

# Morphological status and (de)grammaticalisation: the Swedish possessive

Kersti Börjars

It has been argued that the development of the Swedish possessive *-s* constitutes an example of degrammaticalisation because it has changed from being an affix to being a clitic (Norde 1997; 2001a, b). I argue that a simple distinction between affix and clitic cannot capture the development of this element, instead a distinction in two dimensions need to be made; PLACEMENT needs to be distinguished from DEGREE OF ATTACHMENT. Furthermore, I claim that the distinction between agreement and once only marking represents yet another dimension. With respect to the Swedish possessive, as Norde (1997) shows, there has been a clear change from agreement to once only marking; however, I argue that this change does not tell us anything about the element's morphological status. With respect to placement, *-s* is still subject to competing constraints and with respect to attachment, there is some evidence of morphological interaction between the *-s* and the word to which it attaches. It is then inappropriate to call the Swedish possessive *-s* a clitic and to refer to the change which it has undergone as degrammaticalisation.

**Keywords** affix, clitic, degrammaticalisation, grammaticalisation, possessive, Swedish

*Kersti Börjars, Department of Linguistics, University of Manchester, Manchester M13 9PL, UK.  
E-mail: k.borjars@man.ac.uk*

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## 1. INTRODUCTION

Norde (1997, 2001a) has argued that the development of the Swedish genitive *-s* provides an example of 'degrammaticalisation'; that it constitutes counter-evidence to the hypothesis of unidirectionality of grammaticalisation. Norde's degrammaticalisation claims form part of a recent literature which aims to demonstrate that unidirectionality is either made a property of grammaticalisation by definition – and hence is uninteresting – or else is simply false. In a sense, this trend can be traced back to Ramat (1992), but more recent examples can be found in Beths (1999), Lass (2000), van der Auwera (2002) and especially the papers in *Language Sciences* 23, for instance Joseph (2001) and Newmeyer (2001). For a discussion from a different perspective, see also Plank (1993). A challenge to the assumptions of the traditional literature on grammaticalisation and the methods employed may have been timely, but in some cases, the enthusiasm for challenging the unidirectionality

hypothesis appears to have lead to an interpretation of data that is certainly open to criticism (see Börjars, Eythorsson & Vincent 2003).

Even though much of the work claiming the existence of degrammaticalisation strives to distance itself from the traditional assumptions and methods of many grammaticalisation studies, some of this recent work is weakened by the same failure to recognise and use distinctions and methods developed in modern linguistics. Instead, in challenging old established ‘truths’, we can and should use the knowledge and tools which recent general theoretical work in linguistics has provided us with. The purpose of this paper is then to reconsider in this light one of the cases which has now become an established case of degrammaticalisation, quoted in most recent papers on degrammaticalisation, namely the Swedish possessive ending *-s*. My claim is that the terminology used by Norde (1997, 2001a) to describe the morphological status of bound elements is too simple and collapses a number of distinctions which need to be made to do the data justice and to understand the steps in the change. I will also argue that when reconsidered in the light of these distinctions, a more revealing picture of the development can be drawn. The changes that can be distinguished in this way can be called degrammaticalisation only if one is prepared to widen the notion – and thereby also the notion of grammaticalisation. I would argue that such a broadening of the terms would lead to a point where it no longer refers to a unified and interesting phenomenon.

## 2. THE EARLY DEVELOPMENT OF THE SWEDISH POSSESSIVE

The historical development of the Swedish possessive *-s* is described in detail in Delsing (1991) and Norde (1997). I will provide only a brief overview here. The earliest preserved forms of Swedish reveal a pattern of NP internal case agreement. A number of declensions could be distinguished and Norde (1997:93–105) provides a good overview of the different genitive forms.

The Modern Swedish possessive *-s* developed from the genitive marking on masculine and neuter *a/ia/ja*-stems. There is little doubt that this was originally an affix, in any sense of the word. For instance, in the early examples, there is ‘internal marking’ of case, as in (1).

- (1) *skips-ins*                      *skipa-nna*    (Norde 2001a:107)  
       *ship.GEN-DEF.GEN*    *ship.PL.GEN-DEF.PL.GEN*

Regardless of whether one views this as a separate phenomenon ‘internal affixation’ or whether one assumes it is a combination of an inflected nominal stem and an inflected determiner clitic, it can be seen as evidence of the affix status of *-s*. The latter view follows if one takes the view that the definite ending was still a clitic at this stage, having developed from an independent syntactic element and later developing

into an affix itself (for arguments in favour of its affix status, see Börjars 1998). Since syntactic determiners would have been inflected for number, gender and case, it is not unexpected that a clitic developing from such an element would also be inflected for the same features. However, under either of these views, the affix status of *-s* in (1) is beyond dispute.

With regard to *-s* in Modern Swedish (henceforth ModSw), Norde takes the view that it is a straightforward clitic. Even though the clitic status of ModSw *-s* is crucial to her degrammaticalisation claim, Norde's discussion of its morphological status is remarkably short (1997:63–71), and in that discussion there is more reference to English data than to Swedish.<sup>1</sup> However, Norde's view of ModSw *-s* is a common one and if one's terminology is limited to recognising only two categories, then 'clitic' is more likely than 'affix' as a description of ModSw *-s*.

The original status of *-s* as an affix and its current status as a clitic are then not matters of dispute in the literature on the Swedish genitive, though I will argue in section 3.2 that the terminology used does not make all the distinctions required to capture its behaviour. What IS a matter of dispute is the order in which the main changes occurred which lead to the current distribution of *-s* in Swedish. The traditional view, to which Delsing (1991, 1999) adheres, holds that the *-s* genitive ending spread to other stems first and then changed from being an affix to being a clitic. Norde, on the other hand, concludes that it was the other way around: '*-s* was first reanalysed as a phrase marker with masculine and neuter stems before it spread to other noun phrases' (1997:223).<sup>2</sup> For different views and discussion I refer the reader to Norde (1997, 2001b) and Delsing (1991, 1999, 2001).

The issue of the order in which the two developments occurred is a complex one and it will not be crucial to my argument here. It seems most likely that there were two changes in progress around the same time and that the effects of the two interacted. The texts we have are of different types and from different areas, which also makes it more unlikely that a picture of a simple linear series of changes can be distilled. We can, I think, conclude that Norde's (2001b:117) hope 'that it is now clear how and when the initial stages of the degrammaticalization of *-s* were accomplished' is overly optimistic.

### 3. THE CURRENT STATUS OF THE SWEDISH POSSESSIVE

#### 3.1 *Norde's arguments*

The current status of the possessive *-s* is of course crucial to Norde's (1997, 2001b) argument: it is the development from affix to clitic which is an instance of degrammaticalisation. As mentioned in section 2 above, Norde's (1997:63–71) discussion of the clitic status of ModSw *-s* is brief. As arguments, she uses

the well-known Zwicky & Pullum (1983) criteria and an application of them to Norwegian by Johannessen (1989). The criteria she uses are:

1. clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stem;
2. arbitrary gaps in the set of combinations are more characteristic of affixed words than of clitic groups;
3. morpho-phonological idiosyncrasies are more characteristic of affixed words than of clitic groups;
4. semantic idiosyncrasies are more characteristic of affixed words than of clitic groups;
5. syntactic rules can affect affixed words, but cannot affect clitic groups;
6. clitics can attach to material already containing clitics but affixes cannot.

It is not my intention here to argue about the details of how the criteria are interpreted or applied. However, it is striking that only for criteria 2 and 3, and to some extent 6, is the Swedish possessive *-s* discussed explicitly by Norde. With respect to criterion 2, her conclusions are that even though there are some gaps with place names in Swedish, these are too regular to be described as ‘arbitrary’. I will return to this point in section 3.5. Norde (1997:66–69) also discusses the data used by Zwicky (1987) to argue that the English possessive *-s* is actually an affix (namely an edge affix) and concludes that since Swedish does not have a plural in *-s*, Zwicky’s argument cannot be transferred. Swedish does, however, have an *s*-plural, especially with recent borrowings from English – described as the 7th declension in SAG (2:79–81) – but these do not show the effects which Zwicky claims hold for English. Nouns whose plural ending is *-s* only make up about 1% of normal newspaper texts and there is considerable uncertainty about how to use them with the possessive and naturally occurring examples are hard to come by. Generally, when the Swedish possessive *-s* is added to a word ending in *-s*, the two sounds coalesce: *Nils har en bok* ‘Nils has a book’ vs. *Nils bok* ‘Nils’s book’. This would seem to be what happens also when the *-s* is the exponent of PLURAL, as in the constructed examples in (2).<sup>3</sup>

- (2) a. några negro spirituals lugnande inflytande  
*some Negro spiritual.PLU.POSS calming influence*  
 ‘the calming influence of some Negro spirituals’
- b. alla hans cardigans sönderslitna armbågar  
*all his cardigan.PLU.POSS worn through elbows*  
 ‘the worn through elbows of all his cardigans’

The conclusion is then that Zwicky’s (1987) arguments cannot be applied directly to Swedish, but see section 3.5 below for an application of Zwicky’s general idea.

