A note on Prepositional Verb constructions in Dutch

1.1 Introduction

Certain verbs in Dutch occur with a preposition and this combination of verb and preposition is fixed. I will refer to this group of verbs as prepositional verbs (PVs). Some examples are given below:

- (1) a. Rekenen op count on
 - b. Verlangen naar long for
 - c. Waarschuwen voor warn for
 - d. Twijfelen aan doubt on
 - e. Houden van love of

These verbs can take a clausal complement or a DP complement.² In this paper, the focus will be on clausal complementation. When the complement is clausal, the resumptive prounoun *er* appears in a position preceding the preposition. According to standard analyses (cf. for example Van Riemsdijk 1978a), this *er* is the result of obligatory R-pronominalization of underlying P+*het* (it). This *er* is coindexed with the clause that is to come, thus showing a parallel with object clauses that are preceded by cataphoric *het* (it).

- (2) a. Ik reken er_iop [dat je blijft eten]_i. I count there on that you stay eat
 - b. Ik betreur het_i [dat je niet kan komen]_i. I regret it that you not can come

The preposition does not form a constituent with the clause.^{3,4} This can be observed when we try to topicalize the preposition together with the clause or when we consider constructions

i. A: trots op (proud on, "proud of")

ii. N: weerstand tegen (opposition against, "opposition to")

iii. P: in tegenstelling tot (as opposed to)

i. Ik denk veel aan vroeger. I think a lot of the past

¹ This type of construction is not restricted to the verbal class. Adjectives and nouns, and possibly prepositions, may also occur in collocation with a preposition:

² An adverb can also occur as the complement, as in:

³ It is interesting that in German, PVs that consist of the pronoun da (there), a preposition and a CP do form a

with more than one verb: the so-called split-pattern occurs in which the extraposed position of the clause becomes visible.

- (3) a. Jan rekent erop [dat Maria komt eten]. John counts there on that Mary comes eat
 - b. *[Erop dat Maria komt eten] heeft Jan gerekend. there on that Mary comes eat has John counted
 - c. Omdat Jan *erop* gerekend heeft [dat Maria komt eten]. because John thereon counted has that Mary comes eat

Given these basic facts about the construction, the organization of the paper is as follows. In section 2, I will discuss some new data for Dutch, which illustrate that Dutch, beside the er+P+CP pattern, allows a pronoun-less P+CP pattern as well. In this respect Dutch resembles the Scandinavian languages in which PV constructions are pronoun-less by default (Haslinger 2000). The occurrence of the P+CP pattern in Dutch is, however, restricted by pragmatic principles. In section 3, I will discuss the standard approach to PV constructions. I will argue that it is problematic in several respects. In sections 4, I will summarize and discuss a proposal by Kayne (1999), which generates French and Italian prepositional complementizers external to VP. In section 5, I will investigate whether such an analysis might shed some light on long-standing problems when applied to Dutch PV constructions.

1.2 P+CP in Dutch⁵

In Scandinavian, PV constructions that take a CP complement do not show a resumptive pronoun like Dutch *er*. They consist of just a verb, a preposition and a clause.⁶ This is illustrated for Mainland Scandinavian below:

(i) [Damit daß du kommen würdest] hatte ich überhaupt nicht mehr gerechnet. there with that you come would had I not anymore counted

[PP Naar [DP de zomer]] werd nog het meest verlangd.
 for the summer was the most longed

⁶ In Norwegian, an extra element can be involved in PV constructions as well, namely the demonstrative form *det* which intervenes between the P and the CP. *Det* insertion has a clear semantic effect: the CP has a presupposed reading. For this reason, *det* insertion is pragmatically odd with non-factive matrix verbs.

- i. Per angret på *det* at han slo Ola. (Per regretted on that he hit Ola)
- ii.? Per regnet med *det* at Ola forteller sannheten. (Per counted with that that Ola tells truth-DEF)

⁴ It should be noted that DP complements of a PV construction do form a constituent with the preposition. This can be observed, for instance, when we consider passivization:

⁵ I abstract away from temporal or causal constructions like *nadat Jan binnen kwam* (after that John entered) and *omdat Jan binnen kwam* (to that ("because") John entered) which can be analyzed as P+CP as well. All Germanic languages seem to allow a tensed clause as the complement of a temporal or a locative preposition, i.e. a preposition heading an adverbial adjunct.

- (4) a. Peter tvivlar [på [at Maria ofte ryger disse cigarer]]. (Danish)
 Peter doubts on that Mary often smokes these cigars
 - b. Peter tvivlar [på [att Maria talar sanning]]. (Swedish) Peter doubts on that Mary speaks the truth
 - c. John tvilte [på [at Maria forteller sannheten]]. (Norwegian) John doubted on that Mary tells truth-DEF

In Dutch, a P+CP pattern is odd when the CP is in normal extraposed position, though there seems to be a slight tendency that a factive matrix verb improves the construction.⁷ This is illustrated in (5).

- (5) a. ?Omdat Jan nooit getreurd heeft *over dat* Maria niet op het feestje was. (factive) that John never grieved has about that Maria not on the party was
 - b. *Omdat Jan nooit gehoopt heeft *op dat* Maria naar het feestje zou komen. (non-factive) that John never hoped has on that Maria to the party would come.

