

Definiteness marking and the structure of Danish partitive constructions

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1 Introduction

Like several other Germanic languages, Danish has three partitive(-like) constructions (van Riemsdijk 1998, Vos 1999):

1. Regular Partitive Construction:

- (1) tre af turisterne
 three of tourists-DEF
 three of the tourists

2. Direct Partitive Construction (DPC): [D N1 N2]

- (2) en gruppe turister
 a group tourists
 a group of tourists

3. Indirect Partitive Construction (IPC): [D N1 P N2]

- (3) en gruppe af turister
 a group of tourists
 a group of tourists

DPC and IPC (= pseudopartitives):¹

- strong surface similarity: both involve D, measure N1, and indefinite mass or plural N2
- catalogue of differences: agreement, stress, word order, inflection
(section 4; Delsing 1993:185–224, Vos 1999, Kinn 2001, Koptjevskaja-Tamm 2001)
- different status of N1: lexical (N) in IPC, functional (n) in DPC

¹Despite superficial similarities, the difference between IPC and DPC is fundamentally different from the one observed for English *2 liters of oil* vs. *90 degree oil* by Schwarzschild (2002), and has nothing to do with monotonicity.

2 A puzzle

IPCs, but not DPCs, allow suffixal definiteness marking on N1 (Heltoft 1996:23, Kinn 2001:147):

- (4) gruppen af turister [IPC]
 group-DEF of tourists
the group of tourists
- (5) *gruppen turister [DPC]
 group-DEF tourists

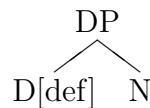
Prenominal definiteness marking is allowed in both IPCs and DPCs in the presence of a restrictive relative clause:

- (6) den gruppe af turister der netop ankom [IPC]
 DEF group of tourists that just arrived
the group of tourists that just arrived
- (7) den gruppe turister der netop ankom [DPC]
 DEF group tourists that just arrived
the group of tourists that just arrived

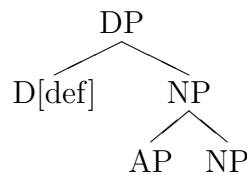
3 Definiteness marking

The definite suffix is found when D[def] is in direct construction with N (sisterhood); the prenominal article is found elsewhere (Hankamer and Mikkelsen 2002, 2005):

- (8) a. grupp-en
 group-DEF
the group
- b. *den gruppe
 DEF group



- (9) a. *store grupp-en
 big group-DEF
- b. den store gruppe
 DEF large group
the large group



- (10) a. forfatteren [til bogen]
 author-DEF to book-DEF
the author of the book
- b. den forfatter [der vandt prisen i fjor]
 DEF author who won prize-DEF in last-year
the author who won the prize last year

4 Structure of pseudopartitives

4.1 Data

Internal agreement In both DPCs and IPCs article shows gender agreement with N1, never with N2 (COMMON vs NEUTER):

- (11) a. **en** spand vand [DPC]
a-COM bucket-COM water-NEU
a bucket of water
- b. ***et** spand vand
a-NEU bucket-COM water-NEU
- (12) a. **en** spand med vand [IPC]
a-COM bucket-COM with water-NEU
a bucket of/with water
- b. ***et** spand med vand
a-NEU bucket-COM with water-NEU

External agreement No subject-verb agreement, but predicative adjectives agree with subject for number and gender, though system is eroding (Jacobson 2005:1818); data is complex and difficult to assess, nonetheless:

- in DPCs agreement seems to follow semantics: if the adjective predicates some property of N1, agreement is with N1; if the adjective predicates some property of N2, agreement is with N2:

- (13) en kasse æbler var for **stor** (til at være i bagagerummet)
a-COM box-SG-COM apples be-PAST too large-SG-COM to to be in trunk-DEF
A/One box of apples was too large to fit in the trunk.
- (14) en kasse æbler var for **store** (til at være i madkassen.)
one box apples be-PAST too large-PL to to be in lunch-box-DEF
A/One box of apples were too large to fit in the lunch box.

- In IPCs external agreement with N2 seems more restricted:

- (15) en kasse med æbler var for **stor** (til at være i bagagerummet)
a-COM box-SG-COM with apples be-PAST too large-SG-COM to to be in trunk-DEF
A/One box of apples was too large to fit in the trunk.
- (16) ??en kasse med æbler var for **store** (til at være i madkassen.)
one box with apples be-PAST too large-PL to to be in lunch-box-DEF

Stress on N1 N1 has regular word stress in IPC, but is destressed in DPC (Grønnum 1998:206, Koptjevskaja-Tamm 2001:553, Kinn 2001:126):

- (17) en 'gruppe af 'turister [IPC]
 a group of tourists
- (18) en ₀gruppe 'turister [DPC]
 a group tourists

Placement of *til* Additive *til* (more) can be placed between N1 and N2 in IPCs, but not in DPCs (Kinn 2001:150):

- | | |
|--|--|
| (19) IPC | (20) DPC |
| a. en til gruppe af turister
one more group of tourists
<i>one more group of tourists</i> | a. en til gruppe turister
a more group tourists
<i>one more group of tourists</i> |
| b. en gruppe af turister til
a group of tourists more | b. en gruppe turister til
a group tourists more |
| c. en gruppe til af turister
a group more of tourists | c. *en gruppe til turister
a group more tourists |

Restrictions on N1 Some items occur as N1 in DPC, but not IPC:

- (21) en liter (*af) vand
 a liter of water
- (22) et kilo (*af) smør
 a kilo of butter
- (23) et par (*af) turister
 a pair of tourists

Also *kilometer*, *meter*, *pund* (pound), cf. Delsing's (1993) *genuine quantifiers*.

