The Internal Structure of Noun Phrases in the Scandinavian Languages

A Comparative Study

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Acknowledgements

Six years ago, I asked my supervisor, Christer Platzack, if he could think of a subject within generative grammar, which would be suitable for a paper that should be done in five weeks. He suggested that I write about the lack of adjectival agreement in certain generic constructions in Swedish. From the beginning it became clear that the structure of the noun phrase could have something to do with the matter, so I started to study noun phrase structure.

The five weeks have long passed. All the time Christer has been guiding and encouraging me. I thank him for all his comments, suggestions and criticism over these years. Christer has always been a good listener and a careful reviewer, who has always had time to discuss noun phrases.

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This summer has not at all been an as I expected. I have often missed Ribban, Svarttjärn and other places where I like to go. While I have been occupied with the dissertation, my friends and family, not least my parents, have assisted me in all imaginable ways. Many thanks!

Malmö, August 1993

Lars-Olof Delsing

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CHAPTER 1
INTRODUCTION

This book is concerned with the internal structure of the noun phrase in the Scandinavian languages. The work is comparative, and tries to present and discuss data from all the Scandinavian languages including some of the dialects. The analysis that I elaborate in this work is formulated within the principles-and-parameters-based framework.

The noun phrase has not been investigated to any great extent in generative literature until quite recently (one exception for Scandinavian is Teleman 1969). Earlier work concentrated on nominalisation, where there are genitival attributes and adjectives that seem to be parallel to arguments and adverbs of the clause (e.g. Chomsky 1970). Other parts of the noun phrase have not been studied in any detail within the theory until the middle of the 80's. The new interest in noun phrase structure is mostly due to the DP-analysis, which assumes determiners to be heads in the noun phrase (cf. Szabolcsi 1983, Hellan 1986 and Abney 1987). This analysis has quickly become accepted, and I will adopt it here. My work will mostly be concerned with the noun phrase in its own right, concentrating more on constructions that are central to the noun phrase than marginal ones that show similarities with the clause. The work basically tries to answer the following question:

> How can the noun phrase structure of the Scandinavian languages be encoded within a principles-and-parameters-based theory of grammar?

The answer to the above question must be stated in such a way that it is compatible with the variation found in the Scandinavian languages--and in principle with the variation in all other natural languages. It must also be stated in a way that the analyses of the specific constructions are compatible with each other.

The aim of this study is twofold. It involves both empirical and theoretical tasks. The empirical part of the work is, of course, the basis for the theoretical discussion. I will present both old and new data in this work. The data of the different languages and the specific constructions are often found in many different sources, and here I have tried to give a more systematic overview. Much of the data are only presented in works written in some of the Scandinavian languages and have not been available for a wider international audience before. It is my hope that the empirical part of my study may also be of interest for researchers that do not share the theoretical assumptions of the particular framework that I am using.

The theoretical part of the work falls into two parts. The study of noun phrase structure within the principles-and-parameters-based theory is quite a new field of research. Therefore, I first elaborate a basic structure of the noun phrase (chapters 2 and 3), and second, I discuss in detail some more specific constructions occurring in the noun phrase (chapters 4 to 6). I frequently make comparison to languages other than Scandinavian, and I believe that my theoretical discussions may be generally relevant for studies on the noun phrase. It is my hope that the study may also be of interest for researchers that do not share my particular interest in the Scandinavian languages.

In this introductory chapter, I will first briefly present the different Scandinavian languages, including some of the dialects (section 1.1), and some basic properties of the Scandinavian noun phrase (section 1.2). In section 1.3, I give a brief introduction to the principles-and-parameters-based theory, and in section 1.4, I present the organisation of this work.

1.1. The Scandinavian Languages

There are five national languages that belong to the Scandinavian (or North Germanic) group. These languages are Danish, Swedish, Norwegian, Faroese and Icelandic. The five national languages are basically limited to their respective countries: Denmark, Sweden, Norway, the Faroe Islands[1] and Iceland. Outside this area there is a small Danish minority in Northern Germany and a Swedish-speaking minority in Finland, where Swedish is also an official language (together with Finnish).[2] Together the Scandinavian languages are spoken by nearly 20 million people.

All five languages are literary languages. Danish, Swedish and Icelandic have an uninterrupted written history of approximately one thousand years. Old Norwegian was also written in medieval times, but due to the long Danish rule of Norway, the language ceased to be a written language in the 15th century. In the 19th century, Norwegian reappeared as a written language, or rather as two. One of them continued the tradition of written Danish, while making the spelling more in accordance with Norwegian pronunciation, and then adjusting some of the morphology and syntax. This language is called *Bokmål*. The other one, *Nynorsk*, is a new written language, based on the Norwegian dialects. During this century the two languages have become closer to each other, with Bokmål abandoning some of its Danish heritage, and Nynorsk abandoning some of its more local

[1] The Faroe Islands, where practically all inhabitants have Faroese as their mother-tongue, constitute a semi-independent part of the kingdom of Denmark.

[2] In the 30's there were more than 3 million Scandinavians (first and second generation immigrants) in North America. The use of the Scandinavian languages has however ceased rapidly since then.

variants. Here, I will frequently talk about *Norwegian*, when the difference between the two variants is not large enough to motivate a distinction. Faroese is young as a written language. The language has practically no written records until the 19th century. In the 20th century, it has become more commonly used as a written language.

Danish, Swedish and Norwegian are mutually intelligible. Danes, Swedes and Norwegians normally use their mother-tongue when they communicate with one another. These three languages differ in some respects, but it is often appropriate to treat them together. I will use the term *Mainland Scandinavian* to characterise them as a whole. Icelandic and Faroese are also mutually intelligible (with some effort on behalf of the speaker and the listener), and as we will see they share several properties, especially with respect to the morphology. When they pattern in the same way, I will sometimes use the term *Insular Scandinavian* to characterise them as a whole.

Due to the fact that Norwegian has two written languages, and that one of them emphasises the spoken language, the Norwegian dialects remain quite strong, whereas the Danish and Swedish dialects are to a great extent loosing ground to the Standard languages. Faroese is divided into a number of dialects, which have hardly been studied syntactically at all. Therefore I will have little to say about them here. Icelandic shows practically no dialectal variation with regard to syntax (but see footnote 16 of chapter 5).

The Mainland Scandinavian dialects are quite well described with respect to phonology and morphology. The syntax of Scandinavian dialects is however a little investigated field of research, and the work that has been done consists mostly of descriptive observations of the syntactic behaviour of individual dialects. The lack of interest in dialect syntax in the past is partly due to the lack of a proper instrument for syntactic analysis, but it is also due to the fact that syntactic studies have been heavily concentrated on the clausal structure, where the Scandinavian dialects are rather similar to the standard languages.[3]

Previous investigations of noun phrase syntax in the Scandinavian dialects are also very limited. However, contrary to the clausal structure, noun phrase structure shows quite a great deal of variation in the dialects. In this study, I have tried to investigate the syntactic properties of the noun phrase in the dialects as well as in the standard languages. I have found that in particular two dialects (or rather dialect groups) are of interest when we discuss the structure

[3] There are basically only two dialects that have been discussed in the generative literature, the dialect of Älvdalen in Sweden (which has retained the case system and verbal agreement; cf. Platzack/Holmberg 1987) and the dialect of Hallingdalen in Norway (which has retained verbal agreement in number; cf. Trosterud 1989).

of the noun phrase. These dialects are Northern Swedish and Western Jutlandic.

Northern Swedish deviates from Standard Swedish in several ways. For instance, it uses obligatory articles with proper names, it has an extended use of articles with indefinite uncountable nouns, and it may double the indefinite article in certain constructions. Furthermore it deviates from Standard Swedish when it comes to possessive constructions. In some of these constructions Northern Norwegian patterns with Northern Swedish, and I will sometimes talk about *Northern Scandinavian* when they do.[4]

Western Jutlandic (spoken in Western Denmark) deviates from standard Danish in several respects. Most importantly, and contrary to all other Scandinavian languages, Western Jutlandic has no suffixed definite article, but consistently uses prenominal articles. It has a gender system of its own, poor noun phrase internal agreement, and it uses a periphrastic genitival construction.[5]

The Scandinavian languages are all V2 languages, requiring one and only one phrase in front of the finite verb. Verbs agree with the subject in number and person in Insular Scandinavian, but not in Mainland Scandinavian. However, predicative adjectives and participles agree with the subject in all dialects.[6]

All through this book, I will give many examples from each of the Scandinavian languages presented above. **I will use Swedish examples if nothing else is stated**, for instance, when all the languages pattern in the same way.

1.2. The Scandinavian Noun Phrase

In this section, I will present some of the basic properties of the Scandinavian noun phrase. The unmarked word order in a noun phrase is, as in the other Germanic languages, determiner-adjective-noun, as illustrated by the Danish examples in (1)-(2).

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[4] It has not been sufficiently investigated whether the deviations from Standard Swedish have the same geographical distribution. Here I try to give the approximate extension of these phenomena, but there is still much to be done in this field. Mainly, examples from Northern Swedish are taken from the dialect of Västerbotten, which seems to be the heartland of some of the constructions mentioned above.

[5] These properties do not have exactly the same geographical distribution. The periphrastic genitival construction is limited to the westernmost parts of Jutland (cf. Jul Nielsen 1987). The Western Jutlandic gender system extends a bit further to the east in Central Jutland, whereas the lack of the suffixed article is found also in the southern parts of Jutland (cf. Nielsen 1959:44ff.).

[6] In Danish agreement is lost on the participle in passive constructions, but retained elsewhere. In Western Jutlandic, gender agreement is lost, but the plural distinction is retained. In Northern Swedish predicative agreement is also quite limited. In the dialects of Västerbotten, for instance, participles are uninflected and the predicative adjective only has two distinct forms, one used in uter singular and plural, the other in neuter singular.

(1) ett stort hus (Danish)
a big house
(2) det store hus
the big house

This basic word order constitutes the basis of the noun phrase structure that I propose in chapter 3 (on the linear order of prenominal elements see Loman 1958). In other respects, the word order cannot be as easily generalised. For instance, possessor phrases show a great deal of variation between the languages (see further chapter 5).

Apart from the prenominal definite article illustrated in (2) above, all variants of Scandinavian (except Western Jutlandic) use a suffixed definite article, as illustrated below.

(3) huset
house-the

The prenominal article is normally used only when there is an attributive adjective in the noun phrase, whereas the suffixed article is used when there is no such adjective. However both may be used simultaneously in some of the languages, as is illustrated in the Swedish example below.

(4) det stora huset
the big house-the

The syntactic function of determiners will be addressed in chapter 2. The variation with regard to the use of the two definite articles will be discussed in detail in chapter 4.

In the rest of this section, I will briefly present some of the basic morphological properties of the noun phrase in the Scandinavian languages. The morphology is only discussed in general terms here. Some details are found in the appendix. With regard to gender and case, some of the Scandinavian languages show a clear difference between full noun phrases and personal pronouns. I will then distinguish between the nominal system and the pronominal system.

In subsection 1.2.1, I will present the three main gender systems used in Scandinavian, and in 1.2.2, I will turn to morphological case. In subsection 1.2.3, I present the properties of noun phrase internal agreement, and then I turn to the two inflectional paradigms used for attributive adjectives (subsection 1.2.4).

1.2.1. Gender System

Old Scandinavian had retained the Indo-European three gender system, where nouns were divided into masculine, feminine and neuter. These three genders were partly visible on the basic ending of the bare noun, which expressed a syncretism of case, number and gen-

der. Gender was, however, primarily visible on the agreement of various attributive elements such as articles, attributive adjectives, and possessive, quantifying, and demonstrative pronouns. It was also visible on the agreement of predicative adjectives and participles. Finally, the gender distinctions were visible on the referring pronouns: *hann, hún* and *þat [he, she* and *it]*.

The Old Scandinavian gender system was preserved in most Scandinavian dialects, and it remains much the same in Icelandic, Faroese and Nynorsk. In two important areas, however, the masculine and feminine nouns collapsed into one gender in the nominal system. This development appeared in the politically most important parts of Denmark and Sweden, and has thus prevailed in written Danish and Swedish. The development entails that the basic ending of the nouns lost its case and gender features and that attributive and predicative agreement lost the distinction between masculine and feminine. The new merged gender is called *uter* her.

Later on, the merging of masculine and feminine has also affected the pronominal system, but not fully. Standard Swedish and Danish make a distinction between animate and inanimate, so that animate nouns are referred to by pronouns that distinguish between three genders *han, hon, det [he, she, it]*, whereas inanimate nouns are referred to as *den* (if uter) and *det* (if neuter), cf. Tegner (1891) and Davidsson (1991).

The standard languages have also greatly influenced the Swedish and Danish dialects that used the original three gender system. The dialects of Northern Sweden, which I refer to frequently in this book have retained the three gender system until the latter part of this century. In Norway, Nynorsk uses three genders consistently, as do practically all Norwegian dialects. Bokmål has however mainly retained the Danish system, although specific feminine forms can be used.[7]

A third development is found in Western Jutlandic. In these dialects all the three old genders have collapsed into one gender. However, a new gender system has emerged, which is semantically based. Countable nouns belong to one gender, and uncountable nouns to another. Following traditional grammarians, I will call the first *common gender* and the second *neuter*. The gender distinction is not visible on articles or attributive adjectives, but certain other determiners, like demonstratives and some indefinite pronouns are inflected. Western Jutlandic has the same partition between animate and inanimate as Standard Danish in the pronominal system. Pronouns referring to animate objects are masculine, feminine or common gender:

[7] Since 1917, the feminine form of articles and some pronouns can be used in Bokmål. Today the use of specific feminine forms is often a matter of style, although it is obligatory for several individual nouns.

han, hun, den [he, she, it]. Pronouns referring to inanimate nouns have common gender (*den*) with countables and neuter gender (*det*) with uncountables.

(5)	æ hus...den	æ mælk...det	(Western Jutlandic)
	the house...it	*the milk...it*	

Thus there are three gender systems in Scandinavian. The first one, used in Icelandic, Faroese and Nynorsk is a three gender system, distinguishing masculine, feminine and neuter nouns, in both the nominal and the pronominal system. The second, used in Standard Swedish, Standard Danish has two genders in the nominal system and the inanimate pronominal system, whereas it has three genders for pronouns referring to animate nouns. The third, used in Western Jutlandic, has a distinction between uncountables and countables in the nominal system, and with inanimate referring pronouns, whereas it has three genders with animate referring nouns. Bokmål uses a mixture of the first and the second system. The gender systems of Scandinavian are schematised in tables 1 and 2 of the appendix.[8]

1.2.2. Morphological Case

Old Scandinavian had preserved four morphological cases: nominative, genitive, dative and accusative. This case system is retained in Modern Icelandic. Determiners, adjectives and nouns all show morphological case (see further tables 3a and 3b of the appendix).

In Faroese, nominative, dative and accusative are retained as morphological cases, visible on all nominal categories. Genitive is found in the written language, but in spoken Faroese it is basically absent, being only found in some fixed expressions (see further chapter 5).

In the Mainland Scandinavian languages, there is no longer any morphological case. In traditional grammars of these languages, genitive is normally considered to be a morphological case, but the genitival ending *-s* has several special properties, and in chapter 5, I will argue that it is a syntactic element and not a morphological ending.[9] In the pronominal system, though, there is a difference between

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[8] The terminology on gender that I use here is not exactly the same as the one that is used in traditional grammar. Especially in Danish and Norwegian literature the term 'fælleskøn' (common gender) is normally used in stead of *uter*. I have chosen to reserve the term 'common gender' for Western Jutlandic, where all three historical genders have collapsed.

[9] In some Northern Swedish and Norwegian dialects there is still some use of morphological dative on the suffixed definite article and the article used with proper names (see Reinhammar 1973.) In chapter 5, I will also claim that some Northern Scandinavian dialects possess morphological genitive on the special article that is used with proper names.

nominative and oblique case. There is also a special set of pronouns used in possessive constructions, but these will not be seen as genitival forms of the personal pronouns. I call such pronouns possessive pronouns (see further chapter 5). The pronominal case system is illustrated in table 4 of the appendix.

Thus, Icelandic has four morphological cases, and Faroese has three. The Mainland Scandinavian languages have no case distinctions in the nominal system, but in the pronominal system, nominative and oblique forms are distinguished.[10]

1.2.3. Agreement within the Noun Phrase

Scandinavian typically displays agreement between the elements in the noun phrase. Determiners and adjectives agree in gender and number with the head noun. In the Insular Scandinavian languages they also agree in case. Consider the Icelandic (nominative) examples in (6).

(6)	**singular:**	**plural:**
masc:	einn gamall bíll	einhverjir gamlir bílar
	one old car	*some old cars*
fem:	ein gömul bók	einhverjar gamlar bækur
	one old	*some old books*
neuter:	eitt gamalt hús	einhver gömul hús
	one old house	*some old houses*

As can be seen Icelandic shows gender agreement in both singular and plural. Faroese patterns in the same way. In Mainland Scandinavian, gender agreement is only found in singular and is not visible in plural, as can bee seen in the Swedish examples below.

(7)	**singular:**	**plural:**
uter:	en gammal bil	några gamla bilar
	one old car	*some old cars*
	en gammal bok	några gamla böcker
	one old book	*some old books*
neuter:	ett gammalt hus	några gamla hus
	one old house	*some old houses*

Western Jutlandic deviates from the agreement pattern described above. The definite article *æ* is invariant, and adjectives do

[10] Even some personal pronouns lack a distinction between nominative and oblique form. None of the Mainland Scandinavian languages have any case distinctions with the inanimate third person singular pronouns *den* and *det*. In colloquial Swedish, the third person plural *dom* is consistently used in both nominative and oblique configurations. In many variants of spoken Swedish, the animate third person singular pronouns *han, hon [he, she]* also lack case distinctions.

not normally show any gender agreement.[11] Only some determiners (demonstrative and indefinite pronouns) show gender agreement.

Thus all the Scandinavian languages have some noun phrase internal agreement, even if it is limited in Western Jutlandic.

1.2.4. Adjectival Morphology

In the Scandinavian languages, there are two different paradigms for adjectives (and participles). They are normally called strong and weak forms. The strong form is used in indefinite noun phrases and in predicative position. The weak form of adjectives is used in definite noun phrases, and it cannot be used in predicative position. Consider the examples in (8)-(10) below.[12]

(8) en gammal man
an old[str] man
(9) den gamle mannen
the old[wk] man-the
(10) Mannen är gammal / *gamle
*Man-the is old[str] / *old[wk]*

It should be noted that the distribution of weak and strong adjectives is different from the distribution in German, where weak adjectives are used only when preceded by a determiner with strong morphology (see e.g. Bhatt 1990:198ff.). The details of adjectival morphology are given in tables 5 and 6 of the appendix.

Attributive adjectives in Scandinavian are normally prenominal. However, they can also be used postnominally, and then they are referred to as *predicative attributes*. Adjectives used postnominally are however subject to restrictions on 'heaviness'. They are only allowed if the adjective has a complement or an adjunct, or if it is part of a co-ordination, and even then it cannot be used freely. As can be seen in (11), predicative attributes always take the strong form, just like ordinary predicative adjectives, regardless of the definiteness of the phrase.

(11) en låda försedd/*försedda med lock
*a box equipped[str/*wk] with lid*
(12) den nye rektorn, utsedd/*utsedde i förra veckan
*the new headmaster-the, appointed [str/*wk] last weak*

In this book, I will use the term attributive adjectives only about prenominal adjectives. I will not discuss predicative attributes.

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[11] A few adjectives still show agreement, for instance the adjective *god [good]*.

[12] There are two exceptions from the rule that (prenominal) adjectives take weak inflection in definite noun phrases. These cases involve 'appositive adjectives' in Icelandic, see footnote 25 of chapter 4) and the adjective/pronoun *egen* in Mainland Scandinavian (see Fretheim 1984).

1.3. The principles-and-parameters-based theory

The analysis of the noun phrase presented in this book is an implementation of the principles-and-parameters-based theory. The basic assumption behind this theory is that all human beings are born with a common linguistic endowment, called *Universal Grammar* (UG). Children are able to learn any natural language, regardless of where they are born or what language their parents speak. The theory assumes that children are able to deduce the grammar of the specific language that they are learning, by processing the data they are exposed to, with the help of UG.

UG consists of two parts, principles and parameters. Principles are universal rules for phrase structure and structural relations that hold for all natural language. Parameters on the other hand can be seen as principles with an open value, which is set differently in different languages. When a child learns a language, it sets the parameter in the language it is learning by judging from the input data. The settings of parameters are thus language specific, and together with the lexicon, pragmatic conventions, etc., they are the part of language the child has to learn. Thus the parameter is a part of UG, but the setting of it is language specific.

In the following subsections, I present the sub-theories that are most relevant to this work. I will often give examples from clausal structure, since that part of the theory has been more explicitly elaborated. I hope that this brief introduction to the principles-and-parameters-based theory will make this book more understandable to readers that are not previously acquainted with the theory.[13] For those who are already familiar with the theory, this section may serve as a clarification of my standpoint on certain issues.

1.3.1. Levels of Representation

The principles-and-parameters framework assumes different levels of representation for linguistic utterances. There is one level that describes basic lexical properties of words and phrases, such as thematic relations between a specific predicate and its arguments. This level is called **D-structure**. Another level concerns the phonetic representation of an utterance, at which level combinatory phonetic rules apply. This level is called **Phonetic Form** or **PF**. Yet another level describes the logical representation of the utterance, and involves such issues as the scope of quantifiers and negation. This level is called **Logical Form** or **LF**. These three levels are connected to each other through a fourth level, namely **S-Structure.** The relation between the four levels is often illustrated as in (13).

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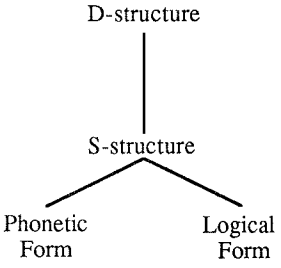
[13] The basics of the modern version of the theory are outlined in Chomsky 1981 and (1986b). Other recent influential works are Chomsky (1986a),, Abney (1987), Baker (1988), Pollock (1989), Rizzi (1990) and Chomsky (1992).

(13)



To put it informally, PF is what we actually hear of the utterance, and LF is the interpretation of it, whereas the S-structure is the common structure, on which phonetic and interpretational rules apply. S-structure in turn is *derived* from D-structure by the operation *move-α*. This operation is free in principle, as long as it is in accordance with the principles of grammar. Move-α is supposed to leave a trace in the original D-structure position. This trace is normally indicated by a *t* with a certain referential index to identify the reference of the moved element (see further 1.3.6). The intuition behind move-α is that different sentences may have the same basic meaning.

(14) De har inte sett många filmer förut
They have not seen many films before
(15) Många filmer har de inte sett förut
Many films have they not seen before

The sentences in (14) and (15) have the same meaning in the sense that both have the same agent and the same patient, but the surface strings are different. In other words, the two sentences have the same D-structure, but move-α has applied differently, so they have different S-structures. LF is based on S-structure, and thus we interpret the two sentences differently, that is, they do not have the same LF interpretation. In the example in (14), negation takes scope over *många [many]*. Thus (14) means 'There are not many films (= few films), such that they have seen them before'. (15) can have this interpretation too (especially if *många* is stressed), but normally the negation does not take scope over *många*. Thus (15) normally means 'There are many films, such that they have not seen them before'. PF is also based on S-structure, and thus PF also differs in the two examples. In the example in (15), the pronunciation of *d* in *de* is affected by the *r* in the preceding word *har*. Because of the different surface string, no such combinatory phonetic rule applies in (14).

Note that PF and LF are 'present' in the way that they actually represent what we hear and what we comprehend, whereas S-struc-

ture and D-structure are abstractions. They are assumptions of a structure that we try to derive by comparing the properties of, for example, a predicate in different syntactic configurations.

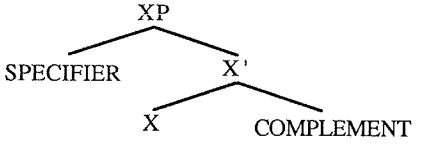
In recent research (e.g. Chomsky 1992) it has been argued that a minimal theory of grammar should only have two levels of representation, namely the two that are 'present': PF and LF. The basic idea is of course attractive, but in many ways the new ideas are merely a descriptive variant of the traditional one. It remains to be seen if the 'minimalist theory' has the same explanative value as the traditional theory.

In this book, I will adhere to the more traditional model described above. I will mostly discuss noun phrases in terms of D-structures and S-structures. Normally it is most convenient to illustrate S-structures, and to indicate the D-structure indirectly, by traces of moved elements.

1.3.2. X-bar-Theory

The X-bar-theory assumes that all phrases in natural language have the same underlying structure. All phrases consist of a head, to which a complement and a specifier are attached. The head X is said to *project* X' and further XP, of which the latter is called a maximal phrase. Consider the structure in (16), where the head is labelled X.

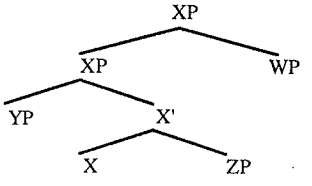
(16)



The specifier and the complement in turn are maximal phrases with specifiers and complements of their own, so that the system is in principle infinitely recursive. In this sense, clauses as well as noun phrases are considered to be phrases of the form in (16).

A further possibility is given in the theory; a phrase may be adjoined to another phrase. In the structure in (17), the head X projects a maximal phrase XP, to which another phrase (WP) is adjoined. The specifier is labelled YP and the complement ZP.

(17)

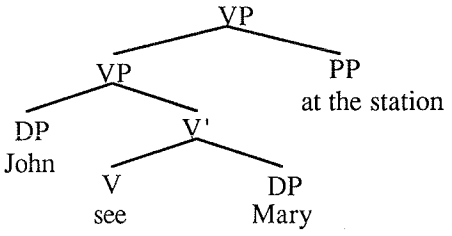


It is assumed that XPs (maximal phrases) can adjoin only to XPs, and heads can adjoin only to heads. The intermediate bar level X' cannot adjoin or be adjoined to. There may be more than one phrase adjoined to a maximal phrase. In this way, adjuncts differ from specifiers and complements, which are unique for each head. Specifiers, complements and adjuncts are positions where maximal phrases are found: they are XP-positions. These are normally distinguished as A-position or A'-positions (see further subsection 1.3.4).

Note that the order between the different elements in the X-bar-tree is arbitrary. The X-bar theory only prescribes the hierarchical relations, whereas the linear order of the elements is subject to parametric (i.e. language specific) variation.[14]

For concreteness, assume that the head X in the X-bar-skeleton (17) above is a transitive verb (V). Consequently XP is a verb phrase (VP). Then the complement is the object noun phrase and the specifier is the subject noun phrase. Here noun phrases are labelled DP. The adjunct (WP) is typically an adverbial expression, for instance a prepositional phrase (a PP).

(18)



The intuition behind the different placement of specifiers, complements and adjuncts is that complements are syntactically closer to the head than specifiers or adjuncts are. In many languages there are asymmetries between the three categories, for instance with regard to movement.

The projecting head may be one of the four major *lexical categories*: verbs, adjectives, nouns and prepositions. These categories all

---

[14] However, the hierarchical structure restricts the possible linear order of specifiers and complements in relation to the head. Since the complement is closer to the head, a specifier may never be placed in-between a head and its complement. Thus, out of the six theoretically possible word orders, X-bar theory allows the four in (i), but excludes the two in (ii).

(i)	specifier-head-complement	(ii)	*complement-specifier head
	complement-head-specifier		*head-specifier-complement
	head-complement-specifier		
	specifier-complement-head		

Word orders as in (ii) must be derived by movement of one or more of the elements.

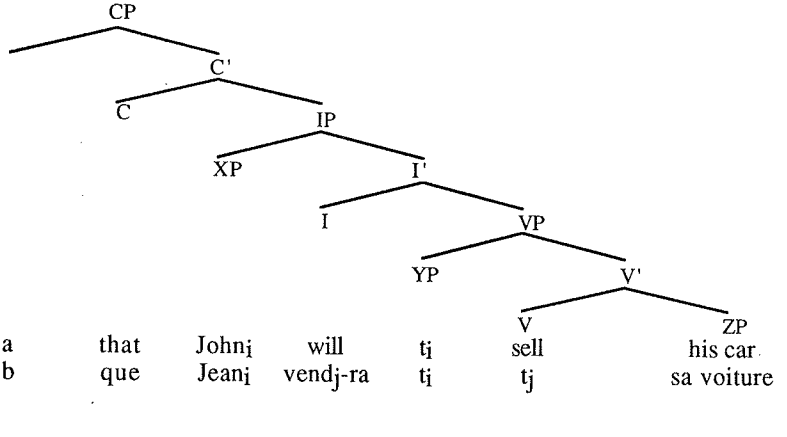
project their own phrases, called VP, AP, NP and PP.[15] They are normally distinguished by the features [±V] and [±N] in the following way.

(19)			
	V	[+V]	[–N]
	A	[+V]	[+N]
	N	[–V]	[+N]
	P	[–V]	[–N]

The scheme in (19) is a simplified way of saying that, for instance, nouns and prepositions have certain properties in common that distinguish them from verbs and adjectives. [–V] categories are typically arguments, whereas [+V] categories are typically predicates. [+N] categories are typically Case bearing categories, whereas [–N] categories are typically Case assigning categories (see e.g. Holmberg 1986:55ff.). On the distinction between predicates and arguments, see further subsection 1.3.4.

Apart from lexical categories, there are also *functional categories*. These involve both affixes such as tense, and grammatical words, such as subjunctions. It is nowadays commonly assumed within the theory that the clause contains (at least) two functional heads, C and I (Complementiser and Inflection, respectively). Consider the clausal S-structure in (20). XP, YP and ZP are arbitrary names for maximal phrases in specifier and complement positions. Moved elements have an index and a co-indexed trace *t* in their D-structure position.

(20)



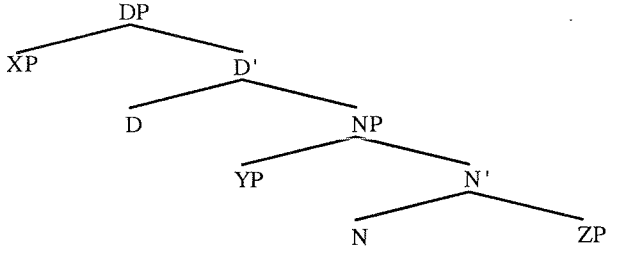
a	that	John$_i$	will	t_i	sell	his car
b	que	Jean$_i$	vendj-ra	t_i	t_j	sa voiture

[15] Other word classes are seen as functional categories, (e.g. subjunctions, see below), subcases of the four main categories (many adverbs can be seen as adjectives or as intransitive prepositions), or as non-projecting categories (e.g. interjections and conjunctions). Some consider negation to be a projecting category, others do not.

In (20) the main verb *sell* is generated in V, and the marker for future tense is generated in I. In English the future marker is an independent word, and in French it is a temporal affix. In English both elements are in their basic (D-structure) positions, but in French the verb moves to I, and attaches to the left of the temporal affix. In this way, affixes and independent words with the same function are given the same structural analysis; the languages (or constructions) only differ with regard to whether the head (in (20) the verb) is moved.

Within the theory there is also some consensus that the determiner (prototypically an article) constitutes a functional head, D, in the noun phrase, which is thus called DP (Determiner Phrase). I will address the function of determiners in chapter 2, and I will discuss (and adopt) the DP-analysis in section 3.1. In the noun phrase, articles can be either independent words or affixes. It has been suggested that this difference should also be described as a difference with regard to movement of the lexical head (in this case N; cf. Delsing 1988, Ritter 1989, Grosu 1989, Taraldsen 1989). Consider the simple noun phrase structure in (21).

(21)



a	the	house
b	hus$_i$-et	t$_i$

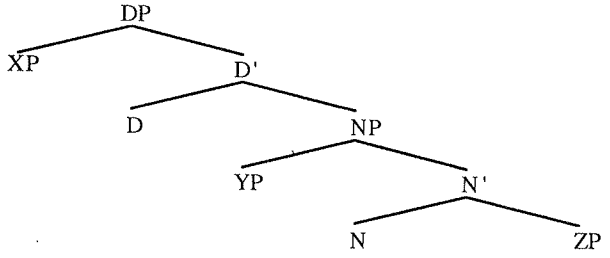
The English example in (21)a has an independent definite article, whereas the Swedish one in (21)b has a suffixed article. Thus we may assume that the noun has moved from N to D in Swedish, but not in English. The assumption that the suffixed article in Scandinavian is attached to the noun by raising of N to D will be further discussed in section 3.1 and in chapter 4. A similar movement inside the adjectival phrase is proposed in section 3.3.

There are many suggestions of more functional heads, both within the clause and the noun phrase. In chapter 3, I discuss some of the functional heads that have been proposed for the noun phrase. In that chapter, I will also discuss the differences between functional and lexical categories.

The principles that apply to elements in the X-bar-tree are formulated in terms of certain structural relations between the different

nodes in the tree. The X-bar skeleton is two-dimensional; it expresses both linear and hierarchical relations. Since the linear order between the elements in an X-bar-tree is subject to language specific alternation, the structural relations that constitute the basis of principles are only stated in hierarchical terms. The primitive hierarchical relation is *domination*. Below, I present the relevant structural relationships within the X-bar-theory. Consider once again the DP-structure.

(22)



Domination: A node α dominates a node β if α is directly or indirectly above β in the X-bar-tree. In (22) DP dominates all elements. It directly dominates XP and D', and it dominates D, NP, YP, N', N and ZP indirectly. D' dominates all elements except for XP and DP.

Sisterhood: Two nodes α and β are sisters if they are directly dominated by the same projection. In (22) XP and D' are sisters, and so are, for instance, D and NP.

C-command: A node α c-commands a node β if every projection that dominates α also dominates β. In (22) XP c-commands D', D, NP, YP, N', N and ZP. D c-commands everything but XP, DP and D'.

M-command: A node α m-commands a node β if every maximal projection that dominates α also dominates β. In (22) N m-commands YP, N', and ZP, but not D or XP, since those are not dominated by NP.[16]

Domination, sisterhood, and c- and m-command are purely structural relations; α and β may be any type of node. Other relations are restricted to certain nodes and have more than one conditional clause. *Government* and *Binding* are such relations. These relations

[16] The m-command definition given here implies that a head also m-commands nodes within an adjunct of the maximal phrase. Sometimes m-command is defined to exclude this option (cf. Chomsky 1986a).

will be discussed together with Case-theory (1.3.4) and Binding-theory (1.3.5), respectively.

To conclude, the X-bar-theory provides a structural skeleton of different types of positions. X-bar-trees are projected by either lexical or functional categories. A number of structural relations are defined as hierarchical relations between different positions in the tree. We will now turn to the sub-theories that restrict how elements from the lexicon are entered into the X-bar-tree (Theta-theory), the restrictions on which positions are licit for noun phrases (Case-theory), and restrictions on co-reference between noun phrases (Binding-Theory). Then we turn to restrictions on movement.

1.3.3. Theta-Theory

Theta-theory concerns the thematic relations between a lexical head and its specifier and complement. These thematic relations are inherent properties of the head that are specified in the lexicon. Different verbs select different kinds of subjects and objects. Some have agential subjects whereas others have experiencer subjects. These differences are encoded by assigning the specifier of such verbs different theta-roles (θ-roles). There is no fixed set of θ-roles in the theory. The following are usually distinguished: AGENT, GOAL, SOURCE, and THEME. These θ-roles are, however, often split in more specific semantic types. For example, GOAL is often split into (locational) GOAL, EXPERIENCER, BENEFICIARY etc. Often, the exact labelling of the theta-role is not considered important for the syntax. What is important is that a specific θ-role is assigned to a specific position, either to the specifier (the external θ-role) or to the complement (the internal θ-role).

Predicates and arguments are normally defined in terms of θ-role-assignment. Predicates are θ-marking categories (i.e. lexical heads), and arguments are θ-marked categories (maximal phrases). In this book, I will assume that in order to be a true argument a phrase must also be assigned Case (see further 1.3.4). In chapter 2, I argue that all arguments must also have a determiner.

Theta-theory interacts with X-bar-theory to create D-structures. This interaction is restricted by two principles, the Projection Principle and the Theta-criterion.

(27) *Projection Principle:* Lexical properties of a lexical item are observed at all levels of representation.

Among other things, the Projection Principle guarantees that an argument has the same θ-role at all levels of derivation. This means that a noun phrase that is generated with an internal θ-role should also preserve this role at other levels of representation.

The other principle that regulates the interaction between Theta-theory and X-bar-theory is the Theta-criterion.

(23) *Theta-criterion:* Each argument has one and only one θ-role and each θ-role is borne by one and only one argument.

The theta-criterion ensures that a verb like *hit* surfaces with two arguments, not one or three, and that a verb like *sleep* takes one (and only one) argument.[17] However, sometimes a predicate has an argument that we interpret, but that is not 'visible'; the argument is present at LF, but not at PF. In such cases the theory assumes a (phonetically) null pronoun. The null (subject) pronoun of an infinitival phrase is labelled PRO.

(24) He started PRO to run

The theory about the reference of PRO is called *Control-theory*. I will not present this particular sub-theory here.

Many languages, like Italian, also have an interpreted, but not 'visible' subject with finite verbs. This null pronoun is labelled *pro* (often called 'small pro').

(25) *pro* balla (Italian)
(she) dances

It is well known that subject-verb agreement shows strong correlation to the possibility of having such 'null-subjects'. This correlation is also quite strong between other sorts of agreement and *pro,* e.g. object agreement and possessor agreement correlate cross linguistically with empty objects and empty possessors (cf. Gilligan 1987). In section 3.2, I will discuss the possible connection between adjectival agreement and *pro*, and in section 6.2, I will assume that genuine partitive constructions involve a small *pro.*

The theta-criterion is a problem for all analyses of noun phrases. The arguments of nominalisations always seem to be optional, contrary to the arguments of the corresponding verb, as is illustrated in (26).

(26)	Han försvarade förslaget	hans försvar av förslaget
	He defended proposal-the	*his defence of proposal-the*
	*Han försvarade	Hans försvar
	*Försvarade förslaget	Försvaret (av förslaget)

[17] The number of arguments that a predicate may take will always have to be modified in some way, since practically all transitive verbs may be used without an object in a generic reading.

The optionality of arguments in noun phrases is not compatible with the theta-criterion, which is a problem that I will not solve in this work. An interesting attempt to solve it is made by Grimshaw (1991), who claims that nominalisations are normally ambiguous between two readings, one event reading (with obligatory arguments) and one result reading (with no obligatory arguments).

1.3.4. Case-Theory

Case-theory restricts the positions, which noun phrases may occur in, at S-structure. The general principle that regulates this is the Case filter, which can simply be stated as below.

(28) *Case Filter:* An overt noun phrase must have Case.

Case does not necessarily mean morphological case. Case can also be an invisible theoretical notion, called abstract Case.[18] Independently of whether a language has morphological case distinctions, the Case filter holds. Case can also be divided into structural and lexical Case (cf. Holmberg 1986:213ff.).

Structural Case is a structural relation between a head and a noun phrase. The head *assigns* Case to a specific position under government. Traditionally, there are assumed to be two structural Cases inside the clause, Nominative and Objective. Nominative is assumed to be assigned by one of the functional categories in the clause (C or I), determined by parametric variation (cf. e.g. Holmberg/Platzack in press). Objective Case can be assigned by the categories V and P. In a language with morphological case, like Icelandic, morphological nominative and accusative are considered to be realisations of structural Nominative and Objective Case.

The reason that these structural relations are given the name Case is that they have the same function as morphological case has. It distinguishes the subject and the object. In languages without morphological case on nouns, like the Mainland Scandinavian languages, subjects and objects can normally be distinguished by word order.

(29) Idag har Kalle bitit hunden
Today has Kalle bit dog-the
Idag har hunden bitit Kalle
Today has dog-the bit Kalle

In both examples the first noun phrase is unambiguously the subject (situated in SpecIP, compare (20) above). Thus word order has the same function in the Mainland Scandinavian as morphological case has in other languages. As a consequence, it is assumed that lan-

[18] To distinguish abstract Case from morphological case, the former is traditionally written with a capital C. Here I will follow this convention.

guages like the Mainland Scandinavian ones have structural Case, which is assigned to a special position in the structure, thus determining whether the noun phrase is a subject or an object.

Lexical Case has other properties than structural Case. It is not dependent on the structural position, but rather it is specified in the lexicon for each specific verb, preposition, adjective or noun, and thus it is preserved throughout the derivation (in accordance with the Projection Principle). In a language with morphological case, like Icelandic, genitive and dative are considered to be realisations of lexical Genitive and Dative. Compare the Icelandic examples below, the first with an accusative object and the second with a dative object.

(30) Jón hefur slegið hundinn
Jón-nom has beaten dog-the-acc
Hundurinn hefur verið sleginn
dog-the-nom has been beaten

(31) Jón hjálpaði strákinum
Jón-nom helped boy-the-dat
Strákinum var hjalpað
Boy-the-dat was helped

In (30) the object takes accusative case, whereas if it is moved to the subject position, it receives nominative case. The case of the noun phrase is dependent on the position. In (31) on the other hand, the dative noun phrase retains its original case in passive sentences, even if it is moved to the subject position.

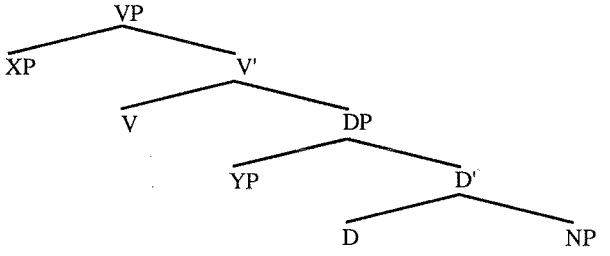
The difference between structural and lexical Case also has relevance for the noun phrase. Nouns normally take arguments with genitive and dative. Nouns seem to be able to assign only lexical Case. On the other hand, the functional categories seem to be able to assign only structural Case. In a language like, Hungarian possessors in a specific position receive nominative case (cf. section 3.1). In chapter 5, I will argue that prenominal possessive noun phrases in Mainland Scandinavian are assigned structural Case. Also adjectives seem to govern only dative and genitive in the Germanic languages that possess morphological case. The generalisation is then that structural Case may be assigned by functional categories or [–N] categories, whereas lexical Case can be assigned by all lexical categories, but not by functional categories.

The structural relation relevant for Case assignment is *Government*. Government is given slightly different definitions in different works, and it is often stated differently for heads and for maximal phrases (head-government and antecedent government). Here I will assume the following definition of head government.

(32) *Head-Government*
a head α head-governs β if
a) α m-commands β, and
b) no head γ intervenes such that γ c-commands β but not α

Consider the verb phrase in (33).

(33)



In (33) the verb head-governs its specifier XP, its complement DP, and the specifier of its complement, YP, but it does not head-govern NP, since NP is c-commanded by a closer head, namely D. Likewise V assigns Case to DP but not to NP. In languages with morphological case, both D and N are however inflected for case. Assuming that noun phrases are DPs, we must distinguish between two types of Case-marked elements, one that is assigned Case under government (DP), and elements that are not governed by the Case assigner (in this case NP). I will say that both elements are *Case-marked.* The first one is *assigned Case*, while the other one has *inherited Case.* These distinctions will be important for the definition of arguments and argument positions.

Above I mentioned that I assume Case to be relevant for the notion of argument. I will assume the following definition of an argument.

(34) A noun phrase α is an argument if
a) α is assigned a θ-role, and
b) α is assigned Case

Thus, the prototypical argument is a Case assigned noun phrase, a subject or an object. In this work, I will assume that genitival attributes are also arguments (see chapter 5).

Arguments are generated in Argument positions (A-positions). A-positions can be defined in different ways. In the clausal structure (compare (20) above), it is normally assumed that SpecIP, SpecVP and the complement of VP are argument positions. In this work I will define an A-position as follows.

(35) An XP-position α is an A-position if
a) α is assigned a θ-role, and
b) α is Case-marked

Note that I assume that Argument positions must be Case-*marked*, whereas arguments must be *assigned* Case. This slight difference in definitions makes no difference in the clausal structure. All elements found in Argument-positions are arguments. In the noun phrase, where all elements are [+N] elements, Case can percolate from one element to another, and thus it should be possible to have a non-argument in an A-position, i.e. a noun phrase that is assigned a θ-role and has inherited Case. I will claim that there are such instances within the noun phrase: with attributive adjectives (sections 3.2 and 3.5), possessive constructions (section 5.3) and in pseudopartitive constructions (section 6.2).

1.3.5. Binding Theory

Binding theory is a theory of co-reference between noun phrases. It restricts the behaviour of referential noun phrases, personal pronouns and reflexive pronouns. Binding describes co-reference in terms of co-indexation. Co-indexation is in principle free: any category may be assigned any index.

(36) *Binding:* α binds β if
a) α c-commands β, and
b) α and β are co-indexed, and
c) α is in an A-position

As a consequence of the definition of binding above, only an XP in a specifier position can be a binder.[19] Thus, for an element to be bound it requires an XP-specifier. The *binding domain* is defined as the smallest XP containing such a specifier (an 'accessible subject'). The binding domain is then a clause or a noun phrase.

The principles that are relevant for Binding constitute the Binding Theory. Different categories have different restrictions with regard to binding, which are stated in the *Binding Principles*. The three relevant categories are anaphors (i.e. reflexive pronouns), pronouns (i.e. personal pronouns), and referential expressions (i.e. ordinary noun phrases).

(37) *Binding Principles*
Principle A: an anaphor must be bound in its binding domain
Principle B: a pronoun must not be bound in its binding domain
Principle C: a referential expression must not be bound

[19] Only XPs are in argument positions, which excludes heads, and complement XPs cannot c-command another element.

The binding principles capture the distribution of referring categories. To put it informally, anaphors are always referring to an element within the same clause or noun phrase (the binding domain). Pronouns can refer to something in the context, but never to a c-commanding element in the same clause or noun phrase (the binding domain). Referential expressions always refer to something outside the binding domain. In section 3.2, I will claim that the adjectival phrase may also be a binding domain.

1.3.6. Movement

The operation move-α is in principle free, it may apply to any element, and the element may be moved in any direction, as long as movement obeys the principles of grammar.

Movement is in practice restricted by quite strong constraints. The basic restriction that applies to all movement can be formulated as follows.

(38) A moved element must c-command its trace.

Informally, the above restriction simply states that an element may only move upwards in the x-bar-tree.

Movement is also restricted by *Relativised minimality*, which states that an element cannot be moved over a position that is of the same kind as the landing site (cf. Rizzi 1990). Moved elements can be divided into heads (X^0-categories) and maximal phrases (XPs). The intermediate bar-level (X') is not assumed to participate in movement. XP-movemement is divided into A-movement and A'-movement. Movement is defined by the status of the landing site. A moved XP landing in an A-position participates in A-movement. Likewise, an XP landing in an A'-position participates in A'-movement.

Head movement is restricted by the Head Movement Constraint (HMC; cf. Travis 1984).[20] [21]

(39) *Head Movement Constraint*
A head α can move to a head β if
a) β c-commands α and
b) there is no head γ such that γ c-commands α and not β.

---

[20] The HMC is given slightly different definitions in different works. The definition in (39) is formulated in accordance with Relativised minimality.

[21] A special type of head movement is called *clitic movement*. This kind of movement involves pronouns that seem to be heads, i.e. they cannot take any kind of modification or complements (cf. Kayne 1975 and 1991), and is prototypically found in the Romance languages. These pronouns are generated in argument positions inside VP and are obligatorily moved to I (or other functional heads in the clause). Thus this kind of movement takes place over another head, and it does not seem to be restricted by Relativised Minimality.

One of the basic assumptions in this work is that there is head movement inside the noun phrase (see section 3.1). Similar restrictions hold for A-movement and A'-movement.

(40) An XP α can move to an A-position β if
a) β c-commands α, and
b) there is no A-position γ such that γ c-commands α but not β

(41) An XP α can move to an A'-position β if
a) β c-commands α, and
b) there is no A'-position γ that γ c-commands α but not β

A prototypical case of A-movement is found in passive sentences. The underlying object (base generated in the complement of V), moves to the subject position of the clause. A typical case of A'-movement is topicalisation.

As can be seen, all the above definitions have an a-clause that rules out downwards movement, and a b-clause that expresses the specific case of relativised minimality. Thus it is fully possible to restrict all three kinds of movement within a unified movement constraint.

A further distinction between A-movement and A'-bar-movement should be noted. An element generated in an A-position can participate in both A- and A'-movement, whereas an element that is generated in an A'-position can only participate in A'-movement.[22]

1.4. The Organisation of this Work

The study of noun phrase structure within the principles and parameters based theory is quite a new field of research. Therefore, I will devote considerable time to argue for the basic structure that I assume. As mentioned above, I will adopt the DP-analysis, claiming that determiners constitute functional heads within the noun phrase. The work is organised as follows.

In chapter 2, I discuss the function of determiners, investigating when they are obligatory and what kind of articles are actually found in the Scandinavian languages. In chapter 3, I argue for my basic assumptions about noun phrase structure. I consider determiners, attributive adjectives, degree elements and quantifiers in turn.

In the following three chapters I discuss in detail the three constructions that I consider most central for noun phrase structure. In chapter 4, I discuss the different possibilities of combining and deleting definite and indefinite articles in the Scandinavian languages. In

[22] The ban on A-movement of categories generated in A'-positions is due to the θ-criterion. θ-roles are uniquely assigned in the D-structure, and phrases that do not have a θ-role at D-structure cannot receive one at S-structure. Thus movement from A'-positions into a θ-marked positions are not allowed. It is not clear to me what general principles rule out the movement from an A'-position to a Case-marked position.

particular I address the question of double definiteness found in several of the languages. In chapter 5, I give a description of the possessor construction in the Scandinavian languages. I show the great variation between them, and then turn to an analysis where I crucially distinguish between possessive pronouns and genitival possessor phrases. In chapter 6, I turn to quantification in the Scandinavian noun phrase. I discuss both pronouns and noun phrases as quantifiers. In particular I investigate the pseudopartitive construction in the Mainland Scandinavian languages.

Finally, in chapter 7 I conclude the empirical and theoretical result of this book.

CHAPTER 2
THE FUNCTION OF DETERMINERS

In this chapter I will consider in some detail the grammatical function of determiners, and the distribution of noun phrases with and without determiners. When using the notion determiner in this chapter, I will refer to all sorts of articles, demonstratives, numerals and indefinite pronouns (existential as well as universal). This chapter will serve as an introduction to the Scandinavian determiner system, and the main claim will be that all argumental noun phrases need an article position, whereas predicative noun phrases do not. The chapter will also serve as a foundation for a discussion of the different sorts of articles that are possible in Scandinavian and other languages.

There are some differences between languages with regard to the use and morphology of articles. First, languages differ as to in what categories they use articles. A language like French uses both indefinite and definite articles, and additionally there is a partitive article used with indefinite plurals and uncountables. Other languages, such as English, German and the Standard Mainland Scandinavian languages, make use of indefinite and definite articles, but lack the partitive article. Still other languages, such as Icelandic and Greek, only make use of a definite article, whereas languages like Russian, Finnish and Latin possess no articles at all.

Second, languages differ with respect to whether articles are more or less similar to pronouns. Some languages, like English, have both a definite and an indefinite article that are morphologically distinct from pronouns and that cannot be used independently. The Mainland Scandinavian languages use a suffixed definite article, which is (of course) distinct from pronouns, but an indefinite article that is homonymous with the numeral *one*. German, French and Italian have articles that are homonymous with pronouns or numerals both in definite and indefinite form. Yet all languages that use articles have the property in common that articles are used as default determiners, which have to be used in certain constructions (i.e. in argumental position), if there is no other determiner.

With regard to the determiner system the Scandinavian languages have gone through roughly the same development as most other European languages, from a stage without articles to a stage where articles are obligatory in most cases. In Old Scandinavian there were no requirements on noun phrases that they contain any determiner, quite like the situation in Russian, Finnish or Latin. All noun phrases were allowed to be bare. There were no articles, and other determiners were only used when the semantics required the noun phrase

to be specified by demonstratives, numerals or pronouns. Consider the Old Swedish example in (1) and its modern Swedish counterpart in (2), where the suffixed definite article or the prenominal indefinite article must be used with most nouns. The articles are underlined in (2).[1]

(1) Værþer maþær stolen vræker fiæt æptir fællir .i. kæfti. fyrst skal by letæ. A grannæ skal kallæ. [---] Leþer eigh fiæt or by. þa skal rannssakæ. Eigh mughu grænnær ranzsak syniæ.
Becomes man robbed, follows trace after, puts in (it) branches, first shall (one) village search. To neighbours shall (one) call. [---] Leads not trace out-of village, then shall (one) investigate. Not may neighbours refuse investigation.

(2) Blir en man bestulen, följer efter spåret och lägger kvistar i det, då skall man först genomsöka byn. Man skall kalla på grannarna. [---] Leder ej spåret ur byn, då skall man undersöka detta. Grannarna får ej neka till undersökningen.
Becomes a man robbed, follows trace-the, and puts branches into it, then shall one first search village-the. One shall call (on) neighbours-the [---] Leads not trace-the out-of village-the , then shall one investigate this. Neighbours-the may not say-no to investigation-the.

In Old Swedish the requirement for using articles was introduced in the 13th century, and the development was completed around the middle of the 14th century (cf. Wessén 1965:31 and Delsing 1992). At that time the restrictions that are at work today were established.[2]

In the Mainland Scandinavian languages and Faroese, the definite article is a postnominal suffix. There is also a prenominal indefinite article, which is homonymous with the cardinal numeral *one*. In indefinite plural noun phrases there is no article. Leaving aside constructions with intervening adjectives, that are to be discussed in chapter 4, the article system of Mainland Scandinavian and Faroese can be illustrated with the Swedish examples in (3) and (4).

	singular		**plural**	
	uter	**neuter**	**uter**	**neuter**
(3)	en bil	ett hus	bilar	hus
	a car	*a house*	*cars*	*houses*
(4)	bil-en	hus-et	bilar-na	hus-en
	car-the	*house-the*	*cars-the*	*houses-the*

[1] The text is from Äldre Västgötalagen, the provincial law of Västergötland, written around 1225. The reading of *kæfti* is uncertain. I assume it to be a miswriting of *kæfli*.

[2] In the 16th and 17th centuries the indefinite article became even more popular than it is today. In predicative constructions, it could be used where it is not used today: *välja någon till en kung [choose someone to a king]* (cf. Terner 1923: 152-160).

In Icelandic, the definite article works the same way as in Swedish. However, Icelandic has no indefinite article. The counterparts to the Swedish examples in (3)-(4) are given in (5)-(6) below.

(5)	bíll	hús	bílar	hús	(Icel.)
	car	*house*	*cars*	*houses*	
(6)	bíll-inn	hús-ið	bílar-nir	hús-in	
	car-the	*house-the*	*cars-the*	*houses-the*	

A third variant of the Scandinavian article system is found in Western and Southern Jutland (henceforth Western Jutlandic, WJu.), where there is an invariant prenominal article. This system is illustrated in (7) and (8).[3]

(7)	en bil	en hus	biler	hus	(WJu.)
	a car	*a house*	*cars*	*houses*	
(8)	æ bil	æ hus	æ biler	æ hus	
	the car	*the house*	*the cars*	*the houses*	

In most languages that make use of articles, there is a strong correlation between noun phrases with determiners and argumental status, in that most noun phrases require a determiner in order to function as an argument. If there is no meaningful determiner, such as a demonstrative, numeral or pronoun, an article has to be inserted in the structure. For Hungarian, Szabolcsi (1987) claims that the determiner is necessary in argumental noun phrases. For languages like English and Italian such claims have also been made (cf. Stowell 1991 and Longobardi 1992). The requirements for using determiners seem to be roughly the same for those two languages.

If we consider the suffixed definite article of Scandinavian to be a determiner on a par with the prenominal articles of other Western European languages, it is a fair generalisation to say that Scandinavian has the same restrictions as English and Italian, with regard to the obligatoriness of articles in argument position. If we exclude the headline language and the like, bare nouns are normally ungrammatical in the prototypical argument positions.[4] Consider the examples in (9) with subjects, objects, prepositional complements and genitival

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[3] In (7) and (8) Standard Danish orthography is used. In the Jutlandic dialects, plural is normally only marked by the absence of the glottal stop.

[4] The special use of bare nouns in headlines is exemplified in (i) and (ii) below.

(i) Sjuksköterska funnen mördad (ii) Ökänd diktator skjuten
Nurse found murdered *Infamous dictator shot*

Such examples are clearly not relevant for our purposes. The special grammar of headlines does not have the same restrictions on articles, and it is also more allowing in other respects, such as the deletion of copulas.

Another style where bare nouns are used more frequently is the language of bureaucracy and administation. In this style generic noun phrases are normally bare.

(i) Tjänsteman som önskar ersättning för resa...
Civil servant who wants refund for journey

attributes, where bare (singular) nouns are ungrammatical, compared to the examples in (10), where an article makes them grammatical.[5]

(9) *Polis arresterade studenten
Police arrested student-the
*Polisen arresterade student
Police-the arrested student
*Han samarbetade med polischef
He co-operated with police-boss
*students böcker
student's books

(10) Polisen/en polis arresterade studenten
Police-the/a policeman arrested student-the
Polisen arresterade studenten/en student
Police-the arrested student-the/a student
Han samarbetade med polischefen/en polischef
He co-operated with police-boss-the/a police-boss
studentens/en students böcker
student-the's/a student's books

When noun phrases are used in typical non-argumental positions, such as predicative constructions, the article is normally not used, and sometimes it is not allowed. The cases with articles will be discussed in section 2.1.

(11) Kalle är läkare
Kalle is doctor
Vi utsåg Kalle till ordförande
We appointed Kalle to chairperson

(12) Kalle är ?en läkare/??läkaren
Kalle is a doctor/doctor-the
Vi utsåg Kalle till *en ordförande/*ordföranden
We appointed Kalle to a chairperson/chairperson-the

Hence, it seems to be a fair generalisation that noun phrases require a determiner of some sort to be able to function as an argument. This observation has been made by many linguists, and it has become important for linguists that work within the DP-hypothesis, which claims that determiners are heads in the noun phrase. Several linguists have claimed that the determiner position is necessary in order for the noun phrase to function as an argument. Szabolcsi (1987) also points out that this makes determiners parallel to complementisers. An even stronger version of this generalisation would of course

[5] Here I will use the term *bare noun* when referring to noun phrases without determiners. The presence of an attributive adjective does not affect the 'bareness' of the noun phrase. Of course there are several attributive elements that can be seen as both determiners and adjectives, such as *många, egen, samma [many, own, same]*, but normally there are no problems in determining whether a noun phrase is bare or not.

be that determiners are not allowed in non-argumental positions, which is proposed in Stowell (1991). I will try this stronger version as my working hypothesis.

(13)a If a noun phrase is a non-argument, then it has no determiner
b If a noun phrase is an argument, then it has a determiner

In Scandinavian any determiner can make an argumental noun phrase licit. In definite noun phrases the suffixed article as well as the prenominal article used with attributive adjectives can fill this function. However, we can see that there are some cases in Mainland Scandinavian that jeopardise the generalisations in (13) above. First, there are cases where non-argumental noun phrases, like predicatives or vocatives, require an article. Second, there are several cases where argumental noun phrases normally do not require the article. There are basically three cases where bare nouns are allowed in argument positions, namely with uncountable nouns, bare plurals and proper names. There are also certain constructions that allow some bare nouns as arguments (objects, generic subjects and prepositional complements). The suffixed article and the prenominal definite article used with attributive adjectives have the same properties. Only in one case do they differ, namely with vocative noun phrases.[6]

The rest of this chapter will be devoted to the cases that seem to go against the generalisations in (13) above. In section 2.1, I will discuss the properties of predicative nouns with determiners, and I will show that the article used with predicative noun phrases is distinct from the one that is used in argumental noun phrases. Then I will consider other types of non-argumental noun phrases, namely vocatives and other noun phrases used in isolation (section 2.2). In section 2.3, I will discuss uncountables, showing that this category may have an article in some variants of Scandinavian. In section 2.4, I will discuss proper names, and will show that several variants of Scandinavian use articles with proper names. In 2.5, I will address some other cases, where bare nouns are found in argument positions. I will argue that these cases can be reduced to lexicalised phrases or be treated as uncountables. In 2.6, I will revise the generalisation in (13), and I will also present a taxonomy of articles. Finally the chapter is summarised in 2.7.

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6 The pattern that is shown here, where the main cases of bare nouns in Scandinavian are found in predicatives, with uncountables, bare plurals, proper names etc. is surprisingly similar to that of other European languages. In fact the only main difference that I can find between Italian and Swedish is the cases (pointed out by Longobardi 1992:6) where negation allows singular bare nouns: *Non c'era studente in giro [There wasn't student around]*. Such cases are not found in Scandinavian.