Consider, however, the following examples in which the clause does not appear in extraposed position but has been moved, together with the preposition. The landing sites are topic position, scrambled position, and a right or left dislocated position. Examples (6e&f) show a P+CP in isolation (as an answer to a question) and in a coordinated structure.

(6) a. Topicalization

[Aan [of Maria de waarheid sprak]] heeft Jan nooit getwijfeld. on whether Mary de truth spoke has John never doubted

b. Scrambling

Ik geloof dat Jan [aan [of Maria de waarheid sprak]] nooit getwijfeld heeft. I believe that John on whether Mary the truth spoke never doubted has

c. Right dislocation (RDL)

Jan heeft daar nooit aan getwijfeld, [aan [dat Maria de waarheid sprak]]. John has there never on doubted, on that Mary the truth spoke

d. Left dislocation (LDL)

[Aan [of Maria de waarheid sprak]], daar heeft Jan nooit aan getwijfeld. on that Mary the truth spoke, there has John never on doubted

e. Isolation

Question:

Waar heeft Jan nooit aan getwijfeld? what has John never on doubted

Answer:

[Aan [of Maria de waarheid sprak]]. on whether Mary the truth spoke

f. Coordination⁸

Ik had noch [op [dat CHRIS zou komen]] noch [op [dat MARIA zou komen]] gerekend. I had neither on that Chris would come nor on that Mary would come counted

From these facts we can derive the descriptive generalization that P+CP patterns in Dutch are allowed as long as the P+CP combination occurs in a sentence position or construction type that is typically associated with presupposed elements. I will use the following definition for the notions of factivity and presupposition:

(7) A predicate is factive if the truth of its complement is presupposed and non-factive or propositional if the truth of its complement is not presupposed. (Kiparsky & Kiparsky 1971)

A presupposed status is well-established for topic position, scrambling position and RDL and LDL constructions. Levinson (1983) mentions WH-questions in his list of so-called presupposition triggers, so this accounts for the isolation context in (6e). As far as the coordination case is concerned, I would like to claim that in this *neither... nor* example, the set of propositions that can enter into this coordination is known. An appropriate context could be a dialogue between the organizers of a party. At this party, some friends turn up unexpectedly in the sense that they did not reply to the invitation. One organizer could ask the following question, to which the other organizer would reply by uttering (6f), repeated below for convenience.

(8) a. Question:

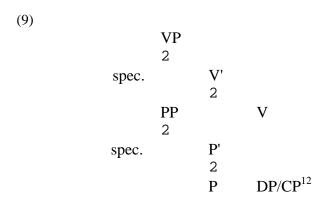
Wist jij dat Chris en Maria toch zouden komen? knew vou that Chris and Maria after all would come

b. Answer:

Ik had noch [op [dat CHRIS zou komen]] noch [op [dat MARIA zou komen]] gerekend. I had neither on that Chris would come nor on that Mary would come counted

1.3 The traditional analysis

In the traditional account of PV constructions in Dutch, a structure like the following is usually assumed: 10, 11



Wh questions introduce the

⁹ Wh-questions introduce the presuppositions that are obtained by replacing the WH-word by the appropriate existentially quantified variable, e.g. *who* by *someone* or *what* by *something* (cf. Levinson 1983:184). For the example in (6e) this means that *waaraan* presupposes that there is *something* that John has never doubted, but I am aware of the fact that it does not make any claims about the presupposed status of the proposition itself. Given that (6e) is o.k., the question arises whether presupposition as such is the correct unifying notion for P+CP constructions in Dutch. I will not go into this problem here.

¹⁰ See for example: Van Riemsdijk 1978a, Bennis 1986, Den Besten & Webelhuth 1990, Model 1991.

¹¹ I abstract away from the discussion whether Dutch is OV or VO because it is not relevant here. Furthermore, in this diagram I ignore the status and syntactic position of *er* that has to occur obligatorily with a CP in extraposed position.

¹² The issue of the base position of CP is more complicated than depicted here. In the traditional analyses it will

There are several problems with this kind of structure. First of all, there is the issue of the selectional relations. The tree diagram in (9) implies that the verb selects a preposition and this preposition selects a DP or a CP complement. Intuitively, however, speakers feel no difference between the pairs in (10) and (11), in which prepositional verb constructions are compared with normal object constructions:

- (10) a. Maria ziet [DP Jan]. Mary sees John
 - b. Maria weet [CP dat Jan blijft eten].Mary knows that John is staying for dinner
- (11) a. Maria luistert [PP naar [DP Jan]]. Mary listens to John
 - b. Maria rekent erop [CP dat Jan blijft eten].Mary counts thereon that John is staying for dinner

In other words, the semantic intuition seems to be that in (11), the DP and CP are verbal complements and not prepositional complements. Neeleman (1999) has referred to this as a "bracketing paradox". This is illustrated below for the verb *geloven in* (believe in).