With respect to criterion 3, Norde points out rightly that there are no obvious morpho-phonological irregularities between the possessive *-s* and its host (but see discussion in section 3.5). Norde (1997:69) contrasts this with the original genitive *-s* form, which lives on in some more or less idiomatic expressions following the preposition *till*, which governed the genitive case and which never occurred with the possessive *-s* because it has ceased to be used productively before the genitive affix was completely substituted by the possessive *-s*.<sup>4</sup> Generally, given the cautious phrasing of the criteria in Zwicky & Pullum (1983), the absence of irregularities is not evidence for clitic status; irregularities are just assumed to be more common in stem-affix combination than in host-clitic combinations.

With respect to criterion 6, Norde (1997:71), referring to Johannessen (1989:128), provides data from Norwegian where a pronominal clitic can be followed by the possessive, which hence cannot itself be an affix. Similar data can be found in Swedish, but as I will argue in section 3.2, the simple affix-clitic distinction is not sufficient for these cases. Norde also adds at this point that

the data from Swedish presented in section 4.3 reveal that in the course of its expansion to other stems or words, *-s* could be attached to virtually every inflected form of the noun, which suggests that *-s* had ceased to be a grammatical element on the word level' (Norde 1997:71).

Now, if a simple distinction is made between affix and clitic, then if it is no longer 'a grammatical element on the word level' then presumably it must be a clitic. However, as I will argue in section 3.4, the nouns to which Norde refers here are all heads of their phrases, hence this can only be taken as a sign that *-s* occurs outside other AFFIXES, and this of course does not say much about its status as a clitic. Even though it may occur further from the stem than the original case marker, it is still clearly attached at word level. For instance, the definite ending in ModSw occurs after number marking, e.g. *gris-ar-na* 'pig-PLU-DEF', but nevertheless current analyses of Swedish noun phrases assume that the definite ending is itself an affix, but an affix that always follows the number marking affix (cf. Delsing 1993, Börjars 1998).<sup>5</sup>

In her discussion of criterion 4, Norde also makes brief reference to Norwegian, but in the remaining discussion, data from English are used. The underlying assumption would appear to be that the English possessive *'s* and the Swedish *-s* are similar in all other important respects. I will argue in section 3.5 that this is not the case; there are important differences in the behaviour of the possessive in the two languages.

### **3.2 The clitic-affix distinction**

Norde (1997, 2001a) – like many other accounts of the Swedish possessive – assumes that the distinction affix-clitic is one-dimensional in that only one parameter of

variation is involved. This is in line with traditional work within grammaticalisation, where the ‘grammaticalisation cline’, given in (3) below, is assumed to represent the stages involved in the process (cf. Hopper & Traugott 1993:7). A development from right to left on this scale would then constitute an example of degrammaticalisation.

(3) content word > grammatical word > clitic > affix > (zero)

However, in the general linguistic literature, this simple distinction has come under scrutiny.<sup>6</sup> In a number of publications, a separate type of element – ‘phrasal affix’, ‘edge affix’ or ‘lexical clitic’, has been identified (Nevis 1985; Zwicky 1987; Lapointe 1990, 1992; Miller 1991; Anderson 1992, 1993, 1996; Miller & Halpern 1993; Halpern & Fontana 1994; Halpern 1995). These analyses vary slightly in how the notion is defined and in how the distinction between ‘phrasal affix’ and ‘clitic’ is made, but one underlying assumption is shared: even when an element is placed with respect to a phrase (rather than a head word), there may be morpho-phonological interaction between the element and its host of the type which is normally associated with affixes. Miller (1991:109), for instance, distinguishes two types of element amongst those which have traditionally been referred to as ‘clitics’: ‘on the one hand those postlexically attached items which will be called postlexical special and simple clitics and, on the other hand, phrasal affixes, which are lexically attached to their stems’. Halpern (1995:101) uses the term ‘lexical clitic’ to refer, roughly, to elements called phrasal affixes, i.e. to those elements which have ‘the distribution of a clitic but the morphology and/or phonology of an affix’.

The common property of these approaches which will be of crucial interest to the discussion here is the separation of PLACEMENT (is the element placed with respect to a phrase?) from ATTACHMENT (is the element morphologically attached to some word?).<sup>7</sup> Using terminology from Börjars & Vincent (1993), if the element is placed phrasally, we can refer to the phrase with respect to which the placement is defined as its HOST and if it shows morphological – rather than purely prosodic – attachment, then the element is specified as having a *host*. This then gives us the basic possibilities illustrated in Table 1.

As Table 1 shows, an independent word lacks both HOST and *host*, whereas a traditional (head) affix lacks a HOST. I have left open here whether a traditional affix attaches to a word or to a unit lower, like stem or root, since it is not of direct concern here. Clitics as identified in much of the traditional literature are assumed not to show morphological interaction with any part of its HOST and hence in this system they are not specified for *host*. The property which identifies pure clitics is, instead, that they are prosodically dependent. It should be pointed out here that much of the literature using the criteria proposed by Zwicky & Pullum (1983) has assumed an absolute distinction, so that the smallest sign of irregularity has been interpreted as arguing against clitic status. However Zwicky & Pullum (1983) recognised the

HOST	<i>host</i>	Category used in the literature	Example
—	—	independent word	
XP	—	clitic	weak pronouns Germanic verb second (Anderson 1993, 1996)
XP	X	clitic (traditionally) phrasal affix (e.g. Zwicky 1987)	English -'s (Zwicky 1987) Bulgarian DEF, etc.
—	X <sup>(-1)</sup>	(head) affix	English PAST, Swedish DEF

**Table 1.** The basic possibilities with HOST-*host* parameters.

fact that even elements positioned phrasally, and hence possessing the ‘promiscuity’ characteristic of clitics (criterion 1 in section 3.1), could still show some irregularity; their criteria referring to irregularities are always carefully stated as it being ‘more likely’ with affixes.

Given evidence like that provided in, for instance, Zwicky (1987), Miller (1991), Miller & Halpern (1993), Halpern (1995) and others cited above, most of the elements which have traditionally been labeled ‘clitics’ do, in fact, turn out to have a morphological *host*. This is also what I will claim for the ModSw possessive in section 3.5.

By not referring to notions such as ‘host phrase’ and ‘host word’, this terminology abstracts over the size of the HOST and the *host*. This, in combination with the fact that the clitic–affix distinction is conceptualised in terms of two dimensions, allows the system to be extended to include elements which have proved difficult to categorise. For instance, Börjars & Vincent (1993) show that some of the properties claimed for the Lithuanian reflexive *-s(i)-* by Nevis & Joseph (1993) can be better understood in these terms. This element appears always to position itself as the second morpheme in the word, so that it is final if the stem is not complex, but if the stem involves prefixes, then the reflexive immediately follows the first prefix and precedes the root. Nevis & Joseph (1993) refer to it as a ‘mobile affix’ and apply the Zwicky & Pullum (1983) criteria with the word as the *host*. However, with these two parameters, we can capture the behaviour of this element which is unusual for an affix as in Table 2.<sup>8</sup>

Thus, elements which are specified as having a *host* share the property of being morphologically attached to some element. However, if the element also has a HOST, one can expect this attachment to be weaker than if it is a head affix; in a sense, such an element has to ‘serve two masters’. If an element is positioned with respect to

HOST	<i>host</i>	Example
X	$X^{-1}$	Lithuanian reflexive <i>-s(i)-</i> 'Wackernagel affix' (Nevis & Joseph 1993)

**Table 2. The values of the HOST-*host* parameters for the Lithuanian reflexive.**

a phrase – has a HOST – then there will be more potential *hosts* – e.g. whichever word happens to be in the right position – and hence a looser relationship will exist between the element and the *host* than if the *host* is always, say, the head noun. Zwicky (1987:136) makes the same claim: ‘Unlike inflections [head affixes], PAs [phrasal affixes] are always realized affixally, never processually, that is, never as gemination, vowel shift, subtraction or the like’. This means that we would not expect a *host*-element combination to behave in the same way with respect to the Zwicky & Pullum (1983) criteria if there is also a HOST as if there is not. At the same time, we can only argue in favour of there being a *host* at all if there are some signs of interaction, i.e. we can only make the distinction between clitic – in the more restricted sense of Table 1 – and phrasal affix if there are some signs of interaction. My claim will be that such a distinction can be made for the Swedish possessive and that it is indeed a phrasal affix.

