps in the distribution of the bound element are, however, considered evidence of affix status, but this is unrelated to whether or not special clitics are expected to attach to more than one category. It should also be pointed out that this holds only under a particular view of the relation between the lexicon and morphology. Di Sciullo & Williams (1987) Williams (2007), for instance, argue that irregularities do not form evidence of a particular morphological status. They assume that the lexicon as a list of irregularities is separate from the lexicon as morphology. They use the term ‘listeme’ for the former and assume that it can also contain syntactic constructs, like idioms. Under this view, irregularities could then not be taken as evidence of affix status.

Faarlund (2007:29) provides the examples in (26a) and (26b) to indicate that there are arbitrary gaps in Norwegian noun-DEF combinations. (26c) is there as a comparison.²¹

- (26) a. ein eksamen ‘an exam’ heile eksamen / ?eksamenen ‘the whole exam’
 b. en verden ‘a/one world’ heile verden / *verdenen ‘the whole world’
 c. ein by ‘a city’ heile byen / *by ‘the whole city’

The two examples provided by Faarlund are interesting because they both end in *-en*, and since the words are non-neuter, this is identical to BOUND-DEF. It is possible then that this is just an example of speakers avoiding haplology, or possibly speakers misinterpreting the *en* of *eksamen* as an instance of BOUND-DEF, in either case it is not arbitrary. *Verden* as an indefinite is particularly interesting since this is actually a reinterpretation of an originally definite form, compare Swedish *en värld*, Dutch *een wereld* and indeed *a world*. Furthermore, the Oslo corpus of Norwegian Bokmål does in fact yield examples of both *verdenen* and *eksamenen*, as well as *verden* and *eksamen* as definite forms.²² Some examples using the forms which Faarlund marks as ungrammatical or questionable are provided in (27).

- (27) a. den jævla eksamenen min
 DEF bloody exam.DEF my
 ‘my bloody exam’
 b. denne nye verdenen
 DEM new world.DEF

It is interesting to consider a mono-syllabic word ending in *en* here, where there is no possibility of confusion with BOUND-DEF *-en*. *Scen* ‘stage’ is such a word and for this word, there is no definite use of *scen* whereas there are examples of *hele scenen* and *den scenen*. We conclude then that in (26a) and (26b) are not so much arbitrary gaps, but are due to the identical shape of the final sounds of the stem and the BOUND-DEF and the confusion this may give rise to.

Börjars (1998:52–6) provides what are argued to be examples of irregularities from Swedish and Hankammer & Mikkelsen (2002–53) for Danish. Some of the Swedish examples are parallel to those given by Faarlund, repeated above as (16) and (17). As our discussion in section 4.1 indicated, our conclusion is that these exceptions actually apply to an identifiable set of examples and hence do not exemplify arbitrariness. Other examples provided for Swedish and Danish refer to proper nouns or morphologically definable sets. We are then not aware of any convincing examples of true arbitrariness in any Mainland Scandinavian languages of the kind that would warrant a description of BOUND-DEF as a clitic.

Faarlund claims that there is no example similar to (26) in Old Norse and hence this can be argued to be a difference between the two stages of the language. How to interpret the absence of something in a historical corpus is of course a notoriously difficult issue. However, given our suspicion that there are no examples of truly arbitrary gaps in Norwegian or Swedish, again we conclude that there is little or no difference between Old Norse and Norwegian in this respect. The potential absence of arbitrary gaps should not lead to the

²¹ The indefinite article varies with gender in Norwegian as it does in the other Scandinavian languages. The exact shape it takes also varies between the two types of Norwegian; for a masculine noun, Nynorsk would use *ein*, whereas Bokmål would use *en*.

²² The corpus for Nynorsk is substantially smaller, so that the lack of examples may be due to the limitations of the text.

conclusion that these elements are clitics though, since it is only positive evidence that should lead to a conclusion.

4.3 *Inflection*

Faarlund's fourth criterion is formulated as 'clitics may have their own inflection, while affixes *are* inflections' (2007:29). We agree with Faarlund that the inflectional properties of the stem and the bound element indicate a change between Old Norse and Norwegian, and one which indicates increased coherence and dependence between BOUND-DEF and its host. The change referred to can be illustrated with reference to the Old Norse data in (28) (only the singular forms are provided here, the plural data show the same pattern).

- (28) a. hestr-inn
horse.SG.NOM-SG.DEF.NOM/ACC
b. hest-inn
horse.SG.ACC-SG.DEF.NOM/ACC
c. hesti-num
horse.SG.DAT-SG.DEF.DAT
d. hests-inns
horse.SG.GEN-SG.DEF.GEN

The crucial property here is that both the stem and BOUND-DEF have morphological marking for number and case. Compare this to the Norwegian data in (29).

- (29) a. hest-en
horse-DEF.SG
b. hest-ar-na (realised as *hestana*, see discussion in section 4.1)
horse-PLU-DEF.PL
c. hest-en-s
horse-DEF.SG-GEN
d. hest-ar-na-s (realised as *hestanas*)
horse-PLU-DEF.PL-GEN

The changes between (28) and (29) are, of course, linked to a general erosion of the case system. However, the genitive can still serve to illustrate the reduced independence of BOUND-DEF from its host: the stem and BOUND-DEF are no longer marked independently for case.

We do not, however, draw any conclusions about the function of these elements from this evidence of a change in cohesion; to Faarlund the more dependent form can only function as agreement inflection exactly because it is more closely bound. We would not want to assume such a close connection between form and function. For instance, we would not exclude the possibility that a pronominal affix on a verb could have the same function as a pronominal element cliticised to a verb (see discussion of 'incorporated pronouns' in for instance Bresnan & Mchombo 1987).

A comparison with the other modern Scandinavian languages reveals interesting differences. As (30a) and (30b), respectively, show, Swedish and Danish behave like Norwegian.

- (30) a. häst-en-s
horse-DEF.SG-GEN
b. hest-en-s
horse-DEF.SG-GEN

Faroese and Icelandic, on the other hand retain a pattern similar to that of Old Norse.

- (31) a. hestur-inn Icelandic
horse.SG.NOM-DEF.SG.NOM/ACC
b. hest-inn
horse.SG.ACC-DEF.SG.NOM/ACC
c. hests-ins
horse.SG.GEN-DEF.SG.GEN
d. hesti-num
horse.SG.DAT-DEF.SG.DAT

- (32) a. hestur-in Faroese
horse.SG.NOM-DEF.SG.NOM/ACC
b. hest-in
horse.SG.ACC-DEF.SG.NOM/ACC
c. hests-ins
horse.SG.GEN-DEF.SG.GEN
d. hesti-num
horse.SG.DAT-DEF.SG.DAT

This is then a property which appears to split the Scandinavian languages into Mainland Scandinavian and Insular Scandinavian. As we shall see not all properties cluster in this way. We will also return to the connection Faarlund establishes between morphosyntactic status, cq affix status, and functional status, cq status as determiner. To our mind, the connection is not as direct as Faarlund assumes.

