

Double definiteness in Scandinavian*

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1. Introduction: ‘double definiteness’

The so-called ‘double definiteness’ in Scandinavian, which is found in Norwegian, Swedish, and Faroese, is illustrated by the Norwegian examples in (1). As we see in (1a) and (1b), a definite nominal phrase that contains no adjective or numeral has a suffixed article but no prenominal determiner. But if there are adjectives or numerals in a definite nominal phrase, the suffixed article co-occurs with a prenominal determiner. This phenomenon, shown in (1c), (1d), and (1e), is the ‘double definiteness’.¹

(1) *Norwegian*

- | | | | | |
|----|---------------------------|---------------------|-------------------------|------------------------|
| a. | skjort- a | | b. | skjort-e- ne |
| | <i>shirt-DEF.FEM.SG</i> | | | <i>shirt-PL-DEF.PL</i> |
| | ‘the shirt’ | | | ‘the shirts’ |
| | | | | |
| c. | de-n | gul-e | skjort- a | |
| | <i>DEF-SG</i> | <i>yellow-W</i> | <i>shirt-DEF.FEM.SG</i> | |
| | ‘the yellow shirt’ | | | |
| | | | | |
| d. | de-i | gul-e | skjort-e- ne | |
| | <i>DEF-PL</i> | <i>yellow-W</i> | <i>shirt-PL-DEF.PL</i> | |
| | ‘the yellow shirts’ | | | |
| | | | | |
| e. | de-i | to (gul-e) | skjort-e- ne | |
| | <i>DEF-PL</i> | <i>two yellow-W</i> | <i>shirt-PL-DEF.PL</i> | |
| | ‘the two (yellow) shirts’ | | | |

2. Longobardi (2001) on the denotation of DPs

To explain this phenomenon, I will start by pointing to Longobardi (2001). In this paper, Longobardi notes that there are two ways in which a nominal argument can be assigned a denotation: either the nominal itself refers

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¹ The following abbreviations are used in the glosses: DEF=definite, FEM=feminine, INDEF=indefinite, MASC=masculine, NEUT= neuter, PL=plural, PRES=present, REFL= reflexive, SG=singular, W=weak inflection.

directly, or else the denotation arises through a quantificational structure, where the nominal is connected to a variable which is bound by an existential or generic operator.

In the latter case, the DP may always be introduced by an empty D-projection. This is illustrated by the Italian examples in (2). (2a) shows a DP that is inserted in an existential environment, and (2b) shows a DP that is inserted in a generic environment. In either case, D is empty.

(2) *Italian*

- a. [_{DP} *e* Elefanti di colorebianci] hanno creato in passato
elephants of colour white have created in past
 grande curiosità.
great curiosity
 ‘White coloured elephants raised a lot of curiosity in the past.’
- b. [_{DP} *e* Cani da guardia di grosse dimensioni] sono più efficienti.
dogs of guard of great dimensions are more efficient
 ‘Watch dogs of large size are more efficient.’

However, when the nominal itself refers directly, Italian and other Romance languages require the D-node to have phonologically overt material in it. For example, proper names either appear with a determiner, as in (3a), or else move themselves to D, as in (3b). Leaving D empty, as in (3c), is out.

(3) *Italian*

- a. [_{DP} L’ antica Roma] (fu distrutta dai barbari).
the ancient Rome was destroyed by.thebarbarians
- b. [_{DP} Roma antica t_{Roma}] (fu distrutta dai barbari).
Rome ancient was destroyed by.thebarbarians
- c. * [_{DP} *e* Antica Roma] (fu distrutta dai barbari).

Similarly, in Italian a DP that functions as a kind name must have a filled D-position, as (4) demonstrates.

(4) *Italian*

- [_{DP} *(Gli) elefanti di colorebianco] sono estinti.
the elephants of colour white are extinct
 ‘White coloured elephants are extinct.’

In Germanic, on the other hand, kind names allow the D-position to be empty. Thus, in all Germanic languages we find examples parallel to (5).

(5) *English*

[_{DP} *e* White elephants] have become extinct.

With proper names, the situation is a bit more complicated. While (6) is acceptable in English, its counterparts in other Germanic languages require an overt determiner, as in the Norwegian example in (7).

