

**DRESSED PARTITIVES, CONSTRUCT STATES AND ECP:
A DUTCH MICRO-COMPARATIVE PERSPECTIVE**

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1 Introduction

In this article we examine the internal and external syntax of Dutch partitives by taking a micro-comparative perspective on this type of nominal construction.¹ In Standard Dutch, and also in many dialectal varieties of Dutch, the partitive construction looks very similar to its Standard English counterpart: a “bare” numeral is followed directly by the preposition *van* (English *of*), which in turn precedes a definite noun phrase:

- (1) a. Jan heeft [vier van de koeien] gemolken.
 Jan has four of the cows milked
 b. John milked [four of the cows].

In several dialects of Dutch, partitives have the intriguing property that the numeral can be morphologically “dressed”. That is, an *-e* (pronounced as the sound ‘schwa’) is attached to the numeral, as for example in *viere van de koeien* (four+*-e* of the cows). There are two interesting restrictions on the occurrence of dressed partitives. Firstly, the schwa does not appear on the numeral when the partitive is [+HUMAN]. Thus, *vier van de mannen* (four of the men) does not allow a schwa after *vier*: **viere van de mannen*. Secondly, with [-HUMAN] partitives schwa only appears on the numeral when the partitive noun phrase occupies a position which, in *Government & Binding* terminology, is not ‘properly governed’ (cf. Chomsky’s (1981) *Empty Category Principle (ECP)*). Thus, in object position we find *vier van de koeien*, but in subject position, i.e. [Spec,TP], we find *viere van de koeien*. This constellation of empirical phenomena raises the following questions: (i) What is the nature of *-e* and what does it tell us about the internal syntax of partitives? (ii) How do we account for the [+HUMAN] versus [-HUMAN] asymmetry? (iii) How do we account for the subject-object

¹ The research reported on in this article was part of a larger research project entitled *Diversity in Dutch DP Design (DiDDD)*, which was carried out at Utrecht University and financially supported by The Netherlands Organization for Scientific Research (NWO); see Corver et al (2007). For this project the nominal system of 53 dialects, evenly distributed over the Netherlands and Flanders (the Dutch speaking part of Belgium), was investigated.

asymmetry? As a fourth question we may add: (iv) What do those dialects exhibiting ‘dressed partitives’ tell us about dialects in which partitive noun phrases always appear “naked” at the surface?

At the theoretical level, the following major claims will be made: Firstly, partitive noun phrases display properties of Construct State (CS) nominal expressions and consequently have an internal syntax characteristic of CS-constructions (see Borer 1984, Ritter 1991, Longobardi 1996). Secondly, the ECP-phenomenon (subject-object asymmetry) can be interpreted along the lines of Bošković and Lasnik’s (2003) minimalist analysis of the distribution of English null-complementizers in terms of PF-merger. In the line of Embick and Noyer’s (2001) theory of PF-merger operations, we will further argue that two types of PF-operations are involved: *Raising* in the case of naked numerals and *Local Dislocation* in the case of dressed numerals. Thirdly, intra-dialectal variation (*in casu* [+HUMAN] *versus* [-HUMAN] in Giethoorn Dutch) and inter-dialectal variation (Giethoorn Dutch *versus* Standard Dutch) relates to Spell out of the syntactic structure (‘externalization’).

2 Dressed partitives in Giethoorn Dutch: some observations

We will discuss the behavior of dressed partitives by focusing on one specific dialect: Giethoorn Dutch (see also Kranendonk 2010).² As shown in (2), the numeral in the partitive construction is always morphologically bare (i.e. without schwa) when the partitive has a [+HUMAN] referent.

- (2) a. *Vier van mien buurkinder’n* gaf’*m* een koekie. (SU)
 four of my neighbor kids stole a cookie
- b. Ik wol gister’n *vier van mien buurkinder’n* uutneudigen (DO)
 I wanted yesterday four of my neighbor kids invite
 veur’n feesien.
 for-a party
 ‘Yesterday, I wanted to invite four of my neighbor kids for a party.’
- c. Mien man gaf *vier van de buurkinder’n* ’n appel. (IO)

² The village of Giethoorn is located in the North-eastern part of the Netherlands. The phenomenon of “dressed” partitives is also found in dialects spoken in other regions of the Netherlands or Belgium, one example being Kortijk Dutch, which is spoken in Belgium:

(i) *Achte van die joenges zitten hier op skole.*
 Eight-e of those boys sit here on school

- my husband gave four of the neighbor kids a apple
- d. Mien dochter die doet mit vier van eur buurkinder'n 'n spullechien. (complement of P)
- my daughter she does with four of her neighbor kids a game
 ‘My daughter is playing a game with four of her neighbor kids.’
- e. Mien dochter vond vier van de buurkinder'n lief. (SC-subject)
- my daughter found four of the neighbor kids sweet
- f. Ik heb vier van mien buurkinder'n 'n koekie zien steel'n. (ECM-context)
- I have four of my neighbor kids a cookie see steal
 ‘I saw four of my neighbor kids steal a cookie.’

If the partitive construction has a [-HUMAN] referent instead of a [+HUMAN] one, a different picture emerges: An *-e* (i.e. the sound schwa) appears attached to the numeral when the partitive noun phrase is a subject (3a), a complement of P (3d), or an indirect object (3c). As indicated, the presence of *-e* is not obligatory for our informants in the case of indirect object partitives.³

- (3) a. *Aachte van mien koen et'n vaers gras.* (SU)
- eight-*e* of my cows eat fresh grass
- b. Ik goa mor'n *aacht van mien koen verkoop'm.* (DO)
- I go tomorrow eight of my cows sell
- c. De boer gaf *aacht(e)* van zien koen een schupp voer. (IO)
- the farmer gave eight(-*e*) of his cows a shovel food
 ‘The farmer gave eight of his cows a shovel of food.’

³ Dressed numerals (i.e. NUM+*-e*) also show up in Giethoorn Dutch in other structural contexts (see Kranendonk 2010, Corver 2010; see also Taldeman (1984) for the occurrence of dressed numerals in Flemish Dutch). For example, *-e* appears on a numeral which is part of a noun phrase from which the so-called quantitative R-pronoun *er* (compare French *en* and Italian *ne*) has been extracted. This is exemplified in (ia). As shown in (ib), *-e* must be absent when an overt noun follows the numeral. As exemplified by (ii), *-e* also appears on the numeral in the bare nominal construction in (ii), where ‘bareness’ refers to the (obligatory) absence of the definite article (**de boek viere*). Importantly, in Standard Dutch, we always have the “naked” numeral *vier* in (i) and (ii).

- | | |
|--|------------------------------------|
| (i) a. Ik heb er toen <i>viere</i> gekocht | (ii) boek <i>viere</i> |
| I have of-them then four- <i>e</i> bought | book four- <i>e</i> |
| ‘I bought four.’ | ‘book number four/the fourth book’ |
| b. Ik heb toen vier(* <i>e</i>) stoelen gekocht | |
| I have then four(- <i>e</i>) chairs bought | |

A complete analysis of these constructions falls beyond the scope of this article. At the end of this article, we will briefly return to these constructions. See note 36.

- d. De boer lop mit *aachte van zien koen* noar de stal. (complement of P)
 the farmer walks with eight-*e* of his cows to the barn
 ‘The farmer is walking to the barn with eight of his cows.’
- e. De slager vond *aacht van mien koen* te mèger. (SC-subject)
 the butcher found eight of my cows too skinny
- f. Ik heb *aacht van mien koen* vaers gras zien et’n. (ECM-context)
 I have eight of my cows fresh grass seen eat
 ‘I saw eight of my cows eat fresh grass.’

The data in (2) and (3) can be summarized as follows:⁴

(4) Syntactic function	[+HUMAN]	[-HUMAN]
Subject	vier	achte
Direct object	vier	acht
Indirect object	vier	acht(e)
Complement of P	vier	achte
Small clause subject	vier	acht
ECM-context	vier	acht

In what follows we will try to give an account of (i) the distribution of schwa (-*e*) within the class of [-HUMAN] partitives, and (ii) the contrast between [+HUMAN] partitives and [-HUMAN] ones. In order to answer these questions, we will first have to determine what the internal architecture of partitive nominal expressions is. In the next section we will propose that partitives have the syntax of Construct State nominal expressions.

3 Partitives as Construct State expressions

One of the main issues in the literature on partitives is the question as to whether a partitive construction contains one or two noun positions (see Martí i Girbau (2010) and Kranendonk (2010) for recent overviews of the discussion). That is, does the sequence *vier van de koeien* in (1a) have the pattern in (5a) or the one in (5b), where N_\emptyset represents a phonetically empty noun?

⁴ The examples in (2) and (3) are those used in our questionnaires. Our informants confirmed that the distribution of naked and dressed partitives as given in (3) is the same for partitives featuring the numeral *vier* (four). For example, *viere van mien koen* in (3a) and *vier van mien koen* in (3b).

- (5) a. [[vier] van de koeien] b. [[vier N_o] van de koeien]

A complete and systematic comparison of the two analyses is beyond the scope of this article.⁵ The analysis which we would like to defend here is the one in (5a). More specifically, we propose that partitives are instances of Construct State (CS) nominal expressions. In what follows, we will motivate this analysis by drawing a parallel with Construct State possessive noun phrases in a language like Modern Hebrew (cf. Borer 1984, Ritter 1988, Siloni 1994).