4.4 Relation to free definite article

Faarlund claims that one criterion for clitic status is that ‘clitics have free word counterparts, affixes do not.’ (2007:25) He attributes this position to Zwicky (1977). This is not an entirely accurate description: Zwicky (1977) recognises three types of clitics; SIMPLE CLITICS — which are prosodically weak variants of a full word which have the same distribution as their full counterparts —, SPECIAL CLITICS — which are also prosodically weak variants of full words, but which have a different distribution from their full counterpart — and BOUND WORDS — which are prosodically weak elements which do not have a full counterpart. To Zwicky, then it has to be established by separate morpho-phonological criteria whether or not an element should be described as a clitic. Its possible relation to a full form will only then determine what type of clitic it is; whether it is simple or not. It is not clear that Zwicky (1977) makes any predictions about whether an affix could have a corresponding full form, but it would not seem impossible to us that a free pronoun could have a bound variant that was closely enough integrated with, say, a verb that it would be appropriate for us to refer to it as an affix. Indeed, maybe a pronoun incorporating (or pro-drop) language like Italian is an example of such a language.

Faarlund’s argument is that in Old Norse, the free article (*h*)*inn* was the full variant of the bound *-inn* and since *-inn* has a different distribution from (*h*)*inn*, it must be a special clitic. In Norwegian, where the independent article *den* has developed from a different Old

Norse form, *sá*, Faarlund argues that BOUND-DEF lacks a corresponding full form. Under Faarlund’s interpretation of Zwicky (1977), this is then evidence that the element in question was a clitic in Old Norse and is an affix in Norwegian. However, given Zwicky’s (1977) trichotomy, it would also be possible in principle to conclude on the basis of this set of data that the Old Norse element as a special clitic and the Norwegian one a bound word.

It is interesting here to consider Danish in particular. For Norwegian and Swedish, which have double definiteness, it may be inappropriate to refer to an alternative full form, since the two can co-occur. However, Danish shows complementary distribution between the free and the bound form and as the data in Table 1 shows, the forms are also similar in shape.

		FREE	BOUND
SG	COM	<i>den</i>	<i>-en</i>
	NT	<i>det</i>	<i>-et</i>
PL		<i>de</i>	<i>-(e)ne</i>

Table 1: forms of FREE-DEF and BOUND-DEF in Danish

The issue is then how one judges whether these should also be considered free and bound variants of the same form, and hence whether the data in Table 1 can be taken as evidence for the special clitic status of Danish BOUND-DEF under Faarlund’s interpretation of Zwicky’s (1977) criteria. The etymology of the two elements are different, but we are quite confident that this is obscured to a native speaker by the similarity in shape, so that if the relation between the two forms is a property of the grammars of native speakers, then they may well be considered related in Danish, in spite of the etymology.

Under our interpretation of the distinctions made by Zwicky (1977), and our assumption that there is no reason to assume that an affix could not have a free variant that is similar in form and function, the presence or absence of a corresponding free form is not directly relevant to the morpho-syntactic status of the bound element. Our conclusion is that whereas the historical relation or phonetic similarity between FREE-DEF and BOUND-DEF may determine what type of clitic it is, it does not distinguish between affix and clitic. Hence the issue of whether the pronominal articles are or are not free versions of the bound article will not concern us further here. We will return to the issue of double definiteness, regardless of etymology or phonetic form, and what that can tell us about the morphological status of the elements.

4.5 Positioning

On the basis of the criteria described in sections 4.1 to 4.4, Faarlund (2007:30) concludes that the Old Norse definiteness marker are ‘elements of the syntax’ and hence enter the syntactic tree in the same way as a free word would. BOUND-DEF in all varieties of Scandinavian referred to in this paper attach to the head noun and do not have their positioning defined with respect to the whole phrase. In the examples we have seen so far, BOUND-DEF has always appeared on the right edge, but this has only been because the head of the noun phrase has been the rightmost element. Examples containing postmodification are provided in (33), (34) and (35) which show that BOUND-DEF is on the head even when this is not the rightmost elements, in Old Norse (33), in Icelandic (34) and in Swedish.

- (33) a. vegginn á bak þórólf (Valfells & Cathay 1981:371)
 wall. DEF.M.NOM.SG behind Thorulf
 ‘the wall behind Thorulf’

- b. húsin á Vinlandi
house.DEF.N.PL in Vinland
‘the houses in Vinland’

(34) a. Icelandic parallel to (35)

- (35) a. pojken med langt hår
boy.DEF.C with long hair(N)
b. *pojkk med langt hår -et / -en
boy(C) with long hair -DEF.N -DEF.C

On the basis of such data, Faarlund (2007:30) proposes not to ‘establish a separate category of “phrasal affixes” with their fixed position within the phrase’. However, in the literature to which Faarlund refers, one of the core criteria for clitic-hood is that they are placed with respect to a phrase and are thus in the domain of syntax, whereas affixes are placed with respect to a stem. Phrasal placement also entails that the clitic is less selective with regard to its host word, whereas an affix is highly selective. The fact that BOUND-DEF in Old Norse and all the modern varieties always occurs on the head noun would then normally be considered evidence of affix status. This should be contrasted with languages such as Romanian or Bulgarian, where BOUND-DEF essentially occurs in second position (see for instance Halpern 1992). Anderson (1993:77) does propose the Optimality Theoretic constraint in (36), which brings the phrasal positioning and the head positioning together.

(36) ANCHOR {FIRST vs LAST vs HEAD}

However, this is done in the context of unifying the categories of affix and clitic (see Anderson 1992:199–210; 1993:76–80) and in particular to argue for an approach to ‘clitics’ in terms of phrasal morphology. Under this approach, the distinctions which Faarlund attempts to make between affixes and clitics would not apply since they are aimed at distinguishing one as morphological and the other as syntactic.²³

Our conclusion is that under the assumptions which underlie Faarlund’s criteria in general, the positioning facts would lead to the conclusion that BOUND-DEF is an affix in all Scandinavian languages, both early and modern. Given our suspicion that a dichotomy between ‘clitic’ and ‘affix’ would unfairly simplify the variation that exists, we just note that positioning is a property with respect to which all BOUND-DEFS under discussion here behave in the same way.