(6) *English*

[_{DP} *e* Ancient Rome] was destroyed by the barbarians.

(7) *Norwegian*

[_{DP} *(Det) *gaml-e Roma*] vartøydelagt av barbar-a-ne.
the old-DEF Roma was destroyed by barbarian-PL-DEF
 ‘Ancient Rome was destroyed by the barbarians.’

The obligatoriness of the determiner in (7) apparently has to do with the restrictiveness of the adjective. If a proper name combines with a non-restrictive adjective, D can be empty even in Norwegian, as (8) shows.²

(8) *Norwegian*

[_{DP} *e Gaml-e Anna*] sette seg.
old-DEF Anna sat REFL
 ‘Old Anna sat down.’

Constructions like (8) are not possible in Italian (cf. Longobardi 1994). According to Longobardi (2001), this contrast has to do with the syntactic function of empty D-nodes. In languages like Italian, an empty D-node always implies a quantificational structure, and it follows that in cases where the nominal refers directly, as proper names and kind names do, the D-position must be filled. In Germanic, by contrast, an empty D-node does not necessarily imply a quantificational structure, and accordingly, referential expressions such as proper names and kind names may appear with an empty D-node.

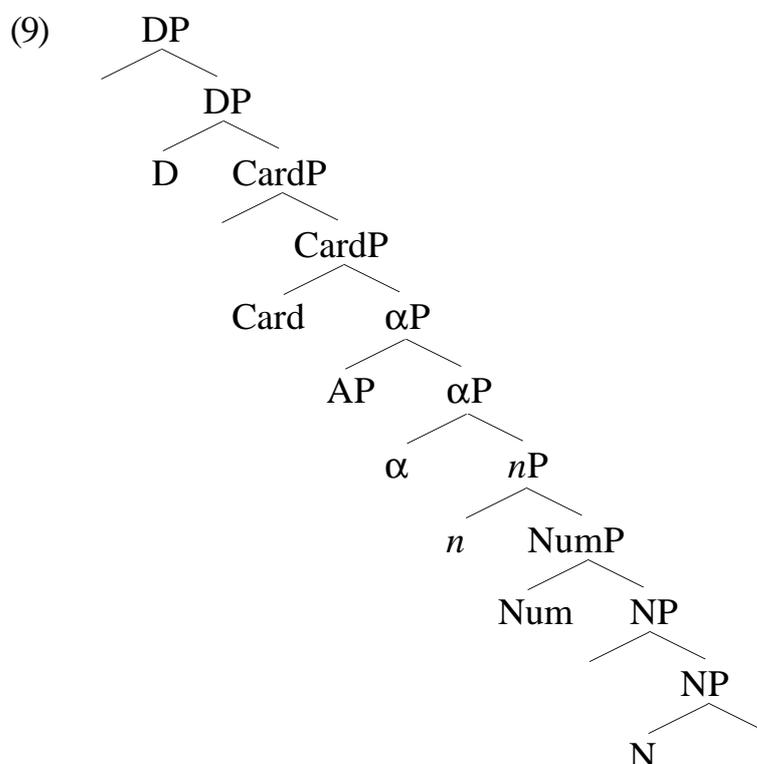
² Colloquial German and many dialects of Mainland Scandinavian use a determiner with person names, though. Thus, the contrast between Romance and Germanic is not as clear-cut as Longobardi (2001) seems to suggest. However, I will not deal with the variation within Germanic here.

Longobardi attributes this difference to the strength of D. He suggests that the referential properties of D are weak in Germanic but strong in Romance. Because of this, Germanic DPs can have a referential reading even if the D-position is not associated with overt material, while in Romance, referentiality requires that the referring expression is visibly associated with D. What I will show here is that the so-called ‘double definiteness’ in Scandinavian can be taken to essentially corroborate Longobardi’s analysis of Germanic.

3. The syntactic structure of the DP

The syntactic structure that I would ascribe to DPs is shown in (9). Every projection that is included here has been proposed by others (see e.g. Duffield 1996, Cinque 1996, Vangsnes 1999, Zamparelli 2000), and I think they can all be motivated, although I will not go into details here.