- (12) a. $[_{VP} \text{ geloven}] [_{PP} \text{ in } [DP]] (syntax)$
 - b. [VP geloven [PP in]] [DP] (semantics)

Secondly, the structure in (9) makes the wrong predictions for constituency as far as clausal complementation is concerned (see footnote 12). For DP complements there is no problem because P+DP functions as a constituent:

(13) [PPNaar[DP Jan]] heeft Maria te vaak geluisterd. to John has Mary too often listened

If we accept the existence of a P+CP construction in Dutch (see section 2), then it makes the right predictions for that pattern as well because they have to be constituents given their distribution. CPs that occur with the pronoun er, however, do not form a constituent with the preposition. This was illustrated in (3).

Finally, Den Besten & Webelhuth (1990) point out the following problem. They show that in languages like Dutch and German in which scrambling is allowed, it is possible to topicalize the remnant VP after scrambling:

- (14) a. Omdat Jan [$_{\Gamma}$ het boek $_{i}$ [$_{\Gamma}$ niet [$_{VP}$ t $_{i}$ gelezen] heeft]]. (scrambling) because John the book not read has
 - b. $[VP t_i \text{ gelezen}]_j$ heeft Jan $[Phet boek_i [Phet t_j]]$. (remnant VP topicalization) read has John the book not

Now consider the following facts: scrambling out of a PP that is contained in a VP (i.e. a PV construction) is possible with R-pronouns because R-pronouns can strand prepositions and *daar* is such an R-pronoun:

Omdat Jan [$_{\Gamma}$ daar $_{i}$ [$_{\Gamma}$ niet [$_{VP}$ [$_{PP}$ t $_{i}$ op] gerekend] had]]. because John there not on counted had

However, subsequent VP topicalization including the remnant PP is not possible:

(16) $*[_{VP}[_{PP} t_i \text{ op}] \text{ gerekend}]_j \text{ had Jan }[_{\Gamma} \text{ daar}_i [_{\Gamma} \text{ niet } t_j]].$ on counted had John there not

The ungrammaticality of (16) is not predicted by the structure in (9). In this structure, the PP is part of the VP and since (remnant) VP topicalization is generally allowed, there is no obvious reason why the presence of an embedded PP is problematic.

1.4 An alternative approach: PP is external to VP

1.4.1 Kayne 1999

Kayne (1999) proposes an analysis for French and Italian infinitive constructions like *Cecilia ha tentato di cantare* (C. has tried di sing) in which the infinitival complementizer de or di is generated in a position external to VP. More specifically, Kayne argues that de/di and the infinitive do not form a constituent. He has two empirical arguments for doing so, apart from a theoretical argument which bears down to the wish to bring the complementizer de/di closer to the possessive de/di and to other instances of de (cf. Kayne 1994, chap.8).

First of all, Kayne argues that infinitives in French and Italian are nominal in the sense that they carry a nominal feature that has to be licensed. One way of licensing this feature is to enter into a checking configuration with the prepositional complementizer de/di. Infinitives are thought of as being NPs rather than DPs. This explains why they do not need Case and allow embedding under a definite article in Italian. The latter construction can be thought of as another way of licensing the infinitival feature. The idea that infinitives are nominal does not imply that they occupy normal DP argument positions, although Italian infinitives that are preceded by a definite article probably do. Kayne argues that bare infinitives do not occur in ordinary DP positions.

Given these assumptions, Kayne proceeds by discussing two problems that are, according to him, the artifact of the assumption that de/di forms a constituent with the infinitive. These problems could be resolved when a derivation is adopted in which de/di and the infinitive do not form a constituent at the beginning of the derivation. The two problems involve the following facts: 1. neither a bare infinitive nor de/di plus infinitive can occur after a subcategorized preposition and 2. di plus infinitive cannot be a subject in Italian. I will discuss the subcategorized preposition case first.

Let us accept the idea that infinitivals have to be licensed and that embedding under a determiner or entering into a relation with de/di are two possible ways of establishing such a licensing configuration. Furthermore, the data seem to indicate that a bare infinitive cannot occupy a DP position. Now consider the following facts: as soon as a bare infinitive is

¹⁴ Although Raposo (1987) argues that the occurrence of de/di with infinitives is related to Case, Kayne (1999) mentions several constructions in Italian that are (marginally) acceptable and in which the infinitive could not possibly be assigned Case. He therefore adopts the view that di plays a licensing role with respect to infinitives

embedded under one type of licenser, a determiner, it can occupy a DP position. However, although we know that a bare infinitive can also be licensed by the second type of licenser, the prepositional complementizer de or di, the combination of de/di plus infinitive is still not possible in an ordinary DP position. This is illustrated below for the DP position following a subcategorized preposition (a PV construction). (17a) shows that a bare infinitive is not allowed in a DP position, (17b) illustrates that the appearance of a determiner makes it possible whereas (17c) shows that the occurrence of de/di does not save the construction:

- (17) a. *Contavo su essere onesto.

 I counted on be-INF honest
 - b. Contavo su l'essere onesto.I counted on the be-INF honest
 - c. *Contavo su di essere onesto I counted on *di* be-INF honest (cf. Kayne 1999:46, 49)

On the assumption that being licensed by a proper licenser and being a constituent are preconditions for occurrence in a DP argument position, together with the assumption that both determiner plus infinitive and de/di plus infinitive do indeed form constituents, the ungrammaticality of (17c) presents a paradox. According to Kayne, this paradox can be resolved if we let go of the idea that di essere onesto in (17c) is a constituent.

