The Syntactic Location of Events

Aspects of Verbal Complementation in Dutch

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The Syntactic Location of Events

Aspects of Verbal Complementation in Dutch

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Voor Bert, Kasper en Tobias

Als ze me missen, dan ben ik vissen

Nico Haak (1939–1990)

Contents

1 Introduction

1.0 General background

The title of this thesis, *The Syntactic Location of Events*, is ambiguous. This is because the goal of this thesis is twofold. The first aim is to provide an answer to the question of how the location of an event is *syntactically* expressed (as opposed to lexically). The second aim of this thesis is to investigate *where* events are located in the *syntactic structure*. More specifically, which syntactic projections can contain information that is associated with the event that is expressed by a predicate? I will discuss these issues in relation to three verbal complementation patterns found in the Dutch language area. These patterns include a bare infinitive (as found in the standard Dutch absentive construction), a *te*-infinitive (as found in for instance the *with*-infinitive construction in the dialect of Wambeek), and a finite clause (as found in verbal collocations).

A more general question underlying this thesis involves the way in which relations between categories are established. As far as DPs are concerned, it is well-known that two DPs are related by case or by a preposition. This is illustrated by the examples in (1):

(1) a. Jans boek. (case)
John-GEN book
'John's book'

b. Het boek *van* Jan. (preposition)
the book of John
'John's book'

The relation between a verb and a DP is also established either by (abstract) case or a preposition:

(2) a. Jan ziet haar. (case)
John sees her-ACC
'John sees the book.'

b. Jan kijkt *naar* het boek. (preposition)
John looks at the book
'John is looking at the book.'

The way in which relations between events are established is less straightforward. In languages that allow serial verb constructions, two or more verbs (or verb phrases) are strung together in a single clause without overt connective morphology (see for instance Ndimele 1996:127). These verbs express simultaneous or immediately

consecutive events and have the same grammatical marking for tense, aspect and modality. Furthermore, they have a single grammatical subject. An example of a serial verb construction is given in (3), taken from Krio, a Creole language of Sierra Leone.

(3) i bai klos gi im pikin.
he buy clothes give his child
'He bought some clothes and gave them to his child.'
(Finney 2004)

In early work on serial verb constructions it is argued that subordination is involved rather than coordination. This means that the second verb is analyzed as an argument of the first verb, rather than there being a construction in which the second verb is coordinated with the first verb (Baker 1989, Sebba 1987). Later work suggests adjunction as a possible structure (see Law&Veenstra 1992).

In Dutch, a finite verb can combine with (1) a bare infinitive, (2) a *te*-infinitive or (3) a complement clause that is more extended than a VP. These possibilities are illustrated in (4):

(4) a. Kasper wil schommelen.
Kasper wants swing-INF
'Kasper wants to play on the swings.'
b. Kasper begint *te* schommelen.
Kasper begins to swing-INF
'Kasper starts swinging.'
c. Kasper zegt [$_{CP}$ dat hij gaat schommelen].
Kasper says that he goes swing-INF
'Kasper says that he is going to play on the swings.'

In (4a), there is no connective material present between the finite verb and the infinitive. In (4b), the complementiser *te* ('to') connects the finite verb and the infinitive. In some cases, the preposition *om* ('for') can be added as well. This is shown in (5):

(5) Kasper is vergeten (*om*) de deur dicht *te* doen.
Kasper is forgotten for the door closed to do-INF
'Kasper has forgotten to close the door.'

Finally, in (4c), the finite verb combines with an extended VP, which is in this case a CP.

In this thesis, the focus will be on a *subset* of constructions in which relations between events are established, namely those in which a *preposition* plays a role as well. An example of such a situation might involve a *te*-infinitive as in (4b), that is if *te* is analyzed as a preposition. However, the morphosyntactic status of *te* in *te*-

infinitives has been the subject of much discussion. Early analyses regard *te* as the counterpart of English *to*, and propose that *te* is an infinitival marker (e.g. Bennis & Hoekstra 1989a), or an infinitival complementiser (see Leys 1985:434). Zwart (1993) rejects the analysis in which *te* is an infinitival marker, because not every infinitive is preceded by *te* (see example (4a) above). Zwart concludes that "te […] appears to be involved in *expressing a syntactic relation* rather than tense. In this respect, *te* looks like a complementiser or a preposition." (Zwart 1993:102), italics are mine, IH). IJbema (2002) argues that *te* can be either a tense marker or a mood marker.

I will not elaborate on this discussion in detail. Instead, I will focus on a construction in which a *te*-infinitive is part of an adjunct phrase. This adjunct phrase is related to the main clause by means of the preposition. An example of this construction is given in (6):

(6) ***Mè*** zaai te werken moest-n-aai de gieln dag toisj blaaiven.
with she-NOM to work had to-CL-he the whole day home stay
'With her working, he had to stay home all day.'

In this example, taken from the dialect of Wambeek, the preposition *mè* ('with') relates the adjunct clause to the main clause, while *te* precedes the infinitive *werken* ('work') inside the adjunct clause.

In (4c) I showed that a finite verb may also combine with a clause, or 'extended VP'. This type of relation also has a subset that involves a preposition. An example is given in (7):

(7) Iedereen zat te rekenen ***op*** [$_{CP}$ dat jij 'm zou nemen].
everybody sat to count on that you it would take
'Everybody was convinced that you would take it (i.e. the free kick).'
(Kees Jansma to Pierre van Hooijdonk, 15-04-2002)

Finally, consider again the example (4a) in which a finite verb combines with a bare infinitive. In the so-called "absentive", the finite verb *zijn* ('be') is followed by a bare infinitive. The absentive signals that the subject of the construction is absent from a certain location. An example is given in (8):

(8) Jan is vissen.
John is fish-INF
'John is off fishing.'

As regards the semantics of the absentive, it is tempting to attribute absence of the subject to a lexical preposition such as *uit* ('out'). In some cases, such as in (9), the absentive indeed cooccurs with the preposition *uit*:

(9) Jan is ***uit*** vissen.
John is out fish-INF
'John is off fishing.'

As such, the absentive might be regarded as a construction in which a finite verb combines with an infinitive, *and* in which a preposition (for instance *uit*) plays a role as well.

The three constructions exemplified in (6)-(9) share the following properties: (1) a relation between two events is established, (2) a preposition (i.e. *mè*, *op*, *uit* in the examples given above) plays a role in establishing this relation. A detailed analysis of these three constructions is at the heart of this dissertation. The outcome of these case-studies contributes to the general picture of how relations between events are established, and more specifically, what kind of role prepositions may play in this process.

1.1 Theoretical background

The theoretical background that I assume is that of generative linguistics. In this framework, the focus of inquiry is the speaker's tacit knowledge of her native language. One of the fundamental assumptions of generative linguistics is the notion of Universal Grammar (UG). UG was introduced by Noam Chomsky in the late 1950s and early 1960s (see e.g. Chomsky 1957, 1964, 1965). In later work, Chomsky hypothesizes that UG consists of a set of innate principles that are common to all languages (the "Principles and Parameters" approach; see Chomsky 1981). These principles are associated with parameters whose setting may vary from language to language. In this way, the Principles and Parameters approach aims at providing an account for the attested variation among languages.

In the "Minimalist Framework", Chomsky proposes that parametric variation must be attributed to different properties of functional projections (see Chomsky 1995). Functional projections typically contain less phonological material than lexical projections. They often host inflectional affixes. As such, functional projections play a prominent role in recent generative theory.

This thesis is empirically oriented. The focus is first and foremost on patterns of verbal complementation in Dutch. For some of these patterns I will make a number of new observations. These lead to novel theoretical insights into the syntactic principles underlying these patterns, such as binding and case marking. For other patterns, which have been discussed on earlier occasions, I will provide a new, and arguably more appropriate analysis. As regards the theoretical interpretation of these patterns, my starting-point has been the data, rather than a particular version of generative syntactic theory that is currently available.

1.2 Overview of the dissertation

The core of this dissertation consists of three chapters. In each of these I will focus on a particular verbal complementation pattern of Dutch.

In chapter 2, I discuss the absentive construction. The absentive signals that the subject of the construction is absent from a certain location. The canonical example that I will use throughout this dissertation is given in (10):

(10) Jan is vissen.
John is fish-INF
'John is off fishing.'

As regards the semantics of the absentive, it is tempting to attribute absence of the subject to a lexical preposition such as *uit* ('out'), or to an empty preposition with the same meaning. In some cases, such as in (9), repeated below as example (11), the absentive indeed cooccurs with the preposition *uit*:

(11) Jan is uit vissen.
John is out fish-INF
'John is off fishing.'

However, in chapter 2 I will show that there are semantic and syntactic differences between "bare" absentives and *uit*-absentives.

The striking property of the (bare) absentive is that the interpretation of absence is not tied to a particular lexical item, but rather follows from the construction as a whole. I will argue that the absentive semantics can be derived from an extension of principle B of the Binding Theory, as originally introduced by Chomsky (1980). Specifically, I propose that binding not only involves pronominal reference, but also the interpretation of other deictic notions, such as time and place.

In chapter 3, I provide an analysis of the *with*-infinitive in the dialect of Wambeek, a village in the Belgian province of Flemish Brabant. The *with*-infinitive is one specific instantiation of the more general *with*-absolute construction. An example of the Wambeek *with*-infinitive was given in (6), and is repeated below:

(12) Mè zaai te werken moest-n-aai de gieln dag toisj blaaiven.
with she-NOM to work had to-CL-he the whole day home stay
'With her working, he had to stay home all day.'

The main challenge that is posed by the *with*-infinitive is that its subject, in this case *zaai*, has nominative rather than oblique case (as would be expected in the context of a preceding preposition). I will argue that the emergence of nominative case must be attributed to the specification of the *with*-preposition, i.e. *mè*, which contains the (tense) feature iT, based on Pesetsky & Torrego's (2001) analysis of nominative case in English. The preposition has acquired this verbal (i.e. functional) property as

the result of grammaticalisation, a diachronic development which often targets prepositions.

In chapter 4, I focus on a construction in which a full CP is preceded by a preposition, which is in turn preceded by a verb. I will refer to such combinations as "verbal collocations". An example is given in (13):

(13) Jan ergert zich er$_i$aan [$_{CP}$ dat Marie altijd zo hard praat]$_i$.
John annoys himself thereon that Mary always so loud speaks
'John gets annoyed about the fact that Mary always speaks so loudly.'

In (13) the PP contains the resumptive pronoun *er* ('there'), which is associated with the CP. However, it has so far gone unobserved in the syntactic literature that Dutch has a similar construction without *er*. I will refer to the latter construction as the "P + CP pattern". An example of this pattern was given in (7) and is repeated below:

(14) Iedereen zat te rekenen op [$_{CP}$ dat jij 'm zou nemen].
everybody sat to count on that you it would take
'Everybody was convinced that you would take it (i.e. the free kick).'
(Kees Jansma to Pierre van Hooijdonk, 15-04-2002)

In present-day Dutch the patterns in (13) and (14) coexist. Following Barbiers (2000), who claims that DPs and CPs in Dutch are in complementary distribution, and that only DPs have argument status, I will propose that the CP complement of a verbal collocation is in fact a DP.

As regards the argument structure of verbal collocations, I will argue that the internal argument is predominantly associated with the thematic role of CAUSE. This would suggest that verbal collocations are in fact causative constructions (see also Den Hertog 1973). Diachronic data from Dutch and English indicate that the role of CAUSE is typically associated with inherent case. Synchronic data from Dutch show that verbal collocations pattern with causatives in a number of ways. Presumably, prepositions, contrary to verbs, did not lose their ability to assign inherent case. Thus, in present-day Dutch, verbs assign structural case and prepositions (may) assign inherent case. This makes prepositions the only category that is capable of establishing a causative relation. The function of prepositions in verbal collocations is therefore primarily functional (i.e. assigning inherent case) rather than lexical (i.e. making a semantic contribution). I propose that the functional status of these prepositions is reflected by their feature specification, which contains an inherent case (iC) feature.

Finally, I consider the internal structure of verbal collocations. To this end, I discuss the traditional analysis in which the PP is generated in a position internal to VP (see e.g. Model 1991), and compare it to an alternative analysis in which the PP is generated in a position external to VP. The latter type of approach is suggested by Kayne (1999) for infinitival complementizers in Italian.

Chapter 5 summarizes the main findings of the earlier chapters, and outlines some possible avenues for further research.

2 The Absentive

2.0 Introduction

The grammatical absentive is a construction which signals absence of its subject.[1] Consider the example in (1):[2]

(1) Jan is vissen.
John is fish-INF
'John is off fishing.'

The construction can be referred to as the 'grammatical absentive', since the notion of absence is not lexically expressed by means of, for instance, an adverb (e.g. 'John is *away* to get lunch'), a particle (e.g. 'John is *off* having lunch'), or a verb (e.g. 'John has *gone* fishing'). The grammatical absentive (henceforth "absentive") is a minimal construction in the sense that it consists only of *zijn* ('be') and an infinitive, both highly underspecified forms in the verbal system.[3] What is striking, therefore, is that the absentive has very specific semantics, rather than some kind of "default" interpretation. Thus, one of the main questions that I will address in this chapter is how the absentive semantics should be accounted for.

I discuss the general properties of the absentive construction in §§2.1–2.2. In §2.3 I present a classification of the verbal types that can occur in the absentive. Next, in §2.4, I present an analysis of the absentive that is based on two fundamental claims. The first is that the semantic interpretation of the absentive follows from the Binding Theory of Chomsky (1980, 1981). Specifically, I will modify the Binding Theory to the extent that it applies to a *set* of referential indices, rather than to a single index for pronominal reference. I will propose that an argument is specified for a triple index containing the variable *x* for pronominal reference, the variable *t* for temporal reference, and the variable *l* for spatial reference.

The second claim is that the verb *zijn* in the absentive has the status of a subject-control verb. This implies that the canonical example in (1) has the structure Jan_i *is* PRO_i *vissen*. It is this subject-control configuration that gives rise to the absentive semantics. The argumentation for this runs roughly as follows. In a given deictic

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[1] The term "absentive" is first used by De Groot (1995a).

[2] As can be seen from the gloss in (1), English lacks a grammatical absentive. Throughout this chapter, I will translate the absentive as 'X is off V-ing', for reasons of consistency rather than style. In at least some of the examples, the translation 'X has gone V-ing' would appear to be more appropriate.

[3] An infinitive is underspecified in the sense that it is not inflected for tense. The traditional, essentially Aristotelian, view of the verb *zijn* is that it makes no semantic contribution to a predicational sentence in which it appears (see Rothstein 1999:347). In this respect, *zijn* can also be regarded as being underspecified. It has been claimed, however, that certain instances of *zijn* have interpretative effects (see e.g. Partee 1977, Rothstein 1999 and Becker 2004). I will discuss the semantics of *zijn* in §2.4.2.

space, one of the elements is fixed as the basic reference point. The location of the other elements can be determined in relation to this reference point. In a subject-control configuration, PRO introduces a second element that has independent argument status. This means, then, that there are two syntactic arguments, i.e. the subject and PRO, which can be evaluated with respect to each other. This evaluation takes places at the level of indices.

I will argue that the reference point in the absentive (which, following Bühler 1934, I will call the "subject's origo") is represented by the triple of indices that are associated with the lexical subject *Jan*. These indices represent the subject in its "default" location. The indices that are associated with the PRO argument are identical to those of the lexical subject *Jan*, except for the index that specifies location. In terms of binding, this means that the subject and PRO do not have the same index for spatial reference. As a result, the event [PRO *vissen*] is *necessarily* interpreted as being removed from its "default" location, which is associated with the lexical subject *Jan*. In *Jan is vissen* the implication is that the fishing event takes place in a location that is not the same as *Jan*'s default location (e.g. *Jan*'s house).

The obligatory nature of this disjoint spatial reference can be seen to follow from principle B of the Binding Theory. The idea is that principle B is violated if the two triples of the arguments that are evaluated with respect to each other are identical in all three dimensions (i.e. *x,t,l = x,t,l). In an absentive, these two arguments, i.e. the lexical subject and PRO, have the same pronominal and temporal index. The shared pronominal reference follows from the subject-control status of *zijn*. The shared temporal reference follows from the fact that the infinitive in the absentive is underspecified for tense, and hence lacks independent temporal reference.[4] Thus, the only way in which principle B of the Binding Theory can be satisfied is if the triples of the subject and PRO differ in their spatial reference. This implies, then, that the variable *l* has disjoint reference, which I will indicate by means of the variable *p*, i.e. *Jan* $_{(x,t,l)}$ *is* [*PRO*$_{(x,t,p)}$ *vissen*]. This representation reflects the semantic interpretation of the absentive: the event [PRO$_{(x,t,p)}$ vissen] is dislocated with respect to the subject's default location, represented here by *Jan* $_{(x,t,l)}$.

In §2.5 I will argue that a binding analysis of the absentive is superior to a number of alternative analyses. One alternative is to analyze the absentive as an instance of *go*-deletion. This analysis relates the absentive semantics to the underlying presence of the verb *gaan* ('go'), which expresses movement away from the speaker. Since *gaan* is not part of the surface structure of the absentive, this account requires deletion of *gaan*, as is illustrated in (2):

[4] Bennis & Hoekstra (1989b) suggest that the presence of *te* in infinitival complements correlates with the presence of tense. Following this proposal, I assume that the bare infinitive in the absentive is tenseless, and is therefore dependent on the matrix verb for its temporal interpretation. Cremers (1983) demonstrates that the correlation between *te* and tense is only a one-way implication, since not all *te*-infinitives are tensed; I will come back to this issue in §3.3.1.

(2) Jan is ~~gaan~~ vissen.
John is gone fish-INF
'John is off fishing.'

Another alternative would be to relate the absentive semantics to the presence of an absentive projection (AbsP). Support for this analysis comes from a number of Low-Saxon dialects, where the absentive requires the presence of the deictic particle *heen*:

(3) *Gramsbergen (Low-Saxon)*
Jan is heen vissen.
John is away fish-INF
'John is off fishing.'

The particle *heen* expresses movement away from the speaker. As far as the dialect of Gramsbergen is concerned, it seems reasonable to assume that *heen* occupies an AbsP. If we extend this account to the absentive in Standard Dutch, we would have to assume that this AbsP is underlyingly present, but empty at the level of surface structure, although in some cases the preposition *uit* can appear in an absentive. The *gaan*-deletion account and the AbsP account might seem appealing, but, as I will show in §2.6, these alternatives are inferior to a binding analysis, both on empirical and on theoretical grounds.

In §2.7 I will speculate on some of the consequences and implications of the binding approach. I will show that disjoint spatial reference is also active in other syntactic contexts, such as the interpretation of complex anaphors and anaphors that occur with verbs of perception. In order to account for these phenomena, we must allow for the possibility that the literal shift in location that we find in the absentive receives a metaphorical interpretation.

2.1 General properties of the absentive

2.1.1 The notion of absence

As noted in §2.0, the absentive consists of the verb *zijn* followed by an infinitive. The canonical example is repeated in (4a); (4b) contains another example:

(4) a. Jan is vissen.
Johnis fish-INF
'John is off fishing.'

b. Marie is een brief posten.
Marie is a letter post-INF
'Mary is off posting a letter.'

An informal paraphrase of (4a) is that the event *Jan vissen* takes place "somewhere else". The same holds for the event *een brief posten* in (4b); here *Marie* is away from her default or expected location, e.g. her home. One property of the absentive is therefore that its subject is absent with respect to a certain location.

In De Groot (1995a:2), this location is referred to as the "deictic centre". Deixis is the general term for words whose reference relies entirely on the circumstances of the utterance. Deictic elements thus lack independent reference, but only receive reference in relation to other elements. Three major categories of deixis are generally distinguished: person deixis, temporal deixis and spatial deixis (see among others. Bühler 1934, Klein 1982 and Anderson & Keenan 1985). The reference of pronouns like *me* and *you* is an example of person deixis. Tense, which relates an event to the time of speaking, illustrates temporal deixis. Words like *here* and *there* are examples of spatial deixis. The absentive can be seen as another example of spatial deixis, since it relates an event (e.g. *Jan vissen*) to a location (i.e. 'not here'). This raises the question of how the deictic centre in the absentive must be defined; I will discuss this issue in §§2.1.2–2.1.6.

2.1.2 Overt speaker and overt location

As is commonly assumed, the default settings for the three dimensions of a deictic centre are *I* (i.e. the speaker, for pronominal reference), *now* (i.e. the moment of speech, for temporal reference), and *here* (i.e. the location of the speaker, for spatial reference) (see e.g. Anderson & Keenan 1985). It is reasonable, therefore, to assume that the deictic centre in an absentive is defined as the location of the speaker. The absence of the absentive subject must then be evaluated in relation to the location of the speaker. Consider this scenario with respect to the example in (5):

(5) Toen *ik* binnenkwam was *Marie* lunchen.
when I entered was Mary lunch-INF
'When I entered, Mary was off having lunch.'

The natural interpretation of (5) is that the absentive subject *Marie* is not at the same location as the speaker. Hence, "absence" is interpreted as "in a location other than that of the speaker". The precise interpretation of the location of the speaker must be pragmatically inferred; in (5) it is presumably a house or a room.

It is, of course, possible to be more explicit about the speaker's location, as in (6):

(6) Toen *ik* *de kamer* binnenkwam was *Marie* lunchen.
when I the room entered was Mary lunch-INF
'When I entered the room, Mary was off having lunch.'

In (6), *de kamer* specifies the speaker's location, and thus functions as reference point for spatial deixis. The natural interpretation of (6) is that the absentive subject *Marie*, is dislocated with respect to this location (i.e. the room the speaker enters).

On the basis of (5) and (6), we can therefore define the semantic interpretation of the absentive as in (7):

(7) **Semantic interpretation of the absentive (version 1)**
The absentive entails dislocation of its subject with respect to the deictic centre. The deictic centre is the location of the speaker. This location may or may not be lexically expressed.

Closer examination reveals that the location from which the subject is absent does not necessarily coincide with the location of the speaker (see also de Groot 1995a:3). In the following example, the speaker's location is the one from which the phone call is made (i.e. the car), but this location is not the same as the one from which *Jan* was absent:

(8) Toen *ik* gisteren *vanuit de auto* opbelde, was *Jan* boksen.
when I yesterday from the car phoned was John box-INF
'When I phoned from the car yesterday, John was off boxing.'

(8) is interpreted to mean that *Jan* was absent from where the speaker expected him to be. This location is not lexically specified, and must be pragmatically inferred.

With this in mind, consider once more the sentence in (6). Although the phrase *the room* here is interpreted as the location from which the absentive subject *Marie* is absent, this is not the only possible reading. There is an alternative interpretation in which the absentive subject has just left another room than the one entered by the speaker. On the latter interpretation, (6) is like (8) in that its subject is absent from an unspecified default location.[5] The specific pragmatic context suggests that it is probably *the room* in (6), but that it cannot be *the car* in (8).

2.1.3 No overt speaker but only overt location

Let us next consider an absentive construction which, unlike the examples in (5), (6) and (8) above, does not involve an overt speaker. This is the case in (9) below, where the absentive subject, i.e. *Jan*, is also the subject of the subordinate clause. Note that, like (6) and (8), (9) contains a locative expression in the embedded clause, i.e. *in Finland*. But note, too, that (9) does not mean that the subject is dislocated with respect to Finland (see De Groot 1995a:3 for the same observation):

(9) Toen *Jan in Finland* was is *hij* drie keer wezen zwemmen
when John in Finland was is he three times be-INF swim-INF
'When John was in Finland he went for a swim three times.'

In (9), too, the deictic centre must be assigned on the basis of pragmatic knowledge; it is presumably *Jan*'s hotel or holiday home.

[5] Fillmore (1971), in his discussion of the syntactic and semantic properties of the verbs *go* and *come*, refers to this location as the "proper location".

2.1.4 No overt speaker and no overt location

I now turn to some examples of the absentive in which there is neither a lexical speaker nor any lexical material that refers to a location. Consider first once more the canonical example in (10):

(10) Jan is vissen.
John is fish-INF
'John is off fishing'

(10) means that John is absent with respect to a certain location, and can be loosely paraphrased as "John is away, and he is (probably) fishing". (I will come back to the precise interpretation of the infinitive in §2.2.1). For present purposes, the important point regarding (10) is that it expresses absence of the subject, despite the fact that the location from which the subject is absent is not lexically expressed (and hence must be pragmatically inferred). Furthermore, there is no lexical manifestation of a speaker in relation to which the absence of the subject *Jan* can be determined.

The example in (11) also illustrates that the absentive entails dislocation of the subject with respect to its expected location:

(11) Jan is het afgelopen jaar drie keer wezen zwemmen.
John is the past year three times been-INF swim-INF
'John went for a swim three times last year.'
(De Groot 1995a:3)

(11) means that during last year John left his house three times to go for a swim. Crucially, (11) cannot be interpreted to mean that John has a swimming pool at home. This is also illustrated by the following example, which is pragmatically odd:[6]

(12) Nu heeft hij dat prachtige zwembad in de tuin, en nu is
now has he that beautiful pool in the garden and now is
hij dit jaar maar drie keer wezen zwemmen.
he this year only three times be-PART swim-INF
'He has this beautiful swimming pool in his garden, and yet he went off for a swim only three times.'

Consider next a written message of the kind in (13) below, which illustrates a quite frequent use of the absentive:[7]

[6] I am grateful to Norbert Corver for providing me with this example.
[7] In messages such as the one in (13) the subject is often dropped: 'ben lunchen'.

(13) Ik ben lunchen.
I am lunch-INF
'I am off lunching.'

Here there is no lexical material referring to a location, but, according to de Groot (1995a:2), it is the position of the note which informs the reader of the location from which the subject is absent. Note, too, that the very fact that the message is written (rather than spoken) implies absence of the subject.

A comment is also in order regarding the use of the present tense in examples such as (13). Consider in this light the statement in (14):

(14) Ik ben boodschappen doen!
I am buying groceries-INF
'I am off buying groceries.'

(14) also lacks a lexically specified location, but it can nevertheless be uttered while the subject (say Mrs. Jones) is still present at her default location. A typical scenario would be one in which Mrs. Jones is standing at the door, holding a shopping bag, ready to go to the supermarket, yelling *Ik ben boodschappen doen!* to Mr. Jones, who is in the living room. The reason why (14) is grammatical is that Dutch allows present tense to shift forward to a future reading. This is also shown by the example in (15):

(15) Ik eet even een boterham.
I eat just a sandwich
'I am about to have a quick sandwich.'

(15) is typically uttered when the subject is not eating yet, but is planning to do so in the near future. For the same reason, (14) can be uttered while the subject is not yet buying groceries; rather the interpretation is that the subject will be dislocated from the unexpressed default location in the near future.

Another situation in which (14) can be used is when Mrs. Jones is wanted on the phone, which has been picked up by Mr. Jones. If Mrs. Jones, for whatever reason, does not want to come to the phone, she may whisper something along the lines of (14) to Mr. Jones. This provides another illustration of the fact that the absentive dislocates the subject. Note, again, that the absentive is grammatical in this context, even though Mrs. Jones is not really absent; rather, the person at the other end of the line is led to believe that she is absent.

2.1.5 A covert speaker?

For cases like *Jan is vissen*, which lack an overt speaker, it could be argued that there is a *covert* speaker present. This interpretation would be in line with a proposal by Ross (1970) regarding the structure of performatives. A performative consists of a performative verb such as *say* or *tell*, a subject, and an object, e.g. [$_{VPperf}$ I tell you].

Ross argues that a performative sentence contains a performative projection at Deep Structure. This performative projection takes a declarative clause as its complement, after which the performative VP is deleted by a rule of performative deletion, resulting in the structure [$_{VPperf}$ ~~I tell you~~ [prices have increased]]. The details of this analysis need not concern us here. Note, though, that Ross's general idea can also be applied to the absentive. If we assume that the speaker, though not realised, is structurally present, then we could analyze the absentive along the lines in (16):

(16) ~~Ik$_{I}$~~ ~~vertel~~ ~~je~~ Jan$_{p}$ is vissen.
I tell you John is fish-INF
'John is off fishing.'

In (16), the different indices on the speaker and the subject of the absentive indicate that the location of the subject is disjoint with respect to the location of the speaker. Note, however, that (16) does not correctly reflect the semantics of the absentive, since we have seen that although the subject can be dislocated with respect to the speaker, this is not necessarily the case. Note, too, that a speaker-oriented approach is at pains to represent those cases in which the subject of the embedded clause is not the speaker, as in the example in (17):

(17) Toen Harry de kamer binnenkwam was Sneep lunchen.
when Harry the room entered was Snape lunch-INF
'When Harry entered the room, Snape was off having lunch.'

Clearly, then, representing dislocation with respect to an overt or covert speaker is insufficient.[8]

[8] The structural representation of a speaker has also been suggested with regard to evidentiality (see e.g. Chafe & Nichols 1986 and Rooryck 2001). Evidentials indicate both source and reliability of information, where the notion of "source of information" might involve the speaker (e.g. hearsay or visual inference). In (i), from the Northern Californian language Wintu, *-re* is an evidential morpheme:

(i) Niççay ?ewin suke**re**.
nephew here stand-EVID
'My nephew must have been here (I see tracks).'
(Rooryck 2001:126)

Evidential *-re* signals visual deduction or inference; it is the result of grammaticalisation of the verb meaning 'see' or 'look'. Although this specific example involves spatial information (i.e. the nephew is no longer "here" with respect to the speaker), the absentive is not an instance of evidentiality. The reason for this is that evidentiality refers to the informational status of an entire proposition rather than to the location of one of its arguments.

2.1.6 Towards a definition of absence

Two points emerge from the previous discussion:

(i) The deictic centre in the absentive cannot be defined as the location of the (overt or covert) speaker.
(ii) The deictic centre cannot be defined in terms of lexical material denoting location.

In a given deictic space, one element is fixed as the basic reference point, so that the location of the other elements can be determined with respect to this point; this is De Groot's "deictic centre". The data that I presented above show that the reference of the deictic centre is variable: it may coincide with the location of the speaker, it may be represented by a lexically specified location, or it may remain implicit and then it must be pragmatically inferred.

In Bühler (1934), the basic point of reference in the deictic field is referred to as the "origo" (see also Klein 1982). Bühler represents the deictic field as in (18):

(18)  [*I, here, now*]

The two intersecting perpendicular lines serve as the coordinate system, with the circle in the centre as its origo. Bühler's main idea is that deictic expressions refer to a deictic field whose zero point, the origo, is fixed by the person who is speaking (the *I*), the place of utterance (the *here*), and the time of utterance (the *now*). The three deictic words *I*, *here* and *now*, then, constitute the origo, which is represented in (18) as a circle. In the unmarked case, the origo is speaker-oriented, since Bühler identifies the origo's spatial aspect (i.e. the *here*) with the speaker's bodily presence. The location of other elements is determined in relation to the origo: *here* denotes a space around the origo, while *there* refers to a space that does not include the origo.

Let us consider the status of the absentive against this background. What makes the absentive special is that its origo is *abstract* to the extent that it does not *necessarily* coincide with the speaker's domain of visual perception. The pattern that emerges from the data presented so far is that a *subject* of the absentive is dislocated with respect to its own place, or "default" location. In other words, in the absentive the subject is not in the location where it usually is, or is expected to be on pragmatic grounds. Below, I refer to this basic point of reference as the "subject's origo". This term expresses the fact that the deictic focus in the absentive is on the default location of the subject. The absence of the subject is determined in relation to this basic reference point.

It is important to observe that the notion of subject's origo is not the same as De Groot's deictic centre. In my analysis, the subject's origo always refers to the subject's default location, and hence is not variable. It also differs from the standard interpretation of origo, which is speaker rather than subject-oriented. In view of this, we can now characterise the absentive semantics in more specific terms, as in (19):

(19) **Semantic interpretation of the absentive (version 2)**
The absentive entails dislocation of the subject with respect to its origo.

This characterisation covers those cases in which there is no lexical material that refers to a location, such as in the canonical example *Jan is vissen*. (19) captures the fact that here *Jan* is dislocated with respect to an unexpressed default location. (19) also covers those cases in which there is a lexically specified location that is not the location from which the absentive subject is absent. This concerns those cases in which the locative expression is not the same as the location from which the subject of the absentive is absent. This is the case in the examples in (8) and (9), repeated in (20ab):

(20) a. Toen *ik* gisteren *vanuit de auto* opbelde, was *Jan* boksen.
When I yesterday from the car phoned was John box-INF
'When I phoned from the car yesterday, John was off boxing.'

b. Toen *Jan in Finland* was is *hij* drie keer wezen zwemmen.
when John in Finland was is he three times be-INF swim-INF
'When John was in Finland he went for a swim three times.'

Here the subject is also dislocated with respect to an unexpressed default location.

Finally, (19) covers those cases in which there is lexical material which *can* be interpreted as the location from which the subject is absent. A case in point is the example in (6), repeated in (21):

(21) Toen *ik de kamer* binnenkwam was *Marie* lunchen.
when I the room entered was Mary lunch-INF
'When I entered the room, Mary was off having lunch.'

In (21) *de kamer* may be part of the subject's origo, but not necessarily so. I noted earlier that (21) can also have an interpretation in which the subject of the absentive, i.e. *Marie*, has just left a room other than the one entered by the speaker. Note once more that I do not regard this lexical material, i.e. *de kamer*, as a lexical instantiation of the subject's origo. This relation is made on the basis of pragmatic inference, not by a syntactic process (such as locative binding).

In §2.4 I will further formalise the notion of the subject's origo and provide an explanation for the semantic interpretation of the absentive. However, before doing so I will first discuss a number of other properties of the absentive (§2.2), and provide a classification of the types of verbs that can occur in the absentive (§2.3).

2.2 Additional properties of the absentive

In this section I will discuss a number of other semantic and pragmatic properties of the absentive. I will consider, among other things, the interpretation of the event

described by the infinitive and De Groot's claim that this event takes place at a location that is relatively far removed from the deictic centre (or subject's origo). It should be noted that the properties of the absentive that I discuss below do not figure in the theoretical interpretation that is presented in § 2.4. However, given the lack of attention that has so far been given to the absentive construction in the literature, I believe that a discussion of these properties is justified. I will do so against the backdrop of De Groot (1995a, 2000), the first – and so far only – description of the grammatical absentive.

2.2.1 Realisation of the activity

In De Groot (2000) it is claimed that the subject of the absentive is involved in the activity expressed by the lexical verb (see De Groot 2000:693). In other words, De Groot states that *Jan is vissen* has the implication that John is engaged in the activity of fishing. This is incorrect, however. The absentive does not carry any implication about the actual realization of the activity expressed by the lexical verb. While it is certainly possible that John is fishing at the time of speaking, this is by no means implied. That is, John can also be on his way (from his origo) to the fishing pond, or, having finished fishing, on his way home (to his origo). Consider to this effect (22). This sentence can be uttered while it is certain that John hasn't reached the shop yet, and is not yet involved in the act of actually buying groceries. It is perfectly possible to utter the sentence a minute after John closed the door behind him, and left the house with an empty shopping bag.

(22) Jan is even boodschappen doen.
John is just buying groceries-INF
'John is off buying groceries.'

In this respect, the infinitive in an absentive resembles the complement of root modal constructions and root infinitives in child language. In both constructions, the event expressed by the infinitive has an unrealized reading.[9]

(23) a. Jan kan boksen.
John can box-INF
'John is able to box.'

b. Niekje buiten spelen.
Niekje outside play
'Niekje wants to play outside.'
(IJbema 2002:119)

[9] Root infinitives in child Dutch typically do not receive a tense interpretation, but a modal interpretation instead; more specifically, such infinitives express deontic modality such as desires and necessities (see e.g. Wijnen 1997 and Hoekstra & Hyams 1998).

It is important to note in this respect that the absentive differs from the *aan het* + infinitive construction. The latter, exemplified in (24), is a periphrastic construction which signals progressive aspect:

(24) Jan is aan het vissen.
John is at the fish-INF
'John is fishing.'

In (24), the event expressed by the infinitive has a realized reading, so that it is implied that John is fishing at the point in time when (24) is uttered. I will discuss the *aan het* construction in more detail in the appendix to this chapter (§2.9).

2.2.2 Period of absence and expectation of return

De Groot (2000:693) further claims that the absentive carries the implication that the subject will return after a certain period of time. In addition, De Groot argues that there is an implicit prediction or assumption about the period of time that the subject will be away. However, the examples in (25) show that these claims are problematic:

(25) a. Jan is boksen en ik weet niet wanneer hij terugkomt.
John is box-INF and I know not when he back-comes
'John is off boxing and I do not know when he will be back.'

b. Jan is boksen en ik weet niet of hij nog terugkomt
John is box-INF and I know not whether he still back-comes
'John is off boxing and I do not know whether he will return.'

The example in (26) also shows that the absentive can be used when there is in fact no expectation of return (though the precise implications of the verb *hemelen* are open to non-linguistic debate, of course):

(26) Jan is hemelen.
John is to be in heaven-INF
'John is off to meet the choir invisible.' (i.e. 'John has died.')

Consider next the example in (27):

(27) * Hermelien is emigreren.
Hermione is emigrate-INF
'Hermione is off emigrating.'

The ungrammaticality of (27) is not due to any implicit expectation of the subject's returning, which seems incompatible with the lexical semantics of the *emigrate*. I would like to suggest instead that the ungrammaticality is related to the verb class that *emigrate* belongs to. According to the classification of Vendler (1967), *emigrate*

is an "achievement" verb. I will discuss Vendler's classification in §2.3, where I will show that the absentive cannot contain "achievement verbs" (such as *emigrate* and *recognize*) or "state verbs" (such as *love* and *hate*).

Consider next De Groot's assertion that the absentive implies distance from (what I call) the subject's origo. As defined in (19), the absentive implies that the subject is dislocated with respect to its origo. The examples in (28) indicate that this period of absence can be both short and long:

(28) a. Jan is een brief posten.
John is a letter post-INF
'John is off posting a letter.'

b. Jan is een huis bouwen in Frankrijk/ in Rotterdam.
John is a house build-INF in France/ in Rotterdam
'John is off building a house in France/in Rotterdam.'

According to the Groot (1995a:7), (28b) is fortuitous only if the house is built some place far away from John's home, such as in France. If the house is built near John's home (such as in Rotterdam, where John lives in the nearby town of Schiedam), the absentive would be impossible, because, so De Groot argues, the implication would then be that the subject comes home on a regular basis. However, closer inspection suggests that the relevant factor is not the distance as such, but rather the implication that the activity is *uninterrupted*. In other words, the event described by the infinitive cannot be internally complex. The example in (29) explicitly states that the subject is going to be in Rotterdam for an uninterrupted period of time:

(29) Jan is de hele maand juni een huis bouwen in Rotterdam.
John is the whole month June a house build-INF in Rotterdam
'In June, John is off building a house in Rotterdam.'

Note that the use of an absentive is perfectly grammatical in this context, even if John lives in the nearby town of Schiedam.

2.2.3 Remoteness

De Groot observes that another property of the absentive involves remoteness (see De Groot 1995a, 2000). That is, fortuitous use of the absentive demands a certain amount of distance or remoteness between the speaker and the subject, as the impossibility of (30) shows:

(30) * Jan loopt hier naast me. Hij is boodschappen doen.
John walks here next to me. he is buying groceries do-INF
'John is walking next to me. He is off buying groceries.'

De Groot (2000:699) in fact states that the subject of the absentive should not be visible to the speaker. This is supported by sentences of the kind in (31):

(31) * Ik kan Jan vanuit het raam zien. Hij is voetballen.
I can John from the window see. he is play-INF soccer
'I can see John from the window. He is off playing soccer.'

The property of remoteness is accounted for by the binding approach that I will propose in §2.4. However, it is not entirely clear how this approach can account for the stricter "invisibility requirement" as exemplified in (31). I leave this issue for further research.