2.1. Predicatives

In this section we will study the behaviour of predicative noun phrases more closely. Some of them seem to contradict the generalisation in (13)a, allowing a determiner. Most frequently, this is the case with the indefinite article. I will begin with the indefinite article in 2.1.1, and in 2.1.2, I will turn to other determiners in predicative noun phrases.

2.1.1. Predicatives with Indefinite Articles

As was mentioned in the previous section, most predicative nouns in Swedish do not require any article. This is true for both subjective and objective predicatives. Consider the subjective predicatives in (14)-(16), where the predicative must always agree in number with the subject.[7]

(14) Christer är professor
Christer is professor
Ulf och Christer är professorer
Ulf and Christer are professors
Ann-Marie arbetade som piga i prästgården
Ann-Marie worked as servant in parsonage-the

(15) Günther spelar infanterimajor i pjäsen
Günther plays infantry-major in play-the
Tore läste till ingenjör i Stockholm
Tore read to engineer in Stockholm

(16) Han var bättre som vicepresident
He was better as vice president
Som tonåringar var de mycket stökiga
As teenagers were they very messy

In objective predicative use, the noun normally lacks an article as well, and there are the same agreement restrictions as in the subjective use. In these cases, Swedish requires a preposition (*som, för* or *till*).[8]

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[7] A further type of subjective predicative might be the ones illustrated in (i) below. They have predicative meaning, but there is no number agreement on the predicative.

(i) De satt barnvakt/ordförande hela dagen
They sat baby-sitter/chairperson all day
De ska stå brud i vår
They will stand bride in spring

Such predicatives are rare, and they may very well be considered fixed expressions.

[8] There is also a sort of nominal predicative variant, where a prepositional attribute seems to be predicative. This type lacks an article in Swedish.

(i) ett monster till skolbyggnad
a monster to school building *[a monster of a school building]*

(ii) ett åbäke till soffa
a hulk to sofa *[a hulk of a sofa]*

In Danish though, there is sometimes an indefinite article with this nominal predicative: *Ett monstrum af en skolebygning* (cf. Hulthén: 1948:92)

(17) Vi använde nyckeln som ölöppnare
We used key-the as beer-can-opener
De valde henne till president
They elected her to president

The examples above show that articles are not normally required in predicative noun phrases. There are however some exceptions, which seem to jeopardise the generalisation in (13)a above. These exceptions are found with the ordinary type of subjective predicative, like those illustrated in (14) above. In the other predicative uses, illustrated in (15)-(17) above, it is normally not possible to use the indefinite article.[9]

When a noun in an ordinary subjective predicative is descriptive rather than classifying the indefinite article becomes nearly obligatory. This works the same way in all the Mainland Scandinavian languages (cf. Western 1921:504, Terner 1922:155ff, Hansen 1927:52ff and Hulthén 1947:90f).

(18) Han är ?(en) idiot
He is an idiot
Hon är ?(en) djävel
She is a devil

If the sentences in (18) above are used without an article, the classifying reading is forced. Hence the interpretation must be that there are objective criteria, such as IQ below 60 or a tail and a cloven hoof, that can justify the statements.

The same pattern appears if an ordinary noun appears with a descriptive attribute, like an adjective or a postnominal attribute; the article becomes obligatory with such noun phrases.

(19) Anna är *(en) duktig läkare
Anna is a competent doctor
Han är *(en) karl som man kan lita på
He is a man that one can trust
Hon är *(en) kvinna med skinn på näsan
She is a woman with skin on nose-the
'She is a woman with a will of her own'

Note that it is not simply the presence of an attribute that makes the article obligatory; it must be a descriptive or evaluative attribute. When classifying attributes are used the indefinite article is not possible, as shown in (20)-(21) below.

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9 In some cases the objective predicatives with *som* may take the indefinite article, with roughly the same restrictions as with subjective predicatives.

(20) Bente är (*en) norsk lektor här
Bente is a Norwegian teacher here
Jerker är (*en) teknisk doktor
Jerker is a technical doctor

(21) Christer är (*en) professor i nordiska språk
Christer is a professor in Scandinavian languages
Lisa är (*en) ordförande för kvinnogruppen
Lisa is a president for woman-group-the

Hence we may state that the use of the article in predicative noun phrases is dependent on the interpretation, i.e. the distinction between classification and description. As a matter of fact, these restrictions seem to be present in several other languages as well. As far as I can judge from Longobardi (1992) and Bhatt (1990), the restrictions are roughly the same in Italian and German. English is the only language that I know of that has a requirement for articles also with non-descriptive noun phrases.[10]

At this point, I will try to show that the article in predicative noun phrases is different from the normal indefinite article that is used with argumental noun phrases. The predicative article is special in having a plural form, in being compatible with uncountable nouns and in introducing an implicit argument.

First, the indefinite article used in predicative noun phrases is morphologically different from its argumental counterpart. In colloquial Swedish, Faroese, and some Norwegian dialects (see Falk-Torp 1900:74 and Christiansen 1953), this article seems to have a plural form, *ena/einir/ene*, which is only possible in descriptive predicative noun phrases.[11] Consider the examples below, where (22)-(23) contain classifying noun phrases, where the plural article is not allowed, and (24)-(25) contain descriptive noun phrases, where the plural article is nearly obligatory.

(22) Per-Erik och Anna är (*ena) läkare
Per-Erik and Anna are a-PL doctors
Ulf och Bengt är (*ena) kaptener
Ulf and Bengt are a-PL captains

---

10 The difference that I have shown above is not found when there is an agreement discrepancy. In such cases the article is normally obligatory.

(i) Detta är *(en) teknisk doktor
This(neuter) is a technical doctor(uter)

(ii) Hennes elever var *(en) plåga
Her students were a pain

11 The plural form of the indefinite article seems to be possible in colloquial Swedish, Faroese, and some Norwegian dialects, whereas it is missing in Danish and Icelandic. In Swedish it is a fairly young phenomenon. According to Terner (1922: 120) the oldest written example is from 1806.

In Icelandic and Faroese there are dual forms of the numerals 1-4: *einir, tvennir* etc., which are used with items that come in natural pairs, like *shoes, skis* etc. This use of *einir [one-PL]* should not be confused with the plural form of the article.

(23) Per och Jerker är (*ena) tekniska doktorer
Per and Jerker are a-PL technical doctors
Kari och Bente är (*ena) norska lektorer
Kari and Bente are a-PL Norwegian teachers

(24) Pelle och Lisa är *(ena) idioter
Pelle and Lisa are a-PL idiots
Cia och Gunlög är *(ena) djävlar på grammatik
Cia and Gunlög are a-PL devils on grammar

(25) Lisa och Kalle är ?(ena) konstiga läkare
Lisa and Kalle are a-PL strange doctors
Pelle och Eva är ?(ena) duktiga löpare
Pelle and Eva are a-PL good runners

As before, the constructions with the article in (22)-(23) would be possible if the noun phrase could be interpreted as descriptive rather than classifying. We can thus make the generalisation that the plural indefinite article is required when the predicative noun or any of its attributes are descriptive, whereas the article cannot be used when the noun and its attributes are purely classifying. In other words, the plural form has the same restrictions as the singular in predicative position.

The plural form of the indefinite article seems to be reserved for predicative use. It is normally ungrammatical in argumental position (cf. Terner 1922:120 and Teleman 1969:52)). Consider the argumental noun phrases in (26).

(26) *Ena duktiga läkare opererade min mor i våras
A-PL competent doctors operated my mother in spring
??Han köpte ena vackra stolar i går
He bought a-PL beautiful chairs yesterday
*Översvämningen berodde på ena trasiga ventiler
Flood-the was-due to a-PL out-of-order valves
*Ena idioters åsikter behöver man inte bry sig om
A-PL idiots' views need one not worry oneself about

As seen in the examples, the constructions with the plural form of the article in argumental position are bad. In some cases, though, where the speaker introduces the noun phrase, the construction becomes better. With verbs like *meet* or in existential constructions the plural article is not altogether bad.

(27) ?Jag träffade ena konstiga typer igår
I met a-PL strange types [persons] yesterday
?Det sitter ena svarta fåglar på taket
There sit a-PL black birds on roof-the

The examples in (27) above are clearly better than those in (26). However they are still not fully grammatical. The plural article seems to introduce a proposition that is not properly expressed syn-

tactically. If the construction is made into a cleft sentence, and the plural article is placed in predicative position, it becomes fully grammatical.

(28) Det var ena duktiga läkare som opererade min mor i våras
It was a-PL competent doctors who operated my mother in spring
Det var ena vackra stolar (som) han köpte igår
It was a-PL beautiful chairs that he bought yesterday
Det var ena konstiga typer (som) jag träffade igår
It was a-PL strange types [persons] whom I met yesterday
Det var ena svarta fåglar som sitter på taket
It was a-PL black birds who sit on roof-the

I will not try to explain why the examples in (27) are better than those in (26), I will only conclude that in order to be fully grammatical, the plural form *ena* must be placed predicatively, and hence, we can state that the indefinite article has a plural form, when it is used in predicative position, but not when it is used in argumental position.[12] [13]

The second property that distinguishes the predicative article from the argumental one is that the former is often fully compatible with uncountable nouns. A predicative uncountable noun, qualified by a descriptive adjective, normally requires an article, whereas the same noun phrases cannot normally have an article when they appear as arguments.

(29) Det var ??(en) sur ved du har skaffat
It was a sour wood you have brought
Det var ??(ett) starkt kaffe du lagar
It was a strong coffee you make
Det är *(en) stor glädje att få presentera herr Olsson
It is a great joy to get-to present mister Olsson

---

12 The marginal possibility of using *ena* with some verbs and in the existential construction may be connected to other tests for argumenthood. As was pointed out to me by Christer Platzack passivisation divides Swedish verbs into roughly the same classes as the test with the plural predicative article. Verbs like *träffa, innehålla, tillhöra [meet, contain, belong to]* cannot passivise and they are marginally possible with *ena*. On the other hand verbs that passivise are normally impossible with *ena*.

13 As pointed out by Teleman (1969:52) the plural form *ena* may also be used in "was-für"-constructions, as in (i) (on this construction, see Börjars 1993).

(i) Vad är ni för ena filurer
What are you for a-PL slyboots
What kind of slyboots are you

These examples are also clearly better in predicative constructions. They are at best marginal in argumental constructions.

(ii) ?Vad har du köpt för ena konstiga böcker
What have you bought for a-PL strange books

(30) Han har skaffat (*en) sur ved
He has brought a sour wood
Hon kokar alltid (?ett) starkt kaffe[14]
She cooks always a strong coffee
Vi har haft (*en) stor glädje av era förslag
We have had a great joy of your proposals

Hence the predicative article seems to be special both in having a plural form and being possible with uncountable nouns.[15]

The third property that distinguishes the predicative article from its argumental counterpart is the fact that the former is always accompanied by an implicit argument. The construction always has the meaning that the description is the view of the speaker, and hence it has a modal function. This implicit argument is often spelled out in Swedish, with a first person object pronoun.

(31) Han var mig en lustig figur
He was me a strange figure [person]
Pelle och Lisa är mig ena slarviga elever
Pelle and Lisa is me a-PL slovenly students
Det var mig en sur ved du har skaffat
It was me a sour wood you have brought
'According to me, it is a sour wood that you have brought'

With arguments, the implicit argument is totally ungrammatical, even with the types that are marginal with the plural form, cf. the examples in (32).

(32) *Det sitter mig ena svarta fåglar på taket
There sit me a-PL black birds on roof-the
*Jag träffade mig ena konstiga typer i går
I met me a-PL strange types yesterday
*Vi köpte mig ena vackra stolar igår
We bought me a-PL beautiful chairs yesterday

To conclude this subsection, I have claimed that the indefinite article that is used in predicative constructions is distinct from the indefinite article that is used in argumental positions. The former one has semantic restrictions on its appearance, i.e. it is dependent on a descriptive/evaluative interpretation of the noun phrase. Furthermore, this article introduces an implicit argument, it has a plural

[14] The reason that the article is not altogether bad with *coffee* is probably that *ett kaffe* may marginally be used to denote 'a sort-of-coffee' (see 2.3.1.)

[15] The indefinite article alters with *någon [any]* in negated or interrogative clauses. In predicative use a negated clause may have either *en* or *någon*, but in interrogative clauses *någon* is quite marginal.

(i) Kalle är en idiot /Kalle är inte en/någon idiot
Kalle is an idiot / Kalle is not a/any idiot

(ii) Är Kalle en/?någon idiot, egentligen?
Is Kalle an/any idiot, really?

form, and it is compatible with uncountable nouns. Hence, I have shown that the indefinite article in predicative noun phrases is quite different from the argumental indefinite article. Before we discuss the consequences of this for our generalisation in (13) we will briefly take a look at other determiners in predicative noun phrases.

2.1.2. Predicatives with Other Determiners

As I stated above, the most common case where we find predicative noun phrases with a determiner involves the indefinite article. There are however some cases where other determiners are possible too, once again challenging the generalisation in (13)a. First, determiners other than the indefinite article are quite bad if the noun phrase lacks other attributes.

(33) ??Kalle är konstnären
Kalle is artist-the
*Valen är däggdjuret
Whale-the is mammal-the

(34) ?Kalle och Pelle är två simmare
Kalle and Pelle are two swimmers
*Flickorna är några simhopperskor
Girls-the are some divers

As noted by e.g. Stowell (1991) superlative adjectives normally make noun phrases such as those in (33)-(34) better in English. The same is true for Swedish. Consider the examples in (35).

(35) Valen är det största däggdjuret
Whale-the is the biggest mammal-the
Kalle och Pelle är två av mina bästa vänner
Kalle and Pelle are two of my best friends

The constructions with determiners may also be saved by other attributive elements.

(36) Kalle är konstnären i familjen
Kalle is artist-the in family-the
Kalle och Pelle är två simmare som jag känner
Kalle and Pelle are two swimmers that I know

It thus seems as if basically the same restrictions are valid for all determiners in predicative noun phrases. They normally have to be descriptive. The fact that superlatives are common does not come as a surprise, since this category has an evaluative meaning, which is quite similar to the modal function of the indefinite article in the predicative construction.

Predicative noun phrases with other determiners than *en* also have other special properties that make them different from typical

predicatives. They may sometimes be moved to the subject position, as shown in Moro (1991), and some linguists do not consider them predicative at all (e.g. Holmberg 1992).

I have not discussed the properties of determiners other than the indefinite article in detail, but I think that this is enough to show that they have roughly the same restrictions as the indefinite article in predicative position. Only when the noun phrase has a descriptive content is a determiner required. Furthermore, I have shown that an indefinite article in predicative position is always accompanied by an implicit argument and that it has special morphosyntactic properties, i.e. it has a plural form and it is compatible with uncountable nouns. Since we do find determiners in predicative noun phrases, the generalisation in (13)a seems to be too strong, however, and we will have to reformulate the generalisation.

The fact that indefinite articles introduce an implicit argument implies that this article has to be present at D-structure, where arguments are introduced. I also assume that meaningful determiners, such as demonstratives, numerals and indefinite pronouns must be present at D-structure. We will return to a discussion of this in section 2.6, when we have studied the behaviour of articles in argumental noun phrases.

2.2. Vocatives and Other Isolated Noun Phrases

Noun phrases that are used in isolation are not arguments of any lexical element. Here I will briefly discuss the use of articles in vocatives and noun phrases on signs. Having the generalisation in (13)a in mind, we would expect that vocative noun phrases would lack determiners altogether. This is also the case in most western European languages, as is illustrated for English in (37) below.

(37) Waiter!
Listen, young man!
Thank you, doctor!

In the Scandinavian languages, the situation is very much the same. The prenominal definite article may never be used in vocatives, and the suffixed article is not used in Danish, Norwegian and Icelandic.[16]

(38) Hvad siger du, skat/*skaten? (Danish)
What say you, treasure/treasure-the

(39) Lærer! / *Læreren! (Norwegian)
Teacher / Teacher-the!

[16] A bare noun, however, seems strange for many younger Danes, who prefer constructions with possessive pronouns, which is also possible in the other languages.

(i) Hvad siger du, min ven?
What say you, my friend

In Swedish and Faroese, though, a vocative noun can either be bare or have the suffixed article. In Swedish, the bare form is mainly used in a disparaging sense, in most plural noun phrases, or with military titles.

(40) Se dig för, människa/*människan!
See you for, man/man-the! [Look out, man!]
Tyst, unge/*ungen!
Quiet, child/child-the!
Kära vänner/*vännerna!
Dear friends/friends-the!
Ja, major/??majoren!
Yes, major/major-the!

In other cases, though, Swedish and Faroese normally use the suffixed article on the noun, as illustrated in (41) and (42).[17]

(41) Nu, grabben, ska vi se. (Swedish)
Now, guy-the, shall we see.
Godmorgon, doktorn
Good morning, doctor-the
Magistern!
Teacher-the!

(42) Setið tygum niður, skomakarin! (Faroese)
Sit you down, shoemaker-the

Another case of isolated usage concerns noun phrases on signs. On signs with street-names the prenominal definite article is never allowed, but the suffixed article is obligatory in Swedish and Norwegian, but not in the other languages (cf. Hulthén 1948:19ff).

(43) Storgata-n (Swedish)
Storgat-a (Norwegian)
Big-street-the

(44) Storgade (Danish)
Stórgata (Icelandic)

The behaviour of Scandinavian languages with regard to isolated nouns seems to challenge the generalisation in (13)a. The suffixed article is sometimes possible with such nouns. The generalisation seems to be too strong for some languages. As we proceed, we will keep in mind that Swedish, Norwegian and Faroese may have some

[17] In many cases, there is a semantic difference between the form with the article and the one without it. The form with the article is definite in the sense that it requires a specific person in the situation. The form without the article indicates that there is no such person in sight.
(i) polisen!
police-the [when calling for a specific policeman in sight]
(ii) polis!
police! [when calling for any policeman]

instances of suffixed articles where there should be no articles. This will be further discussed in chapter 4, where I show that it is connected to double definiteness.

2.3. Uncountables

As was mentioned above, uncountable nouns and plurals may lack determiners in all argumental positions when they are interpreted as indefinite, thus appearing to be counterexamples to the generalisation in (13)b. As I will show in this section several countable nouns in the singular may appear in the same way as uncountables and bare plurals, i.e. without any overt determiner. I will simply call them *bare singulars*, and I will use the term *uncountables* for inherently uncountable nouns, bare plurals and bare singulars together. I will claim that all countable nouns may be used as uncountables, some of them always appearing in the singular and others always in the plural. I will also argue that there is a null determiner position with indefinite uncountables. In other words, the generalisation in (13)b holds for this kind of noun phrases as well.

It has been a long standing problem within linguistic theory whether bare plurals and inherent uncountable nouns should be considered to have a phonetically null determiner. The discussion has often focused on bare plurals, for which a null determiner has been suggested e.g. by Chomsky (1965), Diesing (1988) and Longobardi (1992). Others have argued that an empty determiner cannot be the right answer, see especially Carlson (1978).

The idea that bare plurals contain a null determiner is mainly based on two arguments. First, a plural indefinite article would fill up an empty slot in the paradigm, i.e. all types of common nouns would be introduced by an article. Some languages, like French, actually use an article for indefinite plurals: the partitive article. Under the assumption that languages such as English and the Scandinavian languages have a covert partitive article with bare plurals, we would be able to ascribe to those languages the same structure as the one found in French, as is illustrated in (45).

(45)	**singular:**	**plural:**	**singular:**	**plural:**
indefinite:	un livre	des livres	a book	Ø books
definite:	le livre	les livres	the book	the books

A problem with an analysis where bare plurals have a null determiner, is of course that the French partitive article has singular counterparts, *du* and *de la*, with uncountable nouns. Those forms would not fit into the scheme in (45), because we would have two singular indefinite articles (*un* and *du*) with two clearly different functions. As we will see in this chapter, countability seems to be a more appropriate notion than number, when we are trying to classify articles.

A second argument for a covert article with bare plurals is the ambiguity between the generic reading and the existential reading. The ambiguity could be construed simply as two different null determiners, one corresponding to *all* or *most,* the other to *some.* Consider the examples in (46) below (from Milsark 1976), where the a-example could only have the existential reading (allegedly having a null *some*-determiner), whereas the b-example is normally interpreted generically (allegedly having a null *all*-determiner).[18]

(46)a There arise typhoons in the Pacific
b Typhoons arise in the Pacific

In his dissertation Carlson (1978) argues against the null-determiner-hypothesis for bare plurals. He argues that the ambiguity of bare plurals can be derived from the type of predicate used. Elaborating on Milsark (1976), Carlson shows that the ambiguity of bare plurals can be derived from the difference between different sorts of predicates. Some predicates like *black, in short supply* and *doctor* denote quite stable properties, whereas others, like *available, on the corner* and *is running,* denote more transitory properties. The difference between these two kinds of predicates has become a vital field of research in the late 80's and early 90's, and the former type of predicate is nowadays referred to as individual-level predicates and the latter one as stage-level predicates (cf. Diesing 1988 and Kratzer 1988). With individual-level predicates (which denote more stable properties) the only possible reading is the generic one.

(47) Norwegians are tall
Cats are mammals

With stage-level predicates (which denote transitory properties), like those in (48) below, the only possible interpretation is the existential one.

(48) Students were sick
Cats are on the roof

Carlson's analysis gives an answer to the question of why certain ambiguous predicates combined with bare plurals are not four ways ambiguous. An ordinary verb in the past tense is normally ambiguous between a habitual reading and an occasional (happening) reading (i.e. between an individual- and a stage-level interpretation). If bare plurals were ambiguous too, we would expect sentences like the

[18] In English (46)b may also have the existential reading, even if it is more far-fetched than the generic reading. The same is true for Swedish. In other languages though, like Italian and German, it seems like the existential reading is not possible at all in (46)b, (cf. Longobardi 1992:44)).

one in (49) to have four possible readings, roughly translated in (50), but they do not.

(49) Dogs ran
(50) *'Some dogs ran (as a habit)'
'Some dogs ran (on that occasion)'
'All dogs ran (as a habit)'
*'All dogs ran (on that occasion)'

As is indicated in (50), only two interpretations are possible. From examples like the one in (49) above, Carlson (p. 79) concludes that the occasional reading *is* the existential reading, whereas the habitual reading *is* the generic reading. Hence bare plurals are not ambiguous. The same argument can be reproduced for inherently uncountable nouns.

Carlson's arguments clearly throw some doubt on the hypothesis that there are two different sorts of null determiners. However, it does not solve the puzzle of why languages like French has a determiner with all uncountable nouns, where languages like English and the Standard Scandinavian languages use a bare noun. In this section, I will argue that Mainland Scandinavian uncountables do have a determiner when they are argumental, i.e. that (13)b holds. We can very well agree with Carlson that there are not two different sorts of empty determiners with bare plurals, and yet retain the view that there is one null determiner. The only difference that this makes is that we have an unambiguous null determiner. I will claim that the determiner is necessary for syntactic reasons.

I will now turn to uncountable nouns in Scandinavian. In this section, I will show that there are Scandinavian dialects that make use of an article with uncountables. Before I do so we will have to take a closer look at which properties different uncountables have in common. In subsection 2.3.1, I will discuss the properties of uncountables in Standard Swedish. I will claim that all countable nouns may be used as uncountables. In subsection 2.3.2, I will discuss the special properties of uncountables in Northern Swedish.

2.3.1. Standard Swedish[19]

As mentioned above, uncountable nouns constitute one of the categories that seem to contradict (13)b, because they appear without determiners in all the main argument positions. Inherently uncountable nouns and bare plurals often have similar properties. Above, I also mentioned that some singular nouns in Scandinavian may be used in the same way as inherently uncountable nouns and bare plurals and. Hence it is necessary to take a closer look at which properties cate-

[19] Much of the data and the analyses presented in this subsection have already been published in a working paper, cf. Delsing (1991).

gories have in common and how we can identify them. From now on, I will use the term *uncountables* for all three types: inherently uncountable nouns, bare singulars and bare plurals.

We will now turn to some constructions where the three kinds of nouns subsumed under the term uncountables appear to behave alike in Swedish, viz. when a noun follows a quantifying pronoun, like *mycket* [much] or a quantifying noun phrases, like *ett kilo* [a kilo]. Such constructions are prototypically used with inherently uncountable nouns. Consider the examples in (51)-(52)

(51) mycket kött/litteratur/glädje
much meat/literature/joy
(52) ett kilo smör/kött/järn
a kilo butter/meat/iron

However, we may also use countable nouns in these constructions. Normally, the countable noun is plural, but some nouns are always found in singular. Consider the examples in (53), where a) illustrates genuine uncountables, b) countables in plural and c) countables in singular.

(53)a ett kilo/mycket smör/salt
a kilo/much butter/salt
b ett kilo/mycket morötter/tomater
a kilo/much carrots/tomatoes
c ett kilo/mycket fisk/potatis
a kilo/much fish/potato

The choice between the singular and the plural form of countable nouns is lexicalised to a high degree, and I suggest that this form is specified in the lexicon, as a special **uncountable form**. This form is normally singular for different sorts of fish, wild animals, trees, some sorts of groceries, and other nouns that are often used collectively, such as *sten, svamp, spik* and *korv [stone, mushroom, nail, sausage]*. Most other nouns, like *bok, stol, lögn* and *grupp [book, chair, lie, group]* take the plural form. The difference is obvious to anyone who studies the signs in a grocery store, where he always finds *morötter, tomater, rödbetor* and *grönsaker [carrots, tomatoes, beets, vegetables]* in plural, whereas other countable nouns, like *potatis, lök, gurka* and *frukt [potato, onion, cucumber, fruit]*, always are found in the singular form.

The distinction between bare nouns that take singular and bare nouns that take plural form turns up in several constructions. These are all constructions where it is possible to find an inherently uncountable noun as well. Consider the examples in (54) where a) illustrates a quantifying pronoun, b) a quantifying noun phrase, c) a quantifying adjective with a PP complement, d) a generic clause,

where Standard Swedish has an uninflected predicative adjective, e) the existential construction, f) bare objects specifying the verb action, and g) nouns in isolated usage, on signs and the like. In the examples, I use *potatis* [potato] as a typical singular, and *morötter* [carrots] as a typical plural noun.[20]

(54)a mycket/lite potatis/morötter[21]
much/little potato/carrots
b ett kilo potatis/morötter
one kilo potato/carrots
c gott om potatis/morötter
good about potato/carrots [=plenty of]
d potatis/morötter är gott
potato/carrots is good
[uter.sg]/[plur] [neuter.sg]
e det finns potatis/morötter i skafferiet
there is potato/carrots in pantry-the
f skala potatis/morötter
peel potato/carrots
g potatis och morötter
potato and carrots

In constructions where there is singular/plural distinction, like the ones in (54) above, I will say that the noun is used in the **uncountable function**. This usage can semantically be divided into two different groups. I will use the notion **collective function** when referring to an undetermined (or rather indifferent) number of individuals, whereas **dividuative function** will be used when I refer to an undetermined (or indifferent) amount of a mass noun.

In the constructions in (54) the opposite form is bad, i.e. the singular form of *carrot*-type nouns, and the plural form of *potato*-type nouns. The singular of the *carrot*-type nouns is always bad. The plural of *potato*-type nouns is marginally possible in the collective function, but not in the dividuative function. [22]

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[20] Neuter nouns normally lack a plural ending, and we have to insert an adjective to be able to decide whether the singular or the plural is the uncountable form. As far as I can see, the plural is almost always used with neuter nouns. A word like *hair* however is singular, when used in the uncountable function.
(i) ett kilo rensade blåbär
a kilo (of) picked blueberries
(ii) flera tussar gammalt hår
several wads (of) old hair

[21] In Standard Swedish the singular/plural variation appears only with a few pronouns, like *mycket, lite,* [much, little], that are neuter singular (which is the default form). In colloquial Swedish the neuter form of the pronouns *någon, ingen* and *vad [any, no, what]* may also be used in this way. See further section 6.1.

[22] The plural form *potatisar* in constructions like those in (54) can also marginally be interpreted as 'different sorts of potatoes'. As I will argue in the end of this subsection, this interpretation is actually uncountable too, denoting an undetermined (or indifferent) number of potato-sorts.

I have claimed that the special form (singular or plural) that is used in the uncountable function has to be specified in the lexicon. A further support for this view is that a few words actually have a separate form that is normally used in the uncountable function. Consider the nouns in (55). Note that the special form used in the uncountable use may morphologically be either singular or plural.[23]

(55)	**singular**	**plural**	**uncountable**		
	höna	hönor	höns	[sing]	*hen*
	mygga	myggor	mygg	[sing]	*midge*
	planka	plankor	plank	[sing]	*plank*
	ärta	ärtor	ärter	[plur]	*pea*
	bräda	brädor	bräder	[plur]	*board*

From the data presented above, I will conclude that Swedish countable nouns, in addition to the ordinary countable singular and plural, must have a third uncountable form specified in the lexicon, which, morphologically, is either singular or plural. This uncountable form is used when the noun is interpreted as collective or dividuative, and in this sense the nouns are uncountable. This will be important in chapter 6, where I will discuss quantification inside the noun phrase.

The inherently uncountable nouns, like *gold* or *water,* have no countable forms, and they behave in the same way as countable nouns in the uncountable function. They may appear in the constructions where we have singular/plural variation, and they have the same restrictions as the countable nouns in (54) above. First, inherently uncountable nouns, as well as the uncountable form of countable nouns, may be used without a determiner in the generic construction with non-agreeing adjectives, cf. (54)d. The inflected countable forms may not appear in this constructions.[24]

(56) Öl/morötter/potatis är gott/nyttigt
Beer/carrots/potato is good/wholesome-neut.sg.
(57) *morot/??potatisar är nyttigt
**carrot/potatoes is wholesome-neut.sg*

Second, the inherently uncountable nouns, as well as the uncountable form of countable nouns are possible without an indefinite pronoun/ article in the existential construction. This is not possible for ordinary bare nouns.

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[23] Similar patterns are also found for some words in Danish and Norwegian (cf. Diderichsen (1962:98f) and Vannebo (1978)). Similar examples are also found in Icelandic (Halldór Á Sigurðsson, p.c.). See also Söderberg (1984:23-24).

[24] This construction has other special requirements, see further Hellan 1986, Delsing 1988, and especially Källström 1990:162-212, which also contains an overview of the discussion about this construction.

(58) Det finns öl/morötter/potatis i skafferiet
There is beer/carrots/potato in pantry-the
(59) *Det finns morot/banan/fluga i skafferiet
There is carrot/banana/fly in pantry-the

As well as the uncountable form of countable nouns, the truly uncountable nouns are inherently either singular, like *guld, mjölk [gold, milk]*, or plural, like *kläder, pengar [clothes, money]*. Hence, I claim that inherently uncountable nouns and countable nouns in the uncountable function are structurally and semantically parallel. Nouns in the uncountable function are **inherently specified** for either singular or plural, whereas nouns in the countable function are **inflected** for singular or plural. Consider the examples in (60), which illustrate ordinary countable nouns, (61) countable nouns with a special partitive form, and (62) inherently uncountable nouns.

	countable		**uncountable**		
	singular	**plural**			
(60)	potatis	potatisar	potatis	[sing]	*potato*
	morot	morötter	morötter	[plur]	*carrot*
(61)	mygga	myggor	mygg	[sing]	*midge*
	bräda	brädor	bräder	[plur]	*board*
(62)	–	–	mjölk	[sing]	*milk*
	–	–	kläder	[plur]	*clothes*

The data presented above clearly show that number and countability must be kept apart. We may describe singular and plural in two ways. They may either be inflected forms of a countable noun, or the inherent form of nouns in the uncountable function. In the latter use they are syntactically uncountable. We will then have four different cases, depicted in (63).

(63)	**[±plur]**	**[±count]**		
	+	+	(två) morötter	*two carrots*
	+	–	(mycket) morötter	*much carrots*
	–	+	(en) potatis	*one potato*
	–	–	(mycket) potatis	*much potato*

The fact that the plural *carrots* and the singular *potato* may be used both as countables and as uncountables means that such countable nouns are ambiguous with regard to the two functions.

Apart from the fact that uncountables show up in certain constructions (the ones in (54) above), a further distinction between the uncountables and ordinary countable nouns is that they have different quantifiers. The pronoun *all [all]*, and more marginally *viss [certain], somlig [some], åtskillig [considerable]* can only be combined with uncountables, not with countables in singular. Consider the examples in (64) below, where *all/viss* may be combined with inher-

ently uncountable nouns, with the uncountable form of countable nouns, but not with the countable form of those nouns.[25]

(64) somlig mjölk/allt smör
some milk/all butter
åtskillig fisk/allt hår
considerable fish/all hair
åtskilliga/alla morötter
several/all carrots
*all bok/*allt skåp
all book/ all cupboard
*somlig bok / *visst skåp
some book /certain cupboard

A further distinction between uncountables and countables is that only the former may take a superlative adjective in indefinite noun phrases. If a noun is unambiguously countable, the superlative is totally ungrammatical, whereas it is possible to use the superlative with uncountables (cf. Teleman 1969:87f., Lundbladh 1988:164ff. and Perridon 1989:209ff.). Consider the nouns below, which may be interpreted as both uncountables (65) and countables (66), but where only the uncountable version may have a superlative.

(65) Kalle säljer (godast) glass
Kalle sells tastiest ice-cream
Kalle fångade (störst) fisk
Kalle caught biggest fish
Kalle plockade (finast) jordgubbar
Kalle picked finest strawberries
(66) Kalle köpte en (*godast) glass
Kalle bought a tastiest ice-cream
Kalle fångade en (*störst) fisk
Kalle caught a biggest fish
Kalle plockade några (*finast) jordgubbar
Kalle picked some (finest) strawberries

Before we start looking at the special properties of countability in Northern Swedish, there is a fact that complicates matters a bit. Swedish, as well as other languages, seems to have the possibility of making uncountables countable and vice versa. At least marginally, some countable nouns in singular can be made uncountable by the context, although their normal uncountable form is plural. Consider the examples in (67).

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25 Longobardi (1992:29) notes the same thing about the inflected variant of *molto [much]* in Italian. Similarly, the English polarity item, *any*, and German *einiger [some]* seem to resist countable singular.

We would predict that the plural form of the *potato*-class words would be bad with *alla*, but they are not. This is probably due to an ambiguity of the plural form of *alla;* it could be interpreted as either countable or uncountable.

(67) Det är en hel del finne i honom
It is a whole lot Finn in him
Det är lite politiker i/över Kalle
It is little politician in/over Kalle
I nästa match måste vi ha mera puck
In next match must we have more puck
Vi fick inte mycket soffa för pengarna
We got not much sofa for money-the

The special possibility of making nouns uncountable in this way (without using the uncountable form), is quite marginal. In section 2.3, we will see that it is sometimes used with bare objects.

Conversely, most uncountables can be used after numerals. This is possible in two ways, either the noun denotes a smaller portion of the uncountable noun or a special sort of it.

First, any kind of noun that denotes food can follow a numeral, for instance, when it is served or ordered in a restaurant. A singular numeral can be followed by a plural uncountable noun, and plural numerals may be followed by singular uncountable nouns.

(68) en sniglar/pannkakor/köttbullar
one snails/pancakes/meatballs
två pannbiff/wienerkorv/ostkaka
two rissole/wiener sausage/cheese cake

The examples in (68) denote one or two portions/plates of something. The noun is in the uncountable form. In these cases it is not a question of individualising the nouns. Following Söderberg (1984:27), I assume that this is a construction with an empty noun, like *portion, dish* or *plate* in-between the numeral and the noun. Constructions like *en portion pannkakor [a portion (of) pancakes]* are discussed in chapter 6.

Second, uncountables can have the meaning 'sort of'/ 'kind of'. In Swedish they can always be exchanged for a compound with *sort* as the second part.

(69) ett gott vin = en god vinsort
a good wine = a good sort-of-wine
ett dyrt tyg = en dyr tygsort
an expensive cloth = an expensive sort-of-cloth

Hence, I will assume that examples like those in (69) are different words from the uncountable nouns *wine* and *cloth*, and that Swedish possesses one countable and one uncountable entry in the lexicon for these nouns. Note that the countable variant (meaning sort of wine/ cloth) may in turn be used in the uncountable function, like in the examples in (70) below.

(70) Här har de mycket viner
Here have they much (sorts-of-)wines
Hon sorterar tyger
She sorts (sorts-of-)cloths

In this subsection I have shown that all countable nouns may be used as uncountables. Some of these countable nouns are always singular, when they are used in the uncountable function, whereas others are always plural. I have called them bare singulars and bare plurals, and I have argued that the special uncountable form of each noun has to be specified in the lexicon. Together with inherently uncountable nouns, bare plurals and singulars are called uncountables.

I have pointed out several methods for distinguishing uncountables from countable singular and plural. Uncountables are found in certain constructions (cf. (54) above), they may be used without an article in argumental position, they have certain determiners, such as *all*, and they may take a superlative adjective with the bare form.

2.3.2. Northern Swedish

We will now turn to some data from Northern Swedish, which normally uses an article with uncountable nouns, thus supporting the view that such nouns contain a determiner, as we would conclude if (13)b were correct. In these dialects there is roughly the same singular/plural distinction as in Standard Swedish, between different countable nouns used as uncountables. Additionally the uncountable noun is often combined with a suffixed article, which is morphologically identical to the definite article (*-en* in masculine, *-a* in feminine, and *-e* in neuter). In the glosses I will represent this special use of the suffixed article with *ART*. Consider the examples in (71) below, where Standard Swedish would use a bare noun.[26]

(71) Smör-e ä bra å tvätt bort kåd-a vä (Northern Swedish)
Butter-ART is good to wash away resin-ART with
Mjölk-a ä allti go[27]
Milk-ART is always good
Däm satt å drack öl-e
They sat and drank beer-ART
Han ha fått krimm-en
He has got cold-ART

The fact that Northern Swedish and the Swedish dialects of Österbotten (Finland) use the suffixed article to a greater extent than Stan-

[26] The data that I present here are valid at least for Västerbotten and Southern Lapponia. These areas (together with Ångermanland) seem to be the heartland of the extended use of the suffixed article (cf. Söderström 1972:77).

[27] Note that the example in (61b) has a generic meaning, and would correspond to a bare noun in Standard Swedish: *mjölk är alltid gott*. Note also that the dialect lacks the special property of having predicatives without agreement (cf. (54)d).

dard Swedish has often been commented on in the literature (cf. Vestlund 1948:20, Larsson 1929:13f., Bergman 1952:200f., Eriksson 1973:213f.). It is sometimes pointed out that the definite form is especially frequent with uncountable nouns (e.g. Bucht 1962:44, Söderström 1972:77), but examples are given with countable nouns as well, and nobody has as yet given any clear account for the syntactic restrictions.

I will now propose that the special form with the suffixed article in Northern Swedish is a partitive article. In the following I will show that the article is used with all three sorts of uncountables, i.e. inherently uncountable nouns and in the cases where Standard Swedish would have a bare plural or a bare singular.

First, inherently uncountable nouns normally have the suffixed article in contexts where Standard Swedish would have a bare uncountable. When the noun has a prenominal determiner of its own or a quantifying noun phrase, Northern Swedish normally uses the noun without an article, but the article seems to be possible.[28] Otherwise the article is obligatory. Consider the constructions (72)-(73) below, compared to the Standard Swedish constructions in (54) above.

(72) myttje smör(e)
much butter(-ART)
e glas vattn(e)
a glas (of) water-(ART)

(73) Hä ä gött ätt gräddn hänna
There is good after cream-ART here [=plenty of]
Mjölka ä go
Milk-ART is good
Hä finns vattne/smöre ti hinken
There is water-ART/butter-ART out-in bucket-the
Däm satt å drack öle
They sat and drank beer-ART

The same paradigm can be reproduced with bare singulars. Northern Swedish uses the singular with basically the same words as Standard Swedish does, i.e. with various sorts of fish, wild animals, some groceries, etc. Consider the examples in (74)-(75).

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[28] The use of the article after determiners is not altogether clear to me. According to my informants the suffixed article is not possible if the determiner has visible uter morphology, like *nan, ingen [some/any, no]*. If there is no visible gender morphology on the determiner, such as in the neuter or plural forms *na [some/any-neut.sg/pl]*, *myttje [much]*, with numerals, or with quantifying noun phrases, the article seems to be possible. Consider the examples in (i) below, cf. also Eriksson (1973:211ff.)

(i) nan fisk/*fisken
some fish/fish-the
två bjärk/bjärken
two birches/birches-the

(74) myttje fisk(en)
much fish(-ART)
e tjilo fisk(en)
a kilo fish(-ART)

(75) Hä ä ont ätt löken
There is poor after onion-ART [=not much]
Abbarn ä go
Perch-ART is good
Hä finns soppen däri skogen
There is mushroom-ART in wood-the
Däm satt å ränse siken
They sat and skinned whitefish-ART

The same data can be reproduced for bare plurals. Consider the examples in (76)-(77).[29]

(76) myttje ko(en)
much cows(-ART)
e par jänt(en)
a pair girls(-ART)

(77) Hä ä gött ätt koän hänna
There is good after cows-ART here [plenty of]
Morötträn ä go
Carrots-ART are good
Hä häng tavlän dära vägga
There hang pictures-ART there-on walls-the
Däm satt å ränse snatträn
They sat and picked cloudberries-ART

Thus, we can see that all the three uncountable categories (inherently uncountable nouns, bare singulars and bare plurals) behave in the same way. When they are introduced by a determiner or a quantifying noun phrase they normally lack the article (cf. footnote 28) but in other uses they must have the article. Note that the same restriction holds for the partitive article in French. When the noun follows quantifying pronouns like *beaucoup* or quantifying noun phrases like *un kilo*, it lacks the partitive article, instead they appear after the preposition *de* in the bare form: *beaucoup *du beurre/ beaucoup de beurre*. Thus it is a fair generalisation that the dialect uses the suffixed article with uncountables, i.e. in the cases where Standard Swedish uses a bare noun with singular/plural variation. Hence, it seems as if Northern Swedish possesses a suffixed partitive article.

Note that the suffixed article found with uncountables is morphologically identical to the suffixed definite article, but that it is different in one respect. The former article is possible in existential con-

29 In the dialect, the definite and the indefinite forms have collapsed in some paradigms. For instance, masculine nouns (with formerly long root syllables) with *-ar* in plural have no distinct definite form, but feminines normally have two distinct forms (cf. Eriksson 1973:209f.).

structions, but the latter one is not. Consider the examples in (78), which illustrate uncountables, and in (79), which illustrate ordinary countable nouns with the definite article.

(78) Hä finns vattne däri hinken
There is water-ART there-in bucket-the
Hä finns fisken däri hinken
There is fish-ART there-in bucket-the
Hä häng bonaden dära vägga
There hang hangings-ART there-on walls-the

(79) *Hä sitt katta dära trappa
There sits cat-the there-on staircase-the
*Hä häng tavla dära väggen
There hangs picture-the there-on wall-the
*Hä stå biln däve garasje
There stands car-the there-by garage-the

As is well known, definite noun phrases are generally disallowed in the existential construction, and I will therefore conclude that the article used with uncountables is indefinite, thus being parallel to the French partitive article.[30]

The Northern Swedish data imply that there can be an overt partitive article with all uncountables. The data from the existential construction further imply that this article is not definite. Hence we must conclude that uncountables have a determiner, which is often null, but in some dialects spelled out. In Northern Swedish, this article is phonologically identical to the definite article, but syntactically different; it is not definite.

2.3.3. Conclusions

In this section I have claimed that all countable nouns may be used as uncountables. When they are, they turn up in a form that is inherently either singular or plural. This special form is listed in the lexicon, and it may be homophonous with the normal singular or plural, or it may be a special uncountable form. Thus three groups of uncountables were distinguished, inherently uncountable noun, bare plurals and bare singulars.

Furthermore the examples from Northern Swedish have indicated that some Scandinavian dialects use an article with all uncountables. If uncountable noun phrases have the same structure in Stan-

[30] The suffixed article seems to be possible on uncountables in the existential constructions in the five northernmost provinces of Sweden: Lapponia, Norrbotten, Västerbotten, Ångermanland and Jämtland. In Vestlund (1948:21) it is explicitly pointed out that a noun with the suffixed article in an existential sentence is not possible in Medelpad. Reinhammar (1973:28) mentions that the suffixed article is very common in most Northern Swedish dialects, possibly excluding Härjedalen. If this is correct, we have quite a clear picture of the geographical extension of the suffixed partitive article in Northern Sweden.

dard and Northern Swedish, we must assume that the Standard Mainland Scandinavian languages have a null determiner with uncountables, and that (13)b still holds.

2.4. Proper Names

In this section I will discuss the use of proper names in Scandinavian. Contrary to what we should expect if our working hypothesis in (13)b were correct, all personal proper names are allowed in argument position without a determiner in the Standard Scandinavian languages. Consider the examples in (80) below.

(80) Kalle har slagit Lisa
Kalle has beaten Lisa
Pelle gav Lisa en bok
Pelle gave Lisa a book

Proper names are inherently definite, and we would a priori assume that they should have a structure similar to ordinary definite noun phrases. As we will see, several Scandinavian dialects actually use articles with proper names.

Proper names are inherently uncountable and just as indefinite uncountables they are inherently either singular or plural. The plural form is especially common with place names, and then they require an article (cf. Longobardi 1992:48), which is homonymous with the definite article.[31]

(81) Förenta Staterna
United States-the
Färöarna
Faroe-islands-the
Filippinerna
Philippines-the

As we mentioned above uncountable nouns can marginally be made countable, and the same thing is true for proper names. Ordinary personal names may marginally be used as common nouns, as shown in (82) (cf. Longobardi 1992:47f.).

(82) Jag känner två Annor som är gifta med Lassar.
I know two Annas who are married to Lasses
den Olle som jag känner
the Olle that I know

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[31] Family names may also take the suffixed definite article, as shown in (i) below, but in such cases I assume that they represent proper names that have been made countable common nouns, and thus, like the examples in (82), they are treated as common nouns.

(i) Anderssönerna har aldrig gillat Bergforsarna
Andersson-s-the have never liked Bergfors-es-the

In several variants of Scandinavian it is possible to use a pronoun or an article with proper names. In colloquial Icelandic the personal pronoun is optionally used with personal names. In literary language the pronoun is normally avoided.

(83) Hann Jón hefur slegið hana Önnu (Icelandic)
He Jón has beaten her Anna
Hún Anna hefur gefið honum Jóni bókina
She Anna has given him Jon book-the

In Norwegian Norway, there are dialects that obligatorily have a prenominal pronoun with argumental personal names.[32] Other dialects may have a postnominal article; this latter article is homonymous with the ordinary definite article used with common nouns.

(84) Han Per har slage ho Kari (Norwegian dialects)
He Per has beaten she Kari
Peren har slage Karia
Per-the has beaten Kari-the

In Northern Swedish there is an obligatory prenominal article with all first names. This article is *(e)n* in masculine and *a* in feminine. Following Eriksson (1973:25) I will call it *the preproprial article*. With family names the postnominal article is also possible, but never obligatory. Consider the examples in (85)-(86) from the dialect of Västerbotten, where the proprial article is glossed *ART*.[33]

(85) *(n) Erik ha arrestere student'n (Northern Swedish)
ART Erik has arrested student-the
Polis'n ha arrestere *(a) Anna
Police-the has arrested ART Anna
Hon ha samarbete ve *(n) Erik
She has co-operated with ART Erik
(86) Norströmm(en) ha släjje hästn
Nordström-the has beaten horse-the

As we would expect from the hypothesis in (13)b the article is dropped when proper names are not arguments. Consider the vocative in (87) and the verb *heta/kallas* in (88) below.[34]

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[32] As illustrated in the example in (84), the personal pronoun used with proper names does not have any specific oblique case form, cf. Fiva (1987:87).

[33] The preproprial is homonymous with the weak/clitic form of personal pronouns in many of the dialects. Apart from its use with personal names, the article may also be used with some words of kinship like *father* and *mother*, and is sometimes also used with family names.

[34] The article is not dropped in predicative constructions like in (i).
(i) De här ä n Erik/a Anna
This here is ART Erik/ART Anna
This case is analogous to the case mentioned in fn.10, where the article is retained when there is lack of number or gender agreement.

(87) (*n) Erik! (Northern Swedish)
ART Erik!
(88) Han het (*n) Erik
He is-named ART Erik

The restriction to drop the determiner in non-argumental noun phrases is also found in Icelandic and the Norwegian dialects that use personal pronouns with proper names.[35] The main difference between the languages with regard to the preproprial article is that it is obligatory in Northern Swedish and Northern Norwegian, but optional in Icelandic.[36]

The examples above have shown that articles/determiners with proper names are present in several Scandinavian dialects. Such articles are also well known from German and Italian dialects (cf. Longobardi 1992), even if they are not obligatory in these dialects. The property of having proprial articles that are distinct from articles with ordinary nouns is also a common property of other languages, e.g. Catalan (Longobardi 1992:56f.) and many of the Austronesian languages (see for instance Campbell's (1991) articles on Tagalog, Malagasy and Maori).

Unless we want to assign different syntactic structures to proper names in the Standard Scandinavian languages and some of their dialects, we will have to assume that all proper names have a determiner position. Hence proper names do not have to constitute a violation of the working hypothesis in (13)b.

Furthermore I have shown that the dialects that use proprial articles or pronouns in argumental position, lacks this article in non-argumental position, as we would predict from (13)a.

2.5. Various Bare Nouns

Having shown that uncountables and proper names, although they occur in argument positions without a determiner, nevertheless do not violate our generalisation in (13)b, I will now turn to a discussion of

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Contrary to what we should expect from the generalisation in (13)b the preproprial article in Northern Swedish is not used with possessors. In subsection 5.3.5, I will show that the lack of the article is only superficial.

35 Colloquial Swedish, outside the Northern Swedish area, sometimes uses a proprial pronoun. It is optional and the use is not as common as in Icelandic. In the same way as in Northern Norwegian the pronouns lack case distinctions. This was pointed out to me by Gunlög Josefsson.

(i) Hon Karin har ringt dig (ii) Jag har talat med hon Karin
She Karin has called you *I have talked with she Karin*

36 Another difference is that Icelandic may use the preproprial article without number agreement, as shown in (i).

(i) við Halldór (ii) Þeir Jón
we Halldór *they Jón*
'we, Halldor and I' *'they, Jón and his friend(s)'*

Non-agreeing constructions like the ones in (i) and (ii) are not possible in Northern Swedish or Northern Norwegian.

some remaining types of noun phrases that appear without determiners in argument position. In this section, I will discuss in some detail the properties of bare nouns that are not used with the special uncountable form, but that nevertheless may be bare. Recall that most nouns in Swedish use the plural as the inherent uncountable form (the *carrot* class), whereas several nouns use the singular as the inherent uncountable form (the *potato* class). Therefore, the study will have to be based on the opposite form of the nouns, i.e. the singular of the *carrot* class and the plural of the *potato* class.

Bare countable nouns are normally found as objects or prepositional complements. In some cases we also find them in existential constructions or as generic subjects. Before we discuss those cases further I will mention three cases with bare nouns that I consider irrelevant for our purposes (cf. also footnote 4).

First, we find many bare nouns in proverbs and sayings. There are proverbs that are uncontroversially archaic, or modelled on the pattern of Old Swedish, where all types of bare nouns were allowed in all types of positions (cf. (1) above). Their pattern is not productive.[37]

Second, there are several word pairs with bare nouns. Those are normally used in co-ordinations or with contrastive prepositions.

(89) krig och fred, kropp och själ, himmel och jord
war and peace, body and soul, heaven and earth
liv och död, vett och vilja, häst och vagn,
life and death, wit and will, horse and carriage

(90) från topp till tå, ur hand i mun
from top to toe, out of hand into mouth

Such word pairs are not productive. As can be seen in (91)-(92) below, those expressions are lexicalised and cannot be reordered or altered.[38]

(91) *fred och krig, *själ och kropp, *jord och himmel
*död och liv, *vilja och vett, *vagn och häst

(92) *från tå till topp, *i mun ur hand

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[37] The proverbs that I have in mind are exemplified in (i)-(ii).

(i) gammal man gör så gott han kan
old man makes the best he can
morgonstund har guld i mun
morning-time has gold in mouth

(ii) lagt kort ligger
laid card lies
affär är affär
business is business

[38] There are a few word pairs that seem to be possible to alter.

(i) papper och penna/penna och papper
paper and pen/pen and paper
regering och riksdag/riksdag och regering
government and parliament/parliament and government

Examples like in (i) are quite rare, and perhaps both variants are lexicalised. Another possible solution is that the conjunction, bearing the feature [+plural], may license the empty determiner in some way, cf. Bhatt (1992:193ff.).

Third, there are nouns that turn up with old case morphology, which was lost five hundred years ago, and nouns that are only found in one single expression. Such constructions will of course not have any relevance for our theory of bare nouns. Consider the examples in (93)-(95) below, where (93) illustrates genitives, (94) datives, and (95) nouns that are only found as prepositional complements.

(93) till sängs/sjöss/fots/topps
to bed/sea/foot/top
(94) ur huse, i gårde, i sömne
out-of house, in farm, in sleep
(95) på tok, på känn, på måfå, i fjol
on wrong, on feel, on random, in last-year

I do not think that these cases of bare nouns (proverbs, word pairs and lexicalised PPs) can say anything about the core grammar. In the next two subsection, I will turn to bare nouns appearing as subjects and objects (2.5.1) or as prepositional complements (2.5.2).

2.5.1. Subjects and Objects

As we have seen above, subjects and objects that are not obviously uncountable normally require a determiner, but in some cases they do not. Bare objects appear mainly together with two types of verbs. First, we have (normally) intransitive verbs that take a complement that is semantically close to or limited by the meaning of the verb.

(96) röka pipa, dansa vals
smoke pipe, dance waltz
spela piano, spela fotboll
play piano, play football
åka båt/tunnelbana
go boat/underground [=go by]
köra bil/traktor
drive car/tractor

A typical property of these verb phrases is that they denote a process, and that the object is not referential. The bare object has generic interpretation, whereas an article gives the phrase situational reading. Compare (97) with (98) below.

(97) röka pipa
smoke pipe (habitual)
dansa vals
dance waltz (as a habit or skill)
(98) röka en pipa
smoke a pipe (occasional)
dansa en vals
dance a waltz (occasional)

Note that the noun may be qualified by *mycket* and other quantifying elements that otherwise are followed by a partitive noun (cf. (54) above).

(99) Jag har åkt en hel del tunnelbana i mina dagar
I have gone a whole lot underground in my days
Han har rökt mycket pipa i sina dagar
He has smoked much pipe in his days

These bare nouns may also be combined with superlatives, which is a property that is otherwise only possible with uncountables.

(100) Nu får vi se vem som dansar bäst vals
Now get we see who that dances best waltz

Hence I will assume that these cases actually involve uncountables. I will assume that they are exceptional uses of the singular (where plural is the normal uncountable form), analogous to the examples presented in (67) above.

Second, there are some transitive verbs which take bare objects. This sort of verbs is illustrated in (101) below.

(101) Han ska köpa bil/lägenhet
He shall buy car/apartment
Hon har hund/ svår lunginflammation
She has dog/ hard pneumonia

Bare nouns like the ones in (101) above require that the verb phrase denote something that is a bit more than trivial. The verb phrases in (101) above have connotations of getting a loan in the bank, paying the insurance, moving to the new apartment, having to go out with the dog every day, or being bound to the bed. When the expression lacks such connotations, the bare noun object becomes awkward.

(102) *köpa bok/suddgummi
buy book/rubber
(103) *ha stol/bok
have chair/book

Note that a verb like *sell* denotes an act without the special connotations that are connected to the verb *buy*. Consequently *sell* is not good with the same nouns, although it takes the same kind of objects.

(104) *sälja bil/lägenhet
sell car/apartment

The sort of nouns that may be bare as objects with this kind of verbs may also appear as bare subjects in generic clauses with an uninflect-

ed predicative. More trivial nouns that do not have a set of associations connected to them are excluded, as was the case with objects.

(105) bil/hund är dyrt
car/dog is expensive
*bok är dyrt
book is expensive

In constructions like the one in (105) above only uncountables are normally allowed. Recall from (54) above that the generic construction with an uninflected adjective was one of the constructions where there was singular/plural variation with countable nouns, which we took to be a sign of partitivity. Hence I will propose that bare nouns like those in (102)-(103) above are actually uncountables of the same sort as *skala potatis/morötter,* but with the same exceptional use of the singular as in the group of intransitive verbs, and the examples in (67). The assumption may be corroborated by the superlative test. This kind of bare nouns do take a superlative.

(106) Nu får vi se vem som har snabbast bil
Now get we see who that has fastest car

There is another sort of bare nouns that may appear in argument positions, namely some relational nouns. Only a handful of nouns are involved, but they may appear both as objects and as complements in the existential constructions.

(107) Vi har anledning att betvivla detta
We have reason to doubt this
Vi har möjlighet att...
We have opportunity to...
(108) Det finns orsak att betvivla detta
There is reason to doubt this
Det finns risk för ras
There is risk for landslide
Det finns tillfälle till förfriskningar i pausen
It is opportunity to refreshments in pause-the

These nominals are special in that they are bare and referential simultaneously. They are also special because they obligatorily take a complement.[39]

A similar pattern can be found in French. Relational nouns like the ones in (107)-(108) above are practically the only arguments that appear without determiners in this language: *il a besoin de..., il a raison de..., elle a envie de....* The fact that these relational nouns must have an argument can maybe be the solution to the problem.

[39] Other nouns that may function in this way are: *grund [foundation], behov [need], brist [lack], överflöd [superfluity], tid [time].*

Grimshaw (1991a) shows that true argument taking nouns in English behave as if they are uncountable, not being able to take the indefinite article or the singular numeral, and resisting the plural form.

The nouns in (107)-(108) above also seem to be uncountable in the sense that they allow the pronouns *all/viss* and superlatives, as shown in (109)-(110) below.

(109) Det finns all anledning att betvivla detta
There is all reason to doubt this
Det finns viss risk för ras
There is certain risk for landslide
(110) Den som har störst anledning att bli arg är Pelle
The-one who has greatest reason to get angry is Pelle
Han har störst möjlighet att komma undan
He has greatest possibility to get away

Last there is a special kind of nouns that seem to be truly bare in Swedish. They are similar to particles in some ways (and sometimes analysed as such).

(111) Gardinen fattade eld
Curtain-the caught fire
Vi tog hand om Olle
We took hand of Olle [=took care of]

It seems as if this kind of nouns truly lack determiners. I will claim that they are not arguments. Note that, unlike argumental noun phrases, they cannot be passivised or topicalised.

(112) *Hand togs om Olle av oss
Hand was-taken of Olle by us
*Hand har vi tagit om Olle
Hand have we taken of Olle

To conclude this subsection, I have claimed that several sorts of bare noun complements found in Swedish are similar to uncountables in several ways. I assume that they represent cases where countables can be used in the uncountable function, although they do not exhibit the normal partitive form (compare (67) above). Thus they will have a covert determiner, and they will not constitute counterexamples to our working hypothesis in (13)b.

2.5.2. Complements of Prepositions

There are many occasions where we find truly bare nouns as complements of prepositions. Here we are interested in determining whether such noun phrases might be considered arguments, thus constituting counterexamples to our working hypothesis in (13)b. Our hypothesis states that there should be no bare nouns that are

arguments. Complements of prepositions could be considered to be arguments in three ways. Either the preposition could function as a predicate assigning a θ-role to the noun phrase, or the noun phrase could be assigned a θ-role by a lexical head, where the preposition would be a pure dummy preposition. A third variant would be a joint assignment of a θ-role to the noun by the verb and the preposition. I will assume that prepositional objects belong to the last category.

As far as I know, there are no uncontroversial diagnostics for exactly which prepositions should be regarded as dummy prepositions and which should be considered to be true predicates. However, there are at least some cases where the preposition is arguably predicative (cf. Hoekstra/Mulder 1990), namely cases with copular verbs, illustrated in (113), and prepositional small clauses, like those in (114).

(113) Mannen är från Oslo
Man-the is from Oslo
Kalle stannade i bilen
Kalle stayed in car-the

(114) Han lade kläderna på sängen
He lay clothes-the on bed-the
Hon flyttade stolen mot dörren
She moved chair-the towards door-the

Constructions like those in (115)-(116) below are clearly ungrammatical.[40]

(115) *Sådana män är ofta från småstad
Such men are often from small-town
*De stannar gärna i bil
They stay gladly in car

(116) *De brukar lägga kläderna på säng
They uses-to lay clothes on bed
*Hon brukar flytta stolen mot dörr
She uses-to move chair-the towards door

The second case where we could expect the noun phrase to be an argument is where a lexical head assigns a θ-role to the noun phrase, but where a dummy preposition is needed to assign Case to it.

