‘IDENTIFICATION’ AND THE ROLE OF MORPHOLOGY IN THE SCANDINAVIAN NOUN PHRASE*

1. INTRODUCTION

Across the various varieties of Scandinavian a remarkable variation pertains to the syntactic structure of noun phrases. The aim of this paper is to argue that the variation to a large extent, and in a principled way, is due to overt morphological variation.

As a starting point consider the possessive noun phrases in (1) and (2) from the Skellefteå dialect in northern Sweden. In Mainland Scandinavian dialects there are generally no gender distinctions in the plural, and unless explicitly stated, ‘m.’ ‘f.’, and ‘n’ should henceforth be taken to denote masculine, feminine, and neuter *singular*,respectively.

(1)	a.	**men**	hest/*hestn	m.	(2)	a.	**mine**	hestn/*hest	m.
		my	horse/horse-DEF				my	horse-DEF/horse	
	b.	**mín**	bok/*boka	f.		b.	**mine**	boka/*bok	f.
		my	book/book-DEF				my	book-DEF/book	
	c.	**mett**	hus/*huse	n.		c.	**mine**	huse/*hus	n.
		my	house/house-DEF				my	house-DEF/house	
	d.	**mín**	hesta/bökker/hus	pl.		d.	**mine**	hesta/bökkren/husa	pl.
		my	horses/books/houses				my	horses-/books-/houses-DEF	

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In this dialect there are two types of possessive pronouns (henceforth 'possessives'): one type which agrees with the 'head' noun in gender and number, and one type which does not show any agreement at all. Intriguingly, the possessive types differ with respect to syntactic behavior. As we see from the examples in (1) the agreeing possessive cannot precede a noun carrying the suffixed definite article. On the other hand, as the examples in (2) make evident, the non-agreeing possessor cannot precede a noun which does *not* carry the suffixed article.

In Vangsnes (1996b, 1998b, forthcoming) I have shown on the basis of the Skellefteå dialect and other northern and eastern Swedish dialects in comparison with other Scandinavian dialects that there is substantial evidence for the following empirical generalization:

I In Scandinavian a prenominal possessive cannot cooccur with definite articles unless either the possessive or the closest following definite article, or both, lack gender agreement.

To my knowledge this has not been established elsewhere in the literature, neither in the generative nor in the Scandinavianist tradition.

The question why such a generalization should hold comes naturally, of course, and a main objective of this paper is to answer that question. And in fact, the generalization will turn out to be but an effect of more general principles pertaining to what I will term the 'identification' of functional projections. As I will show, the varying morphological properties of parts of speech across Scandinavian dialects can be considered the main source for the great syntactic variation that we find.

Initially, let us consider the major cross-dialectal differences pertaining to the Scandinavian article system. A well-known "trademark" of Scandinavian is the suffixed definite article. Except for Western Jutlandic (in Denmark) all dialects have a suffixal element on the noun, corresponding in its core meaning and usage to English 'the'.

Disregarding Western Jutlandic, if we consider both definite and indefinite articles, i.e. the article system more generally, we can identify (at least) three different systems. First, Icelandic is the only Scandinavian dialect which lacks an obligatory indefinite article in the singular—in the plural all dialects allow the absence of a determiner—andmoreover Icelandic does not have an obligatory preadjectival lexical definite article either (cf. e.g. Delsing 1993a:114ff). Second, Mainland Scandinavian and Faroese have both a (generally) obligatory indefinite and a preadjectival definite article. Third, northern Swedish dialects have an obligatory indefinite article and adjective incorporation in definite noun phrases, but no preadjectival article.[1]

[1] "Northern Swedish" does not represent a homogenous dialect area. The dialect type described here first and foremost corresponds to the dialects of Västerbotten (to which the Skellefteå dialect belongs) and adjacent districts. It should furthermore be noted that we are talking about a "dying" dialect type: there are relatively few young people who speak a "northern Swedish" dialect as it is described here.

The difference between Icelandic on the one hand and Mainland Scandinavian and Faroese on the other with respect to the requirement for an indefinite article in the singular is illustrated by the expletive constructions in (3)—Icelandic and Faroese are presented with two examples each so as to get the correct agreement on the finite verb (and the English translation at the bottom thus represents a "total" rendering of the examples).

(3)	a.	fia›	stendur	hús/langt hús	á nesinu.		*Icelandic*
		EXPL	stands	house/long house	on cape-DEF		
	b.	fia›	standa	hús	á nesinu.		
		EXPL	stand	houses	on cape-DEF		
	c.	Ta›	stendur	*(eitt) hús/*(eitt) langt hús	á nesinum		*Faroese*
		EXPL	stands	a house/a long house	on cape-DEF		
	d.	Ta›	standa	hús	á nesinum		
		EXPL	stand	houses	on cape-DEF		
	e.	Der	står	*(et) hus/*(et) langt hus/lange huse	på nesset.		*Danish*
		EXPL	stands	a house/a long house/long houses	on cape-DEF		
	f.	Det	står	*(et) hus/*(et) langt hus/lange hus	på neset.		*Norwegian*
		EXPL	stands	a house/a long house/long houses	on cape-DEF		
	g.	Det	står	*(ett) hus/*(ett) långt hus/långa hus	på näset.		*Swedish*
		EXPL	stands	a house/a long house/long houses	on cape-DEF		
All:		'There is a house/a long house/long houses on the cape.'					

Furthermore, the requirement for a preadjectival definite article in Mainland Scandinavian and Faroese, and the lack of such in Icelandic, is illustrated in (4)–(5).

(4)	a.	húsi›		b.	langa húsi›	*Icelandic*
		house-DEF			long house-DEF	
		'the house'			the long house'	
(5)	a.	húsi›		b.	*(ta›) langa húsi›	*Faroese*
		house-DEF			the long house-DEF	
		'the house'			'the long house'	
(6)	a.	huset		b.	*(det) lange huset	*Norwegian*
		house-DEF			the long house-DEF	
		'the house'			'the long house'	
(7)	a.	huset		b.	*(det) långa huset	*Swedish*
		house-DEF			the long house-DEF	
		'the house'			'the long house'	

Danish differs from Faroese, Norwegian, and Swedish in that the preadjectival definite article cannot co-occur with the suffixed definite article.

(8) a. huset
house-DEF
'the house'

b. *(det) lange hus/*huset
the long house/house-DEF
'the long house'

Danish

The difference between Danish on the one hand and Faroese, Norwegian, and Swedish on the other, exactly mirrors the situation found with respect to demonstratives. As we will see later, Danish and Icelandic demonstratives do not co-occur with the suffixed definite article, whereas demonstratives in the other dialects do, and this difference between the dialects will be addressed in section 3.3.

The syntactic parallel between the preadjectival article and demonstratives is not altogether surprising given that the preadjectival article is homophonous with the distal demonstrative in the dialects in question. This homophony is shown by the examples in (9) and (10) from Norwegian, and similar examples could be produced for Danish, Swedish, and Faroese as well. The interpretation of the determiner in the examples in (10) is potentially ambiguous between a demonstrative and an article reading. If the determiner is stressed it can only be interpreted as a distal demonstrative whereas if it does not carry stress, it will normally have the article reading. However, in the absence of an attributive adjective, as in the examples in (9), the determiner can only be interpreted as a demonstrative (and moreover must normally carry stress).

(9)
a. **den** hesten
that horse-DEF
b. **den** myra
that swamp-DEF
c. **det** huset
that house-DEF
d. **de** hestene
those horses-DEF

(10)
a. **den** svarte hesten m.
that/the black horse-DEF
b. **den** svarte myra f.
that/the black swamp-DEF
c. **det** svarte huset n.
that/the black house-DEF
d. **de** svarte hestene pl.
that/the black horses-DEF

Norwegian

For the sake of completeness the Danish examples corresponding to the Norwegian ones in (9) and (10) are given in (11) and (12)(omitting the example with the feminine noun since Danish does not distinguish between masculine and feminine gender).

(11)
a. **den** hest/*hesten
that horse/horse-DEF
'That horse'
b. **det** hus/*huset
that house/house-DEF
'That house'
c. **de** heste/*hestene
those horses/horses-DEF
'Those horses'

(12)
a. **den** sorte hest/*hesten
that/the black horse/horse-DEF
'That/the black horse'
b. **det** sorte hus/*huset
that/the black house/house-DEF
'That/the black house'
c. **de** sorte heste/*hestene
those/the black horses/horses-DEF
'Those/the horses'

Danish

As shown by these examples the distal demonstrative and the preadjectival definite article are homophonous also in Danish, and moreover neither of them can co-occur with the suffixed definite article.

A natural conclusion given these correspondences between the distal demonstrative and the preadjectival article is to say that the two in fact are one and the same linguistic element. Following Lødrup (1989:68) I will take this stand, and moreover I will assume that they have the same syntactic status. This will be important for the analysis to be developed below in section 3.2.

The adjective incorporation found in northern Swedish dialects is illustrated in (13) and contrasted with the Standard Swedish examples in (14)(examples from Sandström and Holmberg 1994).[2]

(13) a. nybiln
new-car-DEF
'the new car'

b. gammsvartkjoln
old-black-skirt-DEF
'the old black skirt'

Northern Swedish

(14) a. den nya bilen
the new car-DEF
'the new car'

b. den gamla svarta kjolen
the old black skirt-DEF
'the old black skirt'

Standard Swedish

This introductory sketch of the crossdialectal differences in the Scandinavian article system raises the following questions which will be addressed in section 3:

(i) Why is there an obligatory singular indefinite article in Mainland Scandinavian and Faroese but not in Icelandic?
(ii) Why is there no preadjectival definite article in Icelandic, whereas there is in Mainland Scandinavian and Faroese?
(iii) Why is the Danish preadjectival definite article in complementary distribution with the suffixed one, whereas the two articles co-occur in Faroese, Norwegian, and Swedish?
(iv) Why do northern Swedish dialects have adjective incorporation in definite noun phrases?

As a further illustration of the wide syntactic variation in the Scandinavian noun phrase, consider the patterns of demonstrative and possessive constructions in (15)–(17).

[2] Northern Swedish dialects moreover have another characteristic property pertaining to the article system. Interestingly, the same linguistic element which is used to form semantically definite noun phrases (i.e. the suffixed definite article), is used with mass nouns and plural count nouns to form mass denoting expressions (cf. Delsing 1993a:47ff). The phenomenon is also found in the Österbotten dialects in Finland. I leave out a discussion of the phenomenon here, but see Vangsnes (1999a) where it is treated within the theory on which the present study is based.

(15)	a.	*this N*	(16)	a.	*John's N*	(17)	a.	*my N*
	b.	*this N-DEF*		b.	*John's N-DEF*		b.	*my N-DEF*
	c.	*N-DEF this*		c.	*N-DEF John's/ P John*		c.	*N-DEF my*
	d.	*N this*		d.	*N John's/ P John*		d.	*N my*

All of these patterns are found in Scandinavian. (15a) is the canonical structure for demonstrative constructions in Icelandic and Danish, and (15b) is the one for Faroese, Norwegian, and Swedish. The structure in (15c) is found in northern Swedish dialects, and (15d) is a stylistically marked construction in Icelandic. As for non-pronominal possessors the structure in (16a) is the one found in Danish and Swedish, and one of two canonical structures in Norwegian; (16b) is found in northern and eastern Swedish dialects; (16c) is found in Icelandic, Faroese, Norwegian, and northern Swedish dialects, and (16d) is found in Icelandic. As far as pronominal possessors are concerned (17a) is found in Mainland Scandinavian and Faroese; (17b) is found in a few Swedish dialects (e.g. Skellefteå, cf. above); (17c) is found in Icelandic, Norwegian, and many Swedish dialects, and (17d) is common in Icelandic as well as in Norwegian and Swedish dialects when the noun is a kinship term.

The great variation is quite remarkable given that we are talking about closely related and to a large extent mutually intelligible linguistic varieties. Moreover, there is relatively little variation across Scandinavian dialects at the clausal level, so why should there be such a great variation within the nominal system?

The answer to this question, I believe, can be sought in the interaction between morphology and syntax, and the fact that there is a much wider range of agreeing constituents within the nominal than within the clausal system in Scandinavian—if morphological features are taken to be a main source of movement, then the potential syntactic variation should in fact be *expected* to be much greater within the nominal system.

In Scandinavian as a whole we find two morphological categories within the clausal system which have been taken to regulate overt movement of the verb: tense and subject/verb agreement, where the latter may be subdivided into person and number agreement.[3] Overt realizations of tense are found on one single constituent: the finite verb. The finite verb furthermore carries agreement features (in some dialects, cf. footnote 3), and one may also argue that the subject carries morphological features corresponding to the agreement features of the finite verb. Still, there are at most *two* constituents which carry overt realizations of the morphological features taken to be a trigger for movement at the clausal level.

[3] All dialects have tense, but agreement is somewhat scarce. Icelandic has a full-fledged agreement system with oppositions between 1., 2., and 3. person and between singular and plural. Faroese has a clear number agreement distinction, but no person oppositions in the plural, and only a distinct 1. person present tense in the singular. As for Mainland Scandinavian there are a few dialects which show number agreement.

Within the nominal system the situation is quite different. Here we find the morphological categories number, gender, definiteness, and case, and, importantly, overt realizations of these categories may be found on a whole range of adnominal constituents.[4] Consider for instance the following example pair from the southwestern Norwegian dialect of Vangsnes (Sogn)—the noun *øl* 'beer' is neuter and *síder* 'cider' is masculine.

(18) a. alt detta góa øle mitt *Vangsnes*
all.N.SG this.N.SG good.DEF.N.SG beer-DEF.N.SG my.N.SG
'all this good beer of mine'

b. addle denna góe síderen min
all.M.SG this.M.SG good.DEF.M.SG cider-DEF.M.SG my.M.SG
'all this good cider of mine'

c. adle dessa góe epli míne
all.PL these(.PL) good.DEF.PL apples-DEF.PL my.PL
'all these good apples of mine'

In these examples all five constituents show overt marking of gender and number.[5] (In the case of the noun, gender and number is marked on the suffixed definite article.)

Given that nominal morphological features spread on a whole range of constituents, across the dialects there is a larger potential for morphological variation within the nominal system than within the clausal system—in some dialects certain classes of words may lack certain overt morphological features, whereas the same classes may have such features in some other dialect. In turn this may lead to syntactic variation since one constituent type may move overtly in one dialect, but not in another.

In other words, the sources for syntactic variation are potentially many more within the nominal system because the morphological variation is much more diverse than what is the case within the clausal system. The goal of the present paper is to exploit this general idea in order to achieve an understanding of the wide variation found in the structure of the Scandinavian noun phrase.

This study of the Scandinavian noun phrase is cast within a chomskyan framework, inspired by developments of generative syntax especially within the last decade, to a certain extent exploiting ideas of Chomsky's (1995, 1998) Minimalist Program (henceforth 'MP'). However, in certain crucial respects the study defines its own path of investigation, in particular with respect to the properties attributed to functional categories. Nevertheless it is my hope that the general theory to be developed, and the analyses it may

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[4] Apart from the pronominal system morphological case is only found in Icelandic and Faroese, as well as in a fairly restricted way in some Norwegian and Swedish dialects. Moreover, definiteness agreement is only found on adjectives—the definite/indefinite distinction on adjectives is discussed in section 2.4.

[5] The distinction between the plural and the masculine singular form of the universal quantifier is really a tonal difference, but I have chosen to represent it here with an extra consonant on the latter. Moreover, the accents mark the vowels as diphthongs, hence as long. See otherwise section 3.2 for the agreement on definite adjectives in the dialect.

offer, will lead to some valuable and general insight into the design of the language faculty.

In section 2 I present the most important theoretical assumptions underlying the study, including the notion 'identification', and I also outline my view on the syntactic status of certain adnominal elements such as adjectives, demonstratives, and possessives. In section 3 I discuss the Scandinavian article system and attempt to answer the four questions raised above. In section 4 I address an interesting phenomenon pertaining to Icelandic definites containing a numeral, and then I turn to a discussion of (nominal) possessive constructions in section 5. Section 6 is devoted to certain apparent counterexamples to the theory, and to a more general discussion of what the relation between morphology and syntax really is. Section 7 concludes the paper.

2. THEORETICAL ASSUMPTIONS

2.1. *Identification*

Let us assume a fundamental division between 'functional' and 'substantive' categories (cf. Chomsky 1995:6).[6] By substantive categories we understand categories which contribute the main denotative content of a phrase structural object, i.e. the 'intension' of an expression. The core cases of substantive categories are N, A, and V, i.e.the big, open parts of speech. By functional categories we understand categories whose function is either extensional, i.e. to anchor the intensional content provided by one or several substantive categories, or categorial. Accordingly, substantive and functional categories "work together" in forming referring expressions.

The difference between extensional and categorial functional categories is probably best illustrated by some examples. T is an extensional functional category whose function is to anchor the state-of-affairs denoted by a verb (or actually minimally a VP) with respect to (at least) time. The crucial semantic effect of combining V and T is that a state-of-affairs receives an extensional interpretation. C is a categorial functional category which combining with (at least) VP yields a clausal phrase structural object. (Below we will see that C has a counterpart, K, which combines with (at least) NP to form a nominal phrase structural object.) We may further add that C is specified as either [+finite] or [–finite], yielding either a finite or a non-finite clause.

A phrase structural object[7] formed by functional and substantive categories will be structured so that the functional categories c-command the substantive categories. This is a standard assumption (i.e. T c-commands V, D c-commands N etc.). However, a non-standard but crucial assumption that I will make is that I will take functional categories to

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6 Substantive categories have previously been referred to as lexical categories, but since functional categories also are lexical in the sense that they in some way or the other must be listed in the lexicon, the term *substantive* appears more appropriate. The term 'lexical category' is employed by Chomsky (1995:54) and replaced by 'substantive' in Chomsky (1998).

7 By 'phrase structural object' I understand what Chomsky (1998) terms 'syntactic object'.

be abstract heads, projecting a phrase which must be licensed through an operation that I will call 'identification', to be defined shortly. The abstract heads may have overt correlates in the shape of for example inflectional elements and function words, but not necessarily. The theoretical ramifications of this assumption will become clear as we proceed.

Since functional categories are explicitly correlated with the extension and categorial specification of phrase structural objects, their very presence in the phrase structure is relevant for the interpretation of phrase structural objects. For this reason, and since they are abstract entities, their presence must be *identified*. 'Identification' is defined as follows where we understand 'extended projection' in the sense of Grimshaw (1991).

> Identification$_{def}$:
> A functional category must be identified by having a constituent containing one or more relevant morphological features either in its specifier or head position. The constituent must be merged within the extended projection of which the functional category is a part.

Assume two typescal features and agreement features. Call the constituent which identifies a functional category 'identifier'. Agreement features play a special role with respect to identification. More specifically we will assume that in a choice situation, the constituent containing most agreement features will be the preferred identifier, otherwise it is the constituent containing most features in total. We can thus formulate the following Preference Principle:

> Preferred identifier$_{def}$:
> When there are several candidates, the preferred identifier of a functional category F will be:
> (i) the constituent containing *most* agreement features relevant for identifying F,
> (ii) the constituent containing most lexical features relevant for identifying F if the candidate constituents have the same number of relevant agreement features,
> (iii) fewest irrelevant lexical features if the candidate constituents have equally many relevant agreement features and lexical features,
> (iv) an X^0 if an X^0 and an XP are equally well suited for identification in terms of the features they contain.

This means that even if a constituent contains only one agreement feature relevant for identifying F, it will 'win' over another constituent containing several lexical features but no agreement feature. As for the assumption that heads are preferred over phrases (the third instance in the definition), see Nunes (1998) and Alexiadou and Anagnostopoulou (1998:519f).[8]

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[8] Alexiadou and Anagnostopoulou attribute the preference for head movement over XP-movement to a notion of 'Economy of Projection', the basic intuition behind which is that when a head is moved and adjoined to the targeted head, projection of the specifier, and thus extension of the phrase marker, need not apply.

Furthermore, we assume the following uniqueness restriction on agreement features with respect to identification:

> Uniqueness restriction on Agreement Features$_{def}$ (UAF):
> An agreement feature relevant for identifying a functional category F cannot occur on more than one of the constituents occupying Spec-F and F^0.

Notice that the UAF does not bar two (or more) constituents carrying the same agreement feature to co-occur in any domain: the principle only applies to co-occurrence of constituents in the functional projection where a particular agreement feature is relevant for the identification of the abstract head.

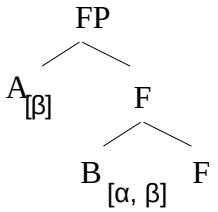
Let us consider the system in abstraction. Let F be a functional category c-commanding the constituents A and B within the same extended projection.

(19) [F ... [A B ...

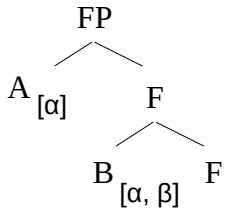
Let us assume that α and β constitute the set of morphological features relevant for identifying F, the former an agreement feature, the latter a lexical feature. Assume furthermore that A is a phrasal category (an XP) and B a head (an X^0), and that A contains α only, whereas B contains both α and β (i.e. yielding $A_{[\alpha]}$ and $B_{[\alpha, \beta]}$). That leaves B as the preferred identifier for F. Moreover, both A and B cannot occur in the domain, i.e. the projection, of F since that would violate the Uniqueness restriction on Agreement Features above (henceforth 'UAF').

However, if A contains the feature β instead of α, A would in principle be allowed to occupy Spec-F with B at the same time occupying F^0. Accordingly, given the values of α and β above, the structure in (20) is legitimate whereas the one in (21) is not.