The same kind of argument can be constructed for the fact that in Italian, di plus infinitive cannot occur in the DP subject position.¹⁶

(18) *Di cercarlo comporta dei rischi.

di look for-INF him implies some risks
(Kayne 1999:50)

This is unexpected if we assume that the infinitive is licensed by di and forms a constituent with it.¹⁷

¹⁶ It should be noted that bare infinitives can occur in what looks like the subject position, for example in:

(i) Mangiare la carne tutti i giorni può provocare una mallatia. eat-INF the meat every day might induce an illness

Kayne briefly discusses this issue (and similar cases for French) and concludes that if we want to maintain the generalization that bare infinitives in French and Italian cannot occupy ordinary DP positions, cases like the one above must be analyzed as instances of topicalization (Kayne 1999:48). He refers to Koster (1978) for arguments against the existence of subject sentences in English and to Stowell's (1981) Case Resistance Principle that argues against the occurrence of clauses in Case positions. The fact that infinitives embedded under a determiner can occupy a DP position like the subject position is expected since those infinitives are licensed and form a constituent with the licenser. So there is no need to analyze cases like (ii) as instances of topicalization.

(ii) Il mangiare la carne tutti i giorni può provocare una mallatia. the eat-INF the meat every day might induce an illness

(i) Cecilia ha tentato di cantare una canzone di Caccini.

¹⁷ But, if de/di plus infinitive is not a constituent, therefore it can neither occur in ordinary DP argument position in (17c) as the object of a subcategorized P nor in subject position in (18), why can it occur in "normal" object position?

Let us now consider Kayne's derivation for de/di plus infinitive constructions. First of all, the infinitive *cantare* is merged with the main verb *tentato*, and crucially not with di. After that, di enters the derivation in a projection on top of VP. The infinitive is then attracted out of the verbal complement position to the specifier of this di projection, which I will label a PP projection. This movement establishes the licensing relation. Then a functional projection, which Kayne labels WP, is merged on top of di and there is head movement of di to the head of this functional projection. Finally, there is remnant VP movement to the specifier position of this functional projection (Kayne 1999:51). This is illustrated below.

$$(19) \begin{tabular}{ccccc} & & & & & & & & \\ & & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\$$

It is clear that in this derivation, di and the infinitive do not form a constituent, although linearly di precedes the infinitive.

The fact that di plus infinitive cannot occur after a subcategorized preposition can now be reduced to an instance of preposition stranding, that is, if we assume that the subcategorized preposition is generated in VP internal position, or in other words, if we assume that a subcategorized P is merged before di is merged. P-stranding would occur when the infinitival phrase is attracted to the specifier of the di projection:

(20) contavo su essere onesto >> merger of di di contavo su essere onesto >> attraction of inf. by *di* [essere onesto]_i di contavo su t_i >> instance of P stranding (Kayne 1999:52)

Languages like French and Italian do not allow preposition stranding, so the ungrammaticality of *Contavo su di essere onesto (I counted on di be-INF honest) is predicted when a derivation like the one in (20) is assumed.

As far as the restriction for di plus infinitive in subject position is concerned, Kayne proposes to treat a subject case like: *Di cercarlo comporta dei rischi (di look for-INF him implies some risks) in exactly the same way as "normal" object cases (see footnote 17). After merging di on top of VP and attraction of the infinitive to its specifier position, we have:

In this case the appearance of the di type licenser does create the possibility of occurrence in a DP argument position. Kayne argues that di plus infinitive can only end up in the complement position of the verb after a derivation has taken place in which di and the infinitive start out as not being a constituent. In other words, what we see in (i) is a derived order and the fact that di linearly precedes the infinitive does not imply that they form indeed a constituent. To me it seems that there is something circular to this reasoning: if the apparent generalization that di plus infinitive cannot occupy a DP position (neither in the complement position of a subcategorized P nor in subject position) is used as an empirical argument against a constituent status of di and

(21) Cercarlo_i di t_i comporta dei rischi. (Kayne 1999:54) look for-INF him *di* implies some risks

Subsequent merger of the functional projection and head movement of di to the functional head produces the ungrammatical order:

(22) *di_i+W cercarlo_i t_i t_i comporta dei rischi. (Kayne 1999:54)

So far, the derivation has proceeded in the same way as for objects, except for the final step: attraction to specifier of WP. Given the fact that this is the only difference and that (22) is ungrammatical, Kayne proposes a rather ad hoc rule:

(23) Attraction to spec. W is obligatory. (Kayne 1999:54)

This should account for the subject restriction, although it is not clear to me what the explanatory value of (23) is. Moreover, if we pursue the line of reasoning that (22) is ungrammatical because nothing is attracted to spec. W, the question remains whether this has to do with the fact that there is no attraction to spec.W whatsoever, in other words, because spec. W is not filled, or with the fact that there is no specific type of attraction available, namely attraction of a remnant VP, on a par with the object cases. If we assume the former, attraction of the VP *comporta dei rischi* should make (22) grammatical. The result would be:

(24) $*[_{VP} \text{ comporta dei rischi}]_k \text{ di}_i + \text{W cercarlo}_i \text{ t}_i \text{ t}_k$

This sentence is ungrammatical, as Kayne points out as well (Kayne 1999:55). ¹⁸ So we are left with the second option, the idea that attraction of a remnant VP to spec. W appears to be obligatory, because the lack of this operation is the only difference between the grammatical object cases like *Cecilia ha tentato di cantare* and the ungrammatical subject cases like *di cercarlo comporta dei rischi. If we consider it this way, the proposal in (23) reduces to the

- (i) Comporta dei rischi cercarlo. implies some risks look for-INF him
- (ii) (II) cercarlo comporta dei rischi. (the) look for-him implies some risks

Kayne relates the unexpected ungrammaticality of *comporta dei rischi di cercarlo to the general property of Italian that postverbal subject infinitives do not allow di, contrary to French: (the details need not concern us here)

- (iii)* E' possibile di capire quella domanda. is possible *di* understand-INF that question
- (iv) Il est possible de comprendre cette question. it is possible *de* understand-INF that question.

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Without di, see (i), the sentence is grammatical and would be analyzed as a postverbal subject infinitive construction. Notice that (i) presents a potential counterexample to the claim that bare infinitives cannot occupy DP positions since (i) cannot be analyzed as an instance of topicalization (though Kayne wants to analyze cases like (i) as being the result of preposing the VP to a spec. position that is even higher than the topic position, see Kayne 1999:59). The preferred way to do it, however, is with a preverbal subject, with or without the determiner il (ii). (Thanks to Patrizia Mignano for her help with the Italian data.)

claim that a specific type of XP (namely a remnant VP) has to fill the spec.of WP, even if this specific type of XP is not available. The real counterpart of the object case, which would be something like [tentare di cantarla] comporta dei rischi per la voce (try-INF di sing-INF it implies some risks for the voice), in which tentare provides the remnant VP, is possible, but then we have a bare infinitive in subject position (or topic position) and we know that bare infinitives are not subject to the subject restriction, so this is beside the point (cf. footnote 16). It seems that the subject restriction does not follow naturally from an analysis based on the derivation in (19).

1.4.2 A PP external analysis for Dutch Prepositional Verbs

After this summary and discussion of Kayne (1999), let us go back to prepositional verb constructions in Dutch. In section 1.3, I argued that the traditional analysis in which the PP is generated internal to VP poses several problems. First of all, there is the bracketing paradox. If we want the syntax to express the intuition that the selectional relation between the verbs *zien* (see) and *luisteren naar* (listen to) on the one hand, and an object *Maria* on the other is the same in both cases, namely a head-complement relation, the object *Maria* should be generated in the complement position of the verb in both cases. If we follow Kayne's idea for de/di, which takes the PP out of VP, this allows us to establish the syntactic configuration we want.¹⁹

Furthermore, we can think of subcategorized prepositions as partly grammaticalized or semi-lexical elements (cf. van Riemsdijk 1998), on a par with de/di, although the latter most certainly have grammaticalized further, given the fact that there is one prepositional form to fulfill a grammatical function like licensing, whereas in Dutch PV constructions there are still different prepositions possible (see examples in (1)).²⁰ It is obvious, however, that a preposition like op (on) in rekenen op (count on) has bleached semantically and has a different function from op in het glas staat op de tafel (the glass is on the table) in which op is a predicate and has full semantics.

The idea that de/di are functional elements that have a grammatical function like licensing an infinitive, can also be taken up for the prepositions in PV constructions. One possibility is to consider them as alternatives of Case marking. In other words, the prepositions can be seen as morphological spell-outs of Case. From a diachronic point of view, it makes sense that the construction starts to appear when the Case system of Dutch is highly impoverished, though no serious diachronic research has been done on Dutch PVs so far. Historical grammars mention first occurrences in late middle Dutch and in the language of the 16^{th} century. In the 18^{th} and 19^{th} century, the construction developed rapidly. Probably, constructions with (inherent) Case marking that consisted of a verb and a verbal complement with morphologically marked Case on it, changed into constructions that consisted of a verb, a preposition and a complement:

¹⁹ I am aware of the fact that Kayne himself generates subcategorized prepositions like *su* in *contare su* (count on) internal to VP. I am also aware of the more complicated situation for CP complements.

²⁰ It is interesting that not all prepositions can occur in a PV construction. Possible prepositions are: *aan* (on), *bij* (with), *in* (in), *met* (with), *naar* (to), *om* (to), *onder* (under), *op* (on), *over* (about), *tegen* (against), *tot* (till), *uit* (out), *van* (of), *voor* (for). Some of the prepositions that cannot occur in a PV construction: *achter* (behind),

- (25) a. Ontferm u mijner. have mercy me-GEN CASE
 - b. Ontferm u over mij. have mercy upon me

I believe, however, that PV constructions do not form a homogeneous group but can be divided into subgroups. This division must be based on the semantics of the construction. With a difference in semantics comes a difference in syntactic structure. This approach implies that a preposition in a PV construction can have different syntactic functions and positions, depending on the type of PV construction it occurs in. Right now, we will accept the idea that in a subgroup of PV constructions the preposition is a functional element that has a licensing role of some sort. On this assumption, it makes sense that the prepositions appear in the domain of extended projections, i.e. external to VP.