One case where we may conjecture that the preposition is purely a Case assigner involves categories that do not assign Case, e.g. nouns in a language like Swedish. As argued by Chomsky (1970) the only function of the preposition in nominalisations is to assign Case

[40] There are cases with bare uncountable nouns, as shown in (i) and (ii).

(i) vara på gott humör
be on good humour
'to be in a good mood'

(ii) lägga jorden i träda
put earth into fallow

to the complement. In Swedish the default preposition with nominalisations is *av*.

(117) Skaparen av skådespelet
Creator-the of play-the
Förstörelsen av staden
Destruction-the of city-the
Publiceringen av artikeln
Publication-the of article-the

As far as I can tell, there are no bare countable nouns in such PPs.

Chomsky makes the same assumption for adjectives in English, i.e. they may not assign Case and hence they need a dummy preposition (*of*) in order to take a complement. In Swedish several adjectives do take objects without any preposition (cf. Platzack 1982), and adjectives in Swedish do not have any standard preposition. Consider the examples in (118) below.

(118) rädd för hunden
afraid for dog-the
stolt över barnen
proud over children-the
medveten om riskerna
aware about risks-the
van vid kyla
used with cold

Since there is no standard preposition with adjectives, I conjecture that there are no dummy prepositions with adjectives in Swedish. I believe that adjectives taking PP-complements are parallel to prepositional objects of verbs, the θ-role being assigned jointly by the verb/adjective and the preposition.

This brings us to the third group of prepositions, which seem to assign a θ-role together with a lexical head. I cannot find any bare countable nouns at all with adjectives. As for PP-complements of verbs, the bare nouns that we find are of the same kind as ordinary objects of verbs, which we assumed to be uncountables (cf. subsection 2.3.1) Consider the prepositional object in (119).

(119) Hon sitter alltid och tittar på teve
She sits always and watches on TV

The bare nouns that we find as complements of prepositions are typically adjuncts. Consider the examples in (120)-(121)

(120) Hon kom till banken utan legitimation/väska/kavaj
She came to bank-the without identification-card/bag/jacket
Han kom till banken i bil/ i frack
He came to bank-the in car/ in dress coat

(121) En skjorta utan ärm/krage
A shirt without sleeve/collar
Två rum med kök/kokvrå
Two rooms with kitchen/kitchenette

As far as I can see, there is only one type of PP that could be assumed be an argument, namely instrumental *med [with]* phrases.

(122) Han åkte till Oslo med bil/båt
He went to Oslo with (by) car/boat
Hon öppnade dörren med dyrk/kort
She opened door-the with picklock/card
Hon betalar alltid med check
She pays always with cheque
Hon simmade tvåhundra meter med simdyna
She swam two hundred meters with cork-pillow

Phrases with instrumental *with* seem to be arguments, and the examples in (122) would then challenge our hypothesis in (13)b. However, I claim that they represent uncountables. They have the same generic interpretation as the bare objects in subsection (2.5.1). Furthermore, the uncountable form (i.e. the singular/plural alternation) is normally used in these cases, as is illustrated in (123) below.[41]

(123) Han prydde smörgåstårtan med gurka/morötter
He decorated sandwich-cake-the with cucumber/carrots

Finally, there is a special kind of nouns in PPs that seem to be truly bare in Swedish. They are found in abstract transitional phrases (cf. Ekberg 1989).

(124) Fienden gick till anfall
Enemy-the went to attack
Hon föll i sömn
She fell in sleep

It seems as if this kind of nouns truly lack determiners. I claim that they are not arguments. Note that they behave unlike other noun phrases in many respects. The cannot be pseudopassivised, and they cannot be topicalised.

41 Instrumental *med*-phrases are found with the suffixed (partitive) article in Northern Swedish and the dialects of Österbotten (cf, Hummelstedt 1934:135), which implies that they are seen as uncountables in these dialects.
(i) vi skar a me stjeron
we cut it with sickle-ART

(125) *Anfall gicks till av fienden
Attack went-pass to by enemy-the
*Anfall har fienden gått till
Attack has enemy-the gone to

To conclude this subsection, I have argued that the cases where we find bare nouns as complements of prepositions represent the exceptional use of singular as the uncountable form. In some cases bare nouns seem to be non-arguments.

2.6. Types of Determiners

In this chapter I have studied the distribution of articles/determiners in argumental and non-argumental positions. This was done with the generalisation in (13) as the working hypothesis, originally proposed by Stowell (1991). (13) is repeated here.

(13)a If a noun phrase is a non-argument, then it has no determiner
b If a noun phrase is an argument, then it has a determiner

In this section, I will first summarise the result of the investigation. I will then turn to a discussion of what kind of articles are found in the Scandinavian languages.

2.6.1. Arguments and Determiners

First, I investigated non-argumental noun phrases such as predicative and vocative noun phrases. I found that the claim that they never have a determiner was too strong. When a predicative noun phrase has descriptive reading, it must have a determiner, most commonly an indefinite article. I have shown that this article is different from the argumental article in several respects: it introduces an implicit modal argument, it has a plural form, and it is compatible with uncountable nouns. I have suggested that the introduction of an implicit argument in predicative noun phrases implies that the predicative article is present already at D-structure. Likewise, I assume that all meaningful determiners have to be present at D-structure.

Second, in vocative and other isolated noun phrases, we found that some of the Scandinavian languages behave as predicted by (13)a, not allowing any determiners, whereas Swedish, Norwegian and Faroese, sometimes may have a suffixed article. I will assume that these languages have a special possibility of base generating the suffixed article on the noun, and thus the determiner position will be empty. At the moment, this assumption seems ad hoc, but as we will see in chapter 4, it is strongly supported by definiteness data in the Scandinavian languages.

Third, I have studied several constructions where bare nouns may appear as arguments, thus seemingly contradicting (13)b. Ex-

cept for several lexicalised types, we were left with two basic categories: uncountables and proper names. I argued that most bare objects and bare complements of prepositions are special cases of uncountables. Both uncountables and proper names were shown to have obligatory articles in Northern Swedish, whereas the Standard Scandinavian languages use them without determiners in argument positions. Since I do not want to assign Standard Swedish and Northern Swedish fundamentally different structures for these kinds of noun phrases, I will assume that uncountables and proper names always contain a covert or overt determiner. Thus (13)b, which requires arguments to have a determiner, still holds.

Note that the suffixed article behaves in the same way as the prenominal article in almost all constructions. This makes the suffixed article in Scandinavian parallel to the prenominal definite article (in Scandinavian and other languages). In the next chapter I will argue that the suffixed article may also be structurally parallel to the prenominal article in other Germanic and Romance languages.

In the discussion above, I have argued that determiners in non-argumental noun phrases are generated in a determiner position at D-structure, but that such noun phrases normally do not require a determiner at S-structure. Contrary to non-arguments, all arguments seem to have a determiner at S-structure. I will thus assume that all meaningful determiners, like demonstratives, numerals and pronouns are base generated in a determiner position at D-structure. At S-structure all arguments must have a determiner, and I propose that a default determiner (an article) has to be inserted at S-structure. We might propose the following (descriptive) rule.

(127) **Argument Rule:**
All arguments must have a filled determiner position at S-structure.

Hence, it will be practical to differentiate between **base-generated determiners** and "expletive" determiners, i.e. **articles**, inserted at S-structure to make the phrase licit. In this sense, the indefinite article in predicative noun phrases is not an article, but a base generated determiner. Henceforth I will call it **the non-argumental indefinite determiner**. Another instance of this article will be discussed in subsection 4.4.2.

The approach presented here means that (13)b still holds, but that it is specified as (127). The distribution of determiners in non-argumental noun phrases does not have to be further specified. There is neither any requirement for, nor a ban on determiners with non-argumental noun phrases. The ones that are base generated at D-structure are still there at S-structure.

2.6.2. Types of Articles

We are now in a position to discuss the different types of articles found in the Scandinavian languages. First, of course, there are the ordinary indefinite and definite articles. Second, we have seen that there are two sorts of uncountable nouns, ordinary uncountables (including bare singulars and plurals) and proper names. Except for being uncountable, the two types have in common that they are inherently specified for number. The first type is indefinite and the second is definite. Hence we would have four different ways to use nouns, distinguished by means of the features [±definite] and [±countable].

(128)		[definite]	[countable]	
a	en bok	–	+	a book
b	Ø smör	–	–	Ø butter
c	bok-en	+	+	the book
d	Ø Kalle	+	–	Ø Kalle

The simple scheme in (128) cannot be the whole truth, though. It is obvious that an uncountable noun that is made definite, like *smöret [butter-the]* does not become a proper name. Hence the system needs at least one more feature, probably something like [±dividuative]. I will not try to give a complete taxonomy of different sorts of nouns here, but I think that (128) is on the right track. I claim that natural language possesses four different types of articles that correspond to the four groups in (128). The article in a) will be called **the indefinite article**, the one in b) **the partitive article**, the one in c) **the definite article** and the one in d) **the proprial article**. In several cases articles may be homonymous with other articles or with pronouns, but the distinctions between the different articles can be proven from different languages.

In Swedish the indefinite article is homonymous with the numeral *one*, but it is morphologically distinct from the non-argumental indefinite determiner, as I argued in 2.1.1. In English the indefinite article is distinct from the numeral *one*, but it is homonymous with the predicative indefinite determiner.

The partitive article is Ø in the Standard Scandinavian languages and in English. In Northern Swedish it is homonymous with the suffixed definite article, but in French it is morphologically distinct from other articles/pronouns. Italian has a morphologically distinct (optional) partitive article.

The definite article in the Standard Scandinavian languages is suffixed and morphologically distinct. English has a distinct prenominal article, whereas German and French have articles that are homonymous with definite pronouns.

In several Scandinavian languages, there is a prenominal proprial article. The same seems to hold for many other languages. In Icelandic the proprial article is homonymous with personal pronouns. In Northern Swedish, there is a special proprial article, which is homonymous with weak pronouns. In Northern Norwegian, the proprial pronoun is distinct from the personal pronoun, since it is lacking a special oblique form.

Let us end this section by giving a taxonomy of the different articles found in some of the Germanic and Romance languages. In (129) only the uter/masculine singular form is given. Suffixed articles are marked with a hyphen. Articles that seem to be optional are put in brackets. The proprial article indicated is the one used with personal names.

(129) **Articles in Germanic and Romance**

	indefinite	partitive	definite	proprial
Icel.	Ø	Ø	-inn	(hann)
NSw.	(e)n	-en	-en	(e)n
Sw./Da.	en	Ø	-en	Ø
WJu.	en	Ø	æ	Ø
German	ein	Ø	der	(der)
English	a	Ø	the	Ø
French	un	du	le	Ø
Italian	un	(del)	il	(il)

Note that the partitive and the definite articles can be suffixes. Recall also that in some Norwegian dialects (not included in (129) above) the proprial article may be a suffix. In other languages, such as Kurdish, even the indefinite article may be suffixed (Campbell 1991: 770). Hence it seems as if all sorts of articles are possible both as independent elements and affixes. This will become important when we start to look at the internal structure of noun phrases in the next chapter.

Of course we still need to discuss whether the Argument Rule in (127) should be parametrised or not, and whether it should be parametrised for indefinite and definite articles. As far as I can see there are no good arguments for positing the argument rule for languages like Old Scandinavian, Russian or Latin, which lack articles altogether. In Old Scandinavian there does not seem to be any fixed determiner position; demonstratives and indefinite pronouns are placed both pre- and postnominally. Hence I think that we must parametrise the argument rule.

We should also ask ourselves whether the parameter could be stated differently for the different sorts of articles (indefinite, definite etc.), making it possible for languages to obey the argument rule only in some cases. Such a question is of course hard to answer, but I

think that we should have only one argument rule. I base this on the behaviour of Icelandic. In Old Icelandic there was obviously no requirement to have articles, and there was no fixed position for determiners; they could appear both pre- and postnominally. In Modern Icelandic there is a requirement for definite articles on argument, but not for indefinite articles. On the other hand, there is a fixed position for determiners, both for indefinite and definite ones. Thus the introduction of the argument rule for definite noun phrases seems to go hand in hand with a fixed position for both definite and indefinite determiners. If the argument rule was stated only for definite noun phrases we would expect that indefinite noun phrases could still have determiners on both sides of the noun. Hence, I will assume that languages must obey the argument rule with all types of argumental noun phrases or disregard it altogether.

2.7. Conclusions

In this chapter I have investigated the distribution of articles in Swedish. As a working hypothesis, I assumed that all arguments have an article position, whereas non-arguments lack such a position.

I have argued that the first statement is true for a language like Swedish. This was formulated as the *Argument Rule:* All argumental noun phrases must have a filled determiner position at S-structure. I also argued that the suffixed article is parallel to prenominal articles in other languages in this respect.

With regard to the second statement, I found that it is perhaps to strong. Determiners are found in many predicative and vocative noun phrases. However, the indefinite article found in predicative position is different from the indefinite article in argument positions.

I have also presented a taxonomy of articles, claiming that there are four sorts of articles, indefinite, definite, partitive and proprial articles. Instances of all of them are found in the Scandinavian languages, but some of them are missing in specific languages.

CHAPTER 3
BASIC NOUN PHRASE STRUCTURE

In this chapter I am going to present my basic assumptions concerning the internal structure of the noun phrase. In the following chapters, I will discuss some of the central nominal constructions, such as possessive and partitive constructions. Before I can do this, there are several assumptions that I must present, and so this chapter will function as a basis for the discussion in the following chapters.

I will begin, in section 3.1, by investigating the DP-analysis, D for Determiner, which claims that the determiner is a functional head within the noun phrase, parallel to functional heads like C and I within the clause. I will argue in favour of such an analysis. In section 3.2, I will discuss the relationship between the adjective and the noun in a noun phrase with an attributive adjective, arguing that the adjective is a head within the noun phrase. In section 3.3, I will further discuss degree adverbials and comparison. It has been suggested that degree words and comparison affixes constitute a functional category, Deg, that selects AP; I will argue in favour of such an analysis. In section 3.4, I will further investigate the QP-analysis, which claims that quantifying elements, such as indefinite pronouns and numerals, head a projection of their own, a Q-projection. The purported head Q is in many ways similar to the head D, but it also resembles A. I will try to show that quantifying elements can be analysed without assuming a special Q-projection. In section 3.5, I discuss some consequences of the structure that I propose. Primarily I discuss Case-marking, agreement and the difference between functional and lexical categories. The chapter will be concluded in 3.6.

3.1. Determiner Phrases (DPs)

In this section I am going to argue in favour of the DP-analysis, proposing that D is a functional head selecting an NP, and that the suffixed article in the Scandinavian languages may be attached to the noun by head movement of N to D.

In the traditional generative analysis of the noun phrase (e.g. Jackendoff 1977), determiners were assumed to be specifiers in the noun phrase. The basis for such an analysis was that possessor phrases and determiners are in complementary distribution in English. However, as we will see in this section there are languages where possessors and determiners co-occur. As research has progressed, it has also become clear that noun phrases contain many elements that are not given any labelling in the traditional structure of the noun phrase. Here I will present the arguments for assuming that there must be multiple heads within the noun phrase. In 3.1.1, I will

outline the arguments for assuming a D-projection within the noun phrase in general, and in 3.1.2, I will turn specifically to the consequences of a D-projection in the Scandinavian languages.

3.1.1. D-Projections

An analysis with determiners as heads in the noun phrase was first proposed by Szabolcsi (1983), discussing Hungarian data. Her arguments were primarily based on the striking similarities between noun phrases and clauses in Hungarian. Basing her discussion on examples like the ones in (1), where the possessor turns up in nominative case, and the head noun agrees with the possessor in number and person, Szabolcsi argues that the possessor in Hungarian must be parallel to the subject in the clause (cf. the clause in (2)).

(1) az én-Ø vendég-e-m (Hungarian)
the I-nom guest-poss-1.sg
'my guest'
a te-Ø vendég-e-d
the you-nom guest-poss-2.sg
'your guest'
(a) Mari-Ø vendég-e-Ø
the Mari-nom guest-poss-3.sg
'Mari's guest'

(2) Mari-Ø alud-t-Ø
Mari-nom sleep-past-3.sg
'Mari slept'

Furthermore, Szabolcsi notes another similarity between the noun phrase and the clause. A possessor may occur in dative case, instead of nominative. Such dative possessors are placed in front of the article (cf. (3) below). If the possessor is a wh-phrase, it must be a dative, and it must precede the article, as shown in (4) and (5).

(3) Mari-nak a vendég-e-Ø (Hungarian)
Mari-dat the guest-poss.3.sg
'Mari's guest'

(4) ki-nek a vendég-e-Ø
who-dat the guest-poss-3.sg
'whose guest'

(5) *a ki-Ø vendég-e-Ø
the who-nom guest-poss-3.sg

The distribution of wh-phrases within the Hungarian noun phrase, illustrated in (4) and (5), is very similar to the distribution of wh-phrases in the clause, where such phrases are always found in the specifier of C in many languages (the Scandinavian languages and English, for instance). Szabolcsi argues that the noun phrase has an initial article position, KOMP, which is parallel to C(OMP) in the

clause, both of them having an A'-position as their specifier. Szabolcsi's KOMP-position is identical to what is nowadays called the D-position. Furthermore Szabolcsi shows that Hungarian may have extraction of the wh-possessor out of the noun phrase, in a way similar to wh-extraction out of the clause. The specifier of KOMP (i.e. SpecDP in our terms) can be used as an escape hatch, in the same way as SpecCP is used as an escape hatch in the clause.

(6) Ki-nek$_i$ alsz-ik [t$_i$ [a t$_i$ vendég-e-Ø]] (Hungarian)
Who-DAT sleep-3.sg the guest-poss-3.sg
'Whose guest sleeps?'

Thus, Szabolcsi noted four striking similarities between the internal structure of noun phrases and clauses in Hungarian. The possessor is similar to the subject in receiving nominative case. The head noun is similar to the verb in agreeing with the possessor (the subject). The specifiers of the COMP/KOMP positions are similar in the way they must attract wh-phrases, and in functioning as escape hatches.

Later, several linguists proposed analyses where the determiner is seen as the head of the noun phrase. The most influential was put forward by Abney (1987; cf. also Abney 1986). Abney takes data like those from Hungarian above as a starting point, arguing, like Szabolcsi, that they show the similarities between the internal structure of noun phrases and clauses.[1]

Abney (1987:30-36) further points out the similar external distributions of clauses and noun phrases. Both may be arguments, both may be recursively stacked, both may participate in binding relations and both take relative clauses. They also have similar behaviour with regard control.[2]

If noun phrases and clauses are similar in their internal and external syntax, it is also arguable that there are functional categories in the noun phrase which corresponds to functional C and/or I. If such a functional category existed, it should have lexical entries; Abney argues that determiners are the only possible entries for such a category, and he names the position that they occupy D (for Determiner). The category D has several similarities to C and I in the clause. Abney (1987:64) lists the similarities of functional categories like C, I and D, here quoted in (7).

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[1] As a matter of fact, typological studies show that possessor agreement is quite a common property of the world's languages. In Gilligan's (1987) study on pro-drop and agreement 55 out of 100 languages have possessor agreement (though restricted to kinship/inalienable possession in a some cases).

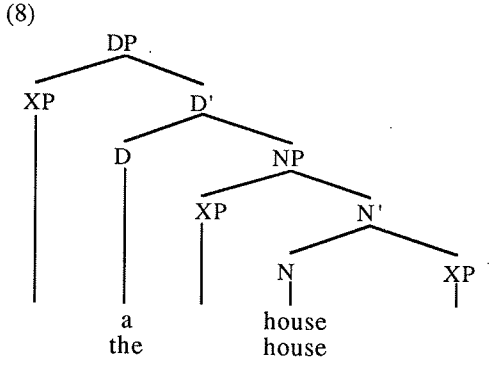
[2] A further similarity, not noted by Abney, is that both noun phrases and clauses can be the complement of prepositions in many languages, among them the Scandinavian and Ibero-Romance languages.

(7) 1. Functional elements constitute closed lexical classes.
2. Functional elements are generally phonologically and morphologically dependent. They are generally stressless, often clitics or affixes, and sometimes even phonologically null.
3. Functional elements permit only one [type of] complement, which is in general not an argument. The arguments are CP, PP and [...] DP. Functional elements select IP, VP, NP.
4. Functional elements are usually inseparable from their complement
5. Functional elements lack [...] 'descriptive content'. Their semantic contribution is second order, regulating or contributing to the interpretation of their complement. They mark grammatical or relational features, rather than picking out a class of objects.

In subsection 3.5.3, I will return to a discussion of the special properties of functional elements, summarising what we can learn from the Scandinavian noun phrase. I will alter some of Abney's formulations and add some more properties of functional elements.

Like most linguists working with noun phrase structure today, I find the basic idea of a functional projection in the noun phrase promising. As mentioned above Abney's proposal has been very influential, and many linguists have proposed a DP-analysis for other languages, cf. e.g. for English (Stowell 1991), French (Tremblay 1991), French and English (Valois 1991, Vergnaud/Zubizarreta 1992), German (Olsen 1988a, Haider 1988, Zimmermann 1989, Bhatt 1990), Scandinavian (Hellan 1986, Delsing 1988, 1989, Taraldsen 1989, Svenonius 1992b), Italian (Longobardi 1992, Cinque 1992), Romanian (Grosu 1988), Hebrew (Ritter 1988) and Arabic (Fassi-Fehri 1987). In the rest of this book, I will assume that there is a D-projection, adding some arguments from the Scandinavian languages. Ignoring constituents other than the determiner and the noun, the structure of a simple noun phrase is assumed to be a DP, where the D head selects an NP as its complement (cf. (8) below).

(8)



From now on, the term DP will be used when referring to entities with a D-projection, and NP will be used when referring to the basic phrase selected by D, where the noun is a head. The term 'noun phrase' will be considered neutral, and it will be used when the difference between DP and NP is not relevant. The term 'head noun' will be used when referring to the lexical noun in N. In accordance with the discussion in chapter 2, where I claimed that all argumental noun phrases must have a determiner, all argumental noun phrases will be DPs, whereas non-argumental noun phrases can be either DPs or NPs.

3.1.2. D-Projections in the Scandinavian Languages

The first proposal of determiners as heads also within the Scandinavian noun phrase was made by Hellan (1986; cf. also Andersson 1986 for a non-generative proposal in the same spirit). Hellan argues that there are two kinds of data that point to such an analysis.

First, the Scandinavian suffixed definite article is traditionally seen as a definite inflection on the noun. If this were true, and if the noun were the sole head of the noun phrase, we would of course expect that all definite noun phrases contained a definite noun, in the same way as all plural noun phrases contain a plural noun. This is however not true; in particular noun phrases with possessors consistently resist the suffixed article. Consider the Swedish examples below.

(9) Kalles hus / *Kalles huset
Kalle's house / Kalle's house-the
mitt hus / *mitt huset
my house / my house-the

Second, Hellan notes that noun phrases without overt articles do not always trigger agreement on the predicative adjective, which ordinary noun phrases with determiners normally do.[3]

(10) bilen är dyr/*dyrt
car-the is expensive
uter.sg uter.sg/*neuter.sg

(11) bil är *dyr/dyrt
car is expensive
uter.sg *uter.sg/neuter.sg

According to Hellan, examples like (10)-(11) above show that the determiner is involved in the agreement on predicatives in some way.

[3] This special disagreement construction has several requirements. Basically the adjective must be able to introduce an implicit argument; if an interpretation *expensive (for someone), good (for someone), nice (for someone)* is possible, then the construction without agreement is used. See further Källström (1990:162-212).

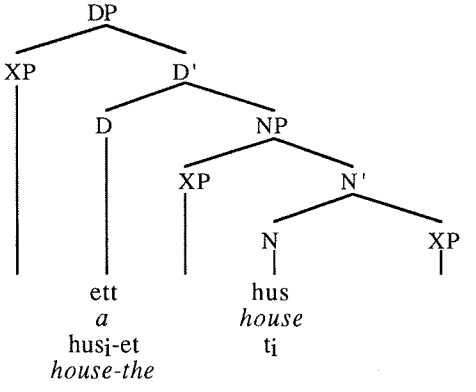
This is more easily understood if the determiner is a head in the noun phrase, than if it were e.g. a specifier.

The arguments in Hellan (1986) are taken up in Delsing (1988), where I claimed that the prenominal indefinite article and the suffixed definite article in Scandinavian should be analysed in the same way. Consider the Swedish noun phrases in (12)-(13) below.

	singular		**plural**	
	uter	**neuter**	**uter**	**neuter**
(12)	en bil	ett hus	bilar	hus
	a car	*a house*	*cars*	*houses*
(13)	bilen	huset	bilarna	husen
	car-the	*house-the*	*cars-the*	*houses-the*

In Delsing (1988) (cf. also Delsing 1989 and Taraldsen 1989, 1991), it was argued that the noun with the suffixed article in Scandinavian can be analysed as head raising of the noun in N to the D-position. Hence, there is yet another parallel between the noun phrase and the clause. In both we find head movement of the lexical category (N and V respectively) to a higher functional category (D and I/C respectively). Note that if we can show that noun raising occurs, it strongly supports the DP-analysis. Raising of a head is only possible to another head position, not, for instance, to a specifier position. Such a noun raising analysis is of course near at hand for languages where the article is suffixed to the noun. Similar analyses have also been proposed for Romanian (Grosu 1989), which has a suffixed article similar to the Scandinavian one, and Semitic languages with affixal articles, such as Hebrew (Ritter 1989) and Arabic (Fassi-Fehri 1987). Consider the structure in (14) below, which illustrates a noun phrase with the indefinite article, and a definite one with N-raising to D.

(14)



In Delsing (1988), I noted that the head movement of the noun could be further supported by data from Norwegian and Northern Swedish, where a prenominal possessive pronoun is always followed by a noun without the article whereas the noun always requires the article when the possessive pronoun is postnominal (cf. also Fiva 1987, Delsing 1989 and Taraldsen 1991). In these dialects an example like (15) is normally used to give contrast, whereas an example like (16) represents the unmarked case.

(15)	mitt hus	*mitt huset	(Northern Swedish)
	my house	*my house-the*	
(16)	huset mitt	*hus mitt	
	house-the my	*house my*	

If it can be shown that the possessive pronoun in some way occupies the D-position when it is prenominal, but not when it is postnominal, we can argue that head movement to D is blocked in the first case (15), but not in the second case (16). I will however argue against such a head raising analysis in chapter 5.

Furthermore the head movement analysis gives a clue to the strange behaviour of the suffixed article when the noun phrase contains an attributive adjective. In section 3.2, I will argue that the adjective is a head in the noun phrase, and thus it will block head movement. Such an approach would help us to explain data like the Danish ones in (17)-(18) below, where the suffixed article is in complementary distribution with a prenominal article, depending on the presence of an attributive adjective.

(17)	huset	(Danish)
	house-the	
(18)	det store hus	
	the big house	

As can be seen in (17) and (18), the suffixed article is used when there is no adjective, whereas the prenominal article is used when there is an adjective. If the adjective is a head in the noun phrase, and if the suffixed article is attached to the noun by head movement, we would expect exactly the difference in (17)-(18). Head movement is blocked by an intervening head in (18), and hence there cannot be any suffixed article. Instead, the D position has to be realised as an independent prenominal article. In the other Mainland Scandinavian languages and Faroese the data are normally complicated by 'double definiteness', which will be one of the major topics of chapter 4.

Further support for the head movement analysis can be found in the morphology (cf. Delsing 1988, 1989). In Old Scandinavian there is both a suffixed article, *-inn,* and an independent prenominal definite article *inn/ hinn*, which is normally used when the noun phrase

contains an adjective. The independent article is assumed to be the historical origin of the suffix (cf. e.g. Wessén 1965:29 and Hansen/ Mundal/Skadberg 1975:69). Whether the article is independent or suffixal, it always has inflection for number, gender and case. Note that the noun is marked for case and number simultaneously. Consider the Old Icelandic (singular masculine) paradigm in (19) below.

(19)	**suffixed**	**independent**	
nom	hestr-inn	inn gamli hestr	(Old Icelandic)
gen	hests-ins	ins gamla hests	
dat	hesti-num	inum gamla hesti	
acc	hest-inn	inn gamla hest	

If the suffixed article is base generated in a position separate from N, we can easily explain why case morphology appears twice, once on the noun and once on the article. If the suffixed article were only a definiteness marker, we would not expect case to appear twice. The system is still very much the same in Modern Icelandic (see table 3b of the appendix).

Another argument in favour of the DP-analysis can be taken from the discussion in chapter 2, where I showed that the determiner position has to be filled in the most central type of noun phrases: argumental noun phrases. The fact that there are special requirements on determiners in argumental noun phrases implies that the determiner is a head. We would not expect external factors, like θ-role assignment, to regulate the lexicalisation of for instance a specifier inside the noun phrase. Note also that the discussion in chapter 2 supports head raising of the noun to D, since the suffixed article seems to have the same effect on argumental noun phrases as prenominal determiners have, i.e. saving an otherwise illicit structure. Assuming a D-projection and head raising, we may then state the argument rule (cf. (127) in chapter 2) as a requirement on one single head position.

A last argument for the DP analysis is that there are certain selectional restrictions between D and its complement. D should select complements with specific grammatical features. As we showed in the previous chapter certain determiners, like (singular) *all [all]* and the partitive article in Northern Swedish, only take uncountables, i.e. their complements are specified [–count]. On the other hand, the indefinite article and several pronouns only take nouns that are [+count]. The proprial article of Northern Scandinavian is reserved for personal names. Such selectional restrictions are expected between a head and its complement but not between a specifier and a head. I claim that such a selectional relation holds between D and its complement NP.

To conclude this section, following Szabolcsi (1983), Hellan (1986), Abney (1987) and many others, I have argued that there are

several similarities between the clause and the noun phrase, both in external distribution and in internal structure. These similarities have led to the assumption that determiners constitute a functional head that selects the noun. Furthermore, I have argued that the suffixed article in Scandinavian implies that there can be head movement in the noun phrase, i.e. raising of N to D. I assume that the difference between languages with head raising (like Scandinavian) and languages without it (like English and German) is stated as a parameter, *the head raising parameter.*

Apart from the functional D-position, Abney (1987:338ff.) also proposed a functional Q-position, Q for Quantifier, where words like *many/few* are generated. Many of the items proposed to be generated in Q are elements that show features similar to either determiners or adjectives, and I intend to analyse them as such. Before we can look at the purported Q-category, we will have to discuss attributive adjectives. In section 3.2. I will consider attributive adjectives, and in 3.3. I will discuss degree adverbials and comparison forms that modify adjectives.

3.2. Attributive Adjectives

In this section I am going to argue that constructions with an attributive adjective have the adjective as a structural head, taking the noun as its right hand specifier. There are basically three types of adjectives: the prototypical modifying adjectives, thematic adjectives (corresponding to an argument in the clause), and adverbial adjectives (corresponding to an adverb in the clause). Consider the examples in (20)-(22) below.

(20)	Modifying:	Det röda/stora huset *The red/big house-the*
(21)	Thematic:	Den italienska invasionen av Albanien *The Italian invasion-the of Albania*
(22)	Adverbial:	Det ständiga tjatandet om skatterna *The constant nagging-the about taxes-the*

Thematic and adverbial adjectives are atypical. They appear only with nominalisations. They cannot take degree words, nor can they be used predicatively (see section 3.3). Here, I will focus on prototypically attributive adjectives, i.e. modifying adjectives as in (20), which may also appear predicatively. I will give an analysis that makes attributive and predicative adjectives parallel to each other with regard to argument structure and agreement.

When I talk about attributive adjectives here, I will only be concerned with adjectives that are prenominal in the Scandinavian languages. The so called predicative attributes, which are postnominal

in the Germanic languages, seem to pattern with predicative adjectives in several respects, so they will have to be analysed as such.

Attributive adjectives in Scandinavian behave in the same way as in the other Germanic languages; they are placed in-between the determiner and the noun. Furthermore the Scandinavian languages make a distinction between strong and weak inflection of adjectives; the strong form is used in indefinite noun phrases, whereas the weak one is used in definite noun phrases. Consider the examples in (23).

(23)	**indefinite**	**definite**
	en gammal man	den gamle mannen
	an old[str] man	*the old[wk] man-the*
	en gammal bok	den gamla boken
	an old[str] book	*the old[wk] book-the*
	ett gammalt hus	det gamla huset
	an old[str] houses	*the old[wk] house-the*
	gamla hus	de gamla husen
	old[str] houses	*the old[wk] houses-the*

As can be seen in the Swedish examples in (23), the plural of the strong and weak forms are homonymous, and the weak form is the same in all genders and numbers, except when the noun denotes a male person. This masculine distinction is maybe not a part of the grammar; for many speakers (myself included) it is just a superficial literary convention. In Danish and Norwegian the weak form is always *-e*, without any distinction in this respect. In Icelandic and Faroese, both the weak and strong forms show agreement in gender, number and case (see further tables 5 and 6 in the appendix).

Attributive adjectives could theoretically be described as either arguments, adjuncts or heads. Actually all three alternatives are represented in the literature. In this section I will present the three different proposals, and confront them with some central properties of attributive adjectives.

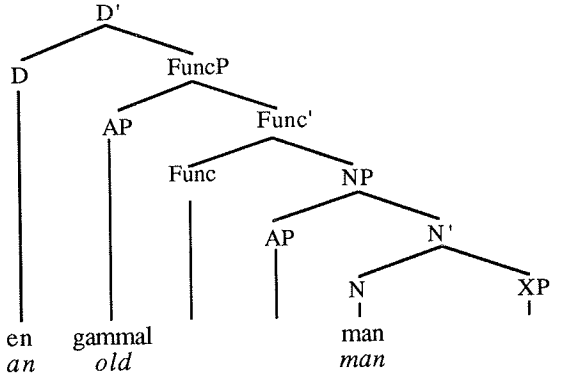
First, attributive adjectives could be analysed as **arguments**. As such they could theoretically be assumed to be either specifiers or complements. As far as I know, there are no proposals where the adjective is generated as the complement of the noun, but there are suggestions, where it is taken to be a specifier. In Jackendoff's (1977) X-bar proposal they are specifiers, although, which Jackendoff (p. 37) points out himself, the notion specifier has no theoretical status in his phrase structure. Jackendoff's structure is not compatible with the present day theory for many reasons; for instance, it does not observe binary branching, and it has three bar levels. Hence I will not discuss his structure here. However, also linguists working within the modern version of X-bar-theory have analysed the attributive adjective as a specifier. Basing their arguments on thematic

adjectives that seem to represent a subject, like in (24) below, Giorgi/Longobardi (1990) assume that adjectives are specifiers.

(24) the Italian invasion of Albania

Recently, Cinque (1992) has proposed that thematic adjectives are generated as specifiers of N, and other (i.e. movifying) adjectives as specifiers of different functional projections selected by D, as illustrated in (25).

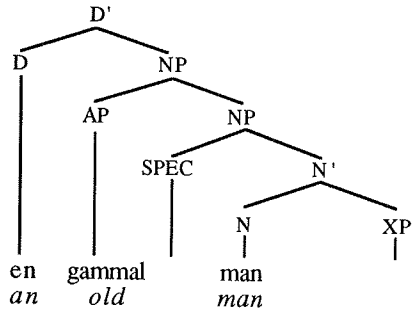
(25)



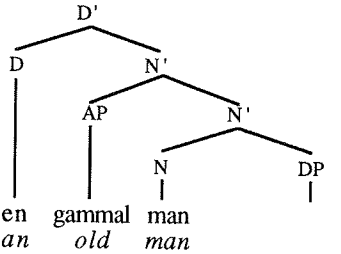
A theoretical objection against an analysis like the one in (25) is that it is unclear what the status of the functional head is. In particular, this structure raises questions of learnability. There seem to be no lexical entries for the Func^0-category. Furthermore this structure entails base generation of maximal categories in the specifier of a functional projection, which is not assumed for other parts of the grammar.

Second, attributive adjectives could be analysed as **adjuncts**. There are basically two different proposals of this kind, one adjoining the adjective to NP and the other adjoining it to N'. The first proposal illustrated in (26)a is used e.g. by Radford (1989), Valois (1991) and Svenonius (1992a). The other one, illustrated in (26)b is used by e.g. Fukui (1986) and Zimmermann (1991), and it assumes that lexical categories have no specifiers, thus making X' the maximal category of lexical phrases.

(26)a



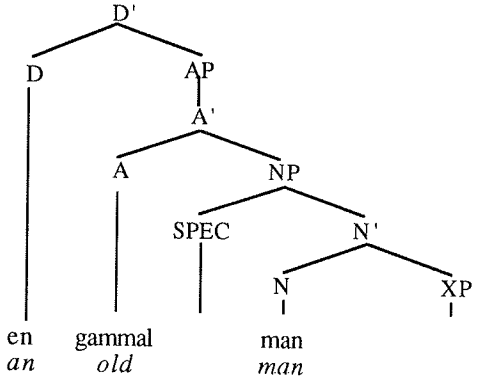
(26)b



I have no theoretical objections against the structure in (26)a, but the structure in (26)b raises some questions. One objection against that structure is that both genitival and adjectival attributes are generated as adjuncts to N'. Since those two categories have different surface distribution, some extra assumptions will have to be made in order to differentiate them.

Third, attributive adjectives could be analysed as **heads**. In Abney (1987; cf. also Radford 1992) it is proposed that the adjective is a head selected by D, which in turn takes the 'head noun' as its complement. This is primarily based on the fact that English never has attributive adjectives with objects, which would then be explained if the head noun takes this position. Consider Abney's proposal in (27) below.

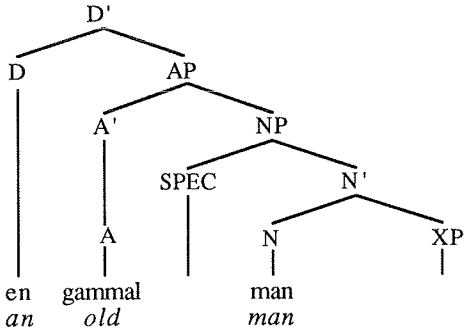
(27)



Abney's proposal is however contradicted by many languages, such as Mainland Scandinavian and German, where there may be objects

connected to attributive adjectives (see 3.2.1. below).[4] This is one of the reasons for another suggestion, put forward for Scandinavian in Delsing (1989, 1993) and for German in Bhatt (1990). In these proposals the adjective is a head, but contrary to Abney's proposal, the 'head noun' is assumed to be the right hand specifier of the adjective. Consider the structure in (28) below.

(28)



The structure in (28) will be the structure that I adopt here. I will call it the SpecA-analysis (adopting the term from Svenonius 1992a). Contrary to Abney (1987), I assume that the adjective is a lexical category.[5]

In the rest of this section, I will confront the different analyses presented above with some central properties of attributive adjectives. In subsection 3.2.1, I discuss the phrasal status of attributive adjectives and their relation to the head noun. Then I turn to agreement on attributive adjectives (3.2.2) and the possibility of using adjectives independently (3.2.3). In subsection 3.2.4, I turn to recursion of attributive adjectives, and in 3.2.5, I discuss cases where adjectives seem to participate in or block head movement. In subsection 3.2.6, I turn to binding of adjectival objects. I will end up with the view that the SpecA-analysis, outlined in (28) above, is the most promising proposal.

4 As is shown in Radford (1989), there are actually attributive adjectives in English that take objects, such as *similar*. Radford further shows some severe problems with Abney's analysis. In particular the assumption that A f-selects N (in the same way as functional categories select their lexical complements) proves to raise problems. In Radford (1992) those objections are not commented on.

5 Right hand specifiers seem to be rare in the European languages. However, Holmberg/Platzack (in press) have proposed that the Italian VP takes its specifier to the right. Shlonsky (1991) makes the same assumption for the Hebrew VP.

3.2.1. Phrasal Structure

Attributive adjectives may take objects and adjuncts in many languages. For instance, in the Mainland Scandinavian languages, German, the Slavic and Uralic languages there are objects and adjuncts connected to attributive adjectives. Consider the Swedish examples in (29). Note that objects may be either DPs or PPs.[6]

(29) en över sin insats stolt försvarsadvokat
a over his accomplishment proud attorney-for-the-defence
den sin hustru trogne mannen
the his wife faithful man-the
ett sedan i går välkänt faktum
a since yesterday well-known fact

Hence, attributive adjectives project in many languages; they are not pure heads. However, attributive adjectives seem to have no subjects, contrary to predicative adjectives. The head noun always corresponds to the subject in the predicative paraphrase, whereas the object of transitive adjectives, like *trogen, stolt [faithful, proud]* may never be the 'head noun' of an attributive adjective. Consider the examples in (30).

(30) ett rött hus ≈ huset är rött
a red house *house-the is red*
en stolt fader ≈ fadern är stolt
a proud father *father-the is proud*
≠ någon är stolt över fadern
someone is proud of the father

As far as I know there are no languages where the object of a predicative adjective corresponds to the 'head noun' of an attributive adjective.[7] The clear distribution of nouns in relation to adjectives is straightforward in the SpecA-analysis: the subject of the adjective will always be generated in SpecA in both predicative and attributive adjectives. This distribution remains a mystery in the other analyses. Abney's analysis (cf. (27) above) seems to be contradicted, since the noun is structurally the object of the adjective in that analysis. Radford (1992) argues for the analysis proposed by Abney, and he notes

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[6] The constructions with adjuncts and objects connected to attributive adjectives are literary style in Swedish, at least if they are DPs. Some speakers consider them marginal. All speakers however agree that they are clearly better than any other word order. For instance, examples like the one in (i) are totally unacceptable.

(i) *en stolt över sin insats försvarsadvokat
a proud over his accomplishment attorney for the defence

[7] In some cases the noun can be interpreted as the object, like in (i)

(i) ett avvisat förslag
a refused proposal

Those cases however always involve a passive participle, and in 3.5.2, I will argue that the NP in SpecAP is moved there by NP-movement.

that the attributive adjective semantically has a subject relation to the noun, although the noun is structurally a complement in his analysis. Without elaborating, he claims that the argument is internalised when the adjective is attributive and externalised when it is predicative. A more radical step is of course to assume the SpecA-analysis, which would make the distribution follow, without any further ado, by manipulating the argument structure. Note that in a theory like LFG the subject of a predicative adjective and the 'head noun' of an attributive adjective are both labelled as 'A-subjects' (cf. e.g. Lødrup 1989:201). This labelling shares with our analysis the intuition that the two categories should be analysed in the same way.

3.2.2. Adjectival Agreement

In most languages of Europe, attributive adjectives show agreement with the 'head' noun in gender, number and/or case. In case-less languages like Mainland Scandinavian and the Romance languages case-agreement is of course missing, and in the Uralic languages, which lack gender distinctions, there is no gender agreement. However number agreement is present on attributive adjectives in most languages. Only in the periphery of Europe are there some languages that seem to lack agreement altogether. In the far west, there is English, and in the far east, there are some Finno-Ugric languages that lack adjectival agreement.

It would of course be a virtue to give the same description of attributive adjectival agreement as we give for predicative adjectives and other instances of agreement within the grammar. Normally agreement on a head is triggered by an argumental XP: Subjects, objects and indirect objects may all trigger agreement on a head verb. As we saw in the previous section, possessors may also trigger agreement on the head noun. Consider the examples in (31).[8]

(31)	subjects:	Við höf-**um** keypt bókina	(Icelandic)
		*We have-**1pl** bought book-the*	
	objects:	qan noqa-ta apa-**wa**-rqa-nki	(Quechua)
		*you I-acc carry-**1sO**-PAST-2sS*	
	ind objects:	zu-k a-ri líburu-a irakur-ri d-**io**-zu	(Basque)
		*you-erg her-dat book-acc read-1PRET 3sA-**3sD**-2sE*	
	possessors:	a te-Ø vendég-e-**d**	(Hungarian)
		the you-NOM guest-POSS-2s	

Normally, linguists assume, implicitly or explicitly, that predicative adjectival agreement is an instance of Spec-head agreement, where the XP subject is base generated as the specifier of AP, and raised to SpecIP, to get Case, as is indicated in the Swedish examples in (32).

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[8] The Quechua and Basque examples are taken from Gilligan 1987:204-205, and the Hungarian example is from Szabolcsi 1983.

(32) Boken$_i$ är [$_{AP}$ t$_i$ röd]
Book-the is red-uter
Huset är [$_{AP}$ t$_i$ rött]
House-the is red-neuter

Note that the derivational approach to predicative adjectives is necessary if we want to maintain the assumption that all arguments are base generated within a lexical phrase.

Adjectives in Scandinavian agree with their noun both in attributive and predicative use, and I will claim that agreement between adjectives and nouns is triggered by Spec-head agreement in both cases. The SpecA-analysis, outlined in (28) above will give the simplest possible answer to adjectival agreement. The A head will agree with its XP specifier, both in the attributive and the predicative use of the adjective, i.e. all adjectival agreement is Spec-head agreement. In the other analyses proposed, adjectival agreement will have to involve additional assumptions.[9]

For instance, if the attributive adjective is assumed to be a specifier, as in (25) above, agreement will be the reverse of ordinary Spec-head agreement, since the head of the AP subject would agree with the head noun, i.e. we would have a case of head-Spec-agreement (note the order). This kind of agreement is not known in other parts of the grammar. A parallel within the clause would be if the subject would agree in tense, mode or weak conjugation with the verb.

If the attributive adjective is seen as an adjunct (cf. (26) above), there are no parallels with other kinds of agreement in the grammar. I know of one attempt to give an analysis of agreement between adjectives and nouns in an adjunct analysis. This analysis is put forward by Valois (1991: 171ff). The problem that he has to solve is how agreement is accounted for and why it is lacking in English. He posits a big PRO in the specifier position of AP, and assumes that this PRO is controlled by the noun. His analysis entails that the noun in French moves upwards to a functional category selecting N (hence the standard word order Noun-Adjective), whereas English has no N-movement (hence the word order Adjective-Noun). He sketches on two possible solutions (fn. 14 p. 173).

In the first solution, Valois conjectures that the noun controls PRO in French by c-command, since it has moved to a higher functional head, whereas the noun in English, which is left in N, cannot

[9] In recent research, several linguists (e.g. Chomsky 1991) have argued that all agreement should be construed as Spec-head agreement. For object agreement, for instance, Chomsky posits an AGR-O projection, where the object moves to the specifier of that projection. This would of course be a more generalised way of describing agreement. The SpecA-analysis is fully compatible with such an analysis, but there are other instances of noun phrase internal agreement that are problematic in this respect. See section 3.5.

control PRO. In such a way it would be possible to derive the difference between French, which has adjectival agreement, and English, which has not. This analysis would however predict that all the Germanic languages (having the word order Adjective-Noun, and thus no N raising) would lack agreement. The prediction is fatally untrue for all the Standard Germanic languages, except for English. Valois does not mention this prediction, but he nevertheless prefers another solution.

The second solution entails that PRO must be controlled, and that the head N raises to a functional head, c-commanding PRO either at S-structure or at LF (Valois 1991:191ff), French having raising of the noun at S-structure, and English at LF. Valois uses this requirement on PRO to explain why English, and basically also French, lacks independently used adjectives, i.e. noun phrases containing an adjective, but no 'head noun'. If the head noun is truly empty there is nothing to raise to the functional category, according to Valois, and hence PRO cannot be controlled. In English this is solved by inserting the prop-word *one*: *the big one*, and in such a case, the prop-word may move to the higher functional category at LF, thus controlling PRO. However, Valois' assumptions here would predict that no language whatsoever could have independent adjectives, without a prop-word. The prediction is not borne out at all. As we will see in the next section, English and French seem to be practically the only two languages in Europe that may not have independent adjectives freely.[10]

Last, if we assume Abney's analysis of attributive adjectives, it is possible to think of adjectival agreement as a form of object agreement. This would be rather surprising for the Scandinavian and Romance languages that lack object agreement with other categories, but it would of course be theoretically possible.

To conclude, the SpecA-analysis gives the best and most straightforward analysis of adjectival agreement. Ordinary Spec-head agreement holds for both predicative and attributive adjectives.

3.2.3. Independently Used Adjectives

Adjectives may be used independently, that is the noun phrase has no overt noun; the determiner and the adjective constitute a noun phrase by themselves. An adjective can also be truly substantivised, taking nominal inflection. For instance the Swedish nationality word like *dansk [Danish]* get the nominal plural ending *-ar* when it is used in the sense *Dane*. Similarly, the English adjective *black* may be truly substantivised, taking the nominal plural *-s*, when denoting coloured

[10] A further problem with the PRO-analysis of Valois' is of course that he will have to make some extra assumptions about the fact that PRO triggers agreement on French adjectives, but not on French infinitivals.

people. In many cases though, there is adjectival morphology. It is those latter cases that I will be concerned with here.

As mentioned above, our analysis claims that adjectival agreement is parallel to subject-verb agreement. If this is true we would expect to find the same correlation between agreement and an optionally empty Spec-position, that we find with verbal agreement, i.e. languages with rich verbal agreement may optionally leave out the subject, whereas languages without verbal agreement may not.[11] As pointed out in Delsing (1989) this prediction is borne out. The Germanic languages that have adjectival agreement on attributive adjectives, like Scandinavian and German, may leave out the noun, when the noun phrase contains an adjective, i.e. they may have independently used adjectives. English on the other hand, which lacks adjectival agreement, may only leave out the noun when the adjective has universal plural or uncountable reference.

(33) Jag gillar inte den gröna
I like not the green
Jag vill ha en grön
I want-to have a green
Den gamle har gift om sig
The old has remarried himself

(34) De blinda har organiserat sig
The blind have organised themselves
Jag föredrar det äkta framför det behagliga
I prefer the genuine to the agreeable

In the English noun phrases corresponding to (33) the prop-word *one* must be used. In the present analysis we may look at English *one* as an expletive subject in the AP, corresponding to the expletive subjects *there/it* in languages with poor verbal agreement, whereas there is a *pro* in the Swedish noun phrases, licenced by adjectival agreement.[12]

Note that our analysis claims that independently used adjectives are generated in the same way as ordinary attributive adjectives, and then we predict that they could be recursively stacked. The prediction is borne out, as shown in (35).

(35) det gamla vanliga
the old usual
Maos lilla röda
Mao's little red

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[11] The same correlation is possible to find with the other cases of agreement, such as possessor and object agreement (cf. Gilligan 1987)

[12] Olsen (1987) shows that German independent adjectives involves a *pro* corresponding to the empty noun. The analysis presented here will make the same assumption, and in addition, it will give *pro* the same relation to adjectival agreement as it has to verbal agreement.

As for the Scandinavian languages, there is one dialect that has reduced agreement, namely Western Jutlandic. In this dialect there are no gender distinctions. Thus we would expect that Western Jutlandic should be more restrictive with independently used adjectives. As far as I can see, independently used adjectives are not less common than in the other Scandinavian languages, but *en* or *nogen [one/some]* are used as prop-words. The example in (36) is taken from Ejskjær (1964:48).

(36) den gule en er da den pæneste
the yellow one is then the prettiest

The analysis suggested here predicts that the English prop-word would appear at the same time as agreement is lost. This seems to be correct. According to Lightfoot (1979:179) the agreement of adjectives in English disappears during the period 1100–1500. The system is first simplified so that only monosyllabic adjectives with a final consonant are inflected in plural: *glad* vs. *glade*. This development is finished around 1250 (Baugh/Cable 1978:160). This last distinction disappears successively, and by the end of the 15th century the adjective is totally uninflected. The prop-word first appears in the 14th century, and by the end of the 16th century the prop-word has become obligatory.

As for the Romance languages, Italian and Spanish that have rich adjectival inflection may leave out the noun, whereas French, that lacks the number distinction in spoken language, has more restrictions. French has more inflection than English; it has kept the gender distinction. We would then expect that French would be more free than English with respect to an empty N-position, but more restricted than other Germanic and Romance languages. This is true, since French may have some elliptical constructions (cf. Valois fn. 12, p.194f.), but does not allow independently used adjectives with specific reference. This was, however, possible in medieval French, when adjectives were also inflected in number. In older stages of French we find independently used adjectives like *le serieux de la situation* (cf. Nyrop 1925:V:114), which are not possible today.

To conclude, the SpecA-analysis has proven to correctly predict the distribution of independently used adjectives. Of course the details and variation on different sorts of independent adjectives (cf. (33)-(34) above) will have to be studied more closely, but the generalisation that independently used adjectives are not allowed freely in languages that lack adjectival agreement seems to hold. This generalisation is parallel to generalisations made about agreement and *pro* in other parts of the grammar.

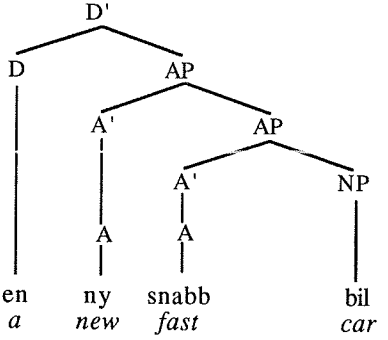
3.2.4. Recursion

Attributive adjectives can be recursively stacked as shown in (37) below.

(37) en lång mörk stilig främling
a tall dark handsome stranger
en ny effektiv tysk direktris
a new efficient German directress

All the three analyses of attributive adjectives can be used to analyse the recursion of adjectives. In the specifier analysis there is a new functional head for each adjective. In the adjunction model the adjectives are adjoined to NP or N' in the same way as adverbs can be adjoined to VP. In the head analyses, the adjective selects an AP instead of an NP in its complement or specifier position respectively. In the SpecA-analysis AP is generated in the specifier of another AP, as illustrated in (38) (disregarding the complement positions of the adjectives).

(38)



Thus, all three analyses of attributive adjectives seem to be able to handle recursion of adjectives. However, the analysis where adjectives are specifiers has to posit a new functional category for each adjective. As mentioned before, such a solution implies that there are functional categories with base generated lexical phrases in their specifier position, which is not found elsewhere in the grammar. Furthermore we would expect these functional categories to have lexical entries, which does not seem to be true.

To evaluate the difference between the other two solutions (adjunction and head), we will have to take a closer look at recursion in other well known cases. Let us distinguish between adjunction and head recursion by looking at adverbs (presumably adjoined to VP) and auxiliaries (which are commonly assumed to be ordinary verbs, thus heads, selecting VPs in Scandinavian).

(39) Han har [väl] [därmed] [tyvärr] inte åstadkommit någon höjdare
He has well there-by unfortunately not accomplished any bigshot
Han har [utan att tveka] [ofta] [numera] struntat i författaren
He has without hesitation often nowadays ignored writer-the
(40) Kalle [skulle [vilja **[kunna [spela cello]]**]]
Kalle should want-to be-able-to play cello

Note that we will leave the negation out of the discussion, since that category is sometimes argued to have its own functional projection. The other adverbials in (39) seem to be connected to VP in quite an equal manner, none of them is closer to the verb than the other, and reordering does not essentially change the meaning of the sentence. Hence, the recursively stacked adjuncts seem to be 'freely' connected to the VP. The same seems to be true for extraposed adverbials, expressing time, location or manner. On the other hand, in a structure with recursively stacked auxiliaries, as in (40) above, the basic VP seems to be closest to the lowest recursive element (auxiliary), i.e. the lowest auxiliary and the VP make up one constituent together. This can be seen in VP-topicalisations in Swedish, where the lowest auxiliary can be moved together with the basic VP.

(41) [Kunna spela cello] skulle Kalle gärna vilja
[Be-able-to play cello] want Kalle gladly

If we now turn to adjectives, they seem to pattern with heads rather than with adjuncts. In adjectival recursion the lowest adjective and the noun make up one constituent together. This can be seen from the predicative paraphrase.

(42) en [mörk **[stilig [främling]]**]
a dark handsome stranger
(43) [den stilige främlingen] var mörk
the handsome stranger was dark

This property is perhaps even more evident in examples like the ones in (44) below, where the placement of the participles changes the interpretation of the phrase. The predicative paraphrase shows that the inner adjective and the noun make up a constituent together.

(44) styckad [fryst kyckling] ≈ [den frysta kycklingen] är styckad
cut-up frozen chicken *the frozen chicken-the is cut-up*
fryst [styckad kyckling] ≈ [den styckade kycklingen] är fryst
frozen cut-up chicken *the cut-up chicken-the is frozen*

Thus, the word order affects the interpretation of the order in which the chicken is frozen and cut up.[13]

The head properties of recursively stacked adjectives will follow from the assumption that adjectives are heads that may take APs as their specifiers, as depicted in (38) above.

3.2.5. Head Movement

In section 3.1. I argued that Scandinavian may attach the suffixed definite article to the noun by head movement from N to D. Among European languages, suffixed articles are found in the Scandinavian languages, in some Balkan languages (Romanian, Bulgarian, Macedonian and Albanian), in Mordvin (a Finno-Ugric language spoken in central Russia) and Basque. Consider the examples in (45).

(45) hus-et (Swedish)
house-the
omu-l (Romanian)
man-the
knigi-te (Bulgarian)
books-the
kudo-s' (Mordvin)
house-the
mendi-a (Basque)
mountain-the

It is especially attractive to assume raising of N to D, when there is a morphological ending on the noun, as in the above languages. I have assumed that the difference between the languages with head raising and languages like English, German and French should be stated as a parameter concerning the category N (the head raising parameter).

The SpecA analysis entails that the adjective is a head within the noun phrase, and we would then assume that it would block head movement of the noun. This also seems to be true. If there is an adjective the head movement seems to be blocked, as was shown in the Danish example in (17)-(18) above, repeated here as (46)-(47).

(46) huset (Danish)
house-the
(47) det gamle hus
the old house

Similar blocking effects can be found with proper names in Italian and German. If we (with Longobardi 1992) assume that proper names may raise from N to D in some languages, we can explain

[13] More will have to be said about recursion of adjectives. Differences in meaning are found with participles and in definite noun phrases, but hardly with ordinary adjectives in indefinite noun phrases.

why an article is obligatory when the phrase contains an adjective. Consider the examples in (48)-(49).[14]

(48)a Gianni (Italian)
b il simpatico Gianni
(49)a Johann (German)
b der sympathische Johann

If we assume head movement from N to D in the a)-examples the D position is lexicalised and hence licensed, whereas the movement seems to be blocked in the b)-examples, and the definite article has to be inserted to license the D-position, quite parallel to the Danish data above, with the only difference that the article is visible on moved nouns in Danish, but not on moved proper names in German and Italian. Note that this kind of blocking of head movement, can only be explained if the adjective itself is a head. In the analyses where the adjective is an adjunct or a specifier, we would not expect any blocking effects at all.[15]

Under the SpecA-analysis the AP is selected by D in the same way as an NP can be selected by D. This suggests that an A-head would also be able to undergo raising to the D-position, and hence get the definite suffix, as in (50).

(50) $[_{D'}\ \text{stor}_i\text{-en}\ [_{AP}\ [_{A^0}\ t_i\ ]\ ]]$
big-the

The A-raising depicted in (51) is not found in the Standard Scandinavian languages, but most northern Norwegian and Swedish dialects have independently used adjectives with the definite suffix, exactly as in (50). In chapter 4 we will return to a similar construction in Northern Swedish.

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[14] In fact one of Longobardi's arguments for head raising of proper names in Italian is that they seem to move across some adjectives. Recall that Longobardi does not analyse adjectives as heads. However, this movement is only possible with what he calls 'possessive adjectives' and a few other special adjectives (like *first, last*), that have more free word order anyway (cf. Longobardi 1992, fn. 18). The fact that the vast majority of adjectives block movement remains. Hence the analysis presented here reaches the same conclusion as Longobardi, i.e. that proper names may be head moved to D. However, in my analysis it is necessary to say something more on the few adjectives that allow raising in Italian, whereas Longobardi must say something about the fact that raising is not allowed with the great majority of adjectives.

[15] Actually, the movement from SpecAP to D is not ruled out by relativised minimality (cf. HMC in (39), chapter 1), as long as it is stated in terms of c-command, The head A does not c-command the trace of the moved element. However, movement of specifiers into governing heads should probably be ruled out for other reasons; the head of SpecIP should, for instance, be excluded from incorporation into C. This then suggests that the HMC should be revised, having m-command in its b-clause.

In the Balkan languages the process of A-raising seems to be more regular, applying also where the 'head noun' is spelled out. Consider the examples in (51).[16]

(51) chubavi-te knigi (Bulgarian)
nice-the books
e bukur-a çantë (Albanian)
AM nice-the bag [AM=attribute marker]
primu-l soldat (Romanian)
first-the soldier

Note that the noun lacks the suffixed article in these constructions, and that the article seems to have the same form and function as the one appearing on nouns. The analyses that assume attributive adjectives to be specifiers or adjuncts will not be able to describe the appearance of the article on adjectives in a way that is parallel to its appearance on nouns.[17]

In the same way as I have assumed that languages that may have a suffixed article on the noun have a special specification on nouns, I assume that languages may have the same specification for adjectives. In the Balkan languages and Northern Scandinavian these specifications are [+head-movement] on both N and A, whereas the Standard Scandinavian languages have [+head-movement] only on Ns.