(20)



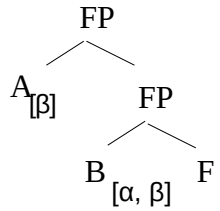
(21) *



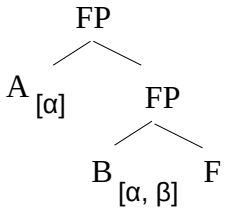
In fact, as I will eventually show, the legitimate phrase *mine hestn* 'my horse-DEF' in (2a) from Skelleftemål will have a structure corresponding to the one in (20)(at a certain level of abstraction, of course), whereas the illegitimate phrase **men hestn* 'my horse-DEF' in (1a) is ruled out for the same reason that (21) is not permissible. The functional projection in question will be DP, headed by the extensional functional category δ, and the agreement feature relevant for identifying the abstract head will be 'gender'—as we remember the possessive *mine* lacks gender agreement.

Let us moreover note that on the assumption that multiple specifiers are allowed, i.e. that the topmost only one of the specifiers can contain an agreement feature relevant for identifiying the abstract head of an F^0. Accordingly, given that A and B both are XPs and again that α is an agreement feature and β a lexical feature relevant for identifying the abstract head of FP, the configuration in (22) is licit whereas the one in (23) is not.

(22)



(23) *



We will encounter cases where this point becomes relevant: in the discussion of possessive constructions in section 5 we will see that there are Swedish dialects where both a possessive and the preadjectival article can be specifiers of D^o, a structure generally not permitted in other Scandinavian dialects, and as in the case of the Skellefteå dialect, what makes the structure possible clearly hinges on the absence of gender agreement (on the preadjectival article in the cases in question).

A question that naturally arises is why something like the UAF should hold. I will postpone further discussion of that until the end of the investigation.

2.2. Agreement

A related issue concerns the classical question—highlighted by examples like those in (18) above—of how agreement is distributed from its source to all the constituents. Within the principles and parameters framework and the earliest formulations of the MP one attempted to capture agreement in terms of a unique syntactic relation, the relation holding between a head and its specifier (Chomsky 1995:149, following Koopman 1987). Furthermore, the particular instances of agreement were located in designated functional projections, so-called AgrPs, and movement of an agreeing constituent to such a projection was required in order to 'check' the agreement.

In recent developments of the theory, however, this project has largely been abandoned (see especially Chomsky 1998), and I consider that a welcome move. In the present work I will assume that agreement features may spread non-locally among heads in an extended projection, and locally from a head to a constituent base generated in its specifier. In other words two heads may share agreement features if they are part of the same extended projection, and an element in a specifier position (Spec-XP) may share agreement features with the head of the projection (X^0).

Notice that the latter is not in conflict with the UAF since the UAF only applies to functional projections where the agreement features in question are relevant for the identification of abstract heads, and the constituents containing these features will have moved there from some other domain.

Whether overt reflexes of agreement, i.e. actual morphological correlates, are found or not, I take to be a lexically defined matter—if a constituent belongs to a class which is sensitive to the morphological properties of other constituents, then it will agree, otherwise it will not. In turn I take it that the matching of features between constituents must be controlled for through designated syntactic configurations, and I define this 'checking relation' as follows:

> Checking of agreement features$_{def}$:
> Constituents share morphological features if they are lexically defined to do so and if either of the following two structural relations obtain between them:
> (i) they are overt heads in the same extended projection (non-local checking),
> (ii) they are specifiers of a head which is either specified for the features in question or shares them with another head (local checking).

As far as I can see this approach to agreement is in line with Chomsky's (1998) syntactic operation 'AGREE'.

An important effect of the proposed definition of agreement checking is that an XP cannot check its agreement features against a *non*-agreeing head. That means that an agreement sensitive XP cannot occupy the specifier of a non-agreeing head.

Let us again consider the issue in abstraction. Take A and B to be XPs in the specifier positions of the heads α and β, respectively, α being a non-agreeing head which c-commands β, a head which carries features to which A is (agreement) sensitive.

(24) [A α [B β …

This configuration is not licit since A cannot check its agreement features—it cannot "look to" β, as it were.

Now, consider a scenario in which β raises and adjoins to the non-agreeing head α. That would give the following configuration.

(25) [A β−α [B t …

In this configuration A may check its agreement features locally against β, and if its features matches those of β its presence in the numeration is licit. Accordingly, the illicit configuration in (24) can be saved derivationally if the operation 'move' yields a configuration which *is* licit.

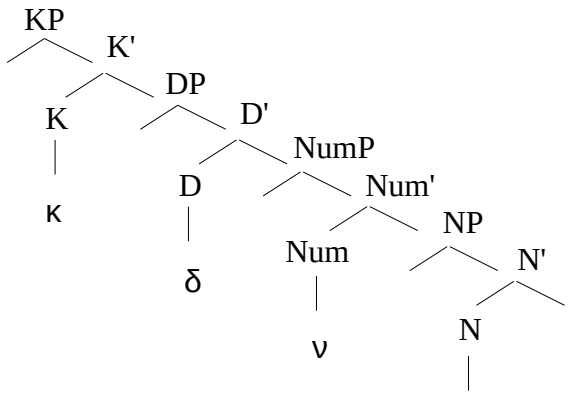
Let us next return to the notion of identification and consider what features are relevant within noun phrases.

2.3. *Features relevant for the nominal domain*

The general theory of noun phrase structure that I will assume is based on Vangsnes (1999a)[9] where the core idea is that the referential properties of noun phrases are reflected in their internal syntactic structure. Those aspects most relevant to the present study will be presented as we proceed.

I assume three functional projections in the nominal domain: KP, DP and NumP. The three projections are headed by the functional categories κ, δ and ν, respectively. The three categories are hierarchically ordered so that κ c-commands δ which c-commands ν, and all three c-command NP. That gives us the basic structure for noun phrases in (26).

(26)



κ is a categorial functional category marking a phrase structural object as nominal, and KP thus bears a clear affinity to CP in the clausal domain. I will assume that a rquirement for Case assignment to a noun phrase to obtain this functional category must be present in the phrase structure. Accordingly, all argument noun phrases must contain κ, and this then represents a correlate of the Argument Rule argued for by Delsing (1993:65).

Moreover, I will assume that κ defines the noun phrase as either unique or non-unique. In order to capture this I argue that κ exists in two varieties, $\kappa_{[+unique]}$ and $\kappa_{[-unique]}$, the choice of which yields either a uniquely referring or non-uniquely referring noun phrase, respectively. By a uniquely referring noun phrase I understand a noun phrase whose referent can be identified by both the speaker and the listener. (For details see Vangsnes 1999a.)

DP and NumP are headed by the extensional functional categories δ and ν, respectively. The extensional property of δ is to anchor the noun phrase to a particular referent (or set of referents), and the presence of DP in the phrase structure thus entails that the noun phrase should be interpreted as specific in the sense that the speaker has a certain referent in mind. Whether or not the listener can identify this referent is irrelevant, and notice then the distinction between 'specific' and 'unique' reference (cf. above)—as an example a noun phrase like *all the dogs* will be both uniquely and specifically referring

[9] See also Vangsnes (1996a) for an early formulation.

whereas *all dogs* will be uniquely but not specifically referring. (See again Vangsnes 1999a for details; the present conception of 'specificity' moreover bears a clear affinity to the 'referential' reading of indefinites argued for by Fodor and Sag 1982).

The extensional property of ν is to define a noun phrase as countable, and the presence of this functional category in the phrase structure thus entails that the noun phrase denotes a set, i.e. an entity individualized into elements that can be counted.

A noun phrase which is both countable and specific will be a phrase structural object consisting of all the projections in (26). If it is not countable, NumP will not be present in the structure, if it is not specifically referring DP is absent, and as we will see there are cases where both DP and NumP are absent—such a noun phrase will then be neither specific nor countable. This gives us the following typology for noun phrases.

(27)	a.	[KP	[DP	[NumP	[NP]]]]	(specific, countable)
	b.	[KP	[DP		[NP]]]	(specific, uncountable)
	c.	[KP		[NumP	[NP]]]	(countable)
	d.	[KP			[NP]]	(uncountable)

Since there are two possible heads for KP, the choice of which defines the noun phrase as referring to a uniquely identifiable referent or not, the typology really comprises 8 different noun phrase types. However, in the present discussion we will not consider the domain of KP in detail, and accordingly we simplify as in (27).

For the sake of clarity examples of the noun phrase types are given in (28) and (29).

(28)	a.	the (three) cars	(specific, countable)
	b.	the beer	(specific, uncountable)
(29)	a.	a beer/three cars	(countable)
	b.	beer	(uncountable)

It would lead too far here to discuss the motivation for modelling noun phrases in this way, i.e. where the phrase structure is taken to reflect the referential properties of the noun phrase. A thorough discussion may be found in Vangsnes (1999a).

The identification of κ (in its two varieties), δ, and ν can be defined as follows.

The identification of noun phrase internal functional categories$_{def}$:

(i) $\kappa_{[-unique]}$ must be identified by an element containing at least one of the following features: [mass], [case], [nominal],

(ii) $\kappa_{[+unique]}$ must be identified by an element containing at least one of the following features: [ ], [case],

(iii) δ must be identified by an element containing at least one of the following features: [gender], [deixis],

(iv) ν must be identified by an element containing the following feature: [number].

If we think of the features in terms of attribute/value pairs, it is only the attribute part which is relevant for identification. In other words, whether for example the case feature is 'nominative' or 'accusative', or the gender feature 'masculine' or 'feminine', is not important.

As for the distinction between lexical features and agreement features, [gender] and [case] are agreement features whereas [nominal], [deixis], [ ], and [mass] are lexical features. The feature [number] can be either an agreement feature or a lexical feature. The features are henceforth abbreviated in the following way: [deix], [gen], [num].

The identification of κ will not be discussed in detail in the present work, but importantly the KP domain hosts universally quantifying determiners (e.g. *all, every* etc.) as well as mass determiners (e.g. *much*), hence the assumption that the features [ ] and [mass] are relevant for the identification of this domain. The lexical feature [nominal], which is relevant for the identification of $\kappa_{[-\text{unique}]}$ is present in all nominal and adnominal constituents which do not constitute an extended projection in and of themselves, hence in nouns, adjectives and determiners but not in e.g. PPs and relative clauses. The effect of this is that a constituent containing this feature may be the single constituent of a noun phrase which contains only the functional category $\kappa_{[-\text{unique}]}$.[10]

The feature [deix] I will take to be a defining characteristic of definite articles—intuitively they "point" to referents. In other words, an element not carrying this feature is not a definite article. Moreover, I will take [deix] to be present on determiners often referred to as 'definite', notably demonstratives and possessives. However, in the case of demonstratives and possessives I will take the specification [deix] to follow automatically from the categorial specification of the elements, which is [demonstrative] and [pronominal], respectively. Accordingly, we may say that [deix] is implied by the features [demonstrative] and [pronominal].

Another assumption about definite articles and determiners is that they may contain the feature [ ], hence making them more appropriate for identification of $\kappa_{[+\text{unique}]}$ than many other adnominal constituents.

The feature [mass] will not play any important role for the issues dealt with here, and I will therefore leave it out of the discussion.[11]

Another point about the feature [num] is that it is either a lexical feature or an agreement feature. On determiners such as numerals and *many, few,* the indefinite article etc. it is lexical, and on other determiners such as demonstratives, possessives etc. it may be an agreement feature.

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[10] The role of [nominal] in the present study represents a gross simplification of what I argue in Vangsnes (1999a). There the feature is taken to be relevant for identification of all the noun phrase internal functional categories, and hence that a constituent containing it may be the single constituent of any noun phrase. From a crosslinguistic point of view that is highly desirable since it accounts for how a language can lack articles altogether. For the present purposes, however, it is convenient to tone down the role of the feature in order to keep additional (well-motivated) grammatical principles out of the discussion.

[11] See Vangsnes (1999a) for further discussion as well as accounts of the French article system and the use of the suffixed article with mass denoting noun phrases (uncountables) in northern and northeastern Swedish dialects (cf. note 2) which rests heavily on the role played by the feature [mass].

Let us then briefly go through the general workings of the theory. Take the Norwegian sentence in (30) as a starting point.

(30) Skipet knuste *(en) båt. *Norwegian*
ship-DEF crushed a boat
'The ship crushed a boat...'
(when the captain lost control of it in the narrow and heavy trafficked sound.)

The subject noun phrase in this example is both uniquely and specifically referring—it denotes a particular ship which the speaker has in mind, and the referent is identifiable for the listener. It is moreover countable—the set denoted consists of 1 member.

As for the object noun phrase we may argue that it is ambiguous between a reading where the speaker has a particular referent in mind, hence is specific, and one reading where the sentence merely asserts the existence of a boat. However, in neither case is the listener able to identify the referent, and hence the noun phrase is not uniquely referring, but the noun phrase is nevertheless countable in both cases: the noun phrase will refer to a set (with 1 member). According to what we said above, the subject noun phrase is a phrase structural object consisting of the functional categories $\kappa_{[+unique]}$, δ, and ν, whereas the indefinite noun phrase consists of $\kappa_{[-unique]}$ and ν, and, on the specific reading, also δ. On the non-specific reading δ is absent.

Consider now certain facts about the suffixed definite article in Norwegian. As shown in (31) and (32) it is inflected for number and gender. The noun *skip* 'ship' is neuter and the noun *båt* 'boat' is masculine, and as the examples show, the two nouns carry distinct forms of the suffixed definite article, Moreover, there is a plural form of the definite article distinct from the singular forms.

(31) a. skip-et
ship-DEF.N
b. *skip-en
ship-DEF.M
c. skip-ene
ship(s)-DEF.PL

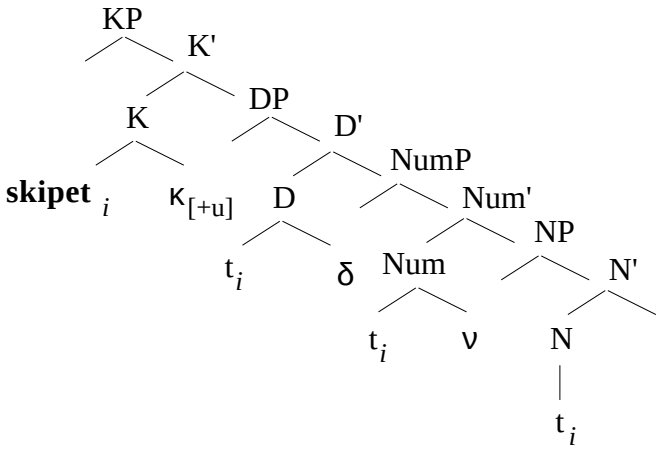
(32) a. båt-en *Norwegian*
boat-DEF.M
b. *båt-et
boat-DEF.N
c. båt-ene
boat(s)-DEF.PL

As far as agreement features are concerned, then, we can assume that the suffixed definite article in Norwegian carries the features [gen] and [num], and moreover by hypothesis that it carries the lexical feature [deix].

Consider then the derivation of the subject noun phrase in (30), *skipet* 'the ship'. For the time being we may assume that the noun and the suffixed definite article enter the derivation as one constituent, that is to say that the merger of the two takes place in the lexicon. The N+DEF is merged under N, and may subsequently move and adjoin to ν in Num^0. In the case of *skipet* we know that the suffixed definite article contains the feature [num] which is relevant for identifying ν (the head of NumP). Accordingly, the movement

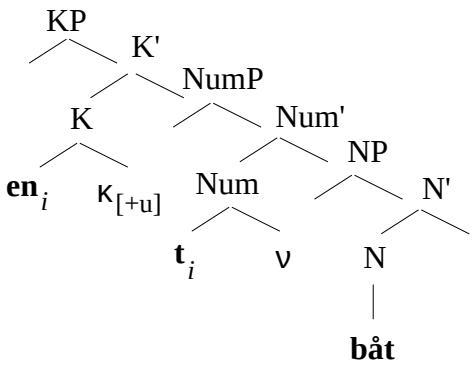
of N+DEF successfully serves to identify NumP. Likewise further head movement of N+DEF to D^0 serves to identify DP since the definite article carries features relevant for identifying δ: [gen] and [deix]. Lastly, when the N+DEF moves and adjoins to K^0 $\kappa_{[+unique]}$ is successfully identified since the article by hypothesis carries the feature [ ]. Accordingly, the derivation of *skipet* can be represented as in (33).

(33)



Consider next the indefinite object noun phrase in (30), *en båt* 'a boat', and let us for the sake of the argument consider the non-specific reading on which the functional categories ν and $\kappa_{[-unique]}$ are present in the phrase structure. The indefinite article, we may take it, carries a lexical [number] feature. This feature is relevant for identifying ν, and identification of this functional category can thus be met by the indefinite article, say if it is merged and adjoined to ν in Num^0. Moreover, since the indefinite article is an adnominal constituent which does not constitute an extended projection in and of itself, it carries the feature [nominal], and accordingly it may also identify $\kappa_{[-unique]}$, and this is met when the indefinite article moves from Num^0 to K^0 and adjoins to $\kappa_{[-unique]}$. The structure and derivation of the noun phrase in question can then be represented as in (34).

(34)



A detail about the senctence in (30) indicated but not commented upon earlier, is the fact that the indefinite article is obligatory. Let us assume that the reason is that the noun itself does not carry any feature relevant for identifying the abstract head ν, and so head movement of the noun to Num^0 would not suffice.

Consider then the following sentence containing a plural object noun phrase.

(35) Skipet knuste båter. *Norwegian*
ship-DEF crushed boats
'The ship crushed boats'

Here the object does not contain any determiner. The denotatum of the noun phrase is however in principle countable—upon hearing the sentence we could ask "How many?"—and we would therefore want to say that the functional category ν may be present. In that case we could take the absence of a determiner to be possible since the noun carries a number affix which in turn contains the feature [num]. The number affix would then serve to identify ν when head movement of the noun to Num^0 has taken place.

Finally, take a case where no determiner is required with a singular noun, i.e. a mass noun.

(36) Skipet knuste is. *Norwegian*
ship-DEF crushed ice
'The ship crushed ice.'

In this example the object noun phrase is not countable. Moreover, it is not specific either, and accordingly neither ν nor δ are present in its phrase structure. The lack of both a determiner and a number affix is thus unproblematic.[12] Moreover, $\kappa_{[-\text{unique}]}$ is successfully identified by the [+nominal] feature of the noun. For the remainder of this study we will not consider the identification of κ since it is neither problemeatic nor crucial for the phenomena under investigation.

With these introductory remarks as to how the noun phrase theory works, let us move on to consider some additional issues concerning noun phrase internal syntax which will be important for the present study: (i) the syntactic status of adjectives, (ii) the syn-

[12] In fact, one may ask whether the abscence of the indefinite article in (30) really invoke ungrammaticality, or if it is just odd for pragmatical reasons. It may be a mere fact about boats that they typically exist as individualized entities and not as a mass, but it does not seem entirely inconceiveable that we could enforce a mass reading even on count nouns such as 'boat', and on the version of (30) without the indefinite article, the sentence would then mean something like 'The ship was boat-crushing', quite on a par with how the semantics of the sentences *The ship chrushed ice* and *The ship was ice-cruching* are more or less the same. See Vangsnes (1999a) for further discussion.

Moreover, in Norwegian bare singular common nouns may in some cases be the single constituent of a noun phrase in which case they appear to denote concepts rather than a physical manifestation of the type of object they denote. An example of such a bare singular in Norwegian is given in (i)—see otherwise Bothen (1999) for discussion of this phenomenon.

(i) Jon kjøpte seg båt i fjor. *Norwegian*
Jon bought himself boat last year

tactic status of demonstratives and the question of 'single' versus 'double' definiteness, and (iii) the syntactic status of possessives.

2.4. *Adjectival inflection and the syntactic status of adjectives*

In the present work I will follow Abney (1987) and Barbiers (1992) in assuming that adjectives are heads in the extended projection of N^0, thereby resembling auxiliaries in the clausal domain. This assumption will be crucial for certain aspects pertaining to the article system. In particular it will allow us to attribute the lack of N-raising to Num^0, D^0, and K^0 to the Head Movement Constraint (Travis 1984).[13]

Treating adjectives as heads in the extended nominal projection is far from uncontroversial, and many authors follow Cinque (1994) who argues that adjectives are generated in functional projections intervening between N and D. It would lead too far here to review the arguments for and against the two views, and I refer the reader to Delsing (1993a, 1993b) and Kester (1996) for a thorough discussion. Crucial for the present theory, however, is that Cinque's view is difficult to maintain for conceptual reasons. Given the restrictive conception of functional projections advocated here, where functional categories serve extensional purposes, it would be difficult to motivate the existence of functional categories whose core function is to project a structure which will host APs in their specifier positions. These would then have to be considered 'intensional' functional categories, clearly not a conclusion in line with the semantically based distinction between functional and substantive categories advocated here (cf. section 2.1).

Similar conceptually based objections apply to the A-as-head analysis as conceived of by Abney (1987) and Barbiers (1992). They consider APs functional projections as such, but I will however argue that the problem is only superficial and a question of terminology. The crucial point for the present study is that I consider adjectives *substantive* categories on a par with nouns, and the projections projected from adjectives combine with NP in defining the intensional properties of the noun phrase.