2.2.4 Embedding of the absentive

As De Groot notes, the absentive is a stative construction (see De Groot 2000:701). This seems reasonable enough, given that the very concept of "absence" is stative. De Groot further observes that the absentive, like other stative constructions, can be used with epistemic, but not with deontic modality.[10] As such, De Groot (ibid.) rejects (32b), for instance:

(32) a. Jan moet boksen zijn. (epistemic)
John must box-INF be
'It must be the case that John is off boxing.'

b. * Jan moet van zijn vader vanmiddag boksen zijn. (deontic)
John must of his father this afternoon box-INF be-INF
'John's father wants him to be off boxing this afternoon.'

Given the right pragmatic context, the absentive would seem to be compatible with deontic modality, however. Consider for instance (33):

(33) Jan moet vanmiddag van zijn vader boksen zijn want
John must this afternoon of his father box-INF be-INF because
de kamer wordt geverfd.
the room becomes painted
'As the room is going to be painted, John's father wants him to be off boxing this afternoon.'

In addition, De Groot predicts that the absentive, being stative, cannot occur as an imperative (34a) or as the complement of the verb *willen* ('want') (34b), but it can be used in combination with an optative (34c):

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[10] See Barbiers (1995), who shows that stative constructions do not enforce epistemic modality. On the contrary, stative constructions allow deontic modality as well:

(i) Je moet geduld hebben.
you must patience have
'You must be patient.'

(34) a. * Wees zwemmen! (imperative)
be-IMP swim-INF
'Be off swimming!'

b. * Ik wil dat Jan zwemmen is. (complement of *willen*)
I want that John swim-INF is
'I want John to be off swimming.'

c. Ik wou dat ze zwemmen waren. (optative)
I wanted that they swim-INF were
'I wish they were off swimming.'

At this point, a comment is in order regarding the syntactic distribution of statives. Despite the fact that the absentive is a stative construction, embedding under *willen* is possible, provided the right pragmatic context is available. Consider (35):

(35) Ik wil dat Jan de hele middag zwemmen is want zijn
I want that John the entire afternoon swim-INF is because his
kamer wordt geverfd.
room becomes painted

'I want John to be off swimming for the entire afternoon because his room is going to be painted.'

Note also that statives can sometimes occur as imperatives, as is shown in (36):

(36) a. Weet dat je altijd welkom bent.
know that you always welcome are
'You must know that you are always welcome.'

b. Heb geduld!
have patience
'Be patient!'

Indeed, it would appear that the absentive, too, can occur as imperative, provided there is an appropriate context:

(37)? Wees straks zwemmen als het schoolhoofd komt.
be-IMP later swim-INF when the headmaster comes
'Make sure to be off swimming when the headmaster comes round later.'

Another possibility, which is perhaps more natural, is to embed the absentive verb under the verb *zorgen* 'make sure', where *zorgen* occurs as imperative:

(38) Zorg dat je vanmiddag vissen bent!
make sure that you this afternoon fish-INF are
'Make sure that you are off fishing this afternoon!'

I interpret these observations to mean that the grammaticality of both the absentive and the imperative is guaranteed by the agentivity of the verb.[11] I will discuss the relevance of agentivity for the absentive in more detail in §2.3.2.

2.3 Classification of verbs in the absentive

In this section I will focus in more detail on the types of verbs that can occur in the absentive. I will show that we can make a descriptively adequate generalization on the basis of the verb categories proposed in Vendler (1967), i.e. states, activities, accomplishments and achievements. First, however, I will briefly point out some problems of the classification of verbs proposed by De Groot (1995a, 2000).

2.3.1 De Groot's classification

We have already seen that not all verbs can occur as the lexical verb in an absentive. In De Groot (1995a:9), an attempt is made to specify the range of possible verbs on the basis of the following three features:

(39) [±agentive]
[±dynamic]
[±telic]

De Groot uses these features within the framework of functional grammar (see for example Dik 1989). With respect to the absentive, De Groot (1995a:17) argues that eligible verbs are specified as [+agentive,+dynamic,+telic]. De Groot illustrates this using the examples in (40):[12]

[11] Another factor that seems to be involved in the case of imperatives is the distinction between alienable and inalienable possession. Consider for instance:

(i) Heb geduld!
have patience
'Be patient!'
(ii) * Heb geld!
have money
'Be rich!'

[12] De Groot (1995a:17) considers (40f) to be ungrammatical; I do not agree with his judgment. See §2.3.3 for discussion.

(40) a. *Agentive*
Jan is kadootjes in ontvangst nemen.
John is presents in reception take-INF
'John is off receiving presents.'

b. *Non-agentive*
* Jan is kadootjes krijgen.
John is presents get-INF
'John is off getting presents.'

c. *Dynamic*
Jan is vissen.
John is fish-INF
'John is off fishing.'

d. *Non-dynamic*
* Jan is slapen.
John is sleep-INF
'John is off sleeping.'

e. *Telic*
Jan is een brief typen.
John is a letter type-INF
'John is off typing a letter.'

f. *Non-telic*
* Jan is typen.
John is type-INF
'John is off typing.'

Below, I will discuss each of the features in (39) in turn.

2.3.2 Agentivity

In §2.2.4 I already hinted at the relevance of agentivity in delimiting the number of eligible absentive verbs. That it is agentivity and not animacy that is relevant is illustrated by the example in (41). Agentivity and animacy are of course closely related, since animate subjects usually have the ability to control a situation, and the semantic role of agent often implies that there is some form of control or volition involved in the event. However, the relation between agentivity and animacy can be rather fuzzy, as in (41), where the subject appears to be [–animate]:

(41) De bus is keren.
the bus is turn-INF
'The bus if off turning.'

De Groot (1995a:17, 2000:706) considers (41) to be ungrammatical, but I disagree with him, and so do most of the native speakers that I consulted. I suspect that this is because the bus is readily interpreted as an agent: it usually has a driver, and native speakers have no problem imagining that it is really the animate driver who is in control of the event (i.e. the turning of the bus).

De Groot (2000:706) notes that Fering (a dialect of Frisian), Swedish, Norwegian and Finnish marginally allow the use of non-agentive verbs in the absentive. Consider the examples in (42ab):

(42) a. *Norwegian*
Jan er og får presanger.
Jan is and gets presents
'John is off getting presents.'

b. *Fering*
A hingst as tu bislauen.
the horse is to shoe-INF
'The horse is off being shoed.'

Such sentences are fine as long as there is an interpretation available in which the absentive verb expresses an intentional or volitional activity. This is the case if, as in (42a), John voluntarily goes to a place where he will receive presents. In (42b), somebody has removed the horse in order to be shoed; the implication is that the horse is meekly coming along.

On the basis of these observations, de Groot makes a distinction between a strong and a weak condition on agentivity. This allows him to distinguish languages such as Fering, Swedish, Norwegian and Finnish (weak condition) from languages such as Dutch, German, Hungarian and Italian (strong condition).

Despite the problems noted above, and despite the fuzzy nature of agentivity, I will maintain the generalization that in Dutch the subject of an absentive must be agentive.

2.3.3 Dynamic and telic

De Groot's examples in (40cd) above show that the absentive allows stative, but not dynamic verbs. However, this generalisation does not appear to be correct in the light of the example in (43):

(43) Jan is een uurtje liggen.
Jan is an hour lie-INF
'John is off to have a quick nap.'

(43) suggests that the absentive does allow temporally modified statives. Indeed, De Groot (1995a:12) makes the same observation:

> In some cases this [temporal] specification is obligatory, as in the case of stative verbs … These examples have in common that they cannot be interpreted as telic events without this temporal specification, neither semantically nor pragmatically … This is the explanation for the fact that fortuitous use of the absentive in these cases requires temporal modification in order to specify the telicity of the event. [translation mine, IH]

In other words, De Groot claims that temporal modification of a stative verb makes this verb telic, and thus suitable to occur in an absentive; compare (40ef). However, note that temporal modification does not turn a stative into a dynamic verb. De Groot's account therefore fails to explain why the dynamicity condition *can* be violated in sentences of the type in (43).[13]

De Groot's examples in (40ef) show that absentive verbs must be telic. Verbs can be made telic not only by means of temporal modification, but also by addition of an object. Consider the examples in (44ab), which, according to De Groot (1995a:12), are grammatical only if an object is present:

(44) a. Maureen is * (brieven) typen.
Maureen is (letters) type-INF
'Maureen is off typing (letters).'

b. Flip is * (klanten) bezoeken.
Flip is (customers) visit-INF
'Flip is off visiting (customers).'
(De Groot 1995a:12)

However, I do not agree that (44a) needs an object. Without an object, (44a) would seem to receive a habitual interpretation in which *Maureen* is off to her typing class, as she does (say) every Monday evening. But the sentence seems acceptable even without a habitual reading. Note, too, that De Groot's example in (44b) is somewhat unfortunate, since the verb *bezoeken* may never occur without an object.

A further problem with De Groot's account concerns the issue of telicity. If telicity is a property of absentive verbs, then De Groot would be unable to account for the ungrammaticality of (45ab), since the VPs here are telic:

(45) a. * Hermelien is de top bereiken.
Hermione is the top reach-INF
'Hermione is off reaching the top.'

[13] It has been claimed that temporal modification of a stative verb makes it less stative or even dynamic (see e.g. Comrie 1976). The point is that temporal modification introduces two transitional stages. In *Jan is een uurtje liggen* these stages comprise the beginning and the end of the nap. Nevertheless, I do not want to go as far as to claim that *liggen* here is a dynamic verb.

b. * Harry is haar herkennen.
Harry is her recognize-INF
'Harry is off recognizing her.'

De Groot (1995a:13) is aware of this. For this reason, he categorizes these verbs as a subclass of "momentaneous" verbs, and observes that

> the impossibility of these verbs to occur in the absentive probably has to do with the lexical meaning of these verbs. [translation mine, IH]

However, this does not amount to a satisfactory explanation, as De Groot (ibid.) acknowledges:

> I conclude that the feature [+telic] is relevant for the use of the absentive, but the precise relation between the use of the absentive and verbs is (not) yet clear. [translation mine, IH]

The facts considered in this section suggest that De Groot's classification in terms of [+agentive, +dynamic, +telic] is not descriptively adequate. While agentivity is a prerequisite, we have seen that the concept is far from straightforward, especially when we take into account data from languages like Fering and Norwegian. As to [+dynamic] and [+telic], I have pointed out a number of clear counterexamples. A more general problem with De Groot's account is that it fails to explain *why* verbs in an absentive would have to exhibit these specific features, and not any other feature combination. In the following section I will present a classification of verbs, based on the classification made in Vendler (1967), which does make the right predictions about the possible types of absentive verbs.

2.3.4 Vendler's classification

Vendler (1967) proposes the following four-way classification of verbs:

(46)

Verb class	*Examples*
State	love, know, possess the house
Activity	run, swim, push the car
Accomplishment	run a marathon, draw a circle, eat a sandwich
Achievement	recognize her, reach the top, find her glasses

These four categories can be characterised as follows:

(47) *Verb class characteristics* (after Vendler 1967)

a. *State*
A predicate is a state when it refers to an event in which nothing changes. States are compatible with time-span adverbials such as *for an hour*, but not with time-frame adverbials like *in an hour*.

b. *Activity*
A predicate is an activity when it involves some kind of change. This change is unbound with respect to time. Activities are compatible with time-span adverbials, but not with time-frame adverbials.

c. *Accomplishment*
A predicate is an accomplishment when it consists of the starting point, the process, and the culmination of an event. Accomplishments can occur with time-frame adverbials, but not with time-span adverbials.

d. *Achievement*
A predicate is an achievement when the culmination of the event is punctual.

Vendler (in Verkuyl 1993:360) describes the difference between accomplishments and achievements as follows:

> I always regarded [achievements] as a *terminus* of a process (e.g. winning *vis à vis* running, reaching the top *vis à vis* climbing, spotting *vis à vis* looking for etc.). This (by and large) is not true of accomplishments (e.g. climbing the mountain or running the marathon).

Following Verkuyl (1993:35), I assume that Vendler's classes can be derived from two parameters, i.e. [+/–process] and [+/–definite]. Consider the table in (48):[14]

(48)

	[–process]	[+process]
[–definite]	*state	Activity
[+definite]	*achievement	accomplishment

The descriptive generalization that can be made with respect to the absentive is that [+process] categories (activities and accomplishments) are allowed, while [–process] categories (states and achievements) are not. The parameter [+/–definite] does not

[14] The parameter [+/–definite] refers to the (in)definiteness of a temporal unit, expressed by *any* or *a* in state or activity verb, and by *the* in accomplishment and achievement verbs in Vendler's definitions (see Verkuyl 1993:34):

(i) State: *A loved somebody from t_1 to t_2* means that at *any* instant between t_1 and t_2 A loved that person.
(ii) Activity: *A was running at time t* means that time instant t is on *a* time stretch throughout which A was running.
(iii) Accomplishment: *A was drawing a circle at t* means that t is on *the* time stretch in which A drew that circle.
(iv) Achievement: *A won a race between t_1 and t_2* means that *the* time instant at which A won the race is between t_1 and t_2.

seem relevant, given that both activities (i.e. [–definite]) and accomplishments (i.e. [+definite]) are possible, as is illustrated in (49):

(49) a. *State*
* Hermelien is het huis bezitten.
Hermione is the house possess-INF
'Hermione is off possessing the house.'

b. *Activity*
Ron is de auto duwen.
Ron is the car push-INF
'Ron is off pushing the car.'

c. *Accomplishment*
Sneep is een boterham eten.
Snape is a sandwich eat-INF
'Snape is off eating a sandwich.'

d. *Achievement*
* Harry is z'n bril vinden.
Harry is his glasses find-INF
'Harry is off finding his glasses.'

Note that on the basis of this generalization, the grammaticality of *Jan is een uurtje liggen* in (43) is due to the fact that the *een uurtje liggen* is an accomplishment, and thus [+process]. By the same token, the ungrammaticality of *Hermelien is de top bereiken* in (45a) is due to the fact that *de top bereiken* is an achievement, and thus [–process].

Activities and accomplishments are both [+process]. The question, however, is how [+process] should be defined. In his discussion of verbal aspect, Verkuyl (1993:35) refers to the properties that are shared by the class of [+process] verbs as the "Continuous Tense Criteria", or CTC. These criteria are meant to capture the contrast between continuous ([+process]) and non-continuous tense ([–process]).

The most important Continuous Tense Criterion is Progressive (ProgF).[15] The ProgF criterion states that accomplishment and activity verbs can have a progressive form, whereas state and achievement verbs cannot:

(50) a. * I am knowing. (state)
b. She is swimming. (activity)
c. She is running a mile. (accomplishment)
d. * She was recognizing him. (achievement)

[15] Other Continuous Tense Criteria include agentive modification by adverbials (such as *deliberately*) and occurrence with the verbs *stop* and *start*. However, Verkuyl (1993:38–41) shows that these criteria can be used to determine "some sort of" (voluntary) agentivity rather than continuous tense.

However, ProgF has not been accepted as a solid criterion for defining processes that go on in time, or, as Vendler (in Verkuyl 1993:36) calls them, processes that "consist of successive phases following one another in time." Consider the examples in (51):

(51) a. I am living in Amherst. (state)
b. She was reaching the top. (achievement)

(51ab) show that a progressive can be used with verbs that do not refer to a process going on in time. What (51ab) therefore suggest is that ProgF is based on another criterion, i.e. some specific sort of agentivity. This is absent in (50ad), but present in (51ab). This coincides with the observation, made in §2.3.2, that absentives require an agentive subject. Note, though, that ProgF cannot be used as a diagnostic for agentivity rather than progress in time. This is shown by (52ab); these lack agentive (or even quasi-agentive) subjects, and yet they allow a progressive:[16]

(52) a. The weather is developing a strange pattern.
b. We are at a point here where small things are mattering.
(Verkuyl 1993:36)

(52ab) show that there is no one-to-one relation between agentivity and ProgF, while (51ab) show that there is no one-to-one relation between process in time and ProgF either. The problem is therefore that ProgF appears to cover two quite different semantic factors. As Verkuyl (1993:36–37) observes,

> [ProgF] is said to pertain to successive phasal progress in time, but it is also tied up with the concept of agentivity. Thus, it is strongly suggested that these factors are identical, which they are not; or that they are closely related, which they are not either … The use of the progressive form is independent of the question of whether a verb expresses agentivity or progress in time.

Verkuyl (ibid.) goes on to illustrate this with the following examples:

(53)

	ProgF	*Agentive*	*Process*
a.	He is running	+	+
b.	He is ignoring me	+	–
c.	Prices are increasing	–	+
d.	Small things are mattering	–	–

[16] All the (British English) native speakers that I consulted reject (52b). It could be the case that speakers of American English are more liberal in their use of the progressive, as is perhaps suggested by the McDonald's slogan *I'm lovin' it* (Marcel den Dikken, p.c.).

ProgF therefore neither necessarily correlates with [+process], nor with [+agentive]. This leaves the notion of [+process], and hence the division between activities and accomplishments versus states and achievements, still undefined.

Given that ProgF does not distinguish between [+process] and [–process], we may wonder whether there is perhaps another way to separate continuous from non-continuous tense. If we consider the feature [–process], the question arises whether states and achievements form a natural class. The problem is that, intuitively, a sentence like **She is loving him* is rejected for other reasons than a sentence like **She is recognizing him.* Galton (in Verkuyl 1993:37) describes the problem as follows:

> State-verbs lack continuous tenses because their meaning is already necessarily continuous in nature, so a continuous tense would be superfluous; while achievement-verbs lack continuous tenses because their meanings, involving as they do the idea of punctuality, are incompatible with continuity.

If a process is defined as something that is going on in time and that consists of successive phases, then states are not processes because they involve a single phase, rather than a succession of them. This single phase is also reflected by Vendler's use of universal quantification (i.e. *any*) in his definition of state-verbs, given in fnt. 14, and repeated below as example (54):

(54) State: *x loved somebody from* t_1 *to* t_2 means that at *any* instant between t_1 and t_2 x loved that person.

Achievements, on the other hand, involve a temporal unit, but lack room between the two boundaries of this unit: the unit is a point, and points are atomic. Achievements are therefore like accomplishments, except that they lack a process part. This is what Galton refers to when he asserts that punctuality is incompatible with continuity. Finally, what unites states and achievements is that neither is perceived as a "stretch of time", but for different reasons: for states the stretch is too extended, while for achievements the stretch is too small.

Summarizing, it would appear to be the case that Vendler's classification is more appropriate than De Groot's, since the former provides a natural explanation for why only some verbs (i.e. activities and accomplishments) can occur in the absentive, while others (i.e. states and achievements) cannot. The parameter that distinguishes activities and accomplishments from states and achievements is [+/–process]. However, as Verkuyl (1993) notes, it is not entirely clear which semantic properties are involved in this parameter. It should in this respect be noted that the features used by De Groot are intended as a refinement of Vendler's original four-way classification. In De Groot's functional grammar approach, features like [+agentive], [+dynamic] and [+telic] specify properties of a predicate or argument; the predicate

and its argument(s), together with their properties, are represented in a predicate scheme which refers to a "State of Affairs". However, despite the fact that Vendler's original classification is not unproblematic, his four verb classes would appear to provide a descriptively adequate account of the restrictions on the absentive.

Another, more fundamental problem with Vendler's approach involves the issue of compositionality. Vendler's classification only takes account of the lexical level. However, as Verkuyl (1993) and others have noted, there are good grounds to assume that the internal structure of events —aspect— is a compositional rather than a lexical notion. A strong argument for this position is that the aspectual properties of verbs can change when arguments are added or deleted, as is illustrated by the examples in (55):[17]

(55) a. Hermelien wandelt. (non-telic)
Hermione walks
'Hermione walks.'

b. Hermelien wandelt naar het station. (telic)
Hermione walks to the station.
'Hermione walks to the station.'

These examples show that the verb *wandelen* cannot be categorized simply as non-telic, since, when a PP like *naar het station* is added, the verb changes into a telic verb. It has also been observed that the aspectual status of VPs is influenced by the nature of the determiner. The example in (56) shows that this is another issue that affects the eligibility of verbs in the absentive:

(56) a. Jan is een prijs winnen. (accomplishment)
John is a price win-INF
'John is off winning a price.'

b. * Jan is de prijs winnen. (achievement)
John is the price win-INF
'John is off winning the price.'

A compositional approach of aspect is incompatible with Vendler's lexical view, since if aspect formation is fed by the syntax, it is hard to see how a classification can be made on lexical grounds. While this is a serious problem, I will nevertheless continue to use Vendler's classification as a descriptive diagnostic; the aim of this chapter is to relate the semantic interpretation of the absentive construction to the Binding Theory, not to provide a syntactic account of aspect formation.

[17] Verkuyl makes a distinction between inner and outer aspect. The former pertains to the verb and its arguments, the latter to adverbial modification.

2.4 Formalizing the absentive: absence as a principle-B effect

2.4.1 Formalizing the absentive

Given that the absentive does not require the presence of lexical material to express absence, I propose an analysis in which the semantic interpretation of the absentive follows from syntactic principles. Thus, the question is how my characterisation in (19) can be reinterpreted in syntactic terms.

In §2.1.6 I established that the absentive involves dislocation of the subject with respect to its origo (i.e. the subject's origo). The aim of this section is to formally represent the subject's origo and to make the notion of "dislocation" more precise.

I will interpret "dislocation" as involving "disjoint reference", which I formalise in terms of indices. Indices are familiar from the Binding Theory, where they are used to express pronominal reference (see Chomsky 1980, 1981).[18] Consider the example in (57):

(57) Harry_x told him_y that $\text{he}_{x/y}$ had found an old map.

The indices *x* and *y* indicate that the arguments *Harry* and *him* must refer to different people. The identical indices on *Harry* and *he* indicate that it is possible to interpret *he* as referring to *Harry*. Finally, the identical indices on *him* and *he* indicate that *he* can also be interpreted as being coreferential with *him*.

Indices are also used in the structural representation of tense. In Zagona (1992, 1995), tense (TP) is viewed as a two-place predicate (see Stowell 1995, 1996 for a similar view). The internal argument is the VP, which contains E (for event); the external argument is S (for speech time). If E and S are corefential, i.e. (E_t, S_t), a present-time reading is induced. If, on the other hand, they are disjoint in reference, i.e. (E_t, S_k), the interpretation is a past or future reading.

As was shown in §2.1.6, pronominal and temporal reference represent two of the three referential dimensions that constitute the deictic field. It seems natural, then, to assume that the third dimension, i.e. the spatial dimension, is also represented by an index. Suppose that every argument has three variables (*x*,*t*,*l*), which refer to person (*x*), time (*t*) and location (*l*), respectively. This assumption, stated in (58), forms the basic hypothesis of my analysis:

(58) An argument has a triple index consisting of three variables (*x*, *t*, *l*).

In any theory that makes use of indices, the indices of two arguments are evaluated with respect to each other in order to assign an interpretation to these arguments. This interpretation is either coreferential or non-coreferential, as I showed above with respect to pronominal and tense reference. I would like to suggest that "same" or "different" location of two arguments can be expressed in a similar fashion. My

[18] Chomsky (1995) has argued against the use of indices; according to the minimalist "inclusiveness condition", the enumeration consists of features only. I do not intend to claim that indices have theoretical status; rather, I use them as a notational shorthand.

proposal, therefore, is to include spatial reference under the rubric of binding, on a par with pronominal and temporal reference.[19] If two arguments share the same location, they have the same spatial index *l*; if they are not at the same location, they receive a different index for the spatial level, i.e. *l* versus *p*. This makes it possible to formalise dislocation in terms of disjoint reference at the spatial level:

(59) Dislocation is disjoint reference at the *l* level:
Argument $1_{(x,t,l)}$ *vs*. Argument $2_{(x,t,p)}$

As regards the absentive, the question is which two arguments enter the equation. I propose that the two arguments are (1) the lexical subject, and (2) a PRO argument of the infinitive that is controlled by the lexical subject. This analysis thus implies that absentive *zijn* is a subject control verb and not, as is commonly assumed (see for example Postal 1974), a raising verb. The canonical example *Jan is vissen* therefore has the representation in (60):

(60) *Jan*$_{(x,t,l)}$ is *PRO*$_{(x,t,p)}$ vissen.
John is fish-INF
'John is off fishing.'

Note that I do not claim that *zijn* is *always* a subject control verb; rather, I claim that it is a control verb in the absentive only. As we will see, it is the status of *zijn* as a control verb which provides the appropriate context for the absentive semantics.[20]

The crucial difference between raising and control is that in raising configurations the lexical item and its trace (or copy) form a chain.[21] This chain as a whole has argument status, and it therefore carries a single thematic role. The result, then, is that it is not possible to have disjoint reference between two (or more) elements that form a chain. In a control configuration, on the other hand, the lexical element and the PRO that it controls have their own theta roles, and therefore their reference can, at least in theory, be disjoint. This is exactly what happens in the absentive. Here the lexical subject and the PRO argument are evaluated with respect to each other for the location index *l.* As is shown in (60), the indices *l* and *p* indicate that the subject and PRO have disjoint spatial reference.

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[19] I am indebted to Sjef Barbiers and Gertjan Postma for bringing to my attention the possibility of a binding approach.

[20] It is not uncommon for a verb to occur both as a raising and a control verb. Familiar Dutch examples are *dreigen* ('threat') and *beloven* ('promise'):

(i) *Raising*
Het belooft slecht weer te worden.
It promises bad weather to become
'It looks like the weather is getting worse'

(ii) *Control*
Jan belooft op te stappen.
John promises on to step
'John promises to quit his job'.

[21] See e.g. Bobaljik (2002), who proposes a copy theory of movement as an alternative to trace theory.

The representation in (60) therefore expresses that the event [*PRO* $_{(x,t,p)}$ *vissen*] is dislocated with respect to the subject's origo. The subject's origo can now be formally identified as the set of indices associated with the lexical subject argument, i.e. the set (*x,t,l*) that is associated with *Jan*. This makes it possible to give a more formal characterisation of the interpretation of the absentive, as in (61):

(61) **Semantic interpretation of the absentive (version 3)**
The absentive entails disjoint reference in the spatial dimension between two arguments, the lexical subject and the PRO subject of the infinitive.

I will come back to the control status of *zijn* in more detail in §2.4.2.

The next question is *why* the absentive should display disjoint reference in the spatial dimension. The answer that I would like to suggest is that this results from principle B of the Binding Theory. This requires a reformulation of the original principle B, to which I will turn now.

In its original formulation, the Binding Theory is a theory about the interpretation of anaphors, pronouns and R-expressions. Principle B of the Binding Theory states that pronouns must be free (i.e. not bound) within their governing category (see Chomsky 1980, 1981). Outside their governing category pronouns can be bound by an antecedent, as is illustrated for the pronouns *him* and *he* in (62):

(62) [Harry$_x$ told him$_{*x/y}$ [that he$_{x/y}$ had found an old map]].

In (62) *Harry* cannot be the binder of the pronoun *him*, since then *him* would be bound (i.e. coindexed and c-commanded) by an antedecent within its governing category, which here is the matrix clause. For this reason, *him* can never refer to the same entity as the DP *Harry* does. The pronoun *he* in the subordinate clause can be bound by *him* or by *Harry*, since these binders are outside the governing category, which in this case is the embedded clause introduced by *that*. In other words, if *he* is coindexed either with *Harry* or *him*, it is still free within its governing category. Principle B can thus be formulated as follows:[22]

(63) Principle B for pronominal reference:
* A1$_{(x)}$ … A2$_{(x)}$ if A1 and A2 are in the same clause.

where the phrase "in the same clause" is an informal characterisation of the notion of governing category.

In order to account for the absentive semantics, I propose to extend principle B to include the following triple of indices:

[22] The definition in (63) has been simplified somewhat. Chomsky (1980) defines Principle B as follows: "A pronoun must be free in a local domain. If β is not bound, then β is free where α binds β if α c-commands β and α, β are coindexed."

(64) Principle B for the triple index:
* $A1_{(x,t,l)}$ … $A2_{(x,t,l)}$

Note that the definition for the triple index does not contain a reference to a clausal domain. The locality restriction follows directly from the *t* variable in the triple. If the *t* variables are different, there will be two tense domains, and hence two clauses, in which case the *x* and *l* indices are allowed to be identical. In other words, the fact that principle B now includes temporal reference no longer makes it necessary to further specify a local domain. The sensitivity of pronouns to a clausal domain is now an epiphenomenon of the fact that principle B is deactivated if the two *t* indices are distinct. In this light, consider again the representation of the canonical absentive in (65):

(65) *Jan*$_{(x,t,\mathbf{l})}$ is [*PRO*$_{(x,t,\mathbf{p})}$ vissen].
John is fish-INF
'John is off fishing.'

In (65) the *x* variables are identical because the subject and PRO are in a subject-control configuration. The *t* variables are also identical because the construction has a single temporal domain. To appreciate this point, consider Bennis & Hoekstra's (1989b) claim that in *te*-infinitives, the infinitival marker *te* is situated in TP. Bennis & Hoekstra further claim that temporal dependency is expressed in terms of the lack of TP, as is the case in, for instance, the complement of a perception verb.[23] Since the absentive has a bare rather than a *te*-infinitive, I conclude that the infinitive does not have independent temporal reference. In other words, *zijn* and the bare infinitive form a single tense domain, as is represented by coindexation at the temporal level.

Given that (65) involves coreference at the *x* and *t* level, the only way in which principle B can be obeyed is by disjoint reference at the spatial level (i.e. *l* versus *p*), and this is, of course, precisely what we find in the absentive. The most striking property of the absentive, i.e. its specific semantic interpretation despite its minimal syntactic components, can now be explained in the following way:[24]

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[23] This analysis implies that the presence of *te* in an infinitival complement signals that it is tensed to the extent that it has independent time reference. However, Cremers (1983) observes that some *te* infinitives are nevertheless timeless. I will come back to this issue in §3.3.1.

[24] Norbert Corver (p.c.) notes that the characterisation in (66) raises the question of whether there are also principle-A effects in the spatial dimension. The sentence in (i) might be an example of such an effect:

(i) Jan blijft nog even PRO dansen
John stays yet while dance-INF
'John is staying because he wants to dance a bit longer.'

The implication in (i) is that John is staying at the same location. I conjecture that principle-A effects in the spatial dimension exist on a par with the pronominal and temporal dimension, though clearly further research is needed to establish this.

(66) **Semantic interpretation of the absentive (final version)**
The absentive entails disjoint reference in the spatial dimension between two arguments, the lexical subject and the PRO subject of the infinitive. Disjoint reference in the spatial dimension is enforced by principle B of the Binding Theory.

This analysis offers an insight into *why* the absentive consists of *be* and a bare infinitive. The idea is that absentive semantics can arise only (1) if there are two arguments that can be evaluated with respect to each other, and (2) if the *x* and *t* variables of the triples that are associated with these arguments are identical. In the absentive these two conditions are met on account of the control status of *zijn*, and the infinitival status of its complement.

Note at this point that a raising analysis of *zijn* would also introduce a copy of the lexical subject in the form of a trace, but the difference would be that a trace is not an independent argument; instead, it is the chain as a whole that has argument status. In a raising configuration it is therefore impossible to assign different indices within a chain, given that one and the same argument cannot have more than one reference at the same time. In a control configuration, on the other hand, there are two independent arguments whose triples can be evaluated with respect to each other. In §2.4.2 I will provide a number of additional arguments in favour of the control status of absentive *zijn*.

I now turn to the second prerequisite for absentive semantics, i.e. coreferentiality at the *x* and *t* level. The *x* variables on the lexical subject and PRO are identical on account of the subject control status of *zijn*.[25] The *t* variables are identical on account of the occurrence of a bare instead of a *te*-infinitive. If (and only if) this is the case, principle B will force a disjunction at the spatial level. I will term such a disjunction an "obligatory shift at the spatial level".[26]

It should be noted, however, that the absentive can also occur without the verb *zijn*, without losing its absentive semantics. Consider for instance (67):[27]

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[25] I am aware of the fact that in the traditional Binding Theory PRO is analysed as a pronominal anaphor with the features [+anaphor,+pronominal]; I will come back to this issue in §2.4.3.

[26] This begs the question why there is no absentive reading in other constructions that involve subject control and an infinitive, for instance in constructions with verbs like *proberen* ('try') or *durven* ('dare') and a following *te*-infinitive. What is relevant here is the status of tense in a *te*-infinitive. While it is commonly assumed that bare infinitives are tenseless, the reverse does not seem to hold, since, as Cremers (1983) has observed, not all *te*-infinitives project an independent temporal domain. I will come back to this issue in §3.3.1 (see also fnt. 23 above).

[27] This kind of ellipis can be used as a diagnostic for small-clause status (e.g. *John is smart* > *John smart? Don't make me laugh!*), although I do not wish to claim that the absentive involves a small-clause configuration. Note that in English predicational *be* can be deleted in other small-clause contexts, e.g. *Mary believes John (to be) smart*. However, this is impossible in so-called "identity sentences", where the nominal following *be* is referential: *The duty nurse is Rina* > *I believe the duty nurse *(to be) Rina*. See Rothstein (1999) for discussion of this issue.

(67) Jan vissen? Laat me niet lachen!
John fish-INF let me not laugh
'John is off fishing? Don't make me laugh!'

The fact that this elliptic construction still expresses absence of its subject suggests that it has the following structure:

(68) $Jan_{(x,t,l)}$ e $PRO_{(x,t,p)}$ vissen? Laat me niet lachen!
John PRO fish-INF let me not laugh
'John is off fishing? Don't make me laugh!'

In this configuration the subject and PRO can still be evaluated for pronominal, temporal and spatial reference. Even though the subject-control verb is not lexically expressed, there is coreference at the pronominal level and there is a single temporal domain. As a consequence, there is obligatory disjoint reference at the spatial level.

At this point a further comment is in order regarding (68). Note that it is necessary to assume elision of *zijn* (or, more specifically, of its tensed form *is*), since otherwise the subject John would be unable to receive nominative case. The fact that John has nominative case becomes evident when we replace *Jan* by a pronoun, as in (69):[28]

(69) a. Hij_i e PRO_i vissen? Laat me niet lachen!
He-NOM PRO fish-INF let me not laugh
'He is off fishing? Don't make me laugh!'

b. * Hem_i e PRO_i vissen? Laat me niet lachen!
Him-OBL PRO fish-INF let me not laugh
'He is off fishing? Don't make me laugh!'

Before I discuss the control status of *zijn* in the absentive, some remarks are in order regarding the presence of lexically (*vs.* grammatically) expressed locations and its relation to the interpretation of the triple. Consider once more the example in (6), repeated in (70) below:

(70) Toen *ik* *de kamer*$_l$ binnenkwam was $Marie_{(x,t,l)}$ $PRO_{(x,t,p)}$ lunchen.
when I the room entered was Mary PRO lunch-INF
'When I entered the room, Mary was off having lunch.'

The representation in (70) expresses the fact that *Marie* is absent with respect to her own origo, as all absentives do: the event [$PRO_{(x,t,p)}$ lunchen] is dislocated with respect to the subject's origo, represented by the triple on the DP $Marie_{(x,t,l)}$. One possible interpretation of (70) is that in which the DP *de kamer* is the location from which *Marie* is absent. In terms of indices, it might seem attractive to interpret this

[28] Unless the nominative case on *hij* in this example is an instance of nominative case as the default case in Dutch, in which case it is not necessary to assume elision of *zijn* ('be').

reading in terms of locative binding, as is indicated in (70) by the index *l* on the DP. This would signal not only that the event [$PRO_{(x,t,p)}$ lunchen] is spatially disjoint from the subject's origo (i.e. $Marie_{(x,t,l)}$), but it would also indicate that the location from which Mary is absent is *de kamer*. According to this analysis, the interpretation of *de kamer* as the reference point for absence thus becomes a matter of syntax rather than pragmatics. An absentive which contains a lexical location that does not function as the reference point of absence would not undergo locative binding, and hence would not receive a spatial index. In this light, consider once more the example in (8), repeated in (71):

(71) Toen ik gisteren *vanuit de auto* opbelde, was $Jan_{(x,t,l)}$ $PRO_{(x,t,p)}$boksen.
when I yesterday from the car phoned was John box-INF
'When I phoned from the car yesterday, John was off boxing.'

The problem with this approach is that it is unclear what the syntactic conditions are under which this kind of locative binding can take place. Apart from the fact that *de kamer* is a DP and *vanuit de auto* a PP, these phrases are syntactically very similar. Nevertheless, *de kamer* can undergo locative binding but *vanuit de auto* cannot. For this reason, I assume that the absentive does not involve (optional) locative binding. Rather, my claim is that those cases in which lexical material can (but need not) be interpreted as part of the subject's origo result from pragmatic inference.

2.4.2 Absentive *zijn* as a subject-control verb

The verb *zijn* has many different functions. It functions as an auxiliary verb in the perfect tenses of unaccusative verbs (72a), and it is the auxiliary of the perfect tenses in the passive (72b). *Zijn* also functions as the predicational (72c) and equative copula (72d), and it forms part of the *aan het*-construction (72e), a periphrastic construction which expresses progressive aspect. Finally, *zijn* occurs in the absentive (72f):

(72) a. Jan is gevallen.
John is fallen
'John has fallen'

b. Jan is gearresteerd (door de politie)
John is arrested by the police
'John has been arrested (by the police).'

c. Jan is $leraar_{NP}$/$boos_{AP}$/$achter_{PP}$.
John is teacher/angry/at the back
'John is a teacher/John is angry/John is at the back.'

d. Jan is het slachtoffer.
John is the victim
'John is the victim.'

e. Jan is nootjes aan het pellen.
John is nuts at the peel-INF
'John is peeling nuts.'

f. Jan is vissen.
John is fish-INF
'John is off fishing.'

I will return to the syntax of the *aan het*-contruction and its relation to the absentive in §2.9.

Despite the fact that *zijn* selects a verb in the absentive (i.e. a bare infinitive), I will not analyse *zijn* as an auxiliary here. There are a number of reasons for this. First of all, in the perfect (active and passive) tenses, the auxiliary *zijn* always selects a verb that is marked for aspect, and never a bare infinitive. Second, the infinitive [*PRO* vissen] expresses a *property* of the lexical subject. This means that *zijn* here expresses a predicational rather than a temporal relation, like the auxiliary *zijn* does.

I will now discuss a number of arguments for a control analysis of absentive *zijn*. First, I will consider some of Baltin's (1995) tests for raising, i.e. (1) the possibility of expletive *there*, (2) the occurrence of idiom chunks, and (3) the possibility of floating quantifiers.

The expletive test can be used as a diagnostic for English, since in English *there*-insertion is only allowed by a subset of unaccusative verbs, i.e. raising verbs such as *seem* and *be* (73a), and verbs indicating movement and (change of) state (73b). Other types of one-argument verbs, such as intransitives (73c), passives (73d), and ergatives (73e), are excluded, as are transitive verbs (73f):[29]

(73) a. There seems to be a problem. (raising)
b. There arrived three women at the station. (movement)
c. * There laughed somebody too loud. (intransitive)
d. * There was believed to be a problem. (passive)
e. * There sank a ship last week. (ergative)
f. * There bought three women a book. (transitive)

[29] The terminology that is used in the classification of verbs is sometimes confusing. I follow Belletti (1988) and Hale & Keyser (1986, 1987) in that I reserve the term "unaccusative" for passive verbs, raising verbs and verbs of movement and (change of) state. I refer to one-argument verbs with a transitive alternation, e.g. *break* and *sink*, as "ergatives", and to one-argument verbs which only project an external theta role, e.g. *laugh* and *dance*, as "intransitives". In the literature, the latter verb type is sometimes called "unergative". As Haegeman (1994:337) notes, many authors do not distinguish between unaccusatives and ergatives, and refer to verbs with transitive pendants (such as *break* and *sink*) as unaccusatives.

The *there*-insertion test is, however, irrelevant for Dutch, because Dutch allows *er* (there)-insertion with control verbs, as well as raising verbs. This is illustrated in (74ab). The observation that *er*-insertion may occur in an absentive (75) is therefore not a proper diagnostic for a control or raising status of *zijn* in the absentive. It is certainly no argument in favour of a raising analysis of absentive *zijn*.