Inflectional deficiency N1 in DPC is inflectionally deficient (see Kinn 2001 on Norwegian)

1. N1s that occur only in DPC (see above) do not have a plural form distinct from the singular:

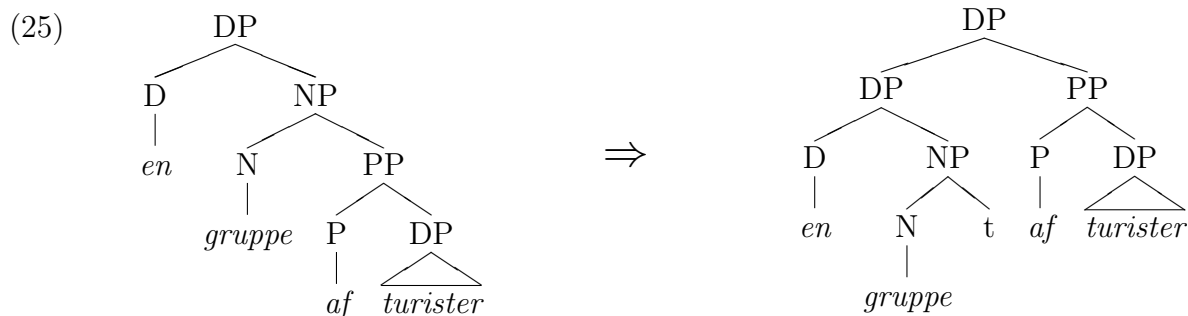
- (24) a. en liter vand
 one liter water
- b. tre liter vand
 three liter water
- c. *tre liter-er vand
 three liter-PL water

2. many N1s that occur freely in DPC when singular do not occur (or occur much less frequently) when plural compared with occurrence in IPC:²

	DPC	IPC	
<i>flok</i> (flock-SG)	97	3	
<i>flokke</i> (flock-PL)	0	9	
<i>gruppe</i> (group-SG)	73	17	(Also <i>bakke</i> (tray), <i>bundt</i> (bunch), <i>buket</i> (bouquet), <i>bunke</i> (heap), <i>flaske</i> (bottle), <i>kasse</i> (box) <i>kop</i> (cup), <i>masse</i> (mass), <i>pakke</i> (pack), <i>samling</i> (collection), <i>stak</i> (stack), <i>stump</i> (piece).)
<i>grupper</i> (group-PL)	1	21	
<i>pose</i> (bag-SG)	29	1	
<i>poser</i> (bag-PL)	1	3	
<i>stabel</i> (pile-SG)	11	1	
<i>stabler</i> (pile-PL)	0	12	

Upshot N1 behaves like a regular noun in IPC, but not in DPC

4.2 Possible structure for IPC



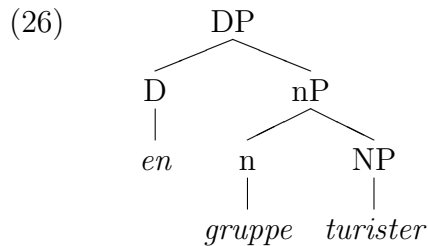
Extrapolation of PP (H&M 2005) or perhaps late merger of PP (Bhatt and Pancheva 2004)

- expect D to agree with N1 (true)
- expect external agreement with N1 only (almost true)
- expect N1 to have ordinary word stress (true)
- if *til* can right-adjoin to NP we understand [D N1 *til* P N2]
- expect N1 to show plural inflection (true)
- N1-DEF possible in IPCs (and [D N PP] generally): D is sister to minimal NP at spell-out
- restriction on P (*af*, *med*) is a case of (l-)selection; PP is complement of N1, though it extraposes/merges late.

²Frequency data from DK87-90, a 4 million word corpus of written Danish.

4.3 Structure for DPC

- N1 is not a regular N, but a functional category, which we call n³
- DPC is one extended nominal projection (Grimshaw 1991, Vos 1999, van Riemsdijk 1998)



- expect D to agree with N1 (true)
- unclear what to expect about external agreement (feature sharing in extended projection)
- prosodic weakness of N1 due to functional status
- no extraposition of NP; *til* cannot intervene between N1 and N2
- inflectional deficiency of N1 due to functional status
- N1-DEF impossible: D[def] is not the sister of N.
- N2-DEF impossible (**en gruppe turisterne* ‘a group tourists-DEF’) because n takes NP, not DP complement

Solution to first half of definiteness puzzle:

- N1 of IPC is regular N; N1 of DPC is functional, n.
- N1 of IPC can bear definite suffix:
 - is of the right category (N)
 - occurs in the right configuration with D at spell-out
- N1 of DPC cannot bear the definite suffix:
 - partly for category reasons: n is not N
 - partly for structural reasons: NP complement of n never extraposes, and hence n will never be in direct construction with D[def] at spell-out
- analysis makes sense of a range of other observations about IPSs and DPCs

³This might not be the best choice of label, since n is already in use for something different, e.g. by Julien (2005).