4.6 *Co-occurrence of definiteness markers*

So-called double definiteness, i.e. the co-occurrence of FREE-DEF and BOUND-DEF is a well-described property of Norwegian and Swedish. It could be described as definiteness agreement and though it is not a frequent property typologically, it is also not unknown (see fn 6). Plank (2003), who uses the term ‘double articulation’, and Dahl (2007b) provide overviews of different types of double definiteness marking. As we showed in section 3, Faarlund assumes that one of the crucial differences between Old Norse and Norwegian is that double definiteness developed between the two stages. Indeed, to Faarlund this distributional fact is intimately linked to the function and the morpho-syntactic status of the

²³ Anderson (1996; 2005) still emphasises the similarity between affixes and clitics and assume an analysis of ‘clitics’ in terms of phrasal morphology, but it is not as obvious in the actual OT constraints, which are now formulated in terms of the constraints NON-INITIAL and EDMOST.

marker; when it co-occurs with a syntactic determiner, BOUND-DEF no longer has the full status of a determiner functionally — in Faarlund’s analysis, it can no longer fill D — and it is an affix rather than a clitic.

It is indeed true that the double definiteness which is characteristic of Norwegian and Swedish has developed since the first sources. Examples of double definiteness are rare in the earliest texts, but not completely unattested. In (37a) there is an example from Old Norse and in (37b) and (37c) from Old Swedish in which the demonstrative, a form of *sá*, co-occurs with BOUND-DEF. As (37c) shows, double definiteness was also possible when the demonstrative followed the definite noun.

- (37) a. *sá* *ørninn* (Faarlund 2008:82)²⁴
 DEM eagle.N.DEF
 ‘that eagle’
- b. *þássa* *pánningana* (Wessén 1956:35)
 DEM.PL money.PL.DEF
 ‘that money’
- c. *barnit* *þät* (Wessén 1956:35)
 child.DEF DEM.SG.NT
 ‘that child’

In examples with premodifying adjectives in Old Norse, by far the most common pattern is for definiteness to be marked only by the free pronominal article. However, early examples of double definiteness involving FREE-DEF can also be found. Examples in (38a) and (38b) illustrate for Old Norse and Old Swedish, respectively.

- (38) a. *hinn hvíti björninn* (Barnes 2004:85)
 the white bear.DEF
 ‘the white bear’
- b. *þän galna hundin* (Wessén 1956:42 & 46)
 DEF.C mad.WK dog.DEF
 ‘the mad dog’

The examples in (39) are particularly striking, since they exemplify what can be referred to as triple definiteness. The examples both combine the free demonstrative *sá*, the free demonstrative/definite article *hinn* and BOUND-DEF, but in (39a) this is with a prenominal adjective and in (39b) with a postnominal one.²⁵

- (39) a. *sá hinn þögli maðrinn* (Barnes 2004:85)
 that the silent man.DEF
- b. *draumkonan sú hin verri* (Dahl 2007b:115)
 dreamwoman.DEF DEF DEF worse
 ‘the evil dreamwoman’

It is also interesting to note, in the light of Faarlund’s discussion and in the light of what we shall have to say about the distribution in modern varieties of the Scandinavian languages,

²⁴ Faarlund (2008) is the paperback version of Faarlund (2004).

²⁵ The example comes from the saga of Gísli Sursson. In his dreams, there are two women, one good and one evil one. ‘Worse’ here then refers to the worst out of the two (Dahl 2007b:115).

that Barnes (2004:85) states that examples with double definiteness are attested most frequently in Norwegian, as opposed to Icelandic, sources of Old Norse.

Examples can be found in which there is “triple definiteness” even when the noun is the leftmost element and the modifying elements are all post-nominal. Consider the following examples:

- (40) a. vápnin þau in góðu (Barnes 2004:86)
 weapon.PL.DEF DEM.PL DEF good.WK
 ‘those good weapons’
- b. mærin sú hin mikilláta (Barnes 2004:87)
 girl.F.SG.DEF DEM.F.SG DEF proud
 ‘that proud girl’

The conclusion with respect to older forms of the Scandinavian languages is that double definiteness was rare, but that there are enough examples of definiteness being marked more than once to serve as an indication that the development towards double definiteness had already started. Given Dahl’s (2007b) description of double definiteness as the result of a “buffer zone” between two different developments (see section 5), it would be interesting to trace the historical examples for regional origin, but apart from Barnes’ comment that double definiteness is more common in the Norwegian varieties of Old Norse than in the Icelandic one, we have little information about tendencies in early geographical distribution.

Turning now to the modern languages, in all varieties, the default mechanism for the marking of definiteness for an unmodified noun is by means BOUND-DEF.²⁶ The languages also share the property of using FREE-DEF when there is pre-modification. Examples from Faroese and Swedish provided in (41a) and (41b), respectively.²⁷

- (41) a. tann stóri bátur-in
 DEF big.WK boat.NOM-DEF
- b. den stora båt-en
 DEF big.WK boat-DEF
 ‘the big boat’

All of these languages permit pre-modification without a syntactic determiner in some environments. Delsing (1993:118-9), Börjars (1998:203–12) and Julien (2005:31–4) provide overviews of such environments in Mainland Scandinavian. There are also dialects, particularly in the north of Sweden, in which adjectives are standardly not preceded by FREE-DEF, see particularly Dahl (2007a). Though the description by Thráinsson et al. (2004:96) and Julien (2005:26) of Faroese as a double definiteness language is correct (see data on demonstratives below), there are more environments in which an adjective need not be preceded by FREE-DEF in Faroese than in the Mainland Scandinavian languages. Exactly which environments permit this is less well-understood for Faroese than for the other languages, but they partly overlap with those of Mainland Scandinavian. Lockwood (Lockwood 1955) and Barnes & Weyhe (1994) provide some relevant data.

²⁶ Except the dialects of Jutland referred to in footnote 5.

²⁷ The definite articles in both languages derives from the ON *sá*, as is the case in Danish and Norwegian. Icelandic still uses a descendant of *(h)inn*, the element originally used as a definite article in ON. This is also an option in present day Faroese, but is regarded as poetic and literary in style and would be used primarily in the written language.

Icelandic is not a double definiteness language, as indicated in (42a). In noun phrases with pronominal modification, the free article is optional and alternates with BOUND-DEF as in (42b) and (42c). The use of the independent *hinn* in this environment is more often found in formal written language.

- (42) a. *hinn ungi hesturinn
 DEF young.WK horse.NOM.DEF
 b. hinn ungi hestur
 DEF young.WK horse.NOM
 c. ungi hestur-inn
 young.WK horse.NOM-DEF

In Danish, FREE-DEF is obligatory when there is premodification, but FREE-DEF and BOUND-DEF are in complementary distribution much like in Icelandic. When a demonstrative is used, the noun occurs without BOUND-DEF. (43) illustrates the Danish pattern.