(74) a. Er beloofde iemand mijn boek te lezen. (control)
there promised someone my book to read
'Someone promised to read my book.'

b. Er schijnt iemand mijn book te lezen. (raising)
there seems someone my book to read
'Someone seems to be reading my book.'

(75) Er is iemand vissen.
there is someone fish-INF
'Someone is off fishing.'

The second test involves idiom chunks. In English, subjects that are part of an idiom (so-called "frozen" subjects) can occur in a raising configuration while maintaining their idiomatic interpretation. Some examples are given in (76):

(76) a. The fat's in the fire now. (idiom)
'There is going to be trouble.' (paraphrase)
The fat seems to be in the fire now. (raising+idiomatic reading)

b. Has the cat got your tongue? [30] (idiom)
'Why are you lost for words?' (paraphrase)
The cat seems to have got your tongue. (raising+idiomatic reading)

It is difficult to reproduce this test for the Dutch absentive. In view of the conditions on agentivity, animacy and volition (see §2.3.2), and the restriction on state and achievement verbs (see §2.3.4), finding an idiom that can be used in the absentive is far from easy. The only candidates that I could find are given in (77) and (78) below. Most native speakers that I consulted consider (77ab) to be ungrammatical; none of them accepted an idiomatic reading:

(77) a. */? De muizen zijn dansen nu de kat van huis is.
the mice are dance-INF now the cat from house is

b. */? Nu de kat van huis is, zijn de muizen dansen.
now the cat from house is are the mice dance-INF
'The mice are off to dance when the cat has left home.'

[30] This idiom is almost always phrased as a question, and is often reduced to 'Cat got your tongue?'

Idiom: When a person in authority is away, the underlings enjoy their freedom (compare 'When the cat's away, the mice will play.')

As is well-known, idiomatic readings can be cancelled by syntactic operations, for instance by reversing the order of the main and subclause. This is in fact what has happened in (77a), given that the original idiom is *Als de kat van huis is*, *dansen de muizen*. While this might be argued to influence speakers' judgments, it should be noted that the original order in (77b) does not appear to be better than (77a). Next, consider (78):

(78) ? De lamme is de blinde helpen.
the cripple is the blind person help-INF
'The cripple person is off to help the blind person.'

Idiom: Incompetent people are leading other, similarly incompetent people (compare 'The blind is leading the blind.').

Native speakers consider (78) to be more or less grammatical, and in any case much better than (77ab). However, they differ as to the interpretation that they assign to (78). Some allow both the idiomatic and the literal reading, while others can only assign either the idiomatic or the literal reading. The problem with judgements that involve indioms is that not all idioms allow the same amount of extension. It is clear that the nature of the syntactic operation plays a role. As I mentioned below, reversing the order of the main clause and the subclause might affect the idiomatic interpretation. Adding a negation or topicalization of the object may also destroy an idiomatic reading. Consider for instance:

(79) a. Hij gaf de pijp aan Maarten.
He gave the pipe to Maarten
'He gave Maarten the pipe.'

Idiom: He quit, he didn't want to be involved any longer.

b. De pijp gaf hij niet aan Maarten.
the pipe gave he not to Maarten
'He didn't give Maarten the pipe.'

Idiom:* He didn't quit, but he carried on.

Given that there seem to be few convincing examples of idioms that can be put in the absentive, and given that speakers' judgments about these are fuzzy, I conclude that the idiom test is not a suitable diagnostic either.

A third property of raising configurations involves floating quantifiers. As Baltin (1995) points out, English raising verbs allow the quantifier *all* to float whereas control verbs do not:

(80) a. The children seem all to be happy. (raising)
b. * The children tried all to be happy. (control)

Unfortunately, this test cannot be reproduced for Dutch, since the Dutch equivalent of *all*, which is *allemaal*, is not a floating quantifier. The reason is that it cannot be part of the DP: * *allemaal de kinderen* ('all the children'). The use of the quantifier *alle* ('all') is possible, but sounds rather old-fashioned in a floating context. Moreover, if such examples are construed, it seems that a control verb (see 81a) allows floating *alle* more easily than a raising verb (see 81b), which is the opposite of the situation in English.

(81) a.? dat de jongens probeerden *allen* hun best te doen. (control)
that the boys tried all their best to do
'That all the boys tried to do their best.'
b.* dat de jongens schijnen *allen* te zijn weggegaan. (raising)
that the boys seem all to be left
'All the boys seem to have left.'

So far, then, there appear to be no empirical arguments for a raising analysis of absentive *zijn*.

I will now advance some arguments that corroborate the claim that absentive *zijn* is a control verb. First, like other control verbs, it is possible to front the verbal complement in the absentive (82ab). This is not possible with raising verbs (82c).[31]

(82) a. Het boek te lezen probeert Jan al jaren. (control)
the book to read tries John already years
'John has been trying to read the book for years.'

b. Sigaretten halen was Jan zogenaamd. (absentive)
cigarettes get-INF was John supposedly
'Supposedly, John was off getting some cigarettes.'

c. * Het boek te kennen schijnt Jan. (raising)
the book to know seems John
'John seems to know the book.'

Second, (83a) shows that the infinitival complement of a control verb allows left-dislocation (LDL). The same holds for the infinitive in an absentive (83b). (83c) shows that LDL is not possible with the verbal complement of a raising verb:

[31] Not all speakers of Dutch accept across-the-board fronting of *te*-infinitives in control structures. See Zwart (1993) and IJbema (2002) for discussion.

(83) a. Het boek te lezen, dat probeert Jan al jaren. (control)
the book to read that tries John already years
'John has been trying to read the book for years.'

b. Sigaretten halen, dat was Jan zogenaamd. (absentive)
cigarettes get-INF that was John supposedly
'Supposedly, John was off getting some cigarettes.'

c. * Het boek te kennen, dat schijnt Jan. (raising)
the book to know that seems John
'John seems to know the book.'

Third, the infinitival complement of a control verb can be pronominalized by *dat* ('that') (see 84a), whereas an infinitival complement of a raising verb cannot be pronominalized by *dat* (see 84b). Pronominalization of the infinitival complement of an absent is allowed (see 84c), and as such, the absentive patterns with a control configuration.

(84) a. Harry probeert een taart te bakken en Ron probeert dat ook.
Harry tries a cake to bake and Ron tries that also
'Harry is trying to bake a cake and so is Ron.'

b.* Jan lijkt te scoren en Piet lijkt dat ook.
John seems to score-INF and Pete seems that also
'It seems that John is scoring, and Pete seems to do so too.'

c. Jan is vissen en Piet is dat ook.
John is fish-INF and Pete is that also
'John is off fishing and so is Pete.'

Regarding these tests, which indicate that fronting, LDL and *dat*-pronominalization are characteristics of control configurations, a number of general comments are in order about modals.[32] According to the classical analyses, deontic modals involve control while epistemic modals involve raising (see e.g. Ross 1969 and Klooster

[32] In what follows, I will maintain the traditional distinction between epistemic and deontic modality, despite the fact that this distinction is somewhat fuzzy. The standard literature on modality generally distinguishes between epistemic and root modality (see e.g. Jackendoff 1972, Palmer 1986). Epistemic modals express the knowledge a speaker has with regard to the embedded proposition, and is therefore typically speaker-oriented. Two types of epistemic modals are distinguished. "Inferential epistemics" convey that the speaker infers the truth of the proposition on the basis of objective grounds (e.g. the perceivable situation). "Non-inferential epistemics" convey that the speaker claims the truth of a proposition on the basis of less objective grounds, for instance her own intuitions or ideas, or hearsay. Root modality can be further divided into deontic and dynamic modality. Modals that express external "force", such as permission and obligation, are called deontic modals. Modals that express internal conditions or dispositions of the subject are referred to as dynamic modals. These internal conditions convey volition or ability, for instance. Root modality is typically subject-oriented.

1986). The idea is that modals in their root interpretation assign a theta role to the subject. This makes the subject the controller of PRO, which is itself the subject of the embedded infinitive. In its epistemic interpretation, a modal does not assign an external theta role to its subject, but the subject of the embedded infinitive raises to the specifier of the modal projection.

If the diagnostic of fronting, LDL and *dat*-pronominalization is applied to modals, we find that, as predicted by the traditional control vs. raising distinction described above, that a deontic modal allows fronting (85a), LDL (85b) and *dat*-pronominalization (85c):

(85) a. Lezen kan Jan wel. (fronting)
read can John certainly
'John is certainly able to read.'

b. Lezen, dat kan Jan wel. (LDL)
read that can John certainly
'John is certainly able to read.'

c. Harry kan lezen en Hermelien kan dat ook. (*dat*-pronom.)
Harry can read and Hermione can that also
'Harry is able to read and so is Hermione.'

A modal with an epistemic nterpretation, on the other hand, does not allow fronting, LDL and replacement by *dat*, as is shown in (86a–c):

(86) a. * Een inbreker zijn kan Jan. (fronting)
a burglar be can John
'John could be a burglar.'

b. * Een inbreker zijn, dat kan Jan. (LDL)
a burglar be that can John
'John could be a burglar.'

c. * Jan kan een inbreker zijn en Piet kan dat ook. (*dat*-pronom.)
John can a burglar be and Pete can that also
'John could be a burglar, and so could Pete.'

In this type of approach, the raising vs. control distinction coincides more or less with the functional and lexical layers in the syntactic tree: control verbs are projected at a lower point in the syntactic tree (i.e. closer to VP) because they are like lexical verbs. Raising verbs, which are more functional in nature, are projected higher in the tree, and form part of the functional domain.[33,] In Dutch, a verb like *beloven*, which can occur either as a control or a raising verb, provides evidence for

[33] For the notions of functional and (semi-)lexical projections, see e.g. Grimshaw (1991), Van Riemsdijk (1998) and Erb (2001).

the relation between lexical properties and control configurations, and between functional properties and raising configurations. Consider for instance the contrast between (87ab):

(87) a. Jan belooft PRO een kaart te sturen. (control)
John promises a postcard to send
'John promises to send a postcard.'

b. Het belooft morgen mooi weer te worden. (raising)
it promises tomorrow nice weather to become
'It looks like we are getting nice weather tomorrow.'

The relation between lexical properties and control is supported by the observation that the control verb *beloven* can occur as a perfect (88a). (88b) shows that as a raising verb, *beloven* cannot occur as a perfect: [34]

(88) a. Jan heeft beloofd PRO een kaart te sturen. (control)
John has promised a postcard to send
'John promised to send a postcard.'

b. * Het heeft beloofd morgen mooi weer te worden. (raising)
it has promised tomorrow nice weather to become
'It looked like we are getting nice weather tomorrow.'

Blocking of perfect tense is a general property of functional verbs. Consider also the phenomenon of *do*-support, a feature of many (non-standard) Dutch dialects:

(89) a. Jan doet even de kopjes afwassen.
John does just the cups wash
'John is washing up the cups.'

b. * Jan heeft even de kopjes afwassen gedaan.
John has just the cups wash done
'John has been washing up the cups.'

Going back to the classification of modals, Barbiers (1995:162), argues that the difference between so-called probability and polarity interpretations of modals does not correspond to the syntactic difference between raising and control structures. The term "polarity transition" in (90) below is due to Ter Meulen (1990). She argues that the interpretation of aspectual verbs like *stop* or *begin* involves a polarity transition, i.e. a negative and a positive stage of the event embedded under the

[34] Gertjan Postma (p.c.).

aspectual verb.[35] In a similar fashion, Barbiers argues that dispositional, directed and non-directed interpretations of modal verbs (the so-called 'polarity interpretations') involve a polarity transition.[36] The probablility interpretation, on the other hand, does not. In general terms, a polarity transition implies that there is a scale at which a shift from stage 0 to stage 1 is potentially possible. Consider for instance *de fles moet leeg* ('the bottle must be emptied'). This sentence implies that there is a scale available at which the bottle changes from full to empty.

The notions of [+/¬ polarity transition] and [+/¬ subject orientation] result in the following classification of modal interpretations (Barbiers 1995:149).

(90) *Classification of modal interpretations*

	[+subject-oriented]	**[¬subject-oriented]**
[+polarity transition]	dispositional directed deontic	non-directed deontic
[¬polarity transition]	negative/positive relation	Probability

Barbiers argues that, depending on their structural base position and the nature of their complement, modals with a verbal complement either receive a polarity interpretation, or a probability interpretation. In other words, the interpretation of a modal is determined by the syntactic configuration it occurs in. Crucially, this syntactic context does not involve the contrast between a raising or control configuration, but involves the categorial nature of the complement.

A strong empirical argument against the traditional epistemic/deontic distinction in terms of raising vs. control is the observation that Dutch modals allow non-verbal complements. Consider for instance:[37]

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[35] This means that a sentence like *John began to talk* presupposes that there is a stage at which *John is talking* is false because an aspectual verb like *begin* says that the truth value of *John is talking* switches from negative to positive (Barbiers 1995:145).

[36] In a dispositional modal interpretation some force, tendency or capacity that is *internal* to the subject is described. In a directed deontic interpretation, the subject has an obligation or is permitted to do something. This obligation or permission has, however, an *external* source. In a non-directed deontic interpretation, the modal has an obligation or permission reading as well, but the difference with the directed deontic interpretation is that the obligation of permission is *not directed to the subject* of the sentence.

[37] This particular example involves a PP complement, but Barbiers shows that modals may take nominal complements (i) and adjectival complements (ii) as well:

(i) Jan moet een hond.
John must a dog
'John definitely wants to have a dog.'

(91) Jan moet [PP in de regering].
John must in the government
(Barbiers 1995:162)

This sentence has the root interpretations, i.e. the dispositional and the directed deontic interpretation, but it does not allow the epistemic, i.e. the probability interpretation.[38] The semantic relation between the DP *Jan* and the PP *in de regering* can be syntactically expressed in two ways: (1) the DP is base-generated in [spec, PP] and then raises to [spec, IP] for reasons of case, (2) PRO is base-generated in [spec, PP] and the DP *Jan* is base-generated in [spec, IP] where it controls PRO (see Barbiers 1995:162) The second scenario is not available, however, if Stowell's (1981) claim is accepted that the subject of a small clause, which is in this case the PP *Jan/PRO in de regering*, cannot be PRO. We are left then with scenario (1), which involves a raising operation even though an epistemic interpretation is not available. This is exactly the opposite of what an analysis of modals in terms of control vs. raising predicts. For further discussion of non-verbal complements of modals, the reader is referred to Barbiers (1995).

I conclude that the classification of modal interpretations in terms of control vs. raising or [+/¬ polarity transition] and [+/¬ subject orientation] is a matter of ongoing debate. This means that the diagnostics of fronting, LDL and *dat*-pronominalization are not straightforward if they are applied to modal verbs. With respect to the absentive however, I will maintain the claim that fronting, LDL and *dat*-pronominalization are typical properties of control configurations. On this assumption, the observation that the absentive allows fronting, LDL and *dat*-

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(ii) De fles moet leeg.
the bottle must empty
'That bottle must be emptied.'

[38] Henk van Riemsdijk (p.c.) points out that *zou* ('would') is a counterexample since it allows an epistemic reading when it selects a prepositional complement:

(i) Jan zou toch [PP in de regering]?
John would – in the government
'Wasn't John going to join the government?'

Note, though, that it is not completely clear whether it is indeed an epistemic reading that is involved in (i), since the use of the adverb *waarschijnlijk* ('probably') seems odd:

(ii)?? Jan zou toch waarschijnlijk [PP in de regering]?
John would – probably in the government
'Wasn't John probably going to join the government?'

Furthermore, the example in (i) also has the root interpretation because the intention of John to join the government can be described as being 'internal' to the subject. I leave the behaviour of *zou* in this context as a topic for further research.

pronominalization, see (82)-(84), supports the position that *zijn* in the absentive patterns as a control verb.

If the absentive is a control configuration, then the prediction is that partial control is possible, given that partial control is a property of control rather than raising.[39] In the generative literature, a distinction is made between obligatory control (OC) and non-obligatory control (NOC) (see e.g. Williams 1980 and Landau 1999). Landau argues that the OC category consists of two types: (1) exhaustive control (EC), and (2) partial control (PC). In EC constructions, the reference of PRO must be exhausted by the reference of its controller. A typical EC verb is *try*, as in (92):

(92) Britney$_i$ tries PRO$_i$ to sing "Night and Day".

PC refers to constructions in which the reference of PRO includes, but need not be identical, to the reference of the controller. The contextual setting presupposes that the hearer can fill in the extra participants in the reference of PRO, other than the controller itself (Landau 1999:38). Environments that force PC and are incompatible with EC involve collective predicates. Collective predicates require their subjects to be plural, but this plurality need not always be lexically expressed. As is illustrated in (93ab), collective predicates like *meet* are incompatible with a singular controller, and are therefore ruled out in EC constructions with a singular controller. (93c) shows that collective predicates are allowed in PC environments ("i+" indicates the partial control reading):

(93) a. * John met at 6. (singular subject)

b. * John$_i$ managed [PRO$_i$ to meet at 6]. (EC)

c. John$_i$ wanted [PRO$_{i+}$ to meet at 6]. (PC)
(Landau 1999:39)

Similar observations can be made for Dutch:

(94) a. ? Jan omsingelde de stad om 6 uur. (singular subject)
John surrounded the city at 6 o'clock
'John surrounded the city at 6 o'clock.'

b. ? Jan$_i$ probeerde om 6 uur PRO$_i$ de stad te omsingelen. (EC)
John tried at 6 o'clock the city to surround
'John tried to surround the city at 6 o'clock.'

c. Jan$_i$ wilde om 6 uur PRO$_{i+}$ de stad omsingelen (PC)
John wanted at 6 o'clock the city surround
'John wanted to surround the city at 6 o'clock.'

[39] I am grateful to Marcel den Dikken for pointing this out to me.

Collective verbs, which force a partial control reading, can occur in the absentive, as (95a–f) show:

(95) a. Jan$_i$ is PRO$_{i+}$ trouwen.
John is get married-INF
'John is off to get married.'

b. Jan$_i$ is PRO$_{i+}$ vergaderen.
John is assemble-INF
'John is off to a meeting.'

c. Jan$_i$ is PRO$_{i+}$ debatteren.
John is debate-INF
'John is off to a debate.'

d. Jan$_i$ is PRO$_{i+}$ ruzie maken.
John is argue-INF
'John is off to argue.'

e. Zidane$_i$ is PRO$_{i+}$ tegen Italië voetballen.
Zidane is against Italy play football-INF
'Zidane is off to play Italy.'

f. De koning$_i$ is PRO$_{i+}$ de stad omsingelen.
the king is the city surround-INF
'The king is off to surround the city.'

These data therefore support a control analysis of absentive *zijn*.

A further prediction, pointed out to me by Marcel den Dikken, is that if the absentive involves control, we expect to find split antecedents (see Bennis & Hoekstra 1989a). Split antecendents are compatible with PRO and pronominal elements, but are ruled out with anaphors:[40]

[40] This is the traditional generalization, though Bennis & Hoekstra (1989a:254) point out certain Dutch counterexamples in which a split antecedent occurs with an anaphor:

(i) ? Rusland$_i$ drong bij Amerika$_j$ aan op elkaars$_{i+j}$ medewerking.
Russia pressed with America on on each other's cooperation
'Russia insisted on mutual cooperation with America.'

Conversely, some speakers reject a split antecedent with PRO. Bennis & Hoekstra (1989a:243) give (ii) an asterisk, though I disagree with their judgement, as do the native speakers that I consulted:

(ii) */? Jan$_i$ beloofde Marie$_j$ om PRO$_{i+j}$ elkaar vaker te zien.
John promised Mary for each-other more-often to see
'John promised Mary to see each other more often.'

(96) a. Jan_i zei tegen $Marie_j$ [dat ze_{i+j} gewonnen hadden].
John said to Mary that they won had
'John said to Mary that they had won.'

b. Jan_i drong er bij $Marie_j$ op aan[om PRO_{i+j} naar huis te gaan.
John urged there with Mary on on for to home to go
'John urged Mary to go home with him.'

c. * Jan_i stelde $Marie_j$ aan elkaar$_{i+j}$ voor.
John introduced Mary to each other for
'John introduced Mary to each other.'

Unfortunately, the occurrence of split antecendents cannot be tested for the absentive because it is impossible to construe an example in which *zijn* has a second argument.[41]

Summarizing, we have seen that there are no arguments for a raising analysis of absentive *zijn*. There are, however, good grounds to assume that absentive *zijn* is a control verb. The control status of absentive *zijn* is suggested by (1) fronting, LDL and *dat*-replacement of the infinitival complement, and (2) the possibility of partial control.

A control analysis of *zijn* has a number of theoretical implications. I will discuss two of these in §§2.4.3–2.4.4.

2.4.3 PRO as a pronominal anaphor

The theoretical motivation for PRO is based on three theoretical constructs: (1) the Projection Principle, (2) the Extended Projection Principle, and (3) Binding Theory (see Chomsky 1980, 1981). The first two constructs are straightforward. The Projection Principle formalizes the idea that syntactic structure is determined, at least to a large extent, by lexical information. One effect of this is that the external theta role assigned by an infinitival verb must be syntactically represented. The

[41] Norbert Corver (p.c.) points out that a split antecedent pattern is usually possible if one of the arguments is contained in an adjunct PP:

(i) Jan_i meende [$_{PP}$ volgens $Marie_j$] PRO_{i+j}samen oud te kunnen worden.
John thought according Mary together old to can become
'According to Mary, John believed that they would grow old together.'

Note that a split antecedent reading is not possible with an adjunct PP in an absentive:

(ii) * Jan_i was toen [$_{PP}$ volgens $Marie_j$] PRO_{i+j}samen vissen.
John was then according Mary together fish-INF
'According to Mary, John was off fishing with her then.'

In this respect, the control properties of the absentive differ from those of ordinary control structures.

Extended Projection Principle requires every clause, including infinitival clauses, to have a subject.

The third construct requires further comment. Chomsky (1981) takes the position that Binding Theory generalizes over both lexical and non-lexical categories. The two binary-valued features [±anaphor] and [±pronominal] yield the following four NP-types:

(97)

NP-type	*Lexical*	*Non-lexical*
[+anaphor, –pronominal]	reflexives, reciprocals	NP-trace
[+anaphor, +pronominal]	–	PRO
[–anaphor, +pronominal]	pronouns	pro
[–anaphor, +pronominal]	R-expressions	wh-trace

In addition to pure anaphors ([+anaphor,–pronominal]) and pronominals ([–anaphor, +pronominal]), the classification of NP-types includes a third category, that of R-expressions ([–anaphor,–pronominal]).

The fourth predicted feature combination, ([+anaphor,+pronominal]), is assumed to specify PRO. The distribution of PRO is limited to ungoverned positions, such as the subject position of controlled infinitives. Binding Theory accounts for this as follows: since PRO is both [+anaphor,+pronominal], it must, paradoxically enough, be free *and* bound in its governing category. This is possible only if there is no governing category present, since in that case the notions "free" and "bound" are vacuous. This is achieved if PRO has no governor. On the assumption that only the *finite* Infl head functions as a governor, PRO has no governor if it is the subject of an infinitival clause; in this case, the *non-finite* Infl head cannot function as a governor, and therefore does not govern its specifier [spec IP]. This is referred to by Chomsky as the "PRO-theorem" (see Chomsky 1981). The PRO-theorem explains why the distribution of PRO is by and large limited to the subject position of infinitival clauses.[42] The PRO-theorem also correctly predicts that there is a complementary distribution between PRO and other NP-types.

Observe that the classification in (97) has a gap where we would expect the lexical equivalent of PRO. This gap follows from the PRO-theorem. A lexical equivalent of PRO would also have the specification [+anaphor, +pronominal], and would therefore also have to be free *and* bound in its governing category. Again, this is possible only if there is no governor. But if there is no governor, then the lexical

[42] As Bennis & Hoekstra (1989a:257, 259) note, PRO also occurs in attributive adjuncts (i) as well as inside some NPs (ii):

(i) Jan_i ging [PRO_i bezopen] naar huis.
John went drunk to home
'John went home drunk.'

(ii) Jan_i heeft [die PRO_i uitspraken over zichzelf$_i$] onthouden.
John has those remarks about himself remembered
'John remembered those remarks about himself.'

element would not be able to receive case (assuming that case is assigned under government). Therefore, the existence of a lexical but caseless element is blocked by the case-filter, which states that every overt NP must be assigned (abstract) case.

So far, I have summarized the theoretical arguments for PRO. However, there are also a number of empirical arguments which show that PRO has both anaphoric and pronominal properties. Consider first the *anaphoric* properties of Dutch PRO, based on Bennis & Hoekstra (1989a). (98a) suggests that PRO must have an antecedent; (98b) suggests that coreference of PRO with a c-commanding NP is obligatory; (98c) suggests that the relation between PRO and its antecedent is subject to locality restrictions:

(98) a. * Het is waarschijnlijk om PRO naar huis te gaan.
it is likely for to house to go
'It is likely to go home.'

b. Jan_i probeert om $\text{PRO}_{i/*j}$ naar huis te gaan.
John tries for to house to go
'John tries to go home.'

c. Harry_i beloofde Ron_j dat Hermelien_k zou proberen om
Harry promised Ron that Hermione would try for
$\text{PRO}_{*i/*j/k}$ het boek uit de bibliotheek te halen.
the book from the library to get
'Harry promised Ron that Hermione would try to get the book from the library.'

Consider next the *pronominal* properties of Dutch PRO, again based on Bennis & Hoekstra (1989a). (99ab) suggest that the position that is occupied by a pronoun in finite subclauses is occupied by PRO in non-finite subclauses. (99c) suggests that, like pronouns, PRO does *not* require an antecedent. (99d) suggests that, again like pronouns, PRO does not allow an antecedent within its governing category.[43] (99e) suggests that, like pronouns, PRO allows a split antecedent:

(99) a. Sneep_i beloofde Harry [dat hij_i zou komen].
Snape promised Harry that he would come
'Snape promised Harry to come.'

b. Sneep_i beloofde Harry [PRO_i te zullen komen].
Snape promised Harry to will come
'Snape promised Harry to come.'

c. [PRO naar de dierentuin gaan] is leuk.
to the zoo go is fun
'It is fun to go to the zoo.'

[43] The reader will note that this observation follows from the PRO-theorem.

d. * Francine$_i$ hoorde [PRO$_i$ een lied zingen].
Francine heard a song sing
'Francine heard sing a song.'

e. Harry$_i$ stelde Ron$_j$ voor [om PRO$_{i+j}$ naar huis te gaan].
Harry suggested Ron for for to house to go
'Harry suggested to Ron to go home.'

The preceding discussion shows that there are good theoretical and empirical grounds for assuming a category [+anaphor, +pronominal], i.e. PRO. Paradoxically, the theory which produced PRO, i.e. Binding Theory, faces a dilemma when its principles are applied to PRO, since an element cannot be both free and bound in its governing category. The PRO-theorem is intended to circumvent this contradiction.

The PRO-theorem does not in fact solve the hybrid nature of PRO, but rather takes PRO out of the Binding Theory and into Control Theory (see Chomsky 1981). It is clear which properties of PRO should be accounted for by Control Theory, but it is rather less clear *how* this should be done.[44] In principle, Control Theory is a theory about the relation between PRO and its possible and impossible antecedents. There are two general factors that influence the interpretation of PRO: (1) properties of the matrix verb (a subject control verb, an object control verb, or a verb that allows both), and (2) properties of the embedded clause. In (100b) I provide an example of the influence of the embedded clause; addition of a modal verb to the embedded clause triggers a shift in reference:

(100) a. Jan$_i$ belooft Piet$_j$ PRO$_{i/*j}$ naar huis te gaan.
John promises Pete to home to go
'John promises Pete to go home'

b. Jan$_i$ belooft Piet$_j$ PRO$_{*i/j}$ naar huis te mogen gaan.
John promises Pete to home to may go
'John promises Piet to be allowed to go home.'

As I mentioned earlier, other properties associated with PRO, such as the occurrence of split antecedents, are not yet fully understood (see also fnt. 40).

Aside from the combined force of the PRO-theorem and Control Theory, there is another way to handle the hybrid nature of PRO. It could be argued that PRO sometimes patterns as an anaphor (in which case it has the syntactic status of an NP-trace) and sometimes as a pronoun (in which case it has the syntactic status of *pro*). On this assumption, there is a principled reason for why the feature combination [+anaphor,+pronominal] is empty. However, this alternative has also been argued to be problematic; see for instance Bennis & Hoekstra (1989a) for discussion.

The preceding discussion shows that there is as yet no satisfactory account of the notion of PRO and its status in relation to binding. In the minimalist framework

[44] See for extensive discussion e.g. Hornstein (1999), Larson (1991), Koster (1984) and Manzini (1983).

ofChomsky (1995), the status of PRO with respect to binding is unclear. One of the reasons for this is that minimalism has discarded the notion of government. It is not my aim to discuss these problems in any detail here, let alone provide a solution for them. As regards the role of PRO in the absentive, I assume that it has sufficient *pronominal* properties to be sensitive to principle B of the Binding Theory.

2.4.4 The external theta role of absentive *zijn*

In §2.4.2 I argued that absentive *zijn* functions as a control verb. One consequence of this view is that *zijn* must assign an external theta-role to the lexical subject. In this section I will discuss the nature of this theta role in some more detail.

While the traditional view of the verb *be* is that it makes no semantic contribution to a predicational sentence, it has been observed that in certain constructions *be* has interpretative effects (see e.g. Partee 1977, Rothstein 1999 and Becker 2004). I will discuss some of these contexts here. Consider for instance the pair in (101ab):

(101) a. Mary considers Jane clever.
b. Mary considers Jane to be clever.
(Rothstein 1999:349)

If *be* makes no semantic contribution, these sentences should be synonymous. Yet, as Rothstein (1999:349) observes, (101a) "feels more individual level" than (101b). This difference cannot be attributed to the individual *vs.* stage level distinction itself, as (102ab) show:

(102) a. The doctor considers Mary quite sick.
b. I believe Mt. Everest to be the highest mountain in the world.
(Rothstein 1999:350)

(102a) contains a bare small clause in which a stage-level property is predicated of the subject, while in (102b) *be* is used for individual-level predication. Consider also the following pair:

(103) a. Ben made Sarah polite.
b. Ben made Sarah be polite.
(Becker 2004:6)

Here the presence of *be* appears to induce a subtle change in meaning. (103b) carries the implication that the DP *Sarah* is "agent-like" in that it performs some act of politeness. This implication is absent in (103a).

Finally, consider the effect of *be* in the complement of progressives. Here four observations can be made. First, *be* as the complement of a progressive appears to introduce agentive implications:

(104) a. Jane is polite.
b. Jane is being polite (to her great-aunt).
(Rothstein 1999:356)

(104a) portrays Jane as being generally polite, whereas (104b) suggests that Jane is being purposefully polite, and that she is actively responsible for her behaviour at that moment.

Second, *be* as a progressive complement can select only a restricted number of predicate types. In Lakoff (1970) a distinction is made between active and stative APs and NPs, where only the active APs and NPs can occur as complement of progressive *be*:

(105) a. Mary is being noisy/mean/*awake/*healthy
b. John is being a nuisance/*a murderer

Third, Partee (1977) notes that *be* in the complement of a progressive also selects for properties of its subject. (106ab) show that the subject must be animate.[45]

(106) a. John is being noisy.
b. * The river is being noisy.
(Rothstein 1999:356)

Note that there is no general constraint on [–animate] subjects in the progressive (see also example (52) in §2.3.4):

(107) a. John is making a lot of noise.
b. The river is making a lot of noise.

Fourth, Partee (1977) shows that animacy alone is not sufficient. The subject must also be a volitional participant in having the property denoted by *be* + AP:

(108) a. The children are being quiet right now because they want a story.
b. ? The children are being quiet right now because they are asleep.
(Rothstein 1999:357)

Note once more that there is no general constraint on non-volitional participants in the progressive, as (109) shows:

(109) The children are making so little noise right now because they want a story/ are asleep.

[45] Partee (1977) rejects (106b); Rothstein (1999) considers (106b) infelicitous.

Partee (1977) captures these observations by assuming that there are two distinct (but homophonous) verbs, i.e. predicative *be* and agentive *be*, of which the latter is [+active]. Agentive *be* requires an animate and volitional subject. The meaning of agentive *be* can be paraphrased in terms of the verb *act*, so that *John is being foolish* has the interpretation *John is acting foolish*; or, as (Rothstein 1999:357) observes, agentive *be* is anomalous "if the subject is not capable of acting to produce the property of the predicate". In Partee's analysis, the subject position of agentive *be* is a thematic position which is assigned the role of agent by the verb.

Clearly, English agentive *be* and Dutch absentive *zijn* have a number of properties in common. Agentive *be* allows only certain types of predicates, i.e. active APs and NPs but not stative APs and NPs. Absentive *zijn* is subject to similar restrictions: it can select activities and accomplishments, but not states and achievements. In addition, the infinitival form in the absentive is similar to the AP and NP complements of agentive *be*, in that both express a *property* of the lexical subject (e.g. *be a nuisance* and, similarly, *vissen zijn* 'be off fishing'). What is more, like agentive *be*, absentive *zijn* places restrictions on its subject. Agentive *be* requires an animate and volitional subject. In §2.3.2 I showed that the absentive is also subject to an animacy restriction, although we saw that there is some cross-linguistic variation in this regard, which I took to suggest that the notion of animacy must be interpreted rather loosely. Note, finally, that like agentive *be*, the absentive has an implication of volition. For instance, in the canonical example *Jan is vissen* the implication is that the subject John is doing this because he wants to. Consider in this respect once more the examples from Norwegian and Fering, repeated in (110):

(110) a. *Norwegian*
Jan er og får presanger.
Jan is and gets presents
'John is off getting presents.'

b. *Fering*
A hingst as tu bislauen.
the horse is to shoe-INF
'The horse is off being shoed.'

As noted earlier, there is nothing wrong with these examples as long as the absentive infinitive expresses an intentional or volitional activity.

Given the similarities between agentive *be* and absentive *zijn*, I propose that absentive *zijn*, like agentive *be*, assigns an agentive theta role to its lexical subject. The syntactic structure of the absentive can then be represented as in (111):[46]

[46] As is the case in all control configurations, the PRO subject in (111) receives a theta role from the infinitival verb, in this specific example *vissen*.

(111) $Jan_{(x,t,l)}$ is $[PRO_{(x,t,p)}$ vissen]
[+agentive] ↵

Summing up, I have analysed the absentive as involving an obligatory spatial shift between the lexical argument and PRO, as forced by Principle B of the Binding Theory. Although the theoretical status of PRO within Binding Theory is not entirely clear, I suggested that PRO has sufficient pronominal properties so as to be sensitive to Principle B. I further argued that there are good grounds to analyze absentive *zijn* as a control verb. As a control verb, absentive *zijn* must assign a theta role; given the similarities between Dutch absentive *zijn* and English agentive *be*, I concluded that absentive *zijn* assigns an agentive theta role to its subject, as in (111) above.

2.4.5 Other instances of locative shift

Having discussed some of the theoretical implications of locative shift in the Dutch absentive, I now consider the issue of locative shift from a more general, cross-linguistic perspective. In this section I will show that a shift at the spatial level is not a unique property of languages with a grammatical absentive, but is also found in languages which have a switch-reference system.

Stirling (1993) observes that in a typical case of switch-reference, a marker on the verb of one clause indicates whether its subject has the same or a different reference as the subject of an adjacent, syntactically related clause. Consider the following canonical example from Mohave, a Hokan language of California:

(112) a. nya- isvar-**k** iima- k
when sing SS dance TNS
'When he_i sang, he_i danced.'

b. nya- isvar-**m** iima- k
when sing DS dance TNS
'When he_i sang, he_j danced.'
(Stirling 1993:3)

In (112a) the subject of the first (subordinate) clause has the same referent as that of the second (matrix) clause. This is indicated in the first clause by the "same-subject" (SS) marker *-k* on the verb (instead of a tense marker). In (112b) the "different-subject" (DS) marker *-m* signals that the subjects have disjoint reference. Note that (112b) does not contain any independent subject NPs.

Consider next what Stirling (1993) calls "unexplained different subject marking". This occurs in, for instance, Amele, a Papuan language of New Guinea. Unexplained DS marking involves those cases in which there is a DS morpheme, but the clauses nevertheless have the same subject referent. The explanation given for this by native speakers is that "something has changed", or "a new situation is involved" (Stirling

1993:215). Roberts (1988:60) gives the following description of unexplained DS marking:

> Often it is obvious that the change being indicated is deictic rather than syntactic and that these changes are in the area of *world, time or place* reference points. [italics mine, IH]

This description fits in nicely with the idea of a triple index containing a variable for time and place. The following Amele example illustrates unexplained DS marking involving a change of place:

(113) Age ceta **gul- do- co- bil** l- i bahim na tac-ein.
3PL yam **carry 3sg DS 3pl** go-PRED floor on fill 3PL_REMP
'They carried the yams on their shoulders and went and filled up the yam store.'
(Stirling 1993:216)

The important observation is that in Amele a change of place occurs when there is coreference at both the pronominal and temporal level (in (113) the verbs all have a past interpretation). In line with my analysis of the absentive, this would imply that principle B can be respected only if there is a shift at the spatial level.

I do not want to go so far as to claim that unexplained DS marking with locative shift is the same phenomenon as found in the absentive. One difference concerns the presence of the motion verb 'go' in Amele. Moreover, Stirling (1993) argues at length that (dis-)agreement marking between clauses (or larger units) in terms of switch-reference functions along more parameters than just pronominal reference, such as major protagonists, spatial and temporal location, and actual or non-actual situations. Extending the binding approach to include switch-reference phenomena is beyond the scope of this dissertation. The aim of this section is rather to make two general points: (1.) a shift in location is found not only in absentives, and (2.) it is feasible that unexplained DS marking in Amele (i.e. coreference at the pronominal level) coincides with a change in location.

Finally, note that unexplained DS marking in Amele displays another interesting property. The example in (114), taken from Stirling (1993:217), shows that a change in location can be either literal or metaphorical:[47]

(114) Je eu **culo- co hul** ni- nij-en oso na let- i lo
talk that **leave DS 1DU** SIM lie 3SG INDEF to cross PRED go
wo- na.
1DU PRED

[47] In §2.7.4 I propose to interpret a shift in *world* in epistemic modality contexts as a shift in place as well, albeit in a metaphorical sense.

Literal:
'We two left that text lying there and moved on to another'
Metaphorical:
'Then we stopped talking about that and went on to something else.'

I interpret this to mean that a shift at the spatial level can encompass more than just a literal shift in location, as is the case in the absentive. Stirling (1993:215–222) also gives examples with unexplained DS marking that include a shift from realis to irrealis, a shift in time that could also be interpreted as a shift in locality, and a change of state of the entity being described. I will return to this issue in more detail in §2.7.

2.5 Alternative approaches

In the preceding sections I have argued for a binding analysis of the absentive. Before discussing the consequences and predictions of this analysis (in §2.7), I will first consider two alternative approaches. The first derives the absentive semantics from the underlying presence of the verb *gaan* ('go'). The second relates the absentive semantics to the presence of an (empty) particle *uit* ('out') or *heen* ('away'), which is syntactically projected as an Absentive Phrase (AbsP). I will argue that both analyses must be rejected, both on empirical and theoretical grounds. Both analyses essentially reduce the grammatical absentive to a lexical absentive. However, the problem with this is that an account which postulates *gaan* or an *AbsP* is at pains to explain why overt *gaan* or *uit*/*heen* is not always possible, unlike "real" lexical absentives (such as an adjunct PP like *in Frankrijk*).

A binding approach, on the other hand, offers an insight as to *why* the absentive consists of *zijn* and an infinitive. If binding is part of the computational component (see Chomsky 1995), then no extra machinery is needed to account for the semantic interpretation of the absentive, since this follows from independently motivated principles.

