A puzzle about PPs in Danish definite DPs

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1 Introduction

Definiteness in Danish (and other Scandinavian languages) is expressed either by a prenominal article or a postnominal suffix. When the definite DP contains no modifiers, as in (1) and (2), definiteness is realized by the suffix, not the article. (In assigning a '*' to (2) we are ignoring a possible demonstrative reading where *den* is stressed.)

(1) gris-en
pig-DEF

(2) *den gris
DEF pig

When the DP contains an attributive Adjective, as in (3) and (4), only the article is possible. (The general pattern of definiteness marking in all the Scandinavian languages is similar, though there are variations. For concreteness, we focus on Danish throughout this paper.)

(3) *plettede gris-en
spotted pig-DEF

(4) den plettede gris
DEF spotted pig

If the DP contains a restrictive relative clause, as in (5), the article is also possible.[1]

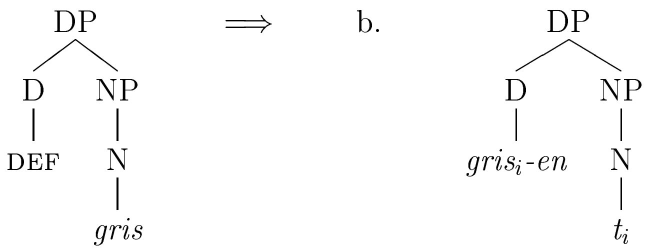
(5) den gris som vi fik af naboen
DEF pig that we got from neighbor-DEF

[1] A few Danish speakers do not accept *den* in (5) as a definite article, but only as a demonstrative.

2 Previous Accounts

Head Movement Accounts Delsing (1993) and Embick and Noyer (2001) offer accounts in which Definite Noun forms (like that in (1)) are derived by movement. As shown in (6a), the DEF feature is generated in D and the N-head of its complement raises to adjoin to D, resulting in the suffixed form in (6b):

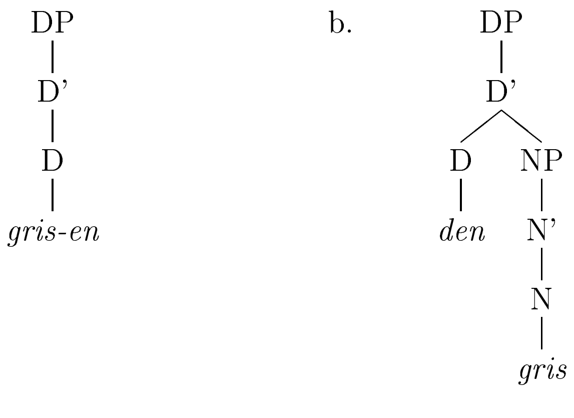
(6) a. b.



When the DP contains an attributive adjective, movement of N to D is blocked by the Head Movement Constraint, together with certain assumptions about the structural relation between AP and N, thus accounting for the ungrammaticality of (3). In the absence of movement, the structure is spelled out with a prenominal lexical definite article, as in (4).

A Lexicalist Alternative Hankamer and Mikkelsen (2002) argue that Definite Noun forms are not derived by movement, but by a morphological rule which turns bare Noun forms into definite Determiners. Thus (1) is derived in the lexicon and enters the syntax as a D (= (7a)).

(7) a. b.



The ungrammaticality of (2) (= (7b)) is due to their version of a blocking principle first proposed by Poser (1992):

(8) ... *when a word-formation process and a phrase-forming syntactic process compete for the expression of exactly the same morphological category, the word-formation process wins and the phrasal construction is blocked.* (H&M, p. 161)

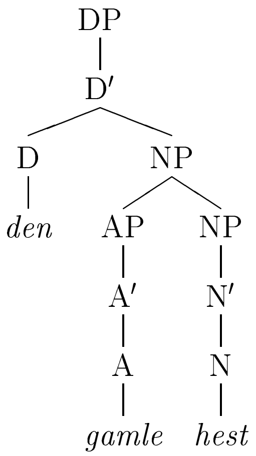
Thus (7a) blocks (7b).

The definite suffix does not co-occur with attributive adjectives, because suffixed forms like *gris-en* are DPs and attributive adjectives adjoin to NP.

The ability of the definite article to co-occur with attributive adjectives is accounted for as follows:

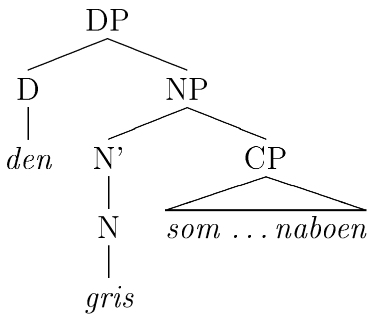
- The definite article is an independent lexical item which subcategorizes for an NP complement, as in (9).
- The attributive adjective adjoins to that NP complement.
- There is no blocking because there is no lexical expression equivalent to the DP in (9).