As we see, I assume that on top of the NP there is a Num(ber)P and an *n*P. Then follow one or more projections that have adjectival phrases in their Spec (see the discussion in section 6). I have chosen to term these projections α P. Above the α P projections is the projection that hosts cardinal numerals and other weak quantifiers (cf. Duffield 1996, Cinque 1996, Vangsnes 1999, Zamparelli 2000). To avoid confusion with NumP, I have termed this projection CardP. Finally, on top of CardP we find the DP-projection.



As for the suffixed definite article in Scandinavian, it has been suggested earlier by several researchers that it is generated in a head which is separate from N (see Taraldsen 1990, Kester 1993, Santelmann 1993, Sandström & Holmberg 1994, and the analysis of Icelandic in Vangsnes 1999). My proposal is that in the varieties of Scandinavian that have double definiteness, that is Norwegian, Swedish, and Faroese, the suffixed definite article is generated in *n*, and the number markers that are suffixed to nouns are generated in Num.³

I will also assume that N always moves to the Num and *n* heads overtly in all varieties of Scandinavian.⁴ With the number marker in Num and a definite marker in *n*, we then get the order Noun+Number+Definite, which is illustrated in (10). In addition, this example reflects the order of the projections above *n*P.

(10) *Swedish*

de två röd-a bil-ar-na
 DEF.PL two red-Wcar-PL-DEF.PL
 ‘the two red cars’

Movement of N to *n* explains why possessors are often postnominal in their surface order, although they are probably generated in a Spec above N (see e.g. Taraldsen 1990, Ritter 1991, Cinque 1996, Vangsnes 1999). Consider the construction in (11).

(11) *Norwegian*

de-n ny-e forstå-ing-a hennar av seg sjølv
 DEF-SG new-W understand-ing-DEF.FEM.SG her ofREFL self
 ‘her new understanding of herself’

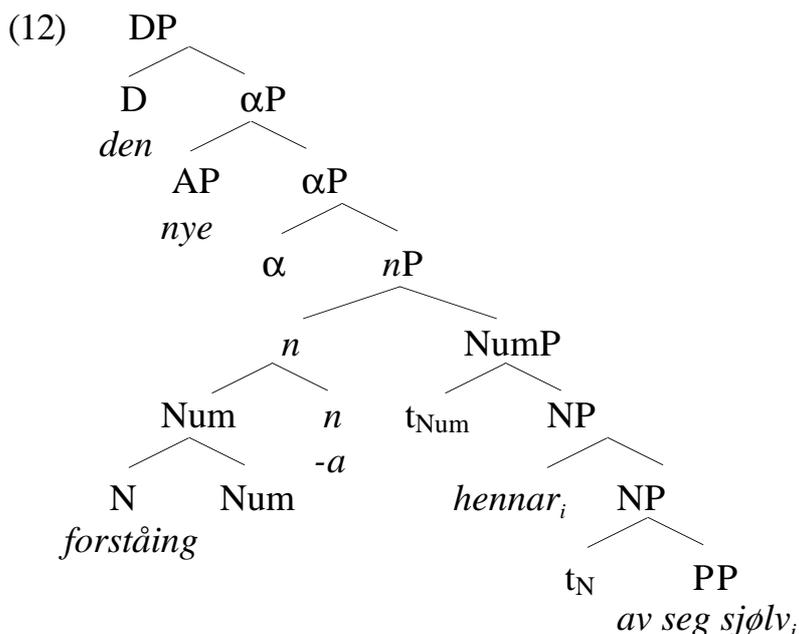
Here the noun, which has a suffixed article, precedes its arguments, i.e. the possessor/subject and the PP object. If theta roles are assigned locally, we would assume the arguments to be generated inside NP. Also note that the possessor/subject can bind the object. This would follow if the possessor is located in Spec-NP, while the object is (inside) the complement of N. The

³ To my knowledge, a NumP was first proposed by Ritter (1991), and similarly named projections have later been posited by many researchers in the field. However, in all the analyses in question the DP is much less articulate than what I take it to be, and because of this, it is unclear, in each particular case, whether the proposed NumP corresponds to my NumP or to my CardP.