A first property of partitive noun phrases is the fact that the numeral cannot be preceded by a determiner-like element. That is, the numeral must occur in initial position.⁶

- (6) Ik heb [(**de/*die*) acht van mijn koeien] verkocht
 I have the/those eight of my cows sold
 ‘I sold eight of my cows.’

As shown in (7), CS possessive noun phrases are also characterized by the obligatory absence of a definite determiner (e.g. *ha*) in initial position. In other words, the Dutch partitive and the Hebrew Construct State possessive share this important syntactic property.⁷

- (7) (**ha-*)beyt ha-mora
 (the-)house the-teacher
 ‘the teacher’s house’

A second CS-characteristic of the Dutch partitive construction comes from the phenomenon of (in)definiteness inheritance. Let us first consider the CS possessive in Modern Hebrew. Given the fact that *beyt* in (7) is not preceded by a definite article, the definiteness of the entire nominal expression must come from elsewhere. It is generally assumed that it is the (genitival) definite possessor-DP *ha-mora* following *beyt* that determines the definiteness of

⁵ The idea that the partitive noun phrase contains a phonetically empty noun has been argued for in, among others, Jackendoff (1977), Hoeksema (1984), Kester and Sleeman (2002), Sauerland and Yatsushiro (2004).

⁶ Importantly, in DP-ellipsis contexts a sequence like *de/die acht* is possible, where the elided noun phrase refers to a set of familiar (i.e. D-linked) objects, e.g. cows.

(i) Ik heb [*de/die acht*] gisteren verkocht
 I have the/those eight yesterday sold
 ‘I sold those eight (e.g. cows) yesterday.’

⁷ Definite non-CS noun phrases do contain the definite article in initial position: *ha-bayit*, the-house; ‘the house’.

the entire nominal construction. Thus, in CS nominal constructions the (in)definiteness reading of the matrix nominal expression is contextually inherited from that of its subordinate.

When we turn now to partitives, we observe that they display this CS-property: the (definite) DP that follows *van* determines the definiteness of the entire noun phrase. Importantly, the numeral itself is not capable of turning a noun phrase into a definite noun phrase. This is shown, for example, by (8a), where *vier koeien* (four cows) is the lower subject of an existential construction. Since, existential constructions do not permit definite DPs as subjects, as shown in (8b), it is clear that the numeral plays no role whatsoever in determining the definiteness of the entire noun phrase. As a consequence, the ill-formedness of (8c) can only be due to the definiteness of the DP which follows *van*. That this DP is a “satellite” rather than the head of the partitive construction is suggested by the subject–finite verb agreement phenomenon in (8d): it is the numeral (*een*), and not the noun (*koeien*), which stands in an (number and person) agreement relation with the finite verb.^{8 9} In short, as the (in)definiteness of the possessor-DP determines the (in)definiteness of the entire possessive CS noun phrase, so the (in)definiteness of the partitive DP determines the (in)definiteness of the entire partitive noun phrase.¹⁰

⁸ That the feature *PERSON* is involved is suggested by the form of the finite verb when it carries present tense; in the past tense all singular forms (i.e. 1st, 2nd and 3rd) are the same: *stond* (stood).

- (i) Staat [een van de koeien] in de wei?
stands one of the cows in the meadow
‘Does one of the cows stand in the meadow?’

In this V_{fin} -Subject order, the finite verb has the form *staat*. When the subject-DP is first or second person, we have the form *sta* in this structural context: *Sta ik...* (Stand I...), *Sta jij...* (Stand you...).

⁹ Another ‘agreement’-based argument which shows that the numeral is the syntactic head of the partitive noun phrase comes from binding (see Wiers 1978, Bennis 1978, Coppen 1991). As shown in (i), it is the numeral (*een* ‘one’) that enters into an agreement relationship with the bound anaphor *zichzelf* (himself), and not the first person plural pronoun *ons* (us). Examples are drawn from Coppen (1991:53):

- (i) [Een_i van ons] had zichzelf_i verraden.
one of us had himself betrayed
‘One of us had betrayed himself.’
(ii) *[Een van ons_i] had onszelf_i verraden.
one of us had ourselves betrayed

¹⁰ In a language like Hungarian, the phenomenon of definiteness inheritance within the partitive noun phrase is clear from the phenomenon of definiteness conjugation, i.e. the phenomenon that the finite verb agrees in (in)definiteness with the direct object noun phrase. As shown in (ia) and (ib), respectively, the verb has indefinite conjugation when the DO is indefinite, but definite conjugation when the DO is definite. As shown in (ic), the finite verb has the definite conjugation when the DO is a partitive phrase like ‘five of your men’. See Bartos (2001) for discussion.

- (i) a. Látok öt embert (indefinite conjugation)
see-1SG five man-ACC
‘I see five men.’
b. Látom az öt embert (definite conjugation)
see-1SG.OB the five man-ACC
‘I see the five men.’
c. Látom öt emberedet (definite conjugation)
see-1SG.OB five man-2SG.POSS.ACC

- (8) a. Er stonden vier koeien in de wei.
 there stood four cows in the meadow
 ‘There were four cows in the meadow.’
- b. *Er stonden de (vier) koeien in de wei.
 there stood the four cows in the meadow
- c. ?*Er stonden vier van de koeien in de wei.¹¹
 there stood four of the cows in the meadow
 ‘There were four cows in the meadow.’
- d. Een van de koeien stond/*stonden in de wei.
 one of the cows stood_{sg}/stood_{pl} in the meadow
 ‘One of the cows was standing in the meadow.’

A third property of the Modern Hebrew CS possessive noun phrase concerns the case feature of the (possessor-)DP that follows the possessed noun. It is generally assumed that the possessor bears genitive case and that this case is assigned by a null Determiner ($D_{\emptyset<gen>}$), which is the head of the Construct State DP and, as we will see later, functions as the adjunction site for a syntactically raised noun (*beyt* in (7)); see Ritter (1988, 1991). Thus, in (7), $D_{\emptyset<gen>}$ assigns genitive case to *ha-mora*.¹² At first sight, the Dutch partitive *vier van de koeien* appears to be quite different from the possessive CS in Modern Hebrew: As opposed to the latter construction, we find the preposition-like element *van* in between the numeral *vier* and the DP *de koeien*. In other words, the initial element and the DP that follows do not seem to be linearly adjacent to each other, a property which is generally taken to be characteristic of the CS construction. Of course, much depends on the analysis of *van*. Is it, for example, a true PP (see (9a)) or should it be interpreted as a case realization (see (9b)). The latter is more in line with the CS analysis, since the numeral and the following DP would

‘I see five of your men.’

¹¹ When the satellite-DP is indefinite, the partitive noun phrase can occur as the (lower) subject in an existential construction (see (i)). Importantly, in CS nominal expressions it is the (in)definiteness of the satellite phrase that determines the (in)definiteness of the larger noun phrase which contains the satellite. In other words, feature inheritance applies to both the [+definite] feature and the [-definite] feature.

(i) a. Er stonden [twee van zulke koeien] in de wei. (Standard Dutch)
 there stood two of such cows in the meadow
 ‘Two such cows were standing in the meadow.’
 b. Er stonden [zulke koeien] in de wei.
 there stood such cows in the meadow
 ‘Such cows were standing in the meadow.’

¹² In a language like Modern Hebrew, this genitival case remains “abstract”; that is, it does not get spelled out morphologically.

be linearly adjacent in the syntactic structure if *van* is simply a morphological manifestation of genitive case in PF (i.e. <+gen> spells out as *van*).¹³

- (9) a. [[vier] [_{PP} van [_{DP} de koeien]]] b. [[vier] [_{DP<+gen>} de koeien]]]

One argument against (9a) and in support of (9b) is the fact that it is impossible to extrapose the sequence *van* + *DP* (see also Coppen 1991).¹⁴ This is exemplified in (10). In this respect, *van de koeien* behaves like a regular DP. As shown in (11), DPs normally cannot be extraposed in Dutch. As shown in (12), the sequence *van*+*DP* can be extraposed from within other (i.e. non-partitive) nominal constructions. Arguably, in those cases, *van*+*DP* constitutes a PP.

- (10) a. Jan heeft vier van de koeien gemolken.
 Jan has four of the cows milked
 b. *Jan heeft vier gemolken van de koeien.
- (11) a. Jan heeft de koeien gemolken.
 Jan has the cows milked
 b. *Jan heeft gemolken de koeien.
- (12) a. Jan heeft de uiers van de koeien gecontroleerd.
 Jan has the udders of the cows checked
 b. Jan heeft de uiers gecontroleerd van de koeien.

More circumstantial evidence in support of the representation in (9b) comes from archaic Dutch (13a), older variants of Dutch (e.g. Middle Dutch (13b)), and dialectal Dutch (e.g. Kempenland Dutch (13c); cf. De Bont (1958:398)).¹⁵ As shown in (13), the DP directly follows the numeral without the intervention of any preposition-like element *van*. Note, furthermore, that in some of the examples, the genitive case surfaces morphologically as a case suffix, whereas in others the DP remains morphologically bare as regards genitive case.

¹³ Advocates of the analysis in (9a) are among others Chomsky (1970:20), Akmajian and Lehrer (1976), Coppen (1991) and Martí i Girbau (2010). Advocates of the analysis in (9b) are Emonds (1976), Jackendoff (1977), Blom (1977), Doetjes (1997).

¹⁴ We abstract away here from the exact analysis of extraposition phenomena. The crucial observation here is that DPs typically do not extrapose in Dutch, whereas PPs do.

¹⁵ In Kempenland Dutch, these partitive noun phrases typically feature a superlative adjective within the satellite phrase (see also the Middle Dutch example for this phenomenon). See Kranendonk (2010) for discussion.