Among the languages that have head raising in the noun phrase, we can then distinguish those who only have N-raising, like Danish, and those who may have both N- and A-raising, like Romanian. The former group has the word order article-adjective-noun, while the latter has adjective+article–noun (as in (51) above).

To conclude, the SpecA-analysis gives a straightforward account of the blocking effects of adjectives and the suffixed article found on adjectives in certain languages that have a suffixed article on adjectives.

3.2.6. Binding

As pointed out both by Delsing (1989) and Bhatt (1990) the SpecA-analysis gives a straightforward account for the binding relations inside attributive APs. In languages like Swedish, German, Slavic and Uralic languages where transitive adjectives are allowed attributively, the 'head' noun always seems to bind an anaphoric object. The example in (52), with the possessive reflexive *sin* is analysed as in (53), where the AP will be the governing category of the anaphor.

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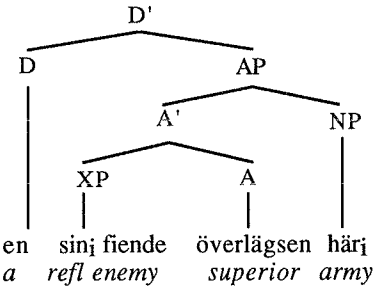
16 The Romanian example is from Grosu 1989, the other from Zimmermann 1991.

17 Longobardi (1992), who apparently does not know of examples like the ones in (50)-(51) above, states that the specifier analysis that he assumes excludes suffixed articles on adjectives.

(52) en sin$_{i}$/*$_{j}$ fiende överlägsen här$_{i}$ (Sw.)
a refl enemy superior army
en hans*$_{i/j}$ herre trogen tjänare$_{i}$
a his lord fatihful servant

(53)



These binding relations have previously been a problem for the theory (cf. Hellan 1987 for Scandinavian and Fanselow 1986 for German). They seem problematic to describe within an adjunction or specifier analysis, since in these cases the 'head' noun (or NP) will never c-command the object of the adjective. Abney's proposal (1987:327), will not be able to handle transitive attributive adjectives, and much less give an analysis of the binding relations mentioned above.[18]

3.2.7. Conclusions

In this section I have confronted the three possible analyses of attributive adjectives with some central properties like argument structure, agreement, independent use, recursion, head movement and binding. In all these cases I found that an analysis that interprets the adjective as a head, selected by D and taking the 'head noun' as its right hand specifier, the SpecA-analysis, was superior to the adjunction and specifier analyses. Some further support for the SpecA-analysis will be given in the next section.

3.3. Degree Phrases (DegPs)

There is a category that normally is included within adjectival phrases in traditional grammar, namely degree adverbials. In Abney 1987 it is suggested that degree adverbials, like *so, too, as,* constitute a functional category that selects APs. Here I will follow Abney (1987), and in particular Bhatt (1990), arguing that Deg is a func-

[18] The object of the adjective is sometimes assumed to be bound by DP (cf. Hellan 1987), which would violate the i-within-i condition. This is discussed in some more detail in Bhatt 1990 and Svenonius 1992. Bhatt tries to preserve the i-within-i condition, whereas Svenonius tries to show that it does not work. I will not discuss the problem here, since I think that the analysis put forward here is superior to any analysis that tries to adopt binding from DP or from the outside.

tional category, projecting a DegP and selecting an AP. It selects both predicative and attributive adjectives, and it contains comparison and degree elements.

As a first observation, we find that comparison can be accomplished by either a free word or as a comparison affix in many languages. Consider the Swedish examples in (58).

(58) den mest intressanta boken
the most interesting book-the
den intressantaste boken
the interesting-est book-the

In Swedish, morphological comparison is almost obligatory with short modifying adjectives. Longer adjectives may take either the periphrastic or the morphological comparison, whereas most participles only take the periphrastic variant.[19]

A pattern like the one in (58) above, with a free preposed lexical item being in complementary distribution with a morphological ending, is the same as we can find with modals and tensed verbs in English, and with the prenominal and suffixed article in Danish. As in these constructions, the free and the inflectional element may not co-occur.

(59) *den mest intressantaste boken
the most interesting-est book-the

The comparison forms also license comparison phrases, *av [of]* phrases with superlatives and *av [of]* or *än [than]* phrases with comparatives.[20] Such phrases are also licensed by some degree adverbials in indefinite noun phrases, *så, lika, för/alltför [so, as, too]*, and others.

(60) den största bilen av de tre
the biggest car-the of the three
en större bil än den här
a bigger car than this
(61) en lika stor bil som den här
an as big car as this
en alltför stor bil för att den ska vara billig
a too big car for that it shall be cheep

---

19 Swedish is thus a bit more liberal with the morphological comparison forms than English. Other languages, like German, almost always uses the morphological comparison, whereas French, for example, almost always uses the periphrastic variant. English and Swedish can be placed in-between those two extremes.

20 In Swedish, comparative may be used with an *av [of]* phrase when there is a presupposed pair. The comparative example in (i) entails that there are only two brothers, whereas the superlative in (ii) has no such restrictions.

(i) den längre av bröderna
the taller of brothers-the

(ii) den längste av bröderna
the tallest of brothers-the

Apart from the property of licensing comparison phrases, the degree words in (61) are in complementary distribution with comparison (morphological or periphrastic), as the examples in (62) show.

(62) *en lika större bil än/som den här
an as bigger car than/as this
*den alltför största bilen
the too biggest car-the

I assume that most degree elements that are in complementary distribution with comparison are degree elements, generated in Deg. I assume that comparison affixes are base generated in Deg and attached to the adjective by head raising of A to Deg. Degree words like *väldigt [very]* will also be seen as Deg elements.[21]

A further thing to be noted about degree elements is that they seem to have special premodifiers, specifying in what sense or to what extent the degree relation holds, or just emphasising the degree (compare Lundbladh 1988:175-182). Consider the (underlined) premodifiers in (63).[22]

(63) den allra/näst största bilen
the of-all/next biggest car-the
en ännu/mycket större bil
an even/much bigger car
en nog så svår uppgift
an enough so difficult task
en nästan/ungefär/precis lika lång käpp
an almost/approximately/precisely as long stick
en alldeles för lång ärm/föreläsning
an all too long sleeve/lecture

I take the premodifiers above to be left adjoined to DegP. These premodifiers will be used to identify degree elements later on.

An argument for a structural difference between positive adjective and the comparison forms is that they are hard to co-ordinate.

(64) *en glad och trevligare flicka (än Lisa)
a glad and nicer girl than Lisa
*det vackra och största huset
the beautiful and biggest house
*Kalle är längst och stark
Kalle is tallest and strong

---

21 With some other degree-denoting words it is not clear whether they should be considered Deg-elements. For instance the words *ganska/rätt [rather/ fairly]* are not compatible with comparison forms, but they may occur with *så*.

(i) ganska/rätt så stor
rather so big

22 It should be noted that the word *mycket* in Swedish is ambiguous. It can be both a degree word, meaning *very*, and a pre-modifier, meaning *much*.

The positive form may however be co-ordinated with comparative or superlative if the positive occurs with a degree element of its own. In predicative position, the positive can be co-ordinated with a comparison form, but only if there is an explicit comparison phrase.[23]

(65) Kalle är längst och stark som en oxe
Kalle is tallest and strong as an ox

I take it that the degree element (*mycket*) or comparison phrase (*som en oxe*) signals that there is a Deg position, thus making co-ordination of two DegPs possible.

I will assume that D can select DegP, but (contrary to Bhatt 1990), I will assume that recursively stacked adjectives will only contain one DegP selecting the first adjective, the other adjectives being only AP. In other words, an attributive adjective can have AP or NP in its specifier position, but not DegP. This will then explain why there is normally only one degree element in a group of recursively stacked adjectives, and why the degree element is normally connected to the first adjective in the row.

(66) den snabbaste svenska bilen
the fastest Swedish car-the
en lika snabb röd bil (som den här)
an as fast red car as this
(67) ?den svenska snabbaste bilen
the Swedish fastest car-the
?en röd lika snabb bil (som den här)
a red as fast car as this
(68) ?den största snabbaste bilen
the biggest fastest car-the
?en lika snabb alltför stor bil
an as fast too big car

As indicated above, there is no absolute ban against two degree elements or a degree element connected to the second adjective, but there is clearly a preference of using only one degree element and to place it first.[24]

A further advantage of the analysis presented here is that it accounts for the placement of comparison phrases licensed by the Deg-element, illustrated in (60)-(61) above. Such phrases always follow

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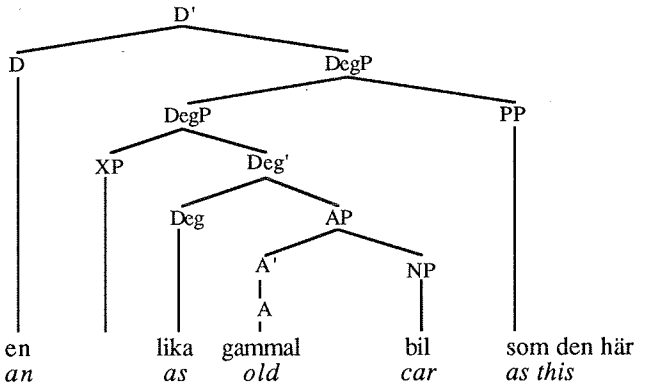
[23] Co-ordination is also possible if the DegP has a modal adverbial like *förmodligen, säkerligen, kanske [probably, certainly, maybe]*. I have no explanation for this.
(i) det vackra och förmodligen äldsta huset
the beautiful and probably oldest house-the

[24] I do not know why they examples in (67) and (68) are not worse than they are. To my ear they sound like co-ordinations, with a left out conjunction. Maybe they should be treated as such.

both the adjective and the noun in a language like Swedish.[25] In analyses that have adjectives (and degree words) generated as specifiers or as adjuncts, it is surprising that such phrases are not placed adjacent to the Deg-word. Such analyses will have to posit obligatory extraposing of the comparison phrase, and additionally they will have to say something about the fact that the phrase is never extraposed in-between the adjective and the noun. In our analysis we would expect the comparison phrase to be adjoined to the right or the left of the DegP. Right adjunction gives the correct word order for a language like Swedish and the other Germanic languages.[26]

(69)



In some languages, the comparison phrase is located directly to the left of Deg, which corresponds to the left adjunction alternative in our analysis. Such constructions are found in Old Scandinavian, Old English and Modern Finnish; it is also found in literary Modern Icelandic (see further Vainikka 1988). The Old Icelandic example in (70) is from Nygaard (1906).

(70) þér betri menn (Old Icel.)
you-DAT better men [=better men than you]

---

25 If the comparison is internal, like in (i) below, which is a bit marginal, the comparison phrase occurs in-between the adjective and the noun.

(i) den lika dumma som skönsjungande tenoren
the as stupid as beautifully-singing tenor-the

Note however, that in (i) it is not a question of comparing two items (nouns), but two properties (adjectives). I assume that the first adjectival phrase is used independently with a *pro* in its specifier, co-ordinated with an adjectival phrase (with a filled specifier).

26 It is a classical problem within traditional grammar, whether *som* in (69) is to be considered a subjunction or a preposition (see e.g. Ljung/Ohlander 1971:188).

A further advantage of the analysis sketched here is that there are quite strong restrictions on what kind of degree elements may appear in different sorts of noun phrases. I believe that this is a reflection of the selectional restrictions on determiners. Determiners should have restrictions for what kind of Deg elements they select. For example, the prenominal definite article is possible with superlatives and comparatives that take *av [of]* phrases, but normally not with *lika, så, hur [as, so, how]* or ordinary comparatives (with *än [than]* phrases). The indefinite article on the other hand does not take superlatives or comparatives with *av [of]* phrases, whereas it may take comparatives with *än* phrases or *lika, så,* etc.

Of course the differences can be taken to be semantic in nature, having nothing to do with syntactic structure or different determiners, but only with definiteness. Such an approach would for instance entail that superlatives were semantically compatible only with definite noun phrases. Under such an analysis it is, however, hard to explain why indefinite uncountables (with the alleged null partitive article) could be combined with superlatives, as was shown in the previous chapter.

(71) Vem säljer godast glass?
Who sells tastiest ice-cream
Tibern har smutsigast vatten
The Tiber has dirtiest water

Another surprising fact under the semantic hypothesis is that the demonstrative *denna [this]* in Swedish is hard to combine with superlatives, although it is perfect with positives. Consider (72).

(72)	detta stora hus	*detta största hus
	this big house	*this biggest house*

The demonstrative *denna* must be followed by an article if there is a comparison form, and hence by a whole noun phrase (see further chapter 4).

(73) detta det största huset i Genua
this the biggest house-the in Genua

In the same way as certain nouns (proper names) are inherently specified for definiteness, certain adjectives are inherently specified for comparison. Words like *inre, övre, bortersta, högra, norra, förra, sådan, samma [inner, upper, farthest, right northern, such, same]* and the ordinals are inherently specified for comparison. Some of them are also morphologically inherent comparatives or superlatives. I assume that these are words that must be raised from A to Deg.

Finally, we will discuss the question of whether all adjectival phrases are DegPs or if there are pure APs without Deg-projections in the grammar. Above, I argued that all argumental noun phrases are DPs, whereas other noun phrases may lack the D-position. It is possible that there is a similar distinction between APs and DegPs. Not all adjectives are able to take a degree word. Basically this is so for classifying adjectives (cf. Teleman 1969:76-79 and Lundbladh 1988:101-130). Consider the noun phrases in (74)-(75).

(74) en etnisk alban
en ethnic Albanian
'an person of Albanian origin'
en teknisk doctor
a technical doctor
'a doctor of technology'

(75) %en mycket etnisk alban
a very ethnic Albanian
en ganska teknisk doktor
a rather technical doctor
' a doctor that is rather skilled technically'

The adjectives in (74) are normally interpreted as classifying. In (75), on the other hand they can only be interpreted as descriptive. The "%" in the first example indicates that the example is odd. Thematic and adverbial adjectives, cf. (21) and (22) above seem to pattern with classifying adjectives (and I will treat them as subcases of classifying adjectives). If they take a degree element, the descriptive reading is forced, which sounds quite odd in some cases, indicated by "%" as before.

(76)a den alltför italienska invasionen av Albanien
the too Italian invasion of Albania

b %det mycket ständiga tjatandet om skatterna
the very constant nagging about taxes-the

The examples in (76) are grammatical, but the use of a degree element makes the thematic or adverbial reading impossible, forcing a descriptive reading. The only possible interpretation of (76)a is the descriptive reading, i.e. that the invasion of Albania was too much accompanied by wine-drinking, beautiful opera-singing and bad organisation, and (76)b is just odd. Thus it seems as if a degree element excludes a classifying reading and forces a descriptive reading. I therefore propose that descriptive adjectival phrases are always DegPs, and classifying adjectival phrases always APs.

Note that a similar fact can be noted for predicative adjectives. A classifying reading of an adjective is normally excluded in predicative position (cf. Lundbladh 1988:103ff.).

(77) Den här doktorn är teknisk
This doctor i technical
'This doctor is technically skilled'
%Albanen som vi träffade igår var etnisk
Albanian-the that we met yesterday was ethnic

The same is true for thematic and adverbial adjectives.

(78) Invasionen av Albanien var (mycket) italiensk
Invasion-the of Albania was (very) Italian
%Detta tjatande är ständigt
This nagging is constant

The adjectives in (77)-(78) may only get a descriptive reading, which can be emphasised by inserting a degree element.

Thus, if predicative adjectival phrases are always descriptive, then we would assume that they are DegPs. If we state that the copula can only select DegPs, not APs, we explain why only a descriptive reading is possible in predicative position.

Note that the observations here about predicative adjectives resembles the observations that we made in section 2.1 about predicative noun phrases. Predicative noun phrases that are interpreted as classifying are not introduced by an article (a D-projection). Predicative adjectives that are interpreted as classifying cannot be introduced by a degree element (a Deg-position). In both cases the classifying reading seems to exclude a functional category.[27]

To conclude this section I have shown that there are good reasons to posit a functional Degree-element selecting APs. The arguments come from the complementary distribution of degree morphology and free degree elements, and from co-ordination. The analysis also seems promising for postnominal comparison phrases, selection between D and Deg, as well as the difference between the descriptive and the classifying interpretation of adjectives.

3.4. Quantifiers

In addition to the DP-analysis, Abney (1987:338ff) also assumes a QP, a quantifier phrase, which is headed by quantifying elements. He gives the following tree diagram.

---

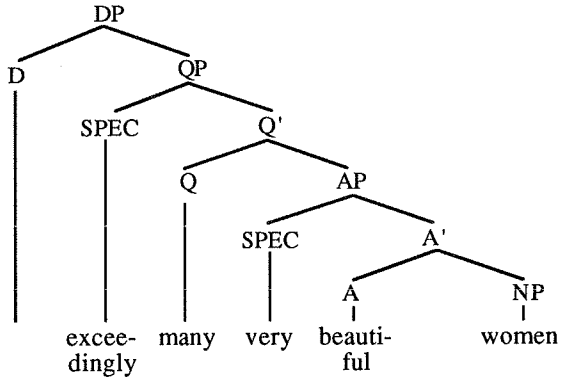
[27] A tempting analysis would of course be to analyse the 'indefinite article' in predicative noun phrases as a Degree element, since it goes together with descriptive reading. Such an analysis would solve one of the problems with the working hypothesis (13)a in chapter 2, that is, predicative noun phrases would never have an indefinite article, but sometimes a degree element.

However, the analysis just sketched would entail that we would have Degree elements directly selecting NP, as in (i). Another problem is that the article co-occurs with other Degree elements, as in (ii).

(i) Han är en idiot
He is an idiot

(ii) Han är en väldigt duktig läkare
He is a very skilled doctor

(79)



The structure in (79), where *many* is generated in Q^0, captures the fact that some quantifiers in English (and the other Germanic languages) normally may intervene between the determiner and the attributive adjective. Consider the Swedish examples in (80) and (81).

(80) de många vackra träden
the many beautiful trees-the
Kalles fyra söta systrar
Kalle's four nice sisters

(81) *de vackra många träden
the beautiful many trees-the
*Kalles söta fyra systrar
Kalle's nice four sisters

Abney does not discuss in detail why Q is to be considered a functional head, but see Löbel (1989) and Bhatt (1990).

Here I will argue that there is no Q-projection in-between D and N in Scandinavian, and that quantifiers belong to the categories D or A. If we can dispense with the Q projection, we will of course prefer such an analysis, because it sets greater constraints on the structural possibilities of noun phrases, (cf. also Svenonius 1992a, who reaches the same conclusion). **Quantifiers that precede the D-position will be discussed in chapter 6.**

In all the studies of QP, it is implicitly or explicitly assumed that we have to postulate a special Q-projection, since some quantifying elements intervene between the D and N positions. On the other hand most Germanic and Romance languages normally have complementary distribution between indefinite quantifying pronouns and definite determiners. For instance, the following Swedish pronouns may not co-occur with definite determiners:

(82) en, någon, ingen, vilken, var/varje
a/one, some/any, no/none, which, each/every

The simplest analysis of such elements is of course that they are generated in the D-position (see section 6.1). The lexical items that may be positioned in-between D and N constitute a more severe challenge to our claim that there is no Q-projection. Those items are the following.[28]

(83) many/few: de många böckerna/Kalles få elever
the many books / Kalle's few pupils
numerals: de fjorton böckerna/Kalles tre systrar
the fourteen books / Kalle's three sisters
both/all: de båda pojkarna/Kalles alla systrar
the both boys-the / Kalle's all sisters

If we could show that those words are adjectives or degree elements, we could argue that there is no special Q projection. This is what I will try to do in the rest of this section.

First, the quantifiers *många, få [many, few]* seem to be adjectives (cf. Svenonius 1992a and Magnússon 1983). They may take the same degree adverbials as ordinary adjectives, they have comparison forms and they take comparison phrases, as shown in (84) below. Thus, contrary to the pronouns in (92), *många* and *få* seem to be selected by a Deg-projection.

(84) väldigt/alltför/lika många böcker
very/too/as many books
fler människor (än hundra)
more people than hundred

A good test for adjectivehood in the Scandinavian languages is the strong/weak distinction. Adjectives normally have both forms, whereas pronouns have only the strong form. Since *many* and *few* are inherently plural, and the plural of strong and weak adjectives in Mainland Scandinavian is homophonous, it is not possible to determine what form they have. In Insular Scandinavian, however, there is a difference between the strong and the weak form in plural, the weak form ending in *-u* (cf. table 6 of the appendix).

(85) þessar mörgu/*margar kenningar (Icelandic)
these many[wk]/[str] theories

---

28 In Danish and literary Norwegian also the quantifiers *hele [whole]* and *halve [half]* may appear in the position between D and N (cf. Hulthén 1947:51).
(i) det hele hus
the whole house [all the house]
However, these word have weak adjectival inflection, and I will assume that they are adjectives when they are found in the position between D and N.

Hence, in Icelandic and Faroese, *many/few* have undoubtedly adjectival inflection, when they appear in-between D and N.

Furthermore *many* and *few* may be co-ordinated with ordinary adjectives, as shown in (86) below.

(86) många och svåra problem
many and difficult problems
få men duktiga spelare
few but skilled players

Last, *many* and *few* may also be used predicatively, as shown in (86) below (cf. also Teleman 1969:19).

(87) Problemen var många, och glädjeämnena var få
Problems-the were many, and causes-of-rejoicing-the were few

The second group of intervening quantifiers involves numerals. The numeral *en [one]* (meaning one out of two) may be used in-between D and A in Swedish. In this position *one* has weak morphology.

(88) den ena stökiga eleven
the one messy pupil
'one of the messy pupils'

The strong forms *en/annan* are not possible in the position between D and N. Furthermore both may take a masculine weak *-e* in Standard Swedish, which is only possible with adjectives.

The other numerals are not inflected in Mainland Scandinavian, but they have other adjectival properties.[29] They may appear in predicative position (at least marginally, cf. Teleman 1969:19).

(89) Bilarna var fyra
Cars-the were four

There are also two reasons to connect numerals to degree elements. First, numerals may be co-ordinated with the comparison forms of *many* and *few,* whereas they cannot be co-ordinated with the positive forms.

---

29 The Icelandic numerals 1-4, are inflected, and numerals in Icelandic have special properties in definite noun phrases, which I will not discuss here. For instance they normally appear after a noun with the suffixed article.

(i) fjórir strákar — *four boys*
(ii) strákarnir fjórir — *boys-the four*

See further Magnússon (1983) and Sigurðsson (1993).

(90) tre eller färre passagerare
three or fewer passengers
femton eller fler elever
fifteen or more pupils

Second, we also note that numerals take the same premodifiers as the degree word *lika [as]* (cf. (63) above), namely *precis, ungefär, nästan, [precisely, approximately, almost]*.

The data above show that numerals have adjectival properties, and that they are similar to degree elements in some ways. I will assume that numerals are adjectives that obligatorily have to raise to the Deg-Position, by head movement.

The third category of quantifiers that may intervene between D and N contains the words *båda* and *alla [both, all]*. *Alla* may only be used after possessives, not after the definite determiner, for some reason. Now note that when these words are placed in-between D and N they seem to lack their quantificational force. They are semantically equivalent to *two* or *many*. The word *all* may not be specified by a PP that denotes the presupposed group, which is usually possible by quantifiers.

(91) alla barn av dem som jag känner
all children of the (ones) that I know
Desireés alla barn (*av dem som jag känner)
Desireé's all children (of the (ones) that I know)

Note also that the quantifier *all* normally may be followed by uncountables. This becomes impossible when it is placed in-between D and N, as shown in (92)-(93) below, (cf. Teleman 1969:103).[30]

(92) all mjölk/fisk
all milk/fish
(93) Kalles (*all) mjölk/fisk
Kalle's all milk/fish

Here, I have shown that *many/few*, numerals and *all/both* behave rather like adjectives when they are placed in-between D and N. I will hence assume that they may be treated as adjectives, having a special relation to the Deg-position. I assume that they must always move up to the Deg-position, as I assumed for some adjectives that are inherently specified for comparison. We will then have an explanation for the fact that they always precede other adjectives in a row (cf. (66)-(68)) above), and why these elements are in complementary distribution with each other. Recall our assumption that there is

[30] In other languages there are two words meaning 'both', one used when it is preceded by the determiner, and another when it is not (see Giusti 1992 on Romanian). This supports the view that the two uses should be kept apart.

normally only one DegP in a noun phrase, adjectives do not take DegPs as specifiers. Thus noun phrases like the ones in (94)-(95) below are ruled out, because they would entail adjectives taking DegP specifiers.

(94) *de besvärliga många problemen
the intriguing many problems
(95) *de många fjorton böckerna
the many fourteen books

To conclude this section, there are no reasons to postulate a special category Q in-between D and N. In the following I will treat elements that are in complementary distribution with determiners as elements in D, and the ones that may intervene between D and N as adjectives, which obligatorily raise to Deg.

3.5. Consequences

In this section I will point out some of the consequences of the analysis proposed in the previous sections. I will discuss agreement, Case-marking, and the distinction between functional and lexical categories.

3.5.1. Agreement

In section 3.2. I argued that adjectival agreement should bee seen as an instance of Spec-head agreement. I showed that this makes adjectival agreement similar to predicative agreement, and that it accounts for the use of independent adjectives. There is however other instances of agreement in the noun phrase. In the Scandinavian languages practically all elements seem to agree. Quantifiers, determiners, and adjectives are all marked for gender, and number (in Insular Scandinavian also in case), as in the Icelandic examples in (96)-(97).

(96) allar þessar ungu stelpur (Icelandic)
all-fem.pl.nom. this-fem.pl.nom. young-fem.pl.nom. girls.nom
(97) allir þessir ungu strákar
all-masc.pl.nom. this-masc.pl.nom. young-masc.pl.nom. boys.nom

In such cases we will have to assume percolation of features from one head to another. A feature like Case is assigned to the DP from the outside, and we must assume percolation of Case from D downwards. Gender, on the other hand, obviously originates on the head noun, and we must assume percolation upwards from the N position. Number does not have an unambiguous source in the same way.

It is, however, not possible to have percolation to all nominal categories. Percolation seems to be blocked when a projection is assigned Case. In Icelandic, gender, number and case percolates to all

categories except for phrases that are assigned case within the noun phrase, e.g. genitival attributes (both in possessive and partitive constructions).

(98) þessi þáttur starfsins
this-masc.sg.nom *part*-masc.sg.nom *work-the*-neut.sg.gen
'this part of the work
(99) gamla hús kaupmansins
old-neut.sg.nom *house*-neut.sg.nom *trades-man-the*-masc.sg.gen

Objects of attributive adjectives and predicative attributes are also excluded from noun phrase internal agreement. The percolation seems to be blocked by a Case assigner.

(100) en [sina fiender] överlägsen här
a-uter.sg [its enemies] superior-uter.sg army-uter.sg
maður trúr [konunni sinni]
man-masc.nom.sg faithful-masc.nom.sg wife-the-fem.dat.sg refl-fem.dat.sg

I assume that ϕ-features may percolate upwards and downwards within the DP. However features do not percolate to Case-assigned positions. In the next subsection we turn to Case within the DP.

3.5.2. Case-marking

Recall from 1.3.5 that, as a consequence of the DP-analysis, we must distinguish between projections that are assigned Case under government and projections that are Case-marked but not governed by the Case-assigner. In the latter case, the category has inherited Case.

Within the noun phrase structure that I have proposed in this chapter only DP will be a Case-assigned projection, whereas DegP, AP, and NP will inherit Case from DP. I informally propose the following rules for Case marking.

(101) DP is Case-marked through assignment
(102) NP, AP and DegP are Case-marked through inheritance

I assume that inheritance is percolation. In accordance with the discussion in the previous subsection, we may also state that Case assigners block percolation. This could be formulated as a Percolation Principle.

(103) *Percolation Principle*
Case percolates from a category α to a category β if
a) α and β are [+N] and
b) α dominates β and
c) β is not governed by a Case-assigner

The above definition is very similar to a proposal made by Sigurðsson (1989:10f), where he assumes a Protection principle and a Percolation principle for Case.[31]

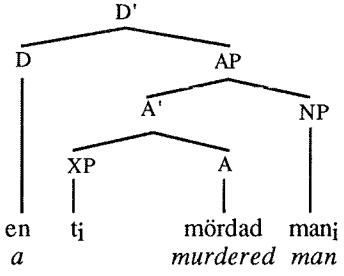
As a consequence of the Percolation Principle, Case that is assigned to DP will percolate to all [+N] categories that are not in a potential Case-assigned position. Note in particular that SpecAP is not assigned Case from A and that Case may percolate to this position. The complement of AP is however a potentially Case assigned position, and objects of adjectives must be assigned Case from A or via a preposition.

Under these assumptions we can analyse passive participles that are used attributively, like in the example below.

(104) en mördad man
a murdered man

Under the natural assumption that the noun *man* is base generated as a complement of the participle, we must assume that it is moved (as an NP) from the complement position to the specifier position.

(105)



I assume that the reason for movement in (105) is the same as for movement out of predicative participles, namely Case. The passive morpheme makes the participle unable to assign Case to its complement. The complement position is a potential Case-assigned position, and hence the NP cannot inherit case in situ, according to the Percolation Principle. In an ordinary passive construction, the complement is moved to Spec-IP to get Case. I assume that the complement of an attributive passive participle can inherit Case if it is moved to SpecA. This is not a potential Case-assigned position, and percolation should be licit. Thus, SpecAP is a position that is Case-marked but not Case-assigned. It will be counted as an A-position (cf. subsection 1.3.4).

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31 The main difference is that Sigurðsson assumes that a Case assigner 'protects' the whole maximal phrase from percolation. Furthermore Sigurðsson's principles are designed for all categories, not just [+N] categories.

3.5.3. Functional and Lexical Categories

In this chapter I have assumed that there are two functional categories in the noun phrase. D is obligatory in argumental noun phrases, and it selects either DegP, AP or NP. Deg is used in noun phrases with attributive adjectives and it selects AP.

We shall now return to a discussion of the special properties of functional categories outlined by Abney, cf. (7) above. Abney claims that functional categories constitute closed classes, which seems to be supported by the data. Both D and Deg elements seem to be closed classes.

Abney also claims that functional categories are morphologically and phonologically dependent. Furthermore they are said to have no 'descriptive content', i.e. they do not refer to anything that is observable in the world around us. In my opinion, these properties are the reflex of the same thing. Let us say that functional categories are light with regard to their phonetics, morphology and semantics.

Abney furthermore discusses the selectional restrictions on functional categories, claiming that the complement of a functional category is never an argument. This will be connected to Abney's fourth observation, that a functional category is normally not separated from its complement, i.e. the functional category is never stranded by movement. In syntax only arguments and adjuncts move out of their projections by XP-movement. Complements of functional categories are not arguments (and by definition not adjuncts). The observation that functional elements do not take arguments as complements may also be extended to include their specifiers. This is in accordance with the assumption that all arguments are base generated inside the projection of lexical categories; functional categories will never have any base generated arguments, neither as specifiers nor as complements.

Abney also claims that each functional head selects a unique complement (see also Felix 1988). As we argued above, D may select either DegP, AP or NP as its complement, so we will have to admit for some variation here.[32] A similar situation appears in the clause, if we, like many others (e.g. Pollock 1988), consider Negation to be a projection of its own, inside the clause. In such a case I^0 must be able to select both NegP and VP.

The selectional restrictions that we find with functional categories are purely grammatical and not semantic. Functional categories select complements marked for grammatical features. There are few selectional restrictions for functional categories within the clause, but in some languages there are certain complementisers that select only subjunctive mode. In some languages there are reasons to

[32] Abney's own analysis of attributive adjectives will also contradict the claim that D can only select NP.

believe that the infinitival marker is generated in C (cf. Platzack 1986:215ff.). Hence, different Cs have to select different values of features like [±finite] and [±tense]. As we have seen the category D selects the features [±countable] and [±superlative]. Lexical categories on the other hand have semantic restrictions on their complements (and specifiers), such as [±human] and [±concrete].

Another observation about the complements of functional categories is that they seem to be obligatory. In other words, functional categories seem always to be transitive, contrary to lexical categories. Pronouns are, however, often taken to be intransitive Ds (cf. Abney 1987:284 and Svenonius 1992b). Thus they would be the only instance of transitive functional categories. Under this assumption, it is hard to see how vocative noun phrases like the Swedish ones in (106) should be analysed.

(106) snälla du!
kind you-sg.!
kära ni!
dear you-pl.!

The word order of (106) indicates that pronouns are generated in N. On the other hand, personal pronouns seem to be in the determiner position in some constructions, as pointed out by e.g. Postal (1966) and Hultman (1967).

(107) vi bönder
we peasants

Thus, I do not think that all personal pronouns can be given a unified analysis. I assume that they are generated in N in most cases, but that they may also be generated in D when they are followed by lexical nouns. Personal pronouns are then generated either in N or as transitive Ds.

A further difference between functional and lexical categories worth noting is their different behaviour with regard to head movement. Theoretically, there are four possible cases of head movement. Lexical heads could be moved either into a functional head or into another lexical head. Likewise, functional heads could be moved either into a lexical head or into another functional head.

Movement of a lexical head into a functional head is well attested in linguistic theory (e.g. V-raising to I, or N-raising to D, as I have argued in this chapter). Movement of a lexical head into another lexical head is also well attested (incorporation, cf. Baker 1988). We also find movement of a functional category into another functional category; in a V2-language like Icelandic with verb

movement to I, there is raising of (complex) I to the C-position.[33] What we do not find are cases where a functional category moves into a lexical category, i.e. D heads never incorporate, only N heads seem to be able to move into a verb or any other lexical category (cf. Li 1990). This is then a structural formulation of the well known fact that compounds seem to involve only stems and not inflected elements.

In this way there is a similarity between head movement and XP-movement, with regard to the A / A' distinction. Also in the latter case, one out of the four theoretically possible alternatives seems to be illicit. Arguments (generated in A-positions) can move to both A and A'- positions, whereas non-arguments (generated in A'-positions) can only move into another A' position, it may not move to an A-position. This generalisation could be stated as in (108).

(108) Head movement: $*F \Rightarrow L$
XP movement: $*A' \Rightarrow A$

In this way we could look upon functional categories as A' heads.

A last property that seems to be general for functional categories is that they do not assign case to their complements. They may however assign structural Case to their specifier, or the specifier of their complement.[34] Lexical categories on the other hand may assign Case (lexical or structural) to their complement. I will leave it as an open question whether they may assign Case to their Specifiers. In the Germanic languages, I know of no analysis that entails a lexical category assigning Case to its specifier. The strongest generalisation would of course be that functional categories assign Case only to specifiers, whereas lexical categories assign Case only to complements.

Now we are in a position tentatively to rephrase Abney's generalisations about functional categories, compared to lexical categories. In (109) below, I summarise the generalisations that I think we can do about functional and lexical categories. Note that the they have somewhat different status. Number 1 and 2 are basically definitions, whereas the other ones are (more or less well explained) ob-

[33] Nothing is said here about movement of a non complex functional head into another functional head. Such movement would result in a cluster of functional features without any lexical element. Such cases are hard to find within the Germanic or Romance languages, but they probably exist. A candidate for head movement of a functional category into another functional category is perhaps Finnish Negation, which shows overt agreement with the subject.

[34] I know of only one analysis that suggests case assignment from a functional category to its complement, namely the analysis of V2 languages made in Platzack/ Holmberg 1989 and Holmberg/Platzack (in press). This analysis entails that the functional category C may assign (nominative) Case to I (or the AGR-feature in I). It remains to be seen whether the advantages of this analysis can be retained within an analysis that does not assume Case assignment from C to I.

servations about the syntactic behaviour of functional and lexical categories.

(109)
1. Functional categories belong to closed classes, whereas lexical categories are open classes.
2. Functional categories are phonetically, morphologically and semantically light, i.e. they are often stressless, affixal and in lack of descriptive content.
3. Functional categories have obligatory complements, select complements with specified grammatical features, whereas lexical categories select complements with specified semantic features.
4. Functional categories are always transitive, whereas lexical categories can be either transitive or intransitive.
5. Functional categories do not take arguments, either as complements or as specifiers, whereas lexical categories do.
6. Functional categories cannot be stranded, whereas lexical categories can.
7. Functional categories cannot head move into a lexical category.
8. Functional categories cannot assign case to their complement, but they can assign structural case to specifiers. Lexical categories, can assign Case to their complements, whereas it is doubtful whether they assign Case to their specifiers at all.

The observations made above concern the functional categories C, I, D and Deg, and the lexical categories V, A and N. As for prepositions, it is well known that they behave like lexical categories in some cases, and as functional categories in others (cf. e.g. Grimshaw 1991b). I do not intend to give a description of the behaviour of prepositions with regard to the generalisations above, but I think that these generalisations might be a good starting point for a proposal that distinguishes functional and lexical prepositions.

3.6. Conclusions

In this chapter I have presented my basic assumptions about the structure of the noun phrase. My central interest has been the Scandinavian languages, but I have often referred to other languages as well, and I think that the structure proposed here can be applied to other languages. In section 3.1, I presented, discussed and adopted the DP-analysis. I argued that indefinite as well as the prenominal and suffixed definite articles should be generated in D. For Danish there is quite strong evidence that the suffixed article is always generated in D, whereas it is not as clear in the other languages. We will discuss this matter in more detail in the next chapter.

In section 3.2, I presented the different structural proposals for attributive adjectives. I adopted the SpecA-analysis, which entails that an adjective is a lexical head within the noun phrase, and that it takes the 'head noun' as a right hand specifier. I showed that the

SpecA-analysis is superior to other analyses with regard to such properties as the internal structure of APs, agreement, independently used adjectives, recursion, head movement and binding.

In section 3.3, I assumed that there is a DegP in noun phrases with attributive adjectives. Deg is a functional category, which hosts degree adverbials and comparison affixes, and which selects AP as its complement.

In section 3.4, i discussed another purported functional head within the noun phrase, namely QP. I argued that the categories that seem to intervene between determiners and adjectives in the Scandinavian languages can be described as adjectives.

In section 3.5, I summarised some of the consequences of my structural proposal. First I assumed that noun phrase internal agreement should be seen as percolation. Second I discussed some of the implications for Case-theory, and I proposed the Case Percolation Principle. Third, I discussed the basic differences between functional and lexical categories.

CHAPTER 4
DEFINITE AND INDEFINITE ARTICLES

In this chapter I am going to discuss some special properties of definite and indefinite articles in the Scandinavian languages. The behaviour of Scandinavian articles is interesting in three respects. The definite article can be either an independent prenominal element or suffixed to the noun, the prenominal and the suffixed article may turn up in one and the same noun phrase in some of these languages, and in some dialects also the indefinite article seems to appear twice in one noun phrase. Here, we will basically be concerned with these cases of doubled articles.

First, the Scandinavian languages differ with regard to definite articles when the noun phrase contains an attributive adjective or a demonstrative. Whereas Danish only has a prenominal determiner, Swedish, Norwegian and Faroese normally have both a prenominal determiner and a suffixed article. Compare the Danish and Norwegian examples below.

(1) det store hus (Danish)
the big house
det store huset (Norwegian)
the big house-the

(2) dette hus (Danish)
this house
dette huset (Norwegian)
this house-the

Second, we will discuss a special construction, where there is what seems to be an indefinite article after the adjective in an indefinite noun phrase. In most Scandinavian languages (as well as in other Germanic languages) we find an indefinite article after an adjective preceded by certain degree words. This is illustrated in (3). In Northern Swedish and Northern Norwegian, there may be two indefinite articles, when the adjective is emphasised, as shown in (4).

(3) så stort et hus (Danish)
so big a house

(4) e stort e hus (Northern Swedish)
a big a house

In section 4.1, I will start off by presenting some relevant data about different definite constructions in the Scandinavian languages. In section 4.2, I will discuss some proposals for the structure of the construction with adjectives, illustrated in (1) above, and I will present my own analysis of the issue, where I argue that the Scandina-

vian languages differ with regard to the possibility of base generating a noun with the suffixed article in N. In 4.3, I will discuss the demonstrative construction illustrated in (2) above. I will present an analysis that makes the constructions with adjectives and demonstratives parallel, arguing that demonstratives are base generated as adjectives. My analysis also entails that there is always only one marker of definiteness in a noun phrase. In section 4.4, I turn to the special use of the indefinite article occurring after attributive adjectives, illustrated in (3) above. In 4.5, I will summarise the discussion.

4.1. Single and Double Definiteness

In this section, I will present the basic data of definiteness and double definiteness in the Scandinavian languages. Here I will describe the properties of the Standard languages and of two groups of dialects that differ from the Standard languages in important ways.

I will adopt the view of traditional Scandinavian grammarians on referentiality, primarily distinguishing between deictic and anaphoric reference (cf. e.g. Hansen 1927:32-51, Lundeby 1965: 21f., Hultman 1967:24-34 and Perridon 1989:150ff.). The term *deictic reference* will be used when referring to an item that is known to the speaker and the listener by the situation or their common knowledge. The term *anaphoric reference* is used when a noun phrase refers to an item previously mentioned in the context. This use of the term 'anaphoric' differs from the normal use of the term in generative grammar, but I will nevertheless preserve the term here.[1]

Note that the distinction between noun phrases with deictic and anaphoric reference is grammaticalised in certain languages. According to Ebert (1970) common nouns in Northern Frisian (the dialect of the Föhr Island) take different articles depending on whether the noun phrase is uniquely identified by the situation or whether it refers to an item previously mentioned. Northern Frisian has two definite articles, *a* and *de*. When a noun phrase has deictic reference the *a*-article is used, whereas when the noun phrase has anaphoric reference the *de*-article is used. Consider the examples in (5)-(6) (from Ebert 1970:82f.).[2]

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[1] Apart from deictic and anaphoric reference, traditional grammarians normally distinguish generic and determinative reference. The term *generic reference* is used when a noun phrase refers to all prototypical members of a category, like in: *The lion is a mammal.* I will have little to say about this kind of reference. The term *determinative reference* is often used when a determiner anticipates a relative clause or another postnominal attribute. However I think that determinative expressions may be both deictic and generic, and they will hence be subordinated within these groups.

[2] Northern Frisian has other special properties with regard to the definite article. According to Ebert 1970:71ff, definite uncountable nouns and proper names take the *a*-article, whereas common nouns have the variation described above.

(5) A Hund hee tuswark (Northern Frisian)
The dog has toothache
'the dog at the farm, our dog, etc.'
(6) De Hund hee tuswark
The dog has toothache
'the dog that we are talking about'

As we will see in the following subsections, some Scandinavian languages also make a syntactically visible distinction between deictic and anaphoric reference.

4.1.1. Danish

Recall from the previous chapter that I argued that the suffixed article in Danish is attached to the noun by head movement of N to the D-position. Recall also that I assumed that adjectives are heads in the noun phrase. These two assumptions were used to derive the different behaviour of the article in noun phrases with and without adjectives in Danish. Consider once again the examples in (7)-(8) (= (17) and (18) in chapter 3).[3]

(7) huset
house-the
(8) det store hus
the big house

In the previous chapter, I argued that the noun is raised to D in (7), thus attaching the article generated in D to the noun. Furthermore, I argued that the intervening adjective in (8) blocks head movement, and that the D-position has to be lexicalised in another way, namely by spelling out definiteness in D as an independent definite article.

Apart from the two constructions in (7)-(8), there is a third construction that is of relevance here. This involves noun phrases with demonstrative determiners, like *denne/dette* and (stressed) *den/det* in (9).

(9) dette hus
this house
det hus
this/that house

As is seen above, Danish consistently shows single definiteness, having only one definiteness marker in every noun phrase, a suffixed article, a prenominal article or a demonstrative pronoun. There are

[3] It is sometimes claimed that Danish might have a prenominal definite article; in some constructions *det hus [the house]* would then be equal to *huset [house-the]*. The former expression is however impossible to distinguish from a construction with a demonstrative *det*, as illustrated in (9) (cf. the discussion in Hulthén 1948:19f., and references there).

no visible differences in Danish between deictic and anaphoric reference, with regard to common nouns (but see section 4.2.3 on proper names).[4]

In fact, there is only one minor exception from the standard pattern. This appears when a noun phrase contains an absolute superlative, like in the example in (10) below.

(10) med (den) største fornøjelse
with the greatest pleasure

As seen, the article may be missing in such constructions. This seems to be possible only after prepositions (cf. Diderichsen 1962: 52f).

4.1.2. Swedish, Norwegian and Faroese

Standard Swedish, Norwegian and Faroese behave very much alike with regard to definiteness, and hence I will treat them together in this subsection. In these languages, a noun phrase without an adjective behaves in the same way as in Danish, the noun takes the suffixed article, but when there is an attributive adjective, two articles appear. In such cases there is both an independent prenominal article and a suffixed article. Consider the Swedish examples in (11)-(12).

(11) huset
house-the
(12) det stora huset
the big house-the

The pattern in the example in (12) is by far the most common when there is an attributive adjective, and this kind of double definiteness will be the main topic of section 4.2. I will present some exceptions in a moment.

Apart from constructions with adjectives, the double definiteness turns up in constructions where there are cardinal numerals, quantifying adjectives or the word *båda [both]* in-between the D and N positions. Recall that I argued in section 3.4 that those elements are adjectives, in this position, so they will be structurally parallel to (12).

The double definiteness also occurs with demonstrative pronouns. First, double definiteness turns up with the demonstrative *denna/denne/hesin* in Swedish, Norwegian and Faroese, respectively.[5] Second, there is double definiteness with the complex demon-

[4] The dialects on Bornholm differ from Standard Danish in this respect. The Bornholm dialects have double definiteness, like Swedish (see Schütte 1922:122)

[5] The demonstrative *denna* is normally followed by a noun without the suffixed article in Standard Swedish. In colloquial Swedish, however, it is almost always used with the suffixed article. The special use of Standard Swedish *denna* will be discussed in subsection 4.3.2.

strative *den här/den her [the here]* in Swedish and Norwegian.[6] Third, double definiteness appears if there is a stressed pronoun *den/den/tann*. Apart from the stress, this last pronoun is homonymous with the prenominal article.[7] All the three variants of demonstratives are normally translated with *this* or *that* in English. Consider the Swedish examples in (13) below, where the stress on *den* is marked by bold face.

(13) denna boken
this book-the
den här boken
the here book-the
den boken
that book-the

The double definiteness in constructions like (13) (henceforth called *demonstrative double definiteness*) is not dependent on an attributive adjective, and it is hence different from the double definiteness in (12) (henceforth called *adjectival double definiteness*). The demonstrative double definiteness is found in several languages, such as Greek, Macedonian, Hungarian, Gothic and Javanese (cf. Lundeby 1965:23ff.). The adjectival double definiteness seems to be more restricted, cross-linguistically. I do not know of any language, apart from the Scandinavian ones described above, that consistently uses the double definiteness with intervening adjectives. However the two cases seem to have the same distribution among the Scandinavian languages, and I will argue that they should be analysed in the same way.

There are some constructions where the double definiteness is eliminated in Swedish and Faroese (and normally also in Norwegian). There are several very subtle distinctions between double and single definiteness, and I will not present all the differences here. I will only try to discuss the most important ones in Swedish, giving references to the corresponding constructions in Norwegian and Faroese.[8]

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6 The complex demonstrative does not occur in Faroese. In Danish the counterpart to Swedish *den här* is not as common as in Swedish or Norwegian. When it appears, the adverb *here* or *there* is placed postnominally: *den bog her [the book here]* (cf. Hulthén 1948:75). This construction is also found in Bokmål. Adverbs like *här* and *där* may follow any definite noun phrase, also personal pronouns, where the complex demonstratives are not allowed. Thus, I assume that the postnominal adverbs in Danish and Norwegian are ordinary adverbs adjoined to the right of DP.

7 The prenominal article and the stressed demonstrative *den* are also homonymous with the third person personal pronoun *den [it]*, except for the fact that the personal pronoun has an oblique plural form.

8 For more details, I refer the reader to Lundeby 1965 for Norwegian, and Hultman 1965:71-81 for Faroese. For a comparative description of the Mainland Scandinavian languages, see Hulthén 1948:13-84. On the lack of the prenominal article in Swedish, see also Ivarsson 1933 and Körner 1938.

The prenominal article may be left out in some cases. First, this is possible if the item is well known in the speech situation, by its uniqueness in the world or in a smaller speech community, such as the village or the family, i.e. when the noun phrase has deictic reference. Thus these cases also include noun phrases that are close to proper names. As indicated in (14) and (15) the article is optional in most cases. The alternative with the article is normally used to emphasise contrast. The ones that are close to proper names, as in (16), normally lack the article.

(14) Ta (den) nya bilen/ (den) stora kniven!
Take the new car-the / the big knife-the
(den) gamle kungen, (det) sena tåget
the old king-the, the late train-the

(15) (den) franska revolutionen, (den) svenska kyrkan
the French revolution-the, the Swedish church-the

(16) Döda fallet, Svarta Havet
Dead fall-the, Black Sea-the
Vita huset, Röda armén
White house-the, Red army-the

In the constructions above, Faroese and Nynorsk behave like Swedish, whereas Bokmål prefers single definiteness with the prenominal article in constructions with nationality adjectives and noun phrases that are close to proper names, i.e. (15) and (16) (cf. Lundeby 231ff. and 304ff.).[9]

Second, a similar pattern appears where there is a certain adjectives that makes the noun phrase unambiguous in the speech situation. Those adjectives are superlatives (especially ordinatives like *första/sista/senaste [first/last/latest]*, ordinal numbers and certain inherent comparatives (denoting position, quarter or the opposition left-right; cf. also Delsing 1988). Those are the kinds of adjectives that I have assumed to be obligatorily raised to DegP.[10]

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[9] Bokmål also uses single definiteness in other constructions. When a noun phrase with an attributive adjective denotes the whole class, like *den hvite man [the white man]* Bokmål normally uses the construction with only a prenominal article (cf. Lundeby 1965: 306).

In general Bokmål uses the Danish construction with only a prenominal article quite frequently. This is (at least partly) a reflex of the Danish heritage of Bokmål. During this century the Danish construction has been replaced by double definiteness to a great extent, and possibly the process is not yet finished (cf. Lundeby 1965:260-285 and 326f.).

[10] Most of these superlatives and comparatives lack a positive form. They normally receive an interpretation that is quite close to the classifying reading. Thus there is a similarity between the cases where predicative noun phrases may leave out the indefinite article and the cases where argumental noun phrases may leave out the prenominal definite article. They are both dependent on a classifying interpretation. I do not know if this should be given a principled explanation.

(17) (det) sista paret
the last pair-the
(den) tredje gången
the third time-the
(den) yttre/inre sängen
the outer/inner bed-the
(den) västra sidan
the western side-the
(den) vänstra handen
the left hand-the

It is quite obvious that the adjectives in (17) have the function of disambiguating the noun phrase and to make it uniquely identifiable. I think that the two cases described above (illustrated in (14)-(16) and (17) respectively) are reflexes of the same thing, namely deictic reference (compare the discussion in Ivarsson 1933). The prenominal article is optional if the noun phrase has deictic reference.[11]

The postnominal article may also be missing in certain constructions. First, when there is a restrictive relative clause that is interpreted generically, the suffixed article is missing, both with demonstrative and adjectival double definiteness.

(18) den bok(*en) som säljer flest exemplar belönas
the book(the) that sells most copies is-rewarded
(19) den sjuårige pojke(*n) som klarar detta finns inte
the seven-year-old boy(the) who manages this exists not

Normative grammarians normally recommend the form without the suffixed article with all restrictive relative clauses. This norm appeared in the 18th century, but there is normally nothing wrong with the suffixed article, unless the generic reading is intended (cf. Teleman 1992:220ff). I will not have any interesting solution to the lack of the suffixed article in this construction.

Second, an absolute superlative is always followed by a noun without the suffixed article. As we mentioned in the previous chapter, demonstratives are not compatible with superlatives at all, so the construction will only be used with attributive adjectives. Consider the examples in (20) below.

(20) I tornet sitter den vackraste prinsessa
In tower-the sits the prettiest princess
Han bakar de godaste bullar
He bakes the best rolls

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11 As pointed out to me by Ulf Teleman, the analysis predicts that the article should be required in plural noun phrases with superlatives or comparatives, since those are not uniquely identified. The prediction is borne out.
(i) Försök med (den) bortre dörren
Try with the farther door-the
(ii) Försök med *(de) bortre dörrarna
Try with the farther doors-the

It should be noted that noun phrases like the ones in (20) belong to literary style in Swedish. In prepositional phrases they are more colloquial, and in such cases even the prenominal article may (or must) be left out (cf. Teleman 1969:88).

(21) Vi följer utvecklingen med (det) största intresse.
We follow development with the greatest interest
Detta måste ordnas på (?det) bästa sätt
This must be-arranges on best way

To conclude, Swedish, Norwegian and Faroese use double definiteness when a noun phrase has an attributive adjective. If the noun phrase has anaphoric reference, both articles are obligatory. If the noun phrase is deictic the prenominal article is often optional (especially in Swedish and Faroese). With demonstratives the suffixed article is obligatory (but see subsection 4.3.2. on the special use of Standard Swedish *denna*).

4.1.3. Icelandic

Turning to Icelandic, we find that it behaves in the same way as the other Scandinavian languages with simple nouns, cf. (22) below, but when there is an attributive adjective, the situation is different. In Icelandic we do not find double definiteness, but instead only one article, which can be either prenominal or suffixed, as shown in (23).

(22) húsið (Icelandic)
house-the
(23) hið gamla hús (literary)
the old house
gamla húsið
old house-the

It should be noted that the prenominal article is literary style and seldom used. Even in written language, the form with the suffixed article is the unmarked construction (cf. Magnússon 1983:94f.).

Demonstrative constructions in Icelandic always display single definiteness. Hence the situation is similar to the one in Danish.[12]

(24) þetta hús
this house
sá maður
that man

12 The pronoun *hinn [the other]* is traditionally considered to be a demonstrative pronoun taking a noun with the suffixed article: *hinn maðurinn [the other of the two men]*. However, this word is similar to several indefinite pronouns, in having partitive meaning: 'the other out of two'. Following Sigurðsson (1993), I will assume that *hinn* is not a demonstrative pronoun.

Furthermore, the form with the prenominal article is not possible when the noun phrase has deictic reference, i.e. in the cases where Swedish may lack the prenominal article (cf. (14)-(17) above). In such constructions the prenominal article is impossible even in literary style (Sigurðsson, p.c.).

(25) Taktu nýja bílinn / *Taktu hin nýja bíl
Take-you new car-the / Take-you the new car
þriðja árið / *hið þriðja ár
third year-the / the third year

Hence it seems as if the prenominal article is impossible in the cases where it is optional in Swedish.

4.1.4. Western Jutlandic

Western Jutlandic patterns with Standard Danish, since it lacks double definiteness. As mentioned above, contrary to Danish and the other Scandinavian languages, Western Jutlandic does not use the suffixed definite article at all. An ordinary definite noun phrase has the prenominal article *æ*, as illustrated in (26).

(26) æ hus (W. Jutlandic)
the house

In constructions with an attributive adjective, there is a choice between two different definite articles. The ordinary one is *de,* but *æ* may also be used in certain contexts, namely if the whole noun phrase is well known in the speech situation. This means that the adjectival *æ*-article is used approximately in the cases where Swedish can leave out the prenominal article. Consider the two examples below, taken from Lund 1932 (cf. also Byskov 1927, Ejskjær 1987).[13]

(27) æ gamel øg
the old horse
'the well known old horse'
(28) de gamel øg
the old horse
'the old horse, as opposed to other horses'

In demonstrative constructions, WJu. behaves like Standard Danish, having only a demonstrative followed by the noun.

(29) **den** mand
that man
den hus
that house

[13] Constructions with superlative adjectives are hard to find in Western Jutlandic. According to Hans Jul Nielsen (p.c.) they sound like Standard Danish.

Hence Western Jutlandic only displays single definiteness, though it makes a lexical distinction between deictic and anaphoric noun phrases, when they contain an attributive adjective.[14]

4.1.5. Northern Swedish

In most dialects of Northern Sweden, there is yet another system of definiteness. There is the usual suffixed article with ordinary definite noun phrases, as in (30).

(30) huse
house-the

In noun phrases with attributive adjectives, there is normally no double definiteness (Åström 1893, Bergman 1951:149-152, Dahlstedt/Ågren 1979:271f.). In such cases there are two alternatives. Either there is only a suffixed article, or there is a compound of adjective and noun with the suffixed article.[15]

(31) siste gånga
last time-the
(32) sist-gånga
last-time-the
stor-huse
big-house-the

The construction with a separate inflected adjective, illustrated in (31), is normally only possible with the special type of degree elements that are relevant for the lack of the article in Standard Swedish, namely superlatives, ordinals and certain inherent comparatives. If the noun phrase has anaphoric reference, the compound construction in (32) is used.[16]

It should be noted that the Northern Swedish dialects also have compounding when there is more than one adjective.

(33) gamm-svart-katta
old-black-cat-the

---

[14] In Western Hanherred, on the border between Western and Eastern Jutlandic, i.e. on the border between prenominal and suffixed articles, there is a dialect that displays a peculiar phenomenon of using bare nouns without any articles quite frequently, where Standard Danish would use the suffixed article (and WJu. would use the prenominal one). As shown by Christiansen (1977) the bare noun forms can only be used in "propriumsfunktion" (the function of proper names). Christiansen uses this term in the same way as I have used *deictic reference* here (p.9).

[15] The same construction may also be found in Northern Norwegian.

[16] The construction in (31) is common with superlatives and inherent comparatives. Perhaps it is less common with deictic noun phrases with positive adjectives.

I have not been able to find good examples with absolute superlatives in the Northern Swedish dialects.

In Northern Swedish, there is demonstrative double definiteness in the same way as in Standard Swedish.

(34) n här biln
this car-the
den gånga
that time-the

Hence, Northern Swedish deviates from Standard Swedish, only with regard to noun phrases with attributive adjectives.

4.1.6. Summary

Concluding this section, we see that the Scandinavian languages are strikingly uniform with regard to simple nouns, where all of them use the suffixed article, except for Western Jutlandic, which uses a prenominal article.

When it comes to noun phrases with demonstratives, Icelandic, Danish and Western Jutlandic have only one marker of definiteness (the demonstrative), whereas Swedish, Norwegian, Faroese and Northern Swedish have both a demonstrative and a suffixed article.

With attributive adjectives, the Scandinavian languages are strikingly different from each other, where Danish consistently uses a prenominal article, and Western Jutlandic uses two different prenominal articles. Swedish, Norwegian and Faroese use both a pre- and a postnominal article, but one of the articles may sometimes be missing. In Northern Scandinavian there is only a postnominal article, and with ordinary adjectives, there is normally compounding of the adjective and the noun. In Icelandic there is a postnominal article in colloquial style and a prenominal one in literary style.

There are four central constructions discussed in this section (leaving aside the special cases with restrictive relative clauses). They are summarised in Table 1, where Swedish represents the double definiteness languages (Norwegian and Faroese are not shown separately).

Marking of definiteness in the Scandinavian languages
Def = definite noun phrases without adjectives, **Adj-an** = definite anaphoric noun phrases with attributive adjectives, **Adj-d** = definite deictic noun phrase with adjectives, **Dem** = noun phrases with demonstrative pronouns.

	Def	Adj-an	Adj-d	Dem
W.Ju.	æ hus	**de** stor hus	æ stor hus	den hus
Da.	huset	**det** store hus	**det** store hus	det hus
Sw.	huset	**det** stora huset	(**det**) stora huset	det huset
NSw.	huse	stor-huse	store huse	de huse
Icel.	húsið	stóra húsið	stóra húsið	það hús

In the next section (4.2) I will discuss some possible analyses of adjectival double definiteness, and in section 4.3. I will turn to demonstrative constructions.

4.2. Adjectival Double Definiteness

In this section I will briefly discuss some possible analyses of adjectival double definiteness in Scandinavian. In the first subsection (4.2.1), I will present some of the analyses that have recently been put forward within a generative framework. In subsection 4.2.2, I will outline a proposal for a new analysis, and in 4.2.3, I will discuss the cases where a prenominal article is used with proper names.