⁴ I take this movement to be a nominal parallel to the obligatory movement of V to *v* (Chomsky 1995), hence the term *n* for the head that N moves to.

order Noun–Possessor–Complement then suggests that the noun has moved across the possessor out of the minimal NP. Still, the noun follows the adjective and the prenominal determiner. This shows that the noun has not moved to D; rather, it is the prenominal determiner that occupies D.⁵

We must conclude that there is a landing site for the nominal head above the minimal NP but below the adjective. My proposal is therefore that the syntactic structure of (11) is as shown in (12).



The configuration in (12), with N raised to *n*, is a stage in the derivation of all nominal phrases in Scandinavian. In some cases, it is the final stage. In other cases, additional movement operations take place.

4. The D-projection

Concerning D, I assume that D has an unvalued feature [_udefinite], in addition to unvalued phi-features, and that these features must be valued by agreement with an element that has valued features (cf. Chomsky 1999). If we consider the structures in (9) and (12), we see that it is reasonable to assume that number features are generated in Num and definiteness features

⁵ If no adjective or numeral is present, there is no prenominal determiner either—see (i).

(i) forstå-ing-a hennar av seg sjølv
 understand-ing-DEF.FEM.SG her of REFL self
 ‘her understanding of herself’

On my analysis, this construction involves movement of *nP* to Spec-DP, just like corresponding DPs without possessors—see section 6. In other words, a postnominal possessor has no syntactic effects outside of *nP*.

in *n*. Person and gender features are presumably supplied by the noun itself. But after movement of N to Num and *n*, the features that are relevant for D are all contained in the complex *n* head. Hence, in the successful derivation there will be an agreement relation between D and *n*. But importantly, I assume that this agreement does not require overt movement; it can be established with D and *n* in their base positions (cf. Chomsky 1998, 1999).

Given the structure of DP that I am assuming, Longobardi's insights concerning Germanic DPs can be formulated as follows. When αP refers directly, so that the reference of αP equals the reference of the DP as a whole, the D-projection can be phonologically empty. The D-projection can also be empty when the DP involves a variable that is existentially or generically bound by an operator. But whenever the DP refers to a specified subset of the set of entities in the extension of the αP , the reference of the DP depends on D, and because of this, D must be made visible, which means that there must be overt material in the D-projection, that is, either in D itself or in Spec-DP.

More precisely, my proposal is that what is required is that the definiteness feature of D has a local phonological realisation, i.e. either in D or in Spec-DP. In addition, the highest projection of the nominal phrase must have a nominal category feature. This requirement should probably be connected to the proposal made in Baker (to appear), according to which nouns are characterised by having a referential index. In other words, the only lexical category associated with referentiality is the nominal category. Given this, it seems reasonable to assume that the nominal phrase as a whole, i.e. the highest projection, must have a nominal feature if the phrase is to have a specified reference.

5. Indefinite nominal phrases

5.1 Indefinite singular nominal phrases

Let us now consider indefinite singular nominal phrases in the languages under discussion. In such phrases, D gets its features valued by agreement with *n*, as usual. As a result, D and *n* share a set of features. However, the indefinite *n* head itself has no phonological realisation in these languages. Instead, the features shared by D and *n* in indefinite singular DPs with a non-mass reading are realised phonologically by means of an indefinite determiner inserted in D—see (13a). Arguably, the indefinite determiner is nominal, and it gives the [-definite] feature of D a local phonological realisation. Accordingly, with an indefinite determiner in D, the reference of the DP is restricted to one member of the set denoted by αP .

(13) *Norwegian*

- a. ei-t hus
 INDEF-NEUT.SG *house*
 ‘a house’
- b. ei-t gul-t hus
 INDEF-NEUT.SG *yellow-NEUT.SG* *house*
 ‘a yellow house’

If an adjective or a numeral is added to the derivation, this has no consequences for the noun and the determiners. When an α head or Card head is merged over *nP*, this head has definiteness and phi-features that come to agree with those of *n*. In the next step, an AP is merged in Spec- α P and/or a numeral is merged in Spec-CardP. The features of the AP and of the numeral will then agree with those of α and Card, respectively. Finally, D is merged, has its features valued, and gets spelled out by the indefinite determiner. The result will be as in (13b).⁶

5.2 *Indefinite plural nominal phrases*

Indefinite plural nominal phrases and singular mass nominal phrases often appear without a determiner. In these cases, D gets its features valued in the usual manner, but these features do not get a local phonological realisation. Hence, the reference of the DP relative to the set denoted by α P is not specified by D. Either α P refers directly, as is the case when α P is a kind name, as in (14a), or else the reference of the DP is determined by an operator binding a variable. An example of this, involving a generic operator, is shown in (14b).