### 3.3 AGREEMENT VERSUS ONCE ONLY MARKING

Before returning to Swedish in sections 3.4 and 3.5 below, I will discuss here the relation between what Norde (1997), following Blake (1994), refers to as ‘phrase marking’ and the clitic–affix distinction. Norde (1997:128) assumes that when a feature is marked only once in a phrase, then this marking is always on the right edge of the noun phrase. Now, if only a simple clitic–affix distinction is made, as in Norde’s work, then an element which is placed on the right edge would have to be a clitic, since such a distinction leaves no room for a category like phrasal affix. Being positioned with respect to a phrase rather than with respect to a word is also a generally assumed characteristic of a clitic. However, in more recent work, Norde (2002:57) describes phrase marking (as opposed to concordial marking) as ‘an essential stage in the development from affix to clitic’ and the implication is that a ‘phrase marking’ element is neither affix nor clitic.<sup>9</sup> At this point, clarification is in order of the general distinctions between (i) concordial vs. phrasal marking, (ii) marking on the head vs. marking on the edge and (iii) clitic vs. affix. So as to avoid confusion between phrasal marking (as opposed to agreement marking) and phrasal



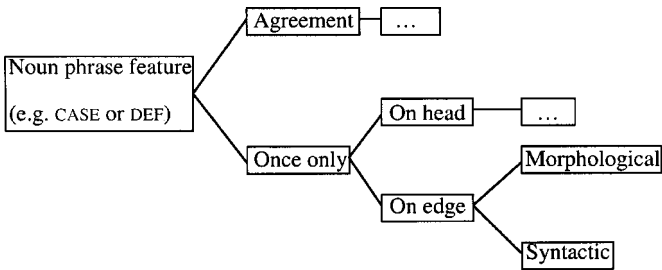


Figure 1. Potential variation in exponence of noun phrase features.

affix (as opposed to head affix), I will refer to this former distinction as ONCE ONLY vs. AGREEMENT marking instead.

If we consider the kind of features which are relevant at noun phrase level and which can find overt exponence somewhere in the noun phrase, we can think of features such as CASE, NUMBER and DEFINITENESS, for instance. Languages can mark such features explicitly in a number of different ways. If we restrict our discussion to marking within the noun phrase only – as opposed to, say, marking on an agreeing verb – then we can divide such features roughly into those that require the marking on as many elements as possible and those that require marking to appear only once, i.e. agreement and once only, respectively. If a language marks a feature just once, then there are different ways in which it can do so: the feature can be marked on the edge, either as a true clitic or as a phrasal affix (cf. Table 1), or it can be marked on the head, possibly this can also be either as an affix or as a clitic. This is represented in Figure 1.

The case marking which we find in Korean, for instance, is found on the right edge and its attachment is syntactic in nature (see Blake 1994:11–12). Definiteness in Bulgarian, or for that matter Danish, appears only once, but there are strong arguments for assuming that it is in both cases in the form of a morphologically attached affix: for Bulgarian as a ‘second position’ affix (see Halpern 1995:chapter 5) and for Danish as a head affix (see Payne & Börjars 2000). The Finnish possessive is marked only once, namely on the head; Nevis (1985) argues that its attachment is not morphological, but Kanerva (1987) argues, I think successfully, that it is a head inflection. Regardless of which one of these two is the appropriate analysis of the Finnish possessive, it is once only marking on the head, not on the edge. It seems clear then that once it has been established whether or not the marking is once only or by agreement, the question of whether it is an affix or a clitic is still open, as indeed it is if we use the two-dimensional distinction proposed in section 3.2 instead. In some difficult cases, where the head tends to be found on the edge of its phrase, it may even be difficult to establish whether the marking is on the head or the edge.

### 3.4 The development of the Swedish possessive revisited

As indicated in section 1, it is clear that in the earliest examples we have of Swedish, the genitive feature was an agreement feature. It is also clear that at some stage, at least by the 15th century, possibly earlier, it had developed into a once only feature. At this stage, the functions of the genitive marked noun phrase had also become more restricted (cf. Askedal 2000:205–207). Furthermore, the marker *-s* had taken over the paradigm, a paradigm that used to have a number of exponents (see Norde 1997:93–105 for an overview of different forms). None of these three changes in itself can be described as degrammaticalisation. It would seem no more or less grammatical to mark a feature once than to mark it by agreement.<sup>10</sup> Askedal (2000) argues that it is part of a tendency to shift from fusional to agglutinative marking. With respect to the change in function, Askedal (2000:205–207) argues that this is in fact grammaticalisation, since the genitive loses its ability to be lexically conditioned and is increasingly uniformly grammatically conditioned.<sup>11</sup> Finally, the reduction in the size of the paradigm, eventually down to one form, is one of the properties of grammaticalisation proposed by Lehmann (1995). I will not evaluate these arguments here, but only conclude that in this aspect of the development, there is certainly no process that can usefully be described as degrammaticalisation. Nor do these developments give us any direct evidence to choose between a clitic or an affix analysis of *-s*.

It is then clear that Swedish is moving towards once only marking during the period that Norde (1997) studies. Her claim is that there is a simultaneous development towards clitic status and that the change from agreement to once only marking is a crucial step in this development. As discussed in section 3.3 above, Norde views ‘phrase marking’ as an intermediate step between affix and clitic. In particular, she argues that Swedish possessive *-s* is an instance of PURE right edge marking, i.e. the marking occurs on the rightmost element regardless of whether this is the head or not (Norde 1997:137). The implication is that true right edge marking is evidence of ‘real’ phrase marking and as such a better indication that a change from affix to clitic is in progress.

The noun-phrase-internal word order displayed by the noun phrases with once only marking which Norde uses in her argument actually makes it difficult to distinguish between head placement and edge phrasal placement. With one type of exception, these noun phrases have the head noun on the right edge of the phrase.<sup>12</sup>

- (4) a. *thin brodhers hustru* (NT, 1526)  
*your-Ø brother.GEN wife*  
 ‘your brother’s wife’
- b. *fadhir mins hws* (Bir 26, 1380s)  
*father-Ø my.GEN house*  
 ‘my father’s house’

In (4a), the *-s* is on the head noun, which is preceded by a possessive pronoun which lacks *-s* marking. In (4b), the possessive pronoun follows the head noun and the *-s* occurs on the pronoun, whereas the head noun is not marked. Examples such as (4b) involve an unstressed pronoun – described by Wessén (1992:115) as ‘enclitically attached’ – immediately following the head noun. Given the close association between the head noun and the pronoun, these are not the strongest examples for showing the difference between head placement and right edge placement. The only other type of example used by Norde are complex names, like *herman appelboms* (‘Herman Appelbom.s’), where the possessive *-s* occurs only on the second part; in contrast, some other marking appears on the first part only: *hermanne appelbom* (‘Herman.DAT Appelbom’ (Norde 1997:144).

There appears then to be little strong positive evidence for making the distinction between head or true edge marking. Stronger evidence for the right edge rather than the head attachment analysis would be so-called group genitives, i.e. examples where there is postmodification within the noun phrase and the *-s* occurs at the right edge of that modifying phrase. In response to Delsing’s (1999) criticism, Norde (2001b:110) points out that the texts she considered do not contain any examples of group genitives, i.e. there are no examples of NP internal postmodification with noun phrases containing *-s*. According to Norde (1997:86, 2001b:110), when postmodification occurs with such noun phrases, it is usually extraposed and the possessive occurs on the head noun which is on the right edge of the noun phrase proper, as in (5).