Before we proceed let us note that in Scandinavian dialects there are two types of adjectival inflection. The two types have traditionally been termed 'weak' and 'strong', respectively, and they have a complementary syntactic distribution: weak adjectives occur attributively in noun phrases which contain definite articles, demonstratives, or possessors, i.e. 'definite determiners', whereas strong adjectives typically occur in noun phrases without such determiners. Accordingly, we may henceforth refer to the adjective types as 'definite' and 'indefinite', respectively. Indefinite adjectives moreover occurpredicatively. The distribution of the two types is illustrated by the Faroese examples in (37)–(39). In (37) the adjectives occur attributively with definite determiners, in (38) the adjectivesoccur attributively with indefinite determiners, and in (39) the adjectives occur predicatively. (In

[13] The basic idea behind the Head Movement Constraint is that a head cannot move across another head, and depending on the general properties of the theory this is formulated in differing ways. The classical GB-account is to attribute the constraint to the Empty Category Principle in which case the "skipped" head would be a closer governor for the trace of the moved head than the moved head itself.

these examples the adjectives are marked for type of inflection only on the glossings, not for gender and number.)

(37) a. tann/hesin fíni/*fínur bilurin *Faroese*
the/this nice-DEF/nice-IND car-DEF
'the/this nice car'

b. mín/Jógvansa fíni/*fínur bilur
my/John's nice-DEF/nice-IND car
'my/John's nice car'

c. teir/hesir fínu bilarnir
the/these fine-DEF cars-DEF

(38) a. ein fínur/*fíni bilur
a nice-IND/nice-DEF car
'a nice car'

b. nakrir/fimm fínir/*fínu bilar
some/five nice-IND/nice-DEF cars
'some/five nice cars'

(39) a. Bilurin er sera fínur/*fíni.
car-DEF is very nice-IND/nice-DEF
'The car is very nice.'

b. Bilarnir eru sera fínir/*fínu.
cars-DEF are very nice-IND/nice-DEF
'The cars are very nice.'

These Faroese data reflect the general situation with respect to the distribution of adjectival inflection in Scandinavian.[14]

The fact that the predicative adjectives have the same form as indefinite attributive adjectives even if the subject it agrees with is definite, shows us that definite adjectival inflection only occurs noun phrase internally. In the present work I will assume that definite adjectival inflection is required whenever the lexical feature [deix] is present on the head chain and/or the abstract head δ is identified by an element carrying this feature. In other words definite adjectival inflection may be considered *agreement* with the feature [deix].

2.5. *DxP and the syntactic status of demonstratives*

[14] The system found in dialects with 'adjective incorporation' (to be discussed in section 3.3, cf. Sandström and Holmberg 1994) surely is different from the general Scandinavian system. Moreover, there are dialects in southern Österbotten (in Finland) where there is no difference between definite and indefinite inflection. Ivars (1988:157) describes changes in the Närpes dialect which in effect imply that the (historically) indefinite inflection is found also in definite noun phrases, and the same appears to be the case for the nearby Malax dialect. See section 3.4. for further details.

The 'traditional' view since Abney (1987) has been to treat demonstratives as heads in the extended projection from N^0, generated in the same position as definite articles, i.e. in D^0. However, Guisti (1997) points to the existence of languages in which demonstratives and the definite article co-occur, a fact which suggests that the two do not necessarily compete for the same position. Her solution is to say that the definite article is a head in the extended projection of N whereas demonstratives are generated in a specifier position.

Brugè (1996) elaborates on Guisti's suggestion, and mainly on the basis of Spanish, she moreover argues that the base generated position for demonstratives is in a specifier position between adjectives and the noun. In Spanish demonstratives occur either prenominally, in complementary distribution with definite articles, or postnominally, co-occurring with definite articles. Moreover, when they occur postnominally, they also occur after postnominal attributive adjectives but before PP-complements. These facts are illustrated in (40).

(40)	a.	ese	(*el)	libro			*Spanish*
		that	the	book			
	b.	*(el)	libro	ese			
		the	book	that			
	c.	el	libro	viejo	ese	de matemáticas	
		the	book	old	that	of mathematics	

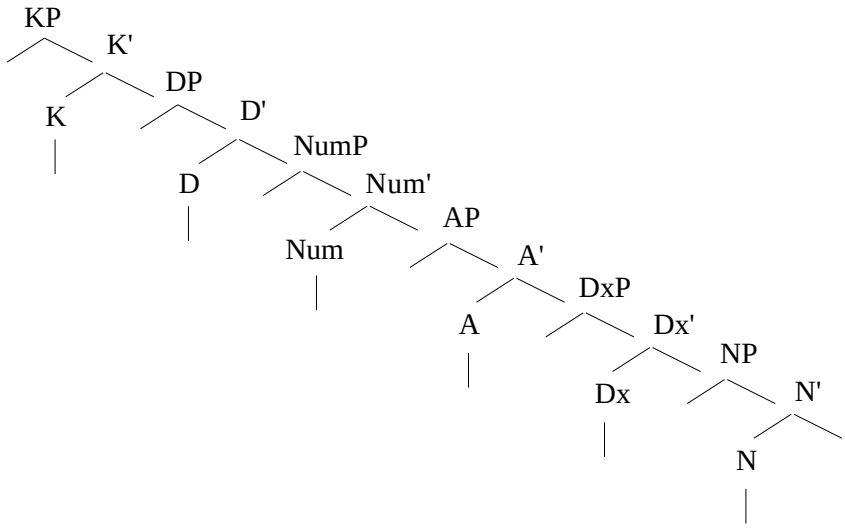
Brugè's basic line of reasoning is that if demonstratives are base generated in a position between adjectives and the noun, N-raising to a preadjectival position will leave a demonstrative in postnominal position unless it too raises. And if the demonstrative does raise that will be to a position in which it will compete with the definite article, and that would then explain their complementarity. As pointed out by Roca (1996) there are certain problems with the data on which Brugè bases her analysis, but I will nevertheless exploit the general idea that she introduces. (See Vangsnes 1996b for further discussion of Guisti's and Brugè's arguments, and also Bernstein 1997 for similar ideas about demonstratives.)

Moreover I will draw a parallel between the idea that demonstratives are generated in a specifier position between AP and NP and the suggestion by Kester (1996) that the suffixed definite article in Scandinavian heads a projection immediately dominating NP. This projection is distinct from DP (which corresponds to KP, DP, and NumP in the present theory) and it may under Kester's account have adjectives in its specifier position. That implies that the suffixed definite article is base generated in a position intervening between adjectives and nouns, quite parallel to Brugè's suggestion about demonstratives.

Accordingly, I propose that the Scandinavian suffixed article *may* be base generated as the head of a projection in which demonstratives are base generated in the specifier position, and I will label this phrase DxP, a mnemonic for 'deixis phrase'. (Below, however, I will argue that the suffixed definite article does not have this status in all Scandina-

vian dialects.) The full structure that I will assume for noun phrases is then as given in (41).

(41)



When the suffixed definite article is generated in Dx^0 it will, since it is a clitic element, force the noun to raise and adjoin to Dx^0 whereby the phonological merge of the noun and the article takes place.

This explicit syntactic correlation between demonstratives and the suffixed definite article finds diachronic support in the fairly well-known fact that the article has developed from a demonstrative (i.e. the Old Scandinavian demonstrative *inn* meaning 'the other'). Crucially however, I will argue that the suffixed article has a dual status across the Scandinavian dialects. More specifically, I will argue that it is either a clitic element (heading Dx^0) or a part of the (pre-syntactic) inflectional system.

In the former dialect group, which consists of Icelandic and Danish, the nominal morphology will be taken to follow the pattern [N+SUFF]+DEF where 'SUFF' stands for a suffix which contains information about declension class and number, and in Icelandic also case. Call this 'group I'.

In the latter dialect group, the nominal morphology follows the pattern [N+SUFF], and in this group of dialects the suffix contains information about declension class, number, *and* definiteness (and in Faroese also case). Call this 'group II'.

As an illustration of the difference between the two systems, consider the following paradigms from Icelandic and Norwegian, the latter represented by the written standard Nynorsk, which show the (nominative) forms of the cognate nouns *magi*/*mage* 'stomach', *hús/hus* 'house', and *epli/eple* 'apple'. The Icelandic paradigms are the ones to the left, and the common glossings for both the Icelandic and Norwegian sets are given to

the far right, and the 'V' in the Icelandic suffixes signifies an underlying vowel which is omitted if preceded by another vowel or which otherwise surfaces as /i/.[15]

(42) a. *mag+i* —> *magi*
b. *mag+i+Vnn* —> *maginn*
—> *magen* 'the stomach'
c. *mag+ar* —> *magar*
d. *mag+ar+nir* —> *magarnir*
mag+ene —> *magene* 'the stomachs'

(43) a. *mag+e* —> *mage* 'stomach'
b. *mag+en* —> *magen* 'the stomach'
c. *mag+er* —> *mager* 'stomachs'
d. *mag+ene* —> *magene* 'the stomachs'

(44) a. *hús+0* —> *hús*
b. *hús+0+V›* —> *húsi›*
c. *hús+0* —> *hús*
d. *hús+0+Vn* —> *húsin*

(45) a. *hus+0* —> *hus* 'house'
b. *hus+e* —> *huse*[16] 'the house'
c. *hus+0* —> *hus* 'house'
d. *hus+ene* —> *husene* 'the houses'

(46) a. *epl+i* —> *epli*
b. *epl+i+V›* —> *epli›*
c. *epl+i* —> *epli*
d. *epl+i+Vn* —> *eplin*

(47) a. *epl+e* —> *eple* 'apple'
b. *epl+e* —> *eple*[16] 'the apple'
c. *epl+er* —> *epler* 'apples'
d. *epl+a* —> *epla* 'the apples'

The examples in (42)–(47) serve to illustrate some general points concerning the difference between the two dialect gropus. For one thing, definiteness marking is clearly more agglutinative in group I than in group II. This is evident from some of the Norwegian examples above—if the form *epla* in (47d) for instance were derived by the pattern N+SUFF+DEF, we would have to assume that the entire number affix were deleted (i.e. that the underlying form were *epl+er+a*).[17] By assuming that definiteness instead is one of the values specified on SUFF in an N+SUFF-pattern, such cases are more easily accounted for.

Moreover, a point which will become important below, is the fact that homonymy between indefinite and definite forms is more easily understood when definiteness is represented on SUFF rather than as a separate element (DEF). And this matches the

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[15] This representation is not strictly relevant in these examples, but it is in other cases—consider for example the following singular accusative forms of two different types of masculine nouns, where the surfacing form is the one to the right.

(i) a. hest+Vnn —> hestinn 'the horse' (horse+DEF) b. mag+a+Vnn —> magann 'the stomach' (stomach+DEF) *Icelandic*

[16] In written Norwegian the definite neuter suffix is written *-et*, but the final 't' is not pronounced (except in the southernmost Østfold dialects (cf. Sandøy 1987:205), spoken southeast of Oslo, which are adjacent to Swedish dialects in which the distinction *is* made), and hence the form /'eple/ for instance is both definite and indefinite. The same holds for a number of Swedish dialects. In fact, in many Norwegian dialects a form like *eple* can also be indefinite plural, hence giving a three-way homonymy in the paradigm for that noun and several others like it.

[17] This is actually the view taken in a recent comprehensive Norwegian reference grammar, Faarlund et.al. (1995:173ff).

empirical facts quite well: in Icelandic there are forms that are homophonous with respect to number (cf. (44) and (46)) and/or case, but not with respect to the definite/indefinite distinction—in Faroese, Norwegian and Swedish dialects on the other hand we find instances of nouns where definite and indefinite forms are not distinguished (along with cases where singular and plural are not disinct), cf. e.g. the paradigm in (47) above and footnote 16. (We will otherwise return to this issue in connection with a discussion of Faroese in section 6.3.2.) Let us in fact assume that a prerequisite for developing homophonous indefinite and definite forms of the (surfacing) noun is that the suffixed definite article be inflectional and not a syntactic clitic.

The status of the suffixed definite article can be summarized as in the following table, and we may consider it a parameter if we say that not being a syntactic head implies that the suffixed definite article is an inflectional element.[18]

	Faroese	Norwegian	Swedish	Danish	Icelandic
DEF_{suff} = syntactic head	–	–	–	+	+

Table 1: The status of the suffixed article across Scandinavian

The conjecture that the suffixed definite article is a syntactic head in Icelandic and Danish but a (part of) an inflectional suffix in the other Scandinavian dialects can next be exploited when we consider the syntactic behavior of demonstratives in the dialects. In Icelandic and Danish demonstratives cannot co-occur with the suffixed definite article, whereas they may in Faroese, Norwegian, and Swedish. This is illustrated in (48).

(48)	a.	flessi	bók/*bókin	*Icelandic*
		this	book/book-DEF	
	b.	denne	bog/*bogen	*Danish*
		this	book/book-DEF	
	c.	henda	bókin	*Faroese*
		this	book-DEF	
	d.	denne	boka	*Norwegian*
		this	book-DEF	
	e.	denna	boken[19]	*Swedish*
		this	book-DEF	

[18] This view on the differing syntactic status of the suffixed definite article across Scandinavian is only partially compatible with the view advocated in Delsing (1993:ch.4). The effect of his analysis, cast within a theory not assuming a projection intervening between adjectives and the noun, is that the article is an inflectional element in Faroese, Norwegian, Swedish, *and* Icelandic, but not Danish.

[19] In written Swedish the simple proximal demonstrative *denna* does by convention not co-occur with the suffixed definite article, and hence (29e) can only be colloquial. For further details cf. Delsing (1993:137f) and references cited there.

As we recall from the introduction this parallels the situation with respect to the preadjectival definite article in Faroese and Mainland Scandinavian: in Faroese, Norwegian, and Swedish the preadjectival definite article co-occurs with the suffixed definite article, whereas in Danish it cannot. There are cases of demonstratives *not* co-occurring with the suffixed definite article in group II also, but co-occurrence with the suffixed definite article clearly represents the unmarked structure.[20]

To account for this variation I will simply assume that DxP cannot have both a demonstrative in Spec-DxP and the enclitic article in Dx^0. Rather, when a demonstrative is generated DxP is projected from an empty deictic head. This empty head does not agree with N^0, and accordingly the demonstrative in Spec-DxP cannot check its agreement features against it (cf. 2.2 above). However, a proper local checking relation obtains if N^0 raises and adjoins to the empty head in Dx^0. The difference between dialect groups I and II now come into play.

In Faroese, Norwegian, and Swedish there is in principle a choice between two different forms of the noun (disregarding plurality which renders it a choice between four forms): N+SUFF can be either *indefinite* or *definite*. In Icelandic and Danish on the other hand there is only one possible form: N+SUFF is never definite.

This then accounts for why demonstratives cannot co-occur with the suffixed article in dialect group I, whereas they may both co-occur and not co-occur with it in dialect group II. Moreover, I will take it that the definite forms of the noun are the most *appropriate* for co-occurring with demonstratives in the latter group, possibly since both elements will contain the feature [deix] and therefore represent a better match than demonstrative plus indefinite noun. This is actually an interesting point: in Icelandic and Danish the sequence *demonstrative–N-DEF* is totally ungrammatical, but in Faroese, Norwegian, and Swedish the "opposing" sequence, *demonstrative–N*, is not—in most cases it merely gives a flavor of formality/archaism. I believe the account given above represents a quite successful approximation to this difference in judgments of grammaticality.

Importantly, demonstratives typically move leftwards from DxP to NumP and DP. The reason is that they are ideal identifiers for the heads of these projections—in most Scandinavian dialects they show both gender and number agreement, and in addition they carry the feature [deix]. Syntactic facts moreover tell us that they occur to the left of both adjectives and numerals. Consider the Norwegian data in (49) which are representative of most Scandinavian dialects.

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[20] Sound arguments for this point of view can be found if we consider the colloquial complex demonstratives consisting of a determiner plus either of the locative adverbs *here* and *there*. Whereas these cannot co-occur with the suffixed definite article in Danish, they *must* co-occur with it in Norwegian and Swedish.

(i)	a.	den	her/der	bog/*bogen
		the	here/there	book/book-DEF
	b.	den	her(re)/der(re)	boka/*bok
		the	here/there	book-DEF/book
	c.	den	här(a)/där(a)	boken/*bok
		the	here/there	book-DEF/book

(49) a. **disse** tre store bøkene *Norwegian*
these three big books-DEF
b. *tre **disse** store bøkene
c. *tre store **disse** bøkene
d. *tre store bøkene **disse**

The fact that the *noun+DEF* remains in a postadjectival position, i.e. Dx^0, is unproblematic as it follows from the head status of the adjective—further raising of the noun is barred by the Head Movement Constraint. We will return to both this question and the question of demonstratives as identifiers later. Let us next briefly consider the syntactic status of possessors.

2.6. *The syntactic status of possessors*

I will assume that the base generated position of possessors, both possessive pronouns (henceforth 'possessives') and non-pronominal possessors is Spec-NP. In this position they are assigned a θ-role by the noun in a local relation (head-specifier) parallel to the way in which a verb assigns a θ -role to the subject of a clause (in standard analyses).

If we consider the Scandinavian dialects as a whole there exist a great number of different possessive constructions. (See Delsing 1993a:149-160, 1996:38-55, 1998 for overviews. See also the introduction). In the present paper I will focus on the possibilities of combining a possessive pronoun with definite articles. A fairly robust empirical generalization in that respect is the following: a possessor cannot precede definite articles at the same noun phrase internal level (cf. Vangsnes 1996, 1998b, forthcoming).

This generalization holds for Danish, Faroese, and Standard Swedish where possessives always occur prenominally, and it moreover holds for Norwegian and many Swedish dialects in which possessives may occur either prenominally or postnominally, the latter option normally being the unmarked option. Moreover, to the extent that Icelandic allows prenominal possessives (Delsing 1993a:157), possessives cannot be followed by a noun carrying the suffixed definite article. Postnominal possessives generally co-occur with definite articles (i.e. in Norwegian, many Swedish dialects, and Icelandic).

However, as we already know this generalization does not hold for the Skellefteå dialect, and it does not hold for several other Swedish dialects either. These dialects will be discussed in section 5. For the time being, let us discuss the generalization mentioned above in the light of the theory as it is presented so far.

Norwegian is a suitable dialect to discuss since it allows both prenominal and postnominal possessors. When they occur prenominally they cannot co-occur with the suf-

fixed definite article. On the other hand, possessors generally co-occur with the suffixed article when they are postnominal. These facts are shown by the examples in (50).

(50) a. mi bok/*boka *Norwegian*
my book/book-DEF
b. Pers bok/*boka
Per's book/book-DEF
c. boka/*bok mi
book-DEF/book my
d. boka/*bok til Per
book-DEF/book to Per

The general co-occurrence of the definite article with postnominal possessives follows straightforwardly from what we have argued earlier in conjunction with the assumption that the possessors are base generated in Spec-NP: a definite noun (N+DEF) but not an indefinite one (N) may raise to D^0 and identify δ, and such raising would leave the possessor in a postnominal position in overt syntax.

An important point about prenominal possessors is that their position is Spec-DP. This can be argued for on the basis of the (fairly uncontroversial) assumption that universal quantifiers are heads adjoined to the functional category κ in K^0 (cf. section 2.3 and otherwise Vangsnes 1999a and references cited there)—as the examples in (51) a universal quantifer occurs to the left of a prenominal possessor in Norwegian (and similar examples could be produced for the other dialects as well[21]), and accordingly the position of prenominal must be to the right of the KP-domain.

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[21] Actually, in Swedish the universal quantifier may follow a non-pronominal possessor, but when it does it clearly loses its 'quantificational force' and merely contributes an "emphatic" totality reading. Accordingly, whereas the bold face prepositional complement in (ia) may take scope over the singular indefinite object noun phrase in (i.e. one plan for each station wagon), this is impossible for the corresponding phrase in (ib).

(i) a. Militären har en plan för **alla Sveriges herrgårdsvagnar**. *Swedish*
Military-DEF has a plan for all Sweden's station wagons
b. Militären har en plan för **Sveriges alla herrgårdsvagnar**.
Military-DEF has a plan for Sweden's all station wagons
'The military has a plan for all of Sweden's station wagons.'

I will argue the reason for this to be that the universal quantifier in (ib) occupies Num^0 rather than K^0, and that the facts pertaining to scope follow from this: the possessor takes scope over the universal quantifier. This moreover fits well with the fact that the universal quantifier is in complementary distribution with weak determiners, e.g. numerals, when it occurs in the lower position, but not when it occurs in the higher one. This is illustrated in (ii).

(ii) a. alla Sveriges tjuge tusen herrgårdsvagnar *Swedish*
all Sweden's twenty thousand station-wagons
b. *Sveriges alla tjuge tusen herrgårdsvagnar
Sweden's all twenty thousand station-wagons

(51)	a.	alle	mine	uangripelige	teorier	*Norwegian*
		all	my	untouchable	theories	
	b.	*mine	alle	uangripelige	teorier	
		my	all	untouchable	theories	
	c.	alle	Peters	uangripelige	teorier	
		all	Peter's	untouchable	theories	
	d.	*Peters	alle	uangripelige	teorier	
		Peters	all	untouchable	theories	

Now, most possessives agree in gender and number in most Scandinavian dialects.[22] The examples in (52) serve to illustrate the agreement pattern of the Norwegian possessive *min* 'my'.

(52)	a.	hesten	**min**	*Norwegian*
		horse-DEF	my	
	b.	boka	**mi**	
		book-DEF	my	
	c.	huset	**mitt**	
		house-DEF	my	
	d.	hestene	**mine**	
		horses-DEF	my	

We may then take it that the possessives are specified for the features [gen] and [num], and hence are suitable identifiers for δ and ν. Moreover, they contain the lexical feature [deix] since they are pronouns (cf. the assumption above (section 2.3) that [deix] is implied by the categorial features [pronominal] and [demonstrative]).