(14) *Norwegian*

- a. [_{DP} *e* *Kvite nashorn*] *er* *nesten utrydda*.
 white rhinos *be.PRES* *nearly extinct*
 ‘White rhinos are nearly extinct.’
- b. [_{DP} *e* *Kvite kattar*] *er* *ofte døve*.
 white cats *be.PRES* *often deaf*
 ‘White cats are often deaf.’

⁶ In this particular case, we see that the adjective agrees with the noun and the determiner. However, in many cases this agreement is not visible, because non-neuter singular indefinite adjectives have zero marking in Norwegian and Swedish (and also in Danish).

However, as illustrated in (15a), an indefinite plural nominal phrase without a determiner cannot have specific reference, in the sense of Abbott (1995) (cf. Vangsnes 1999:59). For specific reference, some element must be added that can restrict the reference of the DP relative to the reference of α P. As we see in (15b), numerals and indefinite quantifiers can perform this function.

(15) *Norwegian*

- a. Jeg vil snakke med leger. #De arbeid-er her.
I want talk with doctors they work-PRES here
- b. Jeg vil snakke med noen/to leger. De arbeid-er her.
I want talk with some/two doctors they work-PRES here

Presumably, these elements may surface in the DP-projection in such cases. Hence, it appears again that the reference of the DP depends on the features of D being made visible.

6. Definite nominal phrases

In definite nominal arguments, we get ‘double definiteness’. But it is interesting to note in this connection that in Norwegian, Swedish, and Faroese, a definite nominal phrase containing an adjective but lacking a prenominal determiner can be used descriptively, as in (16) (cf. Lundeby 1981), and as a vocative, as in (17).

(16) *Norwegian*

Det var (*de-n) svart-e natt-a da ho kom.
it was DEF-SG black-w night-DEF.FEM.SG when she came
 ‘It was dark night when she came.’

(17) *Norwegian*

Veit du ikkje det, (*de-n) stor-e jent-a!
know.PRES you not that, DEF-SG big-w girl-DEF.FEM.SG
 ‘Don’t you know that, you big girl!’

In accordance with Longobardi’s theory, the D-projection can be empty even in argumental DPs if the α P contains a proper name, as in (8), or if α P is a proper name, as in (18).

(18) *Norwegian*

Vibesøkte [DP *e* Gamle Loge-n]
we visited old lodge-DEF.MASC.SG
 ‘We visited The Old Lodge [a concert hall in Oslo].’

Moreover, in certain cases a phrase of the form Adjective Noun+Def, without a prenominal determiner, may appear in argument position even if it is not a proper name. This is possible if the referent of α P is familiar and unique in the universe of discourse, as in the Norwegian examples in (19) (cf. Delsing 1993).

(19) *Norwegian*

- a. Du kan ta (de-n) ny-e bil-en.
you can take DEF-SG new-W car-DEF.MASC.SG
 ‘You can take the new car.’
- b. Ho løft-a (de-n) venstre hand-a.
she lift-PAST DEF-SG left hand-DEF.FEM.SG
 ‘She raised her left hand.’

But if a definite nominal phrase containing an adjective or a numeral is an argument but does not have a familiar and unique referent in the context, it is ungrammatical to leave out the prenominal determiner in the ‘double definiteness’ languages.

This can be explained if we assume that a definite nominal phrase can function as an argument only if its reference is specified DP-internally, and that if the lexical categories that are present in the phrase do not by themselves specify the reference of the DP, the definiteness feature of D must be made locally visible in order for D to specify the reference of the DP. One way to do this is by spelling out the D head itself as a prenominal determiner.