- (13) a. Ik ga [een dezer dagen] naar huis
 I go one these.GEN days to home
 ‘I will go home one of these days.’
- b. De vlienderboom es [een de leelicste ende onzienste boom]
 The butterfly-tree is one the ugliest and horriblem trees
 ‘The butterfly tree is one one of ugliest and most horrible trees.’
- c. [Drieⁱ de dikse hao’nen] hew gevat.
 Three the fattest cocks have-we taken
 ‘We took/slaughtered three of the fattest cocks.’

What these examples clearly show is that partitive constructions in other variants of Dutch can occur without the presence of the element *van*. Arguably, in all these constructions, abstract genitive case is assigned to the post-numeral DP by the null Determiner ($D_{\emptyset<gen>}$), which is taken to be the head of the entire Construct State noun phrase. The Dutch variants may differ from each other in the surface manifestation of this abstract case: zero-marking (13b,c), morphological marking (13a) or realization as *van* (10a).

Having shown that Dutch *van*-partitives display Construct State properties, let us now turn to their structural analysis. In the spirit of Ritter’s (1989, 1991) analysis of CS possessive noun phrases in Modern Hebrew, we will assume that the numeral starts out in a low position (i.e. Num) and raises and adjoins to a phonetically null Determiner ($D_{\emptyset<gen>}$), crossing the partitive DP which we take here to occupy the specifier of NUM.^{16 17} The null Determiner is constrained to assign genitive case to a noun phrase on its right. As we saw earlier, variants of Dutch may differ in the way this genitive case surfaces morphologically.¹⁸

¹⁶ (14) is also the structural analysis which Ritter (1991) proposes for Modern Hebrew CS expressions that are “headed” by quantifiers such as ‘all’ and ‘two’. *Shney* in (ib) is the CS-form of the numeral ‘two’; the Free State form of ‘two’ is *shnayim*. (ii) is the representation as given in Ritter (1991).

(i) a. kol ha-yeladim b. shney ha-yeladim
 all the-boys two the-boys
 ‘all the boys’ ‘the two boys’

(ii) [DP [Dⁱ shney_i+D $\emptyset<gen>$ [NumP [ha-yeladim] [Num t_i]]]]

¹⁷ See Shlonsky (2004) for an alternative analysis of Hebrew CS nominal expressions in terms of phrasal movement. In the present paper, we will follow the “traditional” analysis in terms of head movement. A comparison of the head movement analysis and the phrasal analysis falls beyond the scope of this paper.

¹⁸ Structure (14) may be surprising in the sense that the partitive noun phrase appears to be headed by what has often been identified as a functional category, viz. NUM. Normally, extended nominal projections are projected from a lexical category, i.e. *Noun*. It should be noted that numerals display certain properties that are reminiscent of the lexical category *Noun*. For example, they can be modified (English *[[a beautiful two] weeks]*), combine with a quantifier (English *[[every two] weeks]*) and a preposition (English: *John speaks [[around twenty] languages]*); see, among others, Jackendoff (1977) and Corver & Zwarts (2006). Given their hybrid status (i.e. *functional* as regards their “abstract” grammatical meaning (cardinality) and *lexical* as regards the above-

(14) [DP [D' vier_i+D_{∅<gen>} [NumP [de koeien] [Num t_i]]]]

Interestingly, in older variants of Dutch (e.g. Middle Dutch), it was possible to have the satellite phrase both in pre-numeral position (15a) and post-numeral position (15b):

(15) a. *dezer boeken één* b. *één dezer boeken* (Stoett 1977:71)
 these-GEN books one
 ‘one of these books’

(15b) has the structural analysis given in (14), with *één* being adjoined to the null-D via Num-to-D movement and *dezer boeken* morphologically expressing the assigned genitival case. What about (15a)? It seems plausible that this pattern represents the “base structure”, in the sense that no overt movement of NUM-to-D has taken place. In a way, they are “hidden” Construct State expressions, just like the Germanic Saxon genitive possessive noun phrases (e.g. English *John’s cows*, Dutch *Jans koeien*), which, in Longobardi (1996, 2001), have been analyzed as hidden Construct State expressions; that is, the possessed noun does not raise to D in overt syntax, but covertly in LF.¹⁹

4 Towards an analysis of the “ECP-phenomenon” in Giethoorn Dutch partitives

In this section we will develop in a stepwise fashion an analysis of the subject-object asymmetry (i.e. dressed versus naked) displayed by partitive nominal expressions in Giethoorn Dutch. As a first step, we will give in section 4.1 a GB-style analysis of the subject-object asymmetry in terms of ECP (proper government). In the spirit of Bošković and Lasnik’s (2003) minimalist analysis of the distribution of null-complementizers in English, we will reinterpret, in section 4.2, the Giethoorn Dutch subject-object asymmetry in terms of

mentioned properties), they may be characterized as *semi-lexical* categories in the sense of Corver & Van Riemsdijk (2001).

¹⁹ CS-characteristics of the (Dutch) Saxon Genitive construction *Jan’s koeien* (Jan’s cows) are (a) obligatory absence of the definite article at the beginning of the noun phrase (i.e. **de Jan’s koeien*; the John’s cows), and (b) inheritance of the (in)definiteness feature from the possessor by the larger (i.e. containing) noun phrase (see (i), where the indefiniteness feature of the possessor is inherited by the entire possessive noun phrase, which consequently can act as the lower subject in an existential clause):

(i) ...omdat er [iemand’s boek/*Jan’s boek] op mijn bureau lag
 ...because there someone’s book/Jan’s book on my desk lay

PF-merger, i.e. the possibility of PF-affixation of the null-D onto an appropriate host. As a third step (see 4.3), we will refine our PF-merger analysis by making use of Embick and Noyer’s distinction between two types of PF-merger operations: *Lowering* (which we will argue has the operation of *Raising* as its reverse PF-equivalent) and *Local Dislocation*.

4.1 Naked and dressed numerals in partitive constructions: a GB-style analysis

Having argued that Dutch partitive DPs have the internal syntax of a Construct State nominal expression, let us now turn again to the distribution of the element *-e* (schwa) in Giethoorn Dutch partitives. Remember that this element only appeared in partitive DPs having a [-HUMAN] referent. Furthermore, this schwa only appeared attached to the numeral in what we characterized as non-properly governed positions; that is, the subject position ([Spec,TP]), the complement of P, and possibly also the indirect object position. Those positions that fall within the government domain of the lexical category V—the direct object position, the small clause subject position and the subject position (i.e. [Spec,TP]) of the infinitival complement of an ECM verb—do not permit a (dressed) partitive DP which has a *-e* attached to the numeral. The numeral must be naked in those structural contexts.

Interestingly, the structural contexts in which we find naked partitives (NUM + of + DP) correspond to those structural environments which permit the well-known split *wat voor 'n N* construction (what for a N, ‘what kind of N’; see Den Besten (1985)) in Dutch; that is, the phenomenon that the wh-word *wat* can be removed from within a larger noun phrase, yielding a discontinuous nominal expression. The structural configurations which require dressed partitives (NUM-*e* + of + DP) correspond to the positions from which subextraction of *wat* is not permitted. The relevant split *wat voor 'n N* facts are given in (16):

- (16) a. **Wat_i* hebben [_{t_i} *voor mensen*]je moeder bezocht? (SU)
 what have for people your mother visited
 ‘What kind of people have visited your mother?’
- b. *Wat_i* heb jij in Italië [_{t_i} *voor musea*] bezocht? (DO)
 what have you in Italy for museums visited
 ‘What kind of museums did you visit in Italy?’
- c. ??*Wat* heb jij [_{t_i} *voor mensen*]je stuk gestuurd? (IO)
 what have you for people your paper sent
 ‘What kind of people have you sent your paper to?’

- d. **Wat_i* heb jij [_{PP} met [_{t_i} voor mensen] gesproken (complement of P)
 what have you with for people spoken
 ‘What kind of people did you talk to?’
- e. *Wat_i* vind jij nou [_{SC} [_{t_i} voor boeken] leuk]? (SC subject)
 what consider you PRT for books nice
 ‘What kind of books do you consider funny?’
- f. *Wat_i* zag jij [[_{t_i} voor een man] voor jouw deur staan? (ECM-context)
 What saw you for a man before your door stand
 ‘What kind of man did you see standing in front of your door?’

Den Besten gives an account of the (im)possibility of the split *wat voor* ‘*n N* construction in terms of the *Empty Category Principle* (ECP), which requires that empty categories (e.g. *wh*-traces) be properly governed (cf. Chomsky 1981, Rizzi 1990 for discussion). More specifically, subextraction of *wat* is permitted on the condition that the pertinent noun phrase (and its specifier position) be properly governed by the lexical category V. In (16b, e, f), V is able to govern the *wh*-trace left behind after subextraction of the *wh*-word *wat*. In the other structural environments, there is no proper governor available which can license the *wh*-trace: T cannot act as a proper governor for the subject-DP-internal trace in (16a), the category P in (16d) does not count as a proper governor either, and the *wh*-gap internal to the indirect object noun phrase does not “optimally” fall within the government domain of the lexical category V (whence the intermediate status).