2.5.1 The absentive as *gaan*-deletion

Dutch has a construction *gaan* + infinitive, which is, superficially at least, similar to the absentive. The two constructions are illustrated in (115ab):

(115) a. Jan is vissen. (absentive)
John is fish-INF
'John is off fishing.'

b. Jan gaat vissen. (*gaan* + infinitive)
John goes fish-INF
'John is going to fish/is on his way to fish.'

The similarity between the two constructions becomes all the more striking when we consider the perfect tense of the *gaan* + infinitive construction, as in (116):

(116) Hermelien is ~~gaan~~ zwemmen.
Hermione is gone-PERF swim-INF
'Hermione has gone swimming.'

(116) shows that it is possible to analyse the absentive as having been derived from the perfect tense of the *gaan* + infinitive construction, with subsequent deletion of *gaan*. In this analysis, the absentive semantics would follow from the underlying presence of the (motion verb) *gaan*. However, I will show that there are good grounds to assume that the two constructions are not derivationally related.

First of all, *gaan* + infinitive and the *be* + infinitive (i.e. the absentive) differ in their selection of complements. I observed in §2.3.4 that the absentive does not select states or achievements. States and achievements are possible in the *gaan* + infinitive construction, although it is sometimes difficult to distinguish between a movement interpretation of *gaan* + infinitive and a future reading of *gaan* + infinitive.

(117) a. Harry gaat liggen.
Harry goes lie-INF
'Harry goes to lie down.'

b. Harry gaat de top bereiken.
Harry goes the top reach-INF
'Harry goes to reach the top.'

This would be unexpected if the two constructions are related.

Second, whereas the absentive always entails absence of the subject, the *gaan* + infinitive construction does not:

(118) a. Jan gaat slapen.
John goes sleep-INF
'John is going to sleep.'

b. Jan is toch maar gaan slapen.
John is yet but go-INF sleep-INF
'John decided to go to sleep after all.'

The interpretation of (118ab) does not involve an obligatory shift in location. In other words, (118ab) are (also) appropriate if John is in the same location as, for instance, the speaker.

The third problem concerns word order. If the absentive is derived from the perfect tense of the *gaan* + infinitive construction, the word order preceding *gaan*-deletion must be a possible surface structure, given that the *gaan* + infinitive construction is a possible configuration itself. Note that this argument is independent of the question

of whether Dutch is underlyingly SOV or SVO. An account in terms of *gaan* deletion incorrectly predicts that the word order in (119) is possible: [48]

(119) * omdat Jan is ~~gaan~~ zwemmen.
because John is go-INF swim-INF
'because John has gone swimming.'

Conversely, if the correct order *omdat Jan zwemmen is* results from *gaan*-deletion, there are three possible positions for *gaan*; but the problem is that in standard Dutch *gaan* can occur in none of them:[49]

(120) omdat Jan ~~gaan~~ zwemmen ~~gaan~~ is ~~gaan~~.
because John go-INF swim-INF go-INF is go-INF
'because John has gone swimming.'

Fourth, if the absentive is derived from the perfect tense of *gaan* + infinitive, we expect that the question in (121) has a possible answer which indicates completion; but, as (121b) shows, this is not the case:

(121) a. Wanneer is Jan ~~gaan~~ zwemmen?
when is John go-INF swim-INF
'When did John go for a swim?'

b. * Een uur geleden.
an hour ago

c. Over een uur.
in an hour

Instead, we find the reverse situation; (121c) shows that an answer which indicates non-completion is perfectly possible. Note that this is expected if the absentive consists of a present-tense form of *zijn* and a following infinitive, since, as we saw in §2.1.4, a present tense can easily shift to a future reading. The ungrammaticality

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[48] Some native speakers accept the order in which the infinitive follows *is*. For such speakers the acceptability decreases if the VP is expanded, as in (i):

(i) */? omdat Jan is de kinderen eten brengen.
because John is the children food bring-INF
'because John is off bringing the children their food.'

I have the impression that this is a colloquial speech phenomenon.

[49] The order *omdat Jan gaan zwemmen is*, where *gaan* precedes the infinitive, is certainly more felicitous than the other two and perhaps marginally acceptable, although there is a strong preference for the order *omdat Jan is gaan zwemmen*.

of (121b), on the other hand, supports the claim that the absentive is not derived from a construction with perfect tense.

Finally, consider the type of construction in (122), where *zijn* is followed by a directional PP instead of an infinitive:

(122) Hermelien is de stad in.
Hermione is the town in
'Hermione is off to town.'

These constructions also express absence of the subject with respect to a certain location. In (123), Hermione is not at home when Harry arrives.

(123) Toen Harry thuis kwam was Hermelien de stad in (~~gegaan~~).
when Harry home came was Hermione the town in gone
'When Harry came home, Hermione had gone into town.'

In principle, this type of construction could involve some sort of *gaan*-deletion, as suggested by the representation in (123). In fact, Van Riemsdijk (to appear) argues for the existence of an empty past participle *ggange* ('gone') for similar cases in Swiss German. Note though, that it is not necessary from a semantic point of view to assume an empty past participle *gegaan* ('gone') in (122) and (123), because the directional PP itself expresses movement away from a certain location. I leave this as a matter for further research.

With respect to the absentive, I conclude on the basis of the arguments given in (117) – (121) that there are no arguments that support an analysis in terms of *gaan*-deletion.[50] In the following section, I will examine whether the absentive semantics can be accounted for in terms of an absentive projection.

2.5.2 The absentive as an Absentive Projection (AbsP)

One of the main insights of generative linguistics is that surface elements do not necessarily have a one-to-one correspondence with underlying elements. One reason

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[50] Henk van Riemsdijk raises the question of why the absentive always denotes obligatory *absence* of the subject, and never obligatory presence, as in (i):

(i) * Ik heb erg m'n best gedaan op de lunch want Jan is eten.
I have very my best done on the lunch because John is eat-INF
'I have really tried my best in the kitchen because John is coming for lunch.'

Rephrased in terms of an empty *gaan* analysis (see Van Riemsdijk 2002), the question is why there is an empty verb *gaan* rather than an empty verb *komen* ('come'); or, more generally, why does Dutch, or any other language for that matter, lacks a grammatical "presentive"? I conjecture that the reason for this lies in the default interpretation of the deictic centre as {*I, now, here*}. Languages tend to encode the marked (i.e. "non-default") situation in their grammatical systems; see Cinque (1999) and especially Van Koppen (2005) for discussion of this issue.

for this is that not all structure that is present underlyingly is necessarily realised at the level of surface structure.

Given that the absentive lacks lexical material expressing absence at the surface, it might be argued that there is an *underlying* element that is responsible for the absentive semantics. We might say, for instance, that a sentence like *Jan is vissen* can be paraphrased as in (124):[51]

(124) Jan is weg om te vissen.
John is away for to fish
'John has left to go fishing.'

In this paraphrase *Jan* is the subject of the predicate *weg*. Below, I will refer to this type of predicate as an AWAY-predicate. In addition, the status of the *te*-infinitive in (124) is similar to that of an adjunct, which appears to be in accordance with the historical origin of the *te*-infinitive.[52] Observe in this respect that Van Duinhoven (1997:181) argues that the absentive in Modern Dutch has retained the original adverbial status of the infinitive, to the extent that it has a modifying role that expresses finality. I will come back to the status of the infinitive in the paragraph below; first, I consider the predication relation between the subject and the AWAY-predicate in more detail.

Let us take the periphrastic expression of the absentive in (124) as a starting-point for a possible syntactic interpretation. To do so, we must posit an (abstract) AWAY-predicate. The relation between the subject *Jan* and this predicate can be represented in terms of a small clause. I refer to the projection headed by the AWAY-predicate as the "Absentive Projection", AbsP in short. The subject originates in the specifier position of this AbsP, so that the required predication relation with the AWAY-head is established; the subject receives its thematic role from the AWAY-predicate. The AbsP is preceded by the copula *be*. The subject raises from the specifier of the small clause to the specifier position of the copula. The assumption that copula *be* is a raising verb (i.e. a verb that does not assign a thematic role to its subject) ensures that the theta criterion is respected. This scenario is illustrated in (125):

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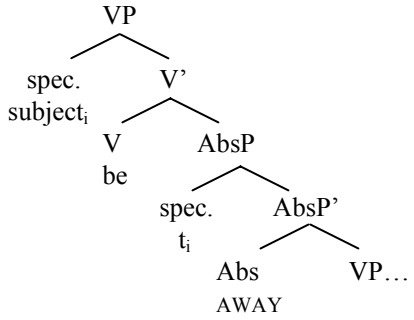
[51] Note that Dutch *om* is not equivalent to English *for*, since *om* cannot license an overt subject of an infinitival clause. Furthermore, Dutch *te* is not equivalent to English *to*, since *to* (but not *te*) can be separated from the infinitive by negative markers and adverbs, and *to* (but not *te*) can be stranded. Despite these differences, I will gloss *om* as *for* and *te* as *to*, as this allows me to distinguish between *om* and *te*.

[52] The diachronic development of the *te*-infinitive can be briefly summarized as follows. Proto-Germanic had a suffix **ana>an* (> Modern Dutch *-en*), which expressed finality/purpose/goal. The infinitive started out as an adverbial derivation of the verbal stem, i.e. $[\text{stem}]_{V}+[an_{goal}]$. At some point, *-an* was no longer transparent as a suffix, and was reanalyzed as part of the verbal stem, i.e. $[\text{stem}+en/an]_{N/V}$. Subsequently, the aspectual meaning was taken over by a preceding preposition, resulting in te_{goal} + $[\text{stem-}en]_{N}$. This was in turn followed by a nominalization process of the infinitive, as can be observed from the presence of flection in Middle Dutch (e.g. (P) + [stem-*en*] + s_{GEN}/e_{DAT}); the SAND database contains some synchronic examples of this type of inflected infinitives, for instance in the dialect of Ouddorp.

(125)



Let us next turn to the syntactic status of the lower VP in (125), i.e. the infinitive *om te vissen*. In the paraphrase *Jan is weg om te vissen*, the infinitive functions as a purpose adjunct. However, closer inspection reveals that there is little evidence for an adjunct status of the infinitive, which casts doubt on Van Duinhoven's analysis. Consider first the observation that absentives allow extraction out of the infinitive:

(126) a. basic: Jan is boeken halen.
John is books fetch-INF
'John is off fetching books'

b. extracted: *Wat* is Jan _ halen?
What is John fetch-INF
'What is John off fetching?

Second, while adjunct clauses can appear both to the right and to the left of a finite verb (127ab), the infinitive in an absentive can appear to the left of a finite verb only (127c):

(127) a. omdat Jan te moe [om te werken] is [om te werken].
because John too tired [for to work-INF] is [for to work-INF]
'because John is too tired to work.'

b. omdat Jan [vissen] is * [vissen]
because Jan [fish-INF] is [fish-INF]

Finally, absentives require the presence of an infinitive (128a), unlike adjunct clauses (128b):[53]

(128) a. * Omdat Jan ~~[vissen]~~ is.
because Jan [fish-INF] is

[53] Note, though, that on its own this argument is inconclusive, since not all adjuncts can be left out, and not all complements are obligatorily realized.

b. Omdat Jan te moe is ~~[om te werken]~~.
because Jan too tired is [for to work-INF]

These facts are captured by the structure in (125), where the infinitive is represented in terms of a small-clause complement. An account in which the infinitive is an adjunct cannot explain these facts.

I now turn to the categorial status of the infinitive and its argument structure. The first issue that must be addressed in this respect is whether the infinitive is a verb or a deverbalised noun. This issue is reminiscent of the question of whether the participial form of a Dutch verb functions as a verb or as an adjective. The answer to this depends in part on the distribution of the participle: verbal participial forms can appear both to the left and the right of the finite verb, whereas adjectival participial forms can occur only to the left of finite verbs, similar to other adjectives:

(129) a. omdat het hek gisteren geverfd is/ is geverfd. (verbal)
because the fence yesterday painted is/ is painted
'because the fence was painted yesterday.'

b. omdat het hek al jaren geverfd is/* is geverfd. (adjectival)
because the fence for years painted is/ is painted
'because the fence has been painted for years.'

c. omdat Jan al jaren verliefd is/* is verliefd. (adjectival)
because Jan for years in love is/ is in love
'because Jan has been in love for years.'

If we apply this test to distinguish between a verbal and a nominalized infinitive, we find that the form *vissen* can occur on the left side of the finite verb only. This would suggest that the infinitive of the absentive has nominal status:

(130) omdat Jan vissen is/* is vissen.
because Jan fish-INF is/ is fish-INF
'because Jan is off fishing.'

However, in the perfect tense the infinitive can occur to the right of the perfect infinitive *wezen* only (131), which would suggest that the infinitive has verbal status. Observe that (131) displays the *infinitivus-pro-participio* (IPP) effect: the past participle is obligatorily replaced by its infinitival form, as is the case in all verb-raising contexts in standard Dutch:

(131) omdat Jan wezen vissen is/* vissen wezen is.
because Jan be-INF fish-INF is/ fish-INF be-INF is
'because Jan has been off fishing.'

As soon as the particle *uit* ('out') is added, *vissen* must occur to the left of the verbal complex, and there is no IPP effect:[54]

(132) omdat Jan uit vissen geweest is/*uit geweest vissen is.
because Jan out fish-INF been-PARTis out been-PART fish-INF is
'because Jan has been off fishing.'

The distribution of the infinitive in (132) would suggest that it has nominal status.

Matters are further complicated if we take into account the position of objects. The fact that infinitives can combine with an object suggests that nominalized infinitives pattern as verbs. Note, though, that in this environment objects are restricted to bare plurals (133a) or mass nouns (133b):

(133) a. Het boeken lezen is leuk.
the books read-INF is nice.
'Reading books is nice.'

b. Wijn drinken is gezond.
wine drink-INF is healthy
'Drinking wine is good for you.'

c. * Het dat boek lezen is leuk.[55]
the that book read-INF is nice
'Reading that book is nice.'

Note, though, that the infinitive in an absentive can occur together with bare plurals (134a) and mass nouns (134b), but also with singular definite objects (134c):

(134) a. Jan is boeken lezen.
Jan is books read-INF
'Jan is off reading books.'

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[54] I will discuss the relation between the presence of the *uit*-particle and the absence of the IPP effect in more detail in §2.6.2.

[55] It seems that the determiners *het* and *dat* cannot be adjacent:

(i)* *Het dat* boek lezen is saai.
the that book read is boring
(ii)? *Het* steeds *dat* boek lezen is saai.
the all the time that book read is boring
(iii) *Het* aan Marie geven van *dat* boek was een flauwe grap
the to Mary give of that book was a sick joke

See Barbiers et. al. (2004) for further discussion.

b. Jan is wijn drinken.
John is wine drink
'John is off drinking wine.'

c. Jan is dat boek lezen.
Jan is that book read-INF
'John is off reading that book.'

We can therefore conclude that the infinitive in the absentive construction has both nominal and verbal properties. It is possible that the infinitive has undergone some sort of category neutralization (in the sense of Van Riemsdijk 1983 and Lefèbre & Muysken 1988) in this context. I will return to the issue of category neutralization in §3.5.1.

According to the Projection Principle (which states that lexical information must be preserved at any level of syntactic representation), the infinitival form in the absentive must project an external theta role. In this respect, the verbal and/or nominal status of the infinitival form is not crucial for the argument that I want to make. While verbs prototypically project argument structure, the question whether nouns project argument structure is more contentious, though it is generally assumed that deverbal nouns do (see e.g. Grimshaw 1990). Arguments for this involve the principle of thematic preservation and the licensing of anaphors inside NPs.[56] In other words, the infinitival form must obey the Projection Principle, regardless of whether it is predominantly verbal or nominal. As regards the absentive, this implies that the subject *Jan* in *Jan is vissen* cannot receive its external theta role from *vissen*, since *Jan* has already received a theta-role from the AWAY-predicate.

The obvious candidate for the external theta-role (that is assigned by *vissen*) is PRO. Note that an analysis in terms of small *pro* is incorrect. Aside from the fact that Dutch does not have *pro*-drop, this would incorrectly predict that small *pro* could also be overt in this context. Since this is impossible (**Jan is hij* ('he-NOM') *vissen*), it follows that an AbsP account must assume the structure in (135):

(135) Jan_i is t_i AWAY PRO vissen.
John is away fish-INF
'John is off fishing'.

In (135), the lexical subject *Jan* functions as the controller of PRO via the trace. As such, there are no theoretical objections against the representation in (135). In §2.6.1

[56] Consider for instance the following Dutch example:

(i.) [Die PRO_i tekening van $hemzelf_i]_{NP}$ beviel Jan.
that drawing of himself pleased John
'John was pleased with that drawing of himself.'

where the presence of PRO is required to bind the anaphor *hemzelf*.

and §2.6.3, however, I will argue that an analysis of the absentive in terms of an AbsP is problematic on empirical grounds.

2.6 On the status of the AWAY-predicate

There are languages in which the absence of the subject is expressed by a particle. This has been argued to be the case in Quechua, for instance, where one of the interpretations of the particle *mu* is that of absence of the subject (see van de Kerke & Muysken 1990). In this section I will consider whether Dutch is another example of such a language. If so, this would support an analysis of the absentive in terms of an AbsP projection.

2.6.1 Dutch *uit* ('out')

In the Dutch absentive, the absence of the subject can be made more explicit by adding the particle *uit* ('out'), as in (136):

(136) Vader is uit vissen.
father is out fish-INF
'Father is off fishing.'

It is conceivable, therefore, that *uit* is the overt realization of an AbsP. However, closer inspection reveals that such an analysis is flawed.

Note first of all that some of *uit* + infinitive combinations have been lexicalized, e.g. *uit eten gaan* ('go out for dinner'). Indeed, according to the *ANS* (1984:578), the use of *uit* is restricted. *Uit* may occur with verbs that express recreational activities (137a), but not sports (137b):

(137) a. Jan is uit wandelen/fietsen.
John is out walk-INF/cycle-INF
'John is off walking/cycling.'

b. * Jan is uit volleyballen/schaken.
John is uit volleyball-INF/chess-INF
'John is off playing volleyball/playing chess.'

Furthermore, the activity must have a positive connotation in the sense that is an outing of some kind. If John is a professional mover, (138) is ungrammatical; this is true even if John likes his job:

(138)* Jan is uit verhuizen.
John is out move-INF
'John is off moving.'

These facts show that the occurrence of *uit* is lexically restricted.[57] Such restrictions are problematic if *uit* is the realization of AbsP. Most absentives do not allow the presence of *uit*, but these nevertheless have absentive semantics. This would imply, then, that AbsP (i.e. the projection that *uit* is identified with, and which is responsible for the absentive semantics) must in most cases remain empty. What is more, the semantic restrictions on the presence of *uit* seem to be extremely specific (e.g. recreational activities, but not sports). An account in terms of AbsP is therefore not very insightful.

A further problem is that the particle *uit* is not semantically identical with the concept of AWAY. Rather, *uit* is the opposite of *in*. As such it refers to a locative concept, but *uit* is not deictic in the sense that *here* and *there* are.

Furthermore, if we take into account absentives with an object, we can see that there are differences between the constructions *Jan is vissen* and *Jan is uit vissen*. The construction without overt *uit* in (139ab) allows both definite and indefinite objects. Indefinite objects can check their case through incorporation; but, given that definite objects do not incorporate, the latter must have the possibility to check their case in a higher functional projection. This suggests that in (139b) we must assume the presence of an AgrO projection:

(139) a. De poes is muizen vangen.
the cat is mice catch-INF
'The cat is off catching mice.'

b. De poes is de muizen vangen.
the cat is the mice catch-INF
'The cat is off catching the mice.'

However, if *uit* is overtly present, a definite object is no longer possible:

(140) a. De poes is uit muizen vangen.
the cat is out mice catch
'The cat is off catching mice.'

b. * De poes is uit de muizen vangen.
the cat is out the mice catch
'The cat is off catching the mice.'

[57] *Uit* also appears to have this positive connotation in the absence of an infinitive. For instance, (i)

(i) Ik ben vanavond uit.
I am tonight out
'I am going out tonight.'

cannot mean that the subject is leaving home in order to (say) put in some extra work at the office.

This difference is unexpected under any analysis of the absentive that takes as its starting-point a paraphrase with 'away'. If the infinitive is indeed a reduced clause, then we expect the object to be able to occur in this position. It could be argued that (140b) is ungrammatical because the presence of *uit* blocks movement of the definite object to AgrOP, which could be attributed to a PP island effect. Note that this presupposes that AgrOP is situated in a position to the left of *uit*. It is also possible that AgrOP is generated to the right of *uit*. In that case, an account in terms of case checking in a higher functional projection would no longer be available.

Note further that in sentences with overt *uit* object extraction is no longer possible, presumably due to a PP island effect. Compare (141ab), for instance:

(141) a. *Wat*$_i$ is de poes t_i vangen?
what is the cat catch-INF
'What is the cat off catching?'

b. * *Wat*$_i$ is de poes uit t_i vangen?
what is the cat out catch-INF
'What is the cat off catching?'

This begs the question why there is no such PP island effect in (141a), where we have object extraction but no overt *uit*. The AbsP has to be present in both (141a) and (141b), since both have an absentive reading. It is mysterious why AbsP should create an island if *uit* is present, but no island when *uit* is absent.

It could also be argued that that the impossibility of definite objects is caused by something else. For instance, there could be a relation with the *aan het* construction, as is perhaps suggested by the parallel in (142ab):

(142) a. * De poes is uit de muizen vangen.
the cat is out the mice catch-INF
'The cat is off catching the mice.'

b. * De poes is aan het de muizen vangen.
the cat is at the the mice catch-INF
'The cat is catching mice.'

I will come back to this issue in §2.9.

Whatever the explanation for the ungrammaticality of the combination of definite objects and *uit* may be, it would appear as though there are no arguments in support of an analysis in which *uit* is the head of an absentive projection. For this reason I conclude that *Jan is vissen* and *Jan is uit vissen* are not derivationally related.

2.6.2 *Uit* and absence of IPP

I will now turn to the observation that *uit* correlates with the absence of the IPP effect in standard Dutch verb-raising contexts. As was already noted in §2.5.2, in

standard Dutch a past participle is obligatorily replaced by its infinitival form in verb-raising contexts (the IPP effect):

(143) a. Jan heeft vannacht nauwelijks geslapen.
John has last night hardly slept-PART
'John didn't sleep much last night.'

b. Jan heeft vannacht nauwelijks kunnen/* gekund slapen.
John has last night hardly can-INF can-PART sleep-INF
'John has hardly been able to sleep last night.'

Note that the absentive with *uit* in the perfect tense undergoes an obligatory change in shape: the infinitive *wezen* is replaced by its participial form *geweest*. Hence, in (144c) there is no IPP effect.

(144) a. Jan is_1 $wezen_2$ $vissen_3$.
Jan is be-INF fish-INF

b.* Jan is_1 *uit* $wezen_2$ $vissen_3$.
Jan is out be-INF fish-INF

c. Jan is_1 *uit* $vissen_3$ $geweest_2$/ * $wezen_2$.
Jan is out fish-INF be-PART be-INF

In addition, (144c) shows that the word order of the infinitives *wezen* and *vissen* has changed: V2–V3 has turned into V3–V2. This verb order switch coincides with the absence of the IPP effect. This correlation is found in the Low-Saxon dialects of Dutch (which are spoken in the north-eastern part of the Netherlands). Consider for instance the example in (145), taken from the dialect of Sleen:[58]

(145) *Sleen*
Hij had_1 de hele stoet $opeten_3$ $kund_2$.
he had the whole bread eat-INF can-PART
'He could have eaten the entire loaf.'
(SAND database)

Note in (145) that the Low-Saxon participle *kund* does not have the prefix *ge-* that is found in Standard Dutch *gekund*. The SAND data suggest that in Low Saxon, V3–V2 word order, the absence of IPP and the lack of a *ge*-prefix form a cluster of properties.[59]

[58] The SAND database is an electronic database which contains syntactic data from a large number of Dutch dialects. A number of recent dissertations have been based on SAND data; see e.g. Craenenbroeck (2004), Van Koppen (2005) and DeVogelaere (2005).
[59] For the general idea that microvariation involves variation of clusters of properties, see Kayne (2000).

Vanden Wyngaerd (1994) argues that this correlation follows from the fact that V3 and the *ge*-prefix are in complementary distribution. The problem with this analysis is that it cannot account for a standard Dutch sentence of the type in (144c). Here we find an absentive in the perfect tense together with *uit*, which displays V3–V2 word order as well as the absence of IPP, *despite* the fact that the participle has the prefix *ge-*. This could be due to the fact that standard Dutch lacks a form *weest*, unlike the Low Saxon dialects. However, it could also be argued that what looks like a combination of V3–V2 switch and absence of IPP is in fact something entirely different. In that case, the presence of the *ge-* prefix would not be a counterexample to the claim that V3–V2 word order, the absence of IPP and the lack of a *ge*-prefix form a cluster of properties. I will pursue this alternative analysis here.

A first, general argument against the idea that the cluster of properties mentioned above plays a role in the perfect-tense absentive is that standard Dutch does not display a correlation between V3–V2 word order, the absence of IPP and the lack of a *ge*-prefix in any other context. Compare (146ab):

(146) a. * Hij had$_1$ het hele brood opeten$_3$ ∅-kund$_2$.
He had the entire bread eat-INF can-PART
'He could have eaten the entire loaf.'

b. Hij had$_1$ het hele brood kunnen$_2$ opeten$_3$.
He had the entire bread can-INF eat-INF
'He could have eaten the entire loaf.'

Furthermore, the occurrence of *geweest* is restricted to absentives in the perfect tense with *uit* (147a). An absentive in the perfect tense without *uit* cannot contain the participle *geweest* (147b); rather, as expected, the IPP effect ensures that we find the infinitival form *wezen* here.[60] Note in (147c–g) that the form *wezen* occurs to the left of the lexical infinitive, parallel with infinitival auxiliaries and modals:

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[60] De Schutter (1974:77–81) discusses the geographical distribution of the *wezen vissen* construction. His overview includes dialects that allow *vissen geweest*. The construction in (i) is found in Frisian and in a number of northern Dutch dialects; note that this construction contains a *te*-infinitive. The construction in (ii) occurs in a number of Western and Southern dialects of Dutch, including dialects in Belgian Limburg and in (parts of) West-Vlaanderen:

(i) Hij is te vissen geweest
he is to fish-INF be-PART

(ii) Hij is vissen (ge)weest
He is fish-INF be-PART

The construction in (iii) occurs in Frans-Vlaanderen, western Belgian Brabant, Oost-Vlaanderen and in parts of West-Vlaanderen and Dutch Limburg. The construction in (iv) is found in some parts of West-Vlaanderen, the western part of Oost-Vlaanderen and the southern part of the province of Antwerp:

(iii) Hij is geweest vissen
He is be-PART fish-INF

(iv) Hij is weest vissen
He is be-PART fish-INF

The construction in (iv) is in competition with *hij is weesten vissen* (he is be-INF fish-INF); notice that the latter contains the "new" infinitival form *weesten*. This construction is also found in Zeeland (with the

(147) a. Jan is *uit* vissen geweest/* wezen.
Jan is out fish-INF be-PART be-INF

b. * Jan is vissen geweest.
Jan is fish-INF be-PART

c . Jan is * geweest/ wezen vissen.
Jan is be-PART be-INF fish-INF

d. Jan heeft het boek kunnen lezen.
John has the book can-INF read-INF
'John has been able to read the book.'

e. Jan heeft het boek * lezen kunnen
John has the book read-INF can-INF

f. Jan moet haar de straat hebben zien oversteken
John must her the street have-INF see-INF cross-INF
'John must have seen her cross the street.'

g. Jan moet haar de straat * zien oversteken hebben.
John must her the street see-INF cross-INF have-INF
'John must have seen her cross the street.'

For this reason, it is conceivable that it is not the absence of IPP and a change in word order that are involved, but something else.

I would like to suggest that adding *uit* to an absentive changes the bare infinitive into a noun, or at least into an infinitive with predominantly nominal properties (see the discussion on category neutralization in §3.5.1). In other words, *uit vissen* is a prepositional phrase with the structure [$_{PP}$ uit [$_{NP}$ vissen]]. On this assumption, the occurrence of *geweest* (instead of *wezen*) is expected, since this is also what we find in sentences of the kind in (148):

(148) Hermelien is [$_{PP}$ in [$_{NP}$ de stad]] geweest/* wezen.
Hermione is in the city be-PART be-INF
'Hermione has been in the city.'

According to this analysis, there has been no shift in word order from V2–V3 to V3–V2, since there is only a single infinitive. Rather, there is a PP preceding the participle *geweest*, which is perfectly normal.

A further argument for a PP analysis is that the [*uit+infinitive*] constituent can be coordinated with a PP such as [*naar de stad*]:

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exception of Schouwen-Duiveland), the western part of Zeeuws-Vlaanderen, and the western part of the province of North-Brabant.

(149) We zijn [PP naar [NP de stad]] en [PP uit [NPvissen]] geweest.
We are to the city and out fish-INF been
'We went to the city and we went fishing.'

Note, however, that it is impossible to add a determiner to the nominalized infinitive (i.e. *[PP *uit* [DP *het vissen*]]). This suggests that the nominalized infinitive retains at least some verbal properties.[61]

In the analysis proposed here, the IPP effect in standard Dutch occurs where it is expected to occur, as is illustrated by the sentences in (150):

(150) a. Jan had [PP uit [NP vissen]] kunnen zijn/wezen maar was toch thuis.
John had out fishing can-INF be-INF but was still home
'John could have been off fishing, but was nevertheless home.'

b. Ron had [PPin [NP de stad]] kunnen zijn/wezen maar was toch thuis.
Ron had in the city can-INF be-INF but was still home
'Ron could have been off to the city, but was nevertheless home.'

Note that in (150) both *zijn* and *wezen* are possible, though *wezen* is considered substandard by many speakers.

Another argument for a PP analysis is that the infinitive cannot select a definite object when *uit* is involved:

(151) a. De poes is uit muizen vangen geweest.
the cat is out mice catch-INF be-PART
'The cat has been off catching mice.'

b. * De poes is uit de muizen vangen geweest.
the cat is out the mice catch-INF be-PART
'The cat has been off catching the mice.'

c. * Het de boeken lezen kost tijd.
the the books read-INF takes time
'Reading the books takes time.'

This is expected if, as is claimed here, the infinitive has nominal properties.

A further argument, which I already touched on in §2.5.2, is that an infinitive that is preceded by *uit* does not allow extraction:

[61] This is reminiscent of the restrictions on nominalised verbs in English. For instance, while gerunds can be combined with a preceding determiner (e.g. *the fishing*), they generally resist pluralisation (e.g. **the fishings*). For an early discussion of this problem, see Chomsky (1970).

(152) * Wat is de poes uit _ vangen geweest?
what is the cat out catch-INF be-PART
'What has the cat been off catching?

In a PP analysis this can be explained simply as a PP island effect.

Summarizing, I propose that [*uit + infinitive*] is a PP. This analysis implies that the constructions *Jan is vissen* and *Jan is uit vissen* are not derivationally related. One consequence of this analysis is that the construction with *uit* does not qualify as a grammatical absentive. Rather, it should be viewed as a type of lexical absentive, and it is in this respect similar to a construction like *Jan is in de stad* ('John is in town'). In lexical absentives, the notion of absence is signalled by lexical material. In both *Jan is uit vissen* and *Jan is in de stad*, this lexical material takes the form of a PP.

The final question that must be addressed in relation to the perfect-tense absentive is why *wezen* is required. Note in (153) that the occurrence of an infinitive is expected because the perfect of the absentive involves a verb-raising context:

(153) a. * Jan is zijn vissen.
John is be-INF fish-INF
'John has gone fishing.'

b. Jan is wezen vissen.
John is be-INF fish-INF
'John has gone fishing.'

In De Schutter (1974), it is argued that standard Dutch *wezen vissen* derives from *geweest vissen*. De Schutter speculates that the unstressed prefix *ge-* was lost, after which *weest* changed to *weesten* due to analogical pressure; a subsequent process of /t/-deletion resulted in the current form *wezen vissen*. Here I will pursue an alternative account, based on Postma (1993).

In the Dutch paradigm of *be*, the two roots *zij-* and *wez-* stand in a suppletive relationship, except in bare infinitives, where they alternate:

(154) Je moet niet zo brutaal zijn/wezen!
you must not so cheeky be-INF
'Don't be so cheeky!'

However, as noted earlier, *wezen* here is considered substandard by many speakers.

Postma (1993) provides an analysis of the distribution of *zijn* and *wezen*. As Postma shows, there is a correlation between auxiliary selection and the form of the *be*-participle. If a language uses *be* as a perfect auxiliary, then it will also have a suppletive participial form of *be* (which Postma refers to as WS). This is the case in Dutch (*zijn*-AUX/*geweest*-PART), but also in languages like Italian (*essere*-AUX/*stato*-PART; from *stare*) and German (*sein*-AUX/*gewesen*-PART). If, on the other hand, a language uses *have* as an auxiliary, then the participle of *be* is not derived from a

suppletive root (Postma refers to the non-suppletive form as BE). Examples of such languages are English (*have*-AUX/*been*-PART), Norwegian (*har*-AUX/*vært*-PART) and French (*avoir*-AUX/*été*-PART).

Based on the properties of *be* in Semitic, Postma goes on to argue that both the auxiliary *be* and the participle BE are pronominal in nature. However, the suppletive participle WS is anaphoric. This allows Postma to account for the suppletive character of the *be* paradigm in terms of binding. Postma (1993:37) formalizes this in terms of the "BE-parameter":[62]

(155) *BE-parameter*
BE must be locally free (and WS must be locally bound).

As Postma (1993:36) shows, the BE-parameter accounts for the patterns in (156), exemplified for Dutch and English:

(156)

Verb pattern	*Example*	*Reason for ungrammaticality*
*BE-AUX BE-PART	*Wij zijn gezijnd	Principle-B violation
HAVE-AUX BE-PART	✓We have been	
BE-AUX WS-PART	✓We zijn geweest	
*HAVE-AUX WS-PART	*We hebben geweest	Principle-A violation

Postma's BE-parameter makes it possible to provide an answer to the question of why the infinitive *zijn* cannot occur in the perfect form of an absentive. *Zijn* is a non-suppletive infinitival form BE, and hence pronominal. Given that the absentive also takes the auxiliary BE, it follows that examples of the kind in (157) violate principle-B:

(157) * Jan is zijn$_{[+pronominal, -anaphoric]}$ vissen.
John is BE-INF fish-INF
'John is off fishing.'

This violation can be circumvented by inserting the WS form of the infinitive, on the assumption that both the participle and the infinitive of the WS form are anaphoric:

(158) Jan is wezen$_{[-pronominal, +anaphoric]}$ vissen.
John is WS-INF fish-INF
'John has gone fishing.'

[62] More specifically, Postma (1993) proposes that both the infinitive and the present tense of BE are universally pronominal, whereas participle formation is parametrized as pronominal (i.e. a BE form as in English) or anaphoric (i.e. a WS form as in Dutch). Postma (ibid.) further assumes that HAVE is not a possible antecedent.

In accordance with principle A, the anaphor *wezen* in (158) is locally bound by the auxiliary *is*.

Applying Postma's account of the roots *zij-* en *wez-* to the absentive is attractive for two reasons. First, it presents an explanatorily adequate analysis which, aside from binding principles, does not require any additional machinery to account for the distribution of *zij-* en *wez-*. Second, it adds further support to a more general approach to binding. Postma's account suggests that binding principles are not only active in the syntactic component, where they control the interpretation of pronominal, temporal and spatial reference, but also in the morphological component, where they control the selection of the auxiliary roots *zij-* en *wez*.

In the following section, I will consider another type of AbsP analysis. However, we will see that this alternative, which is based on the particle *heen*, is also inferior to an interpretation in terms of binding.

2.6.3 The *heen*-particle

Van Bree (2000:50) describes a special form of the absentive in Low-Saxon dialects. Besides *zijn* and an infinitive, the Low-Saxon absentive may contain a form of the particle *heen* (*hen*, *hin*, *en*).[63] *Heen* in these dialects is a deictic particle which usually indicates movement away from the speaker; for this reason, I will gloss *heen* and its variants as 'away'.[64] Furthermore, in Van Bree's example the infinitive is optionally preceded by *te*:[65]

(159) Marc is heen (te) fietsen weest.
Marc is away to cycle-INF been
'Marc has been off cycling.'

The SAND-database contains the following dialect data:

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[63] This construction is also found in some Belgian dialects of Dutch. For instance, Tuerlinxc (1865) provides an example from the dialect of Hageland which contains the particle *eweg* (a cognate of 'away'), preceded by *zijn* and followed by an infinitive:

(i) Ze zijn eweg spele.
they are away play-INF
'They are off playing.'

[64] For a discussion of the relation between the particle *hen* and the auxiliary *gaan* in the dialect of Borne (a village in the eastern part of the province of Overijssel), see Nuijtens (1962:144–149).

[65] The variety of Frisian that is spoken in the Dutch province of Friesland also has an absentive with a *te*-infinitive. However, as Hoekstra (1997) notes, in Frisian *te* is obligatory in this context, as is shown in (i):

(i) Se is te silen.
she is to sail-INF
'She is off sailing.'

(160) *Present*:

a. Jan is hen vissen. (Gramsbergen, Sleen)
John is away fish-INF

b. Jan is en visken. [66] (Noord-Deurningen)
John is away fish-INF

c. Jan is heen vissen.
John is away fish-INF (Hooghalen, Erica)
'John is off fishing'

Past:

d. dat Jan gisteren en visken was. (Noord-Deurningen)
that John yesterday away fish-INF was

e. dat Jan gisteren heen vissen was. (Sleen)
that John yesterday away fish-INF was
'that John was off fishing yesterday'

Perfect:

f. dat Jan gisteren en visken weest is. (Noord-Deurningen)
that John yesterday away fish-INF be-PART is

g. dat Jan gisteren hen vissen weest is/ hef. (Sleen)
that John yesterday away fish-INF be-PART is has
'that John was off fishing yesterday'

The SAND corpus does not contain any examples with a *te*-infinitive. The data show that *heen* is allowed in all tenses. Most speakers report that *heen* is obligatory, although they do not reject sentences without *heen*, such as *Jan is vissen*, but this might be due to interference from the prestige language, Standard Dutch. (160g), a perfect-tense absentive from the Sleen dialect, is especially interesting, since here the auxiliaries BE and HAVE are in apparently free variation.[67] This sentence might therefore be a counterexample to Postma's (1993) generalization (see §2.6.2).

Whenever *heen* occurs, it always directly precedes the VP; *heen* never occurs to the right of the VP (though see the discussion of circumpositional *heen* below).

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[66] Note in (160b) that *en* is a form of *heen*, not the conjunction *en* ('and'). (160b) must therefore be distinguished from the construction in (i), which is found in some other dialects of Dutch:

(i) Jan zit en spelen.
John sits and play-INF
'John is playing'

This construction is termed "verbal hendiadys"; see Haslinger & Van Koppen (2003) for discussion.

[67] This alternation is also found in the dialects of Hooghalen and Noord-Deurningen.

Furthermore, *heen* displays the same restrictions with respect to direct objects as *uit* (see §2.6.1), in that only indefinite objects are allowed, and extraction (or, more precisely, scrambling) of both definite objects (161a) and indefinite objects (161b) is impossible:

(161) a. De poes is hen (*de) muze vange. (Gramsbergen)
the cat is away the mice catch-INF
'The cat is off catching mice.'

b. * De poes is $muze_i$/ de $muze_i$ hen t_i vange.
the cat is mice the mice away catch-INF
'The cat is off catching mice.'

All informants of dialects with *heen* agree that *uit* and *heen* are in complementary distribution. Thus, (162) is ruled out:

(162) * Jan is uit heen/ heen uit vissen.
John is out away away out fish-INF
'John is off fishing.'