- (5) a. *han war cornubæ sun i östrægötllanði* (Vidh 15, 1325)  
*he was Cornubi.GEN son in Östergötland.DAT*  
 ‘He was the son of Cornubi i Östergötland.’
- b. *þerræ mannæ þærwir sum rikit byggjæ* (Vidh 14)  
*those.GEN men.GEN needs who empire.DEF build.up*  
 ‘the needs of those men who build up the empire’

However, Norde (1997:86) does provide the example in (6) where there is a postmodifying preposition phrase immediately following the head noun, but the possessive marking is not found on the right edge of the noun phrase but on the head noun (including internal marking).

- (6) *...oc war son högxsta*  
*and was son highest*  
*biscopsins of iherusalem* (Mose 21, early 14th c)<sup>13</sup>  
*bishop.GEN.DEF.GEN aff Jerusalem*  
 ‘and he was the son of the archbishop of Jerusalem.’

Norde does not comment on the relevance of this type of example for her hypothesis that *-s* is a true edge marker on its way to develop into a clitic. I conclude then

that there is no unambiguous evidence that *-s* was a true right edge marker at this stage. The only type of evidence that *-s* is not an element which attaches to the head of its phrase comes from proper names and examples like (4b) above. The latter involve unstressed pronouns, described in the literature as enclitically attached and very closely connected with the noun.

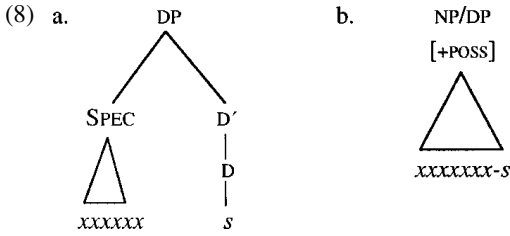
Furthermore, examples can be found of possessive noun phrases containing postmodification, but in all these cases, either the postmodification is extraposed so that the head noun occurs on the right edge of the noun phrase or the *-s* occurs on the head noun even though the postmodification is noun phrase internal. I conclude instead that what we have is a change from genitive case being an agreement feature to it being a once only feature, generally marked on the head noun. I will now turn to Modern Swedish to consider whether there are signs that *-s* has developed into a clitic in more recent times, or at least that it is now a clear right edge element.

### 3.5 A closer look at the modern possessive *-s*

A few things are clear about the ModSw *-s*; for instance, it is not an agreement feature, but is marked once only within its noun phrase. There is one small remnant of genitive agreement in the emotive set expression *allas vår* ‘everyone.S our’, as exemplified in (7), but these do not impinge on the general argument (cf. SAG 3:132).

- (7) a. *allas*            *vår* *kronprinsessa*    *Victoria*                            (PRESS 97)<sup>14</sup>  
       *everyone.S*    *our* *crown princess*    *Victoria*  
       ‘our crown princess Victoria (whom we all like)’
- b. *allas*            *vår* *Sjöwall/Wahlöö-hjälte*    *Beck*                                (PRESS 97)  
       *everyone.S*    *our* *Sjöwall/Wahlöö-hero*    *Beck*  
       ‘Beck, the hero of the *Sjöwall/Wahlöö* books (whom we all know and love)’

Norde (1997:226–229), citing Delsing (1991) and Perridon (1989), suggests that the lack of agreement can be taken as evidence that *-s* has developed into a determiner, found under a separate syntactic node in the tree, resulting in a structure like (8a). There are many difficulties with this approach; for instance, if *-s* is a determiner, it would have to be analysed as a definite determiner and, as pointed out by Koptjevskaja-Tamm (2003), this is not entirely appropriate. I assume instead that *-s* is the realisation of a noun phrase level feature, as represented in (8b). The exact mechanism that ensures the correct realisation of the feature will depend on one’s assumption about morpho-syntax: an Autolexical approach is suggested in Lapointe (1992), Anderson (1992, 1993, 1996) suggests the use of phrase level rules similar to word formation rules and Miller & Halpern (1993) formalise a GPSG approach.



Even though the assumptions about the phrase structure role of the possessive are not absolutely central to the discussion here, they turn out to be of some relevance. I will return to a discussion of this presently.

It is also quite clear that the possessive *-s* TENDS to occur on the right edge of the noun phrase. Some simple examples can be found in (9), and in (10) I provide examples where an adjectival or a participial element functions as the head of a noun phrase; regardless of whether such noun phrases are elliptical or whether the head has been nominalised, the adjectival element can take the possessive *-s*.

- (9) a. de frånskilda **kvinnornas** kastlösa kategori (PAR)  
*the divorced woman.PLU.DEFS casteless category*  
 ‘the casteless category of the divorced women’
- b. de vackra **människornas** utvalda skara (PAR)  
*the beautiful people.PLU.DEFS chosen crowd*  
 ‘the chosen crowd of the beautiful people’
- (10) a. de övriga **boendes** kampanj (PAR)  
*the other live.PART.S campaign*  
 ‘the campaign of the other people living there’
- b. de **osaligas** hämnd (PAR)  
*the unblest.S revenege*  
 ‘the revenge of the lost souls’

In all these examples, the right edge coincides with the head noun, or the modifier which functions as the head of an elliptical construction, so that it is in effect difficult to establish the principle by which the *-s* is distributed. As with the historical data discussed in section 3.5, the deciding cases will be the ones which involve postmodification, so that the difference between the right edge and the head can be made.

Norde’s main arguments in favour of the clitic status of ModSw *-s* are then indeed based on the so-called group genitive, exemplified by Norde (1997:87, 2001a:247).<sup>15</sup>

- (11) a. folket på gatans omdöme  
*people.DEF on street.DEFS opinion*  
 ‘the view of the man in street’
- b. Fredriks-kompis-som-äger-båtens flickvän  
*Fredrik.S-pal-REL-owns-boat.DEFS girlfriend*  
 ‘the girlfriend of Fredrik’s pal who owns the boat’
- c. den som har skrivit kursplanerna’s mening  
*3SG REL has written curriculum.DEFS intention*  
 ‘the intention of the person who wrote the curriculum’
- d. den som är framförs stavar  
*3SG REL is in.front.S poles*  
 ‘the poles of the person in front’

A closer look at the data reveals a more complex situation, however. It is not unusual to find the *-s* occurring on the right edge of a noun phrase containing postmodification where this postmodification has a close relationship with the head noun (cf. SAG 3:130–131). The phrase in (11a) occurs frequently, and some further examples illustrating the point are provided in (12).<sup>16</sup>

- (12) a. Hennes Majestät Drottningen av Sveriges närvaro  
*her majesty queen.DEF of Sweden.S presence*  
 ‘the presence of Her Majesty the Queen of Sweden’
- b. presidenten i USA:s kropp  
*president.DEF in USA.S body*  
 ‘the body of the president of the United States’
- c. min chef Bo Perssons styrka (SAG 3:130)  
*my boss Bo Persson.S strength*  
 ‘my boss Bo Persson’s strength’
- d. professorn i tyskas fru (SAG 3:131)  
*professor.DEF in German.S wife*  
 ‘the wife of the professor of German’

A striking property of all the examples in (11) and (12), with the exception of (11d), is the fact that the element to which *-s* attaches is itself a noun, which could occur as a head noun with a possessive marker. Examples of group genitives where the *-s* is found on an element other than a noun are difficult to come by, even in spoken corpora. They are, however, possible in casual everyday speech. In certain varieties of ModSw, an unstressed possessive pronoun can occur immediately following the head noun, as it could in earlier forms of Swedish (cf. example (4b) above), and when it does, the possessive *-s* can attach to it, as in (13). There are, however, arguments

in favour of clitic status for this element (cf. SAG 2:263), so that examples such as (13) cannot be seen as evidence of a true group genitive in Swedish.<sup>17</sup>

- (13) *bror mins cykel*  
*brother my.S bicycle*

Examples of the type in (11d), where the *-s* occurs on a particle, or intransitively used preposition, can be found in naturally occurring language, as in (14a).<sup>18</sup> Examples like (14b), where the particle belongs to a postmodifying phrase, are in principle possible. Group genitives where *-s* occurs at the end of a relative clause which has a verb on its right edge are also in principle possible, as in (14c).