Given the fact that there is a certain parallelism between the split *wat voor* ‘*n N* phenomenon and the dressed/naked partitive phenomenon in Giethoorn Dutch, the question arises as to whether the latter phenomenon also involves the licensing of an empty category (i.e. a gap). Importantly, when *-e* is absent in (3a,d), the sentence is ill-formed.²⁰ One way of thinking about this is that *-e* is a sort of last resort element that fills the gap and this way avoids an ECP-violation. In those environments in which the numeral remains bare (see (3b,e,f)), the gap can be licensed (‘properly governed’) by V. The question which now arises is: Which element in the partitive DP represents the empty category (i.e. the gap)? If our analysis of partitives as CS nominal expressions is correct, a plausible candidate seems to be

²⁰ As indicated, indirect object noun phrases exhibit “in between” behavior. Subextraction of *wat* from within an IO noun phrase is often taken to be worse than subextraction from within a DO noun phrase. At the same time, it is judged as being better than subextraction from within a subject noun phrase or complement of P. As shown in (3c), indirect object partitives in Giethoorn Dutch also display “in between” behavior. Some people prefer the presence of *-e*, others do not.

the phonetically empty D-head of the Construct State partitive DP (i.e. $D_{\langle \text{gen} \rangle}$); that is, the null-D to which the raised numeral gets adjoined.²¹

The ECP-analysis of the Giethoorn Dutch partitive facts is shown in (17)-(18) for the subject-object asymmetry: In (17), the boldface V is able to properly (i.e. lexically govern) the null-D, which heads the entire partitive DP. In (18), on the contrary, the null-D (i.e. D_{θ}) is not properly governed, since the category T, being non-lexical, does not account as a proper governor. In order to avoid an ECP-violation, Giethoorn Dutch uses a last resort strategy: D is spelled out by $-e$, which yields a structure in which no empty D is present anymore.²² A similar $-e$ insertion strategy arguably applies to partitive nominals that are complement of P, as in (3d), and IO partitives (3c).²³

- (17) ...[VP **V** [DP [D [NUM acht]+**D_θ**] [NUMP [van mien koên] ~~acht~~]]]
- (18) ...[TP [DP [D [NUM acht]+**D_θ**] [NUMP [van mien koên] ~~acht~~]] [T' T...]
- ↓
- $-e$ (\rightarrow *achte*)

The strategy used in Giethoorn Dutch is somehow reminiscent of the *trace* spell out strategy in a language like Vata when the subject has undergone wh-movement (cf. Koopman 1984). As illustrated by (19a), the empty position must be spelled out by a resumptive pronoun. As shown in (19b), the spell-out of the trace is not required (and consequently blocked) when the wh-moved element is an object-noun phrase. The trace is legitimate since it is properly governed by V (*le*).

- (19) a. **àló** *(ò) le saká la? b. **Yi** Kòfí le (*mí) la? (Vata)

²¹ That phonetic emptiness of D may trigger ECP-effects is well-known from Longobardi's (1994) analysis of the distribution of bare nouns in Italian and English. He observes that Romance bare nouns are usually excluded from preverbal subject position, but admitted in internal argument position (*ibidem*: 616); see the contrast in (i), where the bare noun is a mass noun:

- (i) a. **Acqua* viene giù dale colline. b. Ho preso *acqua* dalla sorgente.
 water comes down from-the hills I took water from-the spring

²² The last resort nature of schwa-insertion is shown by the fact that this operation does not apply in structural contexts in which the partitive noun phrase is 'properly governed':

- (i) *Ik goa mor'n *aacht-e* van mien koen verkoop'm.
 I go tomorrow eight-*e* of my cows sell

²³ As illustrated in (i), the occurrence of $-e$ as a definite article is found in other nominal contexts in certain Dutch dialects. Standard Dutch uses the definite article *de*, as in *de lamp* 'the lamp':

- (i) *Lampe* wil nait bran'n. (Oldambt Dutch, Ter Laan 1953)
 lamp-*e* wants not burn
 'The lamp won't light.'

who (he) eat rice WH
'Who ate rice?'

What Kofi eat (it) WH
'What did Kofi eat?'

So far, we have argued that the behavior of the Giethoorn Dutch partitive noun phrase can be characterized as an “ECP-phenomenon.” The central element is the null-D which heads the partitive noun phrase. In current research within the Minimalist framework (Chomsky 1995), the role of (proper) government has been reevaluated because of the arbitrary nature of the structural relation. Phenomena such as case assignment, the distribution of PRO and binding of reflexives, which in *Government & Binding* theory used to be treated in terms of government, have received alternative analyses that do not involve this structural relationship (see e.g. Chomsky 1993, Hornstein 1999, Reinhart and Reuland 1993). The abandonment of government also raises the question as to how GB-type ECP-phenomena can be reinterpreted. For the Giethoorn data at issue one might try to develop an analysis along the lines of Bošković and Lasnik’s (2003) (PF-merger) account of the distribution of null complementizers in English. In the next subsection, we will present such an approach.²⁴

4.2 From GB to Minimalism: A PF-merger approach towards naked and dressed partitives

As is well-known from Stowell (1981) and Kayne (1981), the distribution of null complementizers is restricted to certain structural environments. For example, null-C is impossible in a subject clause, but possible in a direct object clause (examples and judgments are drawn from Bošković and Lasnik (2003)):

- (20) a. (?)It was widely believed [_{CP} that / C_∅ [_{TP} he liked linguistics]].
b. [_{CP} that / *C_∅ [_{TP} he liked linguistics]] was widely believed.

Stowell (1981) argues that the facts in (20) can be explained if null complementizers are subject to the ECP. T, as opposed to V, is not a proper governor. Consequently, an empty C cannot head a subject-clause but it can head an object clause. Pesetsky (1992) gives an alternative account of the distribution of the null-C. For him, the null complementizer is an affix that must undergo attachment to a lexical head (see also Ormazabal 1995). In (20a), C_∅ gets affixed to V through head movement of C to V. In (20b), the C_∅ cannot occur since head

²⁴ We will not attempt here to give a non-ECP-based account of the distribution of the gap in *wat voor 'n N* constructions (see (16)).

movement of this affixal C to a potential host will involve movement out of an island, namely the subject noun phrase. In Bošković (1997) and Bošković and Lasnik (2003), Pesetsky's analysis is slightly reinterpreted by taking C-onto-V affixation not to be a syntactic operation (i.e. C-to-V movement) but rather a PF Merger operation along the lines of Chomsky's (1957) affix hopping operation. Under this PF Merger approach towards affixation, the affix is phonologically realized on a host only if it is adjacent to it in PF. If the null C cannot be affixed onto an appropriate adjacent host, the affixation fails and the construction is ruled out as a violation of the Stranded Affix Filter (Lasnik 1981, 2000). Importantly, Bošković and Lasnik further propose that null C cannot take just any lexical head as a host in PF. More precisely, they argue that English null-C can be hosted only by (lexical) [+V] elements.²⁵ Thus affixal C_ø can undergo PF-merger with the string-adjacent V in (20a), yielding a well-formed PF-representation; see (21b). PF-merger of affixal C is impossible, however, in (20b): the matrix-clausal T is not an appropriate host, and the matrix-clausal V is, obviously, not adjacent to the matrix V (*believed* in (20b)). Consequently, the affixal C remains stranded, yielding an ill-formed PF-representation (say, a violation of the Stranded Affix Filter); see (22).

- | | | | |
|------|----|--|---------------------|
| (21) | a. | ...[VP...believed [CP C _{ø<affix>} [TP]]] | Syntax |
| | b. | ...[VP ... C _{ø<affix>} +believed [CP C _ø [TP]]] | PF (with PF-merger) |
| (22) | | ...[TP [CP C _{ø<affix>} [TP]] [T' T ..[VP V...]]] | Syntax |

Taking this PF-merger approach towards the distribution of null-C in English as our point of departure, let us reconsider the ECP-phenomena in the domain of Giethoorn Dutch partitives. Suppose that, just like English null-C, the Giethoorn Dutch null-D in partitive noun phrases is affixal too. Under a PF-merger approach, the affixal D_ø cannot be stranded and has to undergo (morphological) merger with a lexical head, more specifically a [+V] head. Let's assume that NUM, not being a verbal category (see also note 18), is not an appropriate host for the affixal null-D. So, D_ø must find an appropriate, local enough host which is DP-external.²⁶ V is one

²⁵ Bošković and Lasnik (2003:535) argue that this restriction to certain hosts is rooted in the fact that affixes have subcategorization requirements.

²⁶ Admittedly, this means that PF-merger does not take place under strict adjacency. See section 4.3, though, for a more refined analysis on this point.

such host, T is not.^{27 28} If affixal D_ø in (23a) cannot undergo PF-merger with an appropriate host, the phonetically empty D-affix remains stranded, in violation of the Stranded Affix Filter. Suppose now that Giethoorn Dutch has a last resort PF-strategy of assigning minimal phonetic content (viz. the sound ‘schwa’) to affixal D, turning it into affixal D_{-e}. The morphological behavior of this phonetically non-empty D is different from that of the phonetically empty affixal D. More specifically, D_{-e} PF-merges with the element to its immediate left, *in casu* NUM, yielding the dressed Numeral in PF; see (24).

- (23) a. ...[VP V [DP [[acht]+D_{ø<affix>}] [NUMP van mien kôên] ~~acht~~] Syntax
 b. ...[VP D_{ø<affix>}+V [DP [[acht]+~~D_{ø<affix>}~~] [NUMP van mien kôên]]] PF-merger
- (24) a. ...[TP [DP [[acht]+D_{ø<affix>}] [NUMP van mien kôên] ~~acht~~] [T' T..... Syntax
 b. ...[TP [DP [[acht]+**-e**] [NUMP van mien kôên] ~~acht~~] [T' T.. e-insertion at PF

The analyses given in (23) and (24) account for the ECP-phenomenon (i.e. the distribution of empty material) in terms of the mapping between syntax and PF. More specifically, the GB-style licensing in terms of proper government is replaced by the Syntax-PF Interface licensing in terms of PF-merger; that is, is it possible to map the syntactic structure onto an appropriate PF-representation? Importantly, we argued that the morphological “dress” *-e* of dressed partitives displays different PF-merger behavior from the affixal null-D. In section 4.3, we will relate this difference in PF-merger behavior to the theory of PF-movement as developed in Embick and Noyer (2001).