However, the distribution of *heen* is not identical to that of *uit*. (163), taken from the dialect of Gramsbergen, shows that the *heen*-particle can occur with all types of sports, and also with activities that do not have a connotation of leisure time:

(163) Jan is hen volleyballen/ hen boodschappen doen.
John is away volleyball-INF away groceries buy-INF
'John is off playing volleyball/buying groceries.'

As observed in §2.6.1, such constructions are impossible with *uit*.

Note, too, that the *heen*-particle in Low-Saxon differs from that in Standard Dutch. In Standard Dutch, the occurrence of *heen* is severely restricted. It occurs in a limited number of frozen expressions such as those in (164):

(164) a. Waar ga je heen?
where go you to
'Where are you going?'

b. Hij is ver heen.
he is far away
'He is out of it (i.e. drunk, insane, demented).'

In the Low-Saxon dialects that I investigated, *heen* can also occur as part of a circumposition in combination with the preposition *naar* (165a); this is not possible in Standard Dutch (165b):[68]

(165) a. Hie is naar Coeven hen. (Gramsbergen)
he is to Coevorden away
'He has gone to Coevorden.'

b. * Hij is naar Den Haag heen. (Standard Dutch)
he is to The Hague away
'He has gone to The Hague.'

The use of circumpositional *heen* is a familiar property of Low-Saxon (see Gerritsen 1991).[69] The distribution of *heen* in these dialects is more similar to German *hin* than Standard Dutch *heen*, which is not surprising given that the Low-Saxon area borders German-speaking area. In (166) I give two examples of German circumpositional *hin*:

(166) a. Gegen Ende hin
towards end to
'Towards the end.'

b. Nach Berlin hin werden die Straße immer schlechter.
to Berlin to become the streets increasingly worse
'In the direction of Berlin, the streets become increasingly worse.'

I conclude that *heen* is not the Low-Saxon counterpart of Standard Dutch *uit*, nor is Low-Saxon *heen* comparable to Standard Dutch *heen*. Not only does Low-Saxon *heen* form part of the absentive, but it also differs from Standard Dutch *heen* in other respects.

Since I argued that the construction [*uit+infinitive*] is an instance of a lexical absentive, the question arises whether [*heen+infinitive*] also qualifies as a lexical absentive. If so, its absentive semantics would not be controlled by binding, but would instead be expressed lexically by the *heen-p*article. There is reason to be skeptical of such an analysis, however. Although I have glossed *heen* as 'away', this

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[68] In standard Dutch, *heen* can occur as part of a circumposition that is introduced by the preposition *door* ('through') or *om* ('around'):

(i) We liepen door de stad (heen).
we walked through the city HEEN
'We walked through the city.'

(ii) We liepen om de stad (heen).
we walked around the city HEEN
'We walked around the city.'

Here the particle *heen* does not express movement away from the speaker, but rather seems to add telic aspect to the event.

[69] Gerritsen (1991) presents an overview of the distribution of prepositional and circumpositional *naar … heen/toe*. The construction *naar huis heen* ('to home HEEN') mainly occurs in Low-Saxon.

is not entirely correct. *Heen* is a deictic particle that expresses movement away from the speaker. As such, it reinforces the overall meaning of an absentive, except for the fact that, strictly speaking, an absentive does not imply movement away from the *speaker* per se. The question of whether Low-Saxon [*heen+infinitive*] is a lexical or a grammatical absentive is an issue that requires further research. This research should take as its starting-point the properties and distribution of Low-Saxon *heen*.

2.7 Predictions and consequences of the binding analysis

Having shown that the alternatives to a binding approach to the Dutch absentive are inferior, I now discuss some of the predictions and consequences of the binding analysis.

2.7.1 Introduction

In §2.4.1 I proposed that the absentive involves obligatory shift at the spatial level due to principle B of the Binding Theory. I argued for the existence of a triple index on arguments: *x* for pronominal reference, *t* for temporal reference and *l* for spatial reference. Below, in §2.7.2, I will provide independent evidence for the existence of a temporal and spatial index on arguments. In the remainder of §2.7 I will discuss a number of consequences of a binding approach. These consequences stem from the prediction given in (167):

(167) Absentive semantics are forced when there is coreference at the pronominal (*x*) level and at the temporal (*t*) level.

To test this prediction, we must consider other cases that involve coreference at the *x* and *t* level.[70] At first sight, a shift in location is expected to occur more often than just in the absentive. I will argue that this is indeed the case, and that the notion of "shift at the spatial level" must receive a wider interpretation than a literal change of location. My discussion of this issue is admittedly tentative; a detailed investigation of the consequences of a triple index on arguments is beyond the scope of this thesis.

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[70] An important question is how the *x*, *t* and *l* index relate to each other. For instance, does obligatory disjoint reference at the pronominal level occur if the *t* and *l* indices are coreferential? If this is the case, then obligatory disjoint reference could be active between the subject of a *with*-absolutive and the subject of the matrix clause, for instance. Consider in this respect (i), where the two pronouns are coreferential with respect to time and place, and therefore cannot refer to the same person:

(i) [Met hem$_x$ in het ziekenhuis] kan hij$_{*x/y}$ niet op vakantie.
with him in the hospital can he not on holiday
'With him in the hospital, he cannot go on a holiday.'

I am grateful to Henk van Riemsdijk for raising this issue.

2.7.2 A temporal and spatial index on nouns

The binding analysis of the absentive assumes that every argument has a triple index consisting of a pronominal variable *x*, a temporal variable *t* and a locative variable for *l*. The idea that a noun has a pronominal index is not controversial; indeed, it is used as a notational shorthand in the Binding Theory. The idea that nouns also have a *t* and an *l* variable needs some further clarification, however.

Turning first to the issue of temporal specification, consider the following minimal pair, taken from Barbiers (1995:130):

(168) a. [De krant gisteren] meldde het voorval niet.
the newspaper yesterday reported the incident not
'Yesterday's newspaper did not report the incident'.

b. [De krant van gisteren] meldde het voorval niet.
the newspaper of yesterday reported the incident not
'Yesterday's newspaper did not report the incident'.

According to the ANS (1984), the bracketed constituent in (168a) (which, following Barbiers, I will refer to as a "pseudo-DP") is typical of spoken language, while the bracketed constituent in (168b) is preferred in written language. Barbiers (1995) terms the latter construction an "adverbially modified DP". Barbiers demonstrates that the two members of the pair differ not only in terms of register, but also in terms of syntax. First, the presence of *gisteren* in a pseudo-DP rules out cooccurrence of a contradictory time adverbial (169a). This restriction does not hold for adverbially modified DPs, such as in (169b):

(169) a. * Die man gisteren vertelde vandaag de waarheid.
that man yesterday told today the truth

b. Die man van gisteren vertelde vandaag de waarheid.
that man of yesterday told today the truth
(Barbiers 1995:132)

Second, with a pseudo-DP, a matrix verb with present tense cannot be interpreted as referring to the speech time (170a). In this respect, an adverb like *gisteren* that occurs in a pseudo-DP behaves like a matrix adverbial. However, when *gisteren* is embedded in an adverbially modified DP, a matrix verb with present tense can be interpreted as referring to the speech time (170b):[71]

[71] Henk van Riemsdijk (p.c.) informs me that the corresponding adjective in German shows the same behaviour as the *van*-PPs in Dutch. Consider for instance:

(i) Die gestrige Zeitung liegt im Postfach.
the yesterday's paper lies in-the-DAT letterbox
'Yesterday's paper lies in the letterbox.'

(170) a. * De krant gisteren ligt in de gang.
the newspaper yesterday lies in the hallway
'Yesterday's newspaper lies in the hallway.'

b. De krant van gisteren ligt in de gang.
the newspaper of yesterday lies in the hallway
'Yesterday's newspaper lies in the hallway.'
(Barbiers 1995:132)

Despite this relation between the adverb and the matrix verb in pseudo-DPs, it is clear that *gisteren* temporally modifies the DP *de krant*. I take this as an argument in favour of a temporal variable on nouns; see Musan (1995) for further discussion of this issue.[72]

Similar observations can be made regarding locative adverbs. When a pseudo-DP contains a locative adverb, it is impossible to add a contradictory locative adverb (171a). This does not hold for the adverbially modified DP variant (171b):[73]

(171) a. * De fans thuis zitten in het stadion.
the fans home sit in the stadium
'The fans at home are in the stadium.'

b. De fans van thuis zitten in het stadion.
the fans of home sit in the stadium
'The fans from home are in the stadium.'
(Barbiers 1995:133)

Based on the ungrammaticality of (171a), I conclude that the locative adverb *thuis* modifies the DP *de fans*. I take this as an argument in favour of a locative index on nouns. [74]

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[72] Musan (1995) investigates whether the temporal interpretation of an NP is determined by the temporal interpretation of the rest of the clause, and whether there is any further interaction between the interpretation of NPs and the temporal interpretation of the main predicate of a clause.

[73] Henk van Riemsdijk (p.c.) informs me that the corresponding adjectives in German show the same behaviour as the *van*-PPs in Dutch. Consider for instance:

(i) Die hiesige Fans sitzen alle im dortigen Stadium.
the here fans sit all in-the-DAT there stadium
'The fans from here are all in the stadium overthere.'

[74] Consider in this light also the following example:

(i) Amsterdam, daar ben ik nog nooit geweest.
Amsterdam, there am I still never been
'Amsterdam, I have never been there.'

Finally, I briefly consider the notion of spatial reference, and more specifically that of place deixis, from a cross-linguistic perspective. In the context of place deixis the terms "proximal" and "distal" are often used, where the former refers to a location close to the speaker and the latter to a location removed from the speaker. In a language like English, place deixis would appear to be restricted to demonstratives (*this*/*that*) and locative adverbs (*here*/*there*). As noted by Jayaseelan & Hariprasad (2001), it is traditionally assumed that nominal expressions such as *John*, *he* and *the book* are underspecified for place deixis. However, in many languages of southern Asia, place deixis pervades the entire nominal system. In the Dravidian language Malayalam, for instance, pronouns appear in proximal/distal pairs (see Jayaseelan & Hariprasad 2001:133):[75]

(172) a. awan iwan
that-he this-he

b. awar iwar
that-they this-they

Jayaseelan & Hariprasad argue that referring nominal expressions are universally specified for place deixis. They formalize this in terms of a DeixP in the extended nominal projection. While I do not adopt their proposal, I take their observations as further support for the claim that all nouns have a locative index *l*.

2.7.3 Reflexive verbs (anaphors)

In this section I consider to which extent triple indices can also be used in binding phenomena that involve reflexives. As (173) shows, Dutch has two anaphors, the simplex anaphor *zich* ('self') and the complex anaphor *zichzelf* ('him/herself'); both express coreference with their antecedent:

The presence of *daar* (the emphatic variant of *er*) is traditionally accounted for by assuming the presence of an empty locative preposition like *in* ('in') preceding *Amsterdam*. In LDL-configurations such as (i), Dutch allows preposition drop. The presence of a P is assumed because normally *daar* cannot refer to DPs:

(ii) * Amsterdam, daar ken ik niet.
Amsterdam there know I not

However, regarding (i), it could also be suggested that the presence of *daar* is forced by a locative index on the DP *Amsterdam*, which then licenses the referential pronoun *daar*. I will not pursue such an analysis, however, because I would like to claim that all DPs have a locative variable, and not just the locative DPs.

[75] Note that the proximal forms have a high vowel (with a high second formant) and the distal forms have a low vowel (with a low second formant). This correspondence between sound and meaning appears to be a strong cross-linguistic tendency, and has been argued to be sound-symbolic in nature (see e.g. Hinton *et al*. 1994). Other examples are Dutch *hier*/*daar* and Italian *qui*/*qua*.

(173) Harry$_{(x,t,l)}$ verdedigt zich(zelf)$_{(x,t,l)}$.
Harry defends himself
'Harry defends himself.'

The interpretation of anaphors is regulated by principle A of the binding theory, which says that an anaphor must be bound in its governing category (see for instance Chomsky 1981). As expected, (173) therefore involves not only coreference at the pronominal level, but also at the temporal level, given that there is a single temporal domain, and at the spatial level. In other words, anaphors in this configuration do not present a challenge to my formalisation of binding in terms of a triple index.
Note that it would appear as though in (173) *zich* and *zichzelf* are interchangeable. However, it has been noted that in other contexts the use of the simplex or complex anaphor brings with it a difference in interpretation (see Voskuil & Wehrmann 1990ab and Rooryck & Vanden Wyngaerd 1997). Consider the example in (174):

(174) Münchhausen trok zich(zelf) uit het moeras.
Münchhausen pulled self/himself out of the swamp
'Münchhausen pulled himself out of the swamp.'
(Voskuil & Wehrmann 1990ab)

When *zich* is selected, the sentence has an interpretation in which Münchhausen pulled himself out of the swamp by holding on to (say) a branch or rope. In the case of *zichzelf*, the sentence has a reading that corresponds to Münchhausen's own story, in which he removed himself from the swamp by pulling at his own hair. The latter interpretation is the result of what Rooryck & Vanden Wyngaerd refer to as the "duplication" or "*Doppelgänger*" effect: here Münchhausen is both the puller and "pullee". (175) presents a clearer case of the duplication effect; note that here *zich* is in fact excluded:

(175) DorianGray zag zichzelf/*zich op het schilderij zoals hij werkelijk was.
DorianGray saw himself on the painting as he really was
'Dorian Gray saw himself in the painting as he really was.'
(Rooryck & Vanden Wyngaerd 1997:2)

Rooryck and Vanden Wyngaerd claim that a duplication reading is most prominent in contexts where a spatio-temporal distance between the subject and the anaphor is implied.

(176) a. Hermelien zag zich/zichzelf in de spiegel.
Hermione saw self/herself in the mirror
'Hermione saw herself in the mirror.'

b. Hermelien zag ?zich/zichzelf op de foto.
Hermione saw self/herself in the picture
'Hermione saw herself in the picture.'

(176a) involves simultaneity of viewer and "viewee", and both *zich* and *zichzelf* are allowed. However, viewing oneself in a picture, painting or on, say, a video recording, as in (176b), implies a temporal distance between viewer and "viewee". In such cases speakers display a strong preference for *zichzelf*.

The question arises whether a duplication reading should be accounted for in terms of triple binding. In other words, should the *Doppelgänger* effect (which involves by its very nature a *Doppelgänger* of the subject that is at another location than the subject itself) be assigned the following syntactic representation?

(177) Dorian Gray$_{(x,t,l)}$ zag zichzelf$_{(x,t,p)}$/*zich op het schilderij zoals
Dorian Gray saw himself on the painting as
hij werkelijk was.
he really was
'Dorian Gray saw himself in the painting as he really was.'

In this representation, *Dorian Gray* and the complex anaphor *zichzelf* have the same index at the level of pronominal reference. The index *t* for temporal reference is also identical because there is a single "seeing"-event, and therefore a single temporal domain. Given principle A, however, coreference at the spatial level is also expected but in this representation there is disjoint reference. In other words, (177) should be ruled out by principle A, but it is not.

It is possible that the complex anaphor *zichzelf* has some pronominal characteristics in certain contexts. This would imply, then, that *zichzelf* in examples such as (177) respects principle B. As such, disjoint reference at the spatial level is expected and explains in fact the grammaticality of (177). Note though, that the specific conditions under which *zichzelf* is a 'pronominal' anaphor are rather unclear. The question remains why the duplication effect arises more easily with some predicates than with others. Recall from (173) that the verb *zich(zelf) verdedigen* allows both the simplex and the complex anaphors, but when the complex anaphor is used, it is difficult to assign a duplication reading.[76] Note in this respect that Rooryck & VandenWyngaerd (1997:2) assert that

[76] Rooryck and Vanden Wyngaerd (1997:12) do in fact claim that there is a difference in interpretation here: "When *zich* is used, the interpretation of *verdedigen* refers to a defence in response to an immediate attack, while the use of *zichzelf* is also compatible with an interpretation in which the subject defends a decision taken previously. Already, this interpretation affords a glimpse of "duplication" effects to the extent that the subject's previous *self* is spatio-temporally different from the *self* that is taking care of the defence." I do not share these judgements.

> if the admittedly informal notion of "duplication" is to be formalized at all within Binding Theory, the traditional analysis of anaphoricity as involving identity/(co)reference in the world is insufficient. An alternative view on (co)reference and anaphoric binding is required, within which an interpretation of the type "same, but nevertheless (spatio-temporally) different" can be formally expressed.

Furthermore, if Rooryck and Vanden Wyngaerd's observation that a duplication reading is most prominent in contexts where a spatio-temporal distance between the subject and the anaphor is implied is correct, then the spatio-temporal distance can also be attributed to pragmatice factors instead of syntactic factors like binding. The presence of words like *picture* or *painting* provides the pragmatic context for a spatio-temporal distance interpretation. I leave the duplication effect and its relation to binding theory as a topic for further research.

2.7.4 Verbs of perception

In this section I consider triple-index binding in relation to verbs of perception. The reason for this is that perception verbs may create a coreferential context at the pronominal and temporal level, so that a shift in location is expected. Consider the examples in (178ab):

(178) a. $\text{Ik}_{(x,t)}$ zie $\text{hem}_{(y,t)}$ een boek schrijven.
I see him a book write
'I see him write a book.'

b. $\text{Ik}_{(x,t)}$ zie $\text{mezelf}_{(x,t)}$ een boek schrijven.
I see myself a book write
'I see myself write a book.'

In (178a) principle B is respected because the pronominal subjects of *zien* and *schrijven* refer to different individuals. (178b) is not problematic either, since here the subjects of *zien* and *schrijven* are the same and principle A is respected.

Observe, however, that besides a literal interpretation, in which the subject sees herself in the mirror while she is writing a book, (178b) also has an alternative, epistemic modal interpretation. This interpretation is in fact preferred; it can be paraphrased as "the subject believes that it is likely that she will write a book".[77] This reading is made more prominent if the modal particle *wel* ('really') is added:

(179) $\text{Ik}_{(x,t,p)}$ zie $\text{mezelf}_{(x,t,l)}$ wel een boek schrijven.
I see myself really a book write
'I really believe that I will write a book.'

[77] Sjef Barbiers (p.c.). See also Van der Leek (1989:167).

I propose to analyse the epistemic modal interpretation as involving a spatial shift as well, as is signalled by the indices in (179). Again, this implies that a complex anaphor like *mezelf* respects principle B in certain contexts. An additional assumption that is required for this epistemic interpretation is that a shift in the spatial dimension can also be interpreted metaphorically. Epistemic modality can be thought of as a calculation over possible worlds. Thus, (179) can be paraphrased as "I believe that there is a possible world in which it is true that I write a book". That is, the subject in the here and now compares herself with a *Doppelgänger* in another, possible world. Since this *Doppelgänger* is by its very nature is in a different location, we are dealing with a spatial shift.

At this point it is interesting to recall that Stirling (1993:215) also argues in favour of a wider interpretation of the notion of "change" in relation to unexplained DS marking in Amele (see §2.4.5):

> Often it is obvious that the change being indicated is deictic rather than syntactic and that these changes are in the area of *world, time or place* reference points. [italics mine, IH]

Note, however, that an epistemic reading is not restricted to coreferential subjects. Consider for instance (180), which can be uttered by a spectator during a soccer match:

(180) $Ik_{(x,t,l)}$ zie $het_{(y,t,p)}$ nog wel 4–1 worden.
I see it still really 4–1 become
'I won't be surprised if the match ends in 4–1.'

This is surprising, since we expect a shift in the spatial dimension to occur only if there is coreference at the pronominal and temporal level, i.e. as a last-resort strategy to avoid a principle-B violation. (180) suggests that a spatial shift may also occur when two arguments are not coreferential. It could be the case that a metaphorical shift in location is subject to other conditions than a literal shift in location, as is the case in the absentive. I will leave this as a topic for future research.

2.7.5 Modals

In this section I consider the idea of triple indices in relation to modals. As I already noted in §2.4.2, there is an ongoing debate in the literature regarding the raising or control status of modal verbs (see e.g. Ross 1969, Klooster 1986, Barbiers 1995, and Erb 2001). Traditionally, deontic modals are viewed as control structures and epistemic modals as raising verbs. As far as the triple of indices is concerned, there is therefore crucial difference. If deontic modals are control structures, then there are two arguments involved, i.e. the lexical subject and the PRO subject, which both carry their own triple of indices. The situation is different for epistemic modals. If these involve raising, then the subject is raised from a lower position to the canonical subject position; the subject and its trace thus form a chain, and it is this

chain that has argument status. This implies, then, that in a raising configuration there are no two arguments available that can be evaluated for the interpretation of the triple. The binding approach in terms of a triple index makes therefore no predications with respect to the raising configuration in (181a):

(181) a. Harry$_{(x,t)}$ moet ~~Harry~~ thuis zijn. (epistemic)
Harry must home be
'It is probable that Harry is at home.'

b. Hermelien$_{(x,t)}$ moet PRO$_{(x,t)}$ een boek schrijven. (deontic)
Hermione must PRO a book write
'It is necessary that Hermione writes a book.'

In control configurations such as (181b), we expect to find a shift in location, given that PRO respects principle B of the binding theory, and because the subject *Hermelien* and PRO have the same pronominal and temporal indices. At first sight, no such shift seems to occur. Recall, however, the notion of polarity transition that Barbiers (1995) uses in his classification of modals (see§ 2.4.2). In general terms, a polarity transition implies that there is a scale at which a shift from stage 0 to stage 1 is potentially possible. Consider for instance *de fles moet leeg* ('the bottle must be emptied'). This sentence implies that there is a scale available at which the bottle changes from full to empty. In a similar fashion, the deontic interpretation in (181b) involves a scale on which the event [*een boek schrijven*] ('write a book') is or is not activated.

Just like the epistemic modal interpretation which may arise with the perception verb *zien* ('see') (cf. § 2.7.4, example (179)) can be analyzed as a shift in location in a metaphorical way, i.e. a shift in location from one possible world to another, it could be argued that the potential polarity transition in a control structure like (181b) involves a metaphorical shift in location as well. In the case of a polarity transition, the locative shift can be said to be metaphorical in the sense that it refers to the shift or transition on an abstract scale from stage 0 to stage 1.

2.7.6 Control configurations

In structures with subject control, as in (182), there is coreference between the subject of the finite verb and the PRO subject of the infinitive:

(182) Hermelien$_x$ probeert PRO$_x$ een taart te bakken.
Hermione tries PRO a cake to bake
'Hermione tries to bake a cake.'

The same holds for the object and PRO with object-control verbs, as in (183):

(183) Hermelien dwingt Harry$_x$ PRO$_x$ een taart te bakken.
Hermione forces Harry PRO a cake to bake
'Hermione forces Harry to bake a cake.'

That (183) contains two tense domains becomes apparent if we add a temporal adverb such as *morgen* to the infinitival clause: [78]

(184) Hermelien dwingt $Harry_x$ nu morgen PRO_x een taart te bakken
Hermione forces Harry now tomorrow PRO a cake to bake
'Right now, Hermione forces Harry to bake a cake tomorrow.'

These cases therefore do not pose a problem to the binding analysis. The temporal indices are not coreferential, and hence no shift in location is expected.

However, the impossibility of *zullen*-insertion in subject-control configurations indicates that there is only a single tense domain:[79]

(185) * $Hermelien_{(x,t,l)}$ probeert $PRO_{(x,t,l)}$ een taart te zullen bakken.
Hermione tries PRO a cake to will bake
'Hermione tries to be going to bake a cake.'

This means that we expect to find a spatial shift in this configuration. At first sight, so such shift in location occurs. Again, it could be argued that in (185) a polarity transition on a scale is involved on which the event [PRO *een taart bakken*] is or is not activated. In that case, a metaphorical shift in location can be said to occur, similar to the metaphorical shift in the deontic modal example in (181b). I leave the relation between a polarity transition and binding in terms of a triple index as a topic for further research.

2.7.7 The spectrum problem

In §§2.7.4–2.7.6 I suggested that there is a spectrum for the interpretation of the notion of "shift in location". At one end of the spectrum there is a literal shift in location, as is manifested by the absentive. At the other end, there are metaphorical shifts in location, for instance a shift to another possible world. I suggested that this happens with the epistemic reading of the perception verb *zien* ('see'). A polarity transition can also be analyzed as a metaphorical shift in location, namely a shift on an abstract scale between a stage 0 and a stage 1. This may occur with deontic modals and in subject control configurations. Finally, we saw a shift in location that is triggered by the duplication effect. This duplication (or *Doppelgänger* effect) occurs with some instances of the anaphor *zichzelf*

[78] We will see in §3.3.1 that this test is not completely reliable, however.
[79] The problem is that the *zullen*-test, like the temporal adverb test, is not completely reliable either. See §3.3.1 for discussion of this issue.

(186)

literal			**metaphorical**
Absentive	*Doppelgänger reading*	*Polarity transition*	*Epistemic modality*

The question is why the entire spectrum is not available in all these cases. In other words, why is a metaphorical interpretation of the absentive ruled out, or why is a literal interpretation impossible with epistemic modality? This a very complex issue. For one thing, there are many other factors that play a role in the interpretation of a predicate. In absentives, only the literal interpretation is available, presumably because the absence of lexical material in this construction rules out any other option. The other cases in (186) all involve lexical material, such as the anaphor *zichzelf* or a lexical verb like *zien*. It is possible that the presence of lexical information is responsible for a higher degree of "vagueness" in interpretation, and thus allows for a metaphorical shift in location. But note that these interpretations are still subject to the principle of obligatory disjoint reference: principle B dictates that metaphorical interpretations, like their literal counterparts, involve obligatory disjoint reference at the spatial level.

2.8 Summary and conclusion

I began this chapter by outlining the various properties of the absentive in §§2.1–2.3. I showed that the absentive implies a shift in location of the subject from its deictic centre, the "subject's origo". I also showed that the classification of verbs in Vendler (1967) offers a descriptively adequate generalization of the restrictions on absentive verbs: only *activities* and *accomplishments* can occur in the absentive.

In §2.4 I presented an analysis of the absentive in which the specific semantics of the absentive were accounted for in terms of binding. This led me to posit the following characterization:

(187) **Semantic interpretation of the absentive (final version)**
The absentive entails disjoint reference in the spatial dimension between two arguments, the lexical subject and the PRO subject of the infinitive. Disjoint reference in the spatial dimension is enforced by principle B of the Binding Theory.

The binding analysis is based on the idea that absentive *zijn* functions as a subject control verb. I showed that this idea is supported by empirical evidence. I also showed that Dutch is not unique in having a grammatically conditioned "shift in location", since similar shifts occur in switch-reference languages such as Amele.

In §2.5 I considered two alternative analyses of the absentive. The first derives the absentive by deletion of the motion verb *gaan*; the second accounts for the absentive in terms of an absolutive projection (AbsP). I showed that both alternatives must be rejected, on both empirical and theoretical grounds. In §2.6 I briefly considered the

realisation of the absentive in Low-Saxon, which involves the particle *heen*, and thus provides support for an analysis of the Low-Saxon absentive in terms of an AbsP. However, a comparison between Low-Saxon and Standard Dutch *heen* showed that such an analysis, while plausible for Low-Saxon, cannot be extended to Standard Dutch.

In §2.7 I speculated on the consequences of a binding analysis for other syntactic phenomena, based on the following prediction:

(188) Absentive semantics are forced when there is coreference at the pronominal (x) level and at the temporal (t) level.

I considered a number of contexts which involve coreference at the pronominal and temporal level, and are thus predicted to have a shift in the spatial dimension. The facts encountered suggest that a shift in location, i.e. disjoint reference at the spatial level, can have a literal interpretation, as in the absentive. However, we also saw that a shift in location can receive a metaphorical interpretation, as is the case in, for instance, epistemic modality contexts.

2.9 Appendix: The *aan het* construction

In this appendix I present a brief overview of the Dutch *aan het* construction, a periphrastic construction which signals progressive aspect. The aim of this overview is to show that the *aan het* construction is of a fundamentally different nature than the absentive. In (189a) I provide an example of the *aan het* construction; in (189b) I provide an example of an absentive:

(189) a. Jan is aan het vissen. (*aan het* construction)
John is at the fish-INF
'John is fishing.'

b. Jan is vissen. (absentive)
John is fish-INF
'John is off fishing.'

As (189a) shows, the *aan het* construction is formed by the preposition *aan* ('at'), the determiner *het* ('the') and a following bare infinitive.

The *aan het* construction has received only scant attention in the generative literature. The only account that I could find is Smits (1987). This lack of attention is remarkable, since the construction displays many interesting properties that raise important questions. I will mention some of them below, and refer the reader to Smits (1987) for further discussion.

Smits (1987:282) provides the following schematic representation of the *aan het* construction:

(190) [X - *aan het* - Y - V(erb) - Z]

Position Y is subject to strict conditions. It can only be occupied by a single word (191a); DPs preceded by a determiner and modified DPs are thus excluded (191b). The single word in Y cannot be a pronoun or an R-expression (191cd). In addition, there must be a strong lexical relation between the word in Y and the verb, e.g. between *aardappelen* ('potatoes') and *schillen* ('peel'), or between *piano* ('piano') and *spelen* ('play'). Y can also be occupied by a particle (191e). An adjective is possible only if it forms a semantic unit with the verb, as in (191fg). As (191h) shows, adverbials are ruled out:

(191) a. Jan krijg je niet aan het *aardappelen* schillen/ *piano* spelen.
John get you not at the potatoes peel-INF/ piano play-INF
'You won't get John to peel the potatoes.'

b. * Jan krijg je niet aan het *de* (*glazige*) aardappelen schillen.
John get you not at the the waxy potatoes peel-INF
'You won't get John to peel the waxy potatoes.'

c. * Jan krijg je niet aan het *ze* schillen.
John get you not at the them peel-INF
'You won't get John to peel them.'

d. * Harry was aan het *Hermelien* zoeken.
Harry was at the Hermione look for-INF
'Harry was looking for Hermione.'

e. Ron was een brief aan het *over*schrijven.
Ron was a letter at the copy-INF
'Ron was copying a letter.'

f. Ze waren hem aan het *dronken* voeren.
They were him at the drunk feed-INF
'They were getting him drunk.'

g. * Hermelien was aan het *mooi* schrijven.
Hermione was at the beautiful write-INF
'Hermione was writing a fair copy.'

h. * De studenten waren aan het *niet/ stevig* drinken.
the students were at the not/ heavily drink-INF
'The students were (not) drinking (heavily).'

Position X can be occupied by all the arguments that are selected by the verb V, though not simultaneously. It can be occupied by the subject of the verb (192a) or by one or two objects of the verb (192bc). However, it is not possible for the subject and an object to occur together in X, as in (192de) (see also Smits 1987:284):

(192) a. Voskuil houdt *de mensen* aan het lezen.
Voskuil keeps the people at the read-INF
'Voskuil keeps people reading.'

b. Sebastiaan is *de auto* aan het wassen.
Sebastian is the car at the wash-INF
'Sebastiaan is washing the car.'

c. De juf is *de kinderen een verhaal* aan het voorlezen.
The teacher is the children a story at the read-INF
'The teacher is reading the children a story.'

d. * Voskuil houdt *de mensen boeken* aan het lezen.
Voskuil keeps the people books at the read-INF
'Voskuil keeps people reading books.'

e. Voskuil houdt *de mensen* aan het boeken lezen.
Voskuil keeps the people at the books read-INF
'Voskuil keeps people reading books.'

X can also be occupied by the particle of a particle verb in V:

(193) Maria is zich even *op* aan het maken.
Maria is herself just on at the make-INF
'Maria is just putting on her make-up.'

Finally, X can be occupied by PPs (194a), APs (194b), predicates (194c) and adverbials (194d) (see also Smits 1987:285):

(194) a. Ik ben dit toevallig wel *voor jou* aan het doen!
I am this coincidentally surely for you at the do-INF
'I happen to be doing this for you!'

b. Ze zijn hem alweer *dronken* aan het voeren.
They are him again drunk at the feed-INF
'They are getting him drunk again.'

c. Chris is *jurist* aan het worden.
Chris is lawyer at the become-INF
'Chris is becoming a lawyer.'

d. Christel is weer *hard* aan het studeren.
Christel is again hard at the study-INF
'Christel is studying hard again.'

The rightmost position, i.e. Z, diplays less variation. It can be occupied by verbal clusters (195a), infinitival clauses (195b), PPs (195c) and adverbials (195d) (see also Smits 1987:285):

(195) a. Bert is mij aan het proberen *te leren schaken*.
Bert is me at the try-INF to teach-INF play-chess-INF
'Bert is trying to teach me to play chess.'

b. Tijn is aan het proberen om *mij te helpen*
Tijn is at the try-INF for me to help-INF
het huis te verkopen.
the house to sell-INF
'Tijn is trying to help me sell the house.'

c. Jos is ons aan het vertellen *over* *zijn* *avonturen*
Jos is us at the tell-INF about his adventures
in *de* *supermarkt*.
in the supermarket
'Jos is telling us about his adventures in the supermarket.'

d. Hij was dat aan het verTELlen *gisteren*.[80]
he was that at the tell-INF yesterday
'He was telling that yesterday.'

The *aan het* construction raises a number of questions. One concerns the status of the preposition *aan*. It is clearly not a "normal" preposition, since it displays neither PP island effects nor R-pronominalisation:[81]

(196) a. Jan is [de appels]$_i$ aan het t_i schillen
John is the apples at the peel-INF
'John is peeling the potatoes'

b. Jan is aan het vissen > * Jan is eraan
John is at the fish-INF John is thereon
'John is fishing'

Another question is why it is only the preposition *aan* that can occur in the *aan het* construction. In other words, what are the feature specifications of *aan*? Another question concerns the infinitive: does it have nominal properties, verbal properties, or both? The presence of the determiner *het* seems to argue for nominal status, but the fact that modification by *niet* ('not') is impossible argues against this.[82] The verbal status of the infinitive is supported by the observation that it can select a wide range of arguments; compare the examples in (192bc) and (195), for instance. I refer the reader to Smits (1987) for discussion of these questions, and leave the analysis of the *aan het* construction as a topic for further research.

For the purposes of this chapter, it is important to point out the different syntactic properties of the *aan het* construction and the absentive. In §2.3 I showed that the absentive rules out states and achievements. The examples in (197ab) show that this is not the case in the *aan het* construction:

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[80] This sentence is most felicitous with contrastive stress on the verb, indicated here by capitals.
[81] I discuss the phenomenon of R-pronominalisation in more detail in §4.1.
[82] Nominalized infinitives can be modified by *niet*:

(i) Het niet komen van die rothond als je hem roept irriteert me mateloos.
the not come-INF of that bloody dog if you him call irritates me immensely
'The fact that that bloody dog does not come over if you call him irritates me immensely.'

(197) a. Jan is aan het slapen.
John is at the sleep-INF
'John is sleeping.'

b. Jan is de top aan het bereiken.
John is the top at the reach-INF
'John is reaching the top.'

The *aan het* construction does have restrictions on the verbs that may occur in it, but these restrictions are of a different nature than those on absentive verbs. The *aan het* construction has durative aspect, and must express an action that is naturally bound in time. This means that the action cannot be too short (in the sense that it is not sufficiently momentaneous) or too long (see Smits 1987:286):

(198) a. ? De lamp was van het plafond aan het vallen.
the lamp was of the ceiling at the fall-INF
'The lamp was falling from the ceiling.'

b. ? Jan was aan het leven.
John was at the live-INF
'John was living.'

In addition, note that (197ab) have a realized reading. As we have seen in §2.2.1, this is not necessarily the case for absentives.

The most important difference between the absentive and the *aan het* construction is that the *aan het* construction lacks absentive semantics. The subject of an *aan het* construction is not obligatorily dislocated with respect to its own origo. Indeed, the *aan het* construction does not express any information about the subject's location. Hence, there can be no remoteness or "non-visibility" condition with respect to a speaker, as the following examples illustrate:

(199) a. Richard zit hier naast me. Hij is appelsap aan het drinken.
Richard sits here next to me he is apple juice at the drink-INF
'Richard is sitting next to me. He is drinking apple juice.'

b. Ik kan Cobi vanuit het raam zien. Ze is aan het tennissen.
I can Cobi from the window see she is at the tennis-INF
'I can see Cobi from the window. She is playing tennis.'

As Nobert Corver (p.c.) points out, the "non-visibility" condition of the absentive is also illustrated by the following pair, in which *hier* ('here') modifies the subject *Jantje*:

(200)?/* a. Jantje hier is vissen.
John here is fish-INF
'John overhere is off fishing.'
b. Jantje hier is aan het vissen.
John here is at the fish-INF
'John overhere is fishing.'

The use of *hier* seems incompatible with an absentive, because it gives rise to a contradiction: the absentive expresses that *Jantje* is not present, whereas the deictic pronoun *hier* suggests that he is. As the *aan het* construction does not imply absence of its subject, it is perfectly possible to use *hier* in the *aan het* construction.

Note that the *aan het* construction does not have an animacy requirement either:

(201) Het klimaat is sterk aan het veranderen.
the climate is strongly at the change-INF
'The climate is undergoing drastic changes.'

A further difference is that the *aan het* construction is usually introduced by the verb *zijn* ('be'), as in (202a). However, it can also be introduced by another verb, as (202b) illustrates. In this respect, the *aan het* construction differs from the absentive, whose unique interpretation is (partly) caused by the presence of the subject control verb *zijn*:

(202) a. Voskuil *is* boeken aan het schrijven.
Voskuil is books at the write-INF
'Voskuil is writing books.'

b. Voskuil *krijgt* de mensen aan het lezen.
Voskuil gets the people at the read-INF
'Voskuil gets people to read.'

Finally, there are good grounds to analyze *zijn* in the *aan het* construction as a raising rather than as a control verb. This is motivated by the occurrence of expletive *er* ('there') (203a),[83] and by the observation that the *aan het* construction allows idioms (203b):

(203) a. Er is veel aan het veranderen in het klimaat.
There is much at the change-INF in the climate
'There is a lot of change going on with respect to the climate.'

b. Als je dat doet, dan heb je de poppen aan het dansen.
if you that do then have you the puppets at the dance-INF
'If you do that, then you will make the sparks fly.'

[83] But see the discussion in § 2.4.2 on *er*-insertion in Dutch.

I therefore conclude that the *aan het* construction and the absentive are different constructions, despite their superficial similarities.

3 The *with*-Infinitive

3.0 Introduction

In chapter 2, I discussed the absentive, a construction in which a finite verb combines with a bare infinitive. Apart from its very specific semantics, the syntactic structure of the absentive contributes to a more general discussion. This discussion focuses on the way in which relations between events are established (see chapter 1). In this chapter I discuss a construction (the *with*-infinitive) in which a relation is established between two events. One event is part of an adjunct phrase and involves an infinitive that is preceded by *te* ('to'). The other event is expressed by a main clause. The two events are related by means of a preposition. I will focus on the *with*-infinitive in the dialect of Wambeek, a village in the Belgian province of Flemish Brabant.[1] An example of the Wambeek *with*-infinitive is provided in (1):

(1) Mè zaai te werken moest-n-aai de gieln dag toisj blaaiven.
with she-NOM to work had to-CL-he the whole day home stay
'With her working, he had to stay home all day.'

The main challenge that is posed by the *with*-infinitive is that its subject, in this case *zaai*, has nominative rather than oblique case (as would be expected in the context of a preceding preposition). I will argue that the emergence of nominative case must be attributed to the specification of the *with*-preposition, i.e. *mè*, which contains the interpretable (tense) feature iT.[2] The preposition has acquired this verbal (i.e. functional) property as the result of grammaticalisation, a diachronic development which often targets prepositions.

The structure of this chapter is as follows. In §3.1, I introduce the *with*-infinitive construction against the backdrop of the more familiar *with*-absolute construction (of which the *with*-infinitive is an instantiation). Next, in §3.2, I discuss the general properties of the *with*-infinitive. This is followed by an in-depth discussion of the syntax of the *with*-infinitive in §3.3. In §3.4 I will argue that the emergence of nominative case is the result of an iT feature on *mè*. In §3.5 I will consider my

[1] I am grateful to Jeroen van Craenenbroeck for providing me with the Wambeek data and for helpful discussion.