Let us now assume that prenominal possessors have moved via Spec-NumP to Spec-DP. In the case of the possessive in (50a) the identification of ν and δ is then satisfied by the possessive, and hence N+DEF cannot headmove to Num^0 and D^0 since that would violate the UAF. Moreover, the reason N+DEF cannot be left in situ in N^0, is that an X^0-identifier is preferred over an XP-identifier, other things being equal (i.e. the feature specification), cf. the definition of 'preferred identifier' in section 2.1. In other words, in the dialects under discussion a condition for movement of a possessive to Spec-DP is that a N+DEF is not simultaneously generated.

In Norwegian the choice of having a prenominal or postnominal possessor appears to be determined partly by stylistic and pragmatic factors and partly by idiolectalvariation.

[22] Cf. section 6.2 to the effect that not all Norwegian possessives show agreement.

It seems far from straightforward to give a principled account for this variation. Moreover, I will offer no principled explanation for why some dialects only allow prenominal possessives (i.e., under the present conception, why possessives obligatorily move to Spec-DP in some dialects). Nevertheless I will maintain the assumption that prenominal possessives always have moved to Spec-DP and discuss the data based on that.

Although I will be primarily concerned with possessives in the present paper let me note that in the case of the prenominal *non-pronominal* possessors in Norwegian (and Danish and Swedish) I will assume that the genitival *-s*, clearly a 'phrasal' clitic element (cf. Johannesen 1989, Delsing 1993a:150 and references cited there), carries the appropriate features for identifying ν and δ, and that it may be merged (base generated) in Num^0 before subsequent movement to D^0 obtains.[23] The possessor as such moves from its base generated position in Spec-NP to Spec-DP so that genitive Case is assigned. The complementarity with definite articles follows under this account.

New and important questions will arise when we consider possessive constructions containing adjectives, but I will defer the discussion of that until section 5.1 after we have considered the Scandinavian article system in more detail.

2.7. *Summary*

Before we turn to a more detailed study of the Scandinavian article system, let us briefly summarize some of the crucial points presented so far, and let us do that by giving the full analysis of the example in (18a) from the Vangsnes dialect (Sogn).

(18)	a.	alt	detta	góa	øle	mitt	*Vangsnes*
		all.N.SG	this.N.SG	good.N.SG	beer-DEF.N.SG	my.N.SG	
		'all this good beer of mine'					

This noun phrase is both specific and countable—although the noun as such is a mass noun, and hence uncountable, the determiners (the demonstrative which co-occurs with the suffixed definite article in this dialect) close off the (material) extension of the referent and yield an expression which denotes an individual. Accordingly, the functional projections

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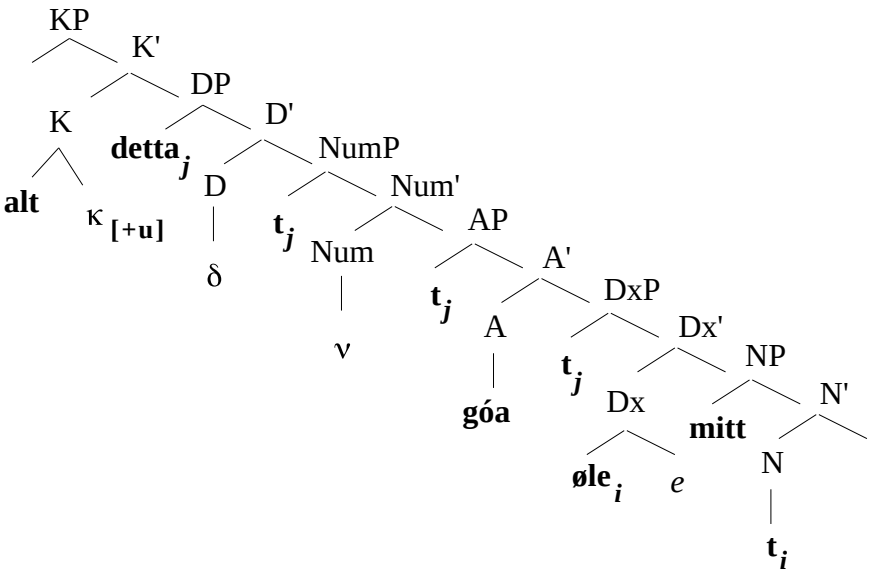
[23] A potential problem with that is that the genitival *–s* arguably does not show any agreement features. That may be related to its clitic status, however. Clitic elements often have reduced morphology, and besides if we consider a full word version of the element possible in most Norwegian dialects, we find both gender and number agreement, cf. (i).

(i)	a.	Pål	**sin**	hest	m.	*Norwegian*
		P.	his	horse		
	b.	Pål	**si**	høne	f.	
		P.	his	hen		
	c.	Pål	**sitt**	egg	n.	
		P.	his	egg		
	d.	Pål	**sine**	høner	pl.	
		P.	his	hens		

Moreover, it seems quite reasonable to conjecture that the cltic is specified both [deix] and [case] since it has a pronominal origin and since it arguably assigns (or checks) the case of the possessor.

KP, DP, and NumP are by hypothesis all projected, and so are the lexical projections AP, DxP, and NP. The full representation of the noun phrase is thus as given in (53) where the merged and moved elements are given in bold face. (The labels of the demonstrative and the possessive have been omitted for space saving reasons.)

(53)



It is worth noticing that only two consitutents have moved. The noun has raised to Dx^0 to adjoin to the suffixed definite article which is a clitic head in the dialect (just like in Norwegian in general). The demonstrative has moved leftwards to Spec-NumP and Spec-DP and identified the functional categories ν and δ, the former by its [num] feature and the latter by its features [gen] and [deix].

As for the checking of agreement in this structure, the adjective and the universal quantifier checks it non-locally through the head chain, the possessive checks it locally against the noun in N^0, and the demonstrative checks it locally against the noun after it has raised to Dx^0.

3. THE SCANDINAVIAN ARTICLE SYSTEM

In section 1 we raised the following questions pertaining to the cross-dialectal differences in the Scandinavian article system.

(i) Why is there an obligatory singular indefinite article in Mainland Scandinavian and Faroese but not in Icelandic?
(ii) Why is there no preadjectival definite article in Icelandic, whereas there is in Mainland Scandinavian and Faroese?
(iii) Why is the Danish preadjectival definite article in complementary distribution with the suffixed one, whereas the two articles co-occur in Faroese, Norwegian, and Swedish?

(iv) Why do northern Swedish dialects have adjective incorporation in definite noun phrases?

Let us now approach these questions in the light of the theory outlined in section 2, starting with the question why Icelandic does not have an obligatory indefinite article.

3.1. *The indefinite article*

In section 3 I argued that the indefinite article in Norwegian (and English) served to identify ν by virtue of containing a feature [num]. Consider then the Icelandic counterpart of the Norwegian sentence in (30).

(54) Skipi› braut bát. *Icelandic*
ship-DEF crushed boat
'The ship crushed a boat.'

(30) Skipet knuste *(en) båt. *Norwegian*
ship-DEF crushed a boat
'The ship crushed a boat.'

The theory predicts that NumP is projected also in the Icelandic object noun phrase since it refers in exactly the same way as the Norwegian one, and the question then is why there is no requirement for an indefinite article in Icelandic.

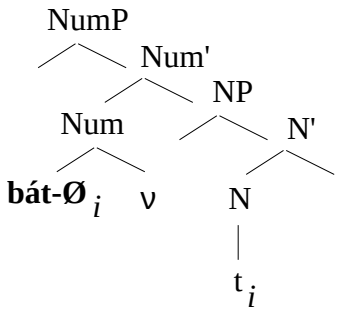
I suggest that the answer lies in the properties of nouns in the two languages: in Icelandic, but not in Norwegian, nouns are inflected for morphological case. Table 1 gives the paradigm for the Icelandic noun *bátur* 'boat'.

	NOM	ACC	DAT	GEN
SG	*bát-ur*	*bát-Ø*	*bát-i*	*bát-s*
PL	*bát-ar*	*bát-a*	*bát-um*	*bát-a*

Table 2: Case inflection of the Icelandic noun *bátur* 'boat'

The case ending contains information about the number of the noun, and accordingly we may take it that it is the case ending which renders Icelandic nouns suitable for identifying ν. Accordingly, the relevant part of the structure and derivation of the object noun phrase in (54) can be represented as in (55).

(55)



This then means that a difference in the morphological system of Icelandic and Mainland Scandinavian can be directly related to a syntactic difference between the two.

But relating the lack of an indefinite article in Icelandic to the presence of inflected case endings is not without problems: Faroese nouns also have case endings which inflect for number, but an indefinite article is nevertheless required in the object noun phrase of the sentence corresponding to (30) and (54). Consider the sentence in (51) and table 2 which gives the paradigm for the noun *bátur* 'boat' in Faroese. (Faroese does not have genitive case.)

(56) Skipi› knústi *(ein) bát. *Faroese*
ship-DEF crushed a boat
'The ship crushed a boat.'

	NOM	ACC	DAT
SG	*bát-ur*	*bát-Ø*	*bát-i*
PL	*bát-ar*	*bát-ar*	*bát-um*

Table 3: Case inflection of the Faroese noun *bátur* 'boat'

As we proceed we will see other cases where Faroese represents a problem for proposals which seek to explain syntactic differences between Icelandic and Mainland Scandinavian/Faroese by referring to morphological differences—as a gross generalization Faroese patterns with Icelandic morphologically but with Mainland Scandinavian syntactically (cf. Holmberg 1994). A discussion of "The Faroese Problem" will therefore be postponed to section 6 where other problematic cases from other dialects also will be addressed. For the time being, let us state that Faroese does not fit the picture as far as the indefinite article is concerned, and proceed to discuss issues concerning the preadjectival definite article.

3.2. *The preadjectival definite article and adjectival inflection*

As we saw in section 1, Mainland Scandinavian and Faroese definite noun phrases containing an attributive adjective normally require a preadjectival lexical article unless the

adjectiveis preceded by a possessor or a demonstrative. In Icelandic there is no such requirement.[24] Consider the relevant examples repeated here.

(4)	a.	húsi›	b.	langa húsi›	*Icelandic*
		house-DEF		long house-DEF	
		'the house'		the long house'	
(5)	a.	húsi›	b.	*(ta›) langa húsi›	*Faroese*
		house-DEF		the long house-DEF	
		'the house'		'the long house'	
(6)	a.	huset	b.	*(det) lange huset	*Norwegian*
		house-DEF		the long house-DEF	
		'the house'		'the long house'	
(7)	a.	huset	b.	*(det) långa huset	*Swedish*
		house-DEF		the long house-DEF	
		'the house'		'the long house'	
(8)	a.	huset	b.	*(det) lange hus/*huset	*Danish*
		house-DEF		the long house/house-DEF	
		'the house'		'the long house'	

There are cases where the preadjectival article is not required in Faroese, Norwegian, and Swedish (cf. Lundeby 1965:315ff, 1981; Delsing 1993a:117ff, Vangsnes 1998a:263ff), but it is quite clear that the structure with a preadjectival article is the canonical one for mere definites containing an attributive article in these dialects.

Another point it is worth observing is the fact that the preadjectival article does not appear if the adjective is preceded by a demonstrative. This is shown in (52).

(57)	a.	hetta	(*ta›)	langa	húsi›	*Faroese*
		this	the	long	house-DEF	
	b.	dette	(*det)	lange	huset	*Norwegian*
		this	the	long	house-DEF	
	c.	det här	(*det)	långa	huset	*Swedish*
		this	the	long	house-DEF	
	d.	dette	(*det)	lange	hus	*Danish*
		this	the	long	house	

[24] Icelandic does have construction with a preadjectival article, but this construction is stylistically marked, normally yielding a formal/archaic flavor. Moreover, as pointed out by Indri›ason (1990:21) adjectives occurring in this construction can only have a non-restrictive reading. An example is given in (i)—notice that the preadjectival article cannot co-occur with the suffixed one.

(i) hi› stora skip/*skipi›
the big ship/ship-DEF
'the big ship' ('the ship, which is big...')

Since it seems quite clear that the differences between the dialects witnessed in (4)-(8) are related to the presence of an attributive adjective, it seems natural to ask whether attributive adjectives have different properties in the dialects. And the answer is "yes".

As we saw in section 2.4 Scandinavian adjectives are either definite or indefinite depending on what kind of noun phrase they occur in, and if we compare the paradigm for definite adjectives in Icelandic and Mainland Scandinavian, say Norwegian, we find that the form of the adjective is invariant in Mainland Scandinavian but not in Icelandic. Compare the Icelandic noun phrases in (53) with the Norwegian ones in (54).

(58)	a.	**svarti**	hesturinn	m., sg.	(59)	a.	*den*	**svarte**	hesten	m., sg.
		black	horse-DEF				the	black	horse-DEF	
	b.	**svarta**	m‡rin	f., sg.		b.	*den*	**svarte**	myra	f., sg.
		black	swamp-DEF				the	black	swamp-DEF	
	c.	**svarta**	húsi›	n., sg.		c.	*det*	**svarte**	huset	n., sg.
		black	house-DEF				the	black	house-DEF	
	d.	**svörtu**	hestarnir	m., pl.		d.	*de*	**svarte**	hestene	m., pl.
		black	horses-DEF				the	black	horses-DEF	
	e.	**svörtu**	m‡rarnar	f., pl.		e.	*de*	**svarte**	myrene	f., pl.
		black	swamps-DEF				the	black	swamps-DEF	
	f.	**svörtu**	húsin	n.,pl.		f.	*de*	**svarte**	husa	n.,pl.
		black	houses-DEF				the	black	houses-DEF	

These examples show that there are oppositions in gender and number on the adjective in Icelandic, but not in Norwegian. Moreover, in Icelandic there is further oppositions in case, and the full paradigm for the definite inflection of the adjective *svartur* 'black' is given in table 2.

	SG			PL
	M	F	N	M/F/N
NOM	*svarti*	*svarta*	*svarta*	*svörtu*
ACC	*svarta*	*svörtu*	*svarta*	*svörtu*
DAT	*svarta*	*svörtu*	*svarta*	*svörtu*
GEN	*svarta*	*svörtu*	*svarta*	*svörtu*

Table 4: Definite inflection of the adjective *svartur* 'black in Icelandic

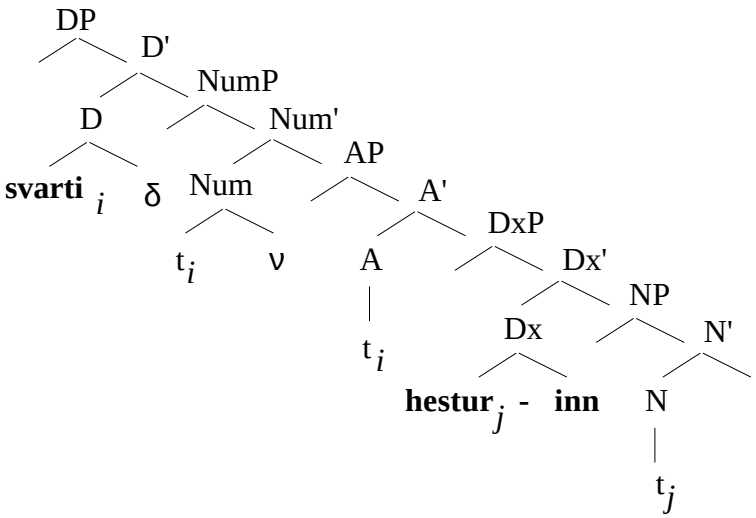
If we then consider what feature specifications definite adjectives in Icelandic and Mainland Scandinavian have, we may conclude that there is morphological evidence for assuming that Icelandic definite adjectives carry the features [gen] and [num] whereas their counterparts in Mainland Scandinavian do not. Moreover, as for the lexical feature [deix] there are no reasons to believe that adjectives *per se*, i.e. as a class, carry this feature.

Consider now the following explanation for the difference between Icelandic and Mainland Scandinavian. The adjective blocks movement of N+DEF to D (i.e. due to The Head Movement Constraint) and identification of δ must therefore be met by other means. Since we have established that Icelandic definite adjectives carry the features [gen] and [num], movement of the adjective to Num and D would suffice to identify ν and δ.

In Mainland Scandinavian, on the other hand, such movement would not serve to identify ν and δ since definite adjectives carry neither the agreement features [gen] and [num] nor the lexical features [deix] and [num]. Instead a different strategy for meeting the requirement is exploited, namely that of inserting a preadjectival definite article. In the introduction (section 1) we saw that the preadjectival article is homophonous with the distal demonstrative. I concluded there that the two elements are really one and the same, and as we see from the examples in (59) this element shows gender and number oppositions. Accordingly, it is specified [gen] and [num], and moreover, if it is a "true" definite article we should, according to what we have said earlier, assume that it contains a [deix] feature as well.

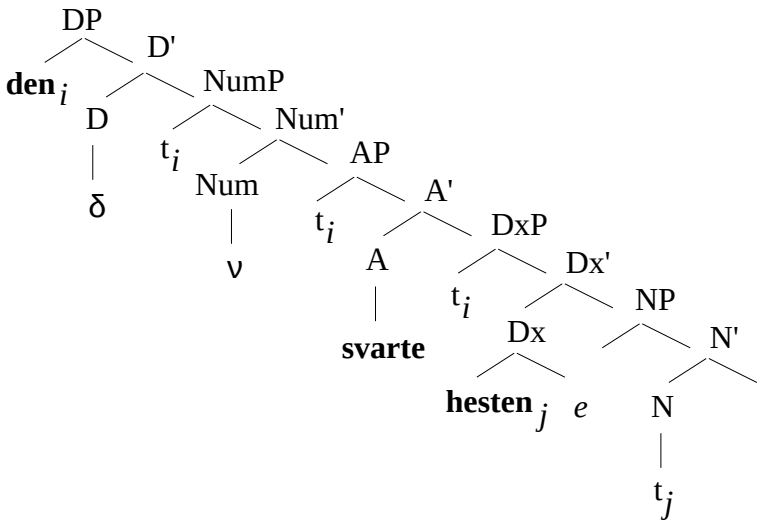
Given that the preadjectival article has the status of a demonstrative, I will assume that it is base generated in Spec-DxP, and that it moves to Spec-NumP and Spec-DP whereby it may identify ν and δ. Structures and derivations capturing these facts are the ones in (60) for the Icelandic noun phrase *svarti hesturinn* 'the black horse' and (61) its Norwegian correlate *den svarte hesten*.[25]

(60)



(61)

[25] Holmberg (1994:44) also captures the difference between Icelandic and the other Scandinavian dialects by arguing that the adjective raises in Icelandic whereas insertion of a lexical article is required in the other dialects. However, in his theory it is the 'strong' case morphology on Icelandic adjectives which renders them suitable for raising to D^0 where they check off case and definiteness features.



From this line of reasoning it follows without further ado that the preadjectival article does not co-occur with (another) demonstrative. Since the demonstrative carries features relevant for identifying ν and δ, it would serve the purpose of the preadjectival article by moving to Spec-NumP and Spec-DP and thus leave merger of the article unnecessary. Moreover, it would violate the UAF if both elements were merged (as multiple specifiers) in Spec-NumP and Spec-DP.

Furthermore, the complementary distribution of the preadjectival and the suffixed article in Danish also follows: since the preadjectival article has the same syntactic status as demonstratives it does not co-occur with the suffixed definite article for the same reason as demonstratives do not. And correspondingly, the preadjectival article *does* co-occur with the suffixed definite article in Faroese, Norwegian, and Swedish since that is what demonstratives typically do in these dialects. (Cf. section 2.5.)

However, again Faroese poses a problem for the explanation offered as to why insertion of the preadjectival article is necessary. The distribution of gender, number, and case oppositions on definite adjectives in Faroese is quite similar to the one found in Icelandic (with the exception that genitive case is absent in the dialect), but nevertheless a preadjectival definite article is generally required. The example in (62) corresponds to the Icelandic and Norwegian examples just discussed (apart from the fact that a slight semantic shift has taken place in the noun *hestur*), and the paradigm for the Faroese adjective *svartur* 'black' is given in table 3.

(62) *(tann) svarti hesturin *Faroese*
the black stallion-DEF
'the black stallion'

	SG			PL
	M	F	N	M/F/N
NOM	*svarti*	*svarta*	*svarta*	*svørtu*

ACC	*svarta*	*svørtu*	*svarta*	*svørtu*
DAT	*svarta*	*svørtu*	*svarta*	*svørtu*

Table 5: Definite inflection of the adjective *svartur* 'black in Faroese

Southwestern Norwegian dialects also represent a problem for the account just offered. Definite adjectives in these dialects show an opposition between on the one hand masculine and plural and on the other feminine and neuter, but the presence of a preadjectival article is nevertheless required just like in Standard Norwegian.[26] Consider the following examples from the Vangsnes dialect (Sogn).

(63)	a.	da	**stóra**	húse	n.	*Vangsnes*
		the	big-DEF	house-DEF		
	b.	dan	**stóra**	ferjá	f.	
		the	big-DEF	ferry-DEF		
	c.	dan	**stóre**	hestn	m.	
		the	big-DEF	horse-DEF		
	d.	dai	**stóre**	hestadn/ferjedn/húsi	pl.	
		the	big-DEF	horses-/ferries-/houses-DEF		

Further discussion of these apparent counterexamples will be deferred to section 6.3.

A reverse problem concerns the cases in Faroese, Norwegian, and Swedish where no preadjectival article is required. The following news paper excerpts illustrate this phenomenon—the definite noun phrases lacking a preadjectival are bold face and their English equivalents italicized.

Faroese: Hann vísti eisini á, at me›an **stóra skuldin hjá føroyingum** hevur givi› **dønsku stjornuna** gó› kort á hondina undir samrá›ingum ...
'He moreover pointed out that whereas *the big debt of the Faroese* had given *the Danish govenrment* good cards on their hands during the talks ...'