4.2.1. Previous Analyses

In this subsection I will discuss some of the proposals that have been made in the literature to solve the different definiteness properties of Scandinavian DPs. In traditional grammar the main interest has been focused on the origin of the suffixed article (for a recent overview of the debate, see Perridon 1989:127-149). The discussion of the double definiteness has normally been descriptive, and traditional linguists have often been content with the statement that double definiteness is pleonastic. Therefore, I will leave them out of the discussion here. Since most linguists working on noun phrase structure today assume the DP-analysis, I will only discuss analyses that are compatible with such a structure.[17]

The analyses presented within a generative framework basically concern Swedish/Norwegian adjectival double definiteness, compared to the Danish single definiteness. As we have seen the Danish data seem most easy to analyse. Hence the work has concentrated on double definiteness in Swedish and Norwegian. No one has, as far as I know, discussed the other Scandinavian languages or dialects in this respect within a generative framework.

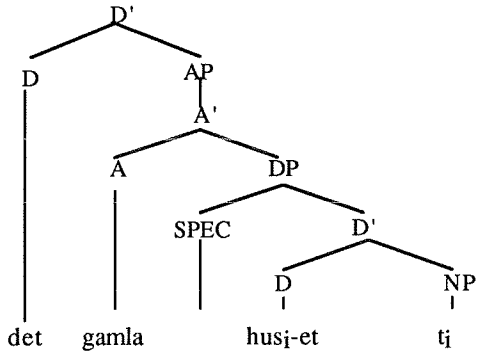
Here, I will first discuss some analyses that assume two DP projections, one above the adjective and the other below. Second, I will discuss some analyses that assume a separate functional category, different from DP, for the suffixed article. Third, I will discuss two proposals that have tried to analyse the double definiteness within a structure only containing one functional projection, namely the D-projection.

Double definiteness can be interpreted as a structure that involves two functional projections. There could be two D-projections,

[17] There are basically two important proposals within a generative framework that try to solve the definiteness properties of the Scandinavian languages, without using the DP-analysis, viz. Holmberg (1987), who allows determiners to be both specifiers and adjuncts in the same NP, and Cooper (1988), who makes use of a GPSG inspired feature analysis.

one above the adjective and the other below the adjective. Consider the structure in (35), which is proposed by Kestner (1993).

(35)



Kestner assumes the analysis of Abney (1987) for the attributive adjective, i.e. that it is a head taking the noun (as an NP or a DP) as its complement.[18]

A problem with Kestner's analysis (outlined in (35) above), is that the lower DP only seems to involve a single noun with the suffixed article. If the analysis is correct we would expect an infinite recursion of DPs, and we would also expect that other types of DPs, like demonstrative and possessive constructions or indefinite noun phrases, could follow the adjective. However, all such cases are completely ungrammatical, as shown in (36) below.

(36) *den gamle [den snälle man(-nen)]
the old the kind man-the
*den gamle [denne man(-nen)]
the old this man-the
*den gamle [Kalles bror]
the old Kalle's brother
*de gamla [några män]
the old some men

It is not clear to me how cases like the ones presented in (36) above should be ruled out, within an analysis that generates a DP within or below the AP.

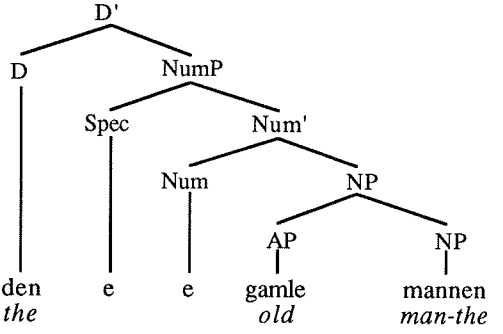
Another alternative is that the functional projection, where the suffixed article is generated, is of a different kind than DP. Such analyses have been proposed in Delsing (1988) and Santelmann

[18] Taraldsen (1989) does not discuss the properties of attributive adjectives or double definiteness in any detail. However, (at p.428), he hints at a solution that seems very similar to the one in Kestner.

(1993).[19] The projections are taken to be Article Phrase and Number Phrase, respectively. Such an analysis would account for the fact that no other category than the suffixed article could appear after the adjective. There are however some problems with both these analyses. In Delsing 1988 the adjective is assumed to be a specifier (which moves to SpecArtP in definite noun phrases). Such an analysis would be hard to apply to recursively stacked adjectives.

In Santelmann's proposal, the adjective is assumed to be adjoined to NP, and the suffixed article is assumed to affix hop down to the N-position. This will create an empty NumP with an empty specifier position.

(37)



In the structure outlined in (37), it is unclear how the two empty positions (SpecNum and Num^0) are licensed. Furthermore Santelmann's analysis gives no clear answer to why the suffixed article is generated in NumP. It is unclear to me what number and articles have in common.

Finally, we will turn to two analyses that do not assume any extra functional projection, trying to describe the double definiteness with only a D- and an N-projection.

In Delsing (1989), I assumed that there is no intermediate functional projection. The double definiteness is then seen as some kind of affix hopping from D to N, under the assumption that this is an alternative to head raising in the cases where there is an intervening head. The prenominal article is assumed to be some kind of reinsertion of the article in the D-position. A problem with this analysis is that we actually get two overt representations of the same article,

[19] A similar suggestion has also been made by Giusti (1992). She proposes that the suffixed article in Swedish and Norwegian double definiteness constructions should be analysed as an Agreement Phrase in-between the (adjoined) adjective and NP. The analysis is a result of Giusti's analysis of Romanian, and it does not go further than this. It is unclear to me why Danish does not have this AgrP, or why it is missing in some constructions (compare (18)-(21) above).

one affix hopped to N and the other reinserted in D. There are very few instances of this kind in other parts of the grammar.

Another proposal for the double definiteness has been put forward by Svenonius (1992a, 1993), which basically rests on two assumptions. The first is that the definite article on the noun is a morphological ending, base generated on the noun, and that the form (noun with or without the suffixed article) is selected by the determiner in D. The second assumption entails that there is a leftmost condition on noun phrases, which requests that they contain an overt marking of definiteness on its leftmost side. Such an analysis encounters several problems with respect to both assumptions.

First, I have shown that the prenominal definite article does not always select a noun with the suffixed article in Swedish. Compare, for instance, the cases with single definiteness with restrictive relative clauses and absolute superlatives in (18)-(21) above. Selection also becomes problematic for noun phrases without an overt determiner in the D-position, since such noun phrases are found both with and without the suffixed article (compare (17) and (21) above). A further problem concerns possessive pronouns, which would select the 'indefinite form' of the noun when they are prenominal, whereas they would select the 'definite form' when they are postnominal (cf. section 3.1 above and chapter 5 below).

Second, the leftmost condition is theoretically doubtful, *per se*. It is construed as a filter, and it does not have any explanatory value. It becomes especially doubtful if it has to be parametrised, which is inevitable for languages with independent postnominal determiners. Furthermore the cases in Swedish where the prenominal article can be left out seem to jeopardise the generalisation. Compare, for instance the examples in (14)-(17) above (Svenonius does not assume the weak form of the adjective to be a marker of definiteness).

Hence, none of the analyses proposed so far is optimal. Especially, none of them explains the differences with regard to the prenominal article, i.e. why Swedish is sensitive to the anaphoric/deictic distinction, whereas Danish seems to be insensitive to it. In the following section I will present a new analysis, which takes the data presented above into consideration.

4.2.2. The Proposed Analysis

In this subsection I will try to elaborate on the analyses proposed by Svenonius and Delsing, using only one functional projection (D) apart from the lexical projections A and N. Along with Svenonius (1992a, 1993), I will assume that the suffixed article may be base generated on the noun in N, but contrary to Svenonius, I assume that this base generation is parametric in nature, and not a question of selection by D.

Recall that we were reasonably satisfied with our analysis of Danish, where we assumed that the head N raises to D to pick up the definite suffix, unless there is an intervening head (adjective). However, the other Scandinavian languages show different patterns, where there is normally a suffixed article, but no visible movement of the noun. Leaving aside the exceptions for a moment, consider once again the examples of ordinary noun phrases with an attributive adjective from Danish, Icelandic and Swedish.

(38) den gamle man (Danish)
the old man
gamli maðurinn (Icelandic)
old man-the
den gamle mannen (Swedish)
the old man-the

Looking at the examples in (38) above, it is obvious that the functions filled by two articles in Swedish can be filled by a prenominal article in Danish and by a suffixed article in Icelandic.

The two articles appearing in an ordinary double definiteness construction in Swedish seem to have different functions. It seems as if the prenominal article is more of an expletive article, which may sometimes be left out. The suffixed article, on the other hand, seems to bear the definiteness of the phrase.

Let us take the existential construction as a reliable test for definiteness. In the cases where there is a prenominal article but no suffixed article, namely cases with an absolute superlative adjective or with generic phrases followed by a restrictive relative clause, the prenominal article does not seem to be definite. As noted already by Falk/Torp (1900:8; cf. also Hansen 1927:62 and Teleman 1969:88) noun phrases with absolute superlative adjectives may appear in existential constructions, even though they seem to have a prenominal 'definite' article, as is shown in (39).[20]

(39) det sitter den vackraste prinsessa i tornet
there sits the prettiest princess in tower-the
det finns inte den minsta anledning att betvivla detta
there is not the least reason to doubt this

[20] This seems be true for other languages with strong definiteness effect as well. According to my informants constructions with absolute superlatives are also quite good in English existential sentences.
(i) ?there is the prettiest princess in the tower
there isn't the slightest doubt about it

Note that the noun phrases in (39) are semantically indefinite, they do not refer to *a princess* or *reason* that are mentioned before or known in the speech situation, and they may be paraphrased with *en mycket vacker prinsessa [a very beautiful princess]* or *någon liten anledning [any small reason]*. If the suffixed article is used, the noun phrase becomes definite, and the sentences ungrammatical.

(40) *det sitter den vackraste prinsessan i tornet
there sits the prettiest princess-the in tower-the
*det finns inte den minsta anledningen att betvivla detta
there are not the least reason-the to doubt this

The other type of noun phrases without a the suffixed article in Swedish, viz. generic noun phrases with relative clauses, also seems to be possible in existential constructions. Consider the examples in (41) below.[21]

(41) det finns de barn som aldrig får någon glass
there are the children who never get any ice-cream
det finns de lingvister som tror att allt flyttar i LF
there are the linguists who believe that everything moves in LF

In constructions where it is possible to leave out the prenominal article, the definiteness restriction applies as usual, cf. (42) below.

(42) *det ligger (den) bortersta dörren till höger
there lies the farthest door-the to right
*det sitter (den) högra handen fast i gallret
there sits the right hand stuck in bars-the

From the examples in (39)-(42) we see that the definiteness restriction in Swedish is not dependent on the prenominal article, only on the suffixed one. Rather the prenominal article seems to behave like an expletive, filling a position that normally must not be empty.

Recall from section 2.2 that three of the languages (Swedish, Norwegian and Faroese) could have the suffixed article on noun phrases in isolated use, but that none of them could have prenominal definite articles in these noun phrases. According to the discussion in chapter 2 we would not expect these phrases to have a determiner position at all. Therefore, I will assume that Swedish, Norwegian and Faroese may have the suffixed article base generated on the noun in N. I will make the same assumption for Icelandic, although I lack independent support for this claim. Danish and Western Jutlandic on the other hand will not have this option. In these two languages, the

21 Note that the sentences in (41) may not be analysed as cleft sentences. The verb *finnas* (*exist*, historically the passive form of *find*) is not compatible with cleft constructions, only with existentials.

definite article must be generated in D. The assumption is depicted in (43). In (43)a, the N-position will host the definiteness feature of the phrase.

(43)a Sw., No., Far., Icel: $[N^0$ huset]
b Da., WJu: *$[N^0$ huset]

Let us now assume that the reference of a noun phrase can be identified by different means. Normally the D-position is filled by an overt lexical element, and then the D-position can identify the phrase. I propose that alternative ways of identification can also be used. The identification could either be achieved by rich morphology on adjectives and nouns, or by unique identification by the situation, i.e. deictic reference. Adding to this the natural assumption that definiteness is only marked on one element in the noun phrase, the distribution of Scandinavian definite articles will follow.

First, in Danish it is not possible to base generate a noun in N with the suffixed article. Hence definiteness has to be expressed in D. If there are no intervening heads, the noun raises to D in Danish, and if there is an intervening element, and raising is thus blocked, definiteness is spelled out as a prenominal article in D. Only in the constructions that are not definite, i.e. noun phrases with absolute superlatives, can the prenominal article be left out; in such cases I assume that the D-position is purely expletive.

Second, in Western Jutlandic the article cannot be realised as a suffix at all, either by base generation, or by movement. Recall from 3.1. that we assumed the difference between head-raising languages and languages of the WJu, English or French type to be due to a specification on N (the head raising parameter). Hence an article has to be spelled out in D in all cases, irrespective of whether an adjective intervenes or not. The only case where WJu. could have an expletive D-position would be in constructions with absolute superlative adjectives. Such constructions are however hard to find (cf. fn. 13), so we cannot tell whether WJu. can license an expletive D-position in any other way than by lexicalising it. [22]

Third, in the double definiteness languages (Swedish, Norwegian and Faroese) the suffixed article may be base generated on the noun in N. In noun phrases without an attributive adjective, the noun can be raised to the D-position. In such cases, it is of course impossible to judge whether the article is base generated on the noun or generated in D and attached to the noun by N-raising, but I assume that raising applies in any case, in order to lexicalise the D-position.

[22] The question why WJu. uses two different articles in noun phrases with adjectives still remains. This language has one article in deictic use, *æ* and another in anaphoric use, *de*. Perhaps WJu. just have two distinct articles, where the other languages have two homonymous articles.

In the cases where the noun phrase contains an attributive adjective, the suffixed article is generated on the noun, head movement is blocked by the adjective, and normally the D-position has to be filled by an expletive article. If the noun phrase is uniquely identified by the situation, the expletive may be left out.

Fourth, in Icelandic, the definite affix can be generated on the noun. In a noun phrase without attributive adjectives, we cannot tell whether the article is generated in D or on the noun in N. When the noun phrase contains an attributive adjective and N-raising is blocked, the word order is adjective–noun, with a suffixed article on the noun, or alternatively, the article may be realised in D (even if this form is rather marked), and then there is no suffixed article on the noun. Icelandic never shows double definiteness, i.e. it never needs to insert an expletive article in D. I take this to be a reflex of the strong morphology visible on both adjectives and nouns. The overt inflection in gender, number and case seems to be enough to identify the noun phrase, without having to lexicalise the D-position.[23]

Last, in Northern Swedish/Norwegian, constructions that are uniquely identified by the situation behave just like in Standard Swedish. In other constructions with attributive adjectives, these dialects display the compound of adjective-noun-article. The compound construction will need more detailed study. The construction could perhaps be analysed with a slight revision of the SpecA-analysis, but I will not make any strong claim here.[24]

Thus, I have shown that the major syntactic and semantic differences in the use of definite articles in the Scandinavian languages fol-

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[23] In Faroese we also find quite rich morphology. Yet, Faroese may not leave out the prenominal article in front of adjectives freely. The inflection in Faroese is, however, poorer than in Icelandic; genitive is lacking, and there are more instances of homonymous forms in the paradigm. According to Holmberg/Platzack (in press) Faroese morphological case should be described as weak, contrary to strong case in Icelandic. This claim is based on the lack of two case related constructions in Faroese, namely Object Shift of full DPs and oblique subjects with passive verbs.

[24] As I showed in section 2.3.5, Northern Swedish has raising of A to D, if the adjective is used independently. This could perhaps be the clue to the compounding construction. It could be accounted for, if we assume that all (or most) adjectives are ergative, i.e. their arguments are generated in the complement position, and normally raised to the Spec-position. Such an analysis has been proposed, for example, by Sigurðsson (1989) (cf. also references there).

If the ergativity analysis is correct we could argue that the noun in the complement of A is incorporated (in the sense of Baker 1988) into A, in these dialects. The complex N-A head is further moved to the D-position, picking up the suffixed article. This would account for the surface string, and it would also account for the fact that this construction is found in the dialects that may have A-raising with independently used adjectives; both constructions require A to be specified [+head-movement]. A third fact that would be accounted for would be the lack of adjectival inflection in this construction. The head noun would never go to or through SpecA. Thus agreement is never triggered. This ergativity hypothesis has many implications, but I shall not go into them here.

low from three assumptions. The languages differ with respect to the head raising parameter, and with respect to where definiteness can be generated. They also differ as to how an expletive D-positions is licensed. This can be done by insertion of an expletive article, by morphology or by deictic reference. In (44) below I give the setting of the three parameters discussed above. E=expletive article, D=deictic reference, M=strong morphology.

(44)

	N-raising to D	Definiteness in N	Identification
WJu.	–	–	E/D
Da.	+	–	E/D
Sw.	+	+	E/D
Icel.	+	+	M

Note that I have not as yet given any evidence that Western Jutlandic can leave out an expletive article because of deictic reference. The only construction where it is possible to test this for common nouns is with absolute superlatives, and such constructions were not found in WJu (cf. fn. 13). In the next section, I will show that constructions with proper names indicate that WJu. may leave out the article in deictic noun phrases.[25]

4.2.3. Articles with Proper Names

The analysis outlined in the previous subsection makes quite interesting predictions about the behaviour of articles with proper names. Proper names are usually inherently definite in the Scandinavian languages. Northern Swedish and Northern Norwegian probably consti-

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[25]There is a semantic distinction, which we have not addressed so far. Some of the Scandinavian languages make a distinction within the group of anaphorically referring noun phrases, depending on whether the adjective is restrictive or not. If a noun phrase of the type *den gula bilen [the yellow car-the]* is not meant to identify 'the yellow car', but only to identify a car, which happens to be yellow, Icelandic marks this with the strong form of the adjective (cf. Rögnvaldsson 1983). Compare the restrictive adjective in (i) to the non-restrictive one in (ii).

(i) guli bíllinn
yellow[wk] car-the *'the yellow car'*

(ii) gulur bíllinn
yellow[str] car-the *'the car, which by the way is yellow'*

A similar distinction is made in Western Jutlandic, where a restrictive adjective is accompanied by the *de*-article, whereas a non restrictive one is accompanied by the *æ*-article (cf. Byskov 1927, Ejskjær 1992).

(i) de gul bil
the yellow car *'the yellow car'*

(ii) æ gul bil
the yellow car *'the car, that by the way is yellow'*

I have no interesting approach to this problem, and I leave it to further research to investigate the restrictive/ non-restrictive distinction.

tute an exception, since those dialects must have an overt definite article with all argumental noun phrases (compare the discussion in section 2.4).

If we assume that proper names are inherently definite, and thus have definiteness generated directly in N, this means that a construction with an attributive adjective and a proper name would have an expletive D-position. We would thus expect all the languages that may license an expletive D-position by deictic reference to be able to leave out the article. In the double definiteness languages we expect proper names and common nouns to behave in the same way, because in these languages definiteness is generated in N in both constructions. In Danish, we expect constructions with proper names to behave differently from common nouns, since only in the former case can definiteness be generated in N. This prediction is borne out. If a noun phrase containing an attributive adjective and a proper name has deictic reference, i.e. denotes a person who is known in the speech situation, both Danish and the double definiteness languages normally leave out the prenominal article (cf. Diderichsen 1962: 53)[26].

(45) (?den) lille Lars (Danish/Swedish)
the little Lars
(?den) gamle Johan
the old Johan

It is striking that Danish behaves like the double definiteness languages exactly when we have reason to believe that Danish generates definiteness in N. This strongly supports the analysis that I have given here.

We also expect that the prenominal article will be obligatory when the noun phrase has anaphoric reference both in Danish and the double definiteness languages. Noun phrases with proper names and adjectives can be used with anaphoric reference in two ways. The adjective could either be restrictive or non restrictive (compare fn. 25 above). In both these cases we expect Danish and the double definiteness languages to have an obligatory article. This is borne out. Compare also Swedish and Danish examples below (the latter are from Diderichsen 1962:53).

(46) den långe Kalle (Swedish)
the tall Kalle (not the short one)
den besvärlige Olsson
the troublesome Olsson (O., who is troublesome)

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26 It seems as if the prenominal article is somewhat more frequent in Danish, though. The important thing here is that it is optional.

(47) den unge Goethe (Danish)
the young Goethe (as opposed to when he was old)
den energiske Peter Nielsen
the energetic Peter Nielsen (PN, who is energetic)

It seems as if Western Jutlandic can use the article-less construction with proper names with deictic reference, just like in Standard Danish and Swedish (as in (45) above; Hans Jul Nielsen, p.c.). In other words it seems as if Western Jutlandic may also identify an empty D-position by deictic reference.

Furthermore we have argued that in Northern Swedish definiteness is not a part of the proper name, definiteness always turning up as a proprial article. Then we would expect that these dialects should never be able to leave out the article. This is borne out. In deictic noun phrases, like the ones in (47) below, the article is obligatory.[27]

(47) *(n) gamm-Erik (Northern Swedish)
ART old-Erik
*(a) lill-Anna
ART little-Anna

Last, in Icelandic, there is an option of using the personal pronouns *hann/hún [he/she]* as a preproprial article. Hence, Icelandic seems to have two choices, either definiteness is a part of the proper name, or definiteness is spelled out as a proprial article. We will then expect the proprial article to be optional also if there is an adjective. The prediction is borne out.[28]

(48)a (hann) gamli Eirikur
he old Eirikur
b (hann) Eirikur gamli
he Eirikur old

Thus our analysis of double definiteness as a reflex of base generating the definiteness in N has proven to carry over to proper names. In the next section I will try to show how demonstrative double definiteness can be incorporated into this analysis.

4.3. Demonstrative Constructions

Demonstrative double definiteness appears in the languages that use adjectival double definiteness, and it is not found in the languages

[27] For some reason the dialect does not seem to have anaphorically used proper names with attributive adjectives. This is not relevant for our prediction, since we would predict anaphorically used proper names with adjectives to have an article. I have no solution to why they are absent.

[28] The example in (48)b illustrate a phenomenon in Icelandic that I will not discuss in this work, namely the fact that proper names usually take their attributive adjectives to the right.

that do not have adjectival double definiteness. Hence it would be plausible that the structural requirements be the same for the two constructions. We would thus want an analysis of demonstratives that parallels that of adjectives. In 4.3.1, I will discuss the demonstrative double definiteness in the Scandinavian languages, and in 4.3.2, I will turn to two constructions where the demonstrative *denna* shows special properties in Standard Swedish.

4.3.1. Demonstrative Double Definiteness

There are some properties that make demonstratives similar to adjectives and degree elements, and here I will argue that they are generated in A. First, demonstratives are usually very hard to combine with degree elements. As is shown in (49) below, they cannot be used together with superlatives, comparatives or degree words that license a comparison phrase.

(49) ***den**/*denna/*den här största bilen av dem alla
this/that biggest car-the of them all
***den**/*denna/*den här längre käppen än den där
this/that longer stick than that
***den**/*denna/*den här lika stora bilen som den där
this/that as big car as that

If demonstratives are adjectives that obligatorily raise to Deg, and there is only one DegP in the noun phrase (as we assumed in section 3.3), the phrases in (49) can be ruled out, since they entail two Deg-positions, one for the demonstrative and one for the degree word.

Second, several languages have demonstratives that are also used as degree elements, and vice versa. Consider the English determiner *that* used as a degree element (50), and the Swedish degree adverbial *så* used as a demonstrative (51).

(50) He is not that clever
Is it that obvious?
(51) i så fall
in so case [in that/such a case]
på så sätt
on so way [in that/such a way]

The use of *så* as a determiner is only found in some more or less fixed phrases in Modern Swedish, but in Old Swedish it was often used in the same way as a demonstrative. Consider the following examples from Söderwall's Old Swedish dictionary.

(52) af swa manne
of so man [of that/such a man]
i swa skipilsom
in so shapes [in those/such shapes]

I take the possibility of using demonstratives as degree elements and vice versa as an implication that they are basically the same category.

Third, in Old Swedish, when there were no articles, demonstratives and adjectives both appeared on either side of the noun (cf. Wessén 1965: 106ff. and 119ff.).

Fourth, the special combination of *den [the/this/that]* and *här/där [here/there]* used as demonstratives: *den här, den där*, is also similar to the use of *här/där* with the degree element *så*. In Swedish *så* can be further specified by *här* or *där*.

(53) en så här stor bil
a so here big car
'a car which is as big as this'

Finally, as pointed out to me by Ulf Teleman, the endings of *denna* are the same as in the weak paradigm of adjectives. In Standard Swedish the special *-e*-ending is used for male persons: *denne*, whereas the *a*-ending is used elsewhere. Compare the demonstrative to the weak adjective in (54).

(54)

	demonstrative	**weak adjective**
male person	denne	gule
other uter.sg	denna	gula
neuter.sg	detta	gula
plural	dessa	gula

I take the similarities between demonstratives and adjectives/degree elements to indicate that noun phrases with demonstratives involve a DegP and an AP, thus giving them the same structure as noun phrases with attributive adjectives. In both configurations head raising of N to D will be blocked. In the double definiteness languages definiteness is generated in N, and we will assume that demonstratives are not definite in these languages. Furthermore, I assume that demonstratives in these languages must raise to D (via Deg), in order to fill this position, basically in the same way as some auxiliaries always raise to I in English.[29]

I assume that Danish has the same structure and the same movement of demonstratives to D, but here the demonstrative has to be considered definite, since definiteness cannot be generated in N.

In Icelandic demonstratives do not cause double definiteness, although the suffixed article can be base generated in the N-position. The demonstrative *þessi* in Icelandic however differs from demonstratives in the other Scandinavian languages (Sigurðsson, p.c.). It is

[29] The assumption that demonstratives do not bear the definiteness of the phrase is supported by data in other languages. In e.g. Bulgarian the demonstrative *tezi* does not always make the noun phrase definite (Dimitrova-Vulkanova p.c.)

compatible with superlative adjectives in some constructions where it is impossible in Swedish. Compare the noun phrases in (55) and (56) below.

(55) þetta stærsta hús í bænum (Icelandic)
this biggest house in town-the

(56) *detta största hus(et) i staden (Swedish)
this biggest house-the in town-the

The possibility of having the demonstrative together with a superlative adjective in Icelandic implies that the demonstrative in Icelandic is actually not an adjective, but a true definite determiner base generated in D. In such a case definiteness is spelled out in D and cannot be base generated in N, in Icelandic.

4.3.2. The Demonstrative denna

In Standard Swedish the demonstrative *denna* (neuter *detta*) *[this]* behaves differently from other instances of demonstratives. It differs from its Norwegian, Faroese and Colloquial Swedish counterparts, as well as it differs from other demonstratives in Standard Swedish. It has two special properties.

First, it is normally followed by a noun without the suffixed article.

(57) detta hus (Standard Swedish)
this house
detta stora hus
this big house

The use of *denna* with a noun without the suffixed article is a literary convention, which appeared in the 18th century. The development of the two forms (with and without the suffixed article) has been thoroughly studied by Hirvonen 1986 (cf. also Teleman 1991:218). In Modern Swedish there is a very clear difference between colloquial and written language. In the spoken language, *denna* is only used in Southern and Western Swedish (other variants of spoken Swedish preferring *den här / den där*; cf. Hirvonen 1987:27f.). In these areas the noun normally has the suffixed article, whereas in written language the form without the suffixed article has prevailed.

Although the forms in (57) above are practically only used in written language, they are of course not ungrammatical. I propose that Standard written Swedish may treat the demonstrative as definite. Hence, definiteness cannot be generated on the noun.

Second, the demonstrative *denna* may be followed by a whole DP in literary style in Swedish. These constructions are discussed by Börjars (1991). She discusses the constructions with possessives, as illustrated in (58).

(58) dessa mina många söta mostrar
these my many sweet aunts
detta Kalles sista försök
these Kalle's last tries

Börjars claims that definite DPs without a possessor may not follow *denna*. This is however wrong. Especially if the noun phrase contains a superlative, it is fully grammatical.

(59) dessa de äldsta husen i Genua
these the oldest houses-the in Genua
detta det svåraste beslutet
this the worst decision-the

Since *denna* may be followed by noun phrases with double definiteness or a noun phrase with a possessive, the noun phrase after *denna* seems to be an ordinary DP. The behaviour of *denna* in these constructions is very similar to the behaviour of some quantifying pronouns, also followed by DPs, and I will analyse it as such. See further chapter 6.

4.4. Postadjectival Indefinite Articles

In this section, I am going to discuss constructions with an indefinite article that appears in-between an attributive adjective and the noun. Following Eriksson's (1971:25) work on the Swedish dialect of Åsele (Northern Sweden), I call this article the *postadjectival article*.

There are two similar constructions with postadjectival articles. One is common all over the Germanic language area, and requires a degree element in front of the adjective. The other is limited to Northern Scandinavian, and entails two indefinite articles.

(60) så stort et hus (Danish)
so big a house
(61) e stort e hus (Northern Swedish)
a big a house

In this section I will claim that the two constructions above have the same underlying structure. In subsection 4.4.1, I will discuss the movement analysis proposed by Radford (1989), which claims that the adjective and the degree element in (60) are moved to the position in front of the article. I will argue against such an analysis, proposing that the construction in (60) has an empty article in front of the degree word. In subsection 4.4.2, I will discuss the "double indefiniteness" construction in (61), arguing that the second article is not an ordinary argumental article, but rather a non-argumental determiner, on a par with the one found in predicative position.

4.4.1. Too big a house

Constructions like the ones in (62)-(64) below are found in practically all Germanic languages. They normally involve a degree element, and they have an indefinite article in-between the adjective and the noun, or in-between *such* and an adjective or the noun.

(62)	so big a house such a house	(English)
(63)	so gross ein Haus solch ein Haus	(German)
(64)	så stort et hus sådan et hus	(Danish/Norwegian)

The degree elements that may be used in this construction are basically *so, too, how* and *as*, though with some variation between the languages. I assume that the words *such, sådan, solch* may be analysed as adjectives that obligatorily raise to Deg, and thus both the constructions can be said to involve a special Deg element.[30]

In Standard Swedish this construction is normally missing. It is only found in colloquial style with the pronoun *sicken [such]* (cf. Terner 1923: 120) as shown in (66). Otherwise Swedish has an article in front of the degree element or *such,* shown in (67)-(68).

(65) *så stor en bil
so big a car
(66) sicken en baddare
such a bigshot
(67) en så stor bil
a so big car
(68) en sådan (stor) bil
a such big car

The constructions in (67)-(68) above are possible also in the other Scandinavian languages.

A common property for the constructions listed in (62)-(64) above is that only the indefinite article is possible after the adjective or *such,* other determiners being totally ungrammatical.

(69) *so big the/John's/some house
*so gross das/Johanns Haus
*så stort det/Jens/noget hus
(70) *such the/John's/some house
*solch das/Johanns Haus
*sådan det/Jens/noget hus

[30] In the Scandinavian languages the latter part *-dan* may be seen as a dummy adjective. It is borrowed from Low German, a participle of the verb *don [do].* It may be combined with the degree elements *så, hur* and *lika [so, how, as]: sådan, hurdan, likadan [such, what-kind-of, the-same-kind-of].* In colloquial Swedish it is also used independently in co-ordinations: *Den är rälig och dan [it is horrible and DAN].*

Here I will argue that constructions like the ones in (62)-(64) above contain an empty article position in front of the degree word or *such*, and additionally a D-position below the adjective. First, we will consider two different proposals for this construction.

The "too-big-a-house-construction" has been discussed for English by Abney (1987) and Radford (1989). In order to explain why there is no initial article in this construction, Abney proposes that the A-head f-selects a DP as its complement instead of an NP (f-selection is the term Abney uses for selection by functional elements). He also assumes that categories inherit features from their f-selected complements, and thus the adjective inherits the DP-hood of its complement. It is unclear how this inheritance principle works, and as shown by Radford (1989: 3ff.) it meets with some quite severe problems. One of them is that an adjective that f-selects an NP would consequently inherit the NP-hood of its complement, and the DP, which f-selects the AP would in turn inherit the NP-hood from the AP. In ordinary DPs, where the D f-selects an NP, the DP would also inherit the NP-hood of the complement. Hence, this makes all DPs structurally NPs. As Radford points out we would then loose the generalisations that distinguishes DPs from NPs. Another problem is of course that if AP can select a DP as its complement, we will have to find some way to rule out phrases like those in (69)-(70).

Radford (1989) on the other hand assumes that the adjective and the degree word are adjoined to NP, and that they are moved to the specifier of DP. He does not discuss the internal relation between the degree word and the adjective. As he shows this movement seems similar to wh-movement in the clause. Compare Radfords proposed structure in (71) to the structure of an ordinary wh-movement construction in (72).

(71) [how big]$_i$ [$_{D'}$ a [$_{NP}$ t_i [$_{NP}$ house]]]
(72) [how often]$_i$ [$_{C'}$ did [$_{IP}$ you [$_{VP}$ t_i [$_{VP}$ go there]]]

However, only *how* has wh-features. The other degree words involved in this construction (*so, as, too*) do not have wh-features, i.e. noun phrases containing these elements do not have to be raised to Spec-CP in the clause, but still they will have to be raised to Spec-DP, in Radford's analysis.

As we have seen in section 3.2. there are strong arguments against the adjunction hypothesis for attributive adjectives. Additionally, Radford's analysis encounters other problems.

First, Radford posits movement of the adjective and the degree element. If the degree element has a comparison phrase we would necessarily get a structure like the one in (73) below.

(73) [$_{AP}$ too big t_j]$_i$ [$_{D'}$ a [$_{NP}$ t_i [$_{NP}$ house]]] [to live in]$_j$

In a structure such as the one in (73) Radford has to assume that the comparison phrase is moved to the right and the adjective and the degree word to the left. Normally there are strong restrictions on moving a constituent from which something else is moved out.

A second problem for Radford's analysis is that there seems to be an empty article position in front of the degree element in this construction. In English there is an article in front of the degree phrase when the degree element has a premodifier.

(74) a far too big house

Radford assumes that there is no movement in cases like (74). It seems a mystery that a premodifier like *far* could make movement impossible. Here the movement would not pattern with wh-movement, since wh-elements move even if they are embedded in PPs or have premodifiers, as shown in the examples in (75).

(75) with how many arrows did he hit the target?
approximately how long shafts do you need?

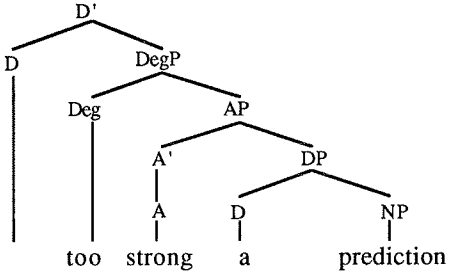
Third, many speakers of English tend to insert a second article after the adjective, when there is a premodifier.

(76) ?a far too big a car
?a far too big an apartment

The phrases in (76) are somewhat marginal, but they are far from ungrammatical. It is unclear to me how such phrases are analysed in Radford's structure. They imply that there are two different article positions in these phrases, and that one of them is normally empty.

Hence it seems as if the order Degree-Adjective-Article-Noun is actually the base generated word order in *too big a house*. In this construction, the first article would then be left out. I assume that some degree elements are sufficiently strong to make the article in the D position superfluous. Consider the structure in (77) below (some irrelevant specifiers and complements are omitted).

(77)



Another fact that implies an empty article position in front of the degree element in noun phrases like the one in (77) is that they seem to be restricted to governed position. The construction is prototypically found in predicative position, and it can also occur in some object positions. Compare the predicative and object constructions in (78), that are grammatical, to the much worse subject examples in (79).[31]

(78) This is too big a house to live in
Yesterday, I made too strong a prediction.
?Yesterday, I bought too expensive a book

(79) ??Too strong a prediction was made about the indefinite article.
*Too expensive a book was stolen from the library, for the headmaster to ignore it.

The same pattern is found with the same construction in Danish. The construction is excluded from subject position.

(80) Han har købt så dyr en bil, at han ikke har råd til huslejen
He has bought so expensive a car that he not can afford rent-the

(81) *Så dyrt et manuskript blev stjålet at rektoren meldte sagen
So expensive a manuscript was stolen that headmaster-the reported thing-the

The examples above show that the "too-big-a-house-construction" is sensitive to whether it is placed in a governed position or not. This is analogous to other cases where functional heads may be left out only in governed position. Compare the possibility to leave out the complementiser of an embedded clause, if it is governed by a verb cf. Stowell (1981).

Hence I assume that the empty D-position in cases like (77) are licit only in governed position. The data in (74) also show that the D-position must be adjacent to the Deg-position. I will not try to give a detailed technical analysis of this observation here.

4.4.2. Double Indefiniteness

I have assumed that the "too-big-a-house-construction" has two article positions, one of them normally being empty. This assumption receives support from Northern Scandinavian. These dialects have the common Germanic construction with degree elements, such as *se, va, för, lik [so, what, too, as]*, followed by an adjective and a postadjectival article. Additionally, there is a construction with two

[31] It also seems as if a complementiser in C, like *if*, may license the empty D-position. With *whether*, which is normally assumed to be generated in Spec-CP (cf. Kayne 1990), they become much worse.

articles when an attributive adjective is emphasised (cf. Vannebo 1972). Consider the examples in (82)-(83).[32]

(82) se stort e hus (Northern Swedish)
so big a house
va fin en bil
what fine a car
'what a fine car'

(83) e stort e hus
a big a house
en ful en kar
an ugly a man

It is worth noting that the double indefiniteness may be recursively stacked, as is shown in (78) below.[33]

(84) en stor en ful en kar
a big an ugly a man

The postadjectival article has some special properties. It does not behave like an ordinary argumental article; it has a plural form, and in singular, it is compatible with singular uncountables. Consider the examples in (85)-(86) below, where the first article behaves like an ordinary argumental article, i.e. it is missing with inherently uncountable nouns and plurals. On the contrary the second article is used with uncountables and it has a special plural form.

(85) han ha tjöfft en stor en bil
he has bought a big a car

(86) Vi ha fått fint e ver
We have got fine a weather
Dänna var he stor a husa
Over-there were there big a-PL houses

The special properties of the indefinite article (the plural form and the compatibility with uncountables) are exactly the properties that we found with the non-argumental indefinite determiner in general in Colloquial Swedish and Norwegian (cf. section 2.1). Let us

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32 The postadjectival article is sometimes said to be obligatory in Västerbotten and Ångermanland (Dahlstedt/Ågren 1980:269f.). Others say that it is very common when the adjective is emphasised. It is clear that it is not always used. When the adjective is classifying rather than descriptive the article sounds very odd: **en norsk en lapp [a Norwegian a Lapp= a Lapp from Norway]*.

33 The use of double articles in this way cannot be seen as doubling of articles, since it appears also with *na [some]* in negated sentences. Consider the example in (i) (taken from Forss 1986:49).

(i) Hä va hällär int na gött e tjött
It was neither not any good a meat 'It wasn't any good meat either'

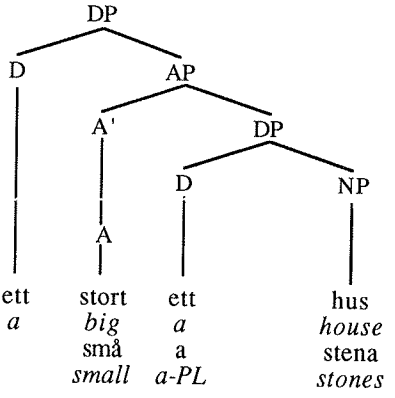
assume that this lack of specification for [±countable] is a property of non-argumental articles in Swedish and Norwegian.[34]

Note that the plural form *a* of the postadjectival article is identical to the plural form of the predicative indefinite determiner in Northern Swedish, as noted already by Åström (1893).

(87) Jetara va som a högjura
Cowboys were as a-PL high-animals (bigshots)
Däm e som a toka
They are as a-PL fools
Hä va a rackara
It was a-PL rascals

Thus the plural *a* in Northern Swedish seems to be parallel to the plural form *ena* in standard Swedish (compare the discussion in section 2.1).[35] I will assign the following structure to double indefiniteness constructions (disregarding the Deg-projection).[36]

(88)



[34] Christiansen (1953) shows that the plural form of the indefinite article in Northern Norwegian dialects is used in several constructions. Apart from the use in predicative and postadjectival use, it may also be used in expressive phrases, in comparative *som* phrases and in "was-für" constructions. Hence it appears in typically non-argumental phrases.

[35] The construction is preferred with the *som [as]*. I interpret this as a marker of the modality that is expressed in such descriptive predicatives. Compare the frequent use of the implicit argument in Standard Swedish (section 2.1).

[36] The double indefiniteness is typical for Northern Scandinavian, but it seems to be found in a few constructions also in other parts of Sweden and Norway (Terner 1923:128f.). A similar phenomenon is also found in Western Jutlandic. According to Lund (1932:189) the dialect of Mors has a special ending on the adjective when it is emphasised.

(i) en svår-e mennesk
a strange--e man

Note that the *-e* ending in (i) does not denote the weak form of the adjective. Weak adjectives have lost their vowel ending in Jutlandic.

The double indefiniteness of Northern Scandinavian gives strong evidence that we have to assume two positions for articles in some indefinite noun phrases. It has been shown that the first article in this construction is an ordinary argumental article, whereas the lower one shares the plural form and non-sensitivity to uncountables with the predicative article in Swedish. Thus, the lower article seems to be a non-argumental determiner. Maybe this should be marked formally by assigning the lower functional phrase some other labelling than DP. The analysis proposed here is also applicable to the common Germanic construction, with the additional assumption that the argumental article can be left out if it is in a governed position and if there is a suitable degree element in the phrase.

4.5. Conclusions

In this chapter I have outlined the different possibilities of realising definite articles within DPs with attributive adjectives in the Scandinavian languages. I have further discussed the demonstrative double definiteness, proposing that they be treated in the same way. Last I discussed constructions with postadjectival articles.

In section 4.1, I showed that the Scandinavian languages are very uniform when a noun phrase only contains a noun, whereas they differ from each other quite radically whenever an adjective intervenes or there is a demonstrative.

In section 4.2, I argued that there are three fundamental parameters that have consequences for the behaviour of definite articles in Scandinavian. First, languages vary as to whether they allow N-raising to D (the N-raising parameter). I have claimed that all the Scandinavian languages except Western Jutlandic have N-raising. Second, languages vary as to whether they may have definiteness spelled out in N or in D. I have argued that all the Scandinavian languages except Danish and Western Jutlandic may have the definiteness feature generated in N, and that this feature is visible as the suffixed article. Third, the Scandinavian languages vary as to how a non-definite expletive D-position is licensed. I have argued that in Icelandic, the D-position may always be empty because of the rich inflectional system on nominal categories in this language. Because Danish always has definiteness realised in D, the D-position can only be expletive in noun phrases with superlative adjectives, which were argued to be indefinite. The other languages have definiteness generated in N and then the D-position is expletive. They may have this expletive D-position licensed either by deictic reference or by an expletive element. The assumptions were corroborated by evidence from noun phrases containing attributive adjectives and proper names. The three parameters and their different settings will predict the main cases of variation within the Scandinavian language family.

In section 4.3, I claimed that the common geographic distribution of adjectival and demonstrative double definiteness should be taken as an argument in favour of their common structural causes. I argued that demonstratives in the Scandinavian languages are generated as adjectives, but that they are obligatorily raised to Deg and D, thus making these phrases structurally parallel to adjectival double definiteness. In Icelandic, though, it seems as if demonstratives are true determiners generated in D.

In section 4.4, I gave a new analysis of indefinite articles appearing after attributive adjectives, connecting it to constructions with two indefinite articles. I argued that the first article is an ordinary argumental article, whereas the latter one was shown to be a non-argumental article on a par with the indefinite predicative determiner in Swedish and Norwegian. In many languages the first argumental article can be left out if it is adjacent to a degree word and if it is governed from the outside.

The double indefiniteness is similar in some respects to the double definiteness. In both cases, the article seems to be base generated below the adjective. However there are also several differences. First, they do not have the same geographic distribution; double definiteness is found in Swedish, Norwegian, Faroese and the Northern Scandinavian dialects, whereas the double indefiniteness is only found in Northern Scandinavian (and possibly also in Western Jutlandic). The double indefiniteness can be recursively stacked, which is not possible for double definiteness. The lower indefinite article can be shown to have special morphology patterning with predicative articles, whereas the lower suffixed definite article seems to be identical to the ordinary definite article.

The studies on both definite and indefinite articles have shown that they may be lacking in several constructions. Four properties were found to affect the possibility to leave out the article, namely if the noun phrase has rich morphological inflection, if the noun phrase can be uniquely identified by the situation, if the noun phrase is in a governed position and if there is adjacency to the degree phrase.

CHAPTER 5
POSSESSION

In this chapter I am going to discuss possessive constructions in the Scandinavian languages. I will give possessive constructions a broad definition; I will include possessive pronouns and all noun phrases that may express possession and similar relations, including subjective and objective genitives. I will exclude various types of measure and partitive genitives.

I will make two main distinctions, one semantic and one syntactic. Semantically, the relation between a possessor and a possessee can be of two sorts. The head noun can be a *relational noun,* which has an inherent relation to its possessor in its semantics. Relational nouns involve derived nominals, kinship nouns and nouns with inherent part-whole relations. Those nouns can be said to have an inherent θ-role, which is assigned to the possessor. Consider the Swedish examples in (1).

(1) Cæsars förstörelse av staden
Caesar's destruction of city-the
stadens förstörelse
city-the's destruction
Kalles kusin
Kalle's cousin
dörrens baksida
door-the's back

The head noun can also be an *absolute noun* without any inherent relation to its possessor in the semantics. Consider the Swedish examples below.

(2) Kalles båt
Kalle's boat
årets mode
year-the's fashion
mannens byxor
man-the's trousers

The distinction between relational and absolute nouns is not very sharp. Many relational nouns can be seen as concrete things or as results of an action, and they are then often interpreted as absolute nouns. On the other hand, some absolute nouns can be interpreted as parts of a part-whole relation.[1] Here I will primarily be concerned

[1] Thus relational nouns go together with inalianable possession and absolute nouns with alienable possession. Grimshaw (1991)a makes another partition of nouns with regard to their argument structure. She shows that, for English, certain tests can be ap-

with absolute nouns, assuming that relational nouns can be analysed along the same lines.

Syntactically, I will make a distinction between two types of possessors: possessive pronouns and full noun phrases (DPs). I will call the constructions *pronominal possessives* and *genitival possessives,* respectively. The former type will include constructions with possessive pronouns. The latter type will include constructions with DPs and PPs. Apart from the fact that possessive pronouns are heads, contrary to genitival possessives, the two types often have different S-structure positions. In German, Russian and the Romance languages, possessive pronouns are prenominal, whereas genitival possessives are postnominal. As will become clear in this chapter the two types have different syntactic distribution in several of the Scandinavian languages, too. I will give an analysis that accounts for these differences in word order.

With regard to the difference between possessive pronouns and genitival DPs, two things should be noted. First, they have different ways of marking the relation to the head noun. Possessive pronouns agree with their head noun in case, number and gender, whereas full noun phrases are assigned case, independently of the case of the head noun. In languages with morphological case, this is normally genitive.[2] Compare the Icelandic pronominal possessive in (3) and the genitival in (4).

(3) af mínum hesti
of my-dat.masc-sg. horse-dat.masc
(4) af hesti kennarans
of horse-gen.masc teacher-gen.masc.sg

It should be stressed that in languages with overt morphological case marking, like Icelandic and German, **possessive pronouns cannot be seen as the genitival form of the personal pronoun.** They are agreeing elements that take the same case as the head noun.

Second, there are many languages, where only some of the possessive pronouns show agreement with the head noun. In languages like German and Spanish all possessive pronouns show agreement, in Swedish and Russian all but third person non-reflexive pronouns show agreement. In other languages, like Danish and Norwegian, the second person plural also lacks agreement, and in Icelandic and

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plied to determine whether the noun is a true argument taking noun or a result noun. The tests elaborated for English cannot be used exactly in the same way for other languages, and I will not try to adapt them to the Scandinavian languages here.

[2] In several languages, like German and Hungarian, a possessor can also be assigned dative. In Old Scandinavian some relational nouns could assign dative, basically names for parts of the body and derived nominals: *i hofþi manne [in head (of) man-DAT], til gagn allum mannum [to benefit (of) all men-DAT].* On the use of accusative in Faroese, see section 5.1.4.

Faroese, even the first person plural lack agreement. However, in all these languages the non-agreeing pronouns have the same syntactic distribution as the agreeing ones. I will hence assume that **in a language where some possessive pronouns agree, non-agreeing possessive pronouns belong to the same syntactic category as agreeing ones.**

Many languages have a different strategy of marking the relation between pronouns and heads. In for instance most Finno-Ugric languages, the pronoun that expresses possession is inflected for genitive, in the same way as nouns are inflected for genitive (or in Hungarian for nominative), and normally, in those languages, the head noun agrees with the possessor. Such pronouns will be seen as genitival pronouns (on a par with genitival DPs), and they will not be given the same status as agreeing possessive pronouns in the Indo-European languages (see also section 5.3.6).[3]

In section 5.1, I will present the possessive constructions in the Scandinavian languages. Then, I present some previous analyses of possessive constructions in Scandinavian in section 5.2. In section 5.3, I outline my own analysis, where I take possessive pronouns to be heads within the noun phrase. Genitival phrases will be assumed to be complements of the noun. In section 5.4, I summarise the chapter.

5.1. Possessive Constructions

In this section, I will briefly present the various possessive constructions in the Scandinavian languages. Before I do so, I will point out some special properties of Scandinavian possessive constructions in general.

First, some Scandinavian languages use both a possessive pronoun and a full DP in one and the same noun phrase, like in the Norwegian example below.

(5) Per sitt hus
Per his-refl house

Constructions like the one in (5) are attested also in other languages, such as colloquial Dutch and German dialects (for further examples, see Bhatt 1990:145f. and Torp 1990). I will refer to this construction as *the auxiliary possessive construction* and to the pronouns as *auxiliary pronouns*.

Second, a special property to be noted for Mainland Scandinavian is that full noun phrases have an *-s* ending, just like in English.

[3] In a language like English, there is neither genitival morphology nor agreement on possessive pronouns. I will however consider English possessive pronouns to be of the same category as those of other Germanic languages, i.e. potentially agreeing elements.

(6) Eriks hus (Swedish)
Erik's house
handlarens hus
tradesman-the's house

As in English, the genitival *-s* is not a case morpheme, but an independent element (cf. Jespersen 1938:170f. on English and Jespersen 1934 on Danish). The genitival *-s* does not attach to the head noun of the possessor phrase, but to the end of the phrase. Such 'group genitivals' are found with co-ordinations, independently used adjectives and pronouns as well as with postnominal attributes. Consider the constructions in (7)-(9) below.[4]

(7) Lasse och Agnetas hus
Lasse and Agneta's house
(8) alla andras böcker
all others's books
den gamles käpp
the old's stick
(9) mannen på gatans åsikter
man-the on street-the's views
en av mina vänners kusin
one of my friends's cousin
I fristil kan man lätt åka in i den som är framförs stavar
In freestyle can one easily get into the (one) who is infront's ski-sticks
Familjen ovanpås ungar brukar komma ner och dricka saft
Family-the above's kids usually-do come down to drink juice

Examples like the ones in (7)-(9) show that the genitival *-s* in Mainland Scandinavian is not a case-morpheme, but an independent syntactic element. I will refer to this construction as the *s-genitival construction.*[5]

Third, some of the languages have a standard preposition that may be used with all absolute nouns. I will refer to such constructions as *standard prepositional possessives.* The preposition will be glossed with English *of,* regardless of the literal meaning.

(10) Boka til Per (Norwegian)
Book-the of Per

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[4] Group genitivals are primarily used when the noun and the attribute are closely connected. Normative Swedish grammarians have normally recommended not to use group genitivals. In Danish and Norwegian the construction has long been accepted in written language (cf. Jespersen 1934).

The genitival *-s*-ending is found on the head noun only if the postnominal attribute is moved out to the right.

(i) den flickans cykel som var förälskad i Olle
the girl-the's bike who was in-love with Olle

[5] The genitival *-s* is developed from the singular masculine/neuter ending. Group genitives started to appear in Old Swedish in the 15th century, see Delsing (1991)a.

Some languages, like Swedish, lack a standard preposition possible with all absolute nouns. However, Swedish uses special prepositions with certain relational nouns.[6]

Fourth, the languages that use proprial articles in front of personal names (cf. the discussion in section 2.4.) also use this one in possessive constructions, as in the Norwegian example below.[7]

(11) huset hans Per (Norwegian)
house-the his Per

I will call this construction *the proprial possessive construction.*

Fifth, it should be noted that the Scandinavian languages have no special independent form of possessive pronouns, corresponding to English *mine*, German *meiner*. Whether the pronoun is used attributively, independently or predicatively, it always has the same form (agreeing with the head noun, the missing head noun or the subject of the clause).

(12) mitt hus
my house
(13) mitt är rött med vita knutar
my (house) is red with white corners
(14) det här huset är mitt
this house-the is my

Sixth, all the Scandinavian languages have a special reflexive possessive pronoun *sin*, just like they have a special reflexive personal pronoun *sig*. Both are normally bound by the subject of the clause, as illustrated in (15) below. The non-reflexive pronouns (personal and possessive) are then always interpreted as pronouns in terms of Binding theory, as illustrated in (16) (see further Hellan 1988).

(15) **Anaphoric:**
Per_i tvättade $sig_{i/*j}$
Per washed refl
Per_i tvättade $sin_{i/*j}$ bil
Per washed his-refl car

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[6] The preposition *av [of]* is normally used with nominalisations, *på/av [on/of]* in part-whole relations, and *till [to]* with kinship relations, see e.g. Pitkänen (1979:165-232).

[7] The construction illustrated in (11) is mainly found in languages with proprial articles: Icelandic, Northern Norwegian and Northern Swedish. The construction is only possible with personal names and the few kinship names, like *far, mor [father, mother]*, which may take the proprial article/pronoun.

In Icelandic, this construction also shows the same 'disagreement' as the proprial pronoun. Both constructions may have a plural pronoun with a singular proper name, as illustrated in (i)-(ii) below.

(i) við Halldór
we Halldór
'we, Halldór and I'

(ii) húsið okkar Halldórs
house-the our Halldór-GEN
'my and Halldor's house'

(16) **Pronominal:**
Per$_i$ tvättade honom$_{j/*i}$
Per washed him
Per$_i$ tvättade hans$_{j/*i}$ bil
Per washed his car

In Jutlandic, the reflexive pronoun *sin* is often exchanged for the originally non-reflexive pronouns *hans/hennes [his/her]* when referring to an animate subject. In Western Jutlandic, the reflexive pronoun *sin* is hardly used at all in those cases (cf. Jul Nielsen 1986).[8]

Below, I will present the possessive constructions for each language. I will first illustrate the use of possessive pronouns, followed by constructions specific to proper names. Finally, I turn to ordinary noun phrases, expressed as case marked DPs or within PPs.

5.1.1. Danish and Standard Swedish

Danish and Standard Swedish behave very much alike with regard to possessive constructions, so they will be treated together here. A possessive pronoun is always prenominal in these languages.[9]

(17) mit (gamle) hus (Danish)
mitt (gamla) hus (Swedish)
my old house

There are no special constructions for proper names. They are expressed in the same way as other full noun phrases, i.e. as s-genitival constructions, which are always prenominal.

(18) Svends/lærerens (gamle) hus (Danish)
Svens/lärarens (gamla) hus (Swedish)
Sven's / teacher-the's old house

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[8] A further property of the Scandinavian possessive pronouns is that they are used without possessive meaning in disparaging vocatives. This use corresponds to personal pronouns in other languages.

(i) din idiot! (ii) era djävlar!
your idiot *your devils*
'you idiot!' *'you devils!'*

I will have no interesting analysis of this special use of possessive pronouns. See further Svartengren (1911) and Ljunggren (1949).

[9] Apart from the Northern Swedish dialects (discussed separately in subsection 5.1.2), some other variants of colloquial/dialectal Swedish may have postnominal possessive pronouns. This use is however restricted to two cases. First, the kinship nouns that may be used without an article in argumental position (thus functioning as proper names), such as *far, mor [father, mother]*, may be used with a postnominal possessive pronoun.

(i) far min är ingenjör
father my is engineer

Second, kinship nouns like *vän [friend]* may appear with a postnominal possessive pronoun in vocatives.

(ii) vännen min!
friend-the my!

Western Jutlandic may use an auxiliary pronoun as in (19).

(19) æ mand sin/hans hat (Western Jutlandic)
the man his hat
den gård sin mark
the farm refl land

Due to the fact that Jutlandic often exchanges the reflexive form of third person pronouns for its non-reflexive counterpart when the pronoun refers to an animate object, the construction is found with both the reflexive *sin* and with *hans/hennes* (non-reflexive *his/her*). The construction is used with ordinary DPs and personal names, but it is "usædvanligt", i.e. 'unusual', with personal pronouns. See further Jul Nielsen (1986).

Swedish and Danish have no standard possessive preposition.

5.1.2. Northern Swedish

In Northern Swedish, possessive pronouns occur both prenominally and postnominally. When the pronoun is postnominal, the noun has the suffixed article. The variant with a prenominal pronoun is normally used to emphasise the possessor.

(20) huse mitt
house-the my
mitt hus
my house

With personal names, there are basically two constructions. Several dialects use the proprial possessive construction, with the suffixed article on the possessee. This construction is found at least in the provinces of Norrbotten (Källskog 1992:152ff.), Västerbotten (Åström 1893:18) and Jämtland (Bergner 1987).[10]

(21) huset hans Per
house-the his Per

Other dialects have a different construction with personal names. In Västerbotten, the proper name takes an *-s* similar to the s-genitive of Standard Swedish. The possessor may be prenominal or postnominal.

(22) Pers huset
Per's house-the
huset Pers
house-the Per's

[10] In some dialects the pronoun and the proper name seem to be possible in prenominal position, as well (cf. Källskog 1992:152f, Bergner 1987).
(i) hans Per hus
his Per house

Note that the noun has the suffixed article with both word orders. (cf. Åström 1893:17, Holmberg 1987, see also 5.3.5)[11]

With ordinary nouns, Northern Swedish uses the ordinary s-genitival in the same way as in standard Swedish.

(23) prästns hus
priest-the's house

Like Danish and Standard Swedish, Northern Swedish has no standard prepositional construction.

5.1.3. Norwegian

In Norwegian there are several different constructions. Norwegian should probably not be treated as one language in this respect (see e.g. Venås 1989). Nevertheless, I will describe the Norwegian dialects together here.

Possessive pronouns may be pre- or postnominal in all variants of Norwegian. As in Northern Swedish, a postnominal possessive pronoun co-occurs with the suffixed article, and the prenominal possessive pronoun is normally used to emphasise the possessor.

(24) mitt hus
my house
huset mitt
house-the my

With personal names, several Norwegian dialects, primarily in Northern Norway, use the proprial possessive construction. The noun takes the suffixed article (cf. Fiva 1987:85ff.).

(25) huset hans Per
house-the his Per

In most parts of Norway there is a pronominal auxiliary construction (cf. Torp 1990). It can be used with both ordinary noun phrases and proper names, but not with single pronouns (compare Western Jutlandic in 5.1.1). The auxiliary pronoun has the reflexive form.

(26) *han sit hus
he his-refl house
Per sit hus
Per his-refl house
mannen sit hus
man-the his-refl house

[11] The construction is found also in the Swedish dialects in Finland and the former Swedish dialects of Estonia (cf. Lundström 1939 and Lagman 1958)

Literary Norwegian has the same s-genitival constructions as Swedish and Danish. Many Norwegians consider the s-genitive to be only a Danish rest in the written language, but at least in the southernmost parts of Norway it is a part of the spoken language (cf. Torp 1990:151f.). It is allowed with both proper names and ordinary noun phrases.

(27) Pers hus
Per's house
mannens hus
man-the's house

Furthermore, Norwegian possesses a standard preposition with absolute nouns, namely *til* (literally *to*). This preposition is possible with proper names and ordinary noun phrases, but not with pronouns.[12]

(28) *huset til meg
house-the of me
huset til Per
house-the of Per
huset til læreren
house-the of teacher-the

5.1.4. Faroese

Written and spoken Faroese differ quite a lot syntactically. Written Faroese is influenced by Danish and (as a reaction to the Danish influence) also by written Icelandic. The description that I give here will primarily take spoken Faroese into account.

Possessive pronouns are pre- or postnominal. The former type is normally used to emphasise the possessor. The head noun always lacks the suffixed article, even when the possessive pronoun is postnominal. Thus Faroese differs from the other Scandinavian languages that allow postnominal possessive pronouns.[13]

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[12] The two central constructions with ordinary noun phrases are the auxiliary possessive construction and the prepositional genitival. There is a slight difference between them. The former is preferred when the head noun is relational. With absolute nouns both variants are possible, but the prepositional variant is perhaps more natural.