A syntactic structure for PVs in Dutch inspired by Kayne (1999) would in principle take the following shape:

A DP complement like *Maria* would move to spec. PP in order to be licensed. Then there is head movement of the preposition *naar* to the functional head F and finally remnant VP movement to the spec. position of FP. This would produce:

Apart from the fact that it is questionable in the first place whether Kayne's empirical arguments for generating de/di external to VP for French and Italian are that convincing, it is not clear at all whether the same empirical arguments (no occurrence after a subcategorized P and no occurrence in subject position) can be made to carry over to Dutch as well, for what is yet a different construction (de/di plus infinitive versus PVs). For one thing, Dutch allows a limited amount of P-stranding. Moreover, also for Kayne's analysis, many general questions

that concern the nature of the functional projections and the triggers for the movement operations can be asked.

It is also evident that in Dutch, the preposition plus verbal DP complement does form a constituent, given the fact that *naar Maria* can be topicalized:

(28) [Naar Maria] heeft Jan nou nog nooit geluisterd. to Mary has John MODAL PRT MODAL PRT never listened

If we want to rule out F' movement in (27), it means that the remnant VP occupying spec. FP has to move further in order to make FP available as a moveable constituent. It is clear that this would involve complex derivations though similar remnant VP movement operations are also assumed in a VO framework for verb raising constructions in Dutch (cf. e.g. Hinterhölzl 1997). Subsequent verb movement out of spec. FP would be necessary for V2 as well, though that would have to be head movement.²² As far as CP complements are concerned, this approach makes the correct prediction in that *er*, P and CP do not form a constituent, but it is also obvious that complex derivations are needed to derive the correct word orders.

1.5 Den Besten & Webelhuth (1990)

So far, we have seen that a PP external approach solves some of the problems that are associated with a PP internal analysis. On the other hand, a PP external approach induces complex derivations including projections and movement operations that are highly stipulative. In this section, we will see whether there are empirical arguments to support a PP external analysis.

1.5.1 Den Besten & Webelhuth's first problem

In section 1.3, I mentioned a problem for the traditional approach that I will refer to as the Den Besten and Webelhuth (B&W) problem. The problem can be briefly summarized as follows: Dutch and German in general allow VP topicalization after the object has been scrambled out of the VP, but they do not allow remnant VP topicalization when the verb is part of a collocation and the scrambled R-pronoun is the object of a preposition. This is illustrated for Dutch in the following examples:

- (29) a. $[VP t_i \text{ gelezen}]_j$ heeft $Jan [P_i \text{ het boek}_i [P_i \text{ niet } t_j]]$. (remnant VP topicalization) read has John the book not
 - b. $*[_{VP}[_{PP}t_i \text{ op}] \text{ gerekend}]_j$ had Jan $[_{\Gamma} \text{ daar}_i [_{\Gamma} \text{ niet } t_j]]$. (remnant VP topicalization of a PV construction) on counted had John there not

The impossibility of (29b) is not predicted by an analysis in which the PP is projected internal to VP. Maybe a PP external approach can shed some light on the problem. But first, let us consider the problem in more detail.

First of all, the problem cannot be reduced to an instance of a general prohibition on the topicalization of PV constructions given the following example in which a PV construction is topicalized. The only difference is that the R-pronoun *er* or *daar* has not been scrambled out of VP but is topicalized along with the VP.

- (30) $[VP [PP erop] gerekend]_i$ had Jan niet t_i . there on counted had John not
 - [VP][PP] daarop gerekend i had Jan niet t_i . thereon counted had John not

In fact, (29b) and (30) present a paradox because (29b) suggests that the PP cannot be part of VP, yet (30) shows that it is.

Secondly, it should be noted that the remnant VP topicalization cases must be kept separate from cases that involve PP fronting with or without scrambling the R-pronoun and in which the finite verb moves independently for verb second reasons:²³

- (31)[PP daarop] rekent Jan niet.²⁴ thereon counts John not
 - b. *[PP ti op] rekent Jan daari niet. on counts John there not

It seems that there is a general problem with fronted PPs whose object position is empty.

Finally, it is possible that the Den Besten & Webelhuth problem is not a syntactic problem, but a pragmatic problem.²⁵ Constituents in topic position are often contrastive, for example:

(32)a. Lezen wil zij dat boek, niet weggooien. read wants she that book, not throw away

The fact that a verb like rekenen op (count on) cannot be contrasted with some counterpart like *rekenen onder (count under) might account for the pragmatic weirdness, hence ungrammaticality. It is difficult to find pairs that can be contrasted, but maybe there is one in the adjectival domain: verlegen mee (to have something in abundance) versus verlegen om (to be in want of something). If the appropriate context is given together with the appropriate intonation (stress indicated by capital letters), some speakers of Dutch accept the following sentence

(33)?MEE verlegen zat zij er niet, maar juist OM (verlegen). with shy was she there not, but for

On the other hand, in the PV constructions it is always the verbal part that is contrasted and not the prepositional part, so it is not so likely after all that pragmatics are behind the Den Besten and Webelhuth problem. As a matter of fact, we expect that the prepositional part cannot be used contrastively because I argued that these prepositions have lost their full semantics.