Norwegian: ... vi fekk kvart vårt gevær for å konkurrere om kven som skaut **største rotta**.
'... we were given a gun each in order to compete for the one to shoot *the biggest rat.*'

Swedish: **Norska flygbolaget Braathens** köper Malmö Aviation, skriver nyhetsbrevet Flygrevyn Express.
'*The Norwegian air company Braathens* buys Malmö Aviation, writes the news letter Flygrevyn Express.'

Such cases can be attributed to either the class of adjectives in question (typically superlatives, ordinals, and nationality terms) or to special contextual licensing (cf. Delsing

[26] Another phenomenon potentially problematic for the account is the Standard Swedish form of definite adjectives occurring with nouns denoting a [+male, +human] entity (cf. Delsing 1993a:78, 230).

1993a:118f, Lundeby 1981, Vangsnes 1998a: 262ff), and in the latter case the noun phrase can only be singular. For the present purposes I will argue that the adjectives in question are idiosyncratically marked [deix] and [num] and that they therefore may raise and identify ν and δ, leaving merger of the preadjectival article unnecessary.

Let us next consider Northern Swedish adjective incorporation and how this phenomenon relates to the difference between Icelandic and Mainland Scandinavian that we have just discussed.

3.3. *Preadjectival article versus adjective incorporation*

As pointed out by Sandström and Holmberg (1994) and Holmberg and Sandström (1996) it is important to notice that the adjective incorporation found in Northern Swedish definites represents a productive linguistic process, and that we are not talking of lexicalized compunds of the A-N type. In the indefinite counterparts of definites formed by adjective incorporation the adjective will always be a separate word, (potentially) carrying inflection, which precedes the noun. In the indefinite counterparts of lexicalized compounds on the other hand the adjective and the noun will constitute a phonological word.

Such lexicalized compounds exist in Scandinavian in general as well, and although they in fact seem to be more frequent in Northern Swedish than in other Scandinavian dialects (cf. Eaker, forthcoming), there is an important semantic difference between an A-N compound and a A-N incorporation product. Whereas the adjective in an A-N compound (of the pan-Scandinavian type) can only have a non-restrictive reading, theadjective in an A-N incorporation product may very well have a restrictive reading.

Accordingly, although the adjectival parts of the expressions in (64) can be interpreted either restrictively or non-restrictively, on the restrictive reading, the indefinite counterparts of the expressions can only be the ones in (65) where the adjective is a separate word carrying inflection. On the non-restrictive reading of the adjectival parts, however, the indefinite versions may be the ones in (66).

(64)	a.	lang-hus-e longhouse-DEF ‘the long house/longhouse’	b.	storkniva bigknives ‘the big knives/bigknives’	*Northern Swedish*
(65)	a.	et langt hus a long house ‘a long house’	b.	nager stor kniva some big knives ‘some big knives’	
(66)	a.	et langhus a longhouse	b.	nager storkniva some bigknives	

In the previous section we argued that the preadjectival article is inserted in Mainland Scandinavian in cases where an attributive adjective would block raising of N+DEF to

Num^0 and D^0, and where raising of the adjective would not meet the identification requirements on ν and ð. The question then is why Northern Swedish does not employ the same strategy.

The reason, I will argue, lies in the properties of demonstratives in the dialect. Compare the Northern Swedish examples in (67) with the Norwegian ones in (68).

(67) a. grannhestn derna *NSw.*
fine-horse-DEF there
'That fine horse'

b. grannhestn jerna
fine-horse-DEF here
'This fine horse'

(68) a. den flotte hesten *Norw.*
that fine horse-DEF
'That fine horse'

b. denne flotte hesten
this fine horse-DEF
'This fine horse'

First of all we may notice the fact that the elements expressing distality/proximality in Northern Swedish occur postnominally whereas they occur prenominally in Norwegian (and in Scandinavian in general). Moreover, as the glossings indicate the Northern Swedish demonstratives are homophonous to the locative adverbs *there* and *here.* That this is actually the case in shown by the example in (69a). The example in (69b) on the other hand shows that the same does not hold for Norwegian.

(69) a. **Derna/herna** jer hestn i tjöft dera marknen. *NSw.*
There/here is horse-DEF I bought there-on market-DEF

b. **Der/her** er hesten jeg kjøpte på markedet. *Norw.*
There/here is horse-DEF I bought on market-DEF

Both: 'There/here is the horse that I bought at the market.'

This indicates that the adnominal elements expressing the referent's local orientation relative to the speaker really are adverbs and not demonstratives. Further support for this comes from the fact that the Northern Swedish 'demonstratives' do not agree in gender and number with the noun. This is shown in (70), and we may thus conclude that the Northern Swedish "demonstratives" do not carry the features [gen] and [num].

(70) a. hestn derna/jerna m. *Northern Swedish*
horse-DEF there/here

b. boka derna/jerna f.
book-DEF there/here

c. huse derna/jerna n.
house-DEF there/here

d. hesta derna/jerna pl.
horses-DEF there/here

On this background I suggest that instead of inserting an element corresponding to the preadjectival article in other Mainland Scandinavian dialects, Northern Swedish employs a strategy which annuls the blocking effect of the adjective and renders movement of N+DEF to Num^0 and D^0 possible: the adjective is incorporated into the same prosodic word as the N+DEF. Moreover, contrary to Sandström and Holmberg (1994) I take this incorporation process to be pre-syntactic, i.e. the result of merge in the lexicon, and accordingly the complex A+N is base generated under N^0. This complex head then raises to Dx^0 and adjoins to the suffixed definite article, and subsequently further to Num^0 and D^0 where ν and δ are identified by the number and gender features of the suffixed definite article, respectively, just like in cases where there is no attributive adjective.[27]

Northern Swedish adjective incorporation in definite noun phrases thus serves the same purpose as the insertion of the preadjectival article in Mainland Scandinavian: it is a way of meeting a formal requirement on the functional categories ν and δ.[28]

Certain interesting questions however arise when we consider how numerals interact with adjective incorporation. First of all we observe that numerals do not incorporate, a fact which supports the view that numerals do not belong to the same class as adjectives, and moreover that the complex A+N+DEF cannot occur to the left of a numeral.

(71) a. trei graann hesta *Northern Swedish*
three fine horses
'three fine horses'
b. *trei-grann-hesta
three-fine-horses-DEF
'the three fine horses'
c. *grann-hesta trei
fine-horses-DEF three

As mentioned in section 2.3. I am assuming that numerals are generated as heads in Num^0 (i.e. adjoined to ν). On that account it is not surprising that the numeral does not incorporate—it is not of the same category as adjectives—and neither is it surprising that the example in (71c) is ungrammatical since the numeral presumably would block raising of the complex head A+N+DEF to D^0.

Now, what we do find in definites containing a numeral is a complex demonstrative consisting of a pronominal part and the distal adverb/"demonstrative".

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[27] Under this approach one may wonder whether AP is projected in the definite noun phrases involving an incorporated adjective. I will assume so since that will give us an account in terms of scope of why the adjective in an incorporation product must have a restrictive interpretation—A^0 will c-command NP.

[28] This is in line with a general point made by Sandström and Holmberg (1994) who also argue that adjective incorporation and insertion of a preadjectival definite article represent two ways of meeting a formal requirement pertaining to a functional projection dominating AP and NP. The details of their analysis however differ from the present one.

(72) demderna trei grannhesta *Northern Swedish*
they-there three fine-horses-DEF
'the three fine horses'

Unlike the postnominal demonstratives discussed earlier, but similar to (agreeing) demonstratives in other Scandinavian dialects, this complex element may occur pronominally, and the form of the pronominal part then varies according to the gender and number of the noun which otherwise would have denoted the referent. Henceforth I will refer to this complex demonstrative as a 'pronominal demonstrative'. Consider the Northern Swedish examples in (73) and compare them with the Norwegian examples in (74).

(73) a. **Handerna/*derna** __ jer stor. m. *Northern Swedish*
he-there / there (e.g. horse) is big
'That one is big.'

b. **Honderna/*derna** __ jer stor. f.
she-there / there (e.g. book) is big
'That one is big.'

c. **Hederna/*derna** __ jer stort n.
it-there / there (e.g. house) is big
'That one is big.'

d. **Demderna/*derna** __ jer stor pl.
they-there / there (e.g. horses) is big
'Those ones are big.'

(74) a. **Den** __ er stor. m. *Norwegian*
that (e.g.horse) is big
'That one is big.'

b. **Den** __ er stor f.
that (e.g. book) is big
'That one is big.'

c. **Det** __ er stort n.
that (e.g. house) is big
'That one is big.'

d. **De** __ er store pl.
those (e.g. horses) is big
'Those ones are big.'

The examples in (73) suggest that the complex demonstrative has morphological features relevant for identifying ν and δ, and it thus furthermore seems that in cases where movement of the incorpration product to D^0 is blocked, Northern Swedish too uses a strategy similar to the insertion of the preadjectival article.

The question is however why Northern Swedish does not use this strategy generally. That is, why is insertion of the complex pronominal demonstrative not employed instead of adjective incorporation also in cases where there is no blocking numeral in the structure? We will return to this question in section 3.5 where we establish the notion of 'generalized strategy'. Rephrasing the question then, we would like to have an idea of why insertion of the complex demonstrative is not a strategy employed quite generally in Northern Swedish.

Interestingly, insertion of a complex demonstrative as a generalized strategy appears to be exactly what we find in a dialect area adjacent to Northern Swedish, more specifically in the dialects of Österbotten in Finland.

3.4. *Pronominal demonstratives, adjective incorporation, and apocope*

Just like the majority of Mainland Scandinavian dialects the (Swedish) dialects of Österbotten on the western coast of Finland have an obligatory preadjectival definite article. Consider the following examples from the Malax dialect.[29]

(75)	a.	*(ande)	grann	hesti	m.	*Malax*
		the	fine	horse-DEF		
	b.	*(onde)	grann	bókje	f.	
		the	fine	book-DEF		
	c.	*(ide)	grannt	húse	n.	
		the	fine	house-DEF		
	d.	*(teide)	grann	hesta/bÕkre/húse	pl.	
		the	fine	horses-/books-/houses-DEF		

Moreover, just like in other dialects the preadjectival definite article is homophonous with the distal demonstrative. Hence, the determiners in (75) are really ambiguous between a "pure" article reading and a demonstrative reading, and in the examples in (76) the determiner can only be interpreted as a demonstrative.

(76)	a.	an-**de**	hesti	m.	*Malax*
		that	horse-DEF		
	b.	on-**de**	bókje	f.	
		that	book-DEF		
	c.	i-**de**	húse	n.	
		that	house-DEF		
	d.	tei-**de**	hesta/bÕkre/húse	pl.	

[29] I am indebted to Åsa Mitts for providing me with examples, judgments, and insights in the Malax dialect. Accents mark vowels as diphthongs, hence as long.

those horses-/books-/houses-DEF

Etymologically speaking this distal demonstrative is of the same kind as the Northern Swedish pronominal demonstrative (cf. the examples in (74)) which we encountered in Northern Swedish definites with numerals (cf. (72)): it consists of a pronominal part plus a part which expresses distality/proximality. In the examples in (76) I have separated the two parts and marked the deictic element with bold face. That the demonstratives in the dialect are morphologically composite in such a way becomes quite clear when we compare the distal demonstrative in (76) with the proximal demonstrative in (77).

(77)	a.	an-**je**	hesti	m.	*Malax*
		this	horse-DEF		
	b.	on-**je**	bókje	f.	
		this	book-DEF		
	c.	i-**je**	húse	n.	
		this	house-DEF		
	d.	tei-**je**	hesta/bÕkre/húse	pl.	
		these	horses-/books-/houses-DEF		

The correspondence between the first part of the demonstratives and pronouns is quite clear: the relevant personal pronouns are *ha/a* 'he', *ho/o* 'she', *he/e* 'it', and *tei/di* 'they', the former strong and the latter weak forms (cf. Ivars 1988:166f for a description of the neighboring dialect of Närpes).

Pronominal demonstratives of this kind are found throughout the Österbotten dialect area, and the distal pronominal demonstrative is moreover used as a preadjectival definite article as exemplified by the Malax examples in (75). It is however an interesting point that adjective incorporation to some extent co-exists with insertion of the preadjectival definite article. This has been pointed out to me by Ann-Marie Ivars (p.c.), and Sandström and Holmberg (1994) notes that Hagfors (1891) describes the Karleby dialect similarly (see Hagfors 1891:93). Ivars provides the following pairs from the Närpes dialect.

(78)	a.	honde	gamälbókjen	f.	*Närpes*
		the	old-book-DEF		
	b.	honde	gambäl bókjen		
		the	old book-DEF		
(79)	a.	hede	storhúse	n.	*Närpes*
		the	big-house-DEF		
	b.	hede	stórt húse		
		the	big house-DEF		

This may seem problematic for my analysis: if adjective incorporation exists in the Österbotten dialect, then movement of the complex A+N+DEF to Num^0 and D^0 should presumably not be blocked and insertion of the preadjectival article not required.

However, to say that raising of A+N+DEF is possible is not the same as saying that it need take place. Insertion of the preadjectival article (= the distal pronominal demonstrative) in Spec-DxP and subsequent movement of it to Spec-NumP and Spec-DP would serve to meet the identification requirement on ν and δ. In fact, I will argue that this is the case in examples like (78a) and (79a): although the adjective is incorporated, raising of A+N+DEF does not take place.

The question then is of course why there is adjective incorporation if not to overcome the blocking effect of the adjective. This is indeed a puzzling question, and I think part of the explanation lies in phonology. Diachronically speaking, both northern Swedish dialects and the Österbotten dialects have undergone a process of apocope whereby vocalic endings were lost. This is seen both in the verbal morphology (e.g. the forms of infinitives) and nominal morphology (e.g. nouns of the weak declensions), and importantly for us the apocope has also affected the form of definite adjectives. In other Mainland Scandinavian dialects definite adjectives have vocalic endings, and omission of the vowel would render them identical to the adjectival stem.

Given the latter point, we may take it that the loss of (overt) inflection on definite adjectives in Northern Swedish and the Österbotten dialects paved the ground for reanalyzing them as incorporated: since the adjectives in A-N sequences were identical to the adjectivalstem, nothing (except perhaps prosody) marked them as a separate syntactic constituent, and hence they could be reanalyzed as part of the same morphological unit as the noun (on a par with what is the case for compounds of the A-N type). In fact, we may conjecture that apocope has been a prerequisite for developing adjective incorporation in Scandinavian dialects.[30]

Subsequently, when adjective incorporation was established as a productive process, that would enable raising of A+N+DEF to identify ν and δ. However, only Northern Swedish resorted to this as the general strategy to be employed—the Österbotten dialects instead resorted to insertion of the distal pronominal demonstrative. On that account adjective incorporation was presumably not generalized to always take place in definites in the Österbotten dialects. That in turn may explain why a historically speaking indefinite adjectival ending now is found on adjectives in definite noun phrases in some of the Österbotten dialects. As we see in the examples in (75)(repeated here) and (80) the adjectives in the Malax dialect have the same form in indefinite and definite noun phrases.

(75)	a.	*(ande)	grann	hesti	m.	*Malax*
		the	fine	horse-DEF		
	b.	*(onde)	grann	bókje	f.	
		the	fine	book-DEF		

30 I thank Görel Sandström for pointing out the role apocope may have played for the development of adjective incorporation.

	c.	*(ide)	grann-**t**	húse	n.	
		the	fine	house-DEF		
	d.	*(teide)	grann	hesta/bøkre/húse	pl.	
		the	fine	horses-/books-/houses-DEF		
(80)	a.	i	grann	hest	m.	*Malax*
		a	fine	horse		
	b.	i	grann	bók	f.	
		a	fine	book		
	c.	i	grann-**t**	hús	n.	
		a	fine	house		
	d.		grann	hestar/bøkär/hús	pl.	
			fine	horses/books/houses		

Notice especially the form of the singular neuter adjective (75c and 80c). I would suggest that the generalization of the (historically) indefinite inflection has been made possible by the fact that adjectives in definites have kept their status as separate syntactic units in the Österbotten dialects, unlike what is the case in Northern Swedish. [31]

Several issues concerning the adjective incorporation found in Northern Swedish and adjacent dialects await further studies. In fact, the Österbotten dialects are not the only ones outside Northern Swedish to exhibit adjective incorporation—Central Norwegian dialects, which are also adjacent to Northern Swedish, possess adjective incorporation in definites, and the fact that these dialects have also undergone a process of apocope, further supports the idea that apocope was a prerequisite for developing adjective incorporation.

3.5. *Generalized strategy*

The claim that has emerged from the discussion in the preceding subsection is that there exists a principle in the organization of grammars which roughly put enhances the choice of one way of doing things when there in principle exist several options. The alternative chosen represents what we have referred to as a 'generalized strategy'.

On an overall account, the northern Swedish and Österbotten dialects share many common characteristics, and the two dialect groups surely must have developed in parallel. At the point where the old way of meeting the identification requirement on ν and δ was lost (when definite adjectives no longer carried the feature [gen]) two alternative strategies could in principle be resorted to: either adjective incorporation or development of a preadjectival definite article. The two dialect groups chose one strategy each, and we can only speculate on what factors it was that contributed to the choice. The choice may have been random, it may have been triggered by certain linguistic differences that our discussion has not revealed, or it may have been triggered by socio-linguistic factors (say dialect contact; maybe Standard Swedish, which has a preadjectival definite article, had a greater impact on the Österbotten dialects than on the northern Swedish dialects).

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[31] Notice that in the neuter noun phrases from the Närpes dialect in (74) the incorporated adjective in the a.-example does not carry the ending *-t* whereas the non-incorporated one in the b.-examples does.

In any event it appears that the fact that a given strategy is not viable in all cases is not decisive for the choice. In the case of Northern Swedish we saw that adjective incorporation is not possible if the definite noun phrase contains a numeral, and we would want some account of why this "deficiency" of adjective incorporation with respect to serving its purpose has not affected on the choice of generalized strategy. The reason, we may hypothesize, is that definite noun phrases containing a numeral are relatively rare when the total number of definite noun phrases are taken into account. In that respect, the fact that a 'specialized strategy' may exists for such cases does not appear unreasonable, and in the next section we will actually encounter a phenomenon from a different Scandinavian dialect where definite noun phrases containing a numeral behave differently from definite noun phrases containing adjectives.

The notion of 'generalized strategy' may appear a difficult one to handle within a generative framework where one seeks to explain the structure of grammars as coherent systems in and of themselves, defined by universal principles. Still, I believe that it is hard to manage without some notion of 'generalized strategy', especially when one considers variation among closely related dialects and languages. In the following sections the notion will therefore play an important role.

4. INTERMEZZO: AP/NP MOVEMENT IN ICELANDIC

Icelandic displays an interesting instance of movement in definites containing a numeral. Consider the following example pair from Sigur›sson (1993:194).

(81) a. hinar **flrjár** frægu bækur *Icelandic*
the three famous books
b. frægu bækurnar **flrjár**
famous books-DEF three

As noted in footnote 24 there exists a (preadjectival) lexical article in Icelandic too, but as Sigur›sson remarks it has a formal/archaic flavor. Interestingly, as the examples in (81) show adjectives and a noun will occur to the right of a numeral in a definite containing the lexical definite article, but to the left of it in a definite where the noun carries the suffixed definite article, thus indicating that movement of the adjective and the noun takes place in the latter case but not in the former.

The fact that the adjective and the noun *must* appear to the left of the numeral when the noun carries the suffixed definite article is shown in (82a), and the examples in (82b) and (82c) moreover show that a corresponding word order is not possible in phrases with the lexical article.

(82) a. ***flrjár** frægu bækurnar *Icelandic*
three famous books-DEF
b. *hinar frægu bækur **flrjár**
the famous books three

c. *frægu bækur hinar **flrjár**
famous books the three

Movement is not dependent on the presence of an attributive adjective, however: the noun+DEF will move also in a definite containing a numeral but no adjective. Furthermore, it is worth pointing out that demonstratives pattern with the lexical article, and moreover that numerals precede adjectives and nouns in indefinite noun phrases. These facts are shown in (83)–(85).

(83) a. bækurnar flrjár b. *flrjár bækurnar *Icelandic*
books-DEF three three books-DEF

(84) a. flessar **flrjár** frægu bækur *Icelandic*
these three famous books
b. *flessar frægu bækur **flrjár**
these famous books three
c. *frægu bækur flessar **flrjár**

(85) a. **flrjár** frægar bækur *Icelandic*
three famous books
b. *frægar bækur **flrjár**
famous books three

The lexical article and the suffixed one are in complementary distribution in Icelandic, and Sigur›sson (op.cit) argues that they actually are the same element, generated as the head of DP (i.e. a functional projection dominating the domain of nouns and adjectives), and that the suffixation of the element to the noun is derived by N^0 raising and adjoining to the article in D^0.

In order to account for the fact that attributive adjectives always appear to the left of nouns in Icelandic, irrespective of whether the noun has raised or not, Sigur›sson suggests that adjectives are adjoined to N^0, thus forming A^0-N^0 complexes (i.e. quite on a par with what I have argued for adjective incorporation in Northern Swedish above). Such a complex evidently may headmove to D^0, say past a numeral as in the examples in (81).

Sigur›sson's analysis is clearly not compatible with the present theory. First of all I am assuming that numerals are heads in Num^0 and that they therefore would block raising of both an N^0 and an A^0-N^0-complex (as we indeed saw was the case in Northern Swedish definites containing a numeral in section 3.3). Second, I have argued that the suffixed article in Icelandic is merged with the noun in the lexicon (cf. section 2.5), and accordingly that it is not generated in the head position of a functional projection dominating the domain of nouns and adjectives.