(9)



Example (5) is grammatical because restrictive relative clauses adjoin low (to NP) making *den gris* in (5) not a phrase, as shown in (10); hence (5) is not blocked.

(10)



The head movement accounts provide no ready explanation for the grammaticality of (5), since it is not obvious what would prevent N from moving to D in (10).

3 PP Modifiers

A relevant but previously unnoticed fact is that PP modifiers never license the prenominal article:

(11) a. gris-en med blå pletter
pig-DEF with blue spots

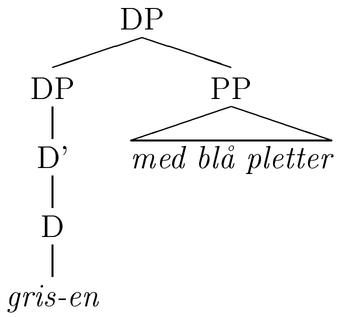
b. *den gris med blå pletter
DEF pig with blue spots

(12) a. hest-en på marken
horse-DEF on field-DEF

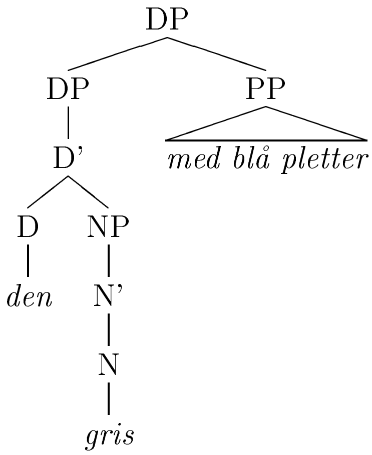
b. *den hest på mark-en
DEF horse on field-DEF

Within H&M's analysis this means that PPs must adjoin to DP, not to NP, since then (13b) would be blocked by (13a):

(13) a.

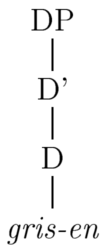


b.

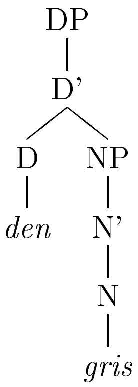


Just like (14b) is blocked by (14a):

(14) a.



b.



Supporting evidence for PP modifiers adjoining to DP, comes from the observation that PPs can modify personal pronouns, which are standardly assumed to be Ds:

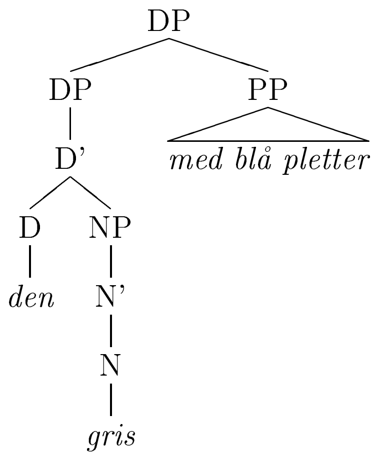
(15) den med blå pletter
it with blue spots
'the one with blue spots'

(16) ham fra fjernsynet
him from television-DEF
'the guy from TV'

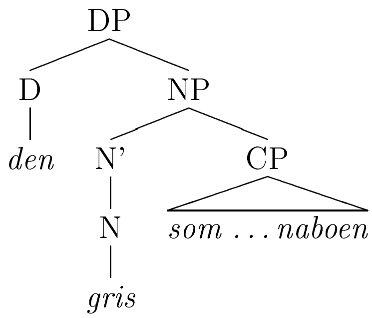
4 The Puzzle

This analysis of modifier PPs, however, predicts that a restrictive relative clause outside a PP modifier could not license the prenominal article: there is no way to "merge" the two structures in (17).

(17) a.



b.



This prediction is false:[2]

(18) den gris [$_{PP}$ med blå prikker] [$_{CP}$ som vi fik af naboen]
DEF pig with blue dots that we got from neighbor-DEF
'the pig with the blue spots that we got from the neighbor'

(19) den hest [$_{PP}$ på mark-en] [$_{CP}$ som står for sig selv]
DEF horse on field-DEF that stands by it self
'the horse on the field that is standing by itself'

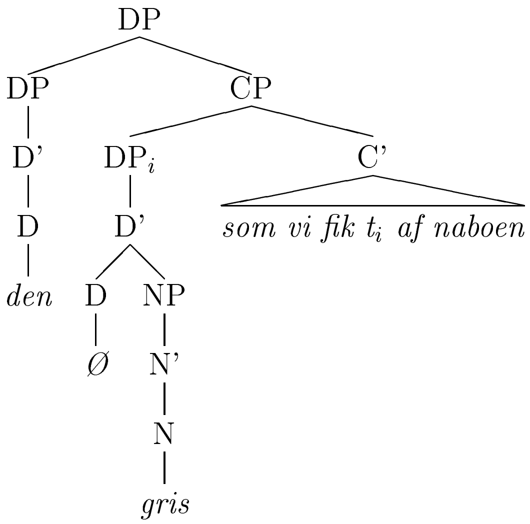
[2]The same minority of speakers who do not accept *den* in (5) as a definite article, but only as a demonstrative, also do not accept *den* in (18) and (19) as a definite article, but only as a demonstrative.