We will now see whether a PP external analysis can account for the B&W problem. At first sight we could say that a PP external analysis predicts the ungrammaticality of (29b), in the sense that remnant VP topicalization in PV constructions cannot take the PP with it, simply because the PP is not part of the VP. In other words, what B&W describe as remnant

²³ Thanks to Paul Law for discussing these facts with me.

²⁴ In this case, PP fronting is not possible with the phonologically weak form of daar, i.e. er: *[PP erop] rekent Jan niet (there on counts John not). This has to do with the contrastive reading that comes with the topic position. The sentence is best pronounced with stress on DAAR, though it is not absolutely necessary for the

VP topicalization does not involve topicalization of VP but of something else. The problem is, however, more complex than that, given examples in (30), repeated below for convenience, which show that the PP is part of VP.

- (34) a. $*[_{VP}[_{PP}t_i \text{ op}] \text{ gerekend}]_j \text{ had Jan } [_{I'}\text{daar}_i [_{I'} \text{ niet } t_j]]$ on counted had John there not
 - b. [VP][PP] daarop] gerekend]_j had Jan niet t_j . thereon counted had John not

If we now assign a structure to these examples that follows from a PP external analysis, the construction takes the following shape:

- (35) a. $*[PP t_i \text{ op } [VP \text{ gerekend } t_i]]_j \text{ had Jan daar}_i \text{ niet } t_j.$ on counted had John there not
 - b. [PP] daar_iop [PP] gerekend [PP] had Jan niet [PP] thereon counted had John not

In both cases the R-pronoun moves to the specifier of PP. The only difference between (35a) and (35b) is whether subsequent scrambling of the R-pronoun has applied or not.

In other words, we would reanalyse the construction as being an instance of PP topicalization with pied-piping of the remnant VP. In principle, both operations are possible independently of each other. But there are some problems with this. We will first consider what happens when we reanalyze these operations in a PP external framework and the complement is a DP instead of an R-pronoun.

- (37) a. [PP op salarisverhoging] had Jan niet ti gerekend. (PP topicalization) on a raise had John not counted
 - b. $[PP] op [VP] salarisverhoging gerekend]_i had Jan niet t_i. (PP top. with VP) on a raise counted had John not.$

It is not so clear how we should treat PP topicalization or fronting in general when the PP dominates the VP. In relation to (28) we saw that complicated derivations are necessary to derive (37a). In case of PP fronting with pied-piping of VP, the question arises whether we assume an OV or VO order for Dutch. The thing is that PP fronting with pied-piping of VP is derivable in an OV order without any further movement operations, but not in a VO order. Furthermore, we would have to assume that the DP remains in situ and does not (have to) move to the specifier of PP in order to be licensed.

- $(38) \quad a. \quad OV \\ [PP op [VP DP salarisverhoging] gerekend]]_j \ had \ Jan \ niet \ t_j. \\ on \ raise \ counted \ had \ John \ not$
 - VO
 *[PP op [VP gerekend [DP salarisverhoging]]] had Jan niet tj.
 on counted raise had John not.

Since the whole idea and approach of a VP external generation of PP so far has been Kaynian in nature, it would be implausible to assume a head final structure for Dutch at this point (cf. Kayne 1994). In the remnant structures above, however, the issue of full DPs is not directly relevant because they cannot scramble out of the PP and in doing so, strand the preposition.

In the case of the R-pronoun and the remnant movement, the VO versus OV distinction is irrelevant because the R-pronoun, by virtue of the R-pronominalization rule, ends up to the left of the preposition anyway. This means that both the ungrammatical case (R-pronoun has scrambled) and the grammatical case (R-pronoun has not scrambled) can be interpreted as PP topicalization, with the PP pied-piping the VP. If we interpret the data this way, we have to face a disappointing conclusion: A PP external approach does not explain the B&W problem, but it reformulates the problem. The questions now is: Why can a PP that pied-pipes a VP be fronted when its specifier is filled with an R-pronoun, but why is this movement impossible when the specifier contains the trace of a scrambled R-pronoun. As we saw in (31), it might be the case that there is a problem with fronting PPs containing traces in general.²⁶

1.5.2 Den Besten & Webelhuth's second problem

So far, we have seen that a PP external approach does not solve but rather rephrases the original B&W problem. In their article, however, Den Besten and Webelhuth discuss another closely related pattern that they cannot account for. This pattern is given below for German and Dutch:

- (39) a. Gerechnet hatte Peter da nicht mit. counted had Peter there not with
 - Gerekend had Jan daar niet op.
 counted had John there not on
 (Den Besten & Webelhuth 1990:87)

The problem (which I will label "the second" B&W problem) is the following: In a PP internal approach, the grammaticality of the examples in (39) is unexpected. The first relevant observation is that in discontinuous constituents like our remnant VP topicalization cases, but also in R-pronoun extraction, was für-extraction and split DPs, the extracted element cannot be extracted when the containing phrase has been scrambled out of "D-structure" position across negation.