- (43) a. præsten
 clergyman.DEF
 b. den / denne præst / *præsten
 that this clergyman
 c. den gamle præst / * præsten
 DEF old.WK clergyman

The examples in (41) showed that Faroese and Swedish have double definiteness when the pronominal article is used with an adjective.²⁸ Norwegian and Swedish have double definiteness also with demonstratives, as in (44a) and (44b), respectively.²⁹

- (44) a. den / denne mannen
 that this man.DEF
 b. den / den här / den där båten / *båt
 that this that boat.DEF

In Faroese, the demonstratives generally combine with the definite form of the noun, as in (45).

²⁸ There is one type of construction in Swedish and Danish in which FREE-DEF is used with a non-definite noun and even when there is no pre-modification. This occurs when the nominal is followed by a restrictive relative clause, as in (i). In these cases, a construction with double definiteness is also possible. For discussion of such constructions, see for instance Payne & Börjars (1994) for Swedish and Hankammer & Mikkelsen (2002) for Danish.

(i) den gris som Oscar köpte
 DEF pig REL Oscar buy.PST

²⁹ Swedish also has a demonstrative *denna*, which in the standard language combines with a non-definite noun; *denna båt* ‘this boat’. *Denna* is used mainly in the written language, except in a number of dialects, in particular those of western and southern Sweden, where it is common also in the spoken language. Those dialects which use *denna* in the spoken language generally combine it with the definite form of the noun (Teleman, Hellberg & Andersson 1999:306–14).

- (45) a. handan bilin
 that.M.SG.ACC car.DEF.M.SG.ACC
 b. hetta vatnið
 this.N.SG.ACC water.DEF.N.SG.ACC

With relative clauses, Faroese may, have double definiteness even when no premodification is present (Lockwood 1955:107). Examples with FREE-DEF are, however, also permitted.

- (46) a. tann maðurin sum gjordi hettar
 DEF man.DEF REL do.PST this
 b. tær konurnar, heima skuldu vera
 the woman.PL.DEF home should be

In relation to demonstratives, Icelandic behaves as would be expected for a language which does not show double definiteness. If the phrase contains a demonstrative, then the noun does not carry BOUND-DEF.

- (47) þessi rauði hestur / *hesturinn
 this red horse.MAS.SING.NOM horse.MAS.SING.NOM.DEF

Largely, then, double definiteness defines two groups; Icelandic and Danish on the one hand and the Modern varieties of Swedish, Norwegian and Faroese on the other. This is different from the groups defined by some of the other properties we have looked at and hence evidence that the behaviour of BOUND-DEF does not divide the Scandinavian languages neatly into two categories.

5. Conclusions

Given the data surveyed here, one of our conclusions is that the differences between Old Norse and Norwegian are, in fact, not as clear cut as suggested by Faarlund. The claim that BOUND-DEF was a clitic in Old Norse and has developed into an affix in Norwegian, we consider a gross oversimplification. More generally, the slightly different paths of development the definiteness elements have taken in the modern languages mean that a division into two types of bound elements, each with its associated function, will not capture the data. Instead, it should be expressed in terms of development and variation in separate dimensions. In particular, the historical development of form and function should be kept separate; an element can develop from a less bound element (clitic) to a more bound element (affix) without its function necessarily changing. Similarly, an element could maintain the same degree of boundedness while changing its the function from a semantic definiteness marker to an agreement marker.

Slightly simplifying matters, we can describe the change between Old Norse and the modern standard varieties of the languages as in Table 2.

		Prediction in Faarlund's approach			Modern varieties				
		Clitic	Affix		ON	Ic	Fa	Da	N0
Degree of boundedness	Arbitrary changes in host	No	Yes	No	No	No	No	No	No
	Arbitrary gaps	No	Yes	?	No	No	No	No	Possibly very minor
	Host can be inflected	Yes	No	Yes	Yes	Yes	No	No	No
Positioning		Phrase ³⁰	Head	Head	Head	Head	Head	Head	Head
Function	Can be sole definiteness marker	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
	Double definiteness	No	Yes	Minor	No	Yes	No	Yes	Yes

Table 2: Overview of differences between old and modern varieties of Scandinavian languages.

A first conclusion from the data, which runs contrary to Faarlund's conclusions, is that as far as degree of boundedness goes, we have no evidence from any variety for clitic or affix status. All varieties fail to display a set of properties described by (Zwicky & Pullum 1983) as 'more characteristic of affixes than of clitics', however, from the absence of these criteria, we cannot conclude that the elements are better described as clitics. Whether or not the genitive *s* is marked both on the stem and on BOUND-DEF is a property which divides the languages into two sets; Old Norse and Insular Scandinavian on the one hand and Mainland Scandinavian on the other. We interpret the intervening genitive marker in Old Norse and the Insular Scandinavian language as evidence of more independence of BOUND-DEF. However, given the other data relating to boundedness and position, we do not wish to conclude that it is a clitic in these languages. Instead we take it as evidence that a simple dichotomy into two categories is an oversimplification.

A second property that is clear for all varieties is that BOUND-DEF only attaches to the head noun, regardless of where in the noun phrase the head noun is situated.³¹ This would normally be interpreted as evidence of affix-like behaviour, but again, we prefer not to use these categories. An overarching conclusion we draw from the application of the traditional clitic-affix criteria is that there is less of a clear cut difference between Old Norse and Norwegian than Faarlund assumes.

Turning now to the properties relating to the function of BOUND-DEF, it is clear that there are in all languages some noun phrases in which BOUND-DEF is the only overt marker of definiteness. In most of the analyses we have considered here, this means that BOUND-DEF, or the noun containing BOUND-DEF, shares some structural property with FREE-DEF, in particular that they are generated in, or move to, the syntactic position in the tree where free

³⁰ As we have seen, due to a misunderstanding of Zwicky & Pullum's criteria, Faarlund predicts that special clitics attach to one category only.

³¹ For languages that do not display double definiteness, this statement of course only holds when there is a BOUND-DEF in the noun phrase. Since BOUND-DEF is only present in Danish when there is no pre-modification, it never occurs on a non-initial noun, but this is for independent reasons.

determiners are found, e.g. head of DP or head of RP (cf Delsing 1993; Embick & Noyer 2001; Lohndal 2007 amongst others). Hankammer & Mikkelsen (2002), in an analysis based on very different theoretical assumptions, posit a morphological rule which adds the definite ending and at the same time convert an N to a D. The result is an analysis in which the definite noun is a determiner and hence fills the D position. Faarlund differs from all these analyses in that he assumes that a noun phrase such as *boka* ‘book.DEF’ is a full referential noun phrase because D is filled by a zero definite determiner in D.