Note that the prenominal determiners are formally identical to pronouns and demonstratives in Norwegian and Swedish and to demonstratives in Faroese. These elements can function as nominal phrases on their own, which is an indication that they do have nominal features. In addition, they are definite. Accordingly, I assume that because of their feature specifications, the prenominal determiners, when inserted in D, satisfy all the requirements of a definite D.

Another indication that the reference of the DP is dependent on D is the following. In (20), two coordination structures are shown. In (20a), each coordinate has a phonologically realised D, and the construction as a whole refers to two persons. In (20b), where only the first conjunct has a

phonologically realised D, the construction as a whole refers to only one person. Thus, the reference of the construction depends on the realisation of the D heads. The fact that all nouns in (20) have a definite suffixed article, for example, plays no role in this matter.

(20) *Norwegian*

- a. de-n ung-e professor-en og de-n kjærlig-e far-en
DEF-SG young-W professor-DEF and DEF-SG loving-W father-DEF
 ‘the young professor and the loving father’
- b. de-n ung-e professor-en og kjærlig-e far-en
DEF-SG young-W professor-DEF and loving-W father-DEF
 ‘the young professor and loving father’

However, it is not the case that the suffixed article, hence the *n* head, has no semantic effect at all. This can be seen from the Norwegian examples in (21). In (21a), we have a context that invites a generic reading of the subject DP. As indicated, the suffixed article is then optional. In (21b), where only an individual reference reading of the subject DP is possible, the suffixed article is obligatory. Thus, it appears that the suffixed article, that is *n*, has to do with individual reference.

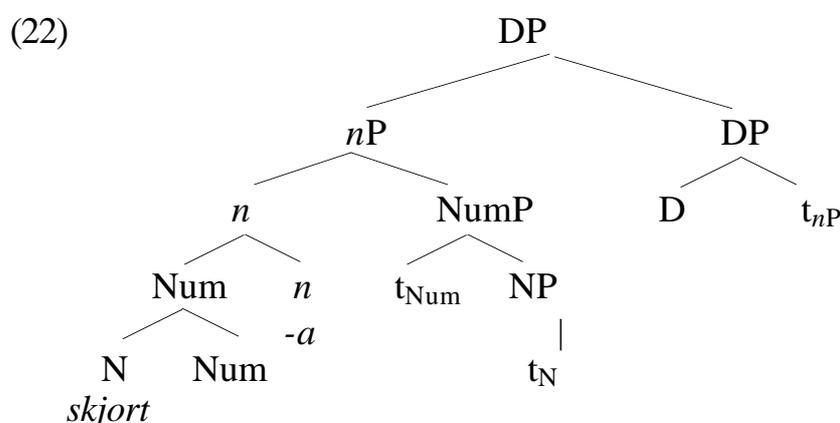
(21) *Norwegian*

- a. De-n kvit-e mann-(en) har undertrykt andre kultur-ar.
DEF-SG white-W man-DEF.SG has oppressed other culture-PL
 ‘The white man has oppressed other cultures.’
- b. De-n kvit-e mann-*(en) åt ein is.
DEF-SG white-W man-DEF.SG ate an ice(-cream)
 ‘The white man ate an ice-cream.’

Now the question is how the definiteness feature of D is made locally visible in DPs without adjectives or numerals, such as (1a). In previous analyses of the ‘double definiteness’ construction, it has been assumed that the noun head-moves to D in definite nominal phrases if no adjective intervenes. The adjective is taken to be a head located between D and N. Given the Head Movement Constraint, it follows that the movement of N to D will be blocked when an adjective is present. When movement of N to D is blocked, the prenominal determiner is inserted in D. (See e.g. Santelmann 1993, Delsing 1993, Kester 1993, Sandström & Holmberg 1994, Vangsnes 1999.)

A problem with these analyses is that it is not explained why we cannot have movement of N to A and of N+A to D. On the other hand, if adjectives are phrasal constituents that sit in Spec positions above where the noun is base-generated, as I am assuming, the question is why the noun cannot move through the heads that have the adjectives in their Spec.