(i)	Per sin fot	(ii)	Per sin bok
	Per his-refl foot		*Per his-refl book*
	?foten til Per		boken til Per
	foot-the of Per		*book-the of Per*

[13] There are two minor exceptions, where the noun has the suffixed article, namely constructions with distributive pronouns as in (i), and possessive pronouns used in a disparaging sense, as in (ii) (cf. fn.8 above). See further Hultman 1967:144f.

(i) hon tók so hvörja hondina f sína honkina
she took so each hand-the in its-refl handle-the

(ii) neyðardýrið títt
wretch-the your *'you poor wretch'*

(29) hús mítt
house my
mítt hús
my house

It should be noted that the postnominal pronoun is a bit archaic with absolute nouns. It is normally only used with relational nouns. When an adjective intervenes, the possessive pronoun is normally prenominal. In spoken language the postnominal position of the pronoun seems to be avoided (Kaj Larsen, p.c.).

(30) mítt gamla hus
my old house
*gamla hús mítt
old house my

Possessive constructions with personal names may be expressed with the special genitival suffix *-sa(r)*. In the spoken language it is only used prenominally.

(31) Ólavsa(r) bók
Ólav-GEN book
*bók Ólavsa(r)
book Ólav-GEN

This special genitival form for personal names is different from the genuine morphological case in Icelandic since it has the same form in both genders. It is also different from the s-genitival construction of Mainland Scandinavian, since it does not allow group genitivals. Its closest cognate seems to be the German prenominal s-genitive construction (see further subsection 5.3.5.).

Regular genitival case with ordinary noun phrases is missing in spoken Faroese (cf. Skårup 1967). Neither are auxiliary pronouns or s-genitival constructions found.[14] With kinship nouns, like *faðir, sonur [father, son]* the possessor can be expressed by a postnominal accusative DP, and then the head noun lacks the suffixed article.

(32) sonur norska kongin
son-NOM Norwegian-ACC king-the-ACC

In other cases a genitival possessive must have a preposition. The standard preposition is *hjá* (literally *with/at*), which governs dative case. It is compatible with proper names and full DPs, and (contrary to Norwegian) also with personal pronouns.

[14] Due to the Danish influence, written Faroese possesses s-genitivals, and due to the Icelandic influence, written Faroese also possesses regular genitive case on possessors.

(33) húsið hjá mær
house-the of me-DAT
húsið hjá Ólavi
house-the of Ólav-DAT
húsið hjá keypmanninum
house-the of tradesman-the-DAT

5.1.5. Icelandic

In Icelandic, the possessive pronoun may be both prenominal and postnominal. If it is postnominal the noun has the suffixed article. The prenominal possessive pronoun is usually used to emphasise the possessor.

(34) mitt hús
my house
húsið mitt
house-the my

If the noun is a kinship noun, such as *faðir, bróðir [father, brother]* or another relational noun, such as *skoðun [opinion/view]*, both word orders are fine, but the head noun lacks the suffixed article when the possessive pronoun is postnominal.[15]

(35) bróðir(*-inn) minn
brother-the my
(36) skoðun(*-in) mín
opinion-the my

If there is an attributive adjective, the postnominal variant is preferred. A prenominal possessive pronoun is possible in vocatives (at least with kinship nouns), but marginal in argumental noun phrases.

(37) gamla húsið mitt
old house my
(38) minn gamli vinur!
my old friend!
?mitt gamla hús
my old house

With personal names, colloquial Icelandic normally uses the proprial possessive construction, which normally requires the suffixed article on the noun.

(39) húsið hans Jóns
house-the his Jón-GEN

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[15] Ordinary absolute nouns that may be interpreted as relational may omit the suffixed article, for instance, when taking a complement.

(i) bók mín um málfræði
book my about linguistics

As with possessive pronouns, the suffixed article must be left out with kinship nouns, and it may be left out with other relational nouns.

(40) bróðir(*-inn) hans Jóns
brother-the his Jón-GEN
skoðun(-in) hennar Önnu
opinion-the her Anna-GEN

With ordinary noun phrases, the head noun lacks the suffixed article, and the noun phrase turns up in genitive after the noun. This is also possible for personal names (without the proprial pronoun).[16]

(41) hús Jóns
house Jon-GEN
(42) hús kaupmansins
house tradesman-the-GEN

The personal name may appear prenominally as well, which is marginal with ordinary noun phrases (cf. Magnússon 1984).[17]

(43) Jóns hús
Jon-GEN house
?kaupmansins hús
tradesman-the-GEN house

If an adjective intervenes, the prenominal position of the personal name is blocked.

(44) *Jóns gamla hús
Jón-GEN old house

Icelandic possesses no standard prepositional construction.

5.1.6. Summary

In this section, I have presented the main possibilities for expressing possession in the Scandinavian languages. As seen the languages differ considerably. There are often different constructions depending on the type of possessor used: possessive pronoun, personal name or ordinary noun phrase. Some constructions are only found with personal names, whereas the ones that are applicable to ordinary DPs

[16] In the dialects of Northern Iceland, the genitive may be preceded by a noun with the suffixed article.

(i) húsið Jóns
house-the Jón-GEN
húsið kaupmansins
house-the tradesman-the-GEN

[17] The judgments of prenominal genitives vary. Some judge them as poetry, whereas others consider them grammatical if they are given contrastive stress.

are also possible with personal names. The central constructions are listed below, with some examples.

(45) **Constructions with possessive pronouns**

1. min hatt	[my hat]	(Swedish)
2. hattur mín	[hat my]	(Faroese)
3. hatten min	[hat-the my]	(Norwegian)

(46) **Constructions with personal names**

4. Péturs hattur	[Pétur-GEN hat]	(Icelandic)
5. hatten hans Per	[hat-the his Per]	(Norwegian)

(47) **Constructions with ordinary nouns and personal names**

6. Per sin hat	[Per refl hat]	(Norwegian)
den gamle mannen sin hat	[the old man-the refl hat]	
7. Pers hatt	[Per's hat]	(Swedish)
den gamle mannens hat	[the old man-the's hat]	
8. hattur Péturs	[hat Pétur-GEN]	(Icelandic)
hattur gamla mansins	[hat old-GEN man-the-GEN]	
9. hatten til Per	[hat-the of Per]	(Norwegian)
hatten til den gamle mannen	[hat-the of the old man]	

In the table below, I give the distribution of the different possibilities, ignoring possible exceptions caused by intervening adjectives or relational head nouns.

(48) Possessive constructions with absolute nouns in Scandinavian

	Possessive pronouns			**Personal names**		**Personal names & ordinary DPs**			
	1 *my hat*	2 *hat my*	3 *hat-the my*	4 *Per-GEN hat*	5 *hat-the his Per*	6 *Per refl hat*	7 *Per's hat*	8 *hat Per-GEN*	9 *hat-the of Per*
Ju.	+	–	–	–	–	+	+	–	–
Da.	+	–	–	–	–	–	+	–	–
Sw.	+	–	–	–	–	–	+	–	–
NSw.	+	–	+	–	+	–	+	–	–
No.	+	–	+	–	+	+	(+)	–	+
Far.	+	(+)	–	+	–	–	–	–	+
Icel.	+	–	+	+	+	–	–	+	–

Note that some differences are not visible in this table. I have put postnominal possessive pronoun i parentheses for Faroese (column 2), since they seem to be archaic, except when used with relational nouns. I have chosen to view the *-sa(r)* ending on proper names in Faroese as a genitival case ending (column 4), although it does not have exactly the same status as other instances of morphological case. In the proprial possessive construction (column 5) in Norwegian and Northern Swedish the personal name has no visible case, whereas it has genitive in Icelandic. The Norwegian s-genitival construction (column 7) has been placed in parentheses, since it is mostly found in literary style. In the prepositional possessive construction (column 9), pronouns are allowed in Faroese, but not in Norwegian.

As should be clear by now, the Scandinavian languages show a great diversity of possessive constructions, and I will not be able to analyse all of them here. What I will do in the following sections is discuss previous analyses and to present an alternative analysis.

5.2. Previous Analyses

In this section, I will briefly comment on some previous generative analyses of possessive constructions, leaving pre-generative accounts out of the discussion. Traditional grammarians have normally only given descriptions of the different possibilities, and they have seldom been occupied with the auxiliary possessive construction or the proprial possessive construction.

In generative grammar, there is one important analysis that does not use the DP-analysis, namely Fiva (1987). Fiva makes the first generative analysis of the Norwegian auxiliary pronominal construction, and she states the important generalisation that the s-genitival and the auxiliary construction should be analysed in the same way (cf. also Torp 1973). Fiva shows that the genitival *-s* and the reflexive possessive *sin* in Norwegian have the same restrictions in possessive constructions. Most importantly, both show the property of group genitivals.

(49) mannen med skjeggets hus
man-the with beard-the's house
(50) mannen med skjegget sitt hus
man-the with beard-the his-refl house

I will follow Fiva in assuming that the genitival *-s*, in (49), and the auxiliary possessive, *sin/sitt*, in (50), should be analysed in the same way. Hence, the genitival *-s* will be considered a special pronoun.

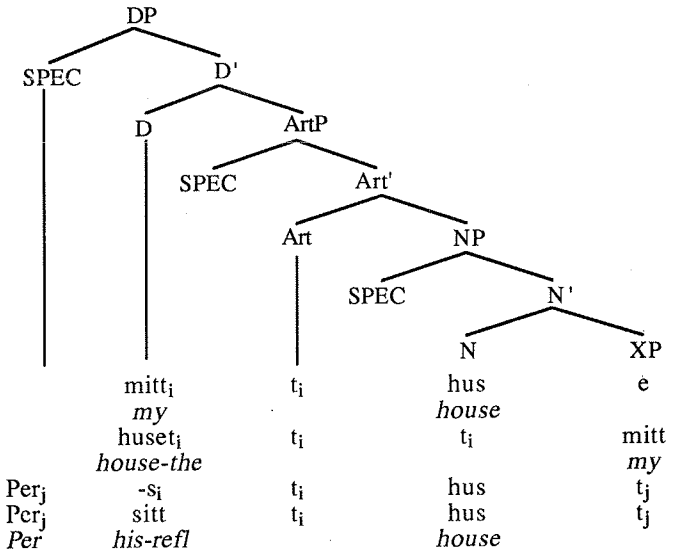
Within the DP-analysis there are basically five analyses of possessive constructions in Scandinavian. I will briefly present them in chronological order.

In Delsing (1988), I concentrated on the properties of the s-genitival construction and the alternation between pre- and postnominal possessive pronouns. I suggested that genitival possessors were generated as complements of the noun, and that they moved into the specifier position of DP. A further assumption was that the genitival *-s* and the auxiliary possessive *sin* in Norwegian were base generated in a functional head (Art) and raised to D, assigning case to the possessor in SpecDP. I also suggested that ordinary possessive pronouns were base generated in Art.[18] The word order *huset mitt [house-the my]* in, for instance, Norwegian was explained by generating posses-

[18] The original motivation for Art was to describe the double definiteness of Swedish and Norwegian (cf. the discussion in subsection 4.2.1)

sive pronouns in the complement position of N (just as with genitival possessors). The suffixed article on the noun could then be derived by head movement of the noun to D (via Art). Hence the proposal in Delsing (1988) can be summarised as in (51).

(51)



Given these assumptions, the two different word orders of possessive pronouns can be described. The lack of the suffixed article with prenominal possessive pronouns and s-genitival constructions is also explained, since in both cases there is lexical material in Art blocking head-movement of the noun. However, the analysis entails that a language like Norwegian can base generate possessive pronouns in two positions, as heads in Art or as XP-complements of N. Below, I will adopt an analysis of s-genitivals similar to Delsing (1988), but I will suggest a different analysis for possessive pronouns.

In Delsing (1989), I tried to refine my analysis from 1988. In order to get rid of the two different possibilities of base generating possessive pronouns, I proposed that all possessive pronouns were base generated in SpecNP and moved to SpecDP to receive Case. The analysis entails that the agreement morpheme of possessive pronouns is base generated in D. We would then have to connect the pronoun to its morphology in PF (similar analyses have been proposed for German by Olsen 1988b and Bhatt 1990).

(52) [$_{DP}$ mi$_i$- [$_{D'}$ -tt [$_{NP}$ t$_i$ [$_{N'}$ hus]]]
my *agr* *house*

A description like the one in (52) would make s-genitivals and pronominal constructions parallel, moving the possessors as XPs to SpecDP and connecting them to the possessive morphology at PF.[19] A disadvantage of this analysis is however that the analysis has to assume two different derivations for possessive pronouns, when they are independent and when they are auxiliary pronouns in Norwegian, as indicated below.

(53) [DP si- [D' -tt [NP hus]]]
refl AGR house

(54) [DP Per [D' sitt [NP hus]]]
Per refl+AGR house

In (53), the possessive stem would be placed in SpecDP, whereas the agreement morphology would be placed in D^0. On the other hand, in (54), the whole possessive pronoun would have to be generated in D.

Taraldsen (1989) presents an analysis similar to Delsing (1989). He assumes that possessors and subjective genitives are base generated in SpecNP, and that the word order difference between the head noun and the possessive pronoun is derived by head movement of the noun or, contrary to Delsing (1989), by (some less precise) clitic movement of the possessive pronoun from SpecNP to D. Taraldsen gives arguments for the analysis that possessors are generated in a specifier position. He bases his arguments on binding facts with relational nouns like the ones in (55).

(55) beskrivelsen hans$_i$ av sin$_i$ bror (Norwegian)
description his of his-refl brother
beskrivelsen hennes$_i$ av seg$_i$ selv
description her of refl self

In (55) the pronouns *hans/hennes [his/her]* (in specifier positions) c-command the reflexive pronouns (in complement positions).

Taraldsen does not discuss attributive adjectives in any detail, but he hints at a solution to the problem raised by phrases like (56).

(56) det store huset mitt (Norwegian)
the big house-the my

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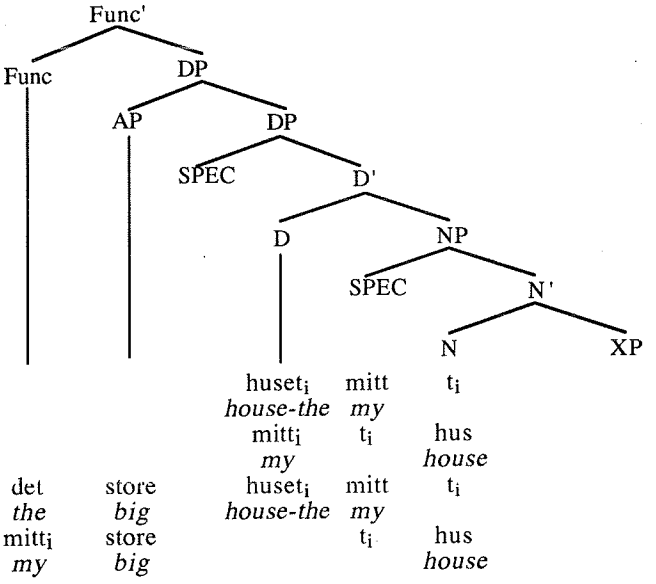
[19] In Mainland Scandinavian, pronouns that do not agree with the head noun often have an -s ending: *hennes, deras [her, their]*. The parallel between possessive pronouns and s-genitives is however not too strong. These pronouns may not take group-genitivals. In group genitivals the personal pronoun must be used.

(i) dera med husvagnens barn
their with caravan-the's children

Carstairs (1987) has shown that the group genitival constructions in the Germanic languages appear, historically and geographically, only in languages where the genitival ending is the same in all paradigms, i.e. *-s*. To view possessive pronouns in the same way would thus be strange, since it would entail that several different inflectional forms were generated in D.

Since Taraldsen argues that the possessive pronoun is generated in SpecNP, he has to assume that the noun has moved in (56), although it shows no movement in relation to the adjective. He introduces a new functional category above the DP. If I interpret Taraldsen correctly the structure would be roughly like in (57).[20]

(57)



As can be seen, generating the possessive pronoun in a specifier position enables Taraldsen to account for the binding facts in (55) above. However, the properties and restrictions of the clitic movement of the possessive pronoun are not discussed in Taraldsen. Several questions arise here: Are noun phrases without adjectives FuncPs or DPs? Does the possessive pronoun move through the D-position on its way to Func? What are the restrictions for movement from Spec to Head?

Holmberg (1991) discusses pronominal possessive constructions, trying to incorporate possessive pronouns into a wider theory of weak pronouns in the Scandinavian languages. He gives roughly the same solution to the different placement of possessive pronouns as Taraldsen (1989). Holmberg assumes that the possessive pronoun is base generated in SpecNP, that the head noun can head-move to D, picking up the suffixed article, or that the possessive pronoun moves

[20] Taraldsen does not discuss the position of attributive adjectives. In (57) I have adjoined them to DP. Nothing in my argumentation hinges on this.

to D, thus some kind of clitic movement in the same spirit as proposed by Taraldsen. We will return to a discussion of this alleged clitic movement in a moment. Holmberg does not discuss how phrases with attributive adjectives and double definiteness should be analysed (compare (56) above).

Sigurðsson (1993), discussing Icelandic, assumes that in *húsið mitt [house-the my]*, the noun moves to D by head movement, picking up the suffixed article, and that the possessive pronoun is base generated in a postnominal position. He does not say *complement* explicitly. Sigurðsson tries to solve the problem with adjectives in front of the noun, as illustrated in the Icelandic example in (58).

(58) stóra húsið mitt
big house-the my

Since the noun in (58) does not seem to be moved in relation to the adjective, Sigurðsson assumes that the adjective is base generated as a head adjoined to N, and that the complex A-N head moves to D, to pick up the suffixed article, as shown in (59)-(60).

(59) $[_{D'}\ [_{D^0}\ [_{N^0}$ stóra-hús$]_i$-ið $]\ [_{NP}\ t_i$ mitt$]]$
big-neut.sg-house-the my

(60) $[_{D'}\ [_{D^0}\ [_{N^0}$ stóri-bíll$]_i$-inn $]\ [_{NP}\ t_i$ minn$]]$
big-masc.sg-car-the my

To me this analysis seems very strange. First, it does not account for the agreement within the complex A-N head, as illustrated in (59)-(60).[21] Second, as Sigurðsson mentions himself, the analysis is not compatible with attributive adjectives taking objects, a structure which is absent in Icelandic, but found in Swedish, German and the Slavic languages (cf. the examples in 3.2.1. above). However, since attributive adjectives are found with measure phrases in Icelandic, Sigurðsson's analysis would entail a very complex attributive adjective-noun head, as indicated by the brackets.[22]

(61) [fimmtán-ára-gamla-hus]-ið hans Jóns
fifteen years old house]the his Jón-GEN

Furthermore, Sigurðsson's analysis cannot handle the Norwegian cases, where the noun phrase has a prenominal determiner as well as a suffixed article, as was illustrated in (56) above.

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[21] The only Scandinavian dialects, where the adjective and the noun is compounded phonetically do not show any agreement. See sections 4.1.5, 4.2.2, and fn. 24 of chapter 4.

[22] Thanks to Halldór Sigurðsson, who has willingly provided me with this example although it goes against his own analysis.

All the proposals described above seem to have one analysis in common: the word order *huset mitt [house-the my]* is explained as head movement of N to D. Some of them assume that the possessive pronoun is generated in a specifier position, thus being able to account for the binding data in (55) above, but this leads to problems with prenominal adjectives and articles, as in (56) and (58) above. In other analyses the possessive pronoun is seen as a complement, thus accounting for the adjectival constructions in (56) and (58), but this leads to problems with the binding data in (55) and the X-bar notation, since there would be no place for an object of a nominalisation. Whatever choice we make, we seem to be in trouble. Assuming the head movement analysis, we would also expect that a noun with a postnominal possessive pronoun should always have the suffixed article, but in Faroese and with relational nouns in Icelandic the suffixed article is missing.[23]

The previous analyses of prenominal possessive pronouns are also problematic. In Delsing (1988, 1989) possessive pronouns are generated in two different positions. In Taraldsen's, Holmberg's and Sigurðsson's analyses, the movement from an argument position to a head position can only be construed as clitic movement. However, the Scandinavian possessive pronouns are not clitics on a par with Romance clitics, since the alleged movement is optional. Neither are they parallel to weak pronouns in Germanic. In the prototypical weak pronoun construction in Scandinavian, namely *object shift*, the weak pronoun is normally stressed when it is left in situ, and never stressed when it is moved.[24] The possessive pronouns pattern in the opposite way; when they are stressed they are normally prenominal (i.e. moved in Taraldsen's, Holmberg's and Sigurðsson's analyses), and when they are unstressed they are normally postnominal (i.e. not moved). If prenominal possessive pronouns are moved from an XP position to a head position, it is also strange that they are in complementary distribution with articles. Such complementary distribution of clitic/weak pronouns and other heads are not found in other parts of the grammar.

A further problem with the analyses above is that they generate at least some possessive pronouns in XP positions. As a consequence, they cannot account for the agreement on the possessive pronoun. Note in particular that a possessive pronoun generated in SpecNP does not explain the agreement. Spec-head agreement is agreement on a head, triggered by an XP specifier, not the other way round (as

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[23] Holmberg (1991) suggests that the presence versus absence of the suffixed article is due to different sorts of head movement: adjunction and substitution respectively. It is not clear to me if there is any independent support for this assumption.

[24] On the Object Shift construction in Scandinavian, see e.g. Holmberg (1986), Josefsson (1992) and Holmberg/Platzack (in press).

I argued in section 3.2.2.). If possessive pronouns are generated in an XP position, it is also hard to see how the auxiliary possessive construction should be analysed.

(62) sitt hus (Norwegian)
refl house
(63) den gamle mannen sitt hus
the old man-the refl house

There are good reasons to believe that the reflexive possessive pronoun *sitt* in (62) and (63) above is the same category. It has exactly the same morphology in both cases. Furthermore, in Jutlandic, both variants are exchanged for the originally non-reflexive form in the same areas and with the same semantic differentiation (compare 5.1. and 5.1.1, see further Jul Nielsen 1986). If they are the same category, and the pronoun is generated in an XP position, it becomes a mystery where the DP *den gamle mannen* in (63) is generated.

The analyses described above have not taken seriously the differences between full noun phrases and possessive pronouns, the latter being heads. In the analysis proposed below, I will try to take these matters into consideration.

5.3. The Proposed Analysis

In this section I will present my analysis of possessive constructions in Scandinavian, an analysis that is compatible with genitival constructions, as well as with auxiliary and pronominal possessive constructions. Recall that genitival constructions may be both pre- and postnominal

(64) **Postnominal genitival constructions**
huset til Per (Norwegian)
house-the of Per
húsið hans Péturs (Icelandic)
house-the his Pétur-GEN
hús Péturs (Icelandic)
house Pétur-GEN
(65) **Prenominal genitival constructions**
Per sitt hus (Norwegian)
Per refl house
Pers hus (Swedish)
Per's house

Note that the prenominal genitival construction always involves an auxiliary pronoun (*sin/sitt* or genitival *-s)*. This will become important below, where I claim that these auxiliary pronouns should be analysed in the same way as other possessive pronouns. My presentation will have the following organisation.

First, I will begin with the assumption that all possessor DPs of absolute nouns are generated in the complement position of this noun. If the DP can receive Case in that position (directly or by a preposition), it may stay there. Otherwise it must raise to SpecDP in order to be assigned structural Case. These assumptions will be developed in subsection 5.3.1.

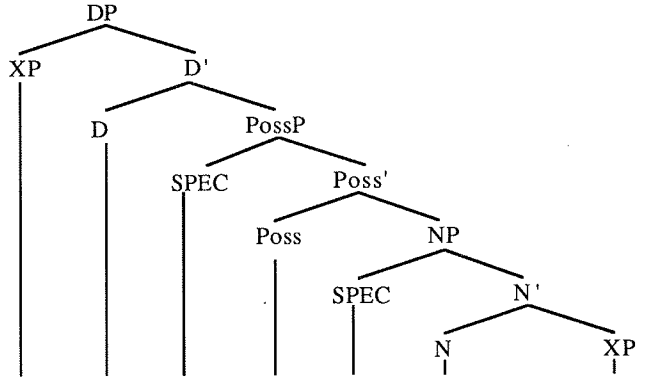
Second, I will propose that possessive pronouns in the Scandinavian languages (auxiliary or not) head a PossessorPhrase (henceforth PossP). I assume that the Poss-head takes the possessee as its complement (subsection 5.3.2).

Third, I will suggest that possessive pronouns are definite and thus moved to D in the Scandinavian languages, and that they may turn D into a structural Case assigner. As mentioned above, possessor DPs that are not assigned Case in their base position may move to SpecDP in order to get Case. These assumptions will be developed in subsection 5.3.3.

Fourth, in subsection 5.3.4, I will explain the difference between prenominal and postnominal pronominal constructions, i.e. *mitt hus [my house]* and *hus / huset mitt [house(-the) my]*, as movement of the possessee phrase to the left of the pronoun, by XP-movement.

Since a noun phrase with a possessor is prototypically an argument, it follows from our discussion in chapter 2 that it is a DP. The structure that I propose is outlined in (66).

(66)



In (66), Poss may select either DP, DegP, AP or NP.

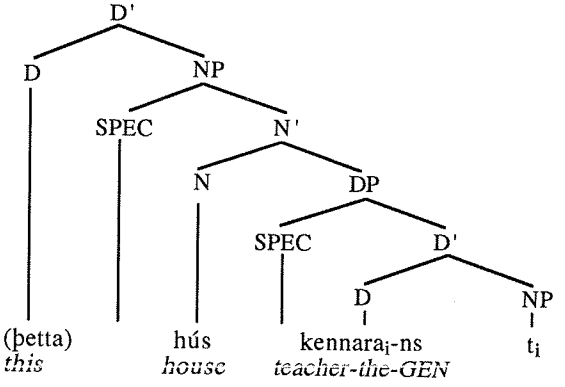
In subsection 5.3.5, I will discuss some constructions that are specific to personal names, and in 5.3.6, I turn to some typological implications of the proposed analysis. Last, I mention some residual problems that are left unsolved (subsection 5.3.7).

5.3.1. Postnominal Genitival Possessives

As mentioned above, I assume that all DP possessors of absolute nouns are base generated as complements of this noun in the Scandinavian languages. This description easily handles the postnominal genitival constructions found in Icelandic, Norwegian and Northern Swedish. Examples like the Icelandic ones in (67) are given the analysis in (68).

(67) hús kennarans (Icelandic)
house teacher-the-GEN
þetta hús kennarans
this house teacher-the-GEN

(68)



In (68) the upper head noun *hús* assigns genitive case to its DP-complement. The head noun of this complement, *kennara,* is raised to D to pick upp the article. In Icelandic the possessee (the upper noun) cannot take the suffixed article when the postnominal genitive is an ordinary noun. I propose that this can be explained by an adjacency requirement on Case assignment between a (nominal) Case assigner and the DP that is assigned Case. If an article were generated on the noun in N (as we argued to be possible in section 4.2), it becomes definite and must raise to D, thus violating the adjacency requirement on Case assignment.[25] I assume that the upper D-position in (68) can simply be left empty. An empty (expletive) D-position in Icelandic is licit, because of the strong morphology on nominal categories (see subsection 4.2.2).

[25] As pointed out in section 4.2.2, in Icelandic and the double definiteness languages, it is never possible to tell whether a simple noun with the suffixed article has the article base generated on the noun or in D. However, I have assumed that there is N-raising to D in both cases.

If the postnominal genitival phrase involves a personal name, Icelandic may use the proprial article. In those cases the possessee appears with the suffixed article, hence it must be raised to D.

(69) húsið hans Jóns
house-the his Jón-GEN

(70) [DP [D' húsið$_i$ [NP t$_i$ [DP hans [NP Jóns]]]]]
house-the his Jón-GEN

Obviously, the possessor is not adjacent to the possessee in (70), indicating that there are less strict requirements on adjacency when the head of the lower D is a proprial pronoun/article, than if it is an ordinary definite article. I do not have a principled reason for why this should be so, but this does not differentiate my analysis from previous ones.

In Northern Norwegian and Northern Swedish the same proprial construction is found. As in Icelandic, a noun phrase with a proprial article and a personal name may be postnominal, the only difference being that the personal name does not show any overt morphological case. Following Fiva (1987:89) I assume that the proprial article/pronoun in D has morphological genitive.[26]

In languages (and constructions) where the postnominal possessor does not receive Case, there are two options. Either a preposition is inserted, or the phrase must move to get structural Case. Both alternatives are attested in the Scandinavian languages.

In Norwegian and Faroese, there are dummy prepositions that may be inserted in front of the complement.

(71) [DP [D' hus$_i$-et [NP t$_i$ [PP til [DP lærere$_j$-n [NP t$_j$]]]]]]
house-the of teacher-the

In Danish and Swedish, overt morphological case and standard prepositions are missing, and thus the possessor DP must move to the upper SpecDP in order to be assigned structural Case. This raising is also possible in Norwegian as an alternative to insertion of *til*. In these raising constructions, an auxiliary possessive pronoun (*sin* or genitival *-s*) is obligatory, positioned in-between the raised possessor and the possessee (see further section 5.3.3.). In the following subsections I will show that possessive pronouns should be analysed as heads, projecting a PossP, and that they raise to D, turning that position into a Case assigner.

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[26] Together with the dative forms found on the suffixed article in Northern Norwegian and Northern Swedish dialects, this visible genitive on the proprial article/pronoun will be the only overt morphological case found in Mainland Scandinavian. Note that these two visible manifestations of morphological case are found in roughly the same dialects and is restricted to D in both cases. On morphological dative in Mainland Scandinavian, see further Reinhammar (1973)

5.3.2. Possessive Pronouns as Heads

In this subsection, I will argue that possessive pronouns are base generated in the head of a PossP. Such an analysis was, as far as I know, first proposed by Battye 1989. The proposal was primarily motivated by the existence of relational nouns in some Romance languages that seem to take three 'arguments', one subject, one object and one possessor.[27] This analysis can also be supported by Scandinavian data.

First, the occurrence of agreement on possessive pronouns in the Indo-European languages is most easily explained if we assume that possessive pronouns are heads. Recall (from subsection 3.2.2) that we have argued that agreement is only possible on heads, and that triggers of agreement are either XPs in an argument position of that head, or heads within a head chain. Here I assume that the possessive pronoun is participating in the noun phrase internal agreement from head to head.

Second, possessive pronouns cannot take their own attributes, determining or describing the possessor, in the way that personal pronouns sometimes do. Compare the Swedish personal pronouns in (72) to their possessive counterparts in (73).

(72) hela han
whole he [all of him]
han med hatten
he with hat-the

(73) *[hela hans] hund
whole his dog
*[hans med hatten] hund
his with hat-the dog

Third, possessive pronouns are in complementary distribution with the determiner (D) head in several languages. This is well known from the Germanic languages, as shown in the examples below.

(74)	mitt hus	(Swedish)
	mein Haus	(German)
	my house	(English)
(75)	*det mitt hus	(Swedish)
	*das mein Haus	(German)
	*the my house	(English)

[27] In Italian, for instance, such triadic constructions are found with picture nouns, where there seem to be three arguments connected to the head noun.

(i) la photografia di New York di Warhol della collezione
the photo of New York (obj) of Warhol (subj) of-the collection (poss)

Examples like (74)-(75) are easily described if the possessive pronoun competes with the article for the same position. In Scandinavian the position of prenominal possessive pronouns is obviously the D-position, as illustrated in (76) below (compare Sigurðsson 1993).

(76) alla de gamla husen
all the old hoses-the
alla mina gamla hus
all my old houses

In other languages, like Italian, possessive pronouns co-occur with the definite article.

(77) il mio libro (Italian)
the my book

The simplest way to analyse this difference is to postulate a separate PossP for the possessive pronoun, and to have different restrictions on raising from Poss to D (cf. also section 5.3.6. below).

Some languages seem to have raising of the possessive pronoun to the D-position, overtly showing this by attaching the suffixed article to the possessive pronoun (in the same way as the article can be attached to adjectives and nouns, cf. subsection 3.2.6.). Consider the Bulgarian example in (78) (from Zimmermann 1991).

(78) moi-te chubavi knigi (Bulgarian)
my-the beautiful books

Data like in (78) are most easily understood if the possessive pronoun is a head that may raise to D.

The data presented above imply that possessive pronouns should be seen as heads within the noun phrase. In the rest of this chapter I will give an analysis, where possessive pronouns constitute a head (Poss). I assume that this head takes the possessee as its complement.[28]

5.3.3. Prenominal Genitival Possessives

As mentioned above some of the Scandinavian languages have raising of the possessor DP from the complement position of N to the Spec-DP-position. This raising is a means for the possessor to be assigned

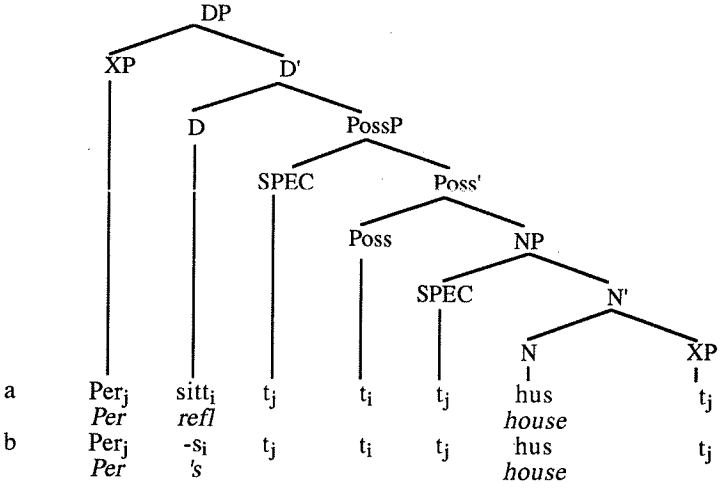
[28] I have not discussed whether Poss is a functional or a lexical category. It seems to have several functional properties. Poss seems to be a closed class, and it is often stressless (in some languages affixal). On the other hand it may be stranded (in predicative use, which is a typical property of lexical elements. In languages like Italian (cf. fn 27) where there are three arguments in a noun phrase it would be plausible to think that one of the arguments is an argument of Poss. Maybe Poss is a lexical category in these languages, but functional in the Germanic languages, where three arguments are never allowed. Compare the discussion in Giorgi/Longobardi (1990).

Case, and it is found in the languages that lack morphological case on nouns, i.e. the Mainland Scandinavian languages. There are two possible constructions of this type. It may involve either an auxiliary pronoun or a genitival *-s*.

(79) Per/læreren sin bil (Norwegian)
Per/teacher-the refl car
Pers/lärarens bil (Swedish)
Per's /teacher-the's car

As I mentioned above I will follow Fiva 1987 in assuming that the reflexive *sin* and the Mainland Scandinavian genitival *-s* is the same category. I will claim that both are generated in Poss, and that they are inherently definite, and thus must raise to the D-position. I also assume that they may assign structural Case to a possessor DP in SpecDP. Thus the structure for prenominal genitival constructions will be as in (80).

(80)



Note that the analysis accounts for the group genitivals, which always have *-s/sin* at the end of the possessor DP. Furthermore, since prenominal possessive constructions always involve an auxiliary pronoun, the analysis accounts for the fact that the head noun never has the suffixed article, i.e. raising of N to D is blocked by the possessive pronoun.

5.3.4. Pronominal Possessives

In this subsection, I will discuss constructions with (simple) possessive pronouns. The three possible constructions are repeated in (81)-(83).

(81)	mitt hus *my house*	(Swedish)
(82)	huset mitt *house-the my*	(Norwegian)
(83)	hús mítt *house my*	(Faroese)

It should be emphasised that the construction in (81) is possible in all the Scandinavian languages. The construction in (82) is used in Northern Swedish, Norwegian and Icelandic, and in these languages, it is the unmarked construction. The construction in (83) is only found in Faroese. In languages that use postnominal possessive pronouns, as in (82) and (83), a prenominal possessive pronoun is always possible, and normally it is used to put emphasis or contrast on the possessor.

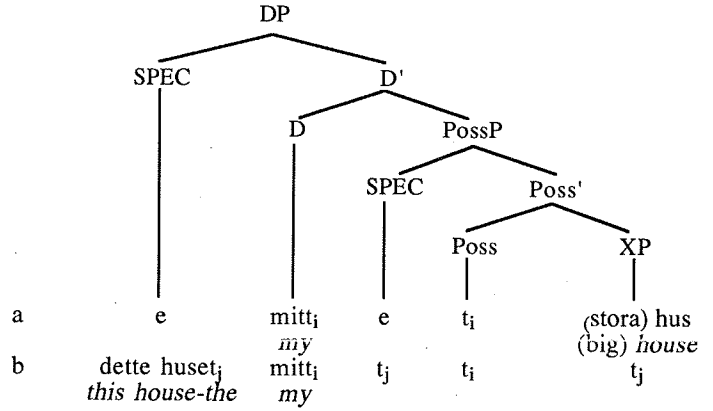
As was shown in section 5.2. the difference between *huset mitt [house-the my]* and *mitt hus [my house]* is often taken to be a result of head movement of the noun from N to D in the former case. I have shown that such an analysis cannot account for both the binding facts and prenominal attributive adjectives simultaneously. Furthermore, the alleged movement from an XP-position to a head position, which this analysis entails, can only be seen as clitic movement. I have shown that possessive pronouns do not pattern with other instances of clitic/weak pronouns. Here I will propose an alternative analysis, suggesting XP-movement of the possessee around the possessive pronoun. Such an analysis immediately accounts for the fact that the noun phrase in front of a possessive pronoun is always structured as if the possessive pronoun were not there; the head noun does not seem to be moved in relation to any other constituent. Consider the following examples, where the structure of the phrase is independent of the possessive pronoun.

(84)	þetta gamla hús (mitt) *this old house my*	(Icelandic)
(85)	det store huset (mitt) *the big house-the my*	(Norwegian)
(86)	alle gamm-stor-husa (hans) *all old-big-houses-the his*	(Northern Swedish)

All instances of noun phrases in front of the possessive pronoun seem to be DPs, whereas all instances of noun phrases after a possessive pronoun seem to be NPs, APs or DegPs. I assume that Poss

may select either NP, AP, DegP or DP as its complement. Recall from section 3.5. that I have assumed that non-arguments (NP, AP and DegP) can inherit case, whereas DPs must be assigned case under government. In cases where the complement is NP, AP or DegP, the Case-features of the phrase may percolate downwards. If a DP is selected there cannot be any percolation, and the DP will have to be assigned Case. Thus it must move to SpecDP. Hence, we derive noun phrases like the ones in (84)-(86) by A-movement of the lower DP to the specifier of the upper DP. We arrive at the following structure for pronominal possessive constructions, illustrated with Norwegian examples.

(87)



In (87)a, Poss selects a DegP, an AP or an NP. In (87)b Poss selects a DP, which cannot receive Case by percolation, but must be assigned Case (cf. section 3.5.2). Thus the DP is moved to SpecDP, to be assigned Case by the upper D.

As can be seen above, this structure enables us to account for the constructions with possessive pronouns in the Scandinavian languages. The question remains why the word order *huset mitt [house-the my]* is blocked in Danish and Standard Swedish. The simplest answer would be that Poss cannot select DP as its complement in these languages.[29]

Let us now see what we have gained with this analysis. First, the analysis gives the same structural analysis of all possessive pronouns, both ordinary and auxiliary ones (including the genitival *-s*).

[29] This assumption remains a stipulation. I cannot see that Danish and Swedish deviate from the other languages in any other respect that could be connected to this difference between the languages.

Second, we have dispensed with the strange clitic movement of prenominal possessive pronouns, assumed by earlier analyses. As I showed above, such pronouns do not pattern with other instances of clitics or weak pronouns.

Third, agreement on possessive pronouns can now be seen as an instance of noun phrase internal agreement between the heads of the noun phrase, in the same way as determiners in D agree with the noun in N (cf. subsection 3.5.1).

Fourth, the problems with adjectives and determiners appearing in front of the possessive pronoun, now disappears. The whole noun phrase including its adjectives and determiners moves from the complement position of Poss to SpecDP.

Fifth, making a distinction between possessive pronouns and genitival attributes in the way that we have done here immediately explains why possessive pronouns, but not genitivals can co-ouccur with partitive genitivals. The examples in (88) below is taken from Magnússon (1984).

(88) minn hluti arfsins
my part heritage-the-gen
*Jóns hluti arfsins
Jóns part heritage-the-gen
*hluti Jóns arfsins / *hluti arfsins Jóns

My analysis entails that genitive is assigned to the complement of N. Two noun phrases cannot be generated in the same position. However a possessive pronoun is generated in Poss^0, and should be able to co-occur with a genitival.[30]

Furthermore the analysis enables us to account for some less central constructions, and additionally it makes some interesting typological predictions, as I will show in the following sections.

5.3.5. Possessives with Personal Names

In this subsection I will briefly discuss a set of data on personal names as possessors in Northern Swedish, which has not yet been analysed.

In 5.3.1, I suggested that a noun may assign genitival Case to a proprial pronoun/article. Under this assumption we may explain a

[30] We would also predict that an ordinary possessive genitival would be able to co-occur with a possessive pronoun. This is however impossible, so something more will have to be said. Intuitively such noun phrases should be ruled out by the Theta-criterion, having two overt lexicalisations of possession. It is possibly the case that the possessive pronoun licenses a *pro* in SpecPossP, and that there is some sort of chain relation to the genitival complement, similar to the chain in an existential construction. In order to be licit *pro* must be co-indexed both with the genitival and with Poss. The only occurrences we find of overt lexicalisations of both Poss and the complement is when they are clearly co-indexed, i.e. they are reflexive possessive pronouns (in the auxiliary possessive construction).

rather striking anomaly of some Northern Swedish dialects. Recall that in these dialects, there is a proprial article on personal names. Surprisingly, this article is missing when the name is used as a possessor. Furthermore, in some of these dialects (e.g. in Västerbotten), the personal name can be both pre- and postnominal as a possessor, and in both cases the possessee has the suffixed article. Note that the suffixed article is otherwise not found on the possessee after prenominal possessors. In fact, I claimed that a genitival *-s* excludes the suffixed article on the possessee, thus the existence of examples like (89) seems to contradict my analysis.

(89)a Pers huset
Per's house
b Huset Pers
House-the Per's

However, the contradiction posed by examples like (89) is only superficial, assuming that the *-s* in (89) is not a genitival *-s*, of the type found in the other Mainland Scandinavian languages, but the genitival form of the proprial article.

In 5.3.1, I assumed that these Northern Swedish dialects have morphological genitive on the proprial article. Furthermore, I assume that they may have raising of the personal name from N to D, exactly when the D head is genitive. As before, I gloss the proprial article *ART*.

(90) $[_{DP}\ [_{D'}\ n\ [_{NP}\ Erik\ ]\ ]\ ]$
ART-NOM/ACC Erik
$[_{DP}\ [_{D'}\ Erik_i\text{-}s\ [_{NP}\ t_i\ ]\ ]\ ]$
Erik-ART-GEN

Such an assumption would explain why the proprial article is 'missing' in possessive constructions. Furthermore we may account for the fact that the possessee takes the definite article, if we assume that possessive pronouns only can turn D into a Case assigner. If so, an ordinary article in D does not assign Case to SpecDP, i.e. SpecDP will be counted as an A'-position. Thus it should be possible to move the Case-marked personal name to SpecDP. Consider the structure in (91) below.

(91) $[_{DP1}\ [_{DP2}\ [_{D'2}\ \mathbf{Erik_i\text{-}s}\ [_{NP}\ \mathbf{t_i}\ ]]]_j\ [_{D'1}\ hus_k\text{-}et\ [_{NP}\ t_k\ \mathbf{t_j}\ ]]]$
Erik-ART-GEN *house-the*

In (91) SpecDP1 is an A-bar position. DP2 is the possessor base generated in the complement of the possessee, where it is assigned genitive case, and it has been moved by A'-movement to SpecDP1. The reason that this structure is not possible in, for instance, standard

Swedish is that the personal name cannot get Case in postnominal position. Hence it must be assigned Case in SpecDP1, and for this purpose a genitival *-s* must be generated in Poss and moved to D, thus blocking head movement of N to D.

A priori, it seems strange that a language would have raising of N to D only when D is assigned genitive case. However, a similar phenomenon is found in Western Jutlandic. Recall that these dialects have prenominal definite articles with ordinary nouns. In these dialects, there are traces of suffixed articles, but only in genitive. Thus, most of these dialects have fixed genitival forms such as *bysens [village-the-GEN]*, *livsens [life-the-GEN]*, but they lack other sorts of reminiscences of suffixed articles (cf. Schütte 1922:99).

Hansen (1927:119-150) has investigated some Old Jutlandic texts, and he shows that suffixed articles are used almost only with genitives, and that the texts show no instances of genitive forms of the prenominal article. Thus, Hansen (1927:147) concludes that Old Jutlandic used a suffixed article in genitive and a prenominal article when the noun phrase was nominative, accusative or dative. The Old Jutlandic definite article would then pattern with the proprial article in Västerbotten, having head raising in genitive, but lacking it in other cases.

The assumption that proper names in some Northern Swedish dialects raise to D, if D is genitive, may also be used to explain some other surprising data of these dialects. Some dialects of Västerbotten have family names which may take either an ordinary suffixed article or a prenominal proprial article, as illustrated in (92) below. When such family names are used as possessors, there is complementary distribution of the suffixed article on the possessor and the possessee, as illustrated in (93), cf. Åström (1893:16f.).

(92) Norström-en
Norström-the
n Norström
ART Norström

(93) Norströmens häst
Norström-the's horse
Norströms hästen
Norström's horse-the

I claim that the two different constructions in (93) are directly derivable from the fact that family names may take both sorts of articles (definite and proprial). The data will fall out from our analysis.

Let us first see what happens if an ordinary definite article is generated in the D-position of the possessor (the family name). First, we assume that the family name is raised to the D-position, attaching

the article to the name as a suffix. Second, we do not expect the possessor to receive genitive case, since that is only possible with the proprial article. Thus we expect the possessor DP to move to the upper SpecDP position in order to receive Case. The only way to make the D into a Case assigner is to raise an auxiliary pronoun from Poss to D (in this dialect the genitival *-s* is used as the auxiliary pronoun). We then arrive at an ordinary s-genitival structure as illustrated in (94) below.

(94) $[_{DP1}\ [_{DP2}\ \textbf{Norström-en}]_j\ [_{D'1}\ \text{-s}_i\ [_{PossP}\ t_i\ [_{NP}\ [_{N'}\ \text{häst}\ t_j\ ]]]]]$
Norström-the *'s* *horse*

If, on the other hand, the proprial article is generated in D of the possessor, we expect it to be assigned genitive case. The family name must then be head moved to the D-position. The possessor DP has now Case and may be left in situ (cf. (89)b above), or it may be moved to the upper SpecDP position. The DP has already received Case, and the upper D position cannot be filled by the Case assigning genitival *-s*, but an ordinary suffixed definite article is in order. Thus, we derive the structure in (95).

(95) $[_{DP1}\ [_{DP2}\ \textbf{Norström-s}]_j\ [_{D'1}\ \text{häst}_i\text{-en}\ [_{NP}\ [_{N'}\ t_i\ t_j\ ]]]$
Norström-ART-GEN *horse-the*

In (95) the family name is assigned genitive in the complement of N, and the phrase is moved to SpecDP1, which is an A'-position if the article is generated in D1. The surprising complementary distribution of articles on either possessor or possessee could then be attributed to the possibility of generating either a proprial or an ordinary definite article with family names.

As we have seen the special use of proprial articles in some Scandinavian languages can be used to explain the more free word order found with personal names, since the proprial article seems to have morphological genitive. Another Scandinavian language that treats personal names in a special way is Faroese (compare the data given in subsection 5.1.4.). It is fully possible that the special properties of Faroese personal names should also be analysed along these lines. The *-sa(r)* ending of Faroese personal names is similar to the proprial article in the way that it is compatible with personal names and with some kinship nouns, such as *mamma, pabbi [mother, father]*. I therefore propose that the *-sa(r)* ending is the genitival form of the proprial article in Faroese.[31] Note that this analysis may also

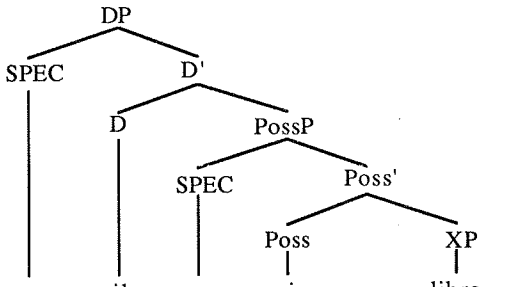
[31] Admittedly, Faroese does not show any overt representations of preproprial articles or pronouns in other cases. If we state that the *-sa(r)*-ending is a suffixed proprial article we must assume that the proprial article is covert in nominative, dative and accusative.

be extended to the special prenominal s-genitive in German. Both have the same properties: they are only possible with proper names and kinship nouns, they are only used prenominally, the form is the same in masculine and feminine, and they are not possible with group-genitives.

5.3.6. Typological Implications

We will now turn to some typological implications of our analysis. The analysis outlined in this section puts us in a position to analyse possessive constructions in other languages as well. There are three heads in the proposed structure, and we expect languages to vary with regard to head movement from one head to another. Theoretically, there are four possible alternatives: no head raising, head raising from N to Poss, head raising from Poss to D, and head raising from N to Poss and further to D. All four alternatives seem to be found, cross-linguistically, as illustrated in (76).[32]

(96)



a	il	mio	libro	(Italian)
	the	*my*	*book*	
b	az	vendég$_i$-em	t$_i$	(Hungarian)
	the	*guest-poss.1sg*		
c	min$_i$	t$_i$	bok	(Swedish)
	my		*book*	
d	kudo$_i$-m$_j$	t$_j$	t$_i$	(Mordvin)
	house-poss.1.sg			

In the Italian and Hungarian examples, I assume that the possessive pronoun/affix is marked [–definite], and the definiteness of the phrase is signalled by insertion of a definite article in D. In the Germanic languages (illustrated by Swedish in (96)) all possessive pronouns are marked [+definite], and this causes raising of the possessive pronoun to the D-position. Similarly, in Mordvin, I assume

[32] I am aware that something more will have to be said about each language when the noun phrase contains further material, such as quantifiers and adjectives.

that the possessive affix is marked [+definite], and must be raised to D^0.[33] [34]

The distinction made here between (agreeing) possessive pronouns and full genitival DPs also helps us to understand an astonishing typological fact, namely the fact that it is quite usual among languages to have pronominal and genitival possessors on opposite sides of the noun. As we mentioned in the introduction of this chapter this pattern is found in German, Russian and many Romance languages, and judging from Koptjevskaja-Tamm's (1987) typological investigation of action nominals, this phenomenon is quite frequent. In (97) below, the languages in her sample are distributed over the four possible types of word orders. (N=head noun, G=genitival possessor, Pr=pronominal possessor).[35]

(97)

	N-G	G-N
N-Pr	16	1
Pr-N	13	32

As can be seen in (97), most languages take genitival and pronominal possessors on the same side of the noun, but it is quite common to have prenominal possessive pronouns and postnominal genitives.[36] This latter type involves many Indo-European and Austronesian languages, which seem to reflect the D-structure that I have proposed in this section.

The distinction that we have made here between pronominal and genitival possessives also helps us to explain another striking typological anomaly. One of the strongest universals of language is the correspondence between prepositions and postnominal genitives. Consider Greenberg's Universal 2 (Greenberg 1966:78)

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[33] The assumption that the possessive suffix is definite in Mordvin is based on the fact that it is in complementary distribution with the (suffixed) definite article, just like the possessive pronouns in Germanic, and that objects with the possessive suffix trigger object agreement on the verb. Object agreement is otherwise only triggered by definite noun phrases in this language (Trond Trosterud, p.c.).

[34] The paradigm illustrated in (96) should probably be enlarged with languages that have a suffixed article generated in D combined with head raising of Poss to D. We would then predict two other types of languages, one with the word order *my-the house* and one with the order *house-poss.1.sg-the.* A language that seems to be of the former type is Bulgarian (cf. example (78) above). I have not found any language that corresponds to the last predicted type.

[35] The sample includes 64 languages. The two languages (English and Latin) that are classified as having both pre- and postnominal genitives are not included in the table.

[36] It has been noted before that the opposite order (prenominal genitives and postnominal possessive pronouns) is quite rare (e.g. Ultan 1978:24). The only language that has this marked order in Koptjevskaja-Tamm's study is Kobon (New Guinea). Ultan mentions Assiniboine (North America) as another example of this marked type.

(98) **Greenberg's Universal 2**
In languages with prepositions, the genitive almost always follows the governing noun, while in languages with postpositions it almost always precedes.

In generative terms (98) states that [–V] categories select their complements on the same side of the head. In Greenberg's basic sample (30 languages), only one language, namely Norwegian, appears to be a counterexample to the universal, having prepositions but prenominal genitival noun phrases (Greenberg classifies Norwegian as having only prenominal genitives.[37]). In Greenberg's appendix II, where he lists nearly all the languages of the world with regard to some central syntactic properties, we find only six prepositional languages with prenominal genitives, among them are the three Mainland Scandinavian languages. Additionally three prepositional languages have both pre- and postnominal genitives, among them English.[38]

Thus, several of the counterexamples to Greenberg's Universal 2 are found in Germanic languages that use the special s-genitive. If our analysis of Mainland Scandinavian and English s-genitive as an auxiliary pronominal possessive construction is correct, we can explain why these languages seem to deviate from the general pattern described in the Universal. The possessor DPs are generated to the right of the noun, as predicted by Greenberg's Universal 2, but due to a marked combination of syntactic properties they turn up to the left of the noun. These properties involve lack of morphological case and lack of standard prepositions (in Danish and Swedish), which makes postnominal genitives illicit. They also involve the article system (entailing a D-position) and prenominal possessive pronouns, which in combination can assign structural Case to the possessor DP.

Our analysis makes a further strong prediction. According to Greenberg's Universal 2, [–V] categories, i.e. nouns and prepositions, always take their complement on the same side of the head. If Poss is also a [–V] category, which seems natural to assume, we would expect Poss to take its complement on the same side as N and P. Thus if N takes its complement (the genitive) to the right, then Poss will take the possessee to its right. Above I assumed that languages with agreeing possessive pronouns had them generated in Poss. We then arrive at the following prediction.

(99) In languages with (agreeing) possessive pronouns, genitives and possessive pronouns appear on opposite sides of the noun.

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[37] In an additional note Greenberg adds that Norwegian actually has both word orders for genitives.

[38] Apart from the three Mainland Scandinavian languages, Milpa Alta Nahuatl (Mexico), Arapesh (New Guinea) and Amharic (Ethiopia) have prepositions and

Recall that pronouns denoting possession in, for instance, the Finno-Ugric languages do not agree with their head nouns, and that they take the same sort of genitival ending as ordinary nouns. Therefore, such pronouns were assumed to be parallel to full genitival DPs (and not generated in Poss). Thus we arrive at the following prediction.

(100) In languages with non-agreeing pronouns (which may take genitival inflection), genitival and pronominal possessors appear on the same side of the noun.

If we accept the analysis of s-genitivals as auxiliary pronominal possessive constructions, these predictions seem to hold for all the European languages.

5.3.7. Residual Problems

In this section, I have presented an analysis that enables me to account for the central possessive constructions with absolute nouns in Scandinavian. However, I have left several interesting constructions and problems aside.

First, I have not said anything about relational nouns. Most of them can easily be accounted for with the analysis presented here, but for nominalisations, which may take two arguments, something more has to be said. With such nouns it seems as if the noun takes both its arguments to the right in several languages, as illustrated in (101)-(103) below.

(101) þessi greining Jóns á vandamálinu (Icelandic)
this analysis Jón-GEN of problem-the
(102) der Wut des Mannes auf sich (German)
the fury the-GEN man-GEN at himself
(103) l'aggressivita di Gianni contro se stesso (Italian)
the aggressivity of Gianni against himself

The fact that the subjective genitive may bind the objective genitive (as illustrated in (102)-(103)) and the fact that the head noun is found to the left of both arguments have caused several linguists to assume that the noun (or verbal stem) is head moved from its basic position to a head to the left. Such an analysis has been proposed by e.g. Valois (1991), Sigurðsson (1993). They label the phrase that the noun moves to Nominalisation Phrase and Kase Phrase, respectively. Here, I have not discussed such constructions at all.

Second, I have not discussed how predicative possessive pronouns and genitivals should be analysed. An interesting difference in this respect is discussed for English by Anderson (1983): relational

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prenominal genitives. Apart from English, Tigrinya (Ethiopia) and Tagalog (Philippines) are prepositional languages with both pre- and postnominal genitives.

nouns cannot take their possessors as predicates. This restriction works the same in the Mainland Scandinavian languages as well.

(104) Den här boken är min/Kalles
This book-the is my / Kalle's
(105) *Den här baksidan är bokens
This back-the is book-the's
*Förstörelsen var stadens
Destruction-the was city-the's

In French, predicative possessives are fine with the preposition *à*, whereas they are not allowed with the preposition *de* (cf. Tremblay 1991). In German, a predicative possessive pronoun can be uninflected, thus behaving as a predicative adjective, but it may also take strong agreement. Interestingly, Icelandic seems to lack predicative possessives.

Within an optimal analysis of possessive constructions, these questions should be given some interesting answers. I have not given such answers here, and I leave this for further research.

5.4. Conclusions

In section 5.1, I have presented the various Scandinavian possessive constructions, showing the great diversity of constructions in these languages. The properties of these constructions are dependent both on the semantics of the head noun (absolute or relational), and properties of the possessor (pronoun, personal name or ordinary DP). Furthermore I have shown that the constructions differ with regard to word order, use of articles and morphology.

In section 5.2, I presented some previous analyses of those constructions. Most of them were seen to be concerned with the difference between pre- and postnominal possessive pronouns, and all of them have tried to analyse this difference as the presence versus absence of head movement of the noun. I have pointed out some shortcomings of such an analysis. For instance, it does not give any answer to the agreement occurring on possessive pronouns in Scandinavian, it implies a clitic movement of prenominal possessive pronouns, which is not compatible with other instances of clitic/weak pronoun movement. It is also hard to make such analyses parallel to auxiliary pronominal constructions.

I have argued that pronominal possessive constructions should be separated from genitival possessive constructions because they have different head status and different S-structure distribution. I further argued that all possessive pronouns, including auxiliary pronouns found in various Germanic languages, should be treated alike, and that the genitival *-s*, found in Mainland Scandinavian and English should also be analysed as an instance of pronominal possessives.

I have argued that all possessor DPs are base generated in the complement of N, and that they may receive Case in that position in some of the Scandinavian languages and constructions. Case on the possessor DP can be realised as morphological case or it can be assigned by a preposition. In some languages both these means of Case assignment are missing, and the possessor can then only be assigned (structural) Case by movement to SpecDP.

In my analysis, possessive pronouns are generated as heads of a PossP situated in-between D and NP/DegP/AP. Possessive pronouns are definite in the Scandinavian languages, and for this reason they always have to move to D, a position which they turn into a structural Case assigner. Thus a Case-less DP possessor may move to SpecDP in order to be assigned structural Case.

I have shown that the proposed analysis can account for all the central possessive constructions in Scandinavian, and that it has interesting typological implications.

Finally, I have pointed out two constructions that I have not dealt with here, namely relational nouns taking two arguments and the predicative possessive constructions. I leave these matters for further research.

CHAPTER 6
QUANTIFICATION

In this chapter, I am going to discuss in some detail the properties of quantification in the noun phrase. This is a broad field of investigation, with several semantic, morphological and syntactic problems. Here I will concentrate on some syntactic and morphological properties of quantified noun phrases.[1] There are basically two types of quantifiers compatible with noun phrases in Scandinavian: pronouns and full noun phrases (DPs). Pronouns may take either a bare noun or a definite DP. In the latter case the DP can directly follow the pronoun, or it can be embedded within a PP, as illustrated for Swedish in (1) below.

(1) **Pronominal quantification**
a några bilar
some cars
b båda bilarna / båda de gamla bilarna
both cars-the / both the old cars-the
några av bilarna / några av de gamla bilarna
some of cars-the / some of the old cars-the

A noun phrase (a DP) may also be used as a quantifier. Again the quantified element may be either a single noun or a definite DP, the latter embedded within a PP.