All languages also have a FREE-DEF and they divide into two sets with respect to the use of this element; those that allow BOUND-DEF to co-occur with it, Faroese, Norwegian and Swedish, and those that do not, Icelandic and Danish. Old Norse would seem to be closer to the latter set; there are examples of double definiteness in early texts, though there are claims that this may have been a dialectal feature of Norwegian varieties. In all languages there are also other free determiners which are definite, like demonstratives, and the pattern of co-occurrence with BOUND-DEF for these elements is the same as for FREE-DEF.³² In the accounts we have considered, the distribution in Danish and Icelandic is as the analysis would predict; the position which accounts for definiteness and referentiality is unique, if it is filled by FREE-DEF the expectation is that no other definiteness marker can occur.³³ For languages which show double definiteness, the issue then in principle arises of which of the two definiteness markers is the “real” determiner, FREE-DEF or BOUND-DEF. As we have seen, for Faarlund, BOUND-DEF is never the true determiner in the modern varieties, so that there is always a FREE-DEF in the determiner positions, only sometimes it is not overt. For all other analyses we have considered, when there is double definiteness, FREE-DEF fills the determiner position and BOUND-DEF is reduced to some secondary status. This precedence of FREE-DEF appears to be a shared assumption, rather than a position argued for. In these models, where single marking of definiteness is the expected situation, an explanation needs to be offered for why some of the languages have double definiteness. This is an issue to which we will return below, when we have considered a radically different approach to analysing definiteness in the Scandinavian languages.

We suggest the outlines of an analysis within a model where it is not assumed that there is a one-to-one relation between formal properties and functional properties. Hence the issue of whether an element functions as a determiner is distinct from whether it fills a D position. Deciding whether or not an element functions as a determiner is a complex issue, but we will say that an element is a determiner functionally if it can combine with a singular count noun to form a referential noun phrase which is capable for instance of filling the subject argument role of a verb. Simplifying things, we will assume that referentiality is associated with a functional feature [\pm DEF]. BOUND-DEF in all these languages is a determiner functionally since a singular definite noun carrying the definite ending can function as a full referential noun phrase.³⁴ Using terminology from Lexical-Functional Grammar (LFG, Bresnan 2001; Dalrymple 2001; Falk 2001), a definite noun in Swedish such as *grodan* ‘frog.DEF’ would then be associated with features as in (59a) — ignoring most features not relevant to the discussion at hand — and with the resulting partial categorial structure in (59b). For our purposes here, the PRED feature can be said to capture the semantics of the element. In LFG, the constituent structure, c-structure, is assumed to be a separate dimension of linguistic information from the functional information, f-structure. There is a mapping between the two

³² Though see footnote 29 about the use of *denna* in Swedish.

³³ Only in Faarlund’s analysis of ON is the relevant node not assumed to be unique.

³⁴ We assume a non-morphemic approach to morphology (e.g. Matthews 1991; Anderson 1992; Stump 2001), so that strictly speaking it is not the actual ending that is associated with the feature, but the process of adding it. In our representations, we will illustrate with a definite noun, rather than with the definite ending, but this does not mean we assume a separate lexical entry for the definite form of the noun.

which can account for non-one-to-one relations. In the representations that follow, the arrows should be interpreted as ‘the f-structure associated with my mother node (for ↑) or with this node (for ↓) in the syntactic tree’. However, we would hope that the idea behind this type of solution can be appreciated without a detailed understanding of the technical detail.³⁵

- (59) a. *grodan* N ↑ PRED = 'frog'
 ↑ DEF = +
- b.
- $$\begin{array}{c}
 \text{N} \\
 \uparrow = \downarrow \\
 | \\
 \textit{grodan} \\
 \uparrow \text{PRED} = \text{'frog'} \\
 \uparrow \text{DEF} = +
 \end{array}$$

Under this approach, it is not necessary to determine which of the two definiteness markers is the determiner functionally in double definiteness constructions. Since definiteness is not expressed through one position, both elements can contribute the same information. A parallel would be a language which has both subject-verb agreement and case marking, so that grammatical relations can be said to be indicated in two ways. We see this as an advantage of this model. As we saw, in all analyses of double definiteness referred to here, the free article is deemed to be the one that contributes the crucial feature. Given that in these languages it is only BOUND-DEF which can actually occur in noun phrases where definiteness is expressed only once, this strikes us as odd. There is an inflection in these languages which corresponds with definite-indefinite, but which can never have the function of a determiner, namely the weak-strong marking on adjectives. As the example in (591) shows, for an adjective to be used nominally, it has to carry BOUND-DEF, as on *högern*, the WEAK ending is not sufficient. This should be contrasted with an adjective which is part of a definite noun phrase, like *vänstra* in this example.³⁶

- (591) Alltså tillslag med högern bakom det vänstra benet.
 thus shot with right.DEF behind DEF left.WK leg.DEF
 ‘Thus a shot with the right (leg) behind the left leg.’

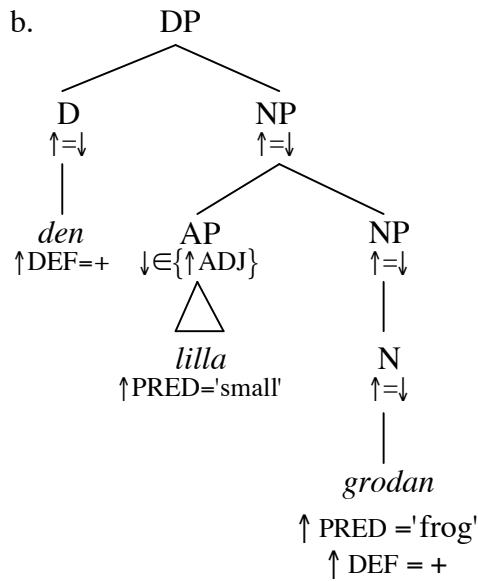
It would then seem inappropriate for BOUND-DEF to be analysed in the same way as WEAK, as a non-functional agreement marker.

The lexical entry for FREE-DEF *den* is then as in (60a), the tree structure for *den lilla grodan* as in (60b) and the resulting f-structure as in (60c). The annotation for the AP is slightly more complicated since an adjunct becomes a member of the set of adjuncts, this detail should hopefully not obscure the general idea behind this solution.