- (14) a. *personen bredvids axel*  
*person.DEF next.to.S shoulder*  
 ‘the person next to you’s shoulder’  
 b. *mannen som sitter framförs flint*  
*man.DEF REL sit.FIN in.front.S bald.patch*  
 ‘the bald patch of the man in front’  
 c. *dom som kommers förtjänst* (SAG 3:131)  
*they REL come.FIN.S merit*  
 ‘thanks to those who come’

The picture that emerges so far then is that group genitives are possible, particularly when the head noun and the postmodifier have a close relationship. They are also possible in casual speech, particularly if the rightmost element in the postmodifier is a noun. When the postmodifier ends in a particle, very casual speech will also permit the *-s* to be attached to it, particularly if the particle immediately follows the head noun. Finally, examples where the *-s* is attached to another category, like a verb, are in principle also possible in very casual spoken registers, but are usually avoided. The unorthodox punctuation used in examples like (11b, c) and (12b) mirrors the uncertainty that native speakers feel about the use of the group genitive. Even though an apostrophe can be found before the *-s* on some modern shop signs in Sweden, presumably under influence from English, in the standard written language, *-s* attaches directly to its host.

True group genitives are then rare and an alternative construction involving a preposition phrase will often be used instead, like *frun till professorn i tyska* ‘wife.DEF to professor.DEF in German’ as an alternative to (12d). Swedish does not, however, have a unique preposition on a par with the English *of* which could be used instead of the possessive *-s* in most environments. Instead, several different prepositions are used and in some cases there is no obvious prepositional alternative, compare *\*?axeln till personen bredvid* ‘shoulder.DEF to person.DEF next to’ as an alternative to (14a)

or \*?förtjänsten hos/av dom som kommer ‘merit.DEF at/by those who come’ instead of (14c) (cf. SAG 3:34–35).

The relative restrictiveness in distribution that the group genitive shows, makes an analysis of *-s* as a full clitic problematic. If the feature POSS is set to be realised as a full clitic *-s* on the right edge of the phrase, then why are native speakers of Swedish so hesitant about group genitives? This problem becomes particularly striking under the structural assumptions behind (8a), where it would have to be captured as restrictions on what can occur in the specifier when the head is filled by POSS *-s*. Within some frameworks, it might be assumed that all group genitives are acceptable to the syntactic component, and that some other, more pragmatically oriented, component puts restrictions on actual usage. Data can be found, however, which render any analysis of *-s* as a right edge clitic implausible and it is to these that I now turn.

There are environments in Swedish in which the *-s* occurs on the head noun even though it is followed by postmodification. This is the case in very careful spoken and formal written Swedish. The first type of example involves the obligatorily postnominal *egen* ‘own’, which synchronically can be described as the genitive corresponding to the reflexive *själv* (cf. SAG 3:132). In noun phrases involving *egen* and a possessive noun phrase, the *-s* may occur on the head noun rather than on the right edge, as in (15).<sup>19</sup>

- (15) a. pappas eget land (PAR)  
*father.S own.NEUT.INDEF land(NEUT)*  
 ‘dad’s own land’
- b. konstruktionens eget fel (PAR)  
*construction.DEF.S own.NEUT.INDEF fault(NEUT)*  
 ‘the fault of the construction itself’

An anonymous referee suggests that in these cases, *egen/ eget* may in fact not form a constituent with the possessor, but may be an adjective in its ordinary prenominal position. However, SAG (3: 26) describes these element as consisting of a combination of a possessive and *egen/ eget*. Furthermore, the form in which the word occurs does in fact constitute evidence against the prenominal adjective analysis. Both noun phrases in (15) are definite and prenominal modifiers which can show a distinction for definiteness would in both cases be marked as definite: *pappas eget fruktbara land* ‘dad.S own fertile.DEF land’ and *konstruktionens eget dumma fel* ‘construction.DEF.S own stupid.DEF fault’. Even though *egen* has a definite form *egna*, as in *det egna självförtroendet* ‘the own.DEF self-confidence’, in (15) *eget* occurs in its indefinite form. This would be unexpected if *eget* was a prenominal adjective in (15).



We get examples of *-s* occurring on the head noun also with more extensive postmodification; SAG (3:79) provides the examples in (16) ((16b) is from a non-fiction text). A search of PAROLE yielded examples like those in (17). This type of example can only be found in very formal written language.

- (16) a. institutionens för slaviska språk prefekt (SAG 3:79)  
*department.DEFS for Slavonic languages head of department*  
 ‘the Head of the Department of Slavonic Languages’
- b. fastighetsnämndens i Göteborg ordförande (SAG 3:79)  
*housing.department.DEFS in Gothenburg chairperson*  
 ‘the Chairperson of the Gothenburg Housing Department’
- (17) a. den självständiga Evangeliska kyrkans i Kongo förste  
*the independent evangelical church.DEFS in Congo first*  
 generalsekreterare (PAR)  
*general secretary*  
 ‘the first General Secretary of the Evangelical Church of the Congo’
- b. aktörers i undervisningssystemet paradigm (PAR)  
*actor.PLS in educational.system.DEF paradigm*  
 ‘the paradigm of the people actively involved the educational system’
- c. enskilda individers vid Operan yrkesskicklighet och  
*individual individual.PLS at Opera.DEF professional skill and*  
 heder (PAR)  
*honour*  
 ‘the professional skill and honour of separate individuals at the Opera’

In less formal language, the possessive *-s* occurs on the head noun rather than on the right edge of postmodification when the whole noun phrase occurs predicatively, as in (18).

- (18) a. Den där cykeln är flickans från Motala. (SAG 3:131)  
*that bicycle.DEF is girl.DEFS from Motala*  
 ‘That bicycle belongs to the girl from Motala.’
- b. Telefonen, skrivbordet och faxen är flickvännens som han  
*telephone.DEF desk.DEF and fax.DEF is girl.friend.DEFS REL he*  
 bor hos i Bryssel. (PAR)  
*live.FIN at in Brussels*  
 ‘The telephone, the desk and the fax belong to the girlfriend with whom he is staying in Brussels.’

As an anonymous referee has pointed out, in these examples, it may well be the case that the preposition phrase and the relative clause are vacuously extraposed, so that the head noun is in fact the right edge of the noun phrase proper. However, if this

were true, this would still say something about the status of the possessive *-s*, since such extraposition could be seen as a strategy to make sure that the head noun does occur on the right edge of the noun phrase, indicating that *-s* by preference occurs on the head noun.

The picture that emerges is then of an element whose exact position inside the noun phrase is subject to some conflicting constraints; that it should appear on the right edge of the noun phrase and that it should appear on the head noun. When the head noun is not on the right edge, a number of different conflict resolution strategies can be employed. One of these is also frequently used in English, namely opting for a construction with a preposition instead. As already mentioned, there is no one preposition in Swedish which can be used in all environments, like the English *of*. Instead, there are a number of different prepositions, motivated by the relation between the two noun phrases. Under certain circumstances, a prepositional construction is preferred even when there is no postmodification (cf. SAG 3:34–35). Another avoidance strategy, one which appears to have been employed also in earlier forms of Swedish (cf. example (5) above) is to extrapose the postmodification, so that the head noun ends up on the right edge of the noun phrase. Such examples are provided in (19) (cf. (14c)).

- (19) a. *deras förtjänst som kommer* (SAG 3:131)  
*their merit REL come.FIN*  
 ‘thanks to those who come’
- b. *fotbollsupportrarnas skrik som just sett sitt*  
*football.supporterPLU.DEF.S shouts REL just see.PASTPART POSS.REFL*  
*lag förlora med tre mål*  
*team lose.INF with three goals*  
 ‘the shouts of the football supporters who had just seen their team lose by three goals’

As we saw in section 3.4, this conflict appears to have existed to some extent already in earlier forms of Swedish, as soon as agreement marking had given way to once only marking. It would appear that the attraction the head noun exercises on the possessive has been weakened, so that right edge non-head placement is more common now. However, as we have seen, the 700 years or more that have passed have not completely removed the conflict and there are many environments in which right edge non-head placement is avoided. It may be that we do not know quite the whole picture since the true group genitives in ModSw come mainly from the spoken language; as far as the formal written language goes, the distribution seems to be remarkably similar to the early stages of once only marking. Of course, our knowledge of earlier stages of the language comes mainly from formal written language; we do not know whether the spoken language at the time was more permissive in this

respect. As far as placement goes then, Swedish appears to find itself involved in a slow change from head to edge marking; or rather, we have a situation in which the possessive element is still subject to conflicting pressures, but where one constraint has been strengthened at the expense of another. The question then arises whether the term ‘degrammaticalisation’ can usefully be applied to this development. I think not, but if one does use it for a situation such as this, then one needs to consider the consequences.