(2) **Phrasal quantification**
a ett antal bilar
a number cars
b en antal av bilarna / ett antal av de gamla bilarna
a number of cars-the / a number of the old cars-the

As can be seen above, both pronominal and phrasal quantification involve one construction with an indefinite noun (the a-examples above) and another with a definite noun phrase (the b-examples above). I will call the former type of construction the *pseudopartitive construction* and the latter one the (genuine) *partitive construction*. These terms (originally due to Selkirk 1977) are normally only used about phrasal quantification, but I will extend the use of the terms to pronominal quantification. These terms are convenient to describe the surface string of quantified noun phrases, but as I will

[1] As shown by Milsark (1976:120ff.) most quantifying pronouns are ambiguous between a cardinal and a quantifying reading in a phrase like *many girls* in English. These different interpretations are sensitive to the S-structure position of the noun phrase. Milsark shows that they become unambiguous in existential sentences, whereas they are ambiguous in subject position. de Hoop (1992) shows that scrambling also disambiguates them in Dutch. I will not discuss such matters here.

show, the pseudopartitive construction will have to be analysed as ambiguous, having two different structures. It is also practical to use special names for the two elements in the examples (1)-(2) above. I will simply talk about the quantifying elements (pronouns or DPs) as *quantifiers* and the noun or noun phrase that is quantified over as the *quantified noun* or the *quantified phrase*.

Both sorts of quantifiers can be inherently specified for the countability of the quantified noun. A quantifier like *ett antal [a number]* always quantifies countable nouns, whereas *en mängd [an amount]* always quantifies over uncountables. Recall from section 2.3 that both singular and plural nouns may be used as uncountables. As in chapter 2, I will use the term uncountables about inherently uncountable nouns, like *mjölk [milk]*, and countable nouns used in the uncountable function, that is the singular of *potato*-class words and the plural of *carrot*-type words.

To determine which word is the head of the noun phrase, I will use agreement of predicative adjectives as a test. I will make the trivial assumption that predicative agreement is triggered by the head chain of the noun phrase (containing D and N), and that specifiers and complements of the noun may not trigger agreement on a predicative. Since all quantifiers precede their quantified nouns, the most natural way to analyse the variation of agreement would be to assume that a quantifier that does not trigger agreement on a predicative is a specifier and that its quantified noun constitutes the head of the phrase. When the predicative agrees with the quantifier we would have to assume that the quantifier constitutes the head of the phrase, and that its quantified noun is generated in its complement position. This is the line of reasoning that I will pursue.

Sometimes quantifying elements are assumed to involve a special functional projection, a Quantifier Phrase (QP). However, I see no need for such a phrase in the Scandinavian languages (compare section 3.4 and subsection 6.1.3. below). I assume that quantifying elements may be properly analysed within a structure with only the heads N and D. In section 6.1, I will assume that quantifying pronouns can be generated in two positions, either in N or in D. In section 6.2, I will propose that quantifying DPs can also be generated in two different positions. Either the quantifying noun is generated in N, taking the quantified noun phrase as its complement, or the quantifying noun phrase is a specifier of the quantified noun. I will show that several syntactic properties of pseudopartitive constructions fall out from this difference. In section 6.3, I turn to a comparison between pronominal and phrasal quantification, and in 6.4, I summarise the chapter.

6.1. Pronominal Quantification

In this section, I will distinguish between partitive and pseudopartitive pronominal constructions. As mentioned above the difference between the two constructions is determined by the definiteness of the mass denoting noun phrase. In the Scandinavian languages, one pseudopartitive and three genuine partitive constructions are found. All of them are represented in Icelandic, as illustrated in (3)-(4) .

(3) **Pronominal pseudopartitive construction:**
sumir bílar
some cars

(4) **Pronominal partitive constructions:**
a sumir bílarnir
some-masc.pl.nom cars-the-masc.pl.nom
b sumir af bílunum
some-masc.pl.nom of cars-the-masc.pl.dat
c sumir bílanna
some-masc.pl.nom cars-the-masc.pl.gen

All the examples in (4) have partitive meaning, they mean 'some of the cars'. The construction in (4)a involves a definite DP that takes the same case, number and gender as the pronoun. I will call it the *DP-partitive construction*. The construction in (4)b involves a PP with *af [of]*, which governs a definite DP in dative case. The pronoun has the same gender as the noun. I will call this the *PP-partitive construction*. In (4)c there is a definite DP in genitive plural directly following the pronoun. The pronoun has the same gender as the noun. I will call this the *genitival partitive construction*.[2]

Partitivity always involves a presupposed set of items (given by the situation or the context), from which another set is selected. Under this definition also constructions with universal pronouns, like the ones in (5), are partitive constructions.

(5) allir / báðir bílarnir
all / both cars-the

In (5) the selected set happens to be equivalent to the presupposed set, and thus we do not normally call this relation partitive, but in a logical sense it is exactly the same relation as the one that holds in other expressions of partitivity. Therefore I will extend the use of the term partitive also to such constructions.[3]

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[2] The three different partitive constructions differ stylistically in Icelandic, when the quantified phrase has a prenominal determiner. In such cases, the PP-partitive (*einn af þessum bílum, one of these cars*) and the genitival partitive (*einn þessara bíla*)are normally preferred to the DP-partitive (*einn þessi bíll*) (Sigurðsson 1993:128).

[3] In principle pronouns also have a presupposed set in the pseudopartitive construction. Most pronouns in this construction are ambiguous between the quantificational and the cardinal reading (cf. fn.1); in the former they have a presupposed set.

The aim of this section is twofold. First, I want to present some relevant data about the various quantifying constructions in Scandinavian (subsection 6.1.1). Second, I will propose an analysis of the different constructions. I will discuss the pseudopartitive construction in subsection 6.1.2, where I take pronouns to be generated in the D-position, and in subsection 6.1.3, I discuss the three to the genuine partitive constructions.

6.1.1. Quantifying Pronouns

The Scandinavian languages behave differently with regard to the different constructions mentioned above. Generally, the Mainland Scandinavian languages have one system and Icelandic another, Faroese taking an intermediate position. Here, I will illustrate the Swedish and Icelandic systems. The numerals and the words *många, få, båda, alla [many, few, both, all]* will be considered to be quantifying pronouns in the same way as indefinite pronouns like *någon, ingen, varje [some, no, each]*.[4] Most pronouns agree with the noun, but there is also a construction with non-agreeing pronouns (in the default form, which is neuter singular).

There are three important distinctions that have to be made if we want to classify quantifying pronominal constructions in Scandinavian, one semantic, one syntactic and one morphological.

First, pronouns are inherently specified for the number of the presupposed set of the partitive relation. This (semantic) number is uncountable or countable. In the latter case pronouns can be specified for singular, dual or plural of the presupposed set. For instance, a pronoun like *båda [both]* always presupposes a set of two items.[5]

Second, pronouns can be part of the four quantifying constructions that were presented above: the pseudopartitive, DP-partitive, PP-partitive and genitival partitive constructions. Pronouns differ with regard to which of these constructions they may occur in.

Thirdly, pronouns are inherently specified for their own morphological number (singular or plural), which is normally in agreement with the number of the quantified noun. A pronoun like *var/ varje [each]* is only found in singular, whereas a pronoun like *båda* is only found in plural. Most pronouns however have both a singular and a plural form.

It should be emphasised that morphological number must be kept apart from the (semantic) number of the presupposed set. The noun phrases *ingen man [no man]* and *inga män [no men]* have dif-

[4] Words like *många, få, båda, alla [many, few, both, all]* and the numerals may also appear in between the D and N positions. As I showed in section 3.4. they have special properties in that position and should be treated as adjectives.

[5] The inherent specification for dual number of the presupposed group is the only instance of dual number in Modern Scandinavian.

ferent morphological number, but the presupposed set from which *no man / no men* are picked is countable plural in both cases. Similarly, *vart/varje hus [each house]* is always morphologically singular, but it always has a plural presupposed set.

Below, I will present the basic data of Swedish and Icelandic, making notes on the other languages. I will concentrate on the number of the presupposed set and the possibility of using the different quantifying constructions, since these two factors seem to be correlated. Morphological number is normally only indicated indirectly in the examples.

Swedish uses the pseudopartitive construction and two partitive constructions with pronouns, the DP-partitive and the PP-partitive (the lack of morphological genitive making the genitival partitive construction impossible). Among the universal pronouns there is one that is specified for both uncountable and countable plural of the presupposed set, namely *all/alla [all]*. Its singular form is only compatible with an uncountable presupposed set. It may be part of both a pseudopartitive and a DP-partitive.

(6)	**Pseudo-partitive**	**DP-partitive**	**PP-partitive**
	all mjölk	all mjölken	*all av mjölken
	all milk	*all milk-the*	*all of milk-the*
	alla flickor	alla flickorna	??alla av flickorna
	all girls	*all girls-the*	*all of girls-the*

The other universal pronouns are specified for countable number: *hela / halva [whole, half]* (singular), *båda [both]* (dual), *var/varje [each], varenda en /vartenda ett [every one], samtliga [all]* (plural).[6]

(7)	**Pseudo-partitive**	**DP-partitive**	**PP-partitive**
a)	*hela bil	hela bilen	*hela av bilen
	whole car	*whole car-the*	*whole of car-the*
b)	*båda bilar	båda bilarna	*båda av bilarna
	both cars	*both cars-the*	*both of cars-the*
c)	varje bil	*varje bilen	*varje av bilarna
	each car	*each car-the*	*each of cars-the*
	?varenda en bil	*varenda en bilen	varenda en av bilarna
	every-one car	*every -one car-the*	*every-one of cars-the*
	samtliga bilar	??samtliga bilarna	??samtliga av bilarna
	all cars	*all cars-the*	*all of cars-the*

[6] The words *hela/halva [whole, half]* may also be used as adjectives, but then they are in agreement with the noun as an ordinary adjective: *hel/helt/hela [undamaged, not half], halv/halvt/halva [parted in two]*

The pronoun *varenda [every]* patterns with *varje [each]*, whereas *var och en / vart och ett [each and (every) one]* patterns with *varenda en [every one]*.

Among the existential pronouns *någon [some/any], ingen [no], vilken [which]* may be combined with uncountable or with countable plural in the presupposed set. The same is true for *somlig [some], åtskillig [a considerable amount/several]*, but their singular form may only be combined with an uncountable presupposed set. The other pronouns have more restricted use. The pronoun *mycken [much]* is only singular and it has an uncountable presupposed set.[7] A special group of pronouns ending in *-dera* can morphologically only be singular and they are inherently specified for dual: *någondera [any of two], ingendera [neither]* etc. Others are just specified for countable plural (of the presupposed set): *mången [many a], många [many], få [few]*, and the numerals. Below, the typical pattern is illustrated for uncountable (a), countable dual (b) and countable plural (c). [8]

(8)	**Pseudo-partitive**	**DP-partitive**	**PP-partitive**
a	någon mjölk	*någon mjölken	*någon av mjölken
	some milk	*some milk-the*	*some of milk-the*
b	*ingendera pojke	ingendera pojken	ingendera av pojkarna
	neither boy	*neither boy-the*	*neither of boys-the*
c	en/någon pojke	*en/*någon pojken	en/någon av pojkarna
	one/some boy	*one/some boy-the*	*one/some of boys-the*
	många/två pojkar	*många/*två pojkarna	många/två av pojkarna
	many/two boys	*many/two boys-the*	*many/two of boys-the*

The pronouns that we have discussed so far all agree with the quantified noun. There is also a small group of existential pronouns that do not agree, namely *mycket [much], lite(t) [little]* and marginally *vad [what]*. These pronouns are specified for an uncountable presupposed set. Recall that uncountables can be morphologically both singular and plural.[9]

---

[7] The use of agreeing *mycken/mycket [much-uter.sg/neuter.sg]* is archaic, and normally only found in high style or in fixed expressions. Normally, the neuter.sg form *mycket* is used without agreement with the noun (see below).

[8] The three Mainland Scandinavian languages pattern in the way exemplified by Swedish here. Generally the DP-partitive is disallowed with existential pronouns specified for a plural presupposed set. There are however a few exceptions.

First, the Mainland Scandinavian languages may marginally accept the DP-partitive construction with the singular numeral *en [one]*, if the quantified noun phrase has a possessor, or if the DP contains a superlative adjective (cf. Teleman 1969:87f. and Perridon 1989:186f.)

(i) ?en min bil
one my car 'one of my cars'

(ii) en den vackraste prinsessa
one the prettiest princess

Second, some variants of Norwegian allow *en/ein [one]* to participate in a DP-partitive if the noun has the suffixed article (see further Hulthén 1947:97).

(iii) en dagen
one day-the 'one day / one of these days'

[9] Similarly, a reduced neuter singular form of *någon [some], ingen [no]*, may be used in colloquial Swedish, if it occurs in a negated or interrogative sentence.

(i) Har du nå' rena kläder?
Have you any clean clothes

(ii) Jag har inge' pengar
I have no money

(9) mycket mjölk/morötter
much-neuter.sg milk-uter.sg/carrots-uter.pl

These pronouns may marginally allow the preposition *med [with]* to intervene between the pronoun and the noun.

(10) ?Här finns det mycket med grejer
Here is there much with stuff
?Vad med slipsar du har!
What with ties you have 'So many ties you have]

The non-agreeing pronouns also deviate from agreeing pronouns that take an uncountable presupposed set, in being possible in the PP-partitive construction (compare (8)a above).

(11)	**Pseudo-partitive**	**DP-partitive**	**PP-partitive**
	mycket mjölk	*mycket mjölken	mycket av mjölken
	much milk	*much milk-the*	*much of milk-the*

Consider next the Icelandic system of pronominal quantifiers. The system is similar to the Swedish one, but it differs in several respects.[10] Among the universal pronouns, *allur [all]* is specified for uncountable as well as countable singular and countable plural of the presupposed set, (thus functioning both as *all/alla* and *hela* in Swedish). Other universal pronouns are specified for one specific countable number. The pronouns *báðir [both]* and *hvor (um sig) [each of two]* are inherently specified for a dual presupposed set, whereas *hver* and *sérhver [every* and *each]* are specified for a plural set. They pattern as follows.[11]

(12)	**Pseudo partitive**	**DP-partitive**	**PP-partitive**	**Genitival partitive**
a	allir bílar	allir bílarnir	*allir af bílunum	*allir bílanna
	all cars	*all cars-the*	*all of cars-the*	*all cars-the-GEN*
b	*báðir bílar	báðir bílarnir	*báðir af bílunum	*báðir bílanna
	both cars	*both cars-the*	*both of cars-the*	*both cars-the-GEN*
c	hver bíll	*hver bíllinn	*hver af bílunum	*hver bílanna
	every cart	*every car-the*	*every of cars-the*	*every cars-the-GEN*

[10] Faroese is similar to Icelandic, for instance it allows the DP-partitive construction with existential pronouns like *onkur [any]* (see Hultman 1967 and Lockwood 1964:132ff.). However, since Faroese lacks genitive case, there is no genitival partitive construction at all.

[11] There is some variation among the distributive pronouns. *Sérhver [each]* and *hvor (um sig) [each of two]* are somewhat better than *hver [every], báðir [both]* in the genitival partitive and perhaps also in the PP-partitive construction.

Turning to the existential pronouns, we find that Icelandic differs from Swedish primarily in the respect that Icelandic has existential pronouns specified for a plural presupposed set that occur in the DP-partitive construction. The pronouns *enginn [no], hver [which], einhver [some], neinn* [negation-dependent *any]* and *nokkur* [question-dependent *any]* are specified for uncountable and countable plural of the presupposed set. So are *sumur [some]* and *viss [certain]*, but their singular form is only compatible with an uncountable presupposed set. The pronoun *hinn [the other of two, the rest of many]* is compatible with both dual and plural of the presupposed set. There are also pronouns specified only for one number of the presupposed set: *annar [one of two]*[12], *hvorugur [neither]* and *hvor [which of two]* are specified for dual, and *margir, fáir [many, few]* and the numerals for plural. There is a great deal of variation between different pronouns. Judgements sometimes vary, and different choice of noun and context changes the judgements, but I think the following is a fair generalisation.[13]

(13)	**Pseudo-partitive**	**DP-partitive**	**PP-partitive**	**Genitival partitive**
a	sum mjólk *some milk*	*sum mjólkin *some milk-the*	*sum af mjólkinni *some of milk-the*	*sum mjólkurinnar *some milk-the-GEN*
b	*hvorugur bíll *neither car*	hvorugur bíllinn *neither car-the*	hvorugur af bílunum *neither of cars-the*	hvorugur bílanna *neither cars-the-GEN*
c	einn bíll *one car*	einn bíllinn *one car-the*	einn af bílunum *one of cars-the*	einn bílanna *one cars-the-GEN*
d	einhver bíll *some car*	*einhver bíllinn *some car-the*	einhver af bílunum *some of cars-the*	einhver bílanna *some cars-the-GEN*

Note that some of the pronouns specified for a countable plural presupposed set, cf. (13c) above, may be part of the DP-partitive, whereas others cannot. According to Sigurðsson (1993), morphological plural is better than singular in the DP-partitive construction with some pronouns (*einhver* belongs to this group).

Icelandic may (like Swedish) use non-agreeing pronoun, like *mikið, litið [much, little]* in the pseudopartitive construction, but then there must be a preposition *af [of]*.

(14) mikið af jarðaberjum
much of strawberries

---

[12] The pronoun *annar* has also two other meanings. It can mean 'another one' (than the one of interest in the discourse) or 'second'. In these two meanings I consider it a to be an adjective.

[13] It is useful to compare the data given by Jónsdóttir (1991) and Sigurðsson (1993). Most of the Icelandic data given here are the result of long discussions with Halldór Ármann Sigurðsson during the autumn of 1991. He should not be blamed for any mistakes.

As should be clear from the presentation above, quantifying pronouns often have their own individual pattern of allowing the different quantifying constructions. However, some generalisations can be made. In both Swedish and Icelandic, the following holds.

> –Pronouns specified for a singular or dual presupposed set are allowed in the DP-partitive construction, but disallowed in pseudopartitives.
> –Universal pronouns are normally disallowed in the PP- and genitival partitive constructions.

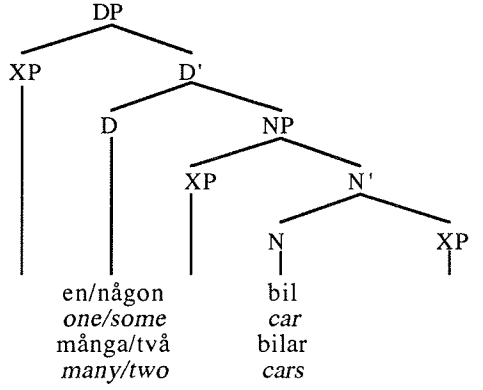
The main differences between Swedish and Icelandic is that Icelandic (but not Swedish) allows existential pronouns specified for a plural presupposed set to appear in the DP-partitive. Furthermore Icelandic has the genitival partitive, which is lacking in Swedish.

We will now turn to an analysis of the different quantifying constructions presented above. The structure of the pseudopartitive construction is normally considered unproblematic (this also goes for the PP-partitive construction to some extent). The other constructions have been shown little interest in previous research.

6.1.2. Pseudopartitive Pronominal Constructions

Indefinite pronouns have the same function as definite determiners, since they always make a noun phrase licit in argumental position. An ordinary pseudopartitive noun phrase containing an indefinite pronoun and a bare noun seems straightforward to analyse. The indefinite pronoun will be generated in D and the noun in N, as depicted in (15) below.

(15)



The agreement between D and N is accounted for in the usual way, by percolation of ϕ-features. In cases like (15), I assume that both N and D contains a [+count] feature. As a feature in the head of DP it

makes the whole phrase countable. The feature may also be specified [–count]. The feature in D can be licensed by a lexical pronoun like *en/någon* that is [+count] or by [–count] pronouns, for instance *all* or *mycken [all* or *much]* or the partitive article which is overt in Northern Swedish but null in the other Scandinavian languages (cf. section 2.3). As we proceed, we will see that the [±count] feature in D can also be licensed by spec-head agreement with a quantifying noun phrase (see further section 6.2.2).

The problematic pseudopartitive constructions are the ones with non-agreeing pronouns. When the pronoun has the default form and the noun has an inflected form, like in (16), it is not entirely clear that the structure in (15) is optimal.

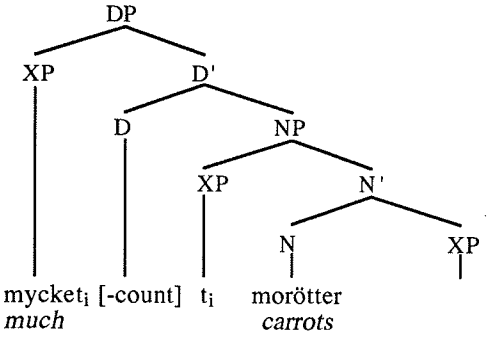
(16) mycket mjölk/potatis/morötter
much-neuter.sg milk-uter/carrots-uter.pl/potato-uter.sg

It could be argued that the non-agreeing pronoun expresses the default form, and that this form actually represents agreement with uncountables, since predicative adjectives often show this default form with uncountable subjects (compare examples (56)-(57) of chapter 2). However, if the non-agreeing pronoun in (16) were to be generated in D, it would be the head of the whole noun phrase, and we would expect it to trigger agreement on a predicative adjective/participle, but this is not borne out.

(17) Vid rånet blev mycket pengar ??stulet/stulna
At robbery-the was much money stolen
*[neuter.sg][uter.pl] [*neuter.sg]/[pl]*

A possible analysis of phrases like the one in (16) compatible with the agreement data in (17) would be to have the pronoun generated (as a maximal phrase) in the specifier of NP, and to raise it to SpecDP.

(18)



In (18) the pronoun *mycket* must move to SpecDP in order to enter into a spec-head relation with the [-count] feature in D. I assume that a quantifying element like *mycket* must raise to SpecDP, in roughly the same way as wh-elements must raise to SpecCP in the clause. This analysis will be able to account for the agreement with the quantified noun (cf. (17) above), but it is not obvious that it explains anything else. I will leave the question for further research.[14]

6.1.3. Partitive Pronominal Constructions

Different pronouns have different possibilities of occurring in the three partitive constructions. In the PP-partitive and the genitival partitive, we have clear indications that the quantified noun phrase is dependent (it is embedded in a PP or assigned genitival Case). In the DP-partitive, it is much less clear which element constitutes the head of the expression. I assume that the latter construction has the same structure as the other two, and that the three constructions represent different ways for the quantified noun phrase to receive Case. In the genitival partitive, the quantified phrase is assigned case by the pronoun, in the PP-partitive a preposition is inserted to assign case, and in the DP-partitive there is Case percolation from the pronoun.

Let us begin by making some structural generalisations about the DP-partitive construction in Icelandic, where it is most frequently used. First, the pronouns that allow a noun with the suffixed definite article normally also allow a full DP. The pronouns that do not allow a noun with the suffixed article do not allow a full DP.

(19) allir strákarnir / allir þessir strákar
all boys-the *all these boys*
sumar stelpurnar / sumar þessar stelpur
some-pl girls *some-pl these girls*

(20) *einhver bíllinn / *einhver þessi bíll
some-sg car-the *some-sg. this car*
*nokkrir bílarnir / *nokkrir þessir bílar
several cars-the *several these cars*

---

[14] The pseudopartitive constructions with non-agreeing pronouns and a PP (found in Icelandic and marginally also in Swedish; compare (10) and (14) above) would probably have to be given another analysis. In Swedish, these constructions become even more marginal in subject position, but it is quite clear that the quantified noun controls agreement.

(i) mycket med grejer hade blivit *stulet/?stulna
much-neuter.sg with stuff-pl had been stolen [neuter.sg / pl]

In Icelandic, the verb and a participle may have either quantifier or mass agreement (cf. (i) and (ii) respectively). Normative grammarians recommend the form with quantifier agreement, that is (iii).

(i) mikið af jarðaberjum var horfið
much of strawberries was disappeared
[neuter.sg] [neuter.pl] [neuter.sg]

(ii) mikið af jarðaberjum voru horfin
much of strawberries were disappeared
[neuter.sg] [neuter.pl] [neuter.pl]

The examples above indicate that the pronouns do not select a special form of the noun, but a certain kind of phrase, in (19) a DP.

Second, constructions with both a possessive pronoun and a quantifier show that the pronoun selects DP. A pronoun like *hvorugur [neither]* is only compatible with a noun with the suffixed article, but not with a bare noun (compare (13)b above). As we showed in chapter 5, some relational nouns cannot appear with a possessive pronoun if they have the suffixed article.

(21) *hvorugur bróðir
hvorugur bróðirinn
neither brother(-the)

(22) bróðir minn
*bróðirinn minn
brother(-the) my

If we combine these two constructions, we find that the form of the noun is restricted by the possessive pronoun, not by the quantifying pronoun.

(23) hvorugur bróðir minn
neither brother my (neither of my two brothers)
*hvorugur bróðirinn minn
neither brother-the my

From (21)-(23) we may conclude that the noun and the possessive pronoun make up a DP together, and that the quantifying pronoun is situated outside this DP.

(24) hvorugur [$_{DP}$ bróðir minn]
neither brother my

Third, adjectival inflection also indicates that the quantifying pronoun in a DP-partitive construction is situated outside the DP. Recall that the strong form of adjectives is used in indefinite noun phrases, whereas the weak form is used in definite noun phrases. In a quantifying structure with an indefinite pronoun and a definite noun, the adjective always takes the weak form, implying that the pronoun does not affect the form of the adjective.

(25) *hvorugur gamall maðurinn
neither old[str] man-the
hvorugur gamli maðurinn
neither old[wk] man-the

Thus we would analyse the noun and adjective together in the same way as we have previously analysed Icelandic definite noun phrases, i.e. with an empty D-position (cf. the discussion in 4.2).

(26) hvorugur [DP [D' e [AP gamli [NP maðurinn]]]]
neither *old[wk]* *man-the*

A last observation about the DP-partitive construction is that pronouns that are allowed in this construction often appear separated from the DP. This is normally known as floating quantifier constructions in the generative literature. In a language like Swedish, universal pronouns, like *alla, båda [all, both]*, which may appear in a DP-partitive construction may also appear in floating quantifier constructions.[15]

(27) Lärarna har **alla** samlats i kafferummet
*Teachers-the have **all** gathered in coffee-room-the*
Bröderna har **båda** fått godkänt på provet
*Brothers-the have **both** got approved on exam-the*

In Icelandic, there is a similar correlation between the pronouns that may appear in a DP-partitive construction and pronouns that may be floated. This is pointed out in Sigurðsson (1993:128f.). Consider his examples in (28)-(29).

(28) **margar/einhverjar/allar** þessar kenningar
many / some / all *these theories*
Þessar kenningar hafa **margar/einhverjar/allar** verið ræddar
*These theories have **many / some / all** been discussed*
(29) **fjórar** þessar nýju kenningar
four *these new theories*
*Þessar nýju kenningar hafa **fjórar** verið ræddar
*These new theories have **four** been discussed*

The data presented above imply that the DP-partitive construction is connected to the floating quantifier construction. I will assume that the DP-partitive construction represents the D-structure of the floating quantifier construction.[16]

In the PP-partitive construction the quantifier may also be floated, but in the genitival partitive construction it may not. Consider Sigurðsson's examples in (30).

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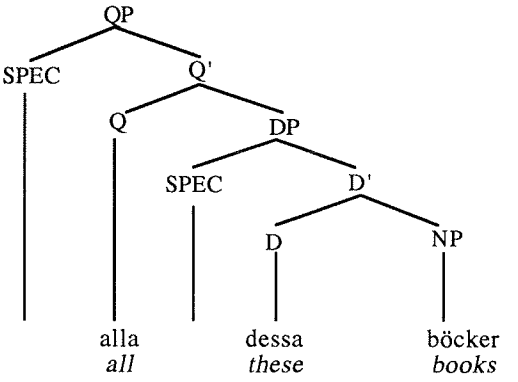
[15] For some reason, the universal quantifiers with an uncountable or a countable singular noun in the presupposed set: *all / hela / halva [all-sing. / whole / half]* may not be floated.
(i) *mjölken har all blivit uppdrucken
milk-the has all been up-drunk
(ii) *huset har hela/halva brunnit ner
house-the has whole/half burned down

[16] There are however exceptions from this generalisation. According to Jónsdottir (1991), a pronoun like *annar [one of two]* can occur in a DP-partitive construction, but it may not be stranded. On the other hand *hver* may not be part of a DP-partitive, but may be stranded. I have no explanation for this behaviour.

(30) Af þessum nýju kenningar hafa **sumar** verið ræddar.
*Of these new theories have **some** been discussed*
*Þessara nýju kenninga hafa **sumar** verið ræddar.
*These-GEN new-GEN theories-GEN have **some** been discussed*

In recent analyses of quantifying pronouns, the DP has often been assumed to be introduced by a functional Q-projection (cf. e.g. Shlonsky (1991), Valois (1991), Giusti (1992) and Sigurðsson (1993)). These analyses entail a Q that takes a DP as its complement.

(31)



Shlonsky (1991), discussing Hebrew, further assumes that the DP may move to the SpecQP, thus deriving the postposed position of the quantifier in this language. Consider the structures in (32).

(32) [$_{QP}$ [$_{Q'}$ kol ha-yeladim]] (Hebrew)
all the-boys
[$_{QP}$ ha-yeladim$_i$ [$_{Q'}$ kulam t$_i$]]
the-boys all-them

Furthermore, Shlonsky connects this structure to the floating quantifier construction, illustrated in (33), where the DP moves from the complement position of QP (through SpecQP) out to the subject position of the clause (a similar analysis is proposed for Icelandic by Sigurðsson 1993).

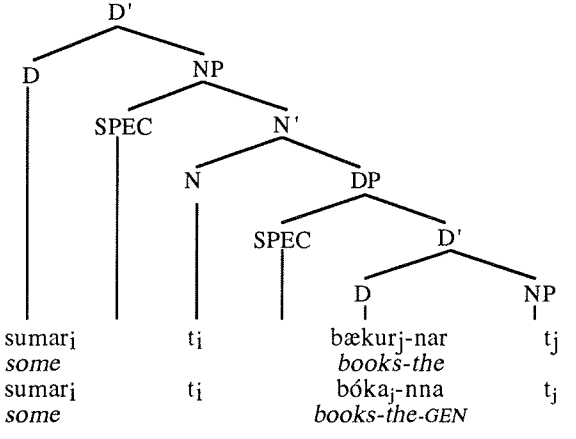
(33) ha-yeladim$_i$ axlu [$_{QP}$ t$_i$ [$_{Q'}$ kulam t$_i$] lexem
the-boys ate all-them bread

Shlonsky argues that all the examples in (32)-(33) have the same D-structure. The floating quantifier construction is then seen as stranding of the quantifier. The analysis has several advantages, but nevertheless it meets with certain problems.

Shlonsky's analysis creates a redundancy, since all noun phrases may now be either DPs or QPs. All categories selecting noun phrases must now have two alternative specifications. Maybe we could live with such a redundancy, but there are also other drawbacks with the analysis. First, if Q is a functional category, floating quantifier constructions will be seen as stranding of the Q-projection. This would go against the observation made by Abney that functional categories are never stranded (see section 3.1; cf. also the discussion in section 3.5). Second, some of the elements that appear in Q may take either an agreeing DP or a genitive DP. Thus it seems as if the pronoun in Q does assign Case to the complement. Recall that in 3.5. we made the generalisation that functional categories do not assign Case to their complements. A last possible problem is that quantifying elements are very often used independently without a lexical noun. This would probably have to be described as an intransitive Q having no DP-complement. However, functional categories are otherwise always transitive. To avoid these problems with the QP-analysis, an alternative analysis would be to generate quantifiers in partitive constructions as lexical heads in N.[17]

Quantifying pronouns have several properties that suggest that they are lexical (rather than functional) heads. They can be stranded, they assign case and they seem to appear as intransitives. For the sake of argument, let us assume that quantifying pronouns are generated in N and raised to D, to license the D-position, and that they take a DP complement. This assumption is outlined in (34).

(34)



[17] Personal pronouns are often given a similar analysis; they are assumed to be intransitive D:s. I assume that they are either Ns or transitive Ds. See the discussion in in subsection section 3.5.3.

The same structure could be assigned to PP-partitives except for the difference that the N selects a PP instead of a DP.

The analysis proposed in (34) solves some of the problems raised above. All noun phrases (quantified or not) will now be DPs. Quantifying pronouns are now lexical heads, and they may assign case, be stranded and be intransitive.[18]

Note that the agreement facts point to the pronoun as the head in the PP-partitive and the genitival partitive construction. Recall that the element that triggers agreement was assumed to be the head of the phrase.

(35) en av bröderna har blivit flintskallig/*flintskalliga (Swedish)
*one of boys-the has become bald-headed-sg./*pl*
einn af bræðrunum var barinn / *voru barðir (Icelandic)
*one of brothers-the was beaten-sg. / *were beaten-pl.*
einn bræðranna var barinn / *voru barðir (Icelandic)
one brothers-the-GEN was beaten-sg. / *were beaten-pl.

However, the analysis in (34) creates a new problem. In the DP-partitive construction, the pronoun and the DP share all features, and we would expect that this is a result of percolation from N to DP. This would however mean that a DP receives Case by percolation, which we would not expect, since DPs should be assigned Case (cf. subsection 3.5.2). In fact we would not expect any language to have both case-assignment and case inheritance in the same construction. Thus Icelandic, with both DP-partitives and genitival partitives, is a paradox. A language should simply not allow both. I will leave the question for further research.

6.2. Phrasal Quantification

In Scandinavian, there are two constructions, where a phrase (a DP) quantifies over a noun. As with pronominal quantification, phrasal quantifiers can be part of a partitive or a pseudopartitive construc-

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[18] As we mentioned in section 4.3 the Standard Swedish demonstrative *denna/detta/dessa [this uter/ neuter/plural]* has several special properties. One of them is that it appears in front of the D-position.

(i) detta det äldsta huset i Malmö
this the oldest house-the in Malmö
(ii) dessa mina många böcker
these my many books

The property to appear in front of the D-position is reminiscent of the behaviour of quantifying pronouns. I assume that Swedish *denna* may be used in the same manner as quantifying pronouns. However it differs from other quantifying pronouns in that it may be preceded by another quantifying pronoun.

(iii) alla dessa de äldsta husen i Genua
all these the oldest houses-the in Genua

This might be because the demonstrative is underspecified for the number of presupposed set and thus compatible with any other quantifier taking a DP.

tion, which are distinguished by the definiteness of the quantified noun or noun phrase. Consider the Swedish examples in (36)-(37).

(36) **Partitive construction:**
ett antal av äpplena
a number of apples-the
en liter av mjölken
a liter of milk-the

(37) **Pseudopartitive construction**
en grupp ungdomar
a group youngsters
en låda (med) äpplen
a box (with) apples

The difference between the construction above is that the genuine partitive construction in (36) has a definite quantified noun, whereas the pseudopartitive in (37) has an indefinite one. Another difference in the Swedish examples is of course the preposition. In Swedish the preposition *av [of]* is always used in genuine partitive constructions, whereas the pseudopartitive construction optionally uses the preposition *med [with]* in many cases, especially in spoken language.[19]

In Icelandic, both constructions require the preposition *af [of]*, as shown in (38) below.

(38) eitt kiló af þessu smjöri (Icelandic)
a/one kilo of this butter
eitt kiló af smjöri
a/one kilo (of) butter

Faroese behaves like Icelandic, but in the pseudopartitive construction either of the prepositions *við [with]* and *af [of]* may be used.

(39) eitt kilo av smørinum (Faroese)
a/one kilo of butter-the
eitt glas av brennivini / ein fløska við mjólk
a glass of vodka / a bottle with milk

In this section, I will concentrate on the Mainland Scandinavian pseudopartitive construction (cf. (37) above), where it is particularly

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[19] Sometimes the preposition *av [of]* may be used in pseudopartitive constructions: *en grupp av ungdomar [a group of youngsters], mängder av snö [lots of snow]*.

Semantically partitive are also phrases like the ones in (i)-(ii). However, they lack quantificational properties, and I consider them to be instances of relational nouns with possessors.

(i) benet på kalven
leg-the on calf-the

(ii) insidan av flaskan
inside-the of bottle-the

hard to decide which noun is the head.[20] Such constructions are ambiguous in several ways. Semantically, a phrase like *en flaska vin [a bottle (of) wine]* may be the object both of verbs that typically take bottles and of verbs that typically take liquids as their objects.

(40) Jag krossade/drack en flaska vin
I broke/drank a bottle wine

Likewise, the agreement facts for pseudopartitive constructions are often ambiguous. Mainland Scandinavian lacks subject-verb agreement, but predicative adjectives and participles agree with the subject in number, (in singular they also agree in gender). In many cases the predicative may agree with either of the noun phrases in a pseudopartitive construction. When it agrees with the quantifying (the first) noun I will talk about *quantifier agreement*, and when it agrees with the quantified (the second) noun, I will talk about *mass agreement*. Consider the example in (41), where both quantifier and mass agreement are possible. Since the verb never agrees, I will always translate the finite verb with the English singular.

(41) en låda äpplen har blivit stulen/stulna
a box apples has been stolen
[uter.sg] [neuter.pl] [uter.sg/pl]

In the Modern Mainland Scandinavian languages, there is normally no morphological marking in pseudopartitive constructions, but in Old Scandinavian there was.[21] One of the nouns could take genitive, and we would then assume that the non-genitive part of the phrase would be the head. However, genitive morphology is sometimes found on the quantifier and sometimes on the quantified noun, as the phrases in (42) show (see further Schwartz 1878:123ff.).

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[20] An investigation of the properties of the pseudopartitive construction in Northern Swedish would of course be relevant to the issues discussed here (compare the preliminary data given in subsection 2.3.2, where a partitive article is sometimes used). I have, however, not been able to conduct such an investigation. This is partly due to the fact that agreement is poor in this dialect. Predicative agreement is missing with participles, which are the most natural predicatives with pseudopartitive constructions. Furthermore, predicative adjectives have only two distinct forms, one in uter singular and in plural and the other in neuter singular.

[21] In Modern Icelandic genitive may be used in certain relations. A quantifying noun phrase may often be genitive, and the quantified noun or noun phrase is possible in genitive, at least with quantifying nouns like *hopur [crowd]* that normally take a countable quantified noun as its complement.

In Mainland Scandinavian, there are sometimes quantifying nouns which seem to have a genitival ending, as illustrated in (i) below.

(i) hundratals människor
hundred-number's people 'hundreds of people'

The construction is not productive; for instance, *tiotals [ten-number's]* is not possible.

(42) fiure þyni korns (Old Swedish)
four barrels grain-GEN
þrigiæ þyniæ øle
three-GEN barrels-GEN beer

The semantic, syntactic and morphological ambiguity of Mainland Scandinavian pseudopartitives seems to call for two different structures. It will be the main aim of this section to give a structural analysis of the two possibilities in Mainland Scandinavian, and to analyse the special properties of these choices.[22]

Recall from the introduction of this chapter that I assume predicative agreement to be triggered by the heads D and N, but never by specifiers or complements of N. As a consequence quantifier agreement will be taken as evidence for generating the quantifier in N, whereas mass agreement will be taken as evidence for generating the quantified noun in N, and the quantifier will then be assumed to be generated in SpecNP.

In the first subsection (6.2.1) I will discuss different quantifying nouns in Swedish, claiming that they may be classified into two groups with different syntactic behaviour. I will then turn to the basic structural proposal for pseudopartitive constructions (subsection 6.2.2), and in 6.2.3, I show that several of the differences between the two types of quantifying nouns fall out from the analysis. Then, in subsection 6.2.4, I turn to some observations about countability in the pseudopartitive construction, and in 6.2.5, I discuss the behaviour of definite quantifiers in the pseudopartitive construction. Last, I give turn to the genuine partitive construction in 6.2.6.[23]

6.2.1. Quantifying Nouns

In this subsection, I will claim that quantifying nouns may be classified into two different groups. The first group is constituted by nouns prototypically used as quantifiers, like *antal, dussin, kilo, liter [number, dozen, kilo, liter]*, whereas the second one includes ordinary nouns that are temporarily used as quantifiers, like *flaska, låda, bunt, hop [bottle, box, bunch, crowd]*. I will call the first type **genuine quantifiers** and the second type **pseudoquantifiers**. These two types of nouns differ syntactically in several respects.

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22 Traditional Swedish grammarians have often tried to attribute one structure to all pseudopartitive constructions, and hence they have been forced to include many exceptions in their analyses (cf. e.g. Körner 1933). Others have explicitly assumed two alternative structures (cf. e.g. Teleman 1969:26).

23 Much of the data and analyses presented in this section have already been published in Working Papers in Scandinavian Syntax, (Delsing 1991b). There are however some differences. In particular, this section does not assume any Q-projection.

First, genuine quantifiers may not normally be part of a pseudopartitive construction with a *med-* (*with-*) phrase, whereas this is normally possible with pseudoquantifiers.

(43) *ett antal/flertal med människor
a number/majority with people
??ett dussin/tjog med ägg
a dozen/score with eggs
??en liter/ett kilo med jordgubbar
a liter/a kilo with strawberries

(44) en grupp/hop med ungdomar
a group/crowd with youngsters
en bukett/ett fång med blommor
a bouquet/an armful with flowers
en låda/flaska med vin
a box/bottle with wine

Second, genuine quantifiers do not take the normal plural ending in pseudopartitive constructions, whereas pseudoquantifiers do. Many of the genuine quantifiers are uncountable or neuter, and such nouns do not normally have a plural ending in Swedish. However, uter nouns and neuter ones ending in a vowel should have plural morphology. In pseudopartitive constructions they do not.[24]

(45) två liter/*litrar vin
two liter/liters wine
fyra kilo/*kilon smör
four kilo/kilos butter
fem meter/*metrar ylletyg
five meter/meters woollen cloth

(46) två *grupp/grupper ungdomar
two group/groups youngsters
fyra *bukett/buketter blommor
four bouquet/bouquets flowers
fem *flaska/flaskor vin
five bottle/bottles wine

Third, genuine quantifiers are very hard to compound with the noun that they quantify, whereas pseudoquantifiers are normally easy to compound in this way.[25]

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[24] These genuine quantifiers may only take the plural form when they are used as ordinary nouns without a quantified noun (or when the they are definite, cf. 6.2.5.)

(i) hon har gått ned fyra kilon
she has gone down four kilos [=lost four kilos]

(ii) han orkade inte springa de sista kilometrarna
he managed not run the last kilometers-the

(iii) hon hällde ut de sista decilitrarna
she poured out the last deciliters-the

[25] The compound does not have exactly the same meaning as the pseudopartitive construction, though. The pseudopartitive *en flaska vin [a bottle wine]* entails that

(47) *ett turistantal, *ett människoflertal
a touristnumber, a peoplemajority
??ett tallriksdussin, *ett äggtjog
a platedozen, an eggscore
*en vinliter, *en tygmeter
a wineliter, a clothmeter

(48) en turistgrupp, en människohop
a touristgroup, a peoplecrowd
en blombukett, ett blom(ster)fång
a flowerbouquet, a flowerarmful
en vinflaska, en vinlåda
a winebottle, a winebox

Fourth, an attributive adjective of the pseudoquantifier may occasionally qualify both the quantifier and the mass noun, in the sense that *a good cup of coffee* entails that the coffee, or the whole *cup of coffee,* is good. This seems to be impossible with genuine quantifiers. The difference is most obvious if the quantified noun has an attributive adjective of its own that contradicts the first adjective. Constructions with genuine quantifiers are fine, whereas constructions with pseudoquantifiers sound like contradictions (indicated by %).

(49) ett imponerande antal (futtiga) detaljer
an imposing number futile details
en lång rad (korta) yttranden
a long row short utterances

(50) en god kopp (%dåligt) kaffe
a good cup bad coffee
en kompetent samling (%odugliga) jurister
a competent assembly incompetent lawyers

Fifth, genuine quantifiers seem to be incompatible with a possessor phrase, whereas pseudoquantifiers are not.

(51) *Kalles antal/flertal böcker
Kalle's number/majority books
??Pelles dussin/tjog kräftor
Pelle's dozen/score crayfish
??Olles kilo/liter jordgubbar
Olle's kilo/liter strawberries

(52) Kalles grupp/hop studenter
Kalle's group/crowd students
Pelles bukett/fång blommor
Pelle's bouquet/armful flowers
Olles flaska/låda vin
Olle's bottle/box wine

---

there is wine in the bottle, whereas the compound *en vinflaska [a wine bottle]* can denote an empty bottle suited for wine.

Sixth, genuine quantifiers may quantify overanother quantifier, whereas pseudoquantifiers may not. A genuine quantifier may quantify a pseudoquantifier or marginally another genuine quantifier.[26]

(53) ett antal/flertal flaskor vin
a number/more-number bottles wine
??ett dussin/tjog lådor kräftor
a dozen/score boxes crayfish

(54) *ett fång buketter blommor
an armful bouquets flowers
*en låda flaskor vin
a box bottles wine

Phrases like the ones in (54) are easy to interpret, but they are not grammatical.

There are obviously several differences between genuine quantifiers and pseudoquantifiers. However some of the quantifiers seem to be ambiguous between the groups. This ambiguity seems to be connected to whether the quantifiers are countable themselves, and whether they take countable quantified nouns. The genuine quantifiers are inherently specified for the feature [±count] of the quantified noun, whereas it is more doubtful whether pseudoquantifiers are. Some of them normally take a countable (plural) noun, whereas most of them normally take uncountable nouns. We will return to this question in section 6.2.4. To give a proper classification of quantifying nouns, we will have to consider countability, both with regard to the quantifier and to the quantified noun. [27]

(55) **Genuine uncountable quantifiers requiring:**
[+count] nouns: *antal, fåtal* [number, few-number]
[–count] nouns: *mängd, massa, summa* [amount, mass, sum]
Genuine countable quantifiers requiring:
[+count] nouns: *stycken, par, dussin* [piece, pair, dozen]
[–count] nouns: *kilo, liter, meter*
Pseudoquantifiers (all countable) requiring:
[+count] nouns: *grupp, hop, gäng* [group, crowd, gang]
[–count] nouns: *flaska, låda, bunt* [bottle, box, bunch]

Below we will see that these three types of quantifying nouns behave differently in the pseudopartitive construction. We will also see that pseudoquantifiers behave in two ways, depending on whether they

[26] Lødrup (1989:85) states that quantifier recursion is nearly ungrammatical in Norwegian, giving examples with what I call psedoquantifiers. In a footnote he notes that some examples are good, this time with (what I have called) a genuine quantifier.

[27] Note that countability of the quantifier must be kept apart from the countability that it requires for the quantified noun. A quantifier like *antal [number]* is in itself uncountable, whereas it requires the quantified noun to be countable. The opposite is true about most pseudoquantifiers, e.g. *flaska, låda [bottle, box].*

appear with unambiguous [–count] nouns or with nouns that can be interpreted as [+count].

Some genuine countable quantifiers, like *liter* or *kilo* may sometimes be interpreted as pseudoquantifiers, i.e. as 'liter-bottle' or 'kilo-package'. On the other hand pseudoquantifiers may be interpreted as genuine quantifiers if they denote an appropriate measure for the quantified noun. This is especially probable with container nouns that are standardly used to measure an item denoted by a mass noun, e.g. *flaska [bottle]* may be interpreted as a genuine quantifier for wine, especially if wine is normally sold and drunk in bottles of a particular size.

In the following subsections, I will show that the distinction between genuine quantifiers and pseudoquantifiers is important for the interpretation and syntactic behaviour of pseudopartitive constructions, although I will not be able to account for all of the differences.

6.2.2. Pseudopartitives with Indefinite Quantifiers

Here I am going to present the basic structural proposal for pseudopartitive construction. The proposal is based on indefinite quantifiers; definite quantifiers are discussed separately in 6.2.5. As mentioned above pseudopartitive constructions in Mainland Scandinavian may often appear with either quantifier agreement or mass agreement. A wide range of factors affect the choice of agreement, and judgements often vary. Here I will address the three main types of quantifying nouns (presented in (55) above) in turn.

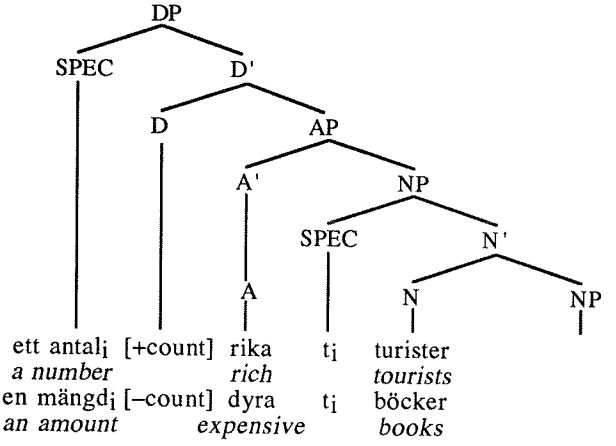
Consider first **genuine uncountable quantifiers**, such as *antal, fåtal, mängd, [number, few-number, amount]*. These quantifiers never trigger agreement; the pseudopartitive construction always appears with mass agreement, i.e. the predicative agrees with the quantified noun. Consider the examples in (56).

(56) **Genuine uncountable quantifiers:**
Nyligen har ett antal rika turister blivit *rånat/rånade
Recently has a number rich tourists been robbed
[neuter.sg] [uter.pl] [*neuter/pl]
Nyligen har en mängd dyra böcker blivit *stulen/stulna
Recently has an amount expensive books been stolen
[uter.sg] [uter.pl] [*uter.sg/pl]

I take the fact that the quantifiers in (56) do not trigger agreement to indicate that they are generated in a specifier position. They are always DPs, and thus we assume that they are arguments (compare the discussion in chapter 2). I claim that they are base generated in the specifier of NP. Nevertheless, it seems as if the S-structure position of these quantifiers is SpecDP, since they always precede attributive adjectives. Therefore I will assume that the quantifier moves out to

SpecDP. As for pronominal quantification, I assume that D and N hosts a [±count] feature. The feature in D can be licensed if an appropriate quantifier is moved to SpecDP, entering into a spec-head relation with D. Such a quantifier must be inherently specified for countability of the quantified noun. Hence, the proposed structure for quantified noun phrases like those in (56) will be as in (57).[28]

(57)



Consider next pseudopartitive constructions with **genuine countable quantifiers**. These constructions normally prefer mass agreement to quantifier agreement, as illustrated in (58).

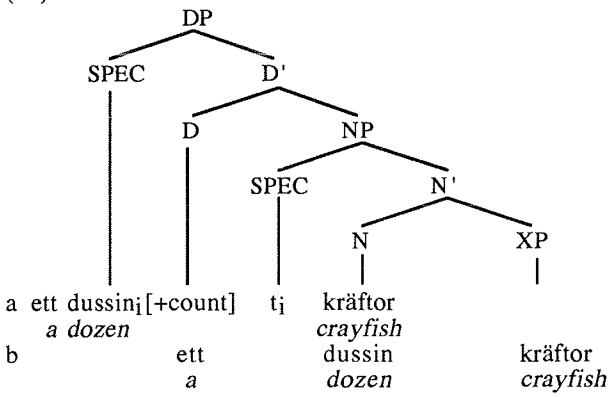
(58) **Genuine countable quantifiers**
Igår blev ett dussin kräftor ??uppätet/uppätna
yesterday was a dozen crayfishes eaten
[neut.sg] [uter.pl] [??neut.sg/pl]
Dessutom blev ett kilo äpplen ??stulet/stulna
Besides was a kilo apples stolen
[neut.sg] [neut.pl] [??neut.sg/pl]

Recall the assumption that a quantifying noun that triggers agreement is generated in the N-position, whereas a quantifying noun that does not trigger agreement is generated in SpecNP. Then, the data in (58) indicate that genuine countable quantifiers behave very much like the corresponding uncountable quantifiers (exemplified in (56) above). Basically they are interpreted as if they were generated in SpecNP. However, it seems as if pseudopartitive constructions with

[28] I also assume that the feature [±count] in D^0 requires to be licensed. As mentioned in 6.1.2. above, this may be done by spec-head agreement or by lexicalising the feature with a pronoun or article. It is also conceivable that a noun or a pronoun in N may lexicalise the feature by head-to-head-movement to D (see subsection 6.2.4.)

this kind of quantifiers may marginally trigger quantifier agreement, i.e. they may marginally be interpreted as if they were generated in N. The unmarked mass agreement would be analysed as in (59)a, whereas the more marked cases where we find quantifier agreement would be analysed as in (59)b.

(59)



The different choices of agreement in (58) affect the interpretation. In the examples with mass agreement (analysed as in (59)a), the quantifier is interpreted as a measure. On the other hand, in the examples with quantifier agreement (analysed as in (59)b), the quantifier is interpreted as container: a 'dozen package' or a 'kilo package'.

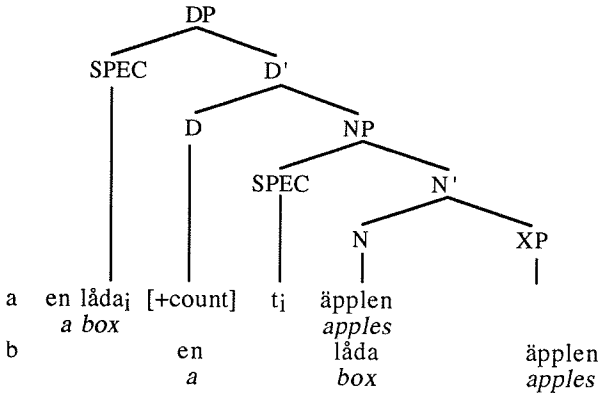
Consider next pseudopartitive constructions with **pseudoquantifiers**. These constructions seem to be equally good with the two different sorts of agreement (quantifier and mass agreement), as illustrated in (60) below.[29]

(60) **Pseudoquantifiers:**
I Oslo blev en grupp pensionärer ?rånad/rånade
In Oslo was a group pensioners robbed
[uter.sg] [uter.pl] [uter.sg/pl]
Under tiden blev en låda äpplen stulen/stulna
In the mean time was a box apples stolen
[uter.sg] [neuter.pl] [uter.sg/pl]

[29] It is a bit harder to get quantifier agreement with pseudoquantifiers like *grupp* or *hop [group, crowd]*, than with other pseudoquantifiers. As pointed out to me by Lena Ekberg, this might be connected to the fact that the former are made up of their quantified noun, and would not exist without them. Pseudoquantifiers like *låda, flaska [box, bottle]* on the other hand, exist even without their quantified noun. In other words a box may be stolen even if it is empty, but a group must be a group of something before it can be robbed.

Contrary to the situation with genuine quantifiers (illustrated in (56) and (58) above, pseudopartitives with pseudoquantifiers (illustrated in (60)) seem to be equally good with quantifier agreement and mass agreement. This is probably connected to the semantic ambiguity of the quantifiers. The pseudoquantifier may be interpreted either as a measure noun and hence in a way similar to genuine quantifiers, in which case it is generated in SpecNP. It may also be interpreted as a container noun and then it will be generated in N, taking the quantified noun as its complement. The pseudopartitive constructions in (60) may then be assigned either the structure in (61a) or the one in (61b).

(61)



Notice that we should treat the quantified noun in a structure like (61)b as an NP. This position seems to lack a D-projection, and all nouns in this position seem to be interpreted as [–count] (see further 6.2.4 below). If the complement of N could be a DP we would assume that there could be an overt quantifying pronoun, inherently marked for countability, but this is impossible (compare Lødrup 1989:84 for the same observation for Norwegian).

(62) *en låda många/mycket äpplen
a box many/much apples
(63) *en grupp femton/några ungdomar
a group fifteen/some youngsters

The main result of this subsection is that I have assigned phrasal pseudopartitive constructions two different structures. The proposed analysis will give a plausible explanation both to the semantic interpretation of pseudopartitives in Mainland Scandinavian and to the agreement variation in these constructions. Normally, a genuine quantifier is generated in SpecNP and raised to SpecDP. The quanti-

fied noun is generated in N and its gender and number features percolates up to D, the head of the phrase. Thus the quantified noun triggers agreement. Pseudoquantifiers, on the other hand, may either be generated in SpecNP (like genuine quantifiers), or they may be generated in N and the quantified noun in the complement of N. In the latter cases the quantifier triggers agreement.

It seems as if all quantifiers that are generated in SpecNP are interpreted as measure nouns, whereas the ones that are generated in N are interpreted as container nouns. In constructions with pseudoquantifiers generated in N, I assume that Case percolates to the complement NP, AP or DegP. This is in accordance with the Percolation Principle stated in section 3.5; those categories should receive Case by percolation.

In the following sections, we will look at the consequences of this structural proposal, and we will discuss in some more detail the countability restrictions of quantified nouns and the behaviour of definite quantifiers.

6.2.3. Consequences

The analysis elaborated above gives a clue to several of the differences between genuine quantifiers and pseudoquantifiers. Here I will point out some of them.

A first fact that falls out from my analysis is the different possibilities of compounding the quantified noun with the quantifying noun, illustrated in (47) and (48) above. If these compounds are generated in the syntax as a result of incorporation (in the sense of Baker 1988), we would expect complements to compound with their head, whereas a head would not compound with its specifier. This is exactly what we find. Pseudoquantifiers take their quantified nouns as complements, and they may compound with them. Genuine quantifiers are specifiers of their quantified noun, and they may not compound.[30]

The difference with regard to scope of adjectives (illustrated in (49) and (50) above) is also straightforward, if we assume that an adjective takes everything that it m-commands in its scope (cf. May 1985:34). Consider the structure in (64).

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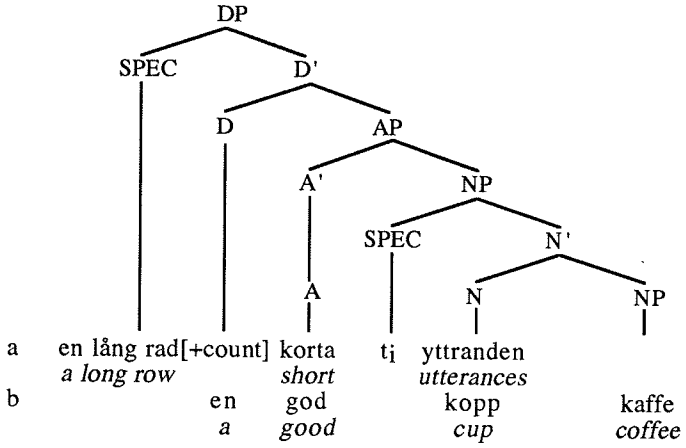
[30] Other lexical categories, like derived nominals, verbs and adjectives are often compounded with their complement, whereas cases where they are compounded with unambiguous specifiers are very hard to find.

(64)



In (64)a, the genuine quantifier projects a DP, which is in a specifier position. The adjective *lång [long]* is embedded within that DP, and thus it does not m-command anything else than the quantifier *rad [row]*. In (64)b on the other hand, the pseudoquantifier is generated in the basic N position. The adjective *god [good]* will then m-command both the pseudoquantifier and its complement, that is the quantified noun.

The difference with regard to possessor phrases (illustrated in (51) and (52) above) is straightforward, as well. Recall from chapter 5 that all prenominal possessive DPs in Mainland Scandinavian are moved to SpecDP in order to receive Case. Here we have assumed that a DP containing a genuine quantifier phrase must also move to SpecDP. The reason that the two types of phrases cannot co-occur is that they compete for the same S-structure position.

With regard to the possibility of having doubly quantified noun phrases (compare (53)-(54) above), my analysis does not explain why this is only possible with a genuine quantifier as the first noun. However the analysis gives the correct agreement facts. Since the first quantifier is a genuine quantifier, we expect it to be generated in SpecNP, we further expect the second quantifier to be generated in N. Thus the second noun should control agreement. This is borne out.

(65) Nyligen har ett flertal lådor/liter vin blivit stulna/*stulet
Recently have a majority boxes/liter wine been stolen
[neut.sg] [uter.pl] [neut.sg] [pl]/*[neut.sg]

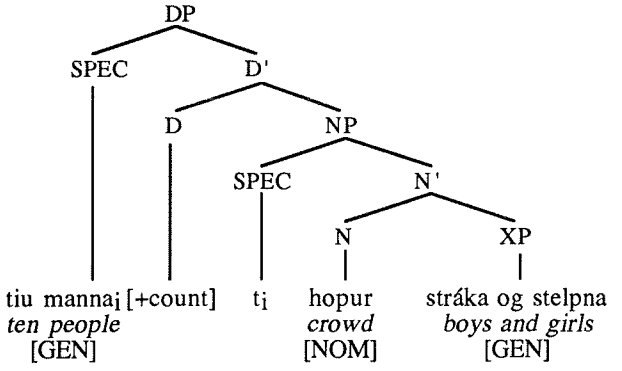
Furthermore the proposed description enables us to give a reasonable analysis of the Old Swedish pseudopartitive constructions,

where either of the nouns may be genitive (compare (42) above). The Old Swedish facts seem to be fully compatible with the analysis presented above. Normally words that correspond to genuine quantifiers, especially measure nouns, are genitive, whereas pseudoquantifiers are not, and then the mass noun turns up in genitive.