³⁵ We will not go into the detail of the syntactic tree here, whether it be headed by a D or an N. In LFG, functional projections such as D are used when there is a functional feature that appears to be associated with a particular structural position. It has been argued that in the Scandinavian languages, definiteness is associated with the leftmost position (Börjars & Donohue 2000), in which case this could be captured by a DP analysis. At the same time, within LFG, it would be possible to state selectional restrictions in terms of functional properties rather than syntactic ones, in this case [+DEF] rather than DP vs NP, so that the category status of the phrase would be irrelevant.

³⁶ Example from *Språkbanken*.

(60) a. *den* D ↑DEF = +



c.
$$\left[\begin{array}{l} \text{PRED 'child'} \\ \text{DEF +} \\ \text{ADJ } \{ \{ \text{PRED 'small'} \} \} \end{array} \right]$$

The feature value [DEF +] in (60c) is contributed to in equal measures by FREE-DEF and by BOUND-DEF.

As Dahl (2007b) shows, there is evidence from some dialects of Swedish that BOUND-DEF has been generalised to environments not normally associated with definiteness. However, as long as it can also function as a determiner in the sense described above, there is no reason not to analyse it as a functional determiner. One might speculate that if the generalisation process develops further, then its meaning may be weakened to the extent that a separate definite determiner becomes obligatory in all environments. At this stage, the bound definiteness marker should no longer be assumed to be a functional determiner, but maybe a morphological agreement marker with little functional value.

If all BOUND-DEFS in the standard Scandinavian languages are functional determiners, does this not make it more difficult to make a distinction between those languages which have double definiteness and those which do not? It strikes us that no principled explanation has been offered for this distinction in the literature. Julien (2005:4, 24, 65–9), for instance, assumes that in all Scandinavian languages except Danish the definite ending is acquired by means of movement through *nP*. This whereas Danish has an obligatorily empty *n* in *nP*, with the definite ending instead being found in D and hence competing with a free determiner. This means then that Danish and Icelandic lack double definiteness for different reasons in Julien’s account (for Icelandic, see Julien 2005:54–57). Embick & Noyer (2001:580–4) distinguish between the double definiteness of Swedish and the complementary distribution of Danish by assuming a constraint on Swedish; ‘The head N must be marked with definiteness when D is [def]’, which does not hold for Danish. We would not wish to stoop to an argument that our account may not have any principled explanation, but then neither is anyone else’s. Our point is rather that the reason that there is no principled explanation for the differences might be that it is a linguistic version of “just one of those things”. Faroese for instance, which in many ways sides with Icelandic in being rather conservative, has double

definiteness even though neither Old Norse nor Icelandic have it to any greater extent. The main contact influence on Faroese is Danish, also a language which lacks double definiteness.

Dahl (2007b; 2007a) shows that in what he terms ‘peripheral Swedish’ BOUND-DEF has a stronger standing as the main marker of definiteness than in the standard language, or indeed than in Danish. In many Northern Swedish dialects, for instance, there is no need for a FREE-DEF with a pronominal adjective. Instead the adjectives are incorporated into the noun and the only marking of definiteness is BOUND-DEF. The example in (61) illustrate

- (61) a. wåtjakku Älvdalen (Dahl 2007a:120)
 wet.coat.DEF.ACC
 ‘the wet coat’
- b. vitgardinân Färila (Dahl 2007b:164)
 white.curtain.DEF.PL
 ‘the white curtains’

In Germanic languages spoken further south in Europe, including English, Dutch, German and South and West Jutlandic dialects of Danish, FREE-DEF is the only option. Dahl refers to this as two distinct grammaticalisation patterns and argues that ‘it is natural to see “double determination” as one possible outcome of the competition between two different grammaticalizing definite articles’ (2007b:178). With reference to Stilo (2005), Dahl suggests that the double definiteness area constitutes a ‘buffer zone’. A buffer zone is an area in which two or more grammaticalisation patterns meet and the result is then a variety in which both patterns are incorporated. Kuteva & Heine (2008:222–8) take this idea up and provide further discussion. Seen this way, double definiteness in the Scandinavian languages is the “accidental” result of a mixture of two grammaticalisation patterns, comparable to the interference Plank (1993) refers to as *systemstörung*.

All analyses of Scandinavian noun phrases — except those dealing exclusively with Icelandic — require an explanation for why FREE-DEF is required when there is premodification. As we have seen, most analyses assume that BOUND-DEF, or the noun carrying the BOUND-DEF, move to fill the position of the determiner. The question then arises why it cannot do so when there is premodification, why a FREE-DEF is required under these circumstances. Generally, the explanation lies in some prohibition on a definite noun moving past an adjective phrase into the D position (e.g. Delsing 1993; Julien 2005). Faarlund differs from the other movement-based accounts in that no special provision is required for noun phrases with adjectives since definite noun phrases always contain a determiner in D, the only difference when there is no premodification is that the syntactic determiner is covert. In Hankammer & Mikkelsen (2002), the definite noun is of category D and hence projects a DP rather than an NP. The reason a noun phrase such as *røde hesten* ‘red.WK horse.DEF’ is ungrammatical is then that APs adjoin to NPs and in this example there is no NP to adjoin to. This explanation would then not be transferrable to the Scandinavian which have double definiteness, since definite nouns in these languages are assumed still to be of category N. Börjars (1998) captures the restriction by means of a selectional restriction on adjectives, requiring them to combine with a nominal which then combines with a FREE-DEF.³⁷

Dahl (2007b) suggests that the development of a definite article may start with APs requiring a definiteness marker as a consequences of the semantics of restrictive modification. Now, if Dahl is correct in this — and there is certainly one interpretation of the

³⁷ This is an unorthodox kind of selectional restriction which can be expressed within the framework used in Börjars (1998), Head-driven Phrase Structure Grammar.

development of the Scandinavian definiteness marker that supports his assumption — then we can distinguish the following stages in the development of definiteness: Stage (i): no dedicated definiteness marking; Stage (ii): dedicated definiteness marking with (restrictive) modification only; Stage (iii): dedicated definiteness marker with all noun phrases. As Dahl points out, the modification at Stage (ii) tends to be adjacent to the modification. A language like Russian can be said to be at Stage (i) and English at Stage (iii). All the Scandinavian languages except Icelandic would then have gone through all stages with respect to *(h)inn*; it developed from a demonstrative to a definiteness marker associated with the premodification, but then generalised as a marker of definiteness and became associated with the head noun rather than the modifier. All these languages then started at Stage (i) again with the demonstrative *sá* and might now be said to have reached Stage (ii) with respect to this element. Icelandic, on the other hand, appears to have stayed stable at stage (iii), with BOUND-DEF being a general noun phrase marker of definiteness, not particularly associated with modification. Under this view of the development, Icelandic can be said to be the most radical of the Scandinavian languages. This is a surprising conclusion given that it in many other respects, it is the more conservative of the Scandinavian language, for instance with respect to maintenance of verb agreement and case system. Only if there was evidence that Icelandic was starting to develop a new modifier-related definiteness marker would it be the case that its development was following that of the other Scandinavian languages.³⁸