Importantly however, even if we accept Sigur›sson's idea that the adjective and the noun form a complex head, there is empirical evidence which suggests that the movement of the adjective and the noun+DEF in (81b) cannot be head movement: if a possessive is

added to the noun phrases in (81) it too will move along with the adjective and the noun+DEF. Possessives are generally postnominal in Icelandic, and as the examples in (86) make evident, a possessive will occur to the left of a numeral if the noun does so, but to the right of it if the noun does so, nevertheless keeping its postnominal position.

(86)	a.	hinar	**flrjár**	frægu	bækur	*mínar*	*Icelandic*
		the	three	famous	books	my	
	b.	frægu	bækurnar	*mínar*	**flrjár**		
		famous	books-DEF	my	three		
	c.	*frægu	bækurnar	**flrjár**	*mínar*		
		famous	books-DEF	three	my		

It seems quite unlikely that the adjective, the noun, and the possessive together form a complex head, and accordingly, we may conclude that the movement in question is *phrasal* and not an instance of head movement.

Moreover, I believe that the phenomenon can be given a straightforward analysis within the theory that I have advocated. In section 3.2 I argued that the adjective in an Icelandic definite is able to identify ν and δ since it is specified [num] and [gen] in the dialect, and it may do so by raising to Num^0 and D^0.

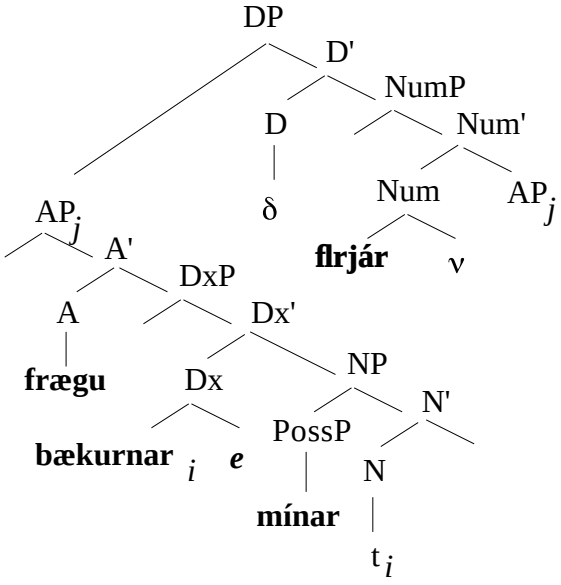
A numeral would however block such raising on the assumption that it is generated in Num^0, and the fact that an adjective alone cannot precede the numeral indicates that head movement of the adjective past the numeral is not possible.

(87)	*frægu	flrjár	bækurnar	(mínar)
	famous	three	books-DEF	my

What I will argue happens in cases like (81b) and (86b), is that the whole AP breaks off and moves to Spec-DP. On the assumption that the features of A^0 percolate to AP, such a movement would serve to identify δ since AP would c-command D^0.[32] The structure and derivation of (86b) would then be as illustrated in (88).

(88)

[32] AP possibly moves to Spec-DP via Spec-NumP, but ν would be identified by the [+num] feature of the numeral anyway

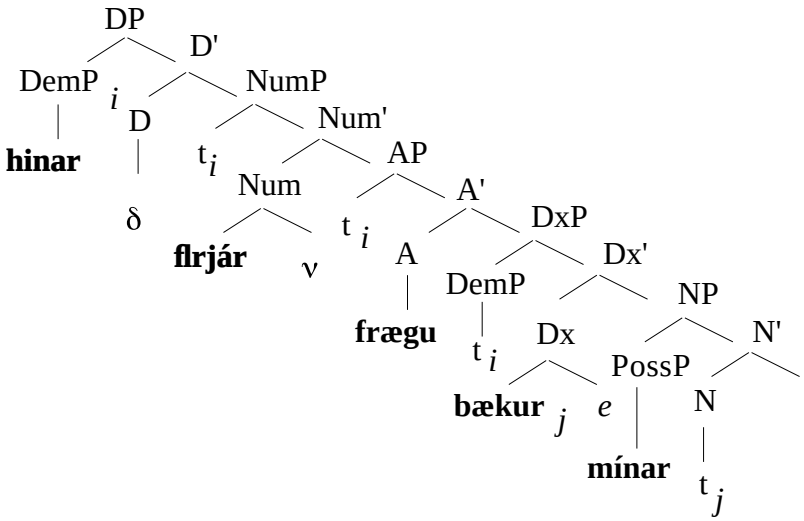


The possessive in (86b) remains in Spec-NP throughout the derivation, and gets its postnominal position when N+DEF has adjoined to Dx^0.

As noted above the movement occurs also when no adjective is present (cf. example (83)), and in that case I assume that it is DxP that breaks off and moves to Spec-DP—the features of the suffixed article percolate to DxP and renders the maximal projection suitable for identifying δ.

As for the cases with a lexical definite article and a demonstrative (examples (81a) and (83a)) I argue that these go through a derivation similar to what I have argued for in the case of Mainland Scandinavian earlier. The lexical article and the demonstrative are base generated in Spec-DxP, and they subsequently move to Spec-NumP and Spec-DP, thereby rendering movement of AP or DxP unnecessary. For the sake of completeness the assumed structure of the definite in (86a) is given in (89).

(89)



As far as I know, Icelandic is the only Scandinavian dialect which exhibits AP/DxP-movement in definites with a numeral.[33] As far as AP-movement to Spec-DP is concerned it seems reasonable to take this to be correlated with the fact that a preadjectival article is not required in Icelandic. In dialects where adjectives are not suitable identifiers for ν and δ, AP presumably would not be either, and AP-movement therefore does not take place.

On the other hand, moving a DxP containing N+DEF past a numeral would seem to be a viable way of meeting the identification requirement on δ also in other Scandinavian dialects since the suffixed article contains features which upon percolation to DxP would render DxP suitable as an identifier. The reason the non-Icelandic dialects nevertheless do not possess the movement in question, I will argue, has to do with the existence of the preadjectival article as the generalized strategy with respect to meeting the identification requirements whenever head movement of N+DEF to Num^0 and D^0 is blocked. DxP-movement to Spec-DP is never resorted to since a different strategy is "easy at hand", and importantly from an acquisitional point of view definite noun phrases containing numerals are probably quite few compared to definite noun phrases containing adjectives in children's input, so it seems quite reasonable to make the assumption that it is the strategy developed in order to deal with adjectives that becomes the generalized one.

For similar reasons I believe that AP/DxP-movement does not take place in Icelandic demonstrative noun phrases and in definites with the lexical definite article: moving the demonstrative or the lexical article from Spec-DxP to Spec-NumP and Spec-DP is the generalized strategy with respect to meeting the identification requirement on ν and δ, and this strategy is available also when there is a numeral present in the phrase.[34]

Another potential problem concerns Icelandic numerals: Icelandic numerals from 1 to 4 agree in gender and case with the 'head' noun. Numerals higher than 4 are invariant. The full paradigm for the numeral 4, for instance, is as given in table 5.

	M	F	N
NOM	*fjórir*	*fjórar*	*fjögur*
ACC	*fjóra*		
DAT	*fjórum*		

[33] It should however be noted that the construction does not sound entirely unfamiliar to a Norwegian ear and surely exists in traditional song poetry and fairy tales.

[34] As noted in the introduction, the word order N–demonstrative exists as a stylistically marked option in Icelandic. Interestingly, this is only possible if there is no attributive adjective present, neither to the left nor to the right of the noun. Consider the examples in (i).

(i) a. ma›ur flessi
mann this
b. *gamli ma›ur flessi
old man this
c. *ma›ur flessi gamli
d. *ma›ur gamli flessi

My tentative analysis of the construction is that the noun has headmoved to D^0 (and eventually to K^0) past the demonstrative which stays in situ in Spec-DxP. The phenomenon however awaits further studies.

GEN	*fjögurra*

Table 6: The forms of the Icelandic numeral *fjórir* 'four'

The question then is why the numeral could not raise from Num^0 to D^0 and identify δ by virtue of its agreement features. The answer to this question will be given in section 6.3.1. Let us next consider possessive constructions.

5. POSSESSIVE CONSTRUCTIONS

5.1. *Possessives and the co-occurrence with definite articles*

In section 2.6 we briefly considered possessive constructions from the viewpoint of Norwegian, and we gave an account of why prenominal possessives cannot co-occur with the suffixed definite article, whereas postnominal possessives do co-occur with it. In short the account was that the prenominal possessives have moved to Spec-NumP and Spec-DP and that head movement of N+DEF, the preferred option, therefore could not take place since it would violate the UAF, the suffixed article and the possessive both containing agreement features relevant for the identification of ν and δ.

Consider now noun phrases containing both a possessive and an adjective. If the possessive is prenominal neither the preadjectival nor the suffixed definite article may occur. On the other hand, if the possessive is postnominal, both articles do occur. This is shown in (90) and (91).

(90)	a.	min		gamle	hest	*Norwegian*
		my		old	horse	
	b.	*min	den	gamle	hesten	
		my	the	old	horse-DEF	
	c.	*min		gamle	hesten	
		my		old	horse-DEF	
	d.	*min	den	gamle	hest/hesten	
		my	the	old	horse/horse-DEF	
	e.	*den	min	gamle	hest/hesten	
		the	my	old	horse/horse-DEF	

(91)	a.	den	gamle	hesten	min	*Norwegian*
		the	old	horse-DEF	my	
	b.	*	gamle	hest	min	
			old	horse	my	

These facts parallel the situation we find in noun phrases without adjective. In both cases the interaction between possessives and the definite articles conform to the generalization

saying that a possessor cannot precede definite articles at the same noun phrase internal level.

Now, the fact that the possessive cannot precede the preadjectival article is easily accounted for on the assumption that both move to Spec-NumP and Spec-DP. That will lead to a violation of the UAF since both carry agreement features relevant for the identification of ν and δ. The UAF is repeated here.

> Uniqueness restriction on Agreement Features$_{def}$ (UAF):
> An agreement feature relevant for identifying a functional category F cannot occur on more than one of the constituents occupying Spec-F and F^0.

Moreover, the analysis of the noun phrase in (91a), i.e. the one containing an attributive adjective and a postnominal possessor is straightforward within the theory presented. Since the possessive has not moved to Spec-NumP and Spec-DP some other constituent must ensure the identification of ν and δ. N+DEF is not a possible candidate since the adjective will bar it from head moving to Num^0 and D^0. Instead the strategy of merging a dummy demonstrative, the preadjectival article, is resorted to. The article is base generated (merged) in Spec-DxP, and since it must check its agreement features in a local relation the N+DEF must raise to Dx^0 and adjoin to the empty head of DxP. That raising leaves the possessive in a postnominal position in overt syntax. In other words the analysis of (91a) is as given in (92).

(92) [$_{DP}$ **den**$_i$ [$_D$ δ [$_{NumP}$ t$_i$ [$_{Num}$ ν [$_{AP}$ t$_i$ [$_A$ **gamle** [$_{DxP}$ t$_i$ [$_{Dx}$ **hesten**$_j$ e [$_{NP}$ **min** [$_N$ t$_j$]]]]]]]]]]

The considerations immediately above together with the ones in section 2.6 now have given us a fairly good understanding of the mechanisms at play in possessive constructions.

However, the generalization saying that a possessor cannot precede definite articles at the same noun phrase internal level does not hold for all Scandinavian dialects. It is fairly well-known that prenominal *non-pronominal* possessors do co-occur with definite articles in northern and eastern Swedish dialects (cf. Delsing 1993a:153, 1996:44-45; Holmberg og Sandström 1996a, 1996b:76; Ivars 1988:151-152; Lundström 1939:28).[35] What is not so well-known is that *possessives* also fail to conform to the generalization in some dialects, notably a subgroup of northern and eastern Swedish dialects. In the remainder of this section we will encounter four such dialects, and as we proceed we will see that there seems to be a clear correlation between the failure to conform to the generalization and absence of gender agreement.

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[35] It should be noted that there are reasons to believe that the *-s* marker on prenominal non-pronominal possessors in the relevant northern and eastern Swedish dialects is not a phrasal clitic element, and an explanation as to why it may co-occur with definite articles, unlike the genitival *-s* in other Mainland Scandinavian dialects (cf. section 2.6), can surely be related to this fact (cf. Vangsnes 1998b:437f). See Delsing (1993:175ff) and Holmberg and Sandström (1996b) for other solutions.

Starting with a summary, we have the Skellefteå dialect spoken in (northern) Västerbotten in northern Sweden in which the generalization does not hold in cases where the possessive lacks gender agreement. Second we have the Karleby dialect in (northern) Österbotten which lacks the morphological category gender altogether, and where a possessive may immediately precede both the preadjectival article and a noun carrying the suffixed article (N+DEF). Third we have the Lappträsk dialect in (Eastern) Nyland in the south of Finland where a possessive may immediately precede the preadjectival definite article but not N+DEF. In this dialect possessives and the suffixed definite article agree in gender, but the preadjectival definite article does not. Fourth we have the Malax dialect in (southern) Österbotten which syntactically speaking behaves similarly to the Lappträsk dialect, but which, as we saw in section 3.4, has a preadjectival article that varies according to the gender and number of the noun (i.e. the pronominal distal demonstrative). However, as I will show, an explanation for why this dialect nevertheless allow a possessive to precede the preadjectival article can be sought in the complex composition of the latter (and demonstratives in general) in the dialect. The explanation will be that the [gen] feature is structurally located in a position which does not allow it to c-command the functional head to be identified.

In conclusion, all the exceptional cases of possessives preceding articles can then be related to absence of gender in a certain sense of the word, and the generalization mentioned earlier can be revised accordingly.

The discussion of possessive constructions and the correlation between absence of gender agreement and syntax will be continued in section 6 where I will draw the attention to certain problems even for the revised generalization: first of all, we will encounter a fifth Swedish dialect which does not conform to the general picture that prenominal possessives cannot co-occur with definite articles, but where possessives as well as both the suffixed and the preadjectival article are inflected for gender, and moreover we will discuss the fact that all Scandinavian dialects have *some* possessives which do not inflect for gender.

Let us now consider the Skellefteå dialect.

5.2. *The Skellefteå dialect*

As shown by the examples in (1) and (2), repeated here, the Skellefteå dialect[36] has two sets of possessives: one set consisting of possessives which agree with the noun in gender and number, and another (one-membered) set where there is no agreement.

(1)	a.	**men**	hest/*hestn	(m.)	(2)	a.	**mine**	hestn/*hest	(m.)
		my	horse/horse-DEF				my	horse-DEF/horse	
	b.	**mín**	bok/*boka	(f.)		b.	**mine**	boka/*bok	(f.)

[36] For judgments and data from the Skellefteå dialect I am indebted to Erik Bergstén, Anders Hedlund, Ingemar Stenmark, and in particular Jarl Svensson.

	my	book/book-DEF			my	book-DEF/book	
c.	**mett**	hus/*huse	(n.)	c..	**mine**	huse/*hus	(n.)
	my	house/house-DEF			my	house-DEF/house	
d.	**mín**	hesta/bökker/hus	(pl.)	d.	**mine**	hesta/bökkren/husa	(pl.)
	my	horses/books/houses			my	horses-/books-/houses-DEF	

In fact the non-agreeing possessive *must* co-occur with the suffixed article both when it occurs prenominally and postnominally. The agreeing possessive also co-occurs with the suffixed article when it is postnominal. These facts are shown in (93).

(93)	a.	hestn/*hest	mine	*Skellefteå*
		horse-DEF/horse	my	
	b.	hestn/*hest	men	
		horse-DEF/horse	my	

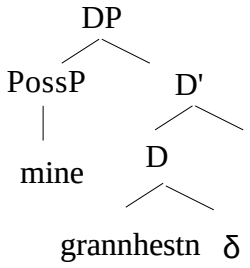
The Skellefteå dialect belongs to the northern Swedish dialects which have adjective incorporation in definites, and the examples in (94) illustrate that only the non-agreeing possessive (*mine*) can precede a A+N+DEF complex.

(94)	a.	mine	grannhestn	*Skellefteå*
		my	fine-horse-DEF	
	b.	*men	grannhestn	
		my	fine-horse-DEF	

As for the agreeing possessive, the fact that it cannot precede the suffixed definite article is accounted for in the same way as for Norwegian: it would violate the UAF since two elements carrying agreement features relevant for identifying δ would reside in the DP-domain (the possessive in Spec-DP and the article adjoined to D^0).

On the other hand if a non-agreeing possessive and a (A+)N+DEF head both move to the DP-domain that will not will not result in a violation of the UAF since only one of the elements, the suffixed definite article, carries an agreement feature ([gen]) relevant for the identification of δ. Accordingly, the structure in (95) is an allowed DP-configuration for the noun phrase in (94a).

(95)



The coexistence of the two types of possessives is actually quite peculiar as I have not been able to discern any semantic or stylistic difference between them from my consultants. My suspicion is however that we are witnessing two competing systems here in a dialect which legitimately may be characterized as "dying" and as an effect of that somewhat unstable. Virtually none from the younger generations speak the dialect as it is described here, and moreover those who speak it, also speak a regional variety of Standard Swedish where possessives indeed are agreeing. Furthermore, the paradigm for the agreeing possessives given in (1) is the one found in neighbouring dialects, for instance in southern Västerbotten, and may possibly be "available" for the intutions of the speakers of the Skellefteå dialect.[37]

So far I have not enough empirical evidence to conclude that the co-existence of the two possessive types can be related to diglossi and dialect contact, but below in section 6.2 we will see that theoretical speculations alone force me to hypothesize that the two types must belong to distinct grammars.

5.3. *The Karleby dialect*

On the opposite side of the Gulf of Bothnia from Skellefteå we find the Karleby dialect[38], and like the Skellefteå dialect this dialect does not either conform to the generalization saying that a prenominal possessive cannot precede definite articles. Possessives may occur both postnominally (the unmarked case) and prenominally (the marked case), and in both cases they co-occur with the definite articles. This is illustrated in (96).

(96) a. heste/*hest mín *Karleby*
horse-DEF/horse my
b. mín heste/*hest
my horse-DEF/horse
c. he grann heste mín
the fine horse-DEF my
d. mín he grann heste
my the fine horse-DEF
e. *mín grann hest
my fine horse

[37] It is interesting to note that Marklund (1976:40f) in his grammar of the Skellefteå dialect only gives the agreeing forms of possessives. Hedlund (1956:16) on the other hand notes the existence of non-agreeing forms alongside what he terms the '"clean" inflectional paradigm'. Unfortunately, he does not give any examples to the fact that the non-agreeing possessives may precede the definite article, but fortunately he does not give evidence to the contrary either.

[38] For data from and discussion of the Karleby dialect I am indebted to Peter Slotte. Accents mark the vowels as long (not diphthongized).

Unlike the Skellefteå dialect the Karleby dialect has a preadjectival article, and as we see from the example in (96d) the possessive may precede the whole sequence DEF–A–N+DEF, an option not available in e.g. Norwegian (cf. (90b) above).

Interestingly, the Karleby dialect lacks the category gender altogether.[39] In order to fully illustrate this we should in principle list all the nouns in the dialect, place them together with adnominal constituents, and show that variation which can be attributed to the gender of the noun is never to be found on the adnominal constituents. This would obviously lead too far here, and for readers familiar with Scandinavian I will exemplify the lack of gender with two nouns that are masculine (or common) and neuter gender, respectively, in all other dialects: *hest* 'horse' and *hús*, 'house'. The lack of gender agreement in the Karleby dialect is otherwise described in Hagfors (1891) and Huldén (1972).[40]

Consider then the following examples where the two nouns co-occur with various adnominal constituents which agree in other Scandinavian dialects.

(97) *Karleby*

a.	ein	grannan	hús	
	a	fine	house	
b.	ein	grannan	hest	
	a	fine	horse	

(98)
a. he grann hús-e
he fine house-DEF
'the fine house'
b. he grann hest-e
the fine horse-DEF
'the fine horse'
c. ti grann hús-a/hest-a
the fine houses-/horses-DEF
'the fine houses/horses'

(99)
a. hedi/hitt hús-e
that/this house-DEF
'that/this house'
b. hedi/hitt hest-e
that/this horse-DEF
'that/this horse'
c. tömti/hiss hús-a/hest-a
those/these houses-/horses-DEF
'those/these houses/horses'

As the examples show there is no gender variation on the indefinite article (97), the preadjectival definite article (98), nor on the proximal and distal demonstratives (99). As the examples moreover indicate the preadjectival definite is not homophonous with the distal demonstrative in the Karleby dialect. However, the morphological resemblance should be obvious, indicating at least an etymological relationship, and I will not pay any special attention to this deviance from other Mainland Scandinavian dialects. A more

[39] The preadjectival definite article is however sensitive to the biological gender of human referents, cf. Huldén (1972:48). This can nevertheless be taken not to be gender agreement in the sense relevant to us.

[40] The lack of gender in the Karleby dialect may historically speaking be a result of its contact situation with Finnish. The dialect is the northernmost of the Swedish dialects on the western coast of Finland, and there has possibly been more widespread bilingualism here than in other Swedish speaking communities in Österbotten. Huldén (1972) however argues that several grammar internal factors, such as the loss of certain inflectional endings, must have contributed in crucial ways to the weakening, and subsequent loss, of the gender system in the dialect.

important point for us is the fact that the preadjecitval article and the demonstratives co-occur with the suffixed definite article in the dialect.