4.3 PF-raising of null-D and Local Dislocation of *-e*

²⁷ P is not an adequate host for affixal D in Giethoorn Dutch; consequently *-e* must be inserted into D, yielding a dressed numeral (see (3d)). For those who must have a dressed numeral with IO partitives (see (3c)), D-affixation onto V is not possible.

²⁸ The question arises as to whether affixation of a definite article onto V ever surfaces in a language. Galician Spanish seems to provide relevant data. As noted in Uriagereka (1995, 1996), Galician definite articles can cliticize onto a ‘governing’ host (see (ia)). As shown in (ib), this cliticization onto a left-adjacent host is also found with clitic-pronouns, which, ever since Postal’s (1969) seminal study, have often been analyzed as D(P)s. Obviously, if pronominal cliticization onto a verbal category involves adjunction of D, our proposal that affixal D in Dutch partitives can PF-merge with V becomes less “exotic”. That is, attachment of D to V becomes a much more widespread phenomenon once pronominal cliticization is taken into consideration.

(i) a. Vimo-*lo* neon b. Vimo-*lo* (Galician Spanish; see Uriagereka (1995:81; note 5)
 saw.we-the child saw.we-him
 ‘We saw the child.’ ‘We saw him.’

The PF-merger analyses sketched above and represented in (23)-(24) can be made more precise by embedding them within the theory of PF-movements (i.e. post-syntactic PF-merger) developed in Embick and Noyer (2001). Adopting the framework of Distributed Morphology (Halle and Marantz 1993), Embick and Noyer distinguish two varieties of morphological merger (see also Marantz 1984): *Lowering* and *Local Dislocation*. Lowering is a PF-movement operation which is sensitive to syntactic headedness. It applies to a hierarchical structure, viz. a head-complement structure $[_{XP} X [_{YP} Y]]$, and unites the heads (i.e. syntactic terminals) X and Y by lowering and adjoining the higher head X to the lower head Y, yielding the structure $[_Y Y+X]$. The lowering operation takes place before so-called Vocabulary Insertion and is indifferent to linear ordering properties; that is, it can affect elements that are not string-adjacent (see Marantz 1988).²⁹ T-to-V in English (i.e. affix hopping in the sense of Chomsky (1957)) is a well-known instance of Lowering: T (e.g. past tense *-ed*) can lower across an intervening adjunct (e.g. *carefully*) and adjoin to the lower head V (e.g. *open*), as is exemplified in (25):^{30 31}

(25) $[_{TP} \text{John } [_{T'} \overset{\text{John}}{\cancel{\text{ed}}} [_{VP} \text{carefully } [_{VP} [_{Vopen}] + \text{-ed the box}]]]]]$

Another phenomenon which is analyzed by Embick and Noyer as an instance of *Lowering* is the suffixed definite article in Bulgarian. As illustrated in (26), the definite article appears suffixed to the noun, or, when the noun is modified by one or more adjectives, the first adjective in a sequence:

(26) a. kniga-ta b. xuba-ta kniga
 book-DEF nice-DEFbook
 ‘the book’ ‘the nice book’

²⁹ With Embick and Noyer (2001), we will assume that there are two types of terminal nodes: *Roots*, which correspond in many ways to the “lexical” or “open class” vocabulary, and *functional heads* (i.e. functional or abstract morphemes). The latter do not contain phonological representations in the syntax. In PF, the phonological contents of these terminal nodes is added, a process which is called: *Vocabulary Insertion*. For example, a morpheme like T[past] (i.e. a Tense node with the feature [past]) receives phonological contents in PF, as specified in that language’s *Vocabulary Items*; *in casu* T[past] \Leftrightarrow *-ed*, where *-ed* is called the phonological *exponent* of this node. We will assume that, given their semi-lexical status (see note 18), numeral vocabulary items are inserted late (i.e. in PF); see also Emonds (1985) for the late insertion of semi-lexical nouns (in his terminology: *grammatical nouns*).

³⁰ The erased $\overset{\text{John}}{\cancel{\text{ed}}}$ simply indicates the position of origin of the element affected by Merger. It does not represent a trace (or copy) in the sense in which traces behave in syntactic theory.

³¹ Importantly, the Lowering operation applies to an abstract syntactic structure, i.e. a structure without Vocabulary items. In (25), actual Vocabulary items appear in terminal nodes for expository purposes only. Thus, the actual content of these nodes is abstract.

Adopting Abney's (1987) DP-analysis of nominal expressions, they argue that the D-head lowers in PF and adjoins to the lexical head N in (27a) and to the lexical head A in (27b) (also here, the Vocabulary items are added for clarity):

- (27) a. $[_{DP} \text{ta} [_{NP} [_{N} [_{N} \text{kniga}]-\text{ta}}]]]$ b. $[_{DP} \text{ta} [_{AP} [_{A} [_{A} \text{xubava}]-\text{ta}}]]] [_{NP} [_{N} \text{kniga}]]]$

Returning now to the partitive pattern in (23), we propose that the PF-merger operation depicted in (23b) is of the same morphological merger-type as *Lowering*, with the important difference that the bound morpheme does not lower but raise onto a higher lexical head; that is, D raises and adjoins to V in PF. In other words, it is the head Y of the YP-complement of X which undergoes PF-movement to X. Note that just like T-to-V lowering (25) and D-to-N/A lowering (27), this D-to-V raising operation (see (23)) is indifferent to linear ordering properties: that is, it can cross an intervening element, *in casu* the numeral (NUM) which is adjoined to D after syntactic NUM-to-D movement.

The derivation can now be depicted as in (28), where only the relevant parts of the structure are represented:

- (28) *Syntax*
- a. $[_{VP} V [_{DP} [_{D'} D_{\langle \text{gen} \rangle} [_{NumP} DP [NUM]]]]]]]$ 'base structure'
- b. $[_{VP} V [_{DP} [_{D'} NUM+D [_{NumP} DP_{\langle \text{gen} \rangle} [NUM]]]]]]]$ syntactic Num-to-D movement
and assignment of genitive case
- PF before Vocabulary Insertion*
- c. $[_{VP} [D+V] [_{DP} [_{D'} NUM+D [_{NumP} DP_{\langle \text{gen} \rangle} [NUM]]]]]]]$ PF-raising of D onto V
- PF after Vocabulary Insertion*
- d. $[_{VP} [D+V] [_{DP} [_{D'} NUM+D [_{NumP} \text{van}+DP [NUM]]]]]]]$ gen. case spell out by *van*
- e. $[_{VP} [D+V] [_{DP} [_{D'} \text{acht}+D [_{NumP} \text{van}+DP_{\langle \text{gen} \rangle} [NUM]]]]]]]$ Insertion of *acht*
- f. *acht van mien koen*

Let us now turn to the second type of morphological merger: *Local Dislocation*. The formal relation for affixation by means of Local Dislocation is not hierarchical, but rather linear: a morpheme gets affixed onto the peripheral morpheme of a neighboring (whence *Local*) constituent under adjacency. Thus, it cannot skip any adjoined elements. Embick and Noyer (2001) argue that this merger under adjacency takes place after Vocabulary Insertion and

Linearization have applied. In other words, *Local Dislocation* is ordered after *Lowering/Raising* in the derivation of the PF-structure.

Embick and Noyer take the formation of English comparatives and superlatives of the type *tall-er*, *tall-est* to be a clear case in which a Vocabulary-specific operation is constrained to apply under linear adjacency (see also Embick 2007). The Vocabulary-specific nature of the operation is suggested by the fact that the bound morphemes *-er* and *-est* can combine only with adjectives with one metrical syllable: for example, *tall-er*, but not **intelligent-er*; and, vice versa: **more tall* and *more intelligent*. Thus, the suffixation of the comparative/superlative morpheme *Deg* is dependent on the prosodic shape of the adjectival host and therefore happens after the Vocabulary-insertion of specific adjectives. Because syntactic structures are linearized by Vocabulary Insertion, merger of *-er/-est* is defined over a linearized structure.³²

Consider now again the PF-merger process in (24). Importantly, the formation of a dressed numeral like *acht-e* (eight+-*e*) is a Vocabulary-specific operation: It turns out that *-e* does not show up on all numerals. For example, *-e* does not appear on numerals that end with the bound morpheme *-tig* ‘-ty’, such as *vijftig* (fifty), *zestig* (sixty), *zeventig* (seventy), *et cetera*.³³ Thus, the morphologically dressed Giethoorn Dutch partitive *vijftige van de koen* (fifty-*e* of the cows) is ill-formed. One must say: *vijftig van de koen*. This restriction does not seem to be related simply to the bisyllabic structure of the numeral. For example, the bisyllabic numerals *vijftien* (fifteen), *zestien* (sixteen) and *zeventien* (seventeen) do permit the presence of *-e*, as in *vijftiene van de koen*. There is, one important difference, though between *vijftig* and *vijftien*: The former morphologically complex numeral ends in a bound morpheme (*-tig*). The latter, on the contrary, ends in a free morpheme *tien*. Arguably, this different morphological status plays a role in the attachment of *-e*: the numeral ending in the bound morpheme *-tig*, cannot act as a host for *-e*, whereas the numeral ending with *tien* can. Importantly, *tien* ‘ten’ itself can obviously also be “dressed”, as in *tiene van de koen*).