We hope to have shown in this paper that a direct link between formal and functional properties cannot be maintained as far as definiteness marking in the Scandinavian languages is concerned. If the existence of double definiteness is taken as evidence of the agreement marker status of BOUND-DEF, as most analyses in the literature do, then it can be shown that this cannot be correlated directly with affix, as opposed to clitic, status of the element. To the extent that there is any difference between the degree of boundedness of BOUND-DEF, it is less bound, and hence less affix-like, in Icelandic and Faroese. Yet out of these, Icelandic does not have double definiteness, whereas Faroese does. Norwegian, Swedish and Danish all have a more strongly bound BOUND-DEF, but whereas Norwegian and Swedish have double definiteness, Danish does not. Our conclusion is also that the difference between Old Norse and Norwegian is not as profound as argued by Faarlund, essentially it lies in the fact that double definiteness has become a more dominating pattern, however, this has not been accompanied by any drastic changes in the boundedness of BOUND-DEF.

References

- Abraham, Werner, and Leiss, Elisabeth, 2007. 'On the interfaces between (double) definiteness, aspect, and word order in Old and Modern Scandinavian'. *Working Papers in Scandinavian Syntax* 80, 17–44.
- Andersen, Henning, 2005. 'On the Handbook of historical linguistics'. *Diachronica* 22, 155–176.
- Anderson, Stephen R, 1992. *A-morphous morphology*. Cambridge: CUP.
- Anderson, Stephen R, 1993. 'Wackernagel's revenge: clitics, morphology, and the syntax of second position'. *Language* 69, 68–98.
- Anderson, Stephen R, 1996. 'How to put your clitics in their place, or why the best account of second-position phenomena may be something like the optimal one'. *The Linguistic Review* 13, 165–191.

³⁸ A further consequence of the assumption that there is a tendency for modifiers to require definiteness marking could be said to be that of the theoretical explanations referred to here, the one offered by Börjars (1998) might be preferable in that it is the only one which makes a very direct link between the modifier and the required presence of FREE-DEF.

- Anderson, Stephen R, 2005. *Aspects of the theory of clitics*: Oxford Studies in Theoretical Linguistics. Oxford: Oxford University Press.
- Barnes, Michael, 2004. *A new introduction for Old Norse*. London: Viking Society for Northern Research, University College London.
- Barnes, Michael P., and Weyhe, Eivind, 1994. 'Faroese' In Ekkehard König and Johan van der Auwera (eds.), *The Germanic languages*. London: Routledge, 190–218
- Börjars, Kersti, 1998. *Feature distribution in Swedish noun phrases*: Publications of the Philological Society. Oxford: Blackwell.
- Börjars, Kersti, and Donohue, Mark, 2000. 'Much ado about nothing – features and zeroes in Germanic noun phrases'. *Studia Linguistica*.
- Börjars, Kersti, Eythorsson, Thorhallur, and Vincent, Nigel. 2002. On defining degrammaticalisation. Paper presented at New Reflections on Grammaticalization. Available at www.llc.manchester.ac.uk/SubjectAreas/LinguisticsEnglishLanguage/Staff/NigelVincent/Publications/. Ms. University of Manchester.
- Bresnan, Joan, and Mchombo, Samuel A., 1987. 'Topic, pronoun and agreement in Chicheŵa'. *Language* 63, 741–782.
- Bresnan, Joan, 2001. *Lexical-Functional Grammar*. Oxford: Blackwell.
- Campbell, Lyle, and Janda, Richard, 2001. 'Introduction: conceptions of grammaticalization and their problems'. *Language Sciences* 23, 93–112.
- Dahl, Östen, 2007a. *Grammaticalization in the North: noun phrase morphosyntax in Scandinavian vernaculars*. Stockholm: Stockholm University.
- Dahl, Östen, 2007b. 'Definite articles in Scandinavian: competing grammaticalization processes in standard and non-standard varieties' In Bernd Kortmann (ed.), *Dialectology meets typology*. Berlin: Mouton, 147–180
- Dalrymple, Mary, 2001. *Lexical Functional Grammar: Syntax and Semantics* 34. New York: Academic press.
- Delbrück, Berthold, 1911. *Germanische Syntax III: Abhandlungen der Königlichen Akademie der Wissenschaften, philologisch-historische Klasse, 28.7*. Leipzig: Teubner.
- Delsing, Lars-Olof, 1993. The internal structure of noun phrases in the Scandinavian languages, Lund University: Ph.D. thesis.
- Di Sciullo, Anne-Marie, and Williams, Edwin, 1987. *On the definition of word*. Cambridge, Mass: MIT Press.
- Dryer, Matthew, 2005. 'Definite articles' In Martin Haspelmath, Matthew Dryer, David Gil and Bernard Comrie (eds.), *World atlas of language structures*. Oxford: Oxford University Press, 154–156
- Dyvik, Helge, 1979. 'Omkring fremveksten av artiklene i norsk'. *Maal og Minne*, 40–78.
- Embick, David, and Noyer, Rolf, 2001. 'Movement operations after syntax'. *Linguistic Inquiry* 32, 555–595.
- Faarlund, Jan Terje, 2004. *The syntax of Old Norse*. Oxford: Oxford University Press.
- Faarlund, Jan Terje, 2007. 'From clitic to affix: the Norwegian definite article'. *Working Papers in Scandinavian Syntax* 79, 21–46.
- Falk, Yehuda, 2001. *Lexical-Functional Grammar: an introduction to parallel constraint-based syntax*. Stanford, Ca: CSLI Publications.
- Halpern, Aaron, 1992. 'The Balkan definite article and pseudo-second position' In Laura A Buszard-Welcher, Lionel Wee and William Weigel (eds.), *Proceedings of the Eighteenth Annual Meeting of the Berkeley Linguistics Society*. Berkeley: Berkeley Linguistics Society