Consider again the well-known grammaticalisation cline, given in (3) and repeated here.

(3) content word > grammatical word > clitic > affix > (zero)

This is a cline whose core parameter of variation is not placement, but degree of morpho-syntactic independence, or possibly a combination of the two. We can probably safely assume that the last stage of this cline, affix > zero, is never reversed. Since this is a special case, it need not affect the general assumption that the cline can be reversed. However, if we assume that degrammaticalisation of the type which Norde assumes to have happened in Swedish is not uncommon, then presumably we would expect developments similar to the ones we have seen here, but beyond clitic status, i.e. to independent word, not to be uncommon. Naturally, not all elements which grammaticalise according to (3) will run the full course, but the development will stop at a certain stage and the element will stabilise as, say, a clitic. However, if the development never spanned several of the stages, the foundation on which the cline rests would be substantially weakened. Similarly, if (3) functions also as a cline of degrammaticalisation, we would expect to find instances of natural developments affix > clitic > grammatical word. Still, there is certainly nothing in the development over the last 700 years or so which would lead us to believe that *-s* might turn into an independent word.<sup>20</sup> The development shown by the Swedish *-s* then seems to be of a different nature than the one we would expect if we inverted (3).

The development we have seen so far could be described as relating to ‘syntactic scope’; a decrease in syntactic scope has been proposed as one of the changes characteristic of grammaticalisation by Lehmann (1995). This means that the unit with which the element combines decreases in size, so an element which used to combine with a clause may after grammaticalisation combine with a verb phrase or a verb. An increase in syntactic scope would then be characteristic of degrammaticalisation. Tabor & Traugott (1998) have suggested that for a number of cases which are standardly assumed to involve grammaticalisation, it is in fact the case that the scope increases and hence that at least in some cases the inverse relation holds. An increase in syntactic scope also becomes a consequence of the model suggested by Roberts & Roussou (1999, 2003), in which grammaticalisation is fossilised upwards movement. The relation between changes in syntactic scope and grammaticalisation is then by no means clear. Furthermore, it would seem

inappropriate to extend the notion of syntactic scope to morphological elements; it would involve thinking of *-s* as an element with a subcategorisation frame of sorts. This becomes particularly anomalous if one conceives of morphology as a non-morphemic, realisational system, as I do (cf. Anderson 1992, Beard 1995, Stump 2001). The change, and the uncertainty in ModSw, is better expressed in terms of where in the phrase the once only marking of POSS finds its exponence; in this respect the morphological and the syntactic components are sufficiently different for the use of a syntactic term like ‘scope’ within morphology to become misleading. I have so far concluded that the development of *-s* involves a change in the position of the exponence, or maybe better, a change in the priorities involved in the placement; my conclusion is that there is still a conflict between head and right edge placement. The use of the terms clitic and affix that Norde (1997) adopts is associated not just with a change in positioning, but this change is accompanied by a change in the degree of attachment. Indeed this assumption underpins a number of the criteria from Zwicky & Pullum (1983) which Norde uses. As discussed in section 3.1 above, the old agreeing genitive marking did display certain irregularities which the ModSw possessive *-s* does not show (cf. note 4). Norde implies that there is no evidence of such irregularities occurring when the change to once only marking has taken place. In her account, this presumed absence would be ascribed to the clitic status of *-s*. However, I have argued that there is little evidence that the non-agreeing *-s* in earlier forms of Swedish was a clitic in the sense of being purely a right edge element. Indeed, I have argued that it is still the case in ModSw that *-s* is sensitive to constraints other than those which pull it to the right edge. In fact, there is evidence that ModSw *-s* shows the kind of interactions with its host word that makes a pure clitic analysis inappropriate.

In order to make a distinction between a clitic – an element which is only prosodically associated with its host – and a phrasal affix – one which shows some morphological interaction with its host – we need to look for signs of irregularities or of interaction between the clitic/phrasal affix and the element within the host phrase to which it attaches. Zwicky (1987) uses evidence of this type to argue in favour of treating the English *-’s* as a phrasal affix rather than a clitic. Some of Zwicky’s arguments involve data where the distinctions are not clear cut to native speakers (as Norde 1997:67, referring to Picard 1990, points out). However, the main point of his argument holds, in that the possessive *-’s* has to have access to the featural content of the word to which it attaches. In any account within which the attachment is assumed to be purely syntactic, this would be difficult to account for; the data in (20)–(23) illustrate.<sup>21</sup>

- (20) a. the fuzz’s old cars  
 b. the bus’s doors  
 c. the terrace’s tiling

- (21) a. the dogs'/\*dogs's kennel  
 b. the cats'/\*cats's favourite place  
 c. the crocuses'/crocuses's bright blossoms
- (22) a. anyone who likes cats'/\*cats's reactions to them  
 b. anyone who likes kids'/\*kids's ideas
- (23) a. people who hurry's ideas  
 b. people who are hurrying's ideas  
 c. anyone who hurries'/\*hurries's ideas

The examples in (20) indicate that when possessive *-s* is attached to a word ending in a sibilant, it behaves in a regular way and we get the pronunciation /tʃ/. On the other hand, when the final sibilant is a morpheme representing the feature PLURAL, as in (21), the exponence of POSS is suppressed and an /tʃ/ pronunciation is not possible. As (22) shows, this is regardless of whether the word carrying the PLURAL marking is the head of the phrase or not. In fact, the same holds true if the sibilant represents the feature 3SG PRESENT, which has the same allomorphs as PLURAL. The fact that the feature of the host word is 'visible' to the possessive *-s* in this way is enough to make a pure clitic analysis of *-s* implausible; standard assumptions about the way syntax works would mean that the featural structure of a constituent word of an adjacent phrase is not transparent to an element external to that phrase.

As already pointed out in the discussion of example (2), the Swedish plural *-s* appears not to have any special effects when combined with the possessive. The data involving any word final *-s* and the possessive are quite interesting in this respect. In Swedish, when a suffix beginning with a consonant is added to a word ending in a long vowel and a homorganic consonant, the two consonants geminate and form a long consonant. Since ModSw does not allow syllables containing both a long vowel and a long consonant, the vowel is shortened, as illustrated in (24a) and (24b). As (24c) shows, this does not, however, happen in the case of the possessive *-s*, but instead it looks as if the possessive *-s* is genuinely deleted here.

- (24) a. vit + t                                    [vi:t] + [t] = [vit:]  
       *white* + NEUT
- b. röd + t                                [rød] + [t] = [røet:]  
       *red* + NEUT
- c. en gris + s liv                        [gris] + [s] = [gris:] \*[gris:]  
       a pig + POSS life

Gemination does not take place when possessive *-s* combines with a word ending in *-s*, regardless of whether the word-final *-s* represents a morpheme or not. This is, however, not an argument against a phrasal affix analysis of *-s*. It is likely that the ties between a head affix and its host are stronger than those between an edge affix and

its host so that the morphological interactions between an edge affix and its host are a subset of those between a head affix and its host. Zwicky (1987:136), for instance, assumes that phrasal affixes will always be realised affixally and never processually, and explicitly states that gemination will not occur with phrasal affixes.