³² As pointed out by Embick and Noyer (2001:564), evidence for this sensitivity to linearized structure comes from adjectival patterns in which there is an intervening adverbial:

- (i) a. Mary is the mo-st amazingly smart person...
- b. *Mary is the – amazingly smart-est person...

³³ This bound morpheme has been reinterpreted as an independent word with the meaning: ‘undetermined large number of’. See (i) for an example of this use. Importantly, in this ‘autonomous’ use of *tig*, the vowel has changed from schwa to [I]; see Booij (2002:174).

- (i) Jan heeft [tig koeien] gemolken
 Jan has ‘tig’ cows milked
 ‘Jan milked an undetermined large number of cows.’

If we are right in saying that the dressing up of a numeral by means of schwa is a Vocabulary-specific operation, this means that schwa-attachment takes place after Vocabulary insertion of specific numerals. The derivation can now be more accurately represented as in (29):

(29) *Syntax*

- a. [TP [DP [D' D_{<gen>} [NumP DP [NUM]]]] [T' T.. 'base structure'
- b. [TP [DP [D' NUM+D [NumP DP_{<gen>} [~~NUM~~]]]] [T' T.. Num-to-D movement
genitive case assignment

PF after Vocabulary Insertion

- c. [TP [DP [D' NUM+D [NumP **van**+DP [~~NUM~~]]]] [T' T.. genitive case realization
- d. [TP [DP [D' **acht**+D [NumP DP_{<gen>} [~~NUM~~]]]] [T' T.. Vocabulary insertion of *acht*
- e. [TP [DP [D' **acht**+**-e** [NumP DP_{<gen>} [~~NUM~~]]]] [T' T.. Vocabulary insertion +
PF-merger (LD) of *-e*

At the derivational stage (29b), it is clear that the affixal D-head cannot get licensed by means of *PF-Raising* onto an appropriate host (i.e. the PF-operation which is of the same PF-Merger type as *PF-Lowering*). That is, T is not an appropriate host. After Vocabulary Insertion has taken place, the structure is linearized, which implies that *acht* precedes D in (29d). As a consequence, D cannot PF-merge “across” the numeral. The only way to “PF-rescue” affixal D is by means of the PF-operation of *Local Dislocation*. When the rule morphophonologically attaches D to the numeral, D is realized as the affix *-e* in Giethoorn Dutch. That is, *-e* is the so-called *exponent* of D in Giethoorn Dutch.

Summarizing, making use of Embick and Noyer’s theory of PF-merger operations, we argued that in Giethoorn Dutch two types of PF-operations are active in the mapping of the partitive syntactic structure onto its PF-representation: *Raising* (the inverse operation of *Lowering*) and *Local Dislocation*. In the PF-derivation, the former, involving PF-merger of affixal D onto a categorially appropriate host (e.g. V but not T or P), is ordered before the latter, which involves PF-merger of D onto the string-adjacent Num. Importantly, D-to-V *Raising* takes place before *Vocabulary Insertion*, whereas *Local Dislocation* of D-to-Num takes place after *Vocabulary Insertion*. As a consequence of this difference in timing in the PF-process, the two affixal Ds surface differently: The D affixed onto V does not surface phonetically (i.e. has no exponent), whereas the D affixed onto Num does (the exponent *-e*).

5. On the role of the [+HUMAN] feature in Giethoorn Dutch

As was noted in section 2, the numeral in the Giethoorn Dutch partitive construction is always morphologically bare when the partitive has a [+HUMAN] referent (see the examples in (2)). The question, obviously, arises as to why those [+HUMAN] partitives in Giethoorn Dutch remain bare in structural environments where [-HUMAN] partitives feature a schwa (-e) on the numeral. More specifically, why doesn't the affixal D-head get realized morphologically? We propose in this section that this relates to the featural make-up of the affixal D-head. More specifically, we argue that, analogously to inheritance of the (in)definiteness feature by affixal D from the (in)definite satellite phrase in partitive constructions, affixal D also inherits the [+/-HUMAN] feature from the satellite phrase. Our claim is then that $D_{[+HUMAN]}$ spells out differently from $D_{[-HUMAN]}$ in PF. In order to show that feature inheritance is a featurally more widespread phenomenon in partitive noun phrases, which we analyzed as CS nominal expressions in section 3, we will first discuss an intriguing phenomenon of gender inheritance in partitive noun phrases. The relevant data come from Weert Dutch.³⁴

5.1 Gender inheritance at the Syntax-PF Interface

Coppen (1991:80ff.) observes that in Weert Dutch the numeral 'one' can have different inflections: masculine (*eine*), feminine (*ejn*) and neuter (*ei(n)*).

- (30) Ich heb *eine* mins / *ejn* vrouw / *ei(n)* wècht gezeen.
I have one.MASC man/ one.FEM woman/ one.NEUT child seen
'I saw one man/one woman/one child.'

Quite surprisingly, in the partitive construction, only the feminine form is used for the numeral.³⁵

- (31) Ich heb [*ejn* van di-j minse / di-j vrölli-j / di-j wichter] gezeen.

³⁴ The city of Weert is located in the province of Limburg, the Netherlands.

³⁵ Weert Dutch, just like Standard Dutch, does not have a plural indefinite article, as is illustrated in (i)

- (i) Ich heb minse gezeen.
I have men seen
'I saw men.'

I have one of those men / those women / those children seen
 ‘I saw one of those men/women/children.’

The question, obviously, arises as to why we find the feminine form ‘one’ in those partitive constructions. We propose that the presence of the feminine form is related to the plural feature of the satellite DP. In many Southern dialects of Dutch, including the dialect of Weert, the feature combination [+feminine, +singular] spells out morphologically in the same way as the feature [+plural]. This similarity in formal manifestation between the feature combination [+feminine, +singular] and the feature [+plural] can be illustrated on the basis of the negative indefinite article ‘no’, as in English *no women*. For the [+singular] forms, the formal shapes of this “negative article” are the same as the ones found in (13); that is, *geine mins* (no man), *gejn vrouw* (no woman), and *gei(n) wècht* (no child). Interestingly, when the noun is plural, the negative article always has the form *gejn*; that is, the form which is also used with a singular feminine noun. Thus: *gejn minse* (no men), *gejn vrölli-j* (no women), *gejn wichter* (no children). In short, the negative indefinite article has the same formal shape for [+singular, +feminine], on the one hand, and [+plural], on the other.

Turning now to the examples in (31), we would like to propose that the feminine form *ejn* results from the fact that the plural satellite DP stands in a Spec-head agreement configuration with this numeral at some point in the derivation. Importantly, feature inheritance, as characteristic of Construct State expressions, does not apply here at the level of syntax: That is, Weert Dutch ‘one’, which is intrinsically specified as [+singular], does not inherit semantic plurality from the [+plural] satellite phrase (e.g. *minse* in (31a)). Rather, in (31), inheritance applies at the level of Spell out, i.e. the mapping from Syntax onto PF. More specifically, the numeral ‘one’ inherits the morphological spell-out property of the plural DP. This morphological shape is identical to that of the feminine singular. In other words, a form (*exponent*) is chosen which matches both [+plural] and [+singular]. The derivation can schematically be presented as in (32), where *ONE* is used to indicate the numeral ‘one’. For the sake of clarity, we have represented the satellite phrase with Vocabulary items (*di-j minse*).

(32) a. ‘base structure’

[DP [D' D<gen> [NumP [di-j minse_[+DEF; +PLURAL]] [ONE_[+SG]]]]]

b. inheritance of definiteness feature by ONE

[DP [D' D<gen> [NumP [di-j minse_[+DEF; +PLURAL]] [ONE_[+SG; +DEF]]]]]

c. Num-to-D movement

[DP [D' [[Num ONE_[+SG; +DEF]]+D_{<gen>}] [NumP [di-j minse_[+DEF; +PLURAL]] [Num ~~ONE~~]]]]

d. genitive case assignment

[DP [D' [[Num ONE_[+SG; +DEF]]+D] [NumP [di-j minse_[+DEF; +PLURAL; +GEN]] [Num ~~ONE~~]]]]

PF after Vocabulary Insertion

e. genitive case realization by *van*

[DP [D' [[Num ONE_[+SG; +DEF]]+D] [NumP [**van**+di-j minse_[+DEF; +PLURAL]] [Num ~~ONE~~]]]]

f. Vocabulary insertion of *ejn*

[DP [D' [[Num **ejn**_[+SG; +DEF]]+D] [NumP [**van**+di-j minse_[+DEF; +PLURAL]] [Num ~~ONE~~]]]]

g. surface form

ejn van di-j minse

In (32f), the spec-head agreement configuration between the plural satellite DP (*di-j minse*) and the trace/lower copy of the NUM-head is reflected at the level of morphological Spell out: A vocabulary form is chosen which is “compatible with” a [+PLURAL] feature: *ejn*. Compare *ejn* at this point with *gejn*, which is used in combination with plural nouns, as noted earlier.