5 Pre-nominal definiteness marking and relative clauses

Recall IPCs and DPCs different wrt. postnominal definiteness marking, but both occur with prenominal definite article in context of restrictive relative clause:

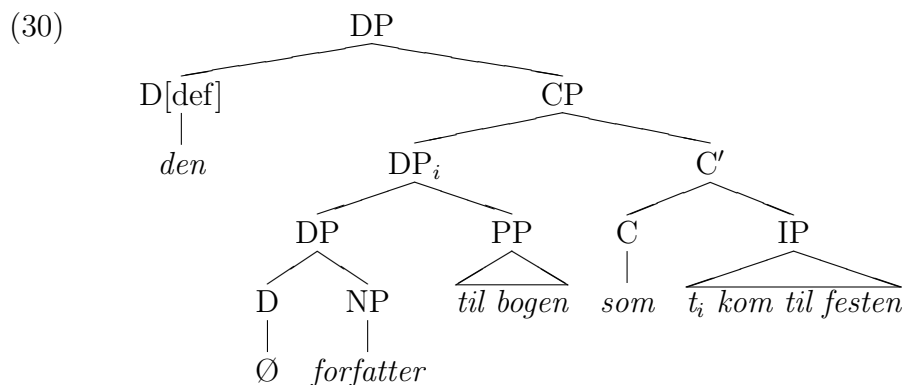
(27) **den** gruppe af turister der netop ankom
 DEF group of tourists that just arrived
the group of tourists that just arrived

(28) **den** gruppe turister der netop ankom
 DEF group tourists that just arrived
the group of tourists that just arrived

In other contexts a restrictive relative clause licenses prenominal definiteness marking:

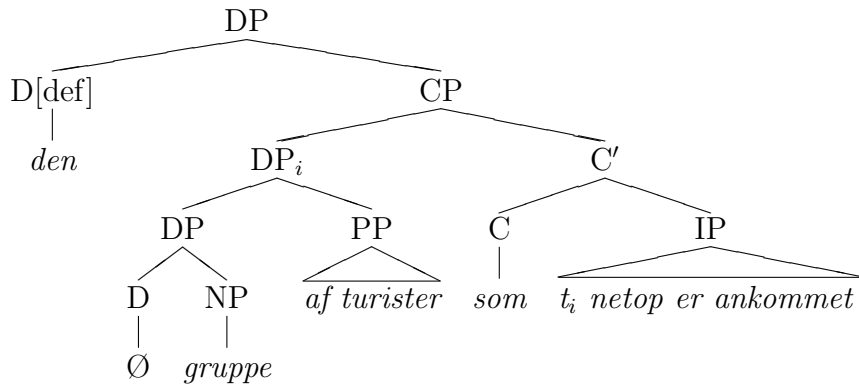
- (29) a. **forfatteren** [til bogen]
 author-DEF to book-DEF
the author of the book
- b. ***den** forfatter [til bogen]
 DEF author to book-DEF
- c. **den** forfatter [til bogen] som kom til festen
 DEF author to book-DEF who came to party-DEF
the author of the book who came to the party

Hankamer and Mikkelsen (2005) DP-raising analysis of relative clause (Bianchi 1999; language-internal evidence from reconstruction effects)

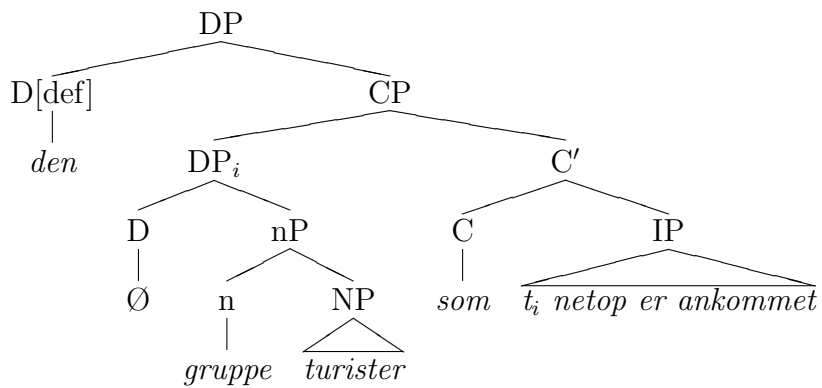


At spell-out D[def] is not sister of N, hence we get prenominal definiteness marking, the elsewhere case.

(31) Indirect Partitive Construction:



(32) Direct Partitive Construction:



Solution to second half of definiteness puzzle: The possibility of prenominal definiteness marking in (27) and (28) has nothing to do with the structure of DPC and IPC, but everything to do with the derivation of restrictive relative clauses in Danish.

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