- Hankammer, Jorge, and Mikkelsen, Line Hove, 2002. 'A morphological analysis of definite nouns in Danish'. *Journal of Germanic Linguistics* 14, 137–175.
- Hansen, Aage, 1927. *Bestemt og obestemt substantiv: bidrag til dansk substantivsyntaks*. København: Arnold Busck.
- Heinrichs, Heinrich Matthias, 1954. *Studien zum bestimmten Artikel in den germanischen Sprachen*. Giessen: Wilhelm Schmitz Verlag.
- Hodler, Werner, 1954. *Grundzüge einer germanischen Artikellehre*. Heidelberg: Carl Winter Universitätsverlag.
- Hopper, Paul J., and Traugott, Elizabeth Closs, 1993. *Grammaticalization*. Cambridge: CUP.
- Jónsson, Finnur, 1901. *Det norsk-islandske skjaldesprog omtr. 800-1300: Samfund til Udgivelse af gammel nordisk Litteratur*. no. 28. Copenhagen: S.I Møllers Bogtrykkeri.
- Julien, Marit, 2005. *Nominal phrases from a Scandinavian perspective*. Amsterdam: John Benjamins.
- Kock, Axel, 1919. 'Fornordiska böjningsformer'. *Arkiv för nordisk filologi* 35, 55–99.
- Kuteva, Tania, and Heine, Bernd, 2008. 'The explanatory value of grammaticalization' In Jeff Good (ed.), *Linguistics universals and language change*. Oxford: Oxford University Press, 215–230
- Leiss, Elisabeth, 2000. *Artikel und Aspect. Die grammatischen Muster von Definitheit*. Berlin: Mouton.
- Lockwood, W B, 1955. *An introduction to Modern Faroese*. Tórshavn: Føroya Skúlabókagrunnur.
- Lohndal, Terje, 2007. 'On the structure and development of nominal phrases in Norwegian' In Elisabeth Stark, Elisabeth Leiss and Werner Abraham (eds.), *Nominal determination. Typology, context constraints, and historical emergence*. Amsterdam: John Benjamins, 287–310
- Lundeby, Einar, 1965. *Overbestemt substantiv i norsk og de andre nordiske språk*. Oslo: Universitetsforlaget.
- Matthews, Peter, 1991. *Morphology. An introduction to the theory of word-structure*. 2nd ed. Cambridge: CUP.
- Musinowicz, Alexander, 1911. Die Stellung des attributiven Adjektivs im Altisländischen und Altnorwegischen. Ein Beitrag zur altnordischen Syntax, Universität Leipzig.
- Neckel, Gustav, 1924. 'Die Entwicklung von schwachtonigem altnordischem u (o) vor m aus helleren Vokalen und der altnordische Substantivartikel' *Festschrift für Eugen Mogk zum 70. Geburtstag*. Halle: Niemeyer, 387–412
- Newmeyer, Frederick, 1998. *Language form and language function*. Cambridge, MA: MIT Press.
- Nilsson, Kim G., 1968. 'Noun and article in Swedish'. *Studia Linguistica* 22, 51-63.
- Noreen, Adolf, 1892. 'Bidrag till den fornnordiska slutartickelns historia'. *Arkiv för nordisk filologi* 8, 140–152.
- Payne, John, and Börjars, Kersti, 1994. 'Swedish noun phrases meet Categorical Grammar' In Cecilia Hedlund and Anders Holmberg (eds.), *Proceedings of The XIVth Scandinavian Conference of Linguistics and the VIIIth Conference of Nordic and General Linguistics. Special session on Scandinavian syntax*. Gothenburg: University of Gothenburg, 111–125
- Perridon, Harry, 1989. Reference, definiteness and the noun phrase in Swedish, University of Amsterdam: Ph.D. thesis.
- Plank, Frans, 1993. 'Entgrammatisierung — Spiegelbild der Grammatisierung?' In N Boretzky, W Dressler, J Orešnik, K Teržan and W Wurzel (eds.), *Beiträge zum*

- internationalen Symposium über "Naturlichkeitstheorie und Sprachwandel" an der Universität Maribor vom 13.5.–15.5.1993.* Bochum: Brockmeyer, 199–219
- Plank, Frans, 2003. 'Double articulation' In Frans Plank (ed.), *Noun phrase structure in the languages of Europe*. Berlin: Mouton de Gruyter, 337–396
- Roberts, Ian, and Roussou, Anna, 2003. *Minimalist approaches to grammaticalization*. Cambridge: CUP.
- Seip, Didrik Arup, 1958. 'Den etterhengte artikkel i nordisk'. *Norsk Tidsskrift for Sprogvidenskap* XVIII, 231–261.
- Sijmons, Barend, 1906. 'Einleitung' In Hugo Gering and Barend Sijmons (eds.), *Die Lieder der Edda*. Halle: Buchhandlung des Waisenhauses
- Söderwall, K F, 1891. *Ordbok över det svenska medeltids-språket*. Lund: Berlingska.
- Stilo, Donald, 2005. 'Iranian as buffer zone between the universal typologies of Turkic and Semitic' In Éva Csató, Bo Isaksson and Carina Jahani (eds.), *Linguistic convergence and areal diffusion: case studies from Iranian, Semitic and Turkic*. London: RoutledgeCurzon, 35–63
- Stump, Gregory T, 2001. *Inflectional morphology: a theory of paradigm structure*. Cambridge: CUP.
- Teleman, Ulf, Hellberg, Staffan, and Andersson, Erik, 1999. *Svenska Akademiens grammatik*. Stockholm: Nordstedts.
- Thráinsson, Höskuldur, Petersen, Hjalmar, Jacobsen, Jógvan í Lon, and Hansen, Zakaris Svabo, 2004. *Faroese: an overview and reference grammar.: Foroya Froðskaparfelag*. Tórshavn: Føroya Fróðskaparfelag.
- Valfells, Sigrid, and Cathay, James, 1981. *Old Icelandic: an introductory course*. Oxford: Oxford University Press in association with the American-Scandinavian Foundation.
- van Gelderen, Elly, 2004a. *Grammaticalization as economy*. Amsterdam: John Benjamins.
- van Gelderen, Elly, 2004b. 'Economy, innovation and prescriptivism: from Spec to Head and Head to Head'. *Journal of Comparative Germanic Linguistics* 7, 59–98.
- Wessén, Elias, 1956. *Svensk språkhistoria. III Grundlinjer till en historisk syntax*. Stockholm: Almqvist & Wiksell.
- Williams, Edwin, 2007. 'Dumping lexicalism' In Gillian Ramchand and Charles Reiss (eds.), *The Oxford handbook of linguistic interfaces*. Oxford: Oxford University Press, 353–381
- Zwicky, Arnold M, 1977. *On clitics*. Bloomington: Indiana University Linguistics Club.
- Zwicky, Arnold M., and Pullum, Geoffrey K., 1983. 'Cliticization vs. inflection: English *n't*'. *Language* 59, 502-513.