[2] In the minimalist framework (Chomsky 1995), a distinction is made between interpretable and uninterpretable features. Uninterpretable features of a lexical item are properties of that item that do not make any semantic contribution. Interpretable features of a lexical item do make a semantic contribution. Consider for instance person and number features, the so-called phi-features. Person and number features make a semantic contribution when they are found on DP (interpretable phi-features or i-phi), but make no semantic contribution when they occur on T (uninterpretable phi-features or u-phi). Similarly, a tense feature T makes a semantic contribution when it is found on T (interpretable T feature or iT), but makes no semantic contribution when it is found on a DP (uninterpretable T feature or uT).

interpretation of the *with*-infinitive in relation to the Standard Dutch *with*-absolute. The differences between these two constructions will lead me to argue that the special properties of Wambeek *mè* are the result of grammaticalisation, a process which, as I will show, has also affected a number of other Dutch prepositions (though to varying extents). Finally, §3.6 concludes.

3.1 The *with*-absolute

In this section I outline the main properties of the Dutch *with*-absolute construction, thereby setting the stage for the discussion of the *with*-infinitive. In the generative literature, Van Riemsdijk (1978) is the first to discuss the Dutch *with*-absolute in any detail.[3] The construction can be schematically represented as in (2):

(2) met NP XP
with NP XP

In standard Dutch, XP can be realised as a PP, an AP, or as an *als* ('as') phrase, as is illustrated in (3a-c):[4]

(3) a. Met Van Nistelrooij *in de spits*, gaat het Nederlands elftal winnen.
with Van Nistelrooij in the front goes the Dutch squad win
'With VanNistelrooij as a striker, the Dutch squad will win.'

b. Met het raam *open* slaap ik beter.
with the window open sleep I better
'I sleep better with the window open.'

c. Met Jan *als voorzitter* wordt de vergadering een puinhoop.
with John as chairman becomes the meeting a mess
'With John as the chairman, the meeting will be a mess.'

Previous work on this construction has focused on the structure of the [NP XP] constituent. Following the work of Stowell (1981), Beukema & Hoekstra (1983) argue that the [NP XP] constituent is a small clause in which the NP subject receives oblique case from the preposition. Their analysis is based on the idea that subjects are not projected by NPs and VPs only, but also by APs and PPs.

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[3] The syntax of the English *with*-absolute is first discussed in some detail by Jespersen (1940:38–42); see also McCawley (1978). Ruwet (1982) gives a detailed account of the French *with*-absolute.

[4] Some speakers of Dutch also accept a *with*-absolute in which the XP is a NP:

(i) ?/* Met je kamer *een troep* mag je geen televisie kijken.
with your room a mess may you no tv watch
'With your room a mess, you cannot watch television.'

Klein (1983) argues that the [NP XP] structure is derived from a sentential source which contains elliptic *hebbend(e)*, the present participle of *hebben* ('have').[5] According to this analysis, (4a) has the underlying structure in (4b):

(4) a. Met [$_{NP}$ Van Nistelrooij] [$_{PP}$ in de spits], ...
with Van Nistelrooij in the front
'With Van Nistelrooij as a striker, …'

b. [$_{NP}$Van Nistelrooij] [$_{PP}$ in de spits] hebbende, ...
Van Nistelrooij in the front having
'Having Van Nistelrooij as a striker, ...'

One of Klein's arguments for this sentential source is that there is a distributional parallel between the NP subject and the PP predicate in *with*-absolutes and *hebbende* constructions (see Klein 1983:153). In both the NP subject can precede the PP predicate, as in (5a,b), while inversion of the PP and the NP subject, as in (5c,d), is also possible:

(5) a. Met [$_{NP}$ Van Nistelrooij] [$_{PP}$ in de spits]
with Van Nistelrooij in the front

b. Met [$_{PP}$ in de spits] [$_{NP}$ van Nistelrooij]
with in the front van Nistelrooij

c. Naar alle waarschijnlijkheid [$_{NP}$ van Nistelrooij] [$_{PP}$ in de spits]
in all probability van Nistelrooij in the front
hebbend gaan we zeker winnen.
having go we certainly win

d. [$_{PP}$ In de spits] naar alle waarschijnlijkheid [$_{NP}$ Van Nistelrooij]
in the front in all probability Van Nistelrooij
hebbend gaan we zeker winnen.
having go we certainly win

One of the problems with this parallel is that it does not hold for AP predicates. A further problem is that inversion is restricted to heavy NP subjects (see Beukema & Hoekstra 1983:534). Note, though, that the heaviness of the NP subject does not play a role in AP predicates:

(6) a. Met [$_{NP}$ Jan]/ [$_{NP}$ de helft van het Nederlands elftal] [$_{AP}$ ziek].
With John/ the half of the Dutch squad ill
'With John/half of the Dutch squad ill, …'

[5] Klein is silent about the issue of case assignment to the subject NP.

b.* Met [$_{AP}$ ziek] [$_{NP}$ Jan]/ [$_{NP}$ de helft van het Nederlands elftal].
With ill John the half of the Dutch squad

Furthermore, AP predicates do not allow a paraphrase with *hebbende*, as (7) shows:

(7) * [$_{NP}$ Jan] [$_{PP}$ ziek] hebbend kan niemand de vergadering voorzitten.
John ill having can nobody the meeting chair
'Given that John is ill, nobody can chair the meeting.'

The projection of elliptic *hebbende* forces Klein to assume the presence of a PRO-subject on account of the projection principle. Beukema & Hoekstra, on the other hand, argue explicitly against the presence of a PRO-subject in *with*-absolutes.

To appreciate Beukema & Hoekstra's view, consider first a standard construction with a present participle in (8). It is generally assumed that this type of construction contains a PRO-subject that is is controlled by the subject of the matrix clause:

(8) PRO$_i$ dit alles bedenkende, komen wij$_i$ tot de volgende conclusie.
PRO this all thinking come we to the following conclusion
'Considering all this, we reach the following conclusion.'
(Beukema & Hoekstra 1983:539)

This suggests that if there is an elliptic *hebbende* in the *with*-absolute, then its PRO-subject must be controlled by the subject of the matrix clause. Consider in this light the example in (9):

(9) Met voetbal op de TV is er geen kip op straat.
with football on the TV is there no chicken on street
'With football on the television, there is not a soul in the street.'

As Beukema & Hoekstra note, a paraphrase with *hebbend* is ungrammatical here:

(10) * PRO$_i$ voetbal op de TV hebbend is er geen kip$_i$ op straat.
PRO football on the TV having is there no chicken on street
'With football on the television, there is not a soul in the street.'

Beukema & Hoekstra argue that the ungrammaticality of (10) follows from the fact that the PRO-subject of *hebbend* cannot be controlled by the matrix subject *geen kip*. Van Riemsdijk (1978:68) makes the same observation with respect to the sentence in (11):

(11) Met Cruyff als libero zijn we verloren.
with Cruyff as sweeper are we lost
'With Cruyff as a sweeper, we are lost.'

Van Riemsdijk observes that (11) has two interpretations: one in which Cruyff is a member of the team represented by *we* in the matrix clause, and one in which Cruyff is the sweeper of the opponent's team. If the PRO-subject associated with *hebbend* is coindexed with *we* in the matrix clause, the first reading is obtained. However, in Klein's analysis it is impossible to obtain the second reading, since this reading would imply that PRO and *we* are not coreferential. In other words, in the second reading the matrix subject does not control the PRO-subject of the *with*-absolute, similar to what is the case in (10). These examples therefore show that postulating elliptic *hebbend* and a PRO-subject is difficult to combine with control theory, since the consequence would be that PRO is not necessarily controlled (see also §2.4.3).

Klein's account is also difficult to reconcile with the theta-criterion and the PRO-theorem. *Hebben* is a transitive verb that assigns thematic roles to its subject and object. In Klein's analysis, PRO carries the external theta-role assigned by *hebben*, while PRO is governed by the preposition *met*. This is problematic with respect to the PRO-theorem (which states that PRO can occur in ungoverned positions only). On the basis of the PRO-theorem, PRO is therefore excluded as a candidate for the external theta-role of *hebben*.

An account in terms of an elliptic form of *zijn* ('be'), e.g. *zijnde* ('be-PART'), might be less problematic in this respect, since *zijn* is a raising verb, and as such does not project an external theta-role.[6] This account would also appear to solve the ambiguity problem that was noted in (11), since a paraphrase with *zijnde* allows both readings. Nevertheless, since there appear to be no conclusive arguments for postulating either elliptic *hebben* or *zijn*, and since an elliptic analysis is not superior to a small-clause analysis in any other respect, Beukema & Hoekstra reject an analysis with elliptic *zijn* as well.

In some West-Flemish and Brabant dialects of Belgium, the XP in a *with*-absolute can also be realised as a *te*-infinitive, as is shown by the examples in (12a,b).[7] The example in (12c) shows that this is impossible in standard Dutch:

(12) a. *Sint-Niklaas*
Mè ikke te gaan werken moestzezij ne gehelen dag thuisblijven.
with I-NOM to go work had to-CL-she the whole day home-stay
'With me working, she had to stay home all day.'

b. *Wambeek*
Mè zaai te werken moest-n-aai de gieln dag toisj blaaiven.
with she-NOM to work had to-CL-he the whole day home stay
'With her working, he had to stay home all day.'

[6] Recall, however, that I argued for a control status of *zijn* ('be') in the absentive (see chapter 2).
[7] Example (12a) was taken from the SAND database. Another dialect that displays this phenomenon is that of Knokke-Heist (see Haegeman 1986).

c. *Standard Dutch*
* Met zij/haar te werken moest hij de hele dag thuis blijven.
with she/her to work had he the whole day home stay
'With her working, he had to stay home all day.'

This construction sheds new light on the status of the [NP XP] constituent. For one thing, it is striking to find a combination of an infinitive with a preceding *nominative* subject.[8] Subjects of infinitives are normally realised as accusative (or oblique) NPs or as PRO, as the following examples from standard Dutch illustrate:[9]

(13) a. Ik zag haar de straat oversteken.
I saw her-ACC the street cross
'I saw her cross the street.'
b. Ik probeerde PRO een taart te bakken.
I tried PRO a cake to bake
'I tried to bake a cake.'

The aim of this chapter is to provide an analysis of the *with*-absolute that contains a *te*-infinitive; I refer to this construction as the "*with*-infinitive" below. My analysis is based primarily on data from the Wambeek dialect. However, this analysis can be easily extended to other Dutch dialects that allow a *with*-infinitive with a nominative subject (though in that case more fieldwork would be needed to determine whether, and if so, to what extent, these dialects differ from each other). In the discussion below I will focus on three issues: (1) the amount of structure projected by the *with*-infinitive, (2) the nominative case of the subject of the *with*-infinitive, and (3) the properties (more specifically, the feature specifications) of the preposition.

3.2 The *with*-infinitive in the dialect of Wambeek

In this section I provide a description of the *with*-infinitive in the Wambeek dialect. This description will serve as the basis for the theoretical interpretation in §§3.3–3.5. Consider first the sentence in (14) (repeated from (1) above):

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[8] The only other example that I am aware of is found in Brazilian Portuguese. Rizzi (2004), gives the example in (i), in which an infinitive with a nominative subject is embedded under the prepositional complementiser *pra*:

(i) Ela me deu o livro pra eu ler.
she me gave the book for I-NOM read-INF

I will come back to this construction in §3.2.

[9] The pronominal paradigm of standard Dutch lacks a morphological distinction between accusative and oblique case.

(14) Mè zaai te werken moest-n-aai de gieln dag toisj blaaiven.
with she-NOM to work must-CL-he the whole day home stay
'With her working, he had to stay home all day.'

The same construction occurs in West-Flemish.[10] Examples are given in (15a-b); note here that the subject of the *with*-infinitive can be lexical or pronominal:

(15) a. Met hele dagen die kinders door mijn vruchten te lopen,
with whole days that children through my fruits to walk
ligt de helft van 't stik plat.
lies the half of the field flat
'Because the children are walking through the fruit trees all day, half of the field has been trampled on.'

b. Met gij hier te komen wonen is 't rap veranderd.
with you-NOM here to come live is it quickly changed
'With you coming to live here, things have changed rapidly.'

The examples with a pronoun in (14) and (15b) show that subjects of *with*-infinitives (here *zaai* and *gij*) have nominative case. This is remarkable, since subjects in the absolutive normally have oblique case, for instance when they occur with a PP predicate, as in (16a), or with an *als*-predicate, as in (16b):[11]

(16) a. Mè ou / *gou in de geul gomme zeker winn.
with you-OBL/you-NOM in the goal go-we certainly win
'With you in the goal, we will certainly win.'

b. Mè ou / *gou as veerzitter guit de verguidering lang
With you-OBL you-NOM as chairman goes the meeting long
diern.
last
'With you as chairman, the meeting will take a long time.'

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[10] I am grateful to Marga Devos for providing me with the West-Flemish examples.

[11] For some reason, Wambeek speakers tend to reject absolutives with an AP predicate:

(i) ?* a. Mè em zat gomme zeker verliezn.
with he-OBL drunk go-we certainly lose
'With him being drunk, we will certainly lose.'
* b. Mè aai zat gomme zeker verliezn.
with he-NOM drunk go-we certainly lose
'With him being drunk, we will certainly lose.'

However, the dialect still maintains a contrast between the oblique and nominative form of the subject here, which corroborates the point made here.

In the *with*-infinitive, (most) Wambeek speakers reject oblique subjects:[12]

(17) */?? Me ee te werken moest-n-aai de gieln dag toisj blaaiven.
with her-OBL to work must-CL-he the whole day home stay
'With her working, he had to stay home all day.'

In Wambeek Dutch, subjects of infinitives (strong or weak) are realised either as an accusative/oblique NP or as a PRO-subject:

(18) a. Ik zien a de struit euversteken
I see you-WEAK ACC the street cross
'I see you cross the street.'

b. Ik zien ou-STRONG ACC de struit euversteken
I see you the street cross
'I see you cross the street.'

c. * Ik zie ge de struit euversteken
I see you-WEAK NOM the street cross
'I see you cross the street.'

d. * Ik zie gou de struit euversteken
I see you-STRONG NOM de struit euversteken
'I see you cross the street.'

e. Zaai ij geprobeed (van) PRO 't struit euver te steken
she has tried of the street over-PART to cross

f. * Zaai ij geprobeed (van) zaai 't struit euver te steken.
She has tried of she the street over-PART to cross

In this respect, Wambeek Dutch is like standard Dutch:[13]

[12] The SAND database contains some examples that would seem to have oblique subjects, e.g. *me **hum** te gaan werke moestz heel den dag thuis blijve* (Lier), *me **hem** te gaa werkn moezezij geheel den dag thuis blijvn* (Ronse). However, it should be noted that in western Belgian dialects the 3-SG pronoun *hum*/*hem* often occurs as the (strong) nominative pronoun (see e.g. DeVogelaer 2005). For the purpose of testing morphological case, the 1-SG pronoun is most reliable, but, unfortunately, the SAND database includes only test sentences with a 3-SG pronoun. According to Magda Devos (p.c.), oblique case is the exception and nominative case the rule. Furthermore, dialects with oblique forms appear to restrict these to 3-SG and 3-PL pronouns. In the northwestern part of West-Flanders, the nominative form *hij* (3-SG) is more common, although the oblique form *hem* is also accepted. In the Westhoek of southern Flanders, older people prefer the oblique form and younger people the nominative form, which suggests that the nominative subject is a later development. Hugo Ryckeboer (p.c.) notes that the *with*-infinitive also occurs in French-Flanders. In this thesis, I will limit my attention to the *with*-infinitive in the dialect of Wambeek, which only allows a nominative subject. I leave the occurrence of oblique subjects in the *with*-infinitive as a topic for further research.

[13] The Wambeek dialect is also like Standard Dutch in that it lacks a morphological distinction between accusative and oblique case in the pronominal paradigm.

In the generative tradition, starting with Vergnaud (1985), it is usually assumed that case is assigned in a local configuration. More specifically, Rizzi (1990) argues that heads and phrases interact locally in processes such as the licensing of case features and of special elements such as null pronominals. Rizzi assumes that there are three basic local configurations in which head–XP interaction is possible: (1) specifier/head, (2) head/complement, and (3) head/specifier-of-the-complement. Type (1) is involved in nominative case-marking. Type (2) involves among other things the licensing of inherent case by the theta-marking head. Type (3) is exemplified by the relation between a prepositional complementiser and the subject of an infinitive, as in the English example in (19):

(19) For [him to do that] would be a mistake.

In this example, the prepositional complementiser *for* assigns oblique case to the subject of the infinitive (i.e. *him*). The ungrammaticality of the example in (20) shows that this procedure requires a local configuration:

(20) * For tomorrow [him to do that] would be a mistake.

Rizzi (2004) notes that in Brazilian Portuguese a similar locality condition applies to an infinitive with an accusative subject that is embedded under the prepositional complementiser *pra* (see also fnt. 8 above):

(21) Ela me deu o livro pra (*amanha) [mim ler].
she me gave the book for tomorrow I-ACC read-INF
(Rizzi 2004:23)

This suggests, then, that in both English and Brazilian Portuguese the prepositional complementiser assigns case to the specifier of its complement.

However, unlike English, Brazilian Portuguese also has an infinitival construction in which the subject of the infinitive has nominative case. As can be seen in (22), this construction permits interpolation of an adverb between the preposition and the pronoun:

(22) Ela me deu o livro pra (amanha) [eu ler].
she me gave the book for tomorrow I-NOM to read

This suggests that *pra* does not assign case to the subject; rather, so Rizzi speculates, the subject is probably case-marked inside the infinitival clause.

The *with*-infinitive in the Wambeek dialect also lacks an adjacency requirement between the preposition and the nominative subject. The example in (23) indicates

that a temporal adverb such as *gisteren* can intervene between the preposition *mè* and the subject *zaai*:[14]

(23) Mè gisteren zaai te werken moest-n-aai de gieln dag toisj
with yesterday she-NOM to work must-CL-he the whole day home
blaaiven.
stay
'With her working, he had to stay home all day.'

Examples of this kind suggest that nominative case in the Wambeek *with*-infinitive is not assigned in a head/specifier-of-the-complement configuration.

The Wambeek facts are all the more peculiar if one bears in mind that prepositions tend to assign accusative or oblique case rather than nominative case. This can be seen in languages with overt case-marking, such as German and Latin. Consider the German examples in (24), which contain the prepositions *trotz* (+genitive), *nach* and *aus* (+dative), and *durch* (+accusative). Note here that morphological case-marking appears on pronouns and determiners, and sometimes, as in (24a), on the DP itself:

(24) a. *Trotz* sein**es** Erfolg**s** ist er ein bescheidener Mensch.
despite his-GEN succes-GEN is he a modest man
'Despite his succes, he has remained a modest man.'

b. *Nach* ein**er** Stunde kamen sie wieder *aus* dem Wald
after one-DAT hour-DAT came they again out the-DAT forest-DAT
'After one hour they came out of the forest again.'

c. Die Katze rannte durch **das** Zimmer.
the cat ran through the-ACC room-ACC
'The cat ran through the room.'

From a typological perspective it is highly unlikely that the preposition *mè* assigns nominative case in the same way as (say) case is assigned by German prepositions, i.e. in a head/complement configuration.

Rather, the Wambeek facts are reminiscent of a special type of case-marking that occurs in West-Flemish. As Devos & Vandeweghe (2003) note, West-Flemish

[14] Magda Devos (p.c.) notes that adverbs occur more readily between *met* and *lexical* subjects, although adverb interpolation preceding pronominals is certainly possible. For instance, the (attested) example in (i) has no fewer than two intervening temporal adverbs:

(i) En met toen kort na de oorlog die jeeps op te komen, peinsden de
and with then shortly after the war those jeeps on to come thought the
boeren dat ze geen paarden meer nodig hadden.
farmers that they no horses more needed
'And when the jeeps became so popular shortly after the war, the farmers thought that they did not need their horses anymore.'

dialects may replace the oblique pronoun form by the nominative pronoun form in the complement position of a preposition:

(25) a. Kom maar mee met ikke.
Come MOD-PART with with I-NOM
'Follow me.'

b. Ik ben kwaad op gij.
I am angry with you-NOM
'I am angry with you.'

c. Wil je kaarten met wulder?
Want you play-cards with we-NOM
'Do you want to play cards with us?'

However, closer inspection reveals that this is a unique property of West-Flemish. The ungrammaticality of (26a) indicates that this type of pronoun replacement is not found in Wambeek:

(26) a. * IJ gui me zaai nui de film.
he goes with she-NOM to the movie
'He goes with her to the movies.'

b. IJ gui me ee nui de film.
he goes with her-OBL to the movie
' He goes with her to the movies.'

On the basis of these observations I conclude that nominative case assignment in the *with*-infinitive construction of the Wambeek dialect differs from case assignment by *for* in English infinitives, and from the standard way in which prepositions assign case to their complement. In the following section, I will consider the syntax of the Wambeek *with*-infinitive in more detail, paying particular attention to its structural content.

3.3 The internal syntax of the Wambeek *with*-infinitive

In order to see how the subject of the *with*-infinitive receives its nominative case, we must first examine the amount of structure that is present in the *with*-infinitive. Taking as my background Cinque's (1999) functional hierarchy for clause structure, I will show that the *te*-infinitive in the Wambeek dialect contains a VP, an AspP and the lower modal projections that are associated with root modality. The presence of an AspP can be inferred from the aspectual properties of the infinitive, which I will outline in §§3.3.1–3.3.4. The claim that the structure of the *te*-infinitive does not extend beyond the lower root modal projections is based on the observation that the *with*-infinitive allows root modals, but no epistemic modals; I will discuss this issue in §3.3.5. A further argument for the absence of higher functional projections is that

the Wambeek *with*-infinitive cannot contain the negative clitic *en*. Haegeman (1995) argues that *en* occupies a NegP that is structurally higher than TP; I consider this issue in §3.3.6. Finally, in §§3.3.7–3.3.8, I consider the syntactic behaviour of the subject and object of the *with*-infinitive. As we will see, the impossibility of clitic doubling and weak subjects suggests that the subject remains in a VP-internal position. This adds further support to the claim that the *with*-infinitive lacks a higher functional domain.

3.3.1 The classification of Dutch *te*-infinitives: tense and realis/irrealis

It has been argued on a number of occasions that there is a relation between the presence of the infinitival marker *te* in infinitives, and the presence of a TP (tense) projection (see e.g. Bennis & Hoekstra 1989b). If the infinitive lacks *te*, it lacks a TP, and hence an independent time reference. In such cases, the time reference of the infinitive depends on the tense in the matrix clause. This can be illustrated with the help of a perception verb such as *zien* ('see'), as in (27a-b):

(27) a. Ron zag [Hermelien dansen].
Ron saw Hermione dance-INF
'Ron saw Hermione dance.'

b. Ron ziet [Hermelien dansen].
Ron sees Hermione dance-INF
'Ron sees Hermione dance.'

In both (27a) and (27b), Hermione's dancing is necessarily simultaneous with Ron seeing Hermione dance.

In a *te*-infinitive, on the other hand, the temporal reference of the infinitive is not necessarily identical to that of the matrix clause:

(28) Harry zegt [Hermelien te bedanken].
Harry says Hermione to thank-INF
'Harry says that he will thank Hermione.'

In (28), the event of Harry saying something does not necessarily coincide with him thanking Hermione.

This observation begs the question whether all *te*-infinitive are tensed, and, if not, how tensed *te*-infinitives can be distinguished from their tenseless counterparts. In Cremers (1983), it is argued that some *te*-infinitives are timeless to the extent that they lack independent time reference. More specifically, Cremers argues that there are two types of *te*-infinitives, which differ from each other in terms of the type of complements that they select:

(29) a. verbs taking a VP-complement
(e.g. *proberen* 'try', *durven* 'dare', *dwingen* 'force', *weigeren* 'refuse')

b. verbs taking a CP (i.e. sentential) complement
(e.g. *zeggen* 'say', *denken* 'think', *beweren* 'claim', *beseffen* 'realise')

The VP-complements in (29a) lack an independent time reference, so that a verb like *proberen* will form a temporal unit with its infinitival complement. According to Cremers, the two types of *te*-infinitives behave differently with respect to the future auxiliary *zullen* ('will'). The examples in (30a,b), taken from Cremers (1983:181), indicate that VP-complements cannot contain this auxiliary, while CP-complements can:

(30) a. * Jacoba probeert jou te zullen bezoeken. (VP-complement)
Jacoba tries you to will visit

b. Jacoba zegt jou te zullen bezoeken. (CP-complement)
Jacoba says you to will visit
'Jacoba says that she will visit you.'

However, the problem with this test is that the presence of *zullen* does not correlate with the presence of an independent tense domain, nor does its absence correlate with the absence of such a domain.[15] While (30a) shows that VP-complements do not allow *zullen*, they can, as IJbema (2002:103) notes, be independently modified by a temporal adverb. Consider (31a,b), where the VP-complement in (31b) has a time reference that is different from that of the matrix clause:

(31) a. Jan weigert een boek te (*zullen) kopen.
John refuses a book to will buy
'John refuses to buy a book.'

b. Gisteren weigerde Jan nog **volgend jaar** op vakantie te gaan.
yesterday refused John still next year on holiday to go
'Yesterday John refused to go on a holiday next year.'

However, IJbema (2002:106) notes that this temporal adverbial in a VP-complement can refer only to the future, and not to the past:

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[15] As Barbiers (1995) and others have argued, *zullen* is most appropriately viewed as a modal rather than as a temporal auxiliary. For instance, constructions with *zullen* allow both a deontic and an epistemic modal reading:

(i) *Deontic*:
Je zult je kamer opruimen.
you will your room clean
'You must clean your room.'

(ii) *Epistemic*:
Jan zal nu wel in Amerika zijn.
John will now surely in America be
'John must be in America by now.'

(32) * Vandaag weigert Jan het boek **gisteren** te hebben gekocht.
today refuses John the book yesterday to have bought
'Today John refuses to have bought the book yesterday.'

VP-complements differ from CP-complements in this respect. As (33a,b) show, the latter do allow time adverbials that refer to both future and past time:

(33) a. Gisteren beweerde Jan nog **volgend jaar** op vakantie te gaan
yesterday claimed John still next year on holiday to go
'Yesterday John claimed to go on holiday next year.'

b. Vandaag beweert Jan haar **gisteren** te hebben ontmoet.
today claims John her yesterday to have met
'Today John claims to have met her yesterday.'

The future time reference found in VP-complements is not a tense specification to the extent that it relates the time of an event to the time of an utterance. Rather, it signals that the event is *not realised*. This observation leads IJbema (2002:108) to replace Cremers's classification by a classification in terms of "irrealis" *vs*. "realis" complements. IJbema's classification is given in (34):

(34) a. verbs selecting an irrealis complement
(e.g. *proberen* 'try', *beloven* 'promise', *besluiten* 'decide', *denken* 'think')

b. verbs selecting a realis complement
(e.g. *beseffen* 'realise', *beweren* 'claim', *meedelen* 'announce', *zeggen* 'say')

The verbs in (34a) select an irrealis complement, which can refer to future time only. The verbs in (34b) select a realis complement, which can have an independent time reference. Thus, a realis complement can refer to an event that temporally precedes or follows the event described in the matrix clause.

As regards the theoretical interpretation of these observations, IJbema (2002:109) gives the classification in (34) the following syntactic implementation:

(35) a. irrealis infinitival complements
$[_{VP}$ besluiten $[_{Mood\ irrealis}$ te $[\ldots\ [_{VP}\ V\ ]]]]$

b. realis infinitival complements
$[_{VP}$ zeggen $[_{T(past)}$ te $[_{Mood\ irrealis}\ [\ldots\ [_{VP}\ V\ ]]]]]$

In the structure in (35a) the infinitival marker *te* is projected in the $Mood_{irrealis}$ node, given that irrealis complements lack a T(past) projection. Since, as IJbema assumes, future reference is not an instantiation of tense, this accounts for the observation that irrealis complements allow future reference only. The structure in (35b) shows that

realis complements do project a T(past) node, since these can have past reference; *te* is projected in the head of this functional projection.

IJbema's classification and syntactic implementation are not unproblematic. First of all, it is doubtful whether the occurrence of a temporal adverb such as *gisteren* is a suitable diagnostic for determining the presence of a T(past) projection. As IJbema (2002:102) acknowledges, *gisteren* can also appear as a modifier in the nominal domain, as is illustrated in (36), in which *gisteren* is part of an attributive AP, which is again part of the DP:

(36) Het gisteren nog zwijgzame elftal staat vandaag de pers te woord.
the yesterday still silent squad stands today the press to word
'The squad, which were silent yesterday, are speaking with the press today.'

If *gisteren* is used as a diagnostic for the presence of TP, then we would be forced to extend the presence of a TP projections to include nominal and adjectival domains.[16]

The classification in (34) is also problematic on empirical grounds. IJbema makes a distinction between irrealis and realis complements on the basis of the possibility of independent past-time reference, using the *gisteren* diagnostic. This predicts that verbs such as *besluiten* ('decide') and *denken* ('think'), which IJbema classifies as irrealis complement taking verbs, cannot take a *te*-infinitive that contains *gisteren*. This prediction is not borne out, as the following examples show:

(37) a. Na lang nadenken besloot Jan zich **gisteren** te hebben vergist.
after long think decided John himself yesterday to have erred
After long consideration, John decided he had been mistaken yesterday.'

b. Na uren studeren dacht Jan zich **gisteren** te hebben vergist.
after hours studying thought John himself yesterday to have erred
'After hours of studying, John thought he had been mistaken yesterday.'

This suggests that the possibility of *gisteren* with a *te*-infinitive is not indicative of realis status — or, in terms of IJbema's analysis, of the presence of a TP projection.

3.3.2 The syntactic location of *te*

I now turn to IJbema's (2002) proposal regarding the position of *te* in the syntactic structure. According to IJbema, the presence of TP depends on the position of *te*. Realis complements have a TP projection, so that *te* is located in the T-head. Irrealis complements lack a TP projection, so that *te* occupies a modal head. Below, I will argue that the *with*-infinitive in Wambeek also lacks a TP, so that here, too, *te* cannot be projected in TP.

[16] Rijkhoek (1998:43) observes that all modifiers that are allowed in the clausal domain are also allowed in the nominal domain.

In this dissertation I will not attempt to solve the problems concerning *te*. One of the complicating factors is that dialects differ as to the location of *te*. For instance, in some dialects, such as that of Groningen, *te* can be separated from the infinitive:

(38) *Groningen*
dat hai begunt te kraant lezen.
that he begins to newspaper read
'That he begins to read the newspaper'
(Schuurman & Wieringa 1986:341)

In southern variaties of Dutch, *te* sometimes precedes the "wrong" infinitive. This phenomenon, exemplified in (39b), is referred to by Zwart (1993:104) as "*te*-shift":

(39) a. *Standard Dutch*
om te komen werken
for to come work
'… to come and work'

b. *Dialect of Geel*
om komen te werken
for come to work
'… to come and work.'

On the basis of the standard Dutch facts it is tempting to analyze *te* as a prefix that is attached to an infinitive. However, this analysis is not supported by the dialect data discussed above. Furthermore, it is also problematic in the light of other syntactic properties of *te* in standard Dutch, such as its behaviour in infinitive coordination and in gapping contexts (see Zwart 1993:103–105).[17]

On a final point, it is interesting to note that IJbema suggests that *te* can occupy a modal head. One of IJbema's arguments for this is that in a nominal construction with an attributive *te*-infinitive, the deontic modality can only be related to *te*:

(40) Het te lezen boek.
the to read book
'The book to be read, the book that can be read.'

This proposal thus departs from the more traditional analyses in which *te* is viewed as a prepositional or tense-related head. Although I will not explore IJbema's proposal here, there is a clear parallel with my analysis of the preposition *mè* in the *with*-infinitive in the Wambeek dialect; as I will argue below, *mè*, like *te*, occupies a lower functional head rather than a higher functional (i.e. tense-related) head, or a prepositional head.

[17] Zwart suggests the possibility that *te* has been reduced to a clitic; I will not discuss this proposal here.

3.3.3 The *te*-infinitive in the *with*-infinitive

In this section I discuss the status of the infinitival clause in the *with*-infinitive of the Wambeek dialect. Note first of all that the presence of *te* is obligatory:

(41) * Me zaai werken moest-n-aai de gieln dag toisj blaaive.
with she-NOM work must-CL-he the whole day home stay
'With her working, he had to stay home all day.'

Second, the *with*-infinitive allows perfective (or terminative) aspect. This is illustrated in (42):

(42) Mè ik da zjust gezeid t'emmen, …
with I that just said to have
'Because I have said that recently, …'

As regards the syntactic implementation of these observations, I propose to identify the possibility of perfective aspect in the *with*-infinitive with the presence of an AspP. In Cinque's (1999) universal hierarchy of functional projections, T(past) dominates AspP. On the assumption that syntactic structure is built in a bottom-up fashion, I propose that the *with*-infinitive projects at least up to the AspP, but not as far up as T(past).

In §§3.3.4–3.3.8 I will provide evidence for the absence of a T(past) position in the *with*-infinitive. These revolve around the properties of the subject, the absence of the negative clitic *en*, and the impossibility of epistemic modality.

3.3.4 The factivity requirement

As Haegeman (1986) has observed, the *with*-infinitive carries a factive implication. Consider for instance the example in (43), from the dialect of Knokke-Heist:

(43) Mee ik tnoaste joar weg te goan heen-k dat hus verkocht.
with I next year away to go have-I that house sold
'Because I will go away next year, I have sold that house.'
(Haegeman 1986:132)

According to Haegeman, (43) implies that the subject is certain about going away next year; the subject's leaving is presented as a "fact". The *with*-infinitive in the dialect of Wambeek also has this factive implication. This can be demonstrated with the following test, originally proposed by Kiparsky & Kiparsky (1971): if a proposition has a factive reading, a contradication arises when this proposition is negated. This is illustrated in (44a) for the factive predicate *toegeven* ('admit'). No such contradiction arises in clauses with a propositional status, as is shown in (44b) for the propositional predicate *denken* ('think'):

(44) a. Jan gaf toe dat hij ziek was, maar hij was niet ziek.
John admitted that he ill was but he was not ill.
'John admitted that he was ill but he was not ill.'

b. Jan dacht dat hij ziek was maar hij was niet ziek.
John thought that he ill was but he was not ill
'John thought that he was ill but he was not ill.'

When we apply this test to the Wambeek *with*-infinitive, we find that a contradiction arises when the proposition that is expressed in the *with*-infinitive is negated:

(45) Mè gou otto's te verkoepen, zal a vrau toch wel mè
with you cars to sell will your wife certainly PART with
ne Mercedes roun zeker. Mo ge verkup gin otto's.
a Mercedes ride surely. but you sell no cars
'With you selling cars, your wife must drive a Mercedes. But you don't sell cars.'

This corroborates the claim that the *with*-infinitive has factive status.

Haegeman (1986:132) uses another diagnostic to determine factivity. She argues that the factive status of the *with*-infinitive implies that the subject cannot receive a generic reading:

(46) Mè gou otto's te verkoepen, zal a vrau toch wel mè
with you cars to sell will your wife certainly PART with
ne Mercedes roun zeker.
a Mercedes ride surely
'With you selling cars, your wife must drive a Mercedes.'
'If one is a cars salesman, the wife is driving a Mercedes.'

In (46), the 2-SG pronoun subject *gou* cannot receive a generic reading; it must have a specific reading. However, it should be noted that a 2nd person sg. pronoun, when embedded under a factive, can receive both a generic and a specific reading:

(47) Ik betreur dat je altijd hard moet werken om iets te bereiken.
I regret that you always hard must work for something to achieve
'I regret it that one/you will always have to work hard to achieve something.'

This suggests that the impossibility of a generic reading of the subject in a *with*-infinitive is not related to its factivity. Rather, it would appear as though this is due to the fact that the subject of a *with*-infinitive is always focused.

At this point, a comment is in order regarding the relation between factivity and perfectivity. Intuitively, perfectivity appears to imply factivity, since if an event is completed, the implication seems to be that the proposition which includes the event must be true. This intuition is borne out by examples of the kind in (48), where we have an attributive perfective participial form:

(48) Het gelezen boek.
the read-PART book
'The book that has been read.'

In (48), the implication is that the book has been read, presumably because the *ge*-prefix signals perfective aspect.[18] In this configuration, then, perfectivity appears to imply factivity.

However, it is easy to show that the correlation in (48) is the exception rather than the rule. This is because in clausal contexts, the propositional or factive properties of the matrix predicate interact with the aspectual properties of the embedded clause, as is illustrated by the example in (49):

(49) Ik denk dat Jan gisteren het boek heeft gelezen.
I think that John yesterday the book has read
'I think that John read the book yesterday.'

Even though the subclause in (49) contains the perfective auxiliary *hebben* ('have'), the proposition expressed by the complement clause is not factive. This is due to the fact that it is embedded under a full sentence with a propositional matrix predicate. As (50) shows, the same obtains for a *te*-infinitive with *hebben* that is embedded under a matrix predicate:

(50) Jan zegt het boek te hebben gelezen.
John says the book to have read
'John says that he has read the book.'

The infinitival clause in (50) is not factive either, despite the presence of a perfective auxiliary.

It is also important to point out that factivity does not imply perfectivity either. This can be illustrated by the sentence in (51), which contains a factive matrix verb and an imperfective (progressive) complement:

[18] Recall that in Low-Saxon, absence of the IPP effect coincides with V3-V2 word order, and the lack of the *ge*-prefix on the participle (see §2.6.2). Nevertheless, these constructions have perfective aspect. It might be interesting to investigate the relation between perfective aspect and the *ge*-prefix on the basis of cases with an attributive perfective participial form in Low-Saxon, as illustrated for Standard Dutch in (48).

(51) Jan betreurt het dat Marie zijn boek aan het lezen is.
John regrets it that Mary his book at the read is
'John regrets that Mary is reading his book.'

In (51) there is an interaction between the properties of the main verb and those of the embedded clause.

As regards the *with*-infinitive, the point to note is that the infinitival clause is never embedded under a matrix predicate, since it functions as an adjunct. This means that there are no semantic properties of a matrix verb which interfere with the perfective aspect introduced by the AspP. The factive status of the *with*-infinitive, then, follows from its inherent aspectual properties, as were argued for above. Consider once more the example in (42), repeated in (52) below:

(52) Mè ik da zjust gezeid t'emmen, …
with I that just said to have
'Because I have said that recently, …'

In this respect, the factive status of the *with*-infinitive is similar to that observed in attributive perfective participles of the kind in (48).

3.3.5 Deontic and epistemic modality in the *with*-infinitive

In Cremers (1983), it is observed that modal complements of verbs which allow VP (or irrealis) complements can receive a deontic interpretation only. Modals which function as infinitival complement of verbs which allow CP (or realis) complements can receive both an epistemic and a deontic interpretation. Consider the following examples, adapted from IJbema (2002:111):

(53) *Irrealis infinitival complements*

a. Marie probeert binnen één jaar Arabisch te kunnen lezen.
Mary tries within one year Arabic to can read
Mary tries to be able to read Arabic within one year (deontic)
* Mary tries that it is possible to read Arabic within one year (epistemic)

Realis infinitival complements

b. Zij besefte niet jou op weg hierheen te moeten zijn gepasseerd.
she realised not you on way here-to to must be passed
'She didn't realise she must have passed you on her way here.' (epistemic)

c. Zij beseft morgen een liedje te moeten zingen.
she realises tomorrow a song to must sing
'She realises she must sing a song tomorrow.' (deontic)

As was argued in §3.3.3, the infinitive in the *with*-infinitive may have perfective (or terminative) aspect. On the assumption that realis status coincides with perfective aspect, we expect modal infinitives in the *with*-infinitive to allow both an epistemic

and a deontic reading. However, the example in (54b) shows that this prediction is not borne out:

(54) a. *Deontic reading*:
Mè zaai gisteren daun boek te mute lezen kostemen nie veel duun.
with she yesterday that book to must read could-we not much do
'Since she had to read that book yesterday, we weren't able to do much'

b. ?/* *Epistemic reading*:
Mè zaai a te muute zen gepasseerd vennek et skou
with she you to must be passed find-I it strange
da-g-ee nie erkost etj.
that-you-her not recognised have

In (54) only a deontic reading is possible. In view of these observations, I propose that the infinitive in a *with*-infinitive differs from an infinitival complement of a realis verb in that the former contains less structure. Since the infinitive in the *with*-infinitive allows perspective aspect, it is reasonable to assume that it contains an aspectual projection. Following Cinque (1999), this means that the functional domain of the *with*-infinitive contains at least $Asp_{terminative/perfect}$.