Although the demonstratives and the preadjectival article do not show any gender agreement, they do agree in number. The examples moreover show that the Karleby dialect has a distinction between indefinite and definite adjectives (*grannan* vs. *grann*), but the definite adjectives do not agree in number.

The suffixed definite article also has the same form irrespective of which of the nouns it co-occurs with: with both of the nouns it has the form *-e* in the singular and *-a* in the plural. There are some further points worth noticing about the suffixed article. First of all there are certain nouns where there is no distinction between indefinite and definite forms in the singular. Furthermore, there is never any distinction between the indefinite and the definite in the plural. This is illustrated in (100)–(102) where the endings have been separated from the stems, and where the plural ending is just glossed as PL.

(100)	a.	ein	spad-**a**	(101)	a.	ein	hús	(102)	a.	ein	hest
		a	spade			a	house			a	horse
	b.	hedi	spad-**a**		b.	hedi	hús-**e**		b.	hedi	hest-**e**
		that	spade			that	house-DEF			that	horse-DEF
	c.	spad-**ona**			c.	hús-**a**				c.	hest-**a**
		spades-PL				houses-PL				horses-PL	
	d.	tömti	spad-**ona**		d.	tömti	hús-**a**		d.	tömti	hest-**a**
		those	spades-PL			those	houses-PL			those	horses-PL

For the sake of clarity, let us for a moment gloss over the treatment of the suffixed definite article advocated earlier and treat N and N+DEF as indefinite and definite 'forms' of the noun, respectively. As we see then there is no difference between the indefinite and the definite forms of the noun *spada* 'spade' in the singular: the indefinite article which requires the indefinite form of the nouns *hús* and *hest* (cf. (101a) and (102a)) co-occurs with the form *spada*, and so does the distal demonstrative which co-occurs with the definite forms of the other two nouns. Moreover, the plural forms in the c.-examples can in fact correspond in meaning to both 'spades, houses, horses' as well as to 'the spades, the houses, the horses', and we see that this is indeed the form that the distal demonstrative co-occurs with.[41]

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41 Again, showing that there exist no nouns which have different definite and indefinite would in principle require an extensive listing of the nouns in the dialect, and it is furthermore made difficult by the fact that numerals and the determiners *mang* 'many' and *nogra* 'some' co-occur with the singular indefinite form of count nouns in the dialect. The determiners *mytji* 'much' and *somt* 'certain' (i.e. 'specific *some*') on the other hand co-occur with the plural form of count nouns, and *mytji* otherwise with the singular definite form of mass nouns. This is exemplified in (i).

(i)	a.	tri/mang/nogra	hest/*hesta/*heste	*Karleby*
		three/many/some	horse/horse-PL/horse-DEF	
	b.	mytji/somt	hesta/*hest/*heste	
		much/certain	horse-PL/horse/horse-DEF	
	c.	mytji	öle/*öl	

Consider next possessives. The examples in (103)-(104) show that possessives are invariant in the Karleby dialect: as we would expect there is no gender agreement, and moreover there is no number agreement either.

(103) a. heste mín
horse-DEF my
b. hesta mín
horse-PL my
c. he grann heste mín
the fine horse-DEF my

(104) a. húse mín *Karleby*
house-DEF my
b. húsa mín
house-PL my
c. he grann húse mín
the fine house-DEF my

Accordingly, we may take it that possessives are not specified for the features [gen] and [num]. We are then in a position to account for why the Karleby dialect allows (and in fact requires) prenominal possessives to co-occur with the definite article.

In the case of a possessive preceding N+DEF (i.e. (96b)) the N+DEF moves to D^0 and the possessive has moved to Spec-DP. The resulting configuration is allowed since none of the constituents carry an agreement feature relevant for identifying δ. The functional category δ is nevertheless properly identified by the [deix] feature of the suffixed definite article.

In the case of a possessive preceding the sequence DEF–A–N+DEF the preadjectival article is the identifier of ν and δ: movement of N+DEF is blocked by the adjective, and the preadjectival article which is specified [num] and [deix] is inserted in Spec-DxP from where it moves to Spec-NumP and Spec-DP. The possessive may however also move to Spec-DP: since neither the possessive nor the preadjectival article carry an agreement feature relevant for identifying δ, the UAF is not violated.

Consider next the Lappträsk dialect spoken in southern Finland.

5.4. *The Lappträsk dialect*

In the Lappträsk dialect[42] possessives may not precede N+DEF, but they may precede the sequence DEF–A–N+DEF. This is exemplified in (105).

(105) a. hús-e mett *Lappträsk*
house-DEF my

much beer-DEF/beer

The Karleby dialect is the only Scandinavian dialect to have this system, and again it is likely to be an effect of the contact situation with Finnish where numerals and some determiners require nouns (and adjectives) to be singular.

[42] I am particularly indebted to Nisse Husberg for data from and extensive discussion of the Lappträsk dialect. I also thank Edit Henriksson and Holger Hollmén for sharing their judgments with me. Accents mark vowels as long (not diphthongized).

b. *mett hús-e
my house-DEF
c. te stór hús-e mett
the big house-DEF my
d. mett te stór hús-e
my the big house-DEF
e. *te mett stór hús-e
the my big house-DEF

In this dialect possessives agree in gender and number with the noun, but interestingly the preadjectival article agrees in number only whereas the suffixed definite article agrees in both number and gender. This can be seen from the following examples.

(106)	a.	**men**	**te**	stór	hest-**n**	m.	*Lappträsk*
		my	the	big	horse-DEF		
	b.	**mín**	**te**	stór	stuvu-**n**	f.	
		my	the	big	cottage-DEF		
	c.	**mett**	**te**	stór	hús-**e**	n.	
		my	the	big	house-DEF		
	d.	**mín**	**tom**	stór	hús-**en**/stuvu-**na**/hesta-**n**	pl.	
		my	the	big	houses-/cottages-/horses-DEF		

On the basis of this evidence we may conclude that possessives and the suffixed article are both specified [gen] and [num] whereas the preadjectival article is only specified [num]. The fact that a possessive can precede the sequence DEF–A–N+DEF but not just N+DEF in the Lappträsk dialect can now be accounted for.

In the case of possessive plus N+DEF, both will move to the DP domain, the possessive to Spec-DP and the N+DEF to D^0. The resulting structure will not be allowed since it violates the UAF: both constituents are specified [gen].

However, in cases like the ones in (106) where the possessive immediately precedes the preadjectival article, both constituents may reside in Spec-DP since only one of them, the possessive, is specified [gen].

Before we proceed to disucss a fourth dialect, the Malax dialect, let us consider the interaction between possessives and the proximal demonstrative in the Lappträsk dialect. Unlike the preadjectival article, which has evolved from the distal demonstrative, the proximal demonstrative agrees in gender and number.[43] This is shown in (107).

[43] In Vangsnes (1998b:429) I report that the proximal demonstrative does not agree in gender. However, upon closer examination and consultance with other speakers, this appears to be too hasty a conclusion. Although the speaker first consulted did report judgments indicating that the proximal demonstrative does not agree in gender, he recognizes the agreeing forms as well, and other consultants clearly require the

(107) a. **tessn** hestn m. *Lappträsk*
this horse-DEF
b. **tessån** stuvun f.
this cottage-DEF
c. **tetta** húse n.
this house-DEF
d. **tess** hestan/stuvuna/húsen pl.
these horses-/cottages-/houses-DEF

Unlike the preadjectival article the proximal demonstrative cannot be preceded by a possessive—a possessive can only co-occur with the demonstrative if it is postnominal. This is made evident by the examples in (108) where the demonstrative is bold face and the possessive italicized.

(108) a. **tetta** húse *mett* *Lappträsk*
this house-DEF my
b. **mett* **tetta** húse
my this house-DEF
c. **tetta** (te) stór húse *mett*
this (the) big house-DEF my
d. **mett* **tetta** (te) stór húse
my this the big house-DEF
e. ***tetta** *mett* (te) stór húse
this my the big house-DEF

The fact that the proximal demonstrative and the possessive cannot both be prenominal, follows straigforwardly from the theory: if both were generated in Spec-DP, that would violate the UAF since both carry the feature [gen].[44]

Let us next consider the Malax dialect which we also encountered in section 3.4.

5.5. *The Malax dialect*

In the Malax dialect[45] possessives behave syntactically more or less in the same way as we have seen for the Lappträsk dialect. They may not immediately precede N+DEF, but they may precede the sequence DEF–A–N+DEF. This is shown in (109).

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proximal demonstrative to agree. No speaker reports (gender) agreeing forms of the preadjectival article, however.

[44] A somewhat preculiar fact, brought out by the example in (108c), is that that the proximal demonstrative may optionally co-occur with the preadjectival article. The theory predicts that only one of them is needed to identify δ, and I have no obvious explanation for why they may be generated simultaneously. Notice, however that the theory *allows* both of them to occupy Spec-DP since only the proximal demonstrative is specified for the feature [gen].

[45] Again, for judgments and information about the Malax dialect I am indebted to Åsa Mitts.

(109) a. mett hús *Malax*
my house
b. *mett húse
my house-DEF
c. húse mett
house-DEF my
d. mett ide stórt húse
my the big house-DEF
e. ide stórt húse mett
the big house-DEF my

In this dialect possessives and the suffixed definite article agree in gender and number, and the ungrammaticality of examples like (109b) can then be accounted for in the same way as for corresponding cases in Norwegian and the Lappträsk dialect. The agreement of the two elements (in bold face) is illustrated in (110).

(110) a. hús-**e** **mett** n. *Malax*
house-DEF my
b. hest-**i** **men** m.
horse-DEF my
c. bokj-**e** **mín** f.
book-DEF my
d. hús-**e**/hest-**a**/bÕkr-**e** **mín** pl.
houses-/horses-/books-DEF my

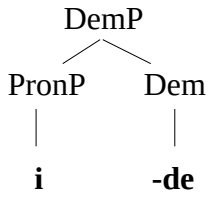
As we saw in section 3.4 the preadjectival article in the Malax dialect is of the type which consists of a pronominal and an adverbial part, and as we remember this element does show variation according to the number and gender of the noun. The relevant examples are repeated here.

(75) a. *(ande) grann hesti m. *Malax*
the fine horse-DEF
b. *(onde) grann bókje f.
the fine book-DEF
c. *(ide) grannt húse n.
the fine house-DEF
d. *(teide) grann hesta/bÕkre/húse pl.
the fine horses-/books-/houses-DEF

The fact that the possessive may precede the string DEF-A-N+DEF as in (109d) then appears to be a blatant problem for the account advocated in so far as this is only possible if either the possessive or the (preadjectival) article, or both, lack gender agreement.

I believe a solution to the problem can be sought in the complex composition of the preadjectival article. Let us conjecture that the element is not morphologically complex, but rather *syntactically* complex, more specifically in such a way that the pronominal part in fact is a phrasal element in the specifier position of a projection headed by the adverbial element. In other words, such a conjecture implies that the preadjectival article syncronically speaking has a structure reflecting its historical origin. The preadjectival article *ide* in (75c) would according to this line of reasoning have the structure in (111)—the whole phrase as such is labelled DemP since we are assuming that the lexical preadjectival articles in Scandinavian are of the same class as demonstratives.

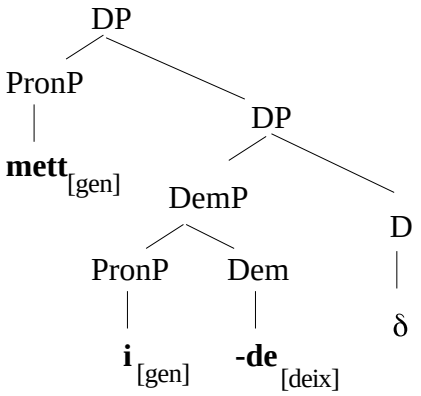
(111)



The feature [gen] of course resides in the pronominal part of the article, and the feature [deix] we may take to be present on the adverbial part, i.e. on the head of DemP. If we now take it that identification only holds if the constituent which contains the identifying element c-commands the functional category which is to be identified, δ cannot be identified by the [gen] feature of the preadjectival article in the Malax dialect since the PronP, which contains the feature [gen], will not c-command δ (after the article has moved from its base generated position in Spec-DxP to Spec-DP). Identification is instead accomplished by the feature [deix] which percolates from the head to the maximal level in DemP.

In turn this means that a possessive also may move to Spec-DP even if there already is a preadjectival article there—the resulting structure is not ruled out by the UAF since only the possessive carries a relevant agreement feature which c-commands δ. As for the noun phrase in (109d), *mett ide stort húse*, the part of the structure in question will be as represented in (112).

(112)



If this analysis is right, it predicts that possessives should be allowed to precede not only the preadjectival article, but demonstratives in general. As shown in section 3.4 the preadjectival article is homophonous with the distal demonstrative, and moreover that the proximal demonstrative has complex composition comparable with the one found in the distal demonstrative: the distality/proximality distinction is determined by the form of the adverbial part which is *-de* in the case of the distal demonstratives and *-je* in the case of the proximal ones. And the prediction holds: unlike what we saw in the case of the Lappträsk dialect, a possessive may precede the proximal demonstrative. The crucial examples are given in (113a) and (113c).

(113) a. men anje hesti *Malax*
my this horse-DEF
b. anje hesti men
this horse-DEF my
c. men anje grann hesti
my this fine horse-DEF
d. anje grann hesti men
this fine horse-DEF my

I thus conclude that the analysis proposed for the composition of demonstratives in the Malax dialect (and presumably also other dialects in Österbotten) is essentially correct.

However, the question arises as to how the pronominal part of the demonstratives checks it form. In other words, why does it vary according to the gender of the noun?

The answer I will provide is that the form of the pronominal part is determined anaphorically in the same way as the form of pronouns, say personal pronouns, is determined in the dialect, i.e. essentially following binding principle B (cf. Chomsky 1981): the pronominal part picks up the gender features of the noun in a non-local relation. (That is, similarly to the way the embedded possessive in *His mother loves John* may be coreferent with *John*.)

5.6. *Conclusion*

The conclusion we may draw after having gone through the four Swedish dialects which allow possessives to precede definite articles, is that in all cases absence of gender agreement is involved, either on the possessives themselves, such as in the Skellefteå dialect, or on the preadjectival definite article such as in the Lappträsk and Malax dialect (with certain proviso in the latter case), or on all constituents such as in the Karleby dialect where the category gender is absent. We may then revise Generalization I given in the introduction (section 1) as follows.

II In Scandinavian a possessive can immediately precede a definite article only if just one of the two, or none of them, carries the feature [gen] in a structural position which c-commands δ.

The theoretical interpretation of this generalization is that it follows from a principle which says that only one instantiation of an agreement feature can be found in the domain of the functional category which the feature may serve to identify: the 'Uniqueness restriction on Agreement Features' (UAF). In our case the agreement feature in question is [gen] and the functional category δ whose presence entails that the noun phrase is to be interpreted as specific.

6. THE INDIRECT ROLE OF MORPHOLOGY

6.1. *Possessive constructions in the Gotland dialect*

Above we have discussed four dialects in which there is a clearcut relation between the absence of gender agreement and the possibility for possessives to precede definite articles. Let us now consider a fifth Swedish dialect where the relation is less perspicuous: the dialect spoken on the island of Gotland in the Baltic Sea.[46]

Possessives are always prenominal in the Gotland dialect (apart from when they occur with kinship terms, in which case they may be postnominal), and the following examples show that they can be followed by definite articles, both the suffixed one and the preadjectival one.

(114) a. **Mitt hårä** gar mair u mair av. *Gotland*
my hair-DEF goes more and more off
'I steadily lose my hair.'
b. ... förr n ja kummar ti **min skogän**.
... before than I come to my forest-DEF

[46] Thanks to Gunnar Nyström for making me aware of the relevance of the Gotland dialect. The data presented here are excerpted from Gustavson (1972-1986) which is a dictionary for the dialect spoken in the parish Lau. I have not investigated to what extent the syntactic facts pertaining to this particular dialect are representative of Gotland as a whole, but for the present purposes I am assuming that they are.

'... before I come to my forest.'

c. ... um **mitt de säist brevä**
... about my the last letter-DEF

d. **Däiras de yngst päiku**
their the youngest girl-DEF

e. me **min läil tåskbåtn**.
with my little cod-boat-DEF

f. ... i **oä gam stäuu** ...
... in our old building-DEF

In fact, it is my impression, based on studies of the material in Gustavson (1972-1986), that (prenominal) possessives in general are followed by definite articles in the Gotland dialect.

Now, as the following paradigm shows, possessives have distinct forms in all three genders in the dialect, and so apparently does the suffixed definite article as well. In the paradigm I have given examples with feminine nouns of both 'strong' and 'weak'[47] declensions, and moreover the indefinite forms of the nouns are given in parentheses.

(115)	a.	**min**	skog-**än**	m.	(indefinite: *skog*)	*Gotland*
		my	forest-DEF			
	b.	**mäin**	dotr-**i**	f., strong	(indefinite: *dåuter*)	
		my	daughter-DEF			
	c.	**mäin**	kåll-**u**	f., weak	(indefinite: *kollå*)	
		my	dress-DEF			
	d.	**mitt**	hår-**ä**	n.	(indefinite: *hår*)	
		my	hair-DEF			
	e.	**mäin**	tankar	pl.	(indefinite: *tankar* NB!)	
		my	thoughts(-DEF)			

Notice that there is no distinction between indefinite and definite in the plural of the noun *tankä* 'thought', a fact we will return to shortly.

The fact that both the possessive and the suffixed definite article show an alternation which may be ascribed to the gender of the noun, is a problem for the revised Generalization II which we established on the basis of the four northern and eastern Swedish dialects.

One possible way of accounting for this, suggested to me by Trond Trosterud (p.c.), is to say that the varying form of the suffixed definite article does not really reflect *gender*

[47] This terminology, originally coined by Jakob Grimm, is well-established in the Germanic grammatical tradition: in Old Scandinavian, and on the most part also in Modern Scandinavian (except where there has been apocope), nouns of the 'strong' declension end in consonants whereas those of the 'weak' declension end in vowels, and importantly, there are considerable differences between the classes with respect to the nominal inflection.

agreement, but rather the declensional membership of the noun. However, as far as I know there are no cases where the form of the suffixed article is the same on two nouns of different genders, and moreover, taking the variation to be determined by declension classes, would raise the question why that would not be the case in other Scandinavian dialects too, notably in dialects which do not allow prenominal possessives to be followed by a noun carrying the suffixed article.

Still, we may very well imagine that the variation on the suffixed article in the Gotland dialect has been (re)analyzed as determined by declensional class, rather than determined by gender, and that such (re)analysis, for some reason, has *not* taken place in other Scandinavian dialects. This appears to be a valid line of reasoning given that the suffixed article is inflectional in the Gotland dialect just like in Swedish in general—if the suffixed article were a syntactic clitic it would not be likely to *agree* with the declension class of the noun (as long as other adnominal constituents agree in *gender*).

And the prerequisite for saying that it is inflectional holds. In section 2.5 we argued that if demonstratives, the preadjectival article included, co-occur with the suffixed definite, then the latter must necessarily be inflectional, and in the Gotland dialect the suffixed article does co-occur with the preadjectival article as well as with demonstratives in general in. The co-occurrence of the preadjectival and suffixed articles can be witnessed in the following examples.

(116)	a.	**dän**	väit	snåiän	m.	*Gotland*
		the	white	snow-DEF		
	b.	**de**	bräun	märi	f.	
		the	brown	mare-DEF		
	c.	**de**	säist	brevä	n.	
		the	last	letter-DEF		
	d.	**de**	sma	batar	pl.	
		the	small	boats(-DEF)		

Interestingly, these examples furthermore show that the agreement on the preadjectival article is highly impoverished in the Gotland dialect compared to what is the case in Scandinavian in general. As we see, there is a distinct form in masculine singular only—the feminine and neuter forms are homophonous with the plural one.

Moreover, if we compare the preadjectival and the suffixed article in the singular, we may notice that the masculine form ends in *-n* in both cases whereas the ending of the feminine and neuter forms are vocalic. One possibility could then be to say that the preadjectival and the suffixed article show the same agreement pattern: masculine is indicated by the ending *-n*, and there is no distinction between feminine and neuter—they both have a vocalic ending, and the value of the vowel is determined by the declension

class of the noun.[48] The conclusion is thus that both articles show a relatively poor agreement pattern.

As for the plural form of the suffixed definite article there is also relatively poor inflection. For one thing, in the major declension classes there is no distinction between indefinite and definite forms (cf. Gustavson op.cit: 1832-35 and (115e) above—the noun in (116d) does not have a distinct definite form either): nouns of the so-called 'consonant stem' declensions do have separate definite plural forms, but these nouns make up a relatively small part of the vocabulary. Moreover, the ending *-ar* appears to have been generalized to almost all declension classes irrespective of gender.

In sum then, we may conclude that the nominal inflection system, and in particular gender agreement, in the Gotland dialect is quite poor compared to other dialects.

A possible way of exploiting this conclusion in order to explain why possessives may precede definite articles is then to say that the gender agreement on the articles is not *rich enough* for these elements to be specified for the feature [gen]. On that account, having both a possessive and a definite article in the DP domain would not violate the UAF in the Gotland dialect, and Generalization II is saved.

With this approach to the role that morphological "richness" plays, let us consider a problem which in some sense represents the opposite of what we have seen in the Gotland dialect, more specifically the fact that in the majority of Scandinavian dialects there are possessives which do not agree in gender but which nevertheless may not precede definite articles.

6.2. *Non-agreeing possessives in other Scandinavian dialects*

The following table gives the free and bound forms, respectively, of possessives in the Nynorsk variety of Norwegian—with reference to Comsky's (1981) Binding Theory, by 'free' possessives we understand possessives that conform to Principle B (i.e. which are not bound in a local domain) and by 'bound' possessives we understand possessives that conform to Principle A (i.e. which *are* bound in a local domain by a c-commanding antecedent).