5.2 [+/-Human] inheritance in partitive noun phrases

Let us now return to the asymmetry between the [-HUMAN] partitives and [+HUMAN] partitives in Giethoorn Dutch. The former feature a schwa (-e) in ‘non-properly governed’ contexts, whereas the latter are always morphologically bare at the sound surface. We propose that this asymmetry in morphological realization is a PF-reflex of different feature constellations of NUM as a result of feature inheritance. More specifically, inheritance of the [+HUMAN] property, associated with the satellite phrase in [Spec,NumP], by the NUM-head under Spec-head agreement leads, via projection, to a [+HUMAN] reading of the matrix nominal (i.e. the entire partitive DP). When the [+HUMAN] partitive noun phrase is “in the scope” of V, the categorial head D can *PF-raise* and adjoin to V, quite along the lines of the derivation in (28). In its PF-merged position, D does not get spelled out; i.e. it has no exponent. Now what about [+HUMAN] partitive noun phrases that fulfill the function of subject (in a finite clause) or complement of P? In those environments, affixal D cannot merge with an appropriate head via *PF-Raising*. Rather, D must form a morphological unit with NUM via *Local Dislocation*. Recall that Local Dislocation is a Vocabulary-specific operation; that is, the morphological

behavior of affixal D is dependent on morpho-phonological properties of the potential host, *in casu* NUM. When the numeral (e.g. *acht* ‘eight’) is specified as [-HUMAN], D has the exponent *-e* (schwa), which merges morphologically with NUM, yielding *achte*. When, on the contrary, the numeral is specified as [+HUMAN], D has a different exponent, viz. a null-morpheme (a “zero-dress”, say \emptyset), yielding *acht- \emptyset* . Importantly, the derivation of a [+HUMAN] partitive noun phrase like *vier van mien buurkinder’n* (four of my neighbor kids) in (2a) is similar then to the derivation of *achte van mien koên* depicted in (29). The only difference regards stage (29e) in the derivation, i.e. the insertion of the right exponent: *e* or \emptyset . Thus, the orthographically represented *vier van mien buurkinder’n* in (2a) has the (simplified) PF-representation *vier- \emptyset van mien buurkinder’n*.

6. Overall bareness in Standard Dutch

Having given an analysis of the distribution of the Giethoorn Dutch partitive patterns, we should obviously address the question as to how to analyze variants of Dutch (including Standard Dutch) in which no formal distinction is made between subject partitive noun phrases and object partitive noun phrase. That is, they are all “naked” at the surface, as is exemplified in (33) for DO and SU partitive noun phrases; compare with the Giethoorn Dutch examples in (3).

- (33) a. *Acht van mijn koeien eten vers gras.*
 eight of my cows eat fresh grass
- b. *Ik ga morgen acht van mijn koeien verkopen.*
 I go tomorrow eight of my cows sell

We propose that the analysis of the “overall naked partitives” is essentially the same as in Giethoorn Dutch. With DO-partitives (or small clause subject-DPs and subject-DPs in ECM-contexts), the affixal D merges with V in PF by means of the PF-operation of *Raising*. Thus, the derivation of the partitive *acht van mijn koeien* in (33b) is similar to that of Giethoorn Dutch *acht van mien koen* in (28). In the case of subject partitives that occupy the Spec-position of a finite T, affixal D cannot attach onto an appropriate DP-external host. Rather, it PF-merges with NUM, which has phonological contents after Vocabulary Insertion has taken place. The only difference with the derivation of Giethoorn Dutch *achte van mien koen* is the phonological exponent of this node: in Standard Dutch, it is a zero allomorph (\emptyset) whereas in

Giethoorn Dutch it is a schwa (*-e*). Importantly, in Standard Dutch, this zero exponent is an “across the board” phenomenon: it is found with both [-HUMAN] and [+HUMAN] partitive noun phrases that occur in “non-properly governed” environments. In Giethoorn Dutch, the zero exponent is only found on numerals in [+HUMAN] partitives. From this we may conclude that, both intra-dialectally and inter-dialectally, micro-diversity in the formal manifestation of the partitive noun phrase relates to Spell out of the syntactic structure, that is *externalization* (Chomsky (2009:386), Berwick & Chomsky (to appear)).

An important consequence of our analysis is that Standard Dutch, just like Giethoorn Dutch, displays a subject-object asymmetry. In the case of DO partitive DPs, affixal D PF-merges with V via *PF-Raising*; in the case of SU partitive DPs, affixal D PF-merges with NUM via *Local Dislocation*, and has a null-morpheme as its exponent. Since, in both instances, affixal D lacks phonetic contents, SU and DO partitive noun phrases all look the same at the surface in Standard Dutch.

7. Conclusion

Our empirical point of departure was a remarkable asymmetry in the surface appearance of partitive noun phrases in certain Dutch dialects, with Giethoorn Dutch being our exemplar dialect. The asymmetry concerned the presence (“dressed”) *versus* absence (“naked”) of a bound morpheme *-e* on the numeral contained in the partitive nominal expression. It was observed that the distribution of this “morphological dress” was reminiscent of ECP-type asymmetries in the phenomenon of *wat voor 'n N* split. More specifically, dressed partitives are typically found in those structural noun phrase positions from which subextraction (yielding the presence of a “gap”) is not permitted. In view of this parallelism, it was concluded that the asymmetric behavior in Giethoorn Dutch partitive noun phrases should also be related to the displacement of some category and the presence of a phonetically empty (silent) element. We took this element to be the D-head of the partitive noun phrase, which we analyzed as a Construct State nominal expression. In the spirit of Bošković and Lasnik’s (2003) PF-merger approach towards the distribution of English null-complementizers, which they analyze as being affixal, we developed a PF-merger analysis of the distribution of (affixal) D. More specifically, in “properly governed” positions, affixal D can be licensed by PF-merging with an appropriate (DP-external) host (i.e. V); in “non-properly governed” contexts, affixal D is licensed by PF-merging with an appropriate DP-internal host (i.e.

NUM). In the latter PF-merger environment, D surfaces as *-e* in Giethoorn Dutch.³⁶ This differentiation in PF-merger behavior of affixal D was refined and reinterpreted in terms of Embick and Noyer’s (2001) theory about PF-merger operations. Finally, we argued that the intra-dialectal and inter-dialectal microdiversity in the formal appearance of partitive noun phrases relates to the mapping of the syntactically structured object onto a PF-representation (so-called ‘externalization’). This reminds us of Chomsky’s (2001) *Uniformity Principle*, which states that “In the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances”.

References

- Abney, Steven (1987). *The English Noun Phrase in its Sentential Aspect*. Ph.D. Dissertation MIT.
- Akmajian, Adrian and Adrienne Lehrer (1976). NP-Like Quantifiers and the Problem of Determining the Head of an NP. *Linguistic Analysis* 2.4: 395-413.

³⁶ Recall from note 3 that *-e* also appears in contexts like (ia) and (ib).

- (i) a. Ik heb er toen *viere* gekocht
 I have of-them then four-*e* bought
 ‘I bought four.’
 b. (*het) boek *viere*
 (the) book four-*e*
 ‘book number four/the fourth book’

Starting with the latter example, note that this nominal expression has Construct State-like properties: *boek* cannot be preceded by a definite article, and in spite of the absence of this article the entire nominal expression has a definite interpretation (e.g. it cannot occur as a low subject in an existential clause). Arguably, it receives this definite interpretation from *viere*, which, if our analysis is correct, is derived by moving the numeral *vier* to D, which can spell out as *-e* in dialects like Giethoorn Dutch. As shown in (ii), we take *viere* to be a DP which occupies a specifier position in the extended nominal projection and we analyze the surface order as being derived by head movement of *boek* to the D-position of the matrix nominal expression.

- (ii) [DP [D' [[N *boek*]+D] [FP [DP *vier*+D (= -*e*) [NumP ~~*vier*~~] [F' F [NP ~~*boek*~~]]]]]]

As for the dressed numeral *viere* in (ia), we will assume that this indefinite nominal expression essentially has the same syntax as that of partitive noun phrases; that is, the numeral, which we take to be a semi-lexical noun (see note 18), is the head of the construction and the (indefinite) clitic pronoun *er* originates as a satellite of the numeral (analogously to the “*van*-phrase” in partitives); see (iii). We propose that NUM raises and adjoins to D, which spells out as *-e*, and that the quantitative pronoun *er* can escape from the nominal expression via [Spec,DP], the edge of the noun phrase. Schematically:

- (iii) ...*er*...[DP ~~*er*~~ [D' [[NUM *vier*]+D(= -*e*)] [NUMP ~~*vier*~~ [NUM' ~~*vier*~~]]]]

There is an interesting contrast between this nominal pattern and the partitive pattern in (3b), *acht van mien koen*. In both examples, the nominal expression is a DO noun phrase. In the partitive noun phrase, *-e* does not appear on the numeral, in the *er*-extraction pattern, it does. How can we account for this remarkable asymmetry in Giethoorn Dutch? Recall that in the case of DO partitive noun phrases, affixal D PF-merges with V and as a result of that does not surface overtly on NUM. One might argue then that affixal D cannot PF-merge with V in a configuration like (iii); that is, affixal D must remain DP-internal. The question is, of course, why this should be. We tentatively propose that this somehow relates to the subextraction of the clitic/weak pronoun *er* from within the direct object DP. In a way, cliticization of *er* blocks PF-affixation of D onto V.