The possibility of deontic modality suggests that the functional domain of the *with*-infinitive also includes the lower modal projections, which are associated with root modality; I suggest that it contains all the modal projections up to and including $Mod_{volition}$. Given that there is no conclusive evidence for the presence of a TP (see also §3.3.6–§3.3.8 below), and given the impossibility of epistemic modality, I further propose that the functional domain of the *with*-infinitive lacks the modal projections above and below T(Past), as well as T(Past) itself.[19] The structure of the *with*-infinitive is summarised in (55), where I provide Cinque's hierarchy for the IP domain (see Cinque 1999:106). The functional projections (FPs) present in the *with*-infinitive are represented in boldface:

(55) [$Mood_{speech\ act}$ [$Mood_{evaluative}$ [$Mood_{evidential}$ [$Mod_{epistemic}$ [T (Past) [T (Future) [$Mood_{irrealis}$ [$Mod_{necessity}$ [$Mod_{possibility}$ **[$Mod_{volitional}$ [$Mod_{obligation}$ [$Mod_{ability/permission}$ [$Asp_{habitual}$ [$Asp_{repetitive(I)}$ [$Asp_{frequentative}$ [$Asp_{celerative\ (I)}$ [T (Anterior) [$Asp_{terminative}$ [$Asp_{continuative}$ [$Asp_{perfect}$ [$Asp_{retrospective}$ [$Asp_{proximative}$ [$Asp_{durative}$ [$Asp_{generic/progressive}$ [$Asp_{prospective}$ [$Asp_{SgCompletive(I)}$ [$Asp_{PlCompletive}$ [Voice [$Asp_{celerative\ (II)}$ [$Asp_{SgCompletive\ (II)}$ [$Asp_{repetitive\ (II)}$ [$Asp_{freqentative\ (II)}$**

Like Cinque, I assume that the order of FPs is universally fixed. However, unlike Cinque I assume that languages vary in the amount of functional structure that they project, depending on the syntactic behaviour of the construction involved. Specifically, I assume that in the Wambeek dialect an infinitival complement

[19] In this respect I depart from IJbema (2002), who generates infinitival *te* in T(Past) in a realis/perfective infinitival complement.

selected by a realis verb projects more structure than an infinitive that is contained in a *with*-infinitive.

Cinque (1999:127) makes the theoretically "least costly assumption" that every sentence in every language contains the full array of FPs, and attributes the fact that not all FPs are realised morphologically to markedness.[20] Cinque's idea is that only the marked value of an FP is expressed in terms of overt morphology, whereas the unmarked (or "default") value lacks morphological marking. Consider for instance the evidential mood head $\text{Mood}_{\text{evidential}}$. Here Cinque takes direct (visual) evidence to be the unmarked value, and all other kinds of evidence to be marked. Cinque notes that this is supported by the observation that many languages with evidentiality lack morphological marking for visual evidence, but not for other kinds of evidence. Another example concerns the epistemic modal head $\text{Mod}_{\text{epistemic}}$. Here Cinque takes the situation in which a speaker is committed to the truth of a proposition to be the unmarked value. According to Cinque, the unmarked value here is implicit in every statement, while the marked situation must be made explicit, for instance in terms of an adverb like *probably* or *presumably*.

However, it is not entirely clear how Cinque can account for the observation that a particular item can appear in one context but not in another. For instance, take the observation that epistemic modals can occur in perfective infinitival complements, but not in the *with*-infinitive, which also has perfective status. In other words, it is unclear in Cinque's account why epistemic modality should be marked in perfective infinitival complements but unmarked in *with*-infinitives. Note that the impossibility of epistemic modality in *with*-infinitives cannot be attributed to the factivity of this construction. The example in (56) shows that it is perfectly possible to embed an epistemic modal under a factive verb:[21]

(56) Zij gaf toe dat Jan onschuldig moest zijn.
she admitted that John innocent had-to be
'She admitted that John had to be innocent.'

Cinque's markedness account also faces a more general problem. Cross-linguistic evidence suggests that the unmarked value of an FP is not always morphologically covert. A clear example of this concerns the present tense, which Cinque considers to be the unmarked value of T(Past). Bybee *et al*. (1994:144–147) observe that in Yagaria, Alyawarra and Tigre progressive markers have developed into present tense markers (see also IJbema 2002:18, 109). In many creoles, a bare stem signals present tense with stative verbs but past tense with non-stative verbs. Consider for instance *mi kiri en* ('I killed him') in Sranan (Norval Smith p.c.). This shows that the

[20] It is rather less clear whether Cinque's assumption is also the "least costly" one from the point of view of UG, or the language learner, since his view would seem to presuppose that all functional projections are innately present.

[21] For discussion of this issue, see Barbiers (1995). Barbiers uses two diagnostics for a pure epistemic reading: (1) the modal must combine with a stative verb and an individual level predicate, and (2) the subject must have a fixed reference.

"marked" value can also remain morphologically covert. It would therefore appear that markedness interacts with lexical aspect (see Cinque (1999:223) for a similar observation).

In view of these problems, I assume, contrary to Cinque, that sentences (and more generally, languages) differ in respect of the FPs that they contain. On the basis of this modified version of Cinque's hierarchy, the lack of epistemic modality in the *with*-infinitive can be accounted for if we assume that the *with*-infinitive does not contain any FPs higher than $Mod_{volitional}$. In the following section, I will consider some empirical evidence in favour of this position.

3.3.6 The negative clitic *en*

One type of support for the claim that the *with*-infinitive lacks the higher part of Cinque's functional domain comes from the observation that the construction cannot contain the negative clitic *en*. To appreciate this point, consider first the following Italian data (from Zanuttini 1996:117):

(57) a. Prendilo!
take-IMP-it
'Take it!'

b. * Non prendilo!
not take-IMP-it
'Don't take it!'

As (57b) shows, imperatives in Italian cannot be negated. This leads Zanuttini (1996) to conclude that imperatives lack a TP, and that NegP must be licensed by TP.[22]

West-Flemish (and many other Belgian dialects, including the Wambeek dialect) has a form of negative doubling in finite clauses in which the negative marker *nie* undergoes optional doubling. This can be seen in the sentence in (58), which has an additional negative marker *en* cliticised to the finite verb:

[22] Italian circumvents this restriction by selecting another form of the verb; as is shown in (i), a negative imperative is expressed with an infinitive (see Zanuttini 1997:119):

(i) Non lo prendere!
not it take-INF
'Don't take it!'

Kayne (1992) proposes that the negative marker *non* licences not so much the infinitive, but an empty modal, which in turn licences the infinitive. The unusual order *clitic–infinitive* that is found in negative imperatives (in all other contexts the order is *infinitive–clitic*) can then be analysed as an instance of clitic climbing. In other words, in (i) the clitic *lo* is not adjoined to the infinitive, but to the empty modal.

(58) Da Valère woarschijnlijk **nie** nor us **en**-goat.
that Valère probably not to home NEG-goes
'That Valère probably does not go home.'
(Haegeman 1995:125)

As regards the syntactic representation of this type of negation, I follow Haegeman's assumption that *en* heads NegP and *nie* occupies its specifier (see Haegeman 1995). Following Haegeman, I further assume that NegP dominates TP and that the verb moves to T in order to pick up tense inflection, then to Neg to pick up the clitic *en* (which attaches itself to the verb), and finally to the Agr head of a head-final AgrP that dominates NegP.

If there is a correlation between the presence of the *en*-headed NegP and TP, then we do not expect to find *en* in the *with*-infinitive. This prediction is borne out:[23]

(59) Mè Jef **nie** <?***en**> te <***en**> kommen, zemme mo mè vieren.
with Jef not NEG to NEG come are-we but with fours
'Given that Jef won't come, it will be just the four of us.'

This supports the claim that the *with*-infinitive lacks a TP projection.

Consider next the status of single sentential negation in the *with*-infinitive, as in (60):

(60) Mè zaai **nie** te werken kon Jef aaindelek mè ee afspreken.
me she not to work could Jef finally with her meet
'Because she didn't go to work, Jef was finally able to meet her.'

Haegeman (1995) argues that in such cases *nie* still occupies the specifier position of the NegP, and stipulates that the head of NegP must remain empty in infinitives. Given that NegP dominates TP, Haegeman thus makes the implicit assumption that infinitives project a TP. This account is incompatible with my analysis of the absence of *en* in the *with*-infinitive, since if *nie* occupies the specifier of NegP, and if NegP precedes TP, then *nie* should not be able to occur in the *with*-infinitive either. However, as (60) shows, this is not the case.

In subsequent work, Haegeman instead argues for the presence of *two* negative projections: a higher projection PolP, which is headed by *en*, and a lower projection NegP, which contains *nie* in its specifier position. NegP immediately dominates VP (see Haegeman 2001). This account appears to offer a solution to the possibility of a

[23] Note that West-Flemish differs from Italian in that *en* can appear in imperatives:

(i) En doet da nie!
NEG do-IMP that not
'Don't do that!'

single sentential negation in the *with*-infinitive: if *nie* is associated with the lower negation projection, we expect to find *nie*, but not *en*.

A final comment is in order regarding negative concord, i.e. the phenomenon that two negative elements express a single negation (rather than cancel each other out). The example in (61), which contains the elements *niemand* and *nie*, shows that the *with*-infinitive allows negative concord:

(61) Mè Jef dad uin **niemand** **nie** te zeggen, ...
with Jef that to no one not to say
'Because Jef has told this to no one, …'

Such cases can be accounted for by assuming that *nie* occupies the specifier of the lower NegP while *niemand* is scrambled out of the VP to a specifier position to the left of NegP, possibly [spec, AgrOP] (see Haegeman 1995:131 for an account along these lines).

3.3.7 The subject in the *with*-infinitive

As I argued in §3.3.5, the *with*-infinitive has the general structure in (62). In (62) I disregard most of the intermediate functional projections, which do not play a role in the following discussion:

(62) [$Mod_{volitional}$ … [$Asp_{terminative/perfect}$ … [vP [VP]]]]

In this section I will discuss the properties of the subject in a *with*-infinitive. As we will see, these properties offer additional support for the idea that the *with*-infinitive lacks the upper part of the functional domain. My focus will be on pronominal rather than on lexical subjects, since only the former have morphological case-marking.[24]

Note first of all that a pronominal subject in a *with*-infinitive must appear in its strong form; a weak pronominal subject, as in (63), is ruled out:

(63) * Mè ze da te zeggen, ...
with she-WEAK that to say-INF
'Because she said that, ...'

The distribution of strong and weak pronouns in Dutch is discussed in Zwart (1993). Following Travis (1984), Zwart makes a distinction between subject-initial and non-subject-initial main clauses. This distinction is motivated by the facts of the kind in (64):

(64) a. Je/jij fietst naar Amsterdam.
you-WEAK/STRONG cycle to Amsterdam
'You are cycling to Amsterdam.'

[24] As regards lexical subjects, Marga Devos (p.c.) notes that West-Flemish tends to have definite subjects in the *with*-infinitive, although indefinite subjects are also possible.

b. * Me/mij heb je niet genoemd.
me-WEAK/STRONG have you not mentioned
'Me you did not mention.'

The data in (64) show that in initial position subjects can be both strong and weak, while objects can only be strong. This difference cannot be explained if subjects and objects occupy the same position in main clauses, i.e. the topic position [spec, CP]. Instead, Zwart (1993) analyzes subject-initial main clauses as TPs and non-subject initial main clauses as CPs. This allows him to say that the specifier of TP can host strong and weak pronouns, and the specifier of CP strong pronouns only.

Zwart's analysis can be extended to account for the impossibility of weak subjects in the *with*-infinitive. The observation that a weak subject is not allowed suggests that there is no TP projected. In a bottom-up derivation, this means that if there is no TP projected, there is no CP either. This means that the strong subject in a *with*-infinitive occupies the specifier of VP (or a lower specifier position), but not the specifier position of a TP or CP. The absence of weak subjects thus supports the structure in (62).

It should be noted at this point that weak subject and object pronouns generally fail to occur in VP-internal positions, but are scrambled to a position outside of the VP:

(65) Omdat <je> <me> waarschijnlijk <*je> <*me> belde.
Since you-WEAK me-WEAK probably you-WEAK me-WEAK called
'Since you probably called me …'

On the assumption that scrambled weak subject pronouns target the specifier of TP, it follows that they cannot occur in a *with*-absolutive. Weak subject pronouns are not allowed inside the VP because they are weak, and they cannot be scrambled to a position outside of the VP because there is no suitable position present. The scenario for weak object pronouns is slightly different; I discuss this issue in §3.3.8.

The second restriction on pronominal subjects in the *with*-infinitive is that such subjects cannot undergo clitic doubling:

(66) * Mèkik da te zeggen, ...
with-CL-I that to say, ...
'Because I said that, …'

Clitic doubling is typically associated with the CP domain (see Van Craenenbroeck & Van Koppen 2002, for instance). The impossibility of clitic doubling in the *with*-infinitive thus suggests that the construction lacks a higher functional domain.

The third restriction on the *with*-infinitive is that it cannot contain an existential construction with two subjects, i.e. expletive *er* and a lexical subject:

(67) * Met- ter gin iejn kans op verbeitering te zenei-se besleutn
with there not one chance on improvement to be has-she decided
nen anderen job te zieken.
an other job to search
'As there wasn't the slighest chance of improvement, she decided to look for another job.'

In my analysis, this follows simply from the fact that the *with*-infinitive does not have a higher subject position to host the expletive.

3.3.8 Weak object pronouns

In the preceding section we saw that weak pronouns cannot appear inside the VP, and weak subject pronouns cannot appear inside the *with*-infinitive. Taken together, these observations support the claim that the *with*-infinitive lacks a TP projection. However, weak *object* pronouns can occur in the *with*-infinitive, as is illustrated in (68) below. Note that the example in (68) has been chosen with care, since in the Wambeek dialect the 3-SG-MASC weak pronoun *em* ('him') is the only pronoun that differs in form from its corresponding object *clitic*, i.e. *en*:[25]

(68) Mè Marie em / * en gezien t'emmen, ...
with Mary him-WEAK PRONOUN him-CL see to have
'Because Mary saw him, …'

As (68) indicates, it is only the weak *pronoun* that is allowed in the *with*-infinitive.

Craenenbroeck & Van Koppen (2002) show that the occurrence of object clitics is linked to finiteness. The impossibility of object clitics thus corroborates my claim that the *with*-infinitive lacks a TP projection.

The fact that the *with*-infinitive allows weak object pronouns can be captured in a number of ways. What seems clear is that such pronouns must leave the VP by scrambling to a higher projection, but the question is which higher position. Recall that object scrambling also occurs in negative concord (compare (61) in §3.3.6). To account for such cases, I assumed that the negative element moves to the specifier of AgrOP. It seems reasonable to make the same assumption with regard to scrambled weak object pronouns. In agreement-based approaches to case checking, AgrOP is dominated by TP (see e.g. Chomsky 1992 and Ura 2001). These approaches are thus

[25] In cases of homophony, such as 3-SG-NEUT, there are diagnostics which help to determine whether the form is an object clitic or a weak pronoun. For instance, only 3-SG-NEUT clitics can appear to the left of a non-clitic subject. As predicted, this is not possible in a *with*-absolute:

(i) Mè <*et> Marie <et> uin niemand nie te zeggen, ...
with it Mary it to no one not to say
'Because Mary has told it to no one, …'

in principle compatible with the present analysis.[26] Another view is that of Cinque (1999), who claims that AgrOP projections can be freely projected on top of each functional projection. This view is also compatible with the analysis proposed here, as it creates a sufficient number of landing sites for scrambled weak object pronouns, even within the rather limited structure of the *with*-infinitive.[27] Note, finally, that scrambling has also been accounted for in terms of PF-movement (see e.g. Holmberg 1997). In this type of approach scrambling no longer takes place in the syntactic component, which makes the issue of available landing sites spurious.

3.4 The properties of *mè* in the *with*-infinitive

Having discussed the internal structure of the *with*-infinitive, I will now consider the properties (or, more specifically, the feature specification) of the preposition *mè*. I will argue that it is by virtue of the specification of *mè* that the subject of the *with*-infinitive has nominative case. Following Pesetsky & Torrego (2001, 2004), I claim that *met* is specified for the interpretable tense feature iT, which enables it to occupy the head of an AspP projection. In this position, *mè* is able to license nominative case.

The presence of a tense feature appears to be incompatible with the analysis that I outlined in §3.3, where I argued explicitly against the presence of a TP projection. In order to resolve this apparent paradox I will follow Stowell (1996), who argues that clauses in fact contain *two* tense projections: a higher tense projection (TP) and a lower one (ZP). My proposal is that in the *with*-infinitive, TP is absent. I will further propose that Stowell's ZP, which has aspectual properties, is to all intents and purposes identical to Cinque's AspP. This claim is supported by Pesetsky & Torrego (2004), who also distinguish between a higher tense projection (T_s) and a lower one (T_o), where T_o has aspectual properties. As regards the *with*-infinitive, this means that the presence of a tense feature does not imply the presence of a *higher* tense projection. My claim that the aspectual projection (i.e. the *lower* tense projection) hosts the preposition *mè* is supported by the work of Torrego (1998, 2002), who, on the basis of the distribution of animate objects in non-stative predicates in Spanish, argues that T_o belongs to the category P.

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[26] In the Minimalist Program, the agreement-based case theory of Chomsky (1992) has been replaced by an "agreement-less" checking theory (see Chomsky 1995). In the latter approach, AgrOP no longer exists. Following Hale & Keyser (1991, 1993), Chomsky adopts a two-layered VP-shell (in which vP dominates VP) for simple active transitive verbs. The object moves to the outer specifier of vP to check its case features; the subject originates in the inner specifier of vP and moves to the specifier of IP to check off the nominative case feature of IP. In §3.4 I will adopt this view to the extent that I assume a two-layered VP-shell. However, the question of whether a (scrambled) object moves to the specifier of AgrOP or to the outer specifier of vP (or to any other projection for that matter) is not crucial to the point that I wish to make. Rather, the important observation is that the presence of weak object pronouns in the *with*-infinitive is compatible with my analysis.

[27] It might be objected that weak object pronouns normally do not occur as low as AgrOP. Perhaps, then, we must make the additional assumption that an element moves to the highest available position when its normal landing site is not projected (since part of the functional domain is missing). Such an approach would weaken my explanation of the absence of weak subjects, however.

First, in §3.4.1, I consider the assignment of nominative case in the *with*-infinitive. Next, in §3.4.2, I demonstrate that the relation between a prepositional element and a temporal, aspectual or modal feature is also found in other languages; in other words, the preposition in the Wambeek *with*-infinitive is not unique in having an iT feature.

3.4.1 Nominative case assignment in the *with*-infinitive

In §3.3 I argued that the *with*-infinitive in Wambeek Dutch contains a VP, an AspP and the lower modal projections that are associated with root modality, but no higher functional domain. The structure of the *with*-infinitive is given in (69), where I have reduced the lower modal projections to ModP and the aspectual projections to AspP:

(69) $[_{ModP}$ Mod $[_{AspP}$ Asp $[_{vP}$ v $[_{VP}$ V]]]]

The reader will recall that in §3.3 I argued explicitly against the presence of a TP projection. In this section I will modify this view to the extent that I show that Cinque's AspP, which forms part of the *with*-infinitive, has the status of a tense projection. This projection, which I will refer to as the "lower tense projection", differs from the "higher tense projection" (i.e. TP), in that it has aspectual properties rather than temporal properties. To appreciate this point, we must briefly digress from the topic of nominative case assignment and turn to Stowell's (1996) approach to tense.

Stowell (1996) argues that TP is a predicate which expresses a relation of temporal ordering between the utterance time (UT or speech time S) and the time of the event or state (E) expressed by the verb phrase. In syntactic terms, this means that S is the external argument of T, and that E is its internal argument. Stowell (1996:281) assigns the following syntactic structure to the tense predicate (exemplified in (70) with the sentence *John hit the ball*):

(70) $[_{TP}$ ZP $[_{T}$ PAST 'after' $[_{ZP_i}$ Op_i $[_{Z}$ $[_{VP}$ ZP$_i$ $[_{VP}$ John $_{DP}$ $[_{V}$ hit the ball]]]]]]]]
=S **=E**

ZP (short for "*Zeit* phrase") intervenes between TP and VP. ZP serves as the time-denoting internal argument of T, and denotes the event time (E). An operator in the Spec of ZP binds a temporal variable within VP. The external argument originates in [spec, TP], where it receives an external theta-role assigned by T. Given that the external argument is time-denoting, Stowell assumes that it also has the categorial status of ZP. Thus, (70) translates as "the Speech Time is after a time ZP_i at which John hit the ball" (see Stowell 1996:281).

Stowell suggests that the relation between ZP and VP is analogous to that between DP and NP. The function of a determiner is to place the reference of a noun in the perspective of the speaker. Similarly, the function of ZP is to place the *event* in the perspective of the speaker. I would like to suggest that these referential properties in the temporal domain are in fact aspectual properties, given that they signal whether

the event is completed or ongoing. If this is correct, then Cinque's AspP can be reinterpreted as Stowell's ZP, i.e. as a lower tense projection with aspectual properties.

As was noted, Pesetsky & Torrego (2004) also propose a lower tense projection T_o and a higher tense projection T_s for verbal predication structures, where T_o is located below v and above VP:[28]

(71) $[_{TPs}$ subject $[_{Ts}[_{vP}\ [_{v}\ [_{TPo}\ [_{To}[_{VP}\ [_{V}$ object$]]]]]]]]$
(Pesetsky & Torrego 2004:12)

The motivation behind the ordering of T_o with respect to vP and VP is semantic in nature. Pesetsky & Torrego argue that a telic verb such as *read* involves two distinct subevents. The first involves a process; for *read*, this is a predicate with an agentive argument. The second involves the completion of a process; for *read*, this is a predicate with an additional argument, e.g. *a book*. Following Hale & Keyser (1993) and Chomsky (1995), Pesetsky & Torrego propose that the predicate of each of the subevents is a distinct level item. In a verbal predicate such as *read*, the predicate that assigns the agent role is v, and the predicate that assigns the additional argument is V.

If tense heads have the general property of ordering pairs of times (see among others Stowell 1996), T_o has the function of relating the time of the vP-subevent to the time of the VP-subevent. For this reason, Pesetsky & Torrego place T_o between vP and VP. Pesetsky & Torrego's proposal resembles those of Kratzer (1996) and Travis (1992), who also suggest the existence of an aspectual head in the position of T_o. For my purposes, the important point is that both Stowell's ZP and Pesetsky & Torrego's T_o are compatible with the claim that Cinque's AspP in the *with*-infinitive constitutes a low tense projection with aspectual properties.

With this in mind, let us now turn to the question of why the *with*-infinitive in the Wambeek dialect involves nominative case assignment. I would like to propose that the key to this conundrum lies in the special feature specification of *mè*. Specifically, I make the claim in (72):

(72) *Mè* has an interpretable tense feature iT.

It is the presence of this iT feature that enables *mè* to occupy a tense position, i.e. the head of AspP.

The idea that a preposition has an iT feature as part of its feature specification is not new. For instance, Barbiers (2002) argues that the Dutch preposition *van* has an iT feature (see §3.4.2). Furthermore, Torrego (1998, 2002) claims that T_o in Spanish is prepositional in nature. Torrego observes that in Spanish animate accusative DPs surface as bare DPs or as DPs introduced by the preposition *a*, the choice depending

[28] In Pesetsky & Torrego's approach T_o plays a role in their reinterpretation of accusative case-marking: T_o allows the uT feature on a DP complement in a verbal predication structure to enter into an Agree relation. I will not consider this approach here.

(in part) on the aspectual properties of the predicate. Consider for instance the verb *conocer*, which may have a stative reading ('know') or a non-stative reading ('get to know'). The data in (73a,b), taken from Pesetsky & Torrego (2004:13), indicates that the difference between the two readings is disambiguated by *a*:

(73) a. *Stative only*
Conoce bien un vecino suyo.
they know well a neighbour of theirs
'They know a neighbour of theirs well.'
b. *Non-stative only*
Conoce bien **a** un vecino suyo.
they know well P a neighbour of theirs
'They got to know a neighbour of theirs well.'

Imperatives, which favour a non-stative reading, are unacceptable with an animate object, unless this object is preceded by *a*:

(74) ¡Conoce * (**a**) tu vecino!
know P your neighbour
'Get to know your neighbour!'
(Torrego 1998:32)

Furthermore, an achievement predicate takes a DP complement with *a* when the complement is animate:

(75) La lluvia empapó * (**a**) muchos turistas.
the rain soaked P many tourists
'The rain soaked many tourists.'
(Torrego 1998:30)

The above data suggest that in Spanish aspectual properties like achievement and completion are syntactically expressed by the preposition *a*. For this reason, Torrego concludes that T_o belongs to the category P.[29]

Torrego's interpretation of the Spanish preposition *a* is similar to my interpretation of the Wambeek preposition *mè*. I propose that the Wambeek *with*-infinitive has the structure in (76), where *mè* occupies the head of AspP:

(76) $[_{ModP}\ [_{Mod}\ [_{AspP}\ [_{Asp}$ mè $[_{vP}$ zaai $[_{v}\ [_{VP}\ [_{V}$te werken]]]]]]]]

In (76) the subject *zaai* receives an external theta-role from the predicate *te werken*, and *mè* assigns a theta-role to the entire clause *zaai te werken*.

[29] Torrego (2002) calls this projection both a "PP" and an "aspectual projection", but this is just a matter of terminology; the PP occupies the same position as T_o, i.e. between vP and VP.

I now turn to the issue of nominative case assignment in the *with*-infinitive. In line with Pesetsky & Torrego (2001), I assume that nominative case is an uninterpretable tense feature on D, which I will refer to as "uT" below. The fact that the infinitival subject has nominative case implies that it must have an uT feature. Furthermore, the subject must also have interpretable phi-features (henceforth "i-phi") on account of it being a D element. I further assume that *mè* is specified for a complete set of u-phi features. This results in the configuration in (77):[30]

(77) $[_{ModP}\ [_{Mod}\ [_{AspP}\ [_{Asp}$ mè $[_{vP}$ zaai $[_{v}\ [_{VP}\ [_{V}$te werken]]]]]]]]
iT uT
~~u phi~~ ~~i phi~~

In this configuration, the u-phi on Asp (the "probe") can be licensed by the i-phi on the subject in spec vP (the "goal"). This is possible because u-phi is a complete set of phi-features (see Chomsky 2001). Furthermore, the uT feature on the subject is licensed by the iT on Asp, which results in the spell-out of nominative case on the subject. Note that the uninterpretable phi-feature dominates the interpretable phi-feature; this is the usual state of affairs in an Agree relation, given the derivational nature of the system: the uninterpretable feature is merged and "looks down" to see whether there is an interpretable feature to agree with. In the *with*-infinitive there is no iT available in the lower domain, since iT, due to its infinitival status, cannot be associated with vP or VP. The iT is therefore introduced by external merger of *mè*, which projects in Asp. This scenario is illustrated in (78):

(78) $[_{ModP}\ [_{Mod}\ [_{AspP}\ [_{Asp}$ mè $[_{vP}$ zaai $[_{v}\ [_{VP}\ [_{V}$te werken]]]]]]]]
~~iT~~ ~~uT~~
~~u phi~~ ~~i phi~~

---

[30] Marjo van Koppen (p.c.) notes that if *mè* has a complete set of u-phi features, then the prediction is that it allows Comp agreement, similar to the CP head. Wambeek *mè* does not display Comp agreement in the *with*-infinitive, however. Jeroen van Craenenbroeck (p.c.) points out that there are speakers with Comp agreement on the preposition *bè* ('at'). Consider the paradigms in (i):

(i)

bè	moi	at me	bè**n**ons	at us
bè	aa	at you	bè**n**eir	at you-PL
bè	em/eer	at him/her	bè**n**eer	at them

Interestingly, the SAND data show that the *with*-infinitive in the dialect of Wambeek corresponds to a *bè*-infinitive with a nominative subject in the dialect of Zoutleeuw (which is another village in the province of Flemish Brabant), as is shown in (ii):

(ii)

Bè	hee	te	werke	moes	sij	den	hielen	dag	thuis	blijve.
at	he-NOM	to	work	had	she	the	whole	day	home	stay

'With him working, she had to stay home all day.'

This would suggest that Zoutleeuw *bè*, like Wambeek *mè*, has iT and a (complete set of) u-phi features. It would be interesting to investigate whether *bè* has Comp agreement, and what the syntactic properties of *mè* are in the Zoutleeuw dialect. I leave this matter for further research.

This analysis accounts for the fact that it is not possible to project a finite verb in the *with*-infinitive, despite the presence of an AspP. The reason for this is that AspP is occupied by the preposition *mè*. The analysis also correctly predicts that there is no obligatory locality between the preposition and the subject. This was shown in (23) above, repeated below in (79):

(79) Mè gisteren zaai te werken moest-n-aai de gieln dag toisj
with yesterday she-NOM to work must-CL-he the whole day home
blaaiven.
stay
'With her working, he had to stay home all day.'

In an Agree configuration, nominative case assignment can take place before optional movement of the preposition to a higher functional head (e.g. ModP). The temporal adverb *gisteren* (which is attached to AspP) is therefore free to intervene between the preposition and the subject. Wambeek Dutch differs from languages like English and Brazilian Portuguese in this respect. As we saw in §3.2, these languages have a *with*-infinitive with an oblique subject, and therefore a locality requirement between the preposition and the subject of the infinitive.

3.4.2 Prepositions and tense

The analysis of the preposition *mè* in terms of an iT feature would gain further support if there is cross-linguistic evidence for prepositional elements with temporal, aspectual or modal properties. In this section I will show that such evidence can indeed be found.

The first point to note is that tense is not a unique property of verbs. In Irish, for instance, tense is also a property of complementisers. (80a) contains the uninflected complementiser *go*; in (80b) the complementiser *gur* is inflected for past tense:

(80) a. Deir sé **go** dtógfaidh sé an peann.
say-PRES he that take-FUT he the pen
'He says that he will take the pen.'

b. Deir sé **gur** thóg sé an peann.
say-PRES he that-PAST take-FUT he the pen
'He says that he took the pen.'
(Cottell 1995:108)

In Malagasy, an Austronesian language of Madagascar, prepositions are inflected for past and non-past. Past is marked with *t-*; non-past is unmarked. The prefix *t-* attaches to a closed class of elements, which Pearson (forthc.) refers to as "oblique phrases". These elements include locative, instrumental and manner PPs, spatial deictics (i.e. words equivalent to 'here' and 'there'), and the operator 'where'. In (81) the phrase *ao anatin'ny ala* functions as a matrix predicate. In (81a), the deictic element *ao* is unmarked, and the sentence receives a present tense interpretation; in

(81b) the deictic element contains the *t*-prefix, and the sentence receives a past tense interpretation:

(81) a. Ao anatin'ny ala ny gidro.
there inside of-DET woods DET lemur
'The lemur is in the woods.'
b. **T**ao anatin'ny ala ny gidro.
PAST-there inside of-DET woods DET lemur
'The lemur was in the woods.'
(Pearson forthc.:2)

Consider next (82), where *t-* has been combined with an argument PP:

(82) **N**apetrako **t**amin'ny latabatra sy **t**amin'ny seza ny boky.
PAST-put1SG PAST-on-DET table and PAST-on-DET chair DET books
'I put the books on the table and on the chair.'
(Pearson forthc.:7)

This last example therefore demonstrates that prepositions are one category that can be inflected for tense.

The cross-linguistic data discussed above show that the dialect of Wambeek is not unique in having a preposition with a tense feature. Needless to say, there are many differences between the languages that I have discussed, but the general picture is nevertheless clear: prepositions can carry tense features.

There is also evidence for the relation between prepositions and tense in Dutch. Barbiers (2002) argues that, depending on the context, the preposition *van* ('of') can have an iT feature. To appreciate this point, consider first of all the verbal structure in (83), taken from Barbiers (2002:7), where the DP argument and the CP argument occupy different structural positions:

(83) $[_{VP}$ DP $[_{V'}$ $[_{V}$ thinks [CP]]]]

This difference is based on the observation that a DP and a CP complement of a verb like *think* are in complementary distribution (see also §4.3, where I will discuss the approach of Barbiers 2000). If the complement position (i.e. CP) is filled, then the specifier position (i.e. DP) can be filled only if there is an expletive (84a) or the negation *niet*, (84b):

(84) a. Ik betreur het dat Jan gaat verhuizen.
I regret it that John goes move-house
'I regret that John is moving house.'

b. Ik denk niet dat Jan komt.
I think not that John comes
'I don't think that John will come.'

The complementary distribution of DP and CP complements follows from theta theory. The verb *think* assigns only one internal theta-role. If this role is assigned to a DP argument, then another CP argument would remain theta-less and thus violate the projection principle (or vice versa). The expletive and negative XP in (84a,b) do not require a theta-role, and can therefore be combined with a CP complement, which in turn receives the internal theta-role.

As regards case, Barbiers follows Pesetsky & Torrego (2001), who argue that case is an uninterpretable tense feature uT. Barbiers further assumes that argument status implies presence of an (un)interpretable T feature, a theta-role, or both. This predicts four types of arguments, which Barbiers (2002:8) interprets as follows:

(85) a. Arguments with an uT-feature and a theta-role : DP arguments
b. Arguments with an uT-feature and no theta-role: expletives/negation
c. Arguments with an iT-feature and a theta-role : CP arguments
d. Arguments with an iT-feature and no theta-role : root CPs

With this in mind, consider next (86), where the PP [*van niet*] occupies the internal argument position of the verb *denk*:

(86) Ik denk van niet (*dat Jan komt).
I think of not that John comes
'I don't think so.'
(Barbiers 2002:9)

Note that the PP is in complementary distribution with the CP complement [*dat Jan komt*]. The question, then, is why the negation element *niet* can be in an argument position when *van* is present. As (85b) shows, Barbiers analyzes negation as having an uT feature but lacking a theta-role. This means that the uT feature on *niet* must be deleted and, furthermore, that *niet* should not receive a theta-role. According to Barbiers, this entails (1) that *van* must have an iT feature, and (2) that *van* does not assign a theta-role. Rather, Barbiers argues, it is the entire constituent [$_{PP}$ *van niet*] which receives a theta-role from the verb. This leads Barbiers (2002:10) to propose the following lexical specification for *van*:

(87) *van* Feature=iT
Argument structure: assigns no internal theta-role

Note that the lexical specification of *van* is very similar to the properties of *mè* in the *with*-infinitive. The observation that the subject in the *with*-infinitive has nominative case led me to argue that the iT feature on *mè* deletes the uT feature on the subject of

the infinitive, and by doing so assigns nominative Case to it (see §3.4.1). Note, too, that *mè* does not assign a theta-role to the subject of the *with*-infinitive. Rather, the subject receives this theta-role from the infinitival verb.

Barbiers provides three arguments in support of the specification of *van*. First, *van* is incompatible with embedded clauses. The reason is that such clauses require a theta-role, which *van* is unable to assign. Declarative root clauses, on the other hand, can function as the complement of *van*, since such clauses do not require a theta-role. Compare (88a) with (88b):

(88) a. * Ik denk [van [dat je morgen moet stoppen.]]
I think of that you tomorrow must stop
'I think that you should stop tomorrow.'

b. Dan denk ik [van [ik stop vandaag]]
then think I of I stop today
'I think I should call it a day.'
(Barbiers: 2002:10)

Second, when *van* introduces a temporal adjunct it does so obligatorily, and it gives this adjunct a specific temporal reference. This is shown in (89a,b) for the temporal adjunct *vanavond* ('of-evening'), which contains *van*. When this adjunct is used, it must refer to the evening of the day of the utterance. This means that *vanavond* is incompatible with an adverb which presupposes that there are more evenings, e.g. *altijd* ('always'). The examples in (89c,d) illustrate that *van* contrasts in this respect with a preposition such as *in* ('in'). The latter lacks an iT feature, which we can infer from the fact that *in* is compatible with *altijd*:

(89) a. We gaan *(van)avond.
we go of evening
'We'll go this evening.'

b. * We gaan altijd vanavond.
we go always of evening
'We'll always go this evening.'

c. We gaan in de avond.
we go in the evening
'We'll go in the evening.'

d. We gaan altijd in de avond.
we go always in the evening
'We always go in the evening.'
(Barbiers 2002:11)

Third, *van* introduces a temporally opaque domain, which strongly suggests that *van* has an iT feature (see also Barbiers 1995). The adverb *gisteren* ('yesterday'), when

part of a DP, forces past tense on the finite verb. However, when *van* is present, the verb can also appear with present tense (see also §2.7.2):

(90) a. Die jongen gisteren vertelde/*vertelt een goed verhaal.
that boy yesterday told tells a good story
'That boy yesterday told a good story.'

b. Die jongen van gisteren vertelde/vertelt een goed verhaal.
that boy of yesterday told tells a good story
(Barbiers 2002:12)

Barbiers' claim that *van* has an iT feature provides indirect support for my analysis of the *with*-infinitive, which rests on the assumption that the preposition *mè* has an iT feature in its lexical specification.

There is no obvious reason why the presence of an iT feature should be limited to just the two prepositions *van* and *mè*. Rather, we expect other prepositions to allow this option as well. Consider in this light *omdat* ('because'). *Omdat* consists of the prepositional element *om* ('for'), and the complementiser *dat* ('that'). Traditionally, *omdat* is analysed as a (complex) complementiser. However, there is some evidence that *omdat* is more appropriately viewed as a (complex) tensed preposition. Note first of all that *omdat*, though morphologically complex, functions as a syntactic atom, since it cannot be coordinated with the *-dat* part only:

(91) Omdat Jan geen zin heeft en *(om)dat hij geen tijd heeft.
because John no sense- has and because he no time has
'Because John doesn't feel like it and because he doesn't have time.'

Note, too, that *dat* introduces finite complements only:

(92) a. Ik weet dat Jan geen boeken leest.
I know that John no books read-3-SG-PRES
'I know that John doesn't read any books'

b. * Ik weet dat Jan geen boeken lezen.
I know that John no books read-INF

These observations could be taken to suggest that *omdat* is another preposition that has an iT feature. The difference with *van* and *met* would then be that the tense specification of *omdat* is "spelled-out" by the complementiser part *dat*, whereas the iT feature of *van* and *met* does not have a separate morphological spell-out. I leave this issue for further research.

3.5 *Met* and *mè* in the *with*-absolute

The crucial insight of my analysis of the Wambeek *with*-infinitive is that it has perfective aspect, which is formalized in terms of the presence of an AspP. This

AspP is headed by the preposition *mè*, which can occur in this position because it has an iT feature in its lexical specification. Thus, I attribute the nominative case of the subject of the *with*-infinitive to the location of *mè* in the head of AspP.

In this section I consider the consequence of this analysis for the preposition *met* in Standard Dutch, whose distribution does not parallel that of *mè* in Wambeek Dutch. My analysis of the Wambeek facts raises the question of how the preposition *met* in standard Dutch should be analyzed. I will argue that there are good grounds to assume that standard Dutch *met* does not have an iT feature as part of its lexical specification.