- (40) a. *Da_i hatten wir $[t_i \text{ mit}]_j$ nicht t_j gerechnet. there had we with not counted
 - b. *Bücher_i hatte er [t_i einige]_j nicht t_j gelesen. books had he some not read
 - c. *Was_i hat er [t_i für Bücher]_j nicht t_j gelesen. what has he for books not read (Den Besten & Webelhuth 1990:86)

If we assign a PP internal structure to the examples in (39), we have to conclude that extraction of the R-pronoun has taken place after scrambling of the PP. The reason that the PP must have been scrambled, or at least must have left the VP, is that the PP is not part of the topicalized VP. Notice that the topicalized verb cannot be interpreted as a V⁰ because B&W follow Chomsky (1986), who claims in his universal theory of movement that only maximal projections are allowed to move to the specifier of COMP and INFL.

[VP t_j gerekend]_k had Jan daar_i niet [PP t_i op]_j t_k counted had John there not on

Notice that the position of PP cannot be analyzed as involving PP extraposition either, because in that case a freezing effect would apply as well. To sum up, the grammaticality of (41) presents a paradox because it has to be extraction out of a moved phrase if we do not want to give up on XP movement, yet the examples in (40) represent robust evidence that such an operation is not allowed. This paradox, however, can be solved when we assume a PP external analysis à la Kayne. This would take the following shape:

[VP] gerekend t_i]_j had Jan daar_i niet [PP] t_i op [t_j]]. counted had John there not on

The crucial point is that the PP is in its base position. The object of the verb undergoes R-prenominalization and moves to the specifier of the PP from which position it scrambles. The remnant VP is then topicalized. We can now easily derive variations on this theme, which are also grammatical. The first one is not problematic for a PP internal approach per se. I will give the two analyses:²⁷

(43) Gerekend had Jan daarop niet.
counted had John thereon not
PP internal account:
[VP ti gerekend] had Jan [PP daarop] niet ti (PP scrambling and VP top.)
PP external account:

 $[v_P \text{ gerekend}]_j$ had Jan $[p_P \text{ daarop } t_j]_k$ niet t_k (PP scrambling with pied-piping of VP followed by VP topicalization)²⁸

The following construction is, however, problematic for a PP internal approach because it would involve VP topicalization without the PP but there is no reason to assume that the PP has left the VP. At least it cannot have scrambled because it follows the negation. This

²⁷ For reason of transparency, I will not indicate the base position of the R-pronoun as the complement of the verb in the following examples.

construction shows part of what we labelled the second B&W problem: it is unclear how the PP has left the VP and where in the structure it is situated at the moment of VP topicalization.

(44) Gerekend had Jan niet daarop.
counted had John not thereon
PP internal approach:
[VP ti gerekend]i had Jan niet [PP daarop]i ti

In a PP external approach, the derivation is straightforward: it is VP topicalization.

[VP gerekend]_i had Jan niet [PP daarop t_i]

Finally, constructions in which even larger parts are topicalized together with the VP, like negation or adverbs, the PP internal analysis runs into deep trouble. Consider the following examples in which negation itself or an adverb are part of the topicalized phrase:

- (46) a. $[NegPNiet [PP] daarop [VP] gerekend]]_j had Jan t_j.$ not thereon counted had John
 - b. [AdvP Blindelings [PP daarop [VP gerekend]]]j had Jan niet tj. blindly thereon counted had John not

A PP internal approach would have to assume scrambling of PP to a position that is in between negation and the VP. After that, the entire phrase is moved. For the adverb case a similar operation would have to be assumed, that is PP scrambling to a position in between the AdvP and VP. In a PP external approach we can simply assume topicalization of the NegP or AdvP respectively, together with pied-piping of the PP and VP. No PP scrambling is necessary. Notice that in this approach the ungrammaticality of the following sentence is predicted because it involves fronting of a non-constituent: the PP occupies a position in between the AdvP and the VP.

(47) *[Blindelings_k gerekend_j] had Jan niet [$_{AdvP}$ t_k [$_{PP}$ erop [$_{VP}$ t_j]]]. blindly counted had John not thereon

1.6 Conclusion

In this paper I presented the standard data for prepositional verb constructions in Dutch and added some new data. I argued that Dutch has a P+CP pattern whose occurrence is restricted by pragmatic principles. Furthermore, I briefly summarized the traditional account of PV constructions and pointed out some of the problems. Then I discussed an alternative approach, inspired by Kayne (1999), in which the PP is projected in a position external to VP. This approach has two main advantages: 1. it expresses the intuition that the DP/CP is the complement of the verb and that the preposition is a functional element. 2. It predicts the grammaticality of *gerekend had Jan daar niet op* (counted had John there not on), which was a problem for Den Besten & Webelhuth (1990). This approach comes at the costs of complex derivations involving functional projections and movement operations that are not always well motivated. Whether a PP-external account for Dutch PV constructions is on the right track needs to be worked out in greater detail.

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