What I will propose instead is that in definite DPs without prenominal modifiers, in the ‘double definiteness’ varieties, *nP* is attracted to Spec-DP. Since the definiteness feature is spelled out in *n*, this operation serves to give the definiteness feature of D a local realisation. In other words, on my analysis the structure of a simple definite nominal phrase like (1a) is as shown in (22).



In fact, there is a construction in Swedish and Norwegian which indicates that movement of *nP* to Spec-DP is possible. This construction, which is found in verse and in certain fixed expressions, is shown in (23). As we see, the inflected noun has moved to the front of the prenominal determiner, which I take to be generated in D.

(23) *Norwegian*

skog-en de-n grønn-e
forest-DEF.MASC.SG DEF-SG green-W
 ‘the green forest’

As evidence that the noun has not moved higher than Spec-DP here, one might point to the fact that if a demonstrative were to appear in the same nominal phrase, it would precede the noun and not follow it, as shown in (24). If demonstratives head a projection Dem immediately above DP, as will I assume, it follows that the nominal in (23) must occupy Spec-DP. Thus, my conclusion is that *nP* has moved to Spec-DP.

(24) *Norwegian*

denne skog-en (*denne) de-n grønn-e
this.SG forest-DEF.MASC.SG this.SG DEF-SG green-W
 ‘this green forest’

However, for definite nominal phrases containing adjectives or numerals, the construction illustrated in (23) is a very marked solution. The unmarked solution would be to have the noun following the modifier, as shown in (1). This must mean that the presence of adjectives or numerals normally blocks overt movement of *nP* to Spec-DP.

As I have mentioned, an AP that is merged in Spec- α P will agree with α , which in turn agrees with *n*. Hence, when D is merged above an α P with an AP in its Spec, the AP will be the closest goal for the probe D. Similarly, if a numeral is merged in Spec-CardP, the numeral will be the closest goal for the probe D, since the Card head as well as the numerals themselves agree (ultimately) with the complex *n* head.

But crucially, moving an adjective or a numeral to Spec-DP will not serve to specify the reference of the definite DP. The problem with adjectives is that they do not have a nominal category feature, in the sense that they do not have a referential index (Baker to appear). It is then of little help that definite adjectives in all Scandinavian varieties are characterised by the so-called ‘weak’ inflection, which could be taken to be a realisation of the [+definite] feature.

The problem with numerals is that they do not spell out any definiteness feature. Consider the Norwegian examples in (25). As we see, the numeral has the same form regardless of the definiteness of the nominal phrase it appears in. That is, its form is compatible with [-definite] as well as with [+definite].

(25) *Norwegian*

a.	fem bil-ar <i>five car-PL</i> ‘five cars’	b.	de-i fem bil-a-ne <i>DEF-PL five car-PL-DEF.PL</i> ‘the five cars.’
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Although a few numerals are in fact inflected in the languages under discussion—in Faroese, the numerals 1 to 3, and in Mainland Scandinavian, the numeral 1—the vast majority of numerals are not. That is, most numerals, like adjectives, are unable to specify the reference of the definite DP. This is apparently generalised to the class of numerals as a whole, so that all numerals have to be accompanied by the pronominal determiner in definite nominal phrases, as in (25b).

This does not necessarily mean that the derivation crashes if an AP or a numeral is the highest element of a definite DP—D will in any case have its features valued. The problem is rather of a semantic nature: the reference of the DP is not defined. At the same time, the DP has a [+definite] feature. The distribution of such a DP will naturally be fairly restricted. But as we have seen, Norwegian, Swedish, and Faroese do have nominal phrases of exactly this type.

It is clear, though, that normally, if a definite DP with a prenominal modifier is to be an argument, some operation is necessary to make the [+definite] feature of D locally visible, and to give the DP projection an overt nominal feature, so that the reference of the DP can be specified. Since adjectives and numerals do not suffice, and *nP* cannot move to Spec-DP due to the intervention of the modifier, the only solution is to spell out D itself as a prenominal determiner. The result is a ‘double definiteness’ construction.

Concerning the marked option shown in (23), where *nP* raises across the adjective, the fronted nominals in these examples appear to be focused. One could propose that they have a focus feature that allows them to skip the adjective, which lacks this feature, and that the focus feature of the noun is matched with a focus feature in D.