	Free				Bound (Reflexive)			
	SG			PL	SG			PL
	M	F	N		M	F	N	
1 SG	*min*	*mi*	*mitt*	*mine*	*min*	*mi*	*mitt*	*mine*
2 SG	*din*	*di*	*ditt*	*dine*	*din*	*di*	*ditt*	*dine*

[48] Further corroborating evidence for this view comes from the agreement pattern of the indefinite article: the masculine form is either *än* or *n* whereas the feminine form is *a*, and although there exists a distinct form *ätt* in the neuter, *a* is also a possible neuter form. Consider the following examples.

(i)	a.	än akar	n käpp	m.	*Gotland*
		a field	a stick		
	b.	a nat		f.	
		a night			
	c.	a däik	ätt älländ	n.	
		a ditch	a misery		

3 SG	*hans/hennar/(dess)*[49]			*sin*	*si*	*sitt*	*sine*
1 PL	*vår*	*vårt*	*våre*	*vår*		*vårt*	*våre*
2 PL	*dykkar*			*dykkar*			
3 PL	*deira*			*sin*	*si*	*sitt*	*sine*

Table 7: Possessives in Norwegian

As this paradigm makes evident there are possessives which do not show gender and number agreement, notably the 3rd person free possessives (both singular and plural) and the 2nd person plural possessives (both free and bound). Given the UAF we would expect that these non-agreeing possessives should be allowed to precede definite articles.

That is not the case, however. The examples in (117) illustrate that the non-agreeing possessive cannot precede a noun carrying the suffixed definite article, and the example in (118b) moreover shows that a non-agreeing possessive cannot precede the preadjectival article either.

(117) a. hans hest/*hesten *Norwegian*
his horse/horse-DEF
b. hennar hest/*hesten
her horse/horse-DEF
c. dykkar hest/*hesten
your-PL horse/horse-DEF
d. deira hest/*hesten
their horse/horse-DEF

(118) a. hans store hest *Norwegian*
his big horse
b. *hans den store hesten
his the big horse-DEF
c. den store hesten hans
the big horse-DEF his

These facts appear to seriously undermine the theory developed so far.

However, the question is how the role of morphology for syntax is to be understood. Let us consider two possibilities:

Alt. I: *Morphology plays a direct role in syntax*. Whenever a constituent enters into a syntactic configuration, its visibly present morphological features must be taken into account.

Alt. II: *Morphology plays an indirect role in syntax*. The overall richness of morphology determines the syntactically relevant properties of constituent classes by

[49] The choice of form in the free 3. person singular possessive is determined by the gender of the possessor, and is thus not gender agreement in the sense relevant to us.

serving as one of several factors relevant for parameter settings and development of generalized strategies.

Given alternative I, the facts about the non-agreeing possessives which may not precede definite articles,cannot be understood under the theory developed here.

If, on the other hand, we base ourselves on alternative II, we are better equipped for developing an account. If we then return to the paradigm in table 7, we see that there are more agreeing possessives than non-agreeing ones. If the *class* 'possessives' then must be defined as either agreeing or not, we may take it that for a child acquiring Norwegian (or a similar dialect) there is considerable evidence for concluding that the class is agreeing. Accordingly, *all* possessives are marked with the feature [gen] although some of the members of the class do not show overt reflexes of it.

Actually, in order to grasp the discrepancy between the fact that the class behaves syntactically, but not morphologically, in a uniform way, we may hypothesize that all members are specified e.g. [+G] whereas only a subset is specified [gen], and that it is the class feature [+G] which is the syntactically relevant one.

If we maintain this line of reasoning and return to the Gotland dialect, we would say that the poor agreement and inflection patterns on the suffixed and preadjectival articles suggest that these classes are not specified [+G]: their members carry the feature [gen], but the gender oppositions are not many enough for the classes to be [+G].

In turn, this means that the only way we can understand the fact that the Skellefteå dialect appears to have two sets of possessives, one agreeing and one non-agreeing, is to say that we are witnessing two competing systems (cf. section 5.2 above).

At this point we may return to the problems posed by the Faroese article system.

6.3. *The Faroese Problem*

6.3.1 *Adjectival inflection versus the preadjectival definite article*

As we recall from section 3.2 Faroese definite adjectives agree in gender, number and case with the noun, quite on a par with Icelandic. Nevertheless, a preadjectival definite article is generally required in Faroese, whereas it is not in Icelandic. The paradigm for definite adjectives in Faroese is repeated here.

	SG			PL
	M	F	N	M/F/N
NOM	*svarti*	*svarta*	*svarta*	*svørtu*
ACC	*svarta*	*svørtu*	*svarta*	*svørtu*
DAT	*svarta*	*svørtu*	*svarta*	*svørtu*

Table 5: Definite inflection of the adjective *svartur* 'black in Faroese

However, this paradigm first and foremost reflects the situation in written Faroese. As pointed out by Weyhe (1996), in most dialects the distinction between the endings *-i* and *-u* is lost (and is now pronounced either [e] or [u] depending on the dialect), and that then reduces the number of oppositions within the paradigm considerably. In fact, given that there are only two possible forms of definite adjectives in most Faroese dialects, the situation is comparable to what we find in southwestern Norwegian dialects which also have an opposition between two forms, but which nevertheless require the presence of the preadjectival definite article (cf. section 3.2).

We could then argue that the morphological evidence for specifying definite adjectives [+G] is too poor in Faroese, and accordingly that a strategy where insertion of a preajectival article instead has been developed.

One thing which may have supported the development of using a preadjectival article as the generalized strategy for meeting the identification requirement on ν and δ, is the fact that the Faroese population is virtually bilingual, speaking a Faroese variety of Danish alongside Faroese. This is certainly the case in the contemprary Faroese society, and it has probably been so for more than a century, maybe even longer, and although Danish can be said to be acquired as a second language, the impact Danish has had on the Faroese language cannot be considered insignificant. Given the clear contact situation, it seems quite plausible that the fact that Danish uses a preadjectival article may have influenced the choice of this as the generalized strategy in Faroese.

In other words, I conjecture that the poor definite adjectival inflection plus the Danish influence have conspired in "driving" Faroese to develop the use of a preadjectival article as the generalized strategy for identifying the functional category δ. Importantly, and interestingly, however, the Faroese preadjectival article is not in complementary distribution with the suffixed one as in Danish: the two articles co-occur as do demonstratives and the suffixed article in the dialect (cf. sections 1 and 2.5). Hence, only the strategy as such has been taken over from Danish, not the syntactic behavior of the preadjectival article.[50]

Returning to the problem with numerals agreeing in gender, we now have a solution as to why they are not suitable identifiers for δ. As noted towards the end of section 4 Icelandic numerals from 1 to 4 agree in gender and case with the noun, and in Faroese numerals from 1 to 3 agree similarly. However, these numerals of course make up a tiny minority of the class 'numerals' considered as a whole, and the fact that all other numerals are invariant with respect to gender (and case), suggests that there is very poor evidence for specifying the class [+G]. Accordingly, raising of a numeral from Num^0 to D^0 does not

[50] It is also interesting to notice that upon collecting material from Faroese newspapers I to quite a surprisingly frequent extent found examples of definite noun phrases with adjectives but no preadjectival article even in cases where this could not be attributed to the type of the adjective or special contextual licensing. One explanation for this may be that Icelandic functions as a model for modern educated scribes, another that raising of the adjective in fact exists as a viable option alongside insertion of a preadjectival article.

meet the identification requirement on δ, even if the numeral actually shows overt agreement.

6.3.2. *The indefinite article and nominal inflection*

A remaining question concerning the Faroese article system is the fact that there is a requirement for an indefinite article in singular indefinite noun phrases in Faroese just as there is in Mainland Scandinavian.

In section 3.1 I argued that the reason why Icelandic does not have an indefinite article is that the case endings on the noun are specified for number and that the noun therefore is a suitable identifier for ν. In Mainland Scandinavian there are no case endings, and the noun is therefore not a suitable identifier.

The problem Faroese poses in this respect, is that Faroese too has a fairly rich system of morphological case displayed in the nominal inflection, quite on a par with Icelandic, and in many cases the case ending arguably contains information about the number of the noun. Holmberg (1994) attempts to capture the difference between the two dialects by arguing that a case-related parameter is 'strong' in Icelandic but 'weak' in Faroese. However, this finds poor support in the actual case-morphological differences between the dialects (although the loss of genitive in Faroese admittedly involved a 'weakening' of the case system).

On the other hand, there are important instances of homonymy in Faroese which are not found in Icelandic, and which do not pertain to case. (There is otherwise considerable homonymy within the case paradims in both Faroese and Icelandic). On the one hand they concern homonymy between singular and plural forms, and on the other homonymy between indefinite and definite forms.

The former cases are pointed out by Weyhe (1996:81) and are again an effect of the historical phonological merge of *-i-* and *-u-* (cf. section 6.3.1), this time in non-final position. In a majority of Faroese dialects, the endings *-ur* and *-ir* are pronounced the same, and in the case of masculine nouns that historically displayed the singular nominative ending *-ur* and the nominative plural ending *-ir* (as they still do in the written standard), there is thus no distinction between nominative singular and plural. A case in point would be the noun *gestur* 'guest': in the written standard the plural form of this noun is *gestir*, but in the dialects in question both the singular and the plural (nominative) forms are pronounced /·gestê»/.

The other cases of homonymy which are found in Faroese but not in Icelandic concern the lack of distinction between definite and indefinite forms of certain neuter nouns, notably the so-called *ija-* and *an*-stems (the 'vocalic' stems). These nouns end in a vowel, and although the definite forms are marked in writing by adding *-›*, there is no effect in pronounciation.[51] Consider the example pairs in (119) which give the written forms of a

[51] Unlike what is the case in Icelandic, the 'grapheme' <›> does not correspond to any 'phoneme' in Faroese—it is either not pronounced (in final position) or else corresponds to a consonantal position which surfaces as either [g] or [v] depending on the phonological context.

nominative (and accusative[52]) *ija-*, *an-*, and *a*-stem, respectively—the latter ends in a consonant in the indefinite, and hence does have an overt correlate of the suffixed definite article (the *-i-* in *i›*).

(119) a. dømi – dømi› b. eyga – eyga› c. hús – húsi› *Far.*

example example-DEF eye eye-DEF house house-DEF

The cognate Icelandic examples are essentially the same (the vowels and diphtongs are written and pronounced slightly different), but in that dialect all three types of neuter nouns have an audible distinction between definite and indefinite forms. On the other hand, the Faroese situation is comparable with what we find in Norwegian, cf. section 2.5 and footnote 16. As argued there, a prerequisite for developing homophonous definite and indefinite forms is that the suffixed article be inflectional and not a syntactic clitic, and as we remember Faroese and Icelandic differ in this respect: in Faroese the suffixed article is arguably inflectional whereas it is a syntactic clitic in Icelandic. This was arrived at on independent theoretical grounds: demonstratives can only co-occur with the suffixed article if the latter is inflectional.[53]

In addition there are cases noted by Weyhe (1996:79) where there is homonymy across both the singular/plural and the definite/indefinite distinction as well as in case. In some dialects (written) forms like *bátin* 'the boat (ACC, SG, DEF)' and *bátum* 'boats (DAT, PL, INDEF)' are homophonous (the final *-m* of inflectional endings is always pronounced [n]). Although one would have to be somewhat imaginative in order to find a context where the homonymy would lead to misundertanding, the phenomenon is worth noticing: something similar is never found in Icelandic.

The homonymy between forms witnessed in Faroese is not pervasive. Moreover, one could point out that there is homonymy between singular and plural forms also in certain Icelandic nouns, more specifically in a large group of neuter nouns. Consider the examples in (120) where the singular and plural indefinite forms of four different Icelandic neuter nominative nouns are given.

(120) a. barn – börn *Icelandic*
child children
b. auga – augu
eye eyes

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[52] There is never a distinction between nominative and accusative in neuter nouns, neither in Faroese nor in Icelandic, a fact which appears to be of a common Indo-European source, reflecting an old ergative-absolutive system in that the class of neuter nouns originally consisted of inanimates.

[53] There is also (possible) morphological evidence in favor of treating the suffixed definite article as non-agglutinative in Faroese: the final *-r* of plural indefinite forms is not pronounced after the definite article has been 'added'. Hence, a form like *gestir-nir* 'the guests' (indefinite *gestir*) is pronounced /gestinir/. This parallels the situation in Norwegian where the indefinite and definite plural forms of the cognate noun is *gjester* and *gjestene*, respectively.

c.	or›	–	or›
	word		words
d.	dæmi	–	dæmi
	example		examples

Now, in some of the corresponding Faroese noun classes, notably in the vocalic classes (i.e. the ones in (120b) and (120d), this dialect has actually developed a distinction between singular and plural (indefinite) not present in older stages of the dialect. The plural indefinite forms of the Faroese nouns are given in (121) and the corresponding Icelandic forms in (122), and the particularly interesting case in the one in (121a).

(121) *Faroese*

a. dømir
examples

b. eygur
eyes

c. hús
houses

(122) *Icelandic*

a. dæmi
examples

b. augu
eyes

c. hús
houses

It should be noted that although the *-r* (in (121a) and (121b) is optional in writing, it is always pronounced in spoken Faroese (cf. Petersen et.al 1998:47). The "new" plural marker is never present on neuter nouns of the non-vocalic class (the *a*-stems), cf. the c.-examples.

Despite these potential objections, I believe that we can reason about the existence of the indefinite article in Faroese and its non-existence in Icelandic as follows: (i) there is a certain degree of homonymy in the Faroese case system as there is in Icelandic, (ii) there is moreover a more widespread homonymy between singular and plural forms in Faroese (both masculine and neuter nouns) than in Icelandic (only neuter nouns), and (iii) importantly, Faroese exhibits cases where there is no distinction between definite and indefinite forms of the noun whereas Icelandic never does.

All these factors have in sum made Faroese develop the insertion of an indefinite article, rather than raising of the noun, as the generalized strategy of meeting the identification requirement on ν: the article is needed to avoid ambiguity between singular and plural forms as well as indefinite and definite. Keeping this consistent with the reasoning above in section 6.2 concerning the feature [gen], we would argue that the singular endings of Faroese nouns (i.e. the case endings) during language acquisition are not classified as [+NUM], i.e. the syntactically relevant correlate of the [num] feature.

Again we may attribute some relevance to the contact situation with Danish. Danish has, like the other Mainland Scandinavian dialects, an indefinite article, and this may have been a contributing factor for the development of the indefinite article in Faroese. In this respect we may also note that although the "new" neuter plural ending in Faroese can be argued to have been modelled on the plural of masculine and feminine nouns, the overall system of neuter plural is strikingly similar to Danish (and different from Icelandic), a fact

suggestive of the Danish influence on Faroese. This is made evident by the following paradigms from Faroese, Danish, and Icelandic which shows the plural indefinite and definite forms of a noun of the vocalic (‘apple’) and consonantal (‘child’) neuter stems, respectively.[54]

(123)	a.	eplir – eplini apples/-DEF	b.	børn – børnini children/-DEF	*Faroese*
(124)	a.	æbler – æblerne apples/-DEF	b.	børn – børnene children/-DEF	*Danish*
(125)	a.	epli – eplin apples/-DEF	b.	börn – börnin children/-DEF	*Icelandic*

6.3.3. *The Faroese Problem solved?*

In conclusion, we see that there are reasons to suspect that the development of both the preadjectival definite article and the indefinite article in Faroese has been triggered by a combination of sociolinguistic and grammatical factors, the latter pertaining to certain developments within the morphological and phonological systems. In fact, perhaps there is a connection between the two phenomena in such a way that both at a certain level of abstraction are varieties of the same generalized strategy, roughly something we could label ‘use lexical articles for identification’. The present theory offers no suggestions as to why that would be the case, however, and I will leave it as an unanswered question whether that would have been desirable or not.

The situation in the southwestern Norwegian dialects is of course but a faint mirror image of the Faroese situation. As we recall from section 3.2 in these dialects there is a two-way gender/number opposition within the paradigm of definite adjectives. The morphological evidence for classifying the adjectives as [+G] is however scarce, and the fact that neighbouring dialects have developed insertion of the preadjectival article as a generalized strategy has probably contributed in making the southwestern dialects do so too.[55]

7. CONCLUDING REMARKS

[54] An additional extra-grammatical factor which may have contributed to the development of the Faroese indefinite article is the fact the phonetic realization of morphological endings vary extensively across Faroese dialects (see Hagström 1967, Weyhe 1996). The introduction of an indefinite article arguably facilitated the communication across dialects. It is of course questionable to what extent this is a valid argument, but in this respect it might be relevant to note that there are relatively little dialectal variation in Iceland, whereas there is extensive dialectal variation in the Faroe Islands.

[55] Likewise, the fact that definite adjectives occurring with a [+male, +human] noun have a distinct form in certain varieties of Swedish (cf. footnote 26) is for obvious reasons unproblematic for the theory.

In Chomsky (1995) the crucial trigger for syntactic movement involves the notion 'checking'. Roughly put, Checking Theory claims that functional categories are equipped with uninterpretable features which must be deleted before the level of Logical Form ('LF'), i.e. the level which constitutes the link between linguistic objects and interpretation, and the deletion is achieved through the attraction of a constituent that carries a correlating morphological feature.

Whether or not the attraction is observable or not in overt syntax in a given language is captured by the distinction between strong and weak features. If the attracting feature in a functional category is strong, movement and subsequent deletion must apply before the derivation feeds the interface level with the articulatory-perceptual system, i.e. Phonetic Form ('PF'), and the movement is then observable in overt syntax. If, on the other hand, the attracting feature is weak the movement is delayed until after the point in the derivation where the PF-level is fed, and in that case the movement is not observable.

Whether or not the attracting features of functional categories are strong or weak differs across languages. However, the distinction between strong and weak features need not correlate with an observable difference between visible morphology and no morphology, i.e. so that actual morphology implies that the functional feature is strong and no morphology that it is weak. Such a correlation between the inflection and strong/weak distinction arguably constituted the original basis for developing Checking Theory, but that was given up because of evidence from languages where there is overt movement but nevertheless absence of the kind of overt morphology expected to be correlated with the movement in question. And vice versa there exists evidence for lack of movement in languages which exhibit morphology expected to yield overt movement.

The present investigation indicates that the view of morphology within Minimalism is essentially right, i.e. that there is no direct relation between overt movements and/or merging of elements to functional categories and presence of overt morphology. In other words, it strengthens the view that the strong/weak distinction implied by Checking Theory is not to be correlated with richness of morphology.

However, in terms of investigating cross-linguistic syntactic differences Checking Theory then offers nothing more than a descriptive device with no explanatory force—the task of the linguist is merely to classify the strength of the functional features in languages according to whether or not the correlating movement is found, surely a highly trivial matter.

In that respect the present theory, call it 'Identification Theory', offers an alternative which better enables us to evaluate what role actual morphology plays in syntax. The notion of 'identification' bears a clear resemblance to the notion of 'checking', but unlike the latter, Identification Theory does not assume a one-to-one relationship between a given functional category and a particular morphological feature. Rather it states that for each functional category there may be several morphological features that are relevant, and these features can be found on several constituents present in a numeration.

In that respect we can develop a typology of features based on which functional category they are relevant for, and it appears well-founded to postulate the existence of a principle which defines preferred identifiers based on their feature composition.

There is a notion of attraction in Identification Theory just as in Checking Theory, but this is seen as a requirement that functional categories be, in some sense, visible. Since they are assumed to be abstract, something "concrete" must show their existence, and that is achieved through the merger of some constituent in their domain, i.e. the projection they head. In turn, the requirement that the functional categories be visible is founded in semantics—the functional categories have semantic imports in that their presence in the phrase structure entails certain semantic properties for the phrase structural object. Arguably, this underlying semantic principle with respect to the organization of syntax is presumably encoded in Universal Grammar.

The conception of functional categories offered by Identification Theory obviates the concept of strong versus weak features—the identification requirement is *total* and must be met in overt syntax.

Crucially however, given the rich typology of features, there exists a variety of ways in which identification may obtain, and in the latter respect, the distinction between lexical features and agreement features plays an important role since it allows us to consider the role played by agreement separately from other factors involved in identification.

The present study has showed how the identification requirement is met within noun phrases by looking at a variety of cross-dialectal differences in Scandinavian, and our findings strongly suggest that agreement features play an important role in syntax, and not a merely accidental one. However, much of the debate on Checking Theory has been centred around issues concerning the clause level, and it would therefore be desirable to investigate to what extent a theory involving 'identification' could successfully replace the notion of 'checking' also in that domain. A contribution in that respect can be found in Vangsnes (1999b) where issues concerning expletive constructions are seen in the light of the present theory, and where it is argued that the Extended Projection Principle can be reinterpreted as an identification requirement on a clausal functional category (AgrS), somewhat along the lines of an existing proposal by Alexiadou and Anagnastopoulou (1998) who argue that the EPP can be met in various ways, and that the strategies (in present terms) are parametrized across languages. The parameterization in turn appears to have a strong foundation in morphology.

A broader evaluation of the adequacy of Identification Theory awaits further studies. So do some of the issues raised in the present investigation, notably the notion of generalized strategy which appears to request a more accurate understanding of the way in which both grammar-internal and grammar-external factors contribute in the organization of particular grammars. Still, it seems that we have achieved some new insights regarding the structure of the Scandinavian noun phrase which should prove valuable regardless of what the faith of the overall theoretical approach may be.

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