Norde (1997:65) discusses and rejects some synchronically arbitrary gaps in the possessive form of certain geographical proper nouns, some of which find a historical explanation in an older possessive in *-a*, e.g. *Uppsala domkyrka* vs. *Stockholms domkyrka* ‘the cathedral of Uppsala/Stockholm’. This pattern has been extended to native proper nouns ending in a vowel which never represented a possessive ending, like *Ramlösa brunn* ‘the spa at Ramlösa’ (cf. *Buxtons brunn*) or *Blekinge län* ‘the county of Blekinge’. It now also includes some names ending in a vowel+/t/ and names ending in a consonant that will often remain unpronounced, e.g. *Kalmar hamn* ‘Kalmar’s harbour’ (cf. *Londons hamn*) and *Karlsta(d) läroverk* ‘the grammar school of Karlstad’ (cf. SAG 2:147–148, 3:30–31). I agree with Norde, however, that these examples do not provide evidence against a pure clitic analysis, since the possessive *-s* can attach to all these place names if they do not form a close unit with the possessum, e.g. *Kalmars första obduktion* ‘Kalmar’s first postmortem’, *Blekinges Östersjöhamnar* ‘the Baltic harbours of Blekinge’, *Karlstads ishall* ‘Karlstad’s ice rink’, and even with some fairly closely connected noun phrases, e.g. *Kalmars domkyrka* ‘the cathedral of Kalmar’.<sup>22</sup>

There are, however, other irregularities in the realisation of the Swedish possessive *-s*, on a par with those illustrated for English in (21)–(23), which indicate that the attachment is not strictly syntactic, as it would be for a pure clitic. The examples I will discuss here are quite complex; naturally occurring examples are difficult to find and not all native speakers have confident intuitions about them. Still, I think these examples do impinge on the debate about the status of possessive *-s*. The essence of the evidence, like that discussed for English by Zwicky (1987), lies in the fact that the feature content of the element to which *-s* attaches appears to matter. In elliptical constructions, a possessive pronoun can come to be the rightmost element in a noun phrase, as in (25a). If the missing head noun would have occurred with the possessive *-s*, then the possessive pronoun can carry this element, as in (25b) (cf. SAG 2:262–263).

- (25) a. Oskar tog sina böcker och jag tog mina.  
*Oskar took his.REFL.PLU books and I took my.PLU*  
 ‘Oskar took his books and I took mine.’
- b. Dina föräldrars båt är inte så gammal som  
*your(SG).PLU parent.PLUS boat is not so old as*  
*minas.* (SAG 2:263)  
*my.PLU.S*  
 ‘Your parents’ boat is not as old as my parents’ (boat).’

The corresponding singular possessive pronoun does not, however, permit this construction, as the ungrammaticality of (26) shows.

- (26) \*Din            mammans   båt   är   inte   så   gammal   som   mins.  
*your(SG).SG   mother.S   boat   is   not   so   old   as   my.SG.S*  
 ‘Your mother’s boat is not as old as my mother’s (boat).’

Constructions in which the ellipited noun phrase is part of a postmodifier show a similar effect, as (27) illustrates.

- (27) a. pojken   som   stal   min   cykels/   mina   cyklars   straff  
*boy.DEF   REL   stole   my.SG   bicycle.S   my.PLU   bicycle.PLU.S   punishment*  
 ‘the punishment of the boy who stole my bicycle(s)’  
 b. pojken   som   stal   minas   straff  
*boy.DEF   REL   stole   myPLU.S   punishment*  
 ‘the punishment of the boy who stole mine (= my bicycles)’  
 c. \*pojken   som   stal   mins   straff  
*boy.DEF   who   stole   my.SG.S   punishment*  
 ‘the punishment of the boy who stole mine (= my bicycle)’

This constraint is not phonological in nature, since a word with similar phonological structure can occur with the possessive *-s*, as in (28).

- (28) ett   glas   gins   positiva   effekt   på   ens   mentala   tillstånd  
*a   glass   gin.S   positive   effect   on   one’s   mental   state*  
 ‘the positive effect of a glass of gin on one’s mental state’

Instead, it seems to be the particular featural composition of the word which determines whether or not the combination is possible. This is the sort of restriction which would be unexpected under a purely syntactic analysis of the possessive *-s*.

In fact, examples similar to those in (25)–(26) provide further support for irregularities. Unlike their first and second person counterparts, the third person singular possessive pronouns are relatively transparent and end in the possessive *-s*. The masculine form synchronically consists of the subject form of the pronoun plus the possessive *-s*: *han-s* ‘he-S’.<sup>23</sup> The feminine form is made up of the object form and the *-s*: *henne-s* ‘she(OBJ)-S’. When either of these forms occurs in an elliptical construction like (25)–(26), it cannot be interpreted as the possessive pronoun plus the possessive *-s*; this is in spite of the fact that any other word-final *-s* can coalesce with the possessive *-s*, even when it represents a morpheme, as the data in (2) showed. The examples in (29) can then only be interpreted as having one possessor; whereas *minas* in (25b) can be said to having double marking for POSS, *hans* in (29a) cannot be glossed as ‘he.POSS.POSS’.

- (29) a. Din            mammans båt   är inte så gammal som hans.  
*your(SG).SG mother.S boat is not so old as his(S)*  
 ‘Your mother’s boat is not as old as his boat.’  
 (Not: ‘... as his mother’s boat.’)
- b. Din            mammans båt   är inte så gammal som hennes.  
*your(SG).SG mother.S boat is not so old as hers(S)*  
 ‘Your mother’s boat is not as old as her boat.’  
 (Not: ‘... as her mother’s boat.’)

The picture which emerges from the data is then not one of a morphologically blind, purely syntactically attached clitic. Instead, we find an element whose placement restrictions can best be described in terms of a conflict between head placement and right edge placement. Even though the morphological attachment is not as strong as might be expected from a pure head affix, there is certainly evidence that it is not a pure clitic.

#### 4. CONCLUSIONS

I conclude from the debate between Norde (1997, 2001b) and Delsing’s (1999, 2001) and other material that there were (at least) two changes which overlapped in time and the effects of which interacted: the genitive case ending *-s* took over from other case endings and *-s* developed from being marked as agreement to being marked once only within a phrase. Some aspects of these changes are best viewed as changes to the case system, rather than changes to individual case endings. The exact order in which these changes happened is not essential to my argument here. It does seem clear that they took place over a long time, as Norde (1997:109) puts it:

[t]he loss of internal inflection was a slow and irregular process: it started in the [Old Swedish] period with strong feminine nouns and went on for many centuries. In 18th century religious prose, definite forms of the noun with internal inflection are still frequently attested.

It is clear, however, that there was a development towards once only marking.

I have argued here that the early data presented by Norde (1997) do not give unambiguous evidence of the right edge marking claimed to be an intermediate stage in the development to clitichood. Since the head noun is on the right edge in almost all noun phrases with once only marking which she cites, it is difficult to disentangle head placement from edge placement. In the single distinctions made by Norde – between affix and clitic – head placement would be inconsistent with a clitic analysis. (As discussed in section 3.2, this is not the case if a two-dimensional distinction is



made.) In fact, I have claimed that there are data, some of which are considered by Norde, which indicate that head placement was preferred above edge placement in the early stages of the development (cf. example (6)). Considering the change from the stage when *-s* found its exponence as an agreement feature to the point when it was first marked only once within its noun phrase, I conclude then that this change cannot be described as a change from an affix to a clitic. The placement of the *-s* might have been guided by a conflict between head marking and right edge marking, the evidence is inconclusive here. However, to describe it as pure right edge clitic marking would seem to do the data an injustice.

In Modern Swedish, I have argued that we find clear evidence of a conflict between head and right edge marking which is incompatible with a pure clitic analysis. In many noun phrases, we cannot tell which option is chosen because the head noun does occur on the right edge, but in other cases, the choice depends on both syntactic considerations and other factors, such as register. Separately from this issue, I also claim that even when there is true edge marking, there is evidence that this is not purely syntactic, but that there is some evidence of the type of irregularities which Zwicky (1987) provides evidence for in English. Such irregularities support a phrasal affix analysis rather than a pure clitic one. In fact, it can be seen as evidence that the two-dimensional distinction argued for in section 3.2 should indeed be made.

To sum up, I have argued that there has been a clear change from agreement to once only marking and that the rules guiding the placement of this once only marking reflect a change in progress which means that there is a conflict between head marking and right edge marking. The issue then arises whether either of these changes, or indeed the combination of the two, should be described as degrammaticalisation. My conclusion is that the term can only be used to describe this change at a peril; it would make the interpretation of it so broad that it would no longer be interesting. One could hardly argue that it is more grammatical to mark a feature on every element of a phrase than exclusively on one of them. Only in a wide interpretation of the notion 'grammatical' could one claim that it was more grammatical for a system to place the marker on the head than on the edge. Since these are the only types of changes for which we can find explicit evidence, I conclude that if this change is described as degrammaticalisation, the term is used in such a way that it no longer refers to an interesting and potentially uniform phenomenon.