5 A Solution

- Restrictive relative clauses are derived by DP raising Bianchi (1999, 2000)
- A variant of "head-raising" analyses (Schachter 1973, Vergnaud 1974, Kayne 1994), but the category raised is DP, not NP or anything smaller.
- Evidence for raising from the reconstruction effects; (Bianchi 1999:107–130).

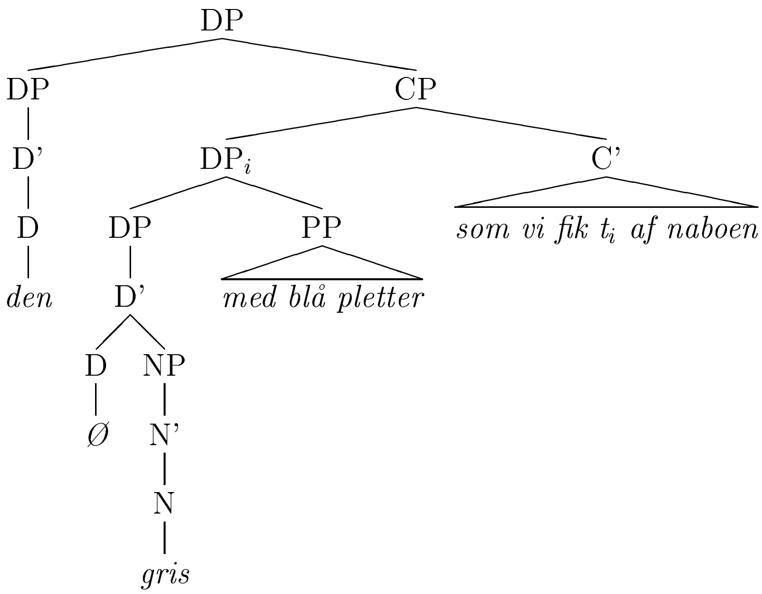
A definite DP containing a restrictive relative clause has the structure in (20):

(20)



- No Poser-blocking because *den gris* does not form a phrase in (20).
- Recall that we were forced (by the facts in (11) and (12)) to assume that PP modifiers adjoin to DP. This, then, leads to a structure for (18) like (21) — (again no blocking):

(21)



A note on non-restrictive relative clauses Bianchi proposes the DP-raising analysis only for restrictive relative clauses, since the reconstructions effects are not found with non-restrictive relative clauses. If DP-raising is essential to the licensing of the definite article in DPs with restrictive relative clauses, as we suggest it is, we would not expect non-restrictive relative clauses to license the definite article. And they don't. The relative clause in (22) can only have a restrictive interpretation. To get a non-restrictive interpretation the definite suffix must be used as in (23):

(22) den gris som vi fik af naboen [RESTRICTIVE]
DEF pig that we got from neighbor-DEF
'the pig that we got from the neighbor'

(23) grisen, som vi fik af naboen [NON-RESTRICTIVE]
pig-DEF which we got from neighbor-DEF
'the pig, which we got from the neighbor'

6 A Remaining Puzzle

Argument PPs behave just like modifier PPs with respect to definiteness marking:[3]

(24) a. ejer-en [$_{PP}$ af gris-en]
owner-DEF of pig-DEF

b. *den ejer [$_{PP}$ af gris-en]
DEF owner of pig-DEF

c. den ejer [$_{PP}$ af gris-en] [$_{CP}$ der kender den bedst]
DEF owner of pig-DEF who knows it best

(25) a. forfatter-en [$_{PP}$ til bog-en]
author-DEF to book-DEF

b. *den forfatter [$_{PP}$ til bog-en]
DEF author to book-DEF

c. den forfatter [$_{PP}$ til bog-en] [$_{CP}$ som kom til fest-en]
DEF author to book-DEF that came to party-DEF

In terms of the analysis developed here, this is very puzzling if argument PPs are sisters of N under N', as is commonly assumed. If, in (25b), the PP *til bogen* (of the book) is a sister of the N *forfatter* (author), then *den forfatter* would not form a phrase. Hence, *den forfatter* would not be blocked by *forfatteren* in (25a), and the ungrammaticality of (25b) remains mysterious.

[3] To allow for a restrictive interpretation of the relative clauses in (24c) and (25c) we must assume multiple owners and multiple authors. This is indeed what is implied by these DPs.

Conclusion We have proposed a solution to the puzzle of why PP modifiers, unlike restrictive relative clauses, do not license the definite article in Danish DPs. There are two points of more general interest to note about this solution.

- It provides evidence new evidence for the DP-raising analysis of restrictive relative clauses proposed by Bianchi (1999, 2000).
- It leads us to question the assumption that PP arguments are sisters of N under N', and more generally that arguments of noun have the same phrase-structural realization as arguments of verbal heads (Grimshaw 1990, Baker 2003).

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