A question that now arises is the following. Why is it that one cannot spell out D itself in a definite DP *without* prenominal modifiers? In other words, why do we get (26a) and not (26b), with a prenominal determiner?

(26) *Norwegian*

- | | | | |
|----|---|----|---|
| a. | [DP [_{<i>nP</i>} hus-et] D <i>t</i> _{<i>nP</i>}]
house-DEF
‘the house’ | b. | * [DP det [_{<i>nP</i>} hus-et]]
DEF house-DEF
‘the house’ |
|----|---|----|---|

One might think that if Merge is preferred over Move (Chomsky 1998), we would get (26b) and not (26a). But it appears that the Merge vs. Move issue is not relevant here after all. D is merged in any case, so the choice is really between moving *nP* and giving D a phonological realisation. In terms of the number of operations, these two options are equal. Since D already agrees with *n*, the only additional operation that is necessary to derive (26a) is merger of *nP* in Spec-DP, whereas the only additional operation that is necessary to derive (26b) is retrieving an item from the lexicon to spell out D. Apparently, since (26a) is preferred to (26b), the introduction of the extra lexical item in (26b) is more costly than the extra Merge in (26a). This is in line with the suggestion in Chomsky (2001) that internal Merge is in principle free.

References:

- Abbott, Barbara. 1995. 'Some remarks on specificity,' *Linguistic Inquiry* 26, 341–346.
- Baker, Mark. (To appear). *On the lexical category distinctions*, Cambridge University Press, Cambridge.
- Chomsky, Noam. 1998. 'Minimalist inquiries: the framework,' *MIT Occasional Papers in Linguistics* 15.
- Chomsky, Noam. 1999. 'Derivation by phase,' *MIT Occasional Papers in Linguistics* 18.
- Chomsky, Noam. 2001. 'Beyond explanatory adequacy,' Ms., MIT.
- Cinque, Guglielmo. 1996. 'The 'antisymmetric' programme: theoretical and typological implications,' *Journal of Linguistics* 32, 447–464.
- Delsing, Lars-Olof. 1993. *The internal structure of noun phrases in the Scandinavian languages*, Doctoral dissertation, University of Lund.
- Duffield, Nigel. 1996. 'On structural invariance and lexical diversity in VSO languages: arguments from Irish noun phrases,' in Robert D. Borsley & Ian Roberts (eds.), *The syntax of the Celtic languages*, Cambridge University Press, pp. 314–340.
- Kester, Ellen-Petra. 1993. 'The inflectional properties of Scandinavian adjectives,' *Studia Linguistica* 47, 139–153.
- Longobardi, Giuseppe. 1994. 'Reference and proper names: a theory of N-movement in syntax and Logical Form,' *Linguistic Inquiry* 25, 609–665.
- Longobardi, Giuseppe. 2001. 'How comparative is semantics? A unified parametric theory of bare nouns and proper names,' *Natural Language Semantics* 9, 335–369.
- Lundeby, Einar. 1981. 'Syntagmetypen "yngste sønnen", "svarte natta",' *Maal og Minne* 1981, 61–71.
- Ritter, Elizabeth. 1991. 'Two functional categories in noun phrases: evidence from Modern Hebrew,' in Susan D. Rothstein (ed.), *Perspectives on phrase structure: heads and licensing*, Academic Press, San Diego, California, pp. 37–62.
- Sandström, Görel & Anders Holmberg. 1994. 'Adjective Incorporation and the syntax of the Scandinavian noun phrase,' *Report 35*, Department of General Linguistics, University of Umeå, pp. 81–97.
- Santelmann, Lynn. 1993. 'The distribution of double determiners in Swedish: *den* support in D,' *Studia Linguistica* 47, 154–176.
- Taraldsen, Knut Tarald. 1990. 'D-projections and N-projections in Norwegian,' in Joan Mascaró & Marina Nespors (eds.) *Grammar in Progress*, Foris, Dordrecht, pp. 419–431.
- Vangsnes, Øystein Alexander. 1999. *The identification of functional architecture*, Doctoral dissertation, University of Bergen.
- Zamparelli, Roberto. 2000. *Layers in the determiner phrase*, Garland, New York.