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## NOTES

1. The issue of ‘group genitives’ is dealt with in a comparative discussion by Norde (1997); I will return to this in section 3.4. There is also a wider discussion of the possessive, for instance its status as part of a modifier or determiner, and there is a comparison between the possessive *-s* and the use of resumptive possessive pronouns, but this is not directly relevant to its possible clitic status.
2. The status of the concept of ‘phrase marker’ with respect to the clitic–affix distinction is not absolutely clear in Norde (1997), a point to which I shall return.
3. Norde’s (1997) way of describing what happens when possessive *-s* combines with a word ending in *s* is slightly unfortunate since it may give the impression that an alternative expression has to be found: ‘Interestingly, unlike English Swedish does not allow the *s*-genitive with words ending in /s/’ (p. 68, fn. 15). However, the examples she provides indicate that her understanding of the data corresponds to the one given here, namely that the noun can be used as a possessor but that it is not marked with a second *-s*.
4. Norde (1997) says about the genitive *-s* occurring on nouns following *till* that ‘[i]n these expressions, as well as in genitival compounds, the *-s* changes the root’. An example provided by her is in (i).
 

(i) a. <i>till skugs</i> [skuk:s]	b. <i>denna skogs</i> [sku:gs]	<i>ägare</i>
<i>to forest.GEN</i>	<i>this forest.s</i>	<i>owner</i>
‘to(wards) the forest’	‘the owner of this forest’	

Norde’s generalisation is not quite accurate, since there are cases where the *-s* governed by *till* does not shorten the stem vowel: *till fots* [fu:ts] ~ \*[fut:s] ‘by foot’ and *till bords* [bu:ɔ:s] ~ \*[bu:ɔ:s] ‘to/at the table’; with some other words, the pronunciation varies, e.g. in *vara till lags* ‘to please someone’, we can have [la:gs] or [lak:s]. Also, there are odd elements which get vowel shortening also with the ModSw possessive, *Gud* [gʉ:d] ‘God’, but *Guds* [gʉt:s] ‘God’s’, as in *Guds nåd* ‘God’s grace’. Still, Norde’s point holds that stem shortening does occur in these set expression, which can presumably be taken as a sign that there were idiosyncrasies of this type when the *-s* was still an agreement affix, but they generally do not occur with ModSw possessive *-s*.

5. Norde (1997) returns to this issue in the conclusion: ‘In other words, unlike ‘ordinary’ case endings, *-s* was no longer a cumulative suffix (e.g. a simultaneous realization of case

- and number) but an edge-located morpheme that could be attached to inflectional suffixes' (p. 224). Naturally, once *-s* had spread throughout the paradigm it was no longer marked for gender and number and hence could not be cumulative, so this is a consequence of it spreading, not an additional factor. I will return to the notion of 'edge located' in section 3.2.
6. In section 3.3, I will claim that there is a third dimension which is not distinguished by Norde, namely between 'phrase marking' (as opposed to agreement) and 'phrasal affix' (as opposed to head affix).
  7. Anderson (1993, 1996) includes HEAD as a possible value of the placement parameter, so that the difference between being placed on the head or at the edge of the phrase is one only of alignment. In principle, his approach predicts no direct connection between placement with respect to the head and stronger attachment, i.e. one would expect 'head clitics'. The literature does not provide many examples of such analyses. It is, however what Nevis (1985) suggests for the Finnish possessive, though Kanerva (1987) argues that it is in fact an affix in attachment. The Italian pronominal clitics on verbs may be a better example of a potential head clitic. The fact that 'head clitics' are not reported in the literature may be a consequence of the general assumption that the very fact that some element occurs on the head is a sign that it is an affix. This is an issue which requires more detailed work and, since it is not directly relevant here, I will follow the more standardly assumed distinction.
  8. Börjars & Vincent (1993) also propose to account for the difference in behaviour between the Italian elements *-no* and *lo*, which have caused problems for linguists, in terms of these parameters.
  9. In fact, whereas the notion of phrase marking as introduced by Norde (1997:128) appears to have two properties: (i) marking occurs only once (and thereby contrasts with concordial marking) and (ii) it occurs on the right edge, later in the same chapter, the edge marking seems to be considered a more central property. In a discussion about an example in which the head noun is followed by a possessive adjective and the *-s* occurs on that adjective *fadhir mins* 'my father's', Norde (1997:137) says that this is an important example, since it 'supports the analysis of *-s* as a TRUE PHRASE MARKER' (my emphasis). This appears to imply that phrases in which *-s* occurs just once, but appears on a right edge head noun do not show true phrase marking. This also seems to be evidence of an unclear distinction between this notion and the notion of clitic.
  10. With this Norde (p.c.) agrees.
  11. Norde (p.c.) disputes Askedal's line of argument.
  12. I will follow Norde's (1997, 2001a) convention here of glossing elements lacking the possessive *-s* where it may have been expected with  $\emptyset$ . This is purely for expository reasons and should not be taken to mean that I assume the existence of zero morphs.

Where appropriate, the sources of data in this paper are annotated as follows:

Bir	<i>The revelations of Saint Birgitta</i> (cf. Norde 1997:20).
Mose	<i>Moseböckerna</i> , the Pentateuch (cf. Norde 1997:20).
NT	New Testament (cf. Norde 1997:21–22).
PAR	From the PAROLE corpus at <i>Språkbanken</i> , Department of Swedish Language, Gothenburg University ( <a href="http://spraakbanken.gu.se/">http://spraakbanken.gu.se/</a> ).
PRESS 97	A corpus at <i>Språkbanken</i> , Department of Swedish Language, Gothenburg University ( <a href="http://spraakbanken.gu.se/">http://spraakbanken.gu.se/</a> ).

Vidh *Vidhemsprästens anteckningar* [Notes of the priest from Vidhem] (cf. Norde 1997:19).

13. This text is from the early 14th century, but the only surviving copy is from 1526. According to Norde (1997:20), it is a faithful copy.
14. I am grateful to those who maintain the *Språkbanken* corpora, and to the funding bodies which support them, for this excellent facility. I am also grateful to Maia Andréasson for providing many of the examples I use here, both those from *Språkbanken* and those from the Web.
15. The example in (11b) comes from the novel *Så går en dag ifrån vårt liv och kommer aldrig åter* by Jonas Gardell (Stockholm: Nordstedts Förlag), (11c) is from Wellander (1973:95) (Wellander uses the apostrophe with the group genitive, but Norde quotes his example without it) and (11d) is from Delsing (1993:150).
16. The examples in (12a, b) were found on [www.array.se/press/release/970522.html](http://www.array.se/press/release/970522.html) and [www.scifi-info.nu/nyheter/myhets-mixen/notiser27-03\\_01.htm](http://www.scifi-info.nu/nyheter/myhets-mixen/notiser27-03_01.htm), respectively (12 April 2003).
17. The construction with postposed possessive pronoun is described by SAG (2:263) as 'regional or mock old-fashioned'. Even though a search of the PAROLE corpus did give examples of postposed possessive pronouns, *brännvinet deras* 'schnapps.DEF they.POSS' and *ansiktet hans* 'face.DEF he.POSS', it did not yield any examples involving this whole phrase functioning as the possessor; hence the example in (13) is constructed.
18. The example was taken from [www.skrattnet.com/roligalistor/forstora\\_bio.asp](http://www.skrattnet.com/roligalistor/forstora_bio.asp) (12 April 2003).
19. *Egen* agrees with the noun it modifies for gender (in singular) and number. I refer to the forms of *egen/leget* and adjectives here as DEF and INDEF, respectively. This is just to make the point more directly, but I think the terms WEAK and STRONG are, in fact, more appropriate for these forms.
20. There have of course been suggestions in the literature to the effect that the English possessive *-s* once underwent this change by analogy, so that *-s* was reinterpreted as a weak form of *his*, giving *the king's servant* > *the king his servant*, with the element later being weakened again to *-s*. Such claims have been comprehensively refuted by Allen (2003).
21. The examples in (20)–(23) are from Zwicky (1987:140); (23) is due to Stemberger (1981).
22. All the examples with *-s* are taken from the PRESS 97 corpus at *Språkbanken*.
23. Diachronically, *han* actually derives from the old object form.

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