- Bartos, Huba 'Object Agreement in Hungarian: A Case for Minimalism', in G. M. Alexandrova and O. Arnaudova (eds.). *The Minimalist Parameter. (Selected papers from the Ottawa Linguistics Forum, 21–23 March, 1997)*, 311–324, Amsterdam: John Benjamins.
- Bennis, Hans (1977). Het kwantitatieve *er* in komparatiefconstructies. *Spektator* 6: 384-387.
- Berwick, R. & N. Chomsky (to appear). The Biolinguistic Program: The Current State of its Evolution and Development. In: Di Sciullo & Aguero (Eds.). *Biolinguistic Investigations*. Cambridge, MA: The MIT Press.
- Besten, Hans (1985). The ergative hypothesis and free word order in Dutch and German. In J. Toman (ed.), *Studies in German Grammar*. 23-64. Dordrecht: Foris.
- Blom, Alied (1977). Het kwantitatieve *er*. *Spektator* 6: 387-394.
- Bont, A.P. de (1958). *Dialekt van Kempenland*. Assen: Van Gorcum & Comp. N.V.
- Booij, Geert (2002). *The Morphology of Dutch*. Oxford: Oxford University Press.
- Borer, Hagit (1984). *Parametric Syntax: Case Studies in Semitic and Romance Languages*. Dordrecht: Foris.
- Bošković, Željko (1997). *The Syntax of Nonfinite Complementation: An Economy Approach*. Cambridge, Mass. The MIT Press.
- Bošković, Željko and Howard Lasnik (2003). On the distribution of null complementizers. *Linguistic Inquiry* 23.4: 527-546.
- Cardinaletti, Anna, and Giuliana Giusti (1992). Partitive *ne* and the QP-hypothesis. A case study. In Elisabetta Fava (ed.), *Proceedings of the XVII Meeting of Generative Grammar: Trieste, february 22-24 1991*. 121-141. Turin: Rosenberg & Sellier.
- Chomsky, Noam (1957). *Syntactic Structures*. The Hague: Janua Linguarum 4.
- Chomsky, Noam (1970). Remarks on Nominalization. In: R.A. Jacobs & P. Rosenbaum (eds.), *Readings in English transformational grammar*. New York.
- Chomsky, Noam (1981). *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, Noam (1993). A minimalist program for linguistic theory. In K. Hale and S.-J. Keyser (eds.). *The View from Building 20: Essays in Honor of Sylvain Bromberger*. Cambridge, Mass.: The MIT Press.
- Chomsky, Noam (1995). *The Minimalist Program*. Cambridge, Mass.: The MIT Press.
- Chomsky, N. (2009). Conclusion. In M. Piattelli-Palmarini, J. Uriagereka & P. Salaburu (Eds.), *Of Minds and Language* (p. 379-409). Oxford: Oxford University Press.
- Coppen, Peter-Arno (1991). *Specifying the Noun Phrase*. Ph.D. Dissertation. University of Nijmegen.

- Corver, Norbert (2010). Dressed numerals and the structure of universal numeric quantifiers. In: J.-W. Zwart & M. de Vries (eds.) *Structure Preserved. Studies in Syntax for Jan Koster*. 91-99. Amsterdam: John Benjamins.
- Corver, Norbert, and Henk van Riemsdijk (2001). Semi-lexical categories. In N. Corver and H. Van Riemsdijk, eds., *Semi-lexical Categories: The function of content words and the content of function words*. 1-20. Berlin: Mouton de Gruyter.
- Corver, Norbert, and Joost Zwarts (2006). Prepositional Numerals. *Lingua* 116.6: 811-835.
- Corver, Norbert, Marjo van Koppen, Huib Kranendonk & Mirjam Rigterink (2007). The Noun Phrase: Diversity in Dutch DP Design. *Nordlyd* 34.1, *Scandinavian Dialect Syntax*: 73-85.
- Doetjes, J. (1997). *Quantifiers and Selection. On the distribution of quantifying expressions in French, Dutch and English*. Ph.D. dissertation Leiden University.
- Embick, David (2007). Blocking Effects and Analytic/Synthetic Alternations. *Natural Language and Linguistic Theory* 25:1
- Embick, David and Rolf Noyer (2001). Movement operations after syntax. *Linguistic Inquiry* 32.4: 555-595.
- Emonds, Joseph (1976). *A Transformational Approach to English Syntax*. Root, Structure-Preserving and Local Transformations. New York: Academic Press.
- Emonds, Joseph (1985). *Towards a Unified Theory of Syntactic Categories*. Dordrecht: Foris.
- Halle, Morris and Alec Marantz (1993). Distributed morphology and the pieces of inflection. In K. Hale and S.-J. Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. 111-176. Cambridge, Mass.: The MIT Press.
- Hoeksema, Jack (1996). *Partitives*. Berlin/New York: Mouton de Gruyter.
- Hornstein, Norbert (1999). Movement and control. *Linguistic Inquiry* 30:69-96.
- Jackendoff, Ray (1977). *X' Syntax: A Study of Phrase Structure*. Cambridge, Mass.: MIT Press.
- Kayne, Richard (1981). ECP-extensions. *Linguistic Inquiry* 12:93-133.
- Kester, Ellen-Petra and Petra Sleeman (2002). Partitive constructions and antisymmetry. In C. Beyssade, R. Bok-Bennema, F. Drijkoningen & P. Monachesi (eds.), *Romance Languages and Linguistic Theory*, 271-286.
- Koopman, Hilda (1984). *The Syntax of Verbs: From Verb Movement Rules in the Kru Languages to Universal Grammar*. Dordrecht: Foris.
- Kranendonk, Huib (2010). *Quantificational Constructions in the Nominal Domain. Facets of Dutch Microvariation*. Ph.D. Dissertation, Utrecht University.

- Laan, K. ter (1953) *Proeve van een Groninger spraakkunst*. Van der Veen, Winschoten.
- Lasnik, Howard (1981). Restricting the theory of transformations: A case study. In N. Hornstein & D. Lightfoot (eds.), *Explanation in Linguistics*. 152-173. London: Longmans.
- Lasnik, Howard (2000) *Syntactic Structures Revisited. Contemporary Lectures on Classic Transformational Grammar*. Cambridge, Mass.: The MIT Press.
- Longobardi, Giuseppe (1994). Reference and Proper Names: A Theory of N-Movement in Syntax and Logical Form. *Linguistic Inquiry* 25.4: 609-665.
- Longobardi, G. (1996). The syntax of N-raising: a minimalist theory. *UiL OTS Working Papers of Theoretical Linguistics*.
- Longobardi, Giuseppe (2001). The structure of DPs: Some principles, parameters and problems. In C. Collins and M. Baltin (eds.), *Handbook of Contemporary Syntactic Theory*. Oxford: Blackwell.
- Marantz, Alec (1984). *On the Nature of Grammatical Relations*. Cambridge, Mass.: The MIT Press.
- Marantz, Alec. (1988). Clitics, morphological merger, and the mapping to phonological structure. In M. Hammond and M. Noonan (eds.), *Theoretical Morphology*. 253-270. San Diego, Calif.: Academic Press.
- Martí i Girbau, Núria (2010). *The Syntax of Partitives*. Ph.D. Dissertation, Universitat Autònoma de Barcelona.
- Ormazabal, Javier (1995). *The Syntax of Complementation: On the connection between syntactic structure and selection*. Ph.D. dissertation, University of Connecticut, Storrs.
- Pesetsky, David (1992). Zero syntax, vol 2., Ms., MIT, Cambridge, Mass.
- Postal, Paul (1969). On so-called "pronouns" in English. In D. Reibel and S. Schane (Eds.), *Modern Studies in English*. 201-224. Englewood Cliffs, N.J.: Prentice-Hall.
- Reinhart, Tanya and Eric Reuland (1993). Reflexivity. *Linguistic Inquiry* 24:657-720.
- Ritter, Elizabeth (1988). A head-movement approach to Construct-state noun phrases. *Linguistics* 26: 909-929.
- Ritter, Elizabeth (1991). Two functional categories in noun phrases: Evidence from Hebrew. In S. Rothstein (ed.), *Perspectives on Phrase Structure: Heads and Licensing* [Syntax and Semantics 26]. 37-62. San Diego: Academic Press.
- Rizzi, Luigi (1986). Null objects in Italian and the theory of *pro*. *Linguistic Inquiry* 17.3: 501-557.
- Rizzi, Luigi (1991). *Relativized Minimality*. Cambridge, Mass.: The MIT Press.
- Sauerland, U. And K. Yatsushiro (2004). A silent noun in partitives. *NELS* 34:101-112.

- Shlonsky, Ur (2004). The form of Semitic noun phrases. *Lingua* 114: 1465-1526.
- Siloni, Tali (1996). Hebrew noun phrases: generalized noun raising: In: A. Belletti and L. Rizzi (eds.), *Parameters and Functional Heads*. 239-267. Oxford: Oxford University Press.
- Stoett, F.A. (1977) *Middelnederlandsche spraakkunst. Syntaxis*. Martinus Nijhoff, Den Haag 1977³.
- Stowell, Tim (1981). Origins of Phrase Structure. Ph.D. Dissertation, MIT.
- Taeldeman, Johan (1984). De morfonologie van hoofdtelwoorden in de zuidwestelijke dialecten. *Taal en Tongval* 36:50-55.
- Uriagereka,, Juan (1995). Aspects of the syntax of clitic placement in Western Romance. *Linguistic Inquiry* 26.1: 79-123.
- Uriagereka, Juan (1996). Determiner clitic placement. In Freidin, R. (ed.). *Current Issues in Comparative Grammar*, 257-294. Dordrecht: Kluwer.
- Vos, Riet (1999). *A Grammar of Partitive Constructions*. Ph.D. Dissertation, Tilburg University.
- Wiers, E. (1978). Kleins 'Appositionele constructies'. *Spektator* 8:62-80.