(66) þriggia famna wargha næt (Old Swedish)
three-GEN fathoms-GEN wolf net
halfwæn span corns
half bucket grain-GEN

The structure proposed here predicts that we would find double quantifier constructions with two genitives in Old Swedish, similar to the examples in (65), where the first quantifier and the quantified noun would both be assigned genitive. However, genitive disappeared early in Old Swedish, and the examples rare (cf. Delsing 1991a). To the best of my knowledge, there are no Old Swedish examples with two genitives simultaneously. Modern Icelandic, however, has retained both genitives (at least with some pseudoquantifiers), and here the prediction is borne out. Consider the example in (67).

(67)



In (67) we have one genuine quantifier expressing the size of the crowd, a pseudoquantifier as the head noun, and a quantified noun as the complement of that head.

6.2.4. Countability in Pseudopartitives

In this subsection, I will further discuss the countability restrictions of the quantified noun in pseudopartitive constructions. First, it should be noted that the examples that I gave of pseudoquantifiers in subsection 6.2.2 all had plural quantified nouns. Recall from section 2.3 that plural is often ambiguous between a countable and an uncountable reading. If we look at examples where we have a pseudo-

quantifier with a quantified noun that is unambiguously uncountable, such as *vin [wine]* or *mjölk [milk]*, we find that such constructions always show quantifier agreement and never mass agreement.

(68) Nyligen har en låda vin blivit stulen/*stulet
Recently has a box wine been stolen
[uter.sg] [neuter.sg] [uter.sg/*neuter.sg.]

(69) Nyligen har en hela bränvin blivit stulen/*stulet
Recently has a whole-bottle vodka been stolen
[uter.sg] [neuter.sg] [uter.sg/*neuter.sg.]

Thus it seems as if a pseudoquantifier with an unambiguously uncountable quantified noun always has the quantifier generated in N and the quantified noun in the complement of N. In other words, it seems as the quantified noun must be in the complement of N if it is uncountable, and that it cannot be generated in N. Before, we observed that genuine quantifiers did not have any problems with an uncountable noun in N, provided the quantifier was inherently specified for [–count]. All this suggests that the [±count] feature in D is assigned the positive value as a default. In order for a [–count] value to be licit, either D must be lexicalised by a determiner specified [–count] or in a spec-head relation with a (genuine) quantifier specified [–count]. This would mean that pseudoquantifiers are underspecified for this feature. Given that my analysis is on the right track, we have arrived at two generalisations about countability. The countability feature in D is assigned [+count] by default, and the complement NP of N is assigned [–count] by default.

The discussion above predicts that we would interpret the quantified nouns differently in clauses with different types of agreement. Consider first the case when a pseudoquantifier is generated in SpecNP and is moved to SpecDP. The [±count] feature in D does agree with the specifier (since pseudoquantifiers are not inherently specified for this feature). The feature would then by default be interpreted as [+count]. On the other hand if the pseudoquantifier is generated in N, and the quantified noun in the complement of N, the quantified noun will by default be interpreted as [–count]. Thus we would find this distinction in sentences like the ones in (70).

(70) **Quantifier agreement:**
?Igår blev en grupp turister rånad
Yesterday was a group tourists robbed-uter.sg
Igår blev en låda äpplen stulen
Yesterday was a box apples stolen-uter.sg

(71) **Mass agreement:**
Igår blev en grupp turister rånade
Yesterday was a group tourists robbed-pl
Igår blev en låda äpplen stulna
Yesterday was a box apples stolen-pl

At least to my ear, it is clear that the examples in (70) means that the tourists were robbed collectively, as a whole, and that the apples are considered as a mass. In the examples in (71) on the contrary, I interpret the tourists as robbed more individually, and the apples are also interpreted as individual apples.

I am not able to give a principled account for the different default values of the [±count] feature in the two structures.

6.2.5. Pseudopartitives with Definite Quantifiers

Constructions with definite quantifiers behave differently from constructions with indefinite quantifiers. It seems as if all definite quantifiers (genuine as well as pseudoquantifiers) are base generated in the N position. This is, for instance, indicated by the agreement facts; in Swedish, definite quantifiers normally trigger agreement. Consider the examples in (72), where one example from each of the different groups of quantifiers, presented in (55) above, is given. The first variant denotes quantifier agreement, and the other one mass agreement.

(72)

a Efter valet blev antalet riksdagsledamöter reducerat/*reducerade
After election-the was number-the members-of-parliament reduced

b På sidan 16 har tyvärr mängden smör blivit fördubblad/*fördubblat
On page 16 has unfortunately amount-the butter been doubled

c Därför är det sista dussinet tallrikar alltid svårsålt/*svårsålda
Therefore is the last dozen-the plates always hard-to-sell

d Därför är den sista litern vin aldrig lika god/*gott
Therefore is the last liter-the wine never as good

e Sedan blev den besvärliga hopen ungdomar arresterad/arresterade
Then was the messy crowd youngsters arrested

f Därefter blev den undangömda lådan äpplen framtagen/*framtagna
Then was the hidden box apples taken-out

The data in (72) indicate that genuine quantifiers behave as if they were generated in the N-position, with the possible exception of pseudopartitives with countable quantified nouns, like in (72)e. This exception indicates that the nature of definite quantifiers is not fully understood.[31] I will not be able to present an analysis of the proper-

[31] There are also other things that are hard to explain with regard to definite quantifiers. Some genuine quantifiers, e.g. *massa, stycken* may not be definite at all.

Another surprising fact is that genuine uncountable quantifiers, like *antal* and *mängd* are fine with only the suffixed definite article, whereas other quantifiers normally require an adjective.

(i) *kilot smör har blivit sålt
kilo-the butter has been sold

(ii) det sista kilot smör har blivit sålt
the last kilo-the butter has been sold

(iii) *lådan smör står i hörnet
box-the butter stands in corner-the

ties of all definite quantifiers, I will only show that most of them are best analysed as elements generated in N. This assumption predicts that the differences between genuine quantifiers and pseudoquantifiers, which were attributed to the different possibilities of generating quantifiers either in N or in SpecNP, should be absent with definite quantifiers. This is true for most of them. In the following I will show that definite genuine quantifiers behave as if they were generated in N.[32]

First, my description predicts that quantifiers that may not take any plural ending in indefinite form (compare (45) and (46) above) would be able to do so in definite form. This is borne out.

(73) de sista kilometrarna motorväg
the last kilometers-the highway
de första litrarna vin
the first liters-the wine
de sista kilona smör
the last kilos-the butter

Second, quantifiers generated in N are possible to compound with their complement, i.e. the quantified noun (compare (47)-(48) above). If definite quantifiers are generated in N, we expect that they should also be able to compound with the quantified noun. This is borne out. Many compounds with genuine quantifiers are considerably better when they are definite. Consider the examples in (74).[33]

(iv) den sista lådan smör står i hörnet
the last box-the butter stands in corner-the

A solution in terms of adjacency seems likely. In chapter 4, I assumed that the noun is raised to D in examples like (i) and (iii), whereas it is not raised in (ii) and (iv).

The same adjacency requirements seem to hold for several plural quantifiers. Bare plural quantifiers seem to require a preposition, whereas this not so if there is a determiner or an attributive adjective (as noted by Teleman 1969:34).

(v) *mängder snö / *lådor vin
lots snow boxes wine
(vi) mängder av snö / lådor med vin
lots of snow / boxes with wine
(vii) åtskilliga mängder snö / några lådor vin
several lots snow / some boxes wine
(viii) stora mängder snö / stora lådor vin
great lots snow / big boxes wine

Under the assumption that a plural quantifier must raise to D, and that the complement requires adjacency to N, we may explain why prepositions, determiners and adjectives save the construction. The preposition provides for Case to the quantified noun in an alternative way, whereas determiners and adjectives force the noun to remain in N, either by occupying the D-position or by blocking head movement.

32 I have assumed that pseudoquantifiers are generated in the head N position. This assumption is also made for definite pseudoquantifiers. Definite genuine quantifiers, on the other hand take different D-structure positions depending on whether they are definite or indefinite. Thus I will only discuss genuine quantifiers in the following.

33 The measure nouns *liter, kilo* etc. seem to be as bad in the definite form as in the indefinite form. I have no explanation for this.

(74)	**indefinite**	**definite**	
	*ett turistantal	turistantalet	*touristnumber*
	*en smörmängd	smörmängden	*butteramount*
	??ett tallriksdussin	det sista tallriksdussinet	*platedozen*

Third, we predict that attributive adjectives with definite genuine quantifiers would be able to take scope over both the quantifier and its quantified noun (compare (49)-(50) above). This is possible, at least for some genuine quantifiers, in cases where it is bad with indefinite quantifiers. As before, the '%' indicates that the example sounds like a contradiction.

(75) den stökiga dussinet (%stillsamma) studenter
the noisy dozen-the calm students
b det svarta paret (%vita) handskar
the black pair-the white gloves

Fourth, the analysis of definite quantifiers also predicts that definite genuine quantifiers should not be able to participate in double quantifier constructions (compare (53)-(54) above).

(76) *antalet flaskor vin
number-the bottles wine
*det sista dussinet lådor vin
the last dozen-the boxes wine

Finally, a special property of uncountable genuine quantifiers like *antal, mängd [number, amount]* is that their complement may be made into a genitival attribute (cf. Teleman 1969:35).

(77) antalet myror
number-the ants
myrornas antal
ants-the's number
(78) mängden bilar
amount-the cars
?bilarnas mängd
cars-the's amount

The examples in (77)-(78) imply that uncountable genuine quantifiers are generated in N in definite noun phrases. The quantified noun is a complement that may be raised to SpecDP as we assumed for ordinary possessor DPs in chapter 5.

As shown above most of the tests that are used to determine whether a quantifier is a genuine one or a pseudoquantifier, suggest that definite genuine quantifiers are to be analysed as N-heads, contrary to indefinite ones. I am not able to give a principled reason for this restriction. It seems as if definite DPs are banned from the specifier position of NP.

To conclude, I have shown that the pseudopartitive constructions in Mainland Scandinavian are best analysed if we assume that the indefinite quantifiers may be generated either in SpecNP or in the head N of the noun phrase, where genuine quantifiers take the first option, and are moved to SpecDP in order to get Case. Pseudoquantifiers may take both options. If a quantifier is definite it is normally generated in the head N of the noun phrase.

6.2.6. Genuine Partitive Constructions

In this subsection, I will briefly sketch an analysis for genuine partitive constructions. This construction also shows a difference between genuine quantifiers and pseudoquantifiers. The latter normally require a more specified quantified noun to be pragmatically good.

(79) ett antal av pojkarna
a number of the boys
en mängd av mjölken
an amount of milk-the

(80) en grupp av de nya studenterna
a group of the new students
en flaska av ert bästa vin
a bottle of your best wine

Semantically, genuine quantifiers (like in (79)) seem to be unambiguous. We may only combine partitive constructions containing genuine quantifiers with verbs that take the quantified noun as an object, as illustrated in (81)a. If we try to combine a partitive construction with a verb that typically takes the quantifier as an object, as illustrated in (81)b, the examples becomes semantically odd.

(81)a Polisen arresterade ett antal av medlemmarna
Police-the arrested a number of members-the

b %Föreningen minskade ett antal av medlemmarna
Union-the decreased a number of members-the

In (81)b above the only possible interpretation is that the members have been decreased (or rather diminished).

Pseudoquantifiers on the other hand are possible with verbs that typically take the quantifier as its object, as well as with verbs that typically take verbs with the quantified noun as their objects.

(82) Hon slog sönder två flaskor av deras bästa whisky
She broke PARTICLE *two bottles of their best whisky*
Hon drack upp två flaskor av deras bästa whisky
She drank PARTICLE *two bottles of their best whisky*

Syntactically, it is clear that genuine quantifiers are not heads of the phrase. Consider the example in (83) where the predicative adjective seems to agree with the complement of the PP.

(83) Ett antal av bröderna har blivit *flintskalligt/flintskalliga
*a number of brothers-the have become baldheaded [*sing/pl]*

Pseudoquantifiers on the other hand seem to be ambiguous. Both the quantifier and the quantified noun may trigger agreement.

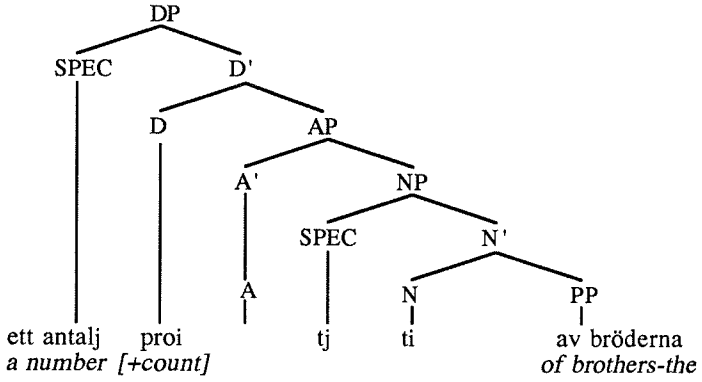
(84) Två lådor av restaurangens bästa vin hade blivit stulna/?stulet
Two boxes of restaurant's best wine had been stolen
[uter.pl] neuter.sg [pl/?neuter.sg]

Thus the partitive construction is similar to the pseudopartitive construction. Both semantically and syntactically, genuine quantifiers are unambiguous; they are not heads of the construction. Pseudoquantifiers, on the other hand, are ambiguous both semantically and syntactically.

I will therefore assign genuine partitive constructions the same basic structure as pseudopartitive constructions. Genuine quantifiers are generated in Spec-NP (and raised to SpecDP), whereas pseudoquantifiers may either be generated in SpecNP or in N. The difference is that the quantified noun in genuine partitive constructions is always a DP, and that it is always generated in the complement of N. As a DP it must be assigned Case. Therefore, the preposition is obligatory in this construction in Mainland Scandinavian.

A last question is posed by the agreement in constructions like (83) above, where the predicative seems to agree with the complement of the preposition. We would not, however, want to say that the complement of the PP is the head of the noun phrase, because the status of the preposition would then be very hard to understand. Many linguists, both traditional grammarians and generative grammarians have therefore assumed that partitive constructions have an empty noun (cf. Teleman 1974, Jackendoff 1977, ch. 5.3, and Abney 1987:344). I will make the same assumption here. The content of the empty noun corresponds to the complement of the PP: *a number (brothers) of the brothers*. Consider (85), where the empty noun is represented by small *pro*, which I assume has to be raised to D.

(85)



In (85) I assume that small *pro* is generated in N, and that it is licensed by an agreement relation between D and SpecDP. This assumption may also give a clue to another problem, namely that attributive adjectives are not possible.

(86) ett antal (*snälla) av pojkarna
a number (nice) of boys-the

Assuming that *pro* has to move to D, in order to license the [±count] feature, we may explain why an attributive adjective is not possible. In such a case *pro* would be the head of a chain from D to N, and the head A would interfere between *pro* and its trace.

6.3. Pronominal and Phrasal Quantification

The analyses that I have proposed for quantifying pronouns and quantifying DPs in the previous sections have several properties in common. In both cases I have differentiated between pseudopartitive and genuine partitive constructions, as illustrated in (87)-(88).

(87) **Pseudopartitive constructions:**
några bilar
some cars
ett antal bilar
a number cars

(88) **Partitive constructions**
några av bilarna
some of the cars
ett antal av bilarna
a number of the cars

The two construction types are distinguished by the definiteness of the quantified noun. Both pronominal and phrasal quantifiers have the property in common that they may be inherently specified for

countability the quantified noun or noun phrase. Pronominal quantifiers additionally distinguish three countable numbers (singular, dual and plural) of the presupposed set, whereas phrasal quantifiers always has a plural presupposed set if it is countable.

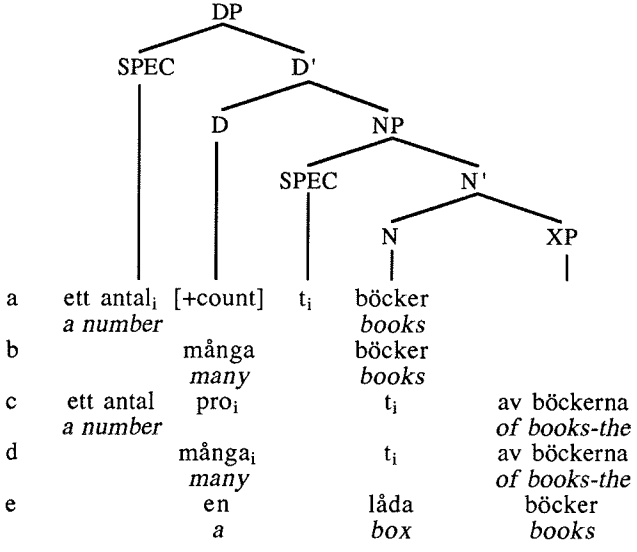
Furthermore, I have distinguished two types of pronominal quantifiers, universal and existential, and two types of quantifying nouns, genuine quantifiers and pseudoquantifiers. However the four groups cannot be directly mapped onto each other. There are no quantifying nouns, such as *en totalitet [a totality]*, which correspond to universal pronouns, and there do not seem to be any pronouns that correspond to pseudoquantifiers. Thus, I will distinguish the following groups of quantifiers in Scandinavian. The countability feature denotes the countability of the quantified noun.

Quantifiers in Mainland Scandinavian.

		Pronouns	**Nouns**
Universal	[+count]	varje [each]	–
quantifiers	[–count]	all [all]	–
Existential (genuine)	[+count]	många [many]	ett antal [a number]
quantifiers	[–count]	mycken [much]	ett kilo [a kilo]
Pseudoquantifiers	[+count]	–	en hop [a crowd]
	[–count]	–	en låda [a box]

The analyses that I have proposed are depicted in (89) below.

(89)



a	ett antal$_i$	[+count]	t_i	böcker	
	a number			*books*	
b		många		böcker	
		many		*books*	
c	ett antal	pro$_i$		t_i	av böckerna
	a number				*of books-the*
d		många$_i$		t_i	av böckerna
		many			*of books-the*
e		en		låda	böcker
		a		*box*	*books*

As can be seen in (89), existential quantifiers, both pronouns and nouns, may be part of both pseudopartitive (a and b) and partitive constructions (c and d). Pseudoquantifiers can also be part of a pseudopartitive construction, but this string can be given two different analyse; one analysis is equal to the pseudopartitive construction with genuine quantifiers (a), and the other one is different (e), having the quantifier generated in N. In (89), there is no pronominal counterpart to the construction in (89)e, having the pronoun base generated in N and the mass noun in the complement of that N. It is however not impossible that such a structure could be argued for. I leave it to further research to find out whether the ambiguity of pronominal pseudopartitive constructions between the quantifying and cardinal reading (cf. footnote 1 above) could be analysed in such a way.

Finally, I will raise the question of feature sharing between N and its complement. In particular it should be accounted for how Case is transmitted in a pseudopartitive construction. I will not be able to give a principled answer to this question, but I think it is important that the questions be raised.

The agreement in pseudopartitive pronominal constructions (like (89)b above) seems unproblematic, there is ordinary feature sharing of Case, gender and number between D and N. The problematic cases are found when a phrase in the complement of N agrees with N. Such feature sharing appears in pseudopartitive constructions with pseudoquantifiers (and definite genuine quantifiers).

(90) [DP [D' en [NP [N' låda [NP smör]]]]]
a box butter
[DP [D' antal$_i$-et [NP [N' t$_i$ [NP människor]]]]]
number-the people

In the examples in (90) it seems as if Case can percolate from one N to another, that is from one lexical category to another. In German, which has morphological case, agreement in case between the quantifying and the quantified element is visible. The quantified element may either agree with the quantifier or it can be assigned genitival case.[34]

(91)a eine Gruppe junge Frauen
one-nom group young-nom women
b eine Gruppe junger Frauen
one-nom group young-gen women

[34] Löbel 1989 argues that the quantified noun can get any morphological case, but this is disputed by Bhatt (1990:56f.).

Case agreement as in (91)a is sometimes seen as unproblematic. Bhatt (1990: 57), for instance assumes that either of two strategies can be applied: case agreement or genitival case assignment by N. However, this is not unproblematic in a broader comparative perspective. There are languages where agreement is not allowed at all (like Icelandic and English). Consider the different possibilities of receiving case for the quantified NP in a pseudopartitive construction for four of the Germanic languages.

(92) *ein flaska vin / ein flaska af vini / ?ein flaska vins (Icelandic)
en flaska vin / en flaska med vin / *en flaska vins (Swedish)
eine Flasche Wein / *eine Flasche von Wein / ?eine Flasche süssen Weines (German)
*a bottle wine / a bottle of wine / *a bottle wine's (English)

It should be noted that a genitival complement sounds archaic both in German and Icelandic, unless the pseudoquantifier is a word like *group* or *crowd*.[35] The data in (88) may be schematised as follows.

Case strategies in pseudopartitive constructions

	Agreement	PP	Genitive
Icelandic	-	+	(+)
Swedish	+	+	–
German	+	–	(+)
English	–	+	–

The fact that genitive is not possible in English and Swedish is hardly surprising, since genitive is not a morphological case in these languages (compare chapter 5). The puzzle is why Icelandic and English disallow the agreement option. It seems as if percolation of Case is not possible at all from one lexical noun to another, in these languages. The question does not seem to be connected to morphological case, since Swedish and English (which lack morphological case) pattern differently, as do German and Icelandic (although both have morphological case).

6.4. Conclusions

In this chapter I have distinguished pronominal and phrasal quantifiers, thus distinguishing between heads and XPs. I have also distinguished pseudopartitive constructions and partitive constructions, the former having a bare noun as the quantified noun and the second having a definite DP as the quantified noun phrase. These terms are

[35] Some speakers of German and Icelandic do not consider the genitive grammatical at all with container nouns.

pre-theoretic descriptions of the superficial string, and I have argued that both constructions should be assigned two alternative structures.

In section 6.1, I proposed that pronouns can be generated in either D or N. When they are generated in D they function as ordinary determiners taking an NP complement. I also discussed the possibility that they be generated in N when they are used in genuine partitive constructions. In such cases the pronoun in N would take a DP complement, which may receive Case either by percolation, insertion of a preposition or assignment of genitive case. However, this solution is not optimal since it would eintail Case assignment and Case percolation in the same configuration.

In section 6.2, I distinguished two types of quantifying nouns: genuine quantifiers and pseudoquantifiers, and I showed that the two sorts of nouns have different syntactic behaviour. It was also proposed that genuine quantifiers are normally generated in SpecNP (and raised to SpecDP), whereas pseudoquantifiers can either be generated in the same way as genuine quantifiers in SpecNP, or in N taking an NP as its complement. Generation in SpecNP yields an interpretation of the quantifying noun as a measure noun, and the quantifier will not trigger agreement. Generation in N, on the other hand will yield an interpretation of the quantifier as a container noun, and the quantifier will trigger agreement.

From these assumptions several of the differences between the two sorts of quantifiers follow. I have also shown that the semantic, syntactic, and morphological ambiguity of pseudopartitive constructions in Mainland Scandinavian can be accounted for. Furthermore, I made two observations, that I am not able to give a principled answer to. First, quantified nouns generated in N are always countable and quantified nouns generated in the complement of N are always interpreted as uncountable. Second, I found that definite quantifiers always seem to be generated in N, implying that a definite DP may not be generated in SpecNP. For the genuine partitive construction, I proposed that it should be analysed as the pseudopartitive construction, with the difference that the quantified noun phrase is always generated as the complement of the head N. Furthermore I assumed that there is an empty pronoun: *pro* generated in N (quite parallel to overt pronouns in the genuine partitive construction).

In section 6.3, I tried to unify the analyses of pronominal and phrasal quantification, and to give a taxonomy of quantifiers in Swedish. Some problems concerning the Case of the complement of N were also pointed out.

CHAPTER 7
CONCLUSIONS

In this work I have discussed the internal structure of noun phrases in the Scandinavian languages, often under comparison to other languages. I have presented the basic data on noun phrase morphology and syntax in the Standard languages, and in two dialect groups, which deviate from the standard languages in interesting ways. I have proposed a general analysis of noun phrases (chapters 2 and 3), and I have discussed some more specific constructions (chapters 4 to 6).

In chapter 2, I discussed at length the function of determiners. I investigated the instances of determiners found in non-argumental noun-phrases, i.e. in predicative and vocative noun phrases. I argued that the indefinite article found in predicative position is different from the indefinite article found with argumental noun phrases. In particular I showed that the predicative article has a plural form and is compatible with uncountable nouns.

I further investigated the cases where argumental noun phrases do not have an overt article, mainly concentrating on uncountables and proper names. I argued that all nouns can be used as uncountables and that bare plurals and bare singulars in an uncountable function are subcases of uncountables. I elaborated certain tests for identifying this uncountable function. Then I argued that the extensive use of the suffixed article in Northern Swedish should be seen as an overt realisation of a partitive article. I furthermore showed that several Scandinavian languages use pronouns or articles obligatorily with argumental personal names. Thus, I assumed that all Scandinavian languages have overt or covert partitive and proprial article.

I argued that all argumental noun phrases are Determiner Phrases in the Scandinavian languages. I proposed an *Argument Rule*, which requires all noun phrases to have a D-position at S-structure. This D-position can be licensed either by moving an element to that position or by inserting an article. I further assumed that the Argument Rule is parametrised, and that the Modern Scandinavian languages take a positive value for it.

In chapter 3, I elaborated my basic structural analysis of noun phrases in Scandinavian. First, I argued in favour of *the DP-analysis*, which claims that noun phrases are introduced by a functional projection D, and that, in accordance with the Argument Rule, all argumental noun phrases are DPs. I further assumed that there is head-movement inside the noun phrase. At least in Danish there are good evidence that the noun raises from N to D. I proposed that head raising is parametrised in the grammar, *the head-raising parameter*. Most Scandinavian languages take a positive value for this parameter, but West-

ern Jutlandic, together with the other Germanic languages, takes a negative value for it.

Second, I argued that the attributive adjective should be analysed as lexical heads of the noun phrase, taking the 'head noun' as its right hand specifier, *the SpecA-analysis*. I showed that this analysis is superior to other analyses of attributive adjectives. In particular I pointed out that the analysis makes attributive and predicative adjectives parallel.

Third, I assumed that adjectival phrases can be introduced by a *Degree Phrase*. The assumption was mainly based on the complementary distribution of comparison affixes and independent degree element. I argued that Deg is a functional head, which selects AP, and which adjectives are sometimes head moved to D. I also showed that the Deg-position can be used to explain certain differences between descriptive and classifying adjectives.

I also discussed some of the consequences of the analysis. I proposed a *Percolation Principle* to account for Case on categories that are not governed by the Case assigner.

In chapter 4, I turned to a classical problem of Scandinavian noun phrases, namely the *double definiteness* found in Swedish, Norwegian and Faroese. This construction involves both a prenominal and a suffixed definite article, and contrasts with Danish, where only a prenominal article is used. I discussed some previous analyses of the problem, and I proposed a new analysis, which entails that the double definiteness languages may have the suffixed article base generated on the noun, whereas this is not possible in Danish. The assumption gets independent support from noun phrases used in isolation. I further argued that the prenominal article in the double definiteness languages is a pure expletive, not marked for definiteness in the double definiteness languages. This was supported by the use of this article in the existential construction. I showed that this analysis accounts for the variation in Scandinavian, and that it makes correct predictions for the use of articles with proper names.

I further discussed the cases of postadjectival indefinite articles found in most Germanic languages. On the basis of the doubled indefinite articles, *double indefiniteness* found in Northern Scandinavian, I argued that the postadjectival article is the same non-argumental article as found in predicative noun phrases.

In chapter 5, I discussed in detail possessive constructions in the Scandinavian languages, showing the great diversity of constructions found in the different languages. I discussed previous analyses of the word order variation found between Danish/Swedish and Norwegian/Icelandic. The former languages have prenominal possessive pronouns, while the latter often have postnominal possessive pronouns. In the latter construction, the head noun additionally has a suffixed

article. I argued against a head raising analysis of this construction. Instead it was proposed that possessive pronouns should be treated differently from genitival noun phrases, namely that they should be seen as heads of a *Possessor Phrase,* and that the noun moves as an XP around the Poss head. The proposed analysis proved to be able to account for most of the data of Scandinavian possession, and to have interesting typological implications.

In chapter 6, I turned to quantification in the noun phrase, discussing both pronominal and phrasal quantification. I claimed that quantifying pronouns with NPs (the pseudopartitive construction) should be generated in D, and I discussed quantifying pronouns with a DP (the partitive constructions), proposing that the pronoun should be generated as lexical nouns taking a DP or PP complement.

I furthermore discussed the headedness of pseudopartitive constructions with DPs as quantifiers. In Mainland Scandinavian it is particularly hard to decide which noun is the head of the phrase. I argued that there are two sorts of quantifiers in Mainland Scandinavian, *genuine quantifiers* and *pseudoquantifiers*. The former are normally unambiguous in pseudopartitive constructions; agreement shows that they are normally not heads. I proposed that they be generated in SpecNP. Pseudoquantifiers, on the other hand, seem to be ambiguous; they may either be generated in SpecNP (like genuine quantifiers) or they are head nouns. I proposed that the same difference between the two types of quantifiers should be made in the genuine partitive construction.

Some of the data presented in this book conforms to the common classification of the Scandinavian languages into Insular and Mainland that was presented in chapter one. The Insular Scandinavian languages pattern together with regard to nominal morphology. They are also alike in taking postnominal possessive pronouns and requiring a preposition in pseudopartitive constructions. They are however different with regard to the article system, where Faroese, which, contrary to Icelandic, possesses an indefinite article. Faroese rather patterns with Swedish (and partly also with Norwegian). Quite surprisingly, Swedish and Faroese share several features of the article system. Both have a plural form of the indefinite non-argumental determiner, they have the same double definiteness system, and both can use the suffixed article in vocative noun phrases. These are cases where Danish, Icelandic and (sometimes) Norwegian pattern differently.

The Mainland Scandinavian languages also pattern alike in some respects. They all have an indefinite article, prenominal genitival constructions with ordinary nouns, and they all seem to have the same system for pronominal and phrasal quantification. However, they differ quite considerably in other ways, in particular with regard to double definiteness and possessive constructions.

Within the Mainland Scandinavian languages, I have discussed some dialectal data. It is worth noting that the data presented from Northern Swedish and Northern Norwegian show many similarities. Both these dialects groups have an obligatory proprial article, adjective-noun compounding in definite noun phrases, and double indefiniteness. They are also similar with regard to possessive constructions.

Appendix: Scandinavian Morphology

I. The Scandinavian Gender Systems

Table 1. The nominal gender system

	Icelandic			Swedish			W.Jutlandic		
Old Sc gender	masc	fem	neut	masc	fem	neut	masc	fem	neut
Modern gender	masc	fem	neut	uter		neut	common		neuter
singular numeral	einn	ein	eitt	en		ett	en		Ø
suffixed articel	-inn	-in	-ið	-en		-et	æ		æ
demonstrative	sá	sú	það	den		det	den		det
strong adjectives	-ur	-Ø	-t	-Ø		-t	-Ø		-Ø

Table 2. The pronominal gender system

	Icelandic			Swedish			W. Jutlandic		
Old Sc. Gender	masc	fem	neut	masc	fem	neut	masc	fem	neut
animate	hann	hún	það	han	hon	det	han	hun	den
inanimate[+count]				den		det	den		
inanimate[–count]							det		

The Icelandic forms represent nominative. Note that Western Jutlandic gender is independent of Old Scandinavian gender, common gender is used with countable nouns, and neuter with uncountable nouns. The three gender system found in Icelandic is the same in Faroese, Nynorsk, and Northern Swedish. The two latter have suffixed articles ending in *-en, -a* and *-et/-e*. Standard Danish uses the same two gender system as Swedish. Bokmål has a mixture of the systems found in Icelandic and Swedish.

II. The Scandinavian Case System

Table 3a Bare Nouns in Icelandic (armur=arm, höpn=harbour, land=land)

	Singular			Plural		
Case	masc	fem	neut	masc	fem	neut
Nom	armur	höfn	land	armar	hafnir	lönd
Gen	arms	hafnar	lands	arma	hafna	landa
Dat	armi	höfn	landi	örmum	höfnum	löndum
Acc	arm	höfn	land	arma	hafnir	lönd

Table 3b Nouns with the suffixed article in Icelandic

	Singular			Plural		
Case	masc	fem	neut	masc	fem	neut
Nom	armur-inn	höfn-in	land-ið	armar-nir	hafnar-nar	lönd-in
Gen	arms-ins	hafnar-innar	lands-ins	arma-nna	hafna-nna	landa-nna
Dat	armi-num	höfn-inni	landi-nu	örmu-num	höfnu-num	löndu-num
Acc	arm-inn	höfn-ina	land-ið	arma-na	hafnar-nar	lönd-in

The Faroese inflectional system is practically the same as the Icelandic one above. Mainland Scandinavian lacks case morphology on nouns.

Table 4 The pronominal case system

Per-son	Icelandic								Swedish			
	Singular				Plural				Singular		Plural	
	N	G	D	A	N	G	D	A	N	Obl	N	Obl
1st	ég	mín	mér	mig	við	okkar	okkur	okkur	jag	mig	vi	oss
2nd	þú	þín	þér	þig	þið	ykkar	ykkur	ykkur	du	dig	ni	er
3rd	hann	hans	honum	hann	þeir	þeirra	þeim	þá	han	honom	de	dem
	hún	hennar	henni	hana	þær	þeirra	þeim	þær	hon	henne		
	það	þess	því	það	þau	þeirra	þeim	þau	det	det		

Faroese behaves basically as Icelandic, except that the former lacks genitival forms in spoken language. Norwegian and Danish have the same system as Swedish, but some of the pronouns have different stems. Note that the table only gives the forms of pronouns referring to animate nouns in Swedish. The pronoun *den,* used with inanimate nouns is invariant.

III. Adjectival inflection

Table 5. Strong adjectival inflection

	Icelandic						Swedish		
	singular			plural			singular		plur
	masc	fem	neut	masc	fem	neut	uter	neut	
N	gulur	gul	gult	gulir	gular	gul	gul	gult	gula
G	guls	gulrar	guls	gulra	gulra	gulra			
D	gulum	gulri	gulu	gulum	gulum	gulum			
A	gulan	gula	gult	gula	gular	gul			

Table 6. Weak adjectival inflection

	Icelandic						Danish		
	singular			plural			singular		plur
	masc	fem	neut	masc	fem	neut	uter	neut	
Nom	guli	gula	gula	gulu			gule	gule	gule
Gen	gula	gulu	gula	gulu					
Dat									
Acc									

Faroese has basically the same paradigm as Icelandic. Norwegian and Swedish have the same paradigm as Danish. In Swedish though, there are two weak forms, the general form is *gula,* and the form *gule* can be used with aminate masculine nouns. Western Jutlandic has no inflection for gender, but plural is normally marked by loss of the glottal stop (ˀ). Thus, the strong forms are: *gulˀ-gulˀ-gul.* Likewise the glottal stop is missing in the weak form, which is invariant: *gul-gul-gul.* Northern Swedish has gender distinctions in singular, wheras the plural is homonymous with uter.singular: *gul-gult-gul.* The weak paradigm invariably ends in -e: *gule- gule-gule.*

References

Abney, P.S: 1986. *Functional Elements and Licensing.* Ms, MIT, Cambridge.

Abney, P.S: 1987. *The English Noun Phrase in its Sentential Aspect.* Unpubl. diss. MIT, Cambridge, Mass.

Anderson, M: 1983. "Prenominal Genitive NPs". *The Linguistic Review 3:1-24.*

Andersson, E: 1987. "Vad är huvudord i en svensk nominalfras". *The Nordic Languages and Modern Linguistics 6:67-78.* Helsinki University Press, Helsinki.

Baker, M: 1988. *Incorporation: A Theory of Grammatical Function Changing.* Chicago & London: The University of Chicago Press.

Battye, A: 1989. "Putting some Romance into a DP-analysis". Handout, talk read at the *Colloquium on Noun Phrase Structure,* Manchester 1989.

Baugh, A.C. & Cable, Th: 1978. *A History of the English language.* 3rd edition. Routledge & Kegan Paul, London, Henley & Boston.

Bergman, G: 1951. "Nordliga provinsialismer i det bildade svenska talspråket". *Arkiv för nordisk filologi 66:131-215.* Lund

Bergner, B: 1985. *En jämförelse av dativbruket i tre generationer i Alsens socken.* Ms. Dpt. of Scandinavian languages, Lund.

Bhatt, Ch: 1990. *Die syntaktische Struktur der Nominalphrase im Deutschen.* Studien zur deutschen Grammatik 38. Günther Narr, Tübingen.

Bucht, T: 1962. *Språket i Härnösand.* Skrifter utg. av Nämnden för Svensk Språkvård 25. Svenska bokförlaget, Stockholm.

Byskov, J: 1912. "Bestemt Kendeord i Jydsk". *Gjedveds Seminariums Festskrift.*

Börjars, K: 1991. "Types of Complementation in Swedish Determiner Phrases". LCJL 2:1-12. Leiden.

Börjars, K: 1993. "D selecting a PP complement in Germanic Languages". *Papers from the Workshop on the Scandinavian Noun Phrase: 1-19,* Holmberg, A. ed. DGL-UUM-R-32. Dpt. of General linguistics, Umeå.

Carlson, G. N: 1978. *Reference to Kinds in English.* Unpubl. diss. University of California, Irvine.

Carstairs, A: 1987. "Diachronic Evidence and the Affix-Clitic Distinction". *Papers from the 7th International Conference on Historical Linguistics.* Current Issues in Linguistic Theory 48: 151-162, A.G. Ramat, O. Corruba & G. Bernini ed. Benjamins, Amsterdam.

Chomsky, N: 1970: "Remarks on Nominalization". *Readings in English Transformational Grammar* 232-286, Jacobs, R.A./ Rosenbaum, P.S. eds. Ginn and Company, Waltham, Mass.

Chomsky, N: 1981. *Lectures on Government and Binding.* Foris, Dordrecht.

Chomsky, N: 1986a. *Barriers.* MIT Press, Cambridge, Mass.

Chomsky, N: 1986b. *Knowledge of Language: its Nature origin and use.* Praeger, New York.
Chomsky, N: 1991. "Some Notes on the Economy of Derivation". *Principles and Parameters in Comparative Grammar* 417-454. R. Freidin ed. MIT Press, Cambridge, Mass.
Chomsky, N: 1992. "A Minimalist Program for Linguistic Theory", *MIT Occsasional Papers in Linguistics 1.* Dpt. of Linguistics and Philosophy, MIT, Cambridge, Mass.
Christiansen, H.B: 1977. "Artikellösheden i Lild og Tømmerby sogne i Vester Hanherred". *Dialektstudier 4:1-28.* Akademisk Forlag, København.
Christiansen, H: 1953. "Flertall av ein". *Maal og Minne 1953:84-91.*
Cinque, G: 1992. *Functional Projections and N-movement within the DP.* Abstract, GLOW Newletter 28:12-13.
Cooper, R: 1986. "Swedish and the Head Feature Convention". *Topics in Scandinavian Syntax,* Hellan, L. & Christensen, K.K. ed. Riedel, Dordrecht.
Dahlstedt, K-H. & Ågren, P-U: 1980. *Övre norrlands bygdemål.* Skrifter utgivna av Johan Nordlander-Sällskapet 2. Cewe, Umeå.
Davidsson, H: 1990. *Han hon den - Genusutvecklingen under nysvensk tid.* Lundastudier i nordisk språkvetenskap A:45. Lund University Press, Lund.
Delsing, L-O: 1988. "The Scandinavian Noun Phrase". *Working Papers in Scandinavian Syntax 42: 57-79.* Lund: Dpt. of Scandinavian Languages.
Delsing, L-O: 1989. *A DP-analysis of the Scandinavian Noun Phrase.* Ms., Talk read at Colloquium on Noun Phrase Structure, Manchester.
Delsing, L-O: 1991a. "Om genitivens utveckling i fornsvenskan". *Studier i svensk språkhistoria 2:12-30.* Malmgren, S-G. & Ralph, B. ed. Nordistica Gothonburgensia 14, Göteborg.
Delsing, L-O: 1991b. "Quantification in the Swedish Noun Phrase". *Working Papers in Scandinavian Syntax 47: 89-117.* Dept. of Scandinavian Linguistics, Lund.
Delsing, L-O: 1993. "On attributive adjectives in Scandinavian and other languages". *Papers from the Workshop on the Scandinavian Noun Phrase: 20-44,* Holmberg, A. ed. DGL-UUM-R-32. Dpt. of General linguistics, Umeå.
Diderichsen, P: 1962. *Elementær Dansk Grammatik,* 3rd ed. Gyldendal, København.
Diesing, M: 1988. *Bare Plural Subjects and the Stage/Individual Contrast.* Ms, Dpt. of Linguistics, University of Massachusetts, Amherst.
Ebert, K.H: 1971. *Referenz, Sprechsituation und die bestimmten Artikel in einem Nordfriesischen Dialekt.* Bredstedt.
Ejskjær, I: 1964. "Regionalsprog og lokalt vestjysk regionaldansk" *Dialektstudier 7.* Schultz, København.
Ejskjær, I: 1987. "Adjektivernes bestemte artikel i vest- og sønderjysk". *Danske Folkemål 87:2-46.* Institut for Dansk Dialektforskning, København.
Ekberg, L: 1989. *Gå till anfall och falla i sömn. En strukturell och funktionell beskrivning av abstrakta övergångsfraser.* Lundastudier i nordisk språkvetenskap A:43. Institutionen för nordiska språk, Lund.

Eriksson, U: 1971. *Åselesvenska 1. Introduktion.* Lundastudier i nordisk språkvetenskap A 20. Institutionen för nordiska språk, Lund.
Eriksson, U: 1973. *Åselesvenska 2. Målutjämning.* Lundastudier i nordisk språkvetenskap A 24. Institutionen för nordiska språk, Lund.
Fanselow, G: 1986. "On the Configurationality of Prenominal Adjectives in German.". *Folia Linguistica 20,* 3-4; 341-380.
Fassi Fehri, A: 1987. "Generalized IP Structure, Case and VS Word Order". *MIT Working Papers in Linguistics 10:75-111.* MIT, Cambridge, Mass.
Felix, S.W: 1988. "The Structure of Functional Categories". *Groninger Arbeiten zur Germanistischen Linguistik (GAGL) 29: 37-62.* Groningen.
Fiva, T: 1987. *Possessor chains in Norwegian.* Novus, Oslo.
Forss, H: 1986. *Folkmålsberättelser från Västerbottens inland.* Skrifter utgivna av Dialekt-, Ortnamns- och Folkminnesarkivet i Umeå A:7.
Fretheim, T: 1984. "Norwegian *egen* 'own' – determiner or adjective". *Morphology, Studies in Norwegian Linguistics 3:135-153,* Jahr, E.H. & Lorentz, O. ed. Novus Oslo.
Fukui, N: 1987. "SPEC, Agreement, and the Comparative Syntax of English and Japanese" Ms, MIT. To appear in the Proceedings of NELS 17.
Gilligan, G.M: 1987. *A Cross-Linguistic Approach to the Pro-Drop Parameter.* Unpubl. diss. USC, Los Angeles.
Giorgi, A & Longobardi, G: 1990. *The Syntax of Noun Phrases: Configuration, parameters and empty categories.* Cambridge University Press, Cambridge.
Giusti, Gi: 1992. "Heads and Modifiers among Determiners. Evidence from Romanian and German" *University of Venice Working Papers in Linguistics: 1992:3.*
Greenberg, J: 1966. "Some Universals of Grammar with Particular Reference to the Order of Meaningful Elements". *Universals of Language.* 2nd ed:73-113. Greenberg, J. ed. MIT Press, Cambridge.
Grimshaw, J: 1991a. *Argument Structure.* MIT Press, Cambridge Mass.
Grimshaw, J: 1991b. *Extended Projections.* Ms, Brandeis.
Grosu, A: 1988. "On the Distribution of genitive phrases in Rumanian". *Linguistics 26: 931-949.*
Haider, H: 1988. "Die Struktur der deutschen Nominalphrase". *Zeitschrift für Sprachwissenschaft* 7:32-59. Vandenboeck & Ruprecht.
Hansen, Aa: 1927. *Bestmet og Ubestemt Substantiv. Bidrag til dansk substantivsyntaks I.* København.
Hansen, E., Mundal, E. & Skadberg, K: 1975. *Norrøn Grammatikk.* Universitetsforlaget, Oslo-Bergen-Tromsø.
Hellan, L: 1986. "The Headedness of NPs in Norwegian". *Features and Projections 89-122,* ed. P Muysken & H van Riemsdijk. Dordrecht: Foris.
Hellan, L: 1987. "On Anaphora and Predication in Norwegian". *Topics in Scandinavian Syntax: 103-124.* Hellan, L. & Koch Christensen, K. ed. Riedel, Dordrecht.
Hellan, L: 1988. *Anaphora in Norwegian and the Theory of Grammar.* Foris, Dordrecht.
Hirvonen, I: 1987. *Konstruktionstyperna* denne man *och* denne mannen. Studier för nordisk filologi 69. Helsingfors.

Hoekstra, T. & Mulder, R: 1990. "Unergatives as Copular Verbs; Locational and Existential Predication". *Linguistic Review 7:1-79.*
Holmberg, A: 1986: *Word Order and Syntactic Features in the Scandinavian Languages and English.* Dpt. of Linguistics, Stockholm.
Holmberg, A: 1987. "The Structure of NP in Swedish". *Working Papers in Scandinavian Syntax 33*, Dpt. of Scandinavian Linguistics, Lund.
Holmberg, A: 1993. "On the structure of predicate NP". *Papers from the Workshop on the Scandinavian Noun Phrase: 58-71,* Holmberg, A. ed. DGL-UUM-R-32. Dpt. of General linguistics, Umeå.
Holmberg, A. & Platzack, C: (in press). *The Role of Inflection in Scandinavian Syntax.*
Hoop, H. de 1992. *Case Configuration and Noun Phrase Interpretation.* University of Groningen.
Hulthén, L: 1948 *Studier i jämförande nunordisk syntax.* Göteborgs Högskolas årsskrift 1947:4. Göteborg.
Hultman, T: 1967. *Studier över nominalfältet i färöiskt skriftspråk.* Ms, Institutionen för nordiska språk, Lund.
Hummelstedt, E: 1934. "Om användningen av substantivets bestämda form i Österbottniskt folkspårk". *Folkmålsstudier. Meddelanden från föreningen för nordisk filologi i Helsingfors 2:134-136.* Karsten T.E. utg. Helsingfors.
Ivarsson, M: 1931. "Varför utelämnas adjektivets bestämda artikel?" *Nysvenska studier 13:189-220.*
Jackendoff, R: 1977. *X-bar-Syntax: A study of Phrase Structure. Linguistic Inquiry monographs 2.* Cambridge, Mass.: MIT Press.
Jespersen, O: 1934. "Gruppegenitiv på Dansk". *Studier tilegnede Verner Dahlerup*, s 1–7. København.
Jespersen, O: 1938. *Growth and Structure of the English Language.* 9th ed. Teubner, Leipzig.
Jónsdóttir, M: 1991. "On Indefinite Pronouns in Icelandic". *Papers from the Twelfth Scandinavian Conference of Linguistics, 153-170.* H.Á. Sigurðsson, ed. Linguistic Institute, University of Iceland.
Josefsson, G: 1992. "Object Shift and Weak Pronominals in Swedish". *Working Papers in Scandinavian Syntax 49:59-94.*
Jul Nielsen, H: 1986. "Om pronominet *sin* i jysk". *Danske Folkemål 28:41-100.* C.A. Rietzels Forlag, København.
Kayne, R: 1975. *French Syntax.* MIT Press, Cambridge, Mass.
Kayne, R: 1990. "Romance Clitics, Verb Movement and PRO", *Linguistic Inquiry 22:4 647-686.*
Kestner, E-P: 1993. "Adjectival inflection and dummy affixation in Germanic and Romance languages". *Papers from the Workshop on the Scandinavian Noun Phrase: 72-87,* Holmberg, A. ed. DGL-UUM-R-32. Dpt. of General linguistics, Umeå.
Koptjevskaja-Tamm, M: 1988. *A Typology of Action Nominal Constructions.* Dpt. of Linguistics, Stockholm.
Kratzer, A: 1988. "Stage-Level and Individual- Level Predicates", Ms, University of Mass, Amherst.
Källskog, M: 1992. *Attityd, interferens, genitivsyntax. Studier i nutida överkalixmål.* Dialekt- och folkminnesarkivet, Uppsala.
Källström, R: 1990. *Kongruens i svenskan.* Institutionen för nordiska språk, Göteborg.

Körner, R: 1933. "Det så kallade partitivattributet". *Moderna språk 27:1-27.* Malmö.
Lagman, E: 1958. *Nuckömålets nominala ordbildning.* Lund.
Larsson, S: 1929. *Substantivböjnignen i Västerbottens folkmål.* Uppsala.
Li, Yafei: 1990. "X-0 Binding and Verb incorporation". *Linguistic Inquiry 21.3:399-426.*
Lightfoot, D: 1979. *Principles in Diachronic Syntax.* Cambridge University Press, Cambridge.
Ljung, M. & Ohlander, S: 1971. *Allmän grammatik.* LiberLäromedel, Lund.
Ljunggren, K.G: 1949. "Till frågan om uppkomsten av uttryckstypen 'din stackare' ". *Studier i nordisk filologi 39:58-61.*
Lockwood, W.B: 1955. *An Introduction to Modern Faroese.* Munksgaard, København.
Loman, B: 1958. "Om relationen mellan ordföljd och betydelse hos framförställda attributiva bestämningar till substantiviska huvudord". *Arkiv för Nordisk Filologi 71:218-244.*
Longobardi, Gi: 1992. *Proper Names and the Theory of N-movement in Syntax and Logical Form.* Ms, University of Venice.
Lund, J: 1932. *Morsingmålets Lyd- og Formlære.* Rietzel, København.
Lundbladh, C-E: 1988. *Adjektivets komparation i svenskan. En semantisk beskrivning.* Lundastudier i nordisk språkvetenskap A:40. Lund University Press, Lund.
Lundeby, E: 1965. *Overbestemt substantiv i norsk og de andre nordiske sprog* .Trondheim.
Lundström, G: 1939. *Studier i Nyländsk syntax.* Nordstedt & söner, Stockholm.
Löbel, E: 1989. "Q as a Functional Category". *Syntactic Phrase Structure Phenomena in Noun Phrases and Sentences,* Linguistik Aktuell 6: 17-37. Bhatt, Ch./ Löbel, E & Schmidt, Cl. ed. Benjamins, Amsterdam.
Lødrup, H: 1989. *Norske Hypotagmer. En LFG-beskrivelse av ikkeverbale hypotagmer.* Novus, Oslo.
Magnússon, F: 1984. "Um inri gerð nafnliða í íslensku". *Islenskt mál og almenn málfræði 6:57-80.*
May, R: 1985. *Logical Form. Its Structure and Derivation.* The MIT Press, Cambridge.
Milsark, G: 1976. *Existential Sentences in English.* Unpubl. diss. MIT, Cambridge, Mass.
Moro, A: 1991. "The raising of Pedicates: Copula, Expletive and Existence". *MIT Working Papers in Linguistics XV.*
Nielsen, N.Å: 1959. *De jyske Dialekter.* Gyldendal 1959.
Nygaard, M: 1966. *Norrøn Syntax.* 2nd ed. Aschehoug, Oslo.
Nyrop, K.N: 1925. *Grammaire Historique de la Langue Française:V.* Copenhague.
Olsen, S: 1987 "Zum 'substantivierten' Adjektiv im Deutchen: Deutch als eine pro-Drop-Sprache". *Studium Linguistik* 21:1-35.
Olsen, S: 1988a. "Die deutsche Nominalphrase als 'Determinansphrase' ". *Akten der Parametersektion der 11. Jahrestagung der DGfS, Osnabrück [= Linguistische Arbeiten]* S. Olsen & G Fanselow eds. Niemeyer, Tübingen.
Olsen, S: 1988b "The 'possessive' pronouns in German". *Groninger Arbeiten zur Germanistischen Linguistik. (GAGL)* 29:137-160. Groningen.

Perridon, H: 1989. *Reference, Definiteness and the Noun Phrase in Swedish.* University of Amsterdam.
Pitkänen, A: 1979. *Binominala genitiviska hypotagmer i yngre nysvenska.* Skrifter utgivna av Svenska litteratursällskapet i Finland 484. Helsingfors.
Platzack, C: 1982. "Transitive Adjectives in Old and Modern Swedish". *Papers from the 5th International Conference on Historical Linguistics.* 273-282, Benjamins, Amsterdam.
Platzack, C: 1986. "COMP, INFL and Germanic Word Order". *Topics in Scandinavian Syntax,* 185-234, Hellan, L. & Koch Christensen, K. ed. Riedel, Dordrecht.
Platzack, Ch. & Homberg, A: 1989. "The role of agr and Finiteness". *Working Papers in Scandinavian Syntax 43:51-76.* Dpt. of Scandinavian Languages, Lund
Pollock, J-Y: 1989. "Verb Movement, Universal Grammar and the Structure of IP". *Linguistic Inquiry 20:365-424.*
Postal, P.M: 1966. "On So-Called 'Pronouns' in English". *Monograph series on Languages and Linguistics,* ed. Dinneen, F.P.
Radford, A: 1989. *The Syntax of Attributive Adjectives in English: Abnegating Abney* Ms. Talk read at Colloquium on Noun Phrase Structure, Manchester.
Radford, A: 1992. *Head-hunting: On the Trail of the Nominal Cyclops.* Ms., Talk read at Talking Heads, Surrey.
Reinhammar, M 1973. *Om dativ i svenska och norska dialekter.* Almquist & Wiksell, Uppsala.
Riemsdijk, H. van: 1981 "The Case of German adjectives". *Markedness and Learnability 148-173,* Pustejovsky & Burke, ed. Occasional papers in Linguistics 6. University of Massachusetts.
Ritter, E: 1988. "A head-movement approach to construct state noun phrases" *Linguistics 26:909-929.*
Rizzi, L: 1990. *Relativized Minimality.* The MIT Press, Cambridge.
Ross, J: 1967. *Constraints on Variables in Syntax.* Unpubl. diss. MIT, Cambridge.
Rögnvaldsson, E: 1984. "Af lysingarorðsviðurlögum". *Islenskt mál og almenn málfræði 6:81-109.*
Santelmann, L: 1993. "Den-support: an analysis of double determiners in Swedish" *Papers from the Workshop on the Scandinavian Noun Phrase: 100-118,* Holmberg, A. ed. DGL-UUM-R-32. Dpt. of General linguistics, Umeå.
Schwartz, E: 1878. *Om oblika kasus och prepositioner i fornsvenskan före år 1400.* Uppsala Universitets Årsskrift 1878. Uppsala.
Schütte, G: 1922. *Jysk og Østdansk artikelbrug.* København.
Selkirk, E: 1977. "Some Remarks on Noun Phrase Structure". *Formal Syntax: 285-316.* Culicover, P.W. & Akmaijan, A. ed. Academic Press, New York, SanFrancesco London.
Shlonsky, U: 1991. "Quantifiers as Functional Heads". *Lingua 84:159-180.*
Sigurðsson, H.Á: 1989. *Verbal Syntax and Case in Icelandic.* Dpt. of Scandinavian Languages, Lund

Sigurðsson, H.Á: 1993. "Aspects of the DP analysis of the Icelandic NP". *Papers from the Workshop on the Scandinavian Noun Phrase:119-144,* Holmberg, A. ed. DGL-UUM-R-32. Dpt. of General linguistics, Umeå.

Skårup, P: 1967. "La catégorie des cas, en général et en féroïn". *Langages 6:70-79.*

Stowell, T: 1981. *Origins of Phrase Structure.* MIT Diss, Cambridge, Mass.

Stowell, T: 1991. "Determiners in NP and DP". *Views on Phrase Structure*: 37-56. K. Leffel, ed. Riedel.

Svartengren, T.H: 1911. "Du lilla skälmgubbe, din lilla skälm" Språk och Stil 11:72-75.

Svenonius, P: 1992a. "The Extended projection of N: Identifying the Head of the Noun Phrase". *Working Papers in Scandinavian Syntax 49:95-121. Dpt. of Scandinavian Languages, Lund.*

Svenonius, P: 1992b. "The Structure of the Norwegian Noun Phrase". Ms, talk pesented at the Seventh Workshop on Comparative Germanic Syntax in Stuttgart.

Svenonius, P: 1993. "The distribution of definite marking" *Papers from the Workshop on the Scandinavian Noun Phrase: 145-164,* Holmberg, A. ed. DGL-UUM-R-32. Dpt. of General linguistics, Umeå.

Szabolcsi, A: 1983. "The Possessor that ran away from Home". *The Linguistic Review 3: 89-102.*

Szabolcsi, A: 1987. "Functional Categories in the Noun Phrase". *Approaches to Hungarian,* Vol II: 167-189, ed. Kenesci I. Szeged.

Söderberg, B: 1984. "Sex öl, två taxi och raffiga foto. Om den oböjda pluralen". *Nysvenska studier 62: 18-44.*

Söderström, S: 1972. *Om kvantitetsutvecklingen i norrländska folkmål.* Almquist & Wiksell, Uppsala.

Taraldsen, K.T: 1989. "D-projections in Norwegian". *Grammar in Progress:419-431,* M. Nespor & J. Mascaró ed. Dordrecht: Foris.

Taraldsen, K.T: 1991. "Two arguments for Functional Heads". *Lingua 84: 85-108.*

Tegner, E: 1891. *Om genus i svenskan.* Svenska akademiens handlingar 1891. Stockholm.

Teleman, U: 1969. *Definita och indefinita attribut i nusvenskan.* Studentlitteratur, Lund.

Terner, E: 1922. *Studier över räkneordet en och dess sekundära användningar, förnämligast i nysvenskan.* Uppsala

Torp, A: 1973. "Om genitivomskrivninger og -s:genitiv i Norsk". *Maal og Minne* 1973: 124–150. Oslo.

Torp, A: 1990. "Der sogenannte 'Garpegenitiv', Ursprung, Alter unt Verbreitung im heutigen Norwegisch". *Niederdeutsch in Skandinavien III. 151-166.* Elmevik, L & Schöndorff K.E. ed.

Travis, L: 1984. *Parameters and Effects of Word Order Variation.* Doctoral Diss. MIT, Cambridge, Mass.

Tremblay, M: 1991. "The syntax of Possession" *Views on Phrase Structure: 57-81.* K Leffel ed. Riedel.

Trosterud T: 1989. "The Null Subject Parameter and the New Mainland Scandinavian Word Order: A possible Counterexample from a Norwegian Dialect. *Papers from the Eleventh Scandinavian Conference of Linguistics I: 87-100.* University of Joensuu, Joensuu,

Ultan, R: 1978. "Towards a Typology of Substantival Possession" *Universals of Human Language 11-49*, Greenberg, J. ed. Stanford University Press, Stanford.
Vainikka, A: 1988. *Two Comparative Constructions.* McGill WP in Linguistics.
Valois, D: 1991. *The syntax of DP.* Unpubl. Diss. UCLA.
Vannebo, K.I: 1972. "Ein sterk ein prylert". *Maal og Minne 1972:160-173.* Oslo.
Vannebo, K.I: 1978. "Tellelige og massebetenende substantiver". *Norskrift 20, 28–65.* Oslo.
Venås, K: 1989. "Toril Fiva: *Possessor chains in Norwegian.*". Review, *Norsk Lingvistisk Tidsskrift 1/1989:90-109.* Oslo.
Vergnaud, J-R: & Zubizarreta, M.L: 1992. "The Definite determiner and the Inalianable Construction in French and English". *Linguistic Inquiry 23:595-652.*
Vestlund, A: 1948. *Medelpads folkmål.* Svenska Landsmål B: 48.
Wessén, E: 1965. *Svensk språkhistoria III. Grundlinjer till en historisk syntax.* 2:a uppl. Almqvist & Wiksell, Stockholm.
Western, A: 1921. *Norsk riksmåls-grammatikk.* Kristiania.
Westroth, H: 1987. *Några svenska adjektivs syntaktiska och semantiska valens.* Ms, Institutionen för nordiska språk, Lund.
Zimmermann, I: 1991. "The Subject in the Noun Phrase: Its Syntax and Semantics". *Syntax und Semantik der Substantivgruppe (I Zimmermann ed.; =Studia Grammatica 33)* 33-68.
Åström, P: 1893. *Degerformålets Formlära.* De svenska landsmålen ock svenskt folkliv XIII.2. Stockholm.

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