In §3.1 we observed that the small-clause complement of the standard Dutch *with*-absolutive can be realised as a PP, an AP or as an *als* ('as') phrase (93a-c), but not as a VP (93d). We also observed that the subject of a *with*-absolutive is not realized with nominative case (93e):

(93) a. Met Van Nistelrooij *in de spits*, gaan we winnen.
with Van Nistelrooij in the front go we win
'With VanNistelrooij as a striker, we will win.'

b. Met het raam *open* slaap ik beter.
with the window open sleep I better
'I sleep better with the window open.'

c. Met Jan *als voorzitter* wordt de vergadering een puinhoop.
with John as chairman becomes the meeting a mess
'With John as the chairman, the meeting will be a mess.'

d.* Met Jan *te werken*, moest zij thuis blijven.
With John to work had to she home stay
'With John working, she had to stay home all day.'

e.* Met *hij* in de spits, gaat het Nederlands elftal winnen.
with he-NOM in the front goes the Dutch squad win
'With him in the front, the Dutch squad will win.'

Furthermore, the only possible reading of the focus particle *pas* 'just' in a *with*-absolutive is the "not long" reading. The "recently" reading, which is typically associated with perfective aspect, is not available.[31] This suggests that the *with*-absolutive in standard Dutch lacks an AspP:

(94) Met Jan pas in het doel...
with John just in the goal
'With John not long in the goal, …'

[31] See Barbiers (1995:46-53) for the possible interpretations of the focus particle *pas* ('just').Barbiers observes that if *pas* occurs in a sentence with a simple past, it is ambiguous between a "recently" and "not long" reading. If *pas* is combined with a present perfect, however, only the "recently" reading is available.

i. "not long", i.e. 'John has just started as a goal keeper.'
ii.# "recently", i.e. 'John had been the goal keeper a couple of weeks ago as well."

Given that *met* can have an iT feature only if there is also a lower tense projection (i.e. Pesetsky & Torrego's aspectual T_o), the conclusion must be that standard Dutch *met* in the *with*-absolutive lacks an iT feature.[32] This implies, in turn, that *met* cannot assign nominative case to the subject of the small clause.

Note in this respect once more that the presence of temporal adverbs like *gisteren* ('yesterday') and future adverbials like *volgende week* ('next week') cannot be used to establish the presence of independent temporal (or aspectual) domains (see also §3.3.1). Hence, the (marginal) examples in (95) do not contradict the claim that *met* lacks an independent temporal (or aspectual) domain:

(95) a.? Met Jan **gisteren** dronken hebben we **vandaag** een hoop uit
with John yesterday drunk have we today a lot out
te leggen.
to explain
'Because John was drunk yesterday, we'll have a lot to explain today.'

b.? Met Jan **volgende week** in het doel, worden we kampioen.
with John next week in the goal become we champion
'With John in goal next week, we will become champions.'

As regards standard Dutch, I follow the traditional analysis in which *met* occupies the head of a PP, from where it assigns oblique case to the subject of the small clause. The local nature of oblique case assignment accounts for the lack of adverb interpolation, as illustrated in (96):[33]

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[32] This does not rule out the possibility that *met* has an uT feature; I leave this issue for further research.

[33] Norbert Corver (p.c.) points out that the following example seems to be more acceptable than the examples given in (96):

(i)?? Met [vandaag Johan als extra spits] en [morgen Rinus als extra verdediger]
with today Johan as extra striker and tomorrow Rinus as extra defender
moet het Nederlands elftal de volgende ronde kunnen bereiken.
must the Dutch squad the next round can reach
'With Johan as an extra striker today and Rinus as an extra defender tomorrow, the Dutch squad must be able to qualify for the next round.'

Note that the adverbs in these *with*-absolutes are used contrastively, which might somehow improve the acceptability.

Furthermore, given the locality restriction on oblique case assignment, I assume that movement is involved for those cases in which there is no adjaceny between *met* ('with') and the subject of the small clause:

(96) a. * Met pas Jan in het doel, …
with just John in the goal
b. * Met gisteren Jan in het doel, …
with yesterday John in the goal

Summarizing, we can make a distinction between "oblique dialects" (like standard Dutch), in which *met* lacks an iT feature and assigns oblique case, and "nominative dialects" (like Wambeek Dutch), where *met* (or rather *mè*) has an iT feature and assigns nominative case:

(97)

	Standard Dutch	*Nominative dialects*
Features of *met*	uT(?)/∅	iT
Case of subject	Oblique	nominative
Presence of VP	*	✓
Adverb interpolation	*	✓

As we have seen, there is a correlation between, on the one hand, an oblique subject and the impossibility of adverb interpolation, and, on the other hand, a nominative subject and the possibility of adverb interpolation. Both can be accounted for in terms of locality. The table in (97) suggests another correlation: the presence of an iT feature on *met* would appear to imply the possibility of a verbal complement in the absolutive. I will provide an explanation for this correlation in §3.5.1.

3.5.1 Verbs and prepositions as syntactic categories

The analysis of the Wambeek *with*-infinitive that is presented here rests on the assumption that prepositions can be specified for tense, and thus can have a property that is normally associated with verbs. It is interesting to note in this respect that in terms of the traditional categorial features [±V] and [±N], prepositions and verbs form a natural class in that they are both specified as being [–N] (see e.g. Muysken & Van Riemsdijk 1986):

(98) a. Noun [+N, –V]
b. Verb [–N, +V]
c. Adjective [+N, +V]
d. Preposition [–N, –V]

In Muysken & Van Riemsdijk, the fact that verbs and prepositions both assign case to their complements is attributed to the feature [–N]. Another property of verbs and prepositions is that both can be subject to grammaticalisation processes. In view of

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(ii) Met [als centrale verdediger Jaap Stam] gaat het Nederlands elftal zeker winnen.
with as central defender Jaap Stam goes the Dutch squad surely win
'With Jaap Stam as the central defender, the Dutch squad will certainly win the match.'

these similarities, we should not be surprised to find a certain amount of overlap between the categories of verb and preposition. More specifically, given that verbs and prepositions have a number of shared traits, we expect to find prepositions with verb-like properties and verbs with preposition-like properties.

First, however, a brief comment is in order regarding the use of features to define syntactic categories. Phrases like "at the margin" and "verb-like" are incompatible with the idea that features define discrete categories. Syntactic features such as [±N] and [±V] are modelled on the kind of features that are used in traditional generative phonology (see Chomsky & Halle 1968 *et seq*.). In phonology, features have a dual function. They are used to represent segmental contrasts and segmental interaction, such as neutralisation. Neutralisation occurs when two distinct underlying forms converge on a single surface form. In a binary-valued feature system, such as that of Chomsky & Halle, neutralisation involves changing a positive value into a negative value, or vice versa.[34]

Now consider the notion of neutralisation in syntax. Van Riemsdijk (1983) argues that transitive adjectives in German, which assign case to their object in much the same way as verbs do, are specified as "degenerate" [+V] constituents. Consider the example in (99):

(99) Das Wort ist mir völlig ungeläufig.
that word is me-DAT completely unfamiliar
'That word is completely unfamiliar to me.'

Van Riemsdijk (1983) accounts for this "degeneration" in terms of neutralisation: in the feature specification of transitive adjectives the [+N] feature is neutralised, so that only the [+V] feature remains.

It is tempting to account for syntactic conversion processes in terms of feature neutralisation. However, the problem with such a view is that the features [±N] and [±V] define discrete categories. If [±N] and [±V] are used to describe processes in which an element of one category displays properties that are usually associated with an element of another category, then a classification in terms of categorial features is too crude. The point is that the case-marking properties of prepositions do not affect the categorial status of prepositions concerned, but rather make them "relatively" verbal. A further problem is that the features [±N] and [±V] would seem to predict rather more cases of syntactic conversion than are actually attested. For instance, there is, as far as I am aware, no syntactic conversion of nouns to prepositions and *vice versa*, even though this conversion can be expressed simply in

[34] Consider the process of final devoicing in Dutch, which involves a change from [–sonorant, +voice] to [–sonorant, –voice] in syllable-final position (see e.g. Booij 1995). Since Dutch also has an underlying series of [–sonorant, –voice] consonants, final devoicing neutralises an underlying contrast.

terms of a change in the feature value of [±N], and is therefore formally equivalent to attested conversions, such as that from nouns to verbs.[35]

In view of these problems, a finer-grained feature system is needed to account for the shared characteristics of syntactic categories. Developing such a feature system is clearly beyond the scope of this dissertation, however.[36] In the remainder of this chapter, I will be concerned with the verbal properties of prepositions and the prepositional properties of verbs, leaving the theoretical implementation of these "properties" for further research.

3.5.2 Prepositions with verbal properties

In this section I focus on a number of Dutch prepositions with verbal properties. Consider first the prepositions in (100), which, as can be seen, fail to take part in the process of R-pronominalisation:[37]

(100) a. (* er) niettegenstaande
there notwithstanding

b. (* er) gedurende
there during

What is striking about *niettegenstaande* and *gedurende* is that they are rather "big" for prepositions, given that canonical prepositions like *in*, *op*, *uit*, *naar*, *tot* and *voor* are monosyllabic. The reason for this is that *niettegenstaande* and *gedurende* are morphologically complex; both contain the suffix *-de*, which marks the present participle. This, then, is the first hint that these prepositions are verbal in nature.

If *niettegenstaande* and *gedurende* are verbal, it is possible that a construction like *gedurende het onderzoek* ('during the investigation') involves V-to-C movement. This would make it very similar to Aux-to-Comp constructions in Italian.[38] As Rizzi (1982:83) observes, in Italian the subject of a root declarative cannot occur between the aspectual auxiliary and the past participle, as in (101a,b):

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[35] A possible candidate for noun-preposition conversion was suggested to me by Norbert Corver (p.c.), namely *richting* ('towards') as in:

(i) Jan reed richting Rotterdam.
John drove towards Rotterdam
'John drove into the direction of Rotterdam.'

[36] One possibility would be to assume that syntactic features may enter into head–dependency relations. This kind of approach is familiar from phonology (see e.g. Anderson & Ewen 1987); see Lefèbre & Muysken (1988) for a syntactic implementation of this idea.

[37] I discuss R-pronominalisation in more detail in §4.1.

[38] I am grateful to Gertjan Postma for suggesting this parallel.

(101) *Root declarative*

a. Mario ha accettato di aiutarci.
Mario has accepted to help-us
'Mario has accepted to help us.'

b. * Ha Mario accettato di aiutarci.
has Mario accepted to help-us

The data in (102a,b) show that the reverse situation holds in gerundial adverbial clauses; in such clauses the ordering Aux-NP is acceptable, but most speakers reject the ordering NP-Aux:

(102) *Gerundial adverbial clause*

a. Avendo Mario accettato di aiutarci, potremo risolvere
having Mario accepted to help-us we-will-be-able to-resolve
il problema.
the problem
'Since Mario has accepted to help us, we'll be able to solve the problem.'

b. * Mario avendo accettato di aiutarci, potremo risolvere
Mario having accepted to help-us we-will-be-able to-resolve
il problema.
the problem
(Rizzi 1982:83)

Dutch *gedurende*, which derives historically from the verb *duren* ('last'), is not an auxiliary, of course. However, as Hoeksema (2003) shows, V1 orders with present participles were possible with all sorts of verbs in earlier stages of Dutch (from c. 1600 to 1800), and not just with auxiliaries. Consider the data in (103), taken from Hoeksema (2003:2):

(103) a. Steekende mijn mageren Hals en slincker arm onder de Deecken uit.
stick-ing my skinny neck and left arm under the blanket out
'Extending my skinny neck and left arm from under the blanket.'
(*W.G. van Focquenbroch*, *Afrikaense Thalia*, 1678)

b. Konnende een Schilder op die tyd een dikke Kaers bekostigen.
can-ing a painter on that time a fat candle afford
'A painter being able in those days to afford a fat candle.'
(*Jacob Campo Weyerman*, *Den echo des Weerelds*, 1726)

c. Zullende wij die met ons gansche hof komen bijwonen.
will-ing we that with our whole courtcome attend
'We will be attending that with our entire court.'
(*Jacob van Lennep*, *De roos van Dekama*, 1836)

As Hoeksema (ibid.) observes, these constructions exhibit properties typical of V1 structures:

(104) a. Only the highest verb in the structure moves to the initial position
b. Subjects (if present) appear to the right of the initial verb
c. Particle verbs leave their particle behind
d. V1 does not distinguish between auxiliary and main verbs

These properties lead Hoeksema (2003:13) to conjecture that "V1 is (probably) V-to-C movement".

As regards Aux-to-Comp movement in Italian, Rizzi argues that nominative case is assigned by the verb in C to the NP in post-Aux position, i.e. in [spec, IP].[39] If we adopt such a configuration for a Dutch preposition like *gedurende*, we would have the following structure:

(105) $[_{CP}\ [_{C}$ gedurende $[_{specIP}$ het onderzoek $[_{I}\ldots]]]]$
during the investigation

How does this analysis account for the ungrammaticality of **er gedurende* and other *-de* forms? Note first of all that R-pronominalisation is restricted by a locality requirement: the preposition and its complement must be sisters. If they are not, R-pronominalisation fails to apply, despite the fact that the pronoun is neuter. This can be demonstrated on the basis of a *with*-absolutive in which the pronoun *dat* ('that') is the subject of a small clause (and thus not a sister of the preposition):

(106) a. Met dat in gedachten viel Jan in slaap.
with that in thought fell John in sleep
'With this in mind, John fell asleep.'

b. * Daarmee in gedachten viel Jan in slaap.
there-with in thoughts fell John in sleep
'With this in mind, John fell asleep.'

[39] The fact that *Mario* in (102a) has nominative case can be illustrated on the basis of a pronominal subject (Henk van Riemsdijk p.c.):

(i) Avendo io/* me accettato di aiatarla, potremo risolvere il problema.
having I me accepted to help-her we will be able resolve the problem
'Since I have accepted to help her, we'll be able to resolve the problem.'

In (105), *gedurende* and *het onderzoek* are not sisters either. Furthermore, *gedurende* here does not project a PP, but a CP. Although the categorial distinction between P and C elements is not clear-cut (see e.g. Emonds 1985), it might well be that R-pronominalization applies only in the context of a PP projection. This aside, there are good grounds to assume that the DP *het onderzoek* is a subject, and thus receives nominative rather than oblique case. As Gertjan Postma (p.c.) notes, the subject status of *het onderzoek* in (107a) can be inferred from its paraphrase in (107b):

(107) a. Gedurende het onderzoek.
'During the investigation'

b. Zolang het onderzoek duurt.
'As long as the investigation lasts'

This suggests that R-pronominalisation is dependent on the assignment of objective or oblique case.

On the basis of the above considerations I conclude that *gedurende* behaves as a preposition with predominantly verbal properties, such as V-to-C movement and nominative case assignment.[40] Its categorisation as a preposition in modern Dutch is probably due to a diachronic process of reanalysis.

It could be argued that the preposition *van* in the *schat-van-een-kind* ('darling-of-a-child') construction is another instance of a preposition with verbal properties. Den Dikken (1995) analyzes *van* in this construction as a nominal copula, i.e. as the equivalent of *zijn* ('be') in the nominal domain, an interpretation that is similar to my account of *mè* in the *with*-infinitive.

Finally, it is interesting to observe that Ruwet (1978) has claimed that the French *with*-construction displays verbal properties.[41] Ruwet's discussion revolves around the possibility of having a floating quantifier in constructions of the type in (108):

(108) Avec ces imbéciles tous pour Reagan …
with those idiots all for Reagan
'With all those idiots supporting Reagan …'

where *tous* is interpreted as being associated with the unpronounced subject of *avec*. Ruwet's account is based on the existence of sentences such as that in (109), as have been discussed by Kayne (1975):

(109) On est tous partis à la pêche
one-3-SG is all-1-PL left for the fishing
'We have all gone fishing'

[40] A remaining problem concerns the ungrammaticality of the DP **gedurende dat/het*, ('during that/it'). It is difficult to see why this option is ruled out if the pronoun receives nominative case. At this point I can do no better than stipulate that the complement position of *gedurende* accepts full DPs, but no pronouns.

[41] I am grateful to Richard Kayne for bringing this reference under my attention.

According to Kayne, the underlying representation of this type of sentence contains an unpronounced additional subject, in this case *nous* ('we-1PL'), which is associated with the plural form *tous*.

3.5.3 Verbs with prepositional properties

Examples of verbs with prepositional properties are rather more difficult to find. However, English exhibits a number of cases of preposition–verb conversion, such as the examples in (110):

(110) a. to *forward* an e-mail
b. to *up* the tempo
c. to *down* a pint

Examples of Dutch preposition–verb conversions are:

(111) a. P *uit* ('out') > V (*zich*) *uiten* ('to express (oneself)')
b. P *in* ('in') > V *innen* ('to collect')

The process is certainly not unique to English and Dutch, however. For instance, in Twi, a Kwa language of Ghana, the verb /wɔ/ ('to be at') has converted into the preposition /wɔ/ 'at' (see Caɔmpbell 1998:232).

In any case, it should be noted that conversion is not a strong argument, neither for class behaviour of prepositions and verbs, nor for the claim that prepositions have verbal properties. The reason is that, in languages like Dutch and English at least, conversion of nouns to verbs (and vice versa) is much more typical than conversion of prepositions to verbs (for discussion of conversion in Dutch and English, see Don 1993 and Farrell 2001, respectively).

3.5.4 Syntactic reanalysis, extension and grammaticalisation

In the preceding sections I have argued that Dutch displays some overlap between verbs and prepositions, in that prepositions may exhibit verb-like behaviour and vice versa. With respect to the verbal properties of the preposition *gedurende* (in §3.5.2), I observed that *gedurende* was historically a verb, but later became a preposition through reanalysis. Below, I will argue that the correlation between the presence of an iT on *mè* and the possibility of an infinitival complement can also be explained in terms of reanalysis. Before doing so, however, some general comments are in order regarding reanalysis and grammaticalisation.

According to Lightfoot (1979), a landmark study on the relevance of diachronic research to generative syntax, every new generation of language learners constructs a new grammar. The form of this grammar is constrained by principles of UG (see also Van Kemenade 1987:5). In this view, language change is a natural consequence of language acquisition, in that it occurs in the transition of a grammar from one generation to the next. In other words, the language-acquiring child constructs its

grammar on the basis of the input from the adults around it. The child's grammar reproduces the output from the adult grammars more or less accurately, but it does not necessarily coincide with the internal structure of the adult grammars.[42]

As far as syntactic change is concerned, Campbell (1998:226) claims that there are only three mechanisms of syntactic change: reanalysis, extension and borrowing. Of these, reanalysis and extension are of interest here. Campbell asserts that reanalysis changes the underlying structure of a syntactic construction, but does not modify its surface manifestation. Extension results in surface changes, but does not involve any immediate modification of underlying structure.

According to Campbell, reanalysis is often followed by extension. A case in point concerns the reflexive in Old Spanish, which developed into a passive construction in Modern Spanish. The example in (112) shows that Old Spanish had the reflexive *se* ('himself') (Here and below, all Spanish examples are taken from Campbell 1998: 229–230):

(112) Yo no vestí a Juanito. Juanito se vistío.
I no dressed OBJ Juanito Juanito himself dressed
'I didn't dress Johnny. Johnny dressed himself.'

At some point reanalysis took place, as a result of which *se* could also be interpreted as a passive. In the first stage of this development, surface orders containing certain transitive verbs with *se* and a human subject came to have multiple underlying representations. For instance, the sentence in (113) could receive either a volitional reflexive or a passive interpretation:

(113) El rico se entierra en la iglesia.
the rich SE bury in the church

i. *Volitional reflexive*
'The rich person has himself buried in the church'
(Literally: 'The rich person buries himself in the church.')

ii. *Passive*
'The rich person is buried in the church.'

In the second stage of this change, the passive interpretation of the reflexive *se* was extended to include not just human subjects, but also non-animate subjects. At this point the ambiguity had disappeared, so that (114) had a passive interpretation only:

[42] This scenario is rather similar to the Darwinian concept of variation and evolution. The prerequisite for genetic variation (and evolution) of a species is copying of genetic information, but this copying need not be perfect. See Pinker (1994) for a discussion of this parallel.

(114) Los vinos que en esta ciudad se venden.
the wines that in this city SE sell
'the wines that are sold in this city'

(114) is clearly a passive; it cannot receive a reflexive interpretation because the wines cannot "sell themselves", at least not in the literal interpretation of *sell*.

A comment is also in order regarding the notion of grammaticalisation. According to Meillet (1912:132), who introduced the term, grammaticalisation involves "the attribution of a grammatical character to a formerly independent word.' Another definition is that of Kuryłowicz (1965:52), who asserts that "grammaticalisation consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status". The process is typically accompanied by semantic bleaching and phonetic reduction (see e.g. Hopper & Traugott 1993).

In generative syntax, it has been proposed that the concept of "grammaticalised element" corresponds to the notion of "functional element" (see e.g. Roberts 1993). According to Roberts, grammaticalisation involves a change from a lexical to a functional category. For instance, the grammaticalisation of the English modals was accompanied by reanalysis of a lexical category, i.e. V, to a functional category, i.e. I (see Roberts 1985; for other examples, see IJbema 2002). It is widely assumed that functional heads "lack descriptive content and express a grammatical meaning" (Abney 1987:64–65).

An important property of grammaticalisation is that it is irreversible. Lexical items can develop into functional elements, but not vice versa. As IJbema (2002) argues, the unidirectional nature of grammaticalisation follows directly from two generative assumptions: (1) functional projections are higher in the syntactic structure than lexical projections, and (2) movement to a position lower in the syntactic structure is impossible. The ban on downward movement is due to the requirement that traces be bound (i.e. c-commanded) by their antecedents. Thus, a grammaticalised functional head cannot turn into a lexical item, since this development would involve lowering (see Beths 1999 for discussion of this issue). Furthermore, IJbema (2002) argues that further grammaticalisation of functional items always involves raising to a higher functional projection.

It has often been noted that prepositions are prone to undergo grammaticalisation. Dutch examples include the infinitival marker *te* and the infinitival complementisers *om* and *voor*, and their Flemish counterpart *van* (see Van Craenenbroeck 2000); all these elements derive from historical prepositions. Further examples include the use of *van* as discussed in §3.4.2 above, and the use of *van* in the *schat-van-een-kind* construction (see §3.5.2). In the following section, I will argue that the preposition *mè* in the Wambeek *with*-infinitive has also been subject to grammaticalisation.

3.5.5 Reanalysis and extension of *mè* in the dialect of Wambeek

In §§3.1–3.4 we saw that the preposition *mè* differs from other prepositions in that it has a number of verbal properties. I suggest that *mè* has these properties as the result

of reanalysis. Specifically, I propose that *mè* started out as a lexical preposition, i.e. as a comitative or instrumental preposition, and developed into to a "relatively functional" preposition, i.e. as a preposition with verbal properties. These properties of *mè* are syntactically expressed by the presence of iT in its feature specification.

Reanalysis of *mè* was followed by extension. As the result of its verbal properties, the distribution of *mè* was extended to include verbal positions, such as AspP. Thus, the syntactic behaviour of reanalyzed *mè* is not unlike that of a finite verb with functional characteristics, such as the English auxiliary *do*.

If *mè* has an iT feature and the ability to assign nominative case, we should not be surprised to find that, like verbs, *mè* can take a clausal complement. This is precisely what happens in the *with*-infinitive in the dialect of Wambeek, where *mè* takes the *te*-infinitive as its complement. I would like to suggest that the verbal properties of *mè* are the result of grammaticalisation, which, as we have seen in §3.5.4, frequently affects prepositions. It is conceivable, then, that the preposition *met* in the Standard Dutch *with*-absolute has not grammaticalised to such an extent that it has gained an iT feature. This would then explain why it selects a smaller range of complement types than *mè*. Note, though, that *met* in the *with*-absolute did grammaticalise to the extent that it no longer has a lexical interpretation; in this context, its function is that of relating an adjunct to the matrix clause.[43]

The questions remains why *mè* has undergone reanalysis in Wambeek Dutch, while standard Dutch *met* has not.[44] This question is very similar to the question why *van* has grammaticalised to infinitival complementiser in Flemish, but not in Standard Dutch. I believe that the only reasonable answer to both questions is: "just because". When it comes to linguistic change, the best linguists can do is study the general conditions under which a change may happen, so that when a change occurs, they can account for why it happened the way it happened. From this viewpoint, it is not surprising that a preposition such as *mè* develops verbal properties, since, as linguists, we know that verbal properties are functional in nature, and prepositions are frequently subject to grammaticalisation.

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[43] Note that *met* has grammaticalised to the extent that it can select a finite clause in adjuncts where *met* functions as a complementiser:

(i) Met dat (i.e.'toen') ze binnenkwam ging gelijk het licht aan.
with that (i.e.'when') she entered went immediately the light on
'When she entered, the lights went on immediately.'

This suggests that the lexical specification of *met* may vary, and that the location of *met* in the syntactic structure depends on its specification.

[44] Note that apart from its behaviour in the *with*-infinitive, Wambeek *mè* displays the same behaviour as Standard Dutch *met*. It displays the *met*/*mee* alternation in R-pronominalisation contexts, as in (i), and it occurs as a circumposition, as in (ii):

(i) mè wa > wuimee
with what wherewith

(ii) goje mè mou mee?
go-you with me with
'Are you coming with me?'

However, as far as the predictability of this or of any other linguistic change is concerned, linguists can try to distinguish between possible and impossible changes, but what they cannot do is *predict* that a particular linguistic change will occur. Even when all the preconditions for a change are present, there is no guarantee that it will indeed take place. The reason for this is that many other, non-linguistic factors also play a role in language change (such as social aspects of the language community, or other factors that have not been investigated yet).

3.6 Summary and conclusion

In this chapter I have provided an analysis of the syntax of the *with*-infinitive in the dialect of Wambeek Dutch, against the backdrop of the *with*-absolute construction in Standard Dutch. The *with*-infinitive in Wambeek Dutch posed three analytical challenges: (1) the amount of structure that it projects, (2) the nominative case of the subject, and (3) the properties (more specifically, the feature specifications) of *mè*.

As to the first challenge, I have argued that the *te*-infinitive in the *with*-infinitive contains a VP, vP, an AspP and the lower modal projections that are associated with root modality, but no higher functional domain:

(115) $[_{ModP}\,[_{Mod}\;\;[_{AspP}\,[_{Asp}$ mè $[_{vP}$ zaai $[_{v}\,[_{VP}\,[_{V}$te werken]]]]]]]

As to the second and third challenge, I have argued, following Pesetsky & Torrego (2001, 2004), that *mè* has an iT feature. This feature has also been argued to be part of the specification of the preposition *van* (see Barbiers 2002). The presence of the iT feature in *mè* accounts for the nominative case on the subject of the infinitive:

(116) $[_{ModP}\,[_{Mod}\;\;[_{AspP}\,[_{Asp}$ mè $[_{vP}$ zaai $[_{v}\,[_{VP}\,[_{V}$te werken]]]]]]]
~~iT~~ ~~uT~~
~~u phi~~ ~~i phi~~

In the structure in (116) nominative case is assigned in an Agree configuration before the preposition undergoes optional movement to a higher functional head (e.g. ModP). This accounts for the possibility of adverb interpolation between the preposition and the subject.

Finally, I have argued that the presence of an iT feature on *mè* is due to a process of grammaticalisation which occurred in the Wambeek dialect, but not in Standard Dutch. As a result of this process, the distribution of *mè* was extended to AspP, a projection that is normally reserved for verbs. The fact that *mè* can occupy AspP implies that it can select a verbal complement, i.e. the *te*-infinitive that is part of the *with*-infinitive construction.

4 Verbal Collocations

4.0 Introduction

In the previous chapter I discussed the status of a Dutch *te*-infinitive in the context of a preceding preposition, i.e. *with*. In this chapter I will discuss an even more extended verbal complementation pattern, which involves a full CP. As in chapter 3, I will focus on a construction in which a preposition establishes a relation between two events. In the construction that I consider in this chapter, a full CP is preceded by a preposition, which is in turn preceded by a verb. I refer to such combinations as "verbal collocations".

To set the discussion on a concrete footing, consider (1):

(1) Jan ergert zich er$_i$aan [$_{CP}$ dat Marie altijd zo hard praat]$_i$.
John annoys himself thereon that Mary always so loud speaks
'John gets annoyed about the fact that Mary always speaks so loudly.'

(1) contains the preposition *aan* followed by a full CP. Note, too, that the PP in (1) contains the resumptive pronoun *er*, which is associated with the CP. I will refer to the construction in (1) as the "resumptive pronoun pattern" (henceforth the RP pattern).

(1) is a standard example of a verbal collocation with a sentential complement. However, it has so far gone unobserved in the syntactic literature that Dutch also has verbal collocations which contain a P + CP construction without *er*, as in (2):[1]

(2) Iedereen zat te rekenen op [$_{CP}$ dat jij 'm zou nemen].
everybody sat to count on that you him would take
'Everybody was convinced that you would take it (i.e. the free kick).'
(Kees Jansma to Pierre van Hooijdonk, 15-04-2002)

I will refer to the construction in (2) as the "P + CP pattern".

In the following discussion and analysis of the P+CP pattern, I will not speculate on a derivational relation between the two patterns. It might be tempting to assume that the patterns in (1) and (2) are in competition in present-day Dutch, and that P + CP is an innovation, which is somehow derived from the RP pattern. An argument in favour for such an approach is that the P+CP pattern is not mentioned in standard grammars of Dutch. This might be the case because the P+CP pattern is indeed a recent development. But it is also possible that the P+CP pattern simply has not been observed before, and that the two patterns have coexisted peacefully for a long time,

[1] With the exception of Haslinger (2000), which contains an earlier analysis of the P+CP pattern.

without there being any derivational relation. To determine this, systematic research, both diachronic and synchronic, is required.I leave this issue for further research.[2]

The structure of this chapter is as follows. In §4.1 I consider the behaviour of the constructions in (1) and (2) with respect to the phenomenon of R-pronominalisation. The facts encountered suggest that P + CP forms a constituent while the RP pattern does not.

Next, in §4.2, I present an overview of the distribution of the P + CP pattern in Dutch. As we will see, the P + CP pattern does not only occur in verbal collocations, but also in a number of different contexts. These contexts suggests that the CP has D-like properties. I will also show that Dutch is not unique in having the P + CP pattern. The pattern is also found in other Germanic languages, such as Frisian, Norwegian and Swedish.

In §4.3 I consider the relation between the preposition and the CP in the P + CP pattern. On the assumption that only DPs have argument status (see Barbiers 2000), I propose that the CP in the P + CP pattern is more appropriately viewed as being a DP.

In §4.4 I examine the argument structure of verbal collocations in more detail. I will show that the internal argument of a verbal collocation is generally associated with the thematic role of CAUSE. This would suggest that verbal collocations are in fact causative constructions (see also Den Hertog 1973). Diachronic data from both Dutch and English indicate that the role of CAUSE is typically associated with inherent case. Based on these observations, I propose to relate the emergence of verbal collocations (i.e. fixed combinations of a verb and a preposition) to the gradual loss of inherent case marking in verbs, with the preposition taking over the role of assigning inherent case from the verb. In modern Dutch, then, prepositions are the only category capable of establishing a causative relation. I propose that the functional status of prepositions in verbal collocations is reflected by their feature specification, which contains an inherent case (iC) feature.

Finally, in §4.5, I turn to the internal structure of verbal collocations. I will discuss the traditional analysis in which the PP is generated in a position internal to VP (see e.g. Model 1991), and compare it to an alternative analysis in which the PP is generated in a position external to VP. The latter type of approach is suggested by Kayne (1999) for infinitival complementisers in Italian. I will conclude that on the basis of the facts encountered, neither analysis is superior to the other, although the VP-external analysis is more interesting from a theoretical perspective.

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[2] Note that under a derivational account in which the P+CP pattern is an innovation, it is implied that the resumptive pronoun *er* in constructions such as in (1) is gradually being dropped. In that case, the occurrence of a transitional stage is expected, in which the resumptive pronoun is dropped in its original position (Sjef Barbiers, p.c.):

i.	Jan	heeft	~~er~~over	geklaagd	dat	Marie	zo	hard	praat.
	Jan	has	thereabout	complained	that	Mary	so	loud	speaks

'John has complained about the fact that Mary always speaks so loudly.'

To my knowledge, this construction is not attested. I leave this as a topic for further research.

4.1 Verbal collocations and R-pronominalisation

In this section I will consider verbal collocations, and particularly the RP and the P + CP patterns as exemplified in (1) and (2) above, against the backdrop of R-pronominalisation. As we will see, evidence from R-pronominalisation suggests that the P + CP pattern forms a constituent while the resumptive pattern does not.

Consider first of all some general observations about verbal collocations. One property of such collocations is that they consist of fixed combinations of verb and preposition.[3] Some examples are given in (3); note here that verbal collocations can involve normal transitives (3a), reflexives (3b) and particle verbs (3c):[4]

(3) a. Transitive verbs
e.g. *verlangen naar* 'long for', *twijfelen aan* 'doubt on', *rekenen op* 'count on', *waarschuwen voor* 'warn for', *houden van* 'love of'

b. Reflexive verbs
e.g. *zich ergeren aan* 'REFL annoy on', *zich verheugen op*, 'REFL look forward to', *zich beroepen op* 'REFL plead on'

c. Particle verbs
e.g. *terugdeinzen voor* 'shrink back from', *uitzien naar* 'look forward to', *nadenken over* 'think about'

(4a–b) show that verbal collocations can be followed by a DP or a clause:

(4) a. Ik verlang naar [$_{DP}$ de zomer].
I long for the summer
'I long for the summer.'
b. Ik verlang ernaar [$_{CP}$ dat het eindelijk zomer wordt].
I long there for that it finally summer becomes
'I wish it was finally turning to summer.'

At first sight, it would appear as though there is a difference between the two types of complement: a clausal complement implies the presence of the pronoun *er* (5b), while a nominal complement cannot co-occur with *er* (5a):

[3] Some verbs, e.g. *denken* ('think'), form fixed combinations with more than one preposition. In such cases the collocations have a different meaning, i.e. *denken aan* ('think of'), *denken over* ('think about'), *denken om* ('mind').

[4] Dutch also has fixed noun–preposition and adjective–preposition combinations, such as *kritiek op* ('criticism on') and *blij met* ('happy with'). In what follows I limit my attention to verbal collocations.

(5) a. Ik verlang (*er)naar [$_{DP}$ de zomer].
I long therefor the summer
'I long for the summer.'
b. Ik verlang *(er)naar [$_{CP}$ dat het eindelijk zomer wordt].
I long therefore that it finally summer becomes
'I wish it was finally turning to summer.'

The distribution of *er* can be explained if we assume that the DP is the complement of the preposition whereas the CP is not. Support for this assumption comes from the phenomenon of R-pronominalisation, which applies only to (specific types of) prepositional *complements* (see also §3.5.2).

In R-pronominalisation, a neuter pronominal complement of a preposition changes into an R-pronoun which occurs at the edge of the PP. A schematic representation of the process is given in (6):[5]

(6) P + pronoun$_{neuter}$ → R-pronoun + P

R-pronominalisation yields "R-pronouns" (Van Riemsdijk 1978), so called because they contain the phoneme /r/. R-pronouns display special syntactic behaviour. The data in (7a–c) show that they occupy a position at the edge of the PP, i.e. [spec. PP]:

(7) a. * op het$_{NEUT}$ → erop
on it thereon
b. * op dat$_{NEUT}$ → daarop
on that thereon
c. * op wat$_{NEUT}$ → waarop
on what whereon

The data in (8) shows that R-pronouns can escape from a PP island:[6]

[5] R-pronominalisation is traditionally interpreted as a replacement rule. In the Minimalist Program this interpretation is no longer possible given the assumption that an argument can only occur once in the enumeration, either as a pronoun or as a DP.

[6] A traditional claim in the literature is that prepositions in (standard) Dutch cannot be stranded, unless they are stranded by an R-pronoun (see e.g. Van Riemsdijk 1978:144 for further discussion of extraction out of a PP in Dutch). However, P-stranding by a full DP does occur in a number of Dutch dialects, such as that of Flakkee (see Landheer 1955:109):

i. *Dad wäärek* zal je gêen êer van _ häbbe.
that work will you no honour of have
'That job won't gain you any credit.'

Note, however, that (i) can also be analysed as an instance of left dislocation in which the resumptive pronoun has been dropped.

(8) *Waar*$_i$ reken je [$_{PP}$ op t_i]?
what count you on
'What do you count on?'

R-pronominalisation of neuter pronouns is virtually obligatory. R-pronominalisation of non-neuter pronouns is blocked (9a–b), while R-pronominalisation of both neuter and non-neuter DP complements is optional (9c–d):

(9) a. op haar$_{NON\text{-}NEUT}$ → * haarop
on her heron

b. op hem$_{NON\text{-}NEUT}$ → * hemop
on him himon

c. op het paard$_{NEUT}$ → erop
on the horse thereon

d. op de rekening$_{NON\text{-}NEUT}$ → erop
on the bill thereon

With some neuter pronouns that are quantificational, R-pronominalisation appears to be optional as well:

---

ii. *Dad wäärek*, ~~daar~~ zal je gêen êer van _ häbbe.
that work there will you no honour of have
'That job won't gain you any credit.'

It is also worth pointing out that regular examples of preposition stranding by a full DP can be heard in the standard (spoken) language: (iii) and (iv) can also be analysed as an instance of left dislocation with resumptive pronoun drop, but (v) and (vi) cannot:

iii. *Dat soort dingen* (~~daar~~) ben ik natuurlijk wel mee _ bezig.
that sort things (there) am I naturally AFF with occupied
'Naturally, I am occupied with those kinds of things as well.'

iv. Boeken, (~~daar~~) hou ik niet van _.
books there love I not of
'Books I don't like.'

v. *Welk huis* woon je in _?
which house live you in
'Which house do you live in?'

vi. *Wat voor tijd* zit je aan _ te denken?
which for time sit you of to think
'What time are you thinking of?'

It is possible that this reflects a change in progress; I will leave this as an issue for further research.

(10) a. ? op iets → ergens op
on something somewhere on
b ? op niets → nergens op
on nothing nowhere on
c. ? op alles → overal op
on everything everywhere on

In two prepositions R-pronominalisation triggers a change in the phonological form. This holds for *met* ('with') and *tot* ('till'), which under R-pronominalisation change into *mee* and *toe*, respectively:

(11) a. met iets → ergens mee
with something somewhere with
b. tot alles → overal toe
till everything everywhere till

A general tendency is that R-pronominalisation works best with frequently used and phonologically short prepositions. R-pronominalisation is unlikely to occur in (12a), for instance, and is ruled out in (12bc):[7]

(12) a. */? er zonder[8]
there without
b. * er niettegenstaande
there notwithstanding
c. * er blijkens
there according-to

Furthermore, R-pronominalisation can take place only if there is a sisterhood relation between the preposition and its complement. This can be illustrated on the basis of the *with*-absolute (see also chapter 3, example (106)). In (13a) the pronoun

[7] See also §3.5.2.

[8] Note that *zonder* is relatively short and frequently used. For this reason it is perhaps not too surprising that some speakers use R-pronominalisation in the context of *zonder*:

(i) Die typische Hollandse lekkernijen, *daar* kunnen we niet meer zonder _.
those typical Dutch delicacies there can we not more without
'Those typical Dutch delicacies, we cannot do without them.'
(TV West news, 23-10-2004)

It is also possible to use *zonder* without an R-pronoun as in:

(ii) We kunnen niet meer zonder.
we can not more without

It is interesting to note that *zonder* does not occur in verbal collocations, but only in adverbial PPs. This might be related to its irregular stranding behaviour.

dat is the subject of the small clause *dat in gedachten*, and therefore not a sister of the preposition. This correctly predicts that R-pronominalisation, as in (13b), is ungrammatical:

(13) a. Met dat in gedachten, ging Jan naar huis.
with that in mind went John to house
'With that in mind, John went home.'
b. * Daarmee in gedachten, ging Jan naar huis.
Therewith in mind went John to house
'With that in mind, John went home.'

Against this background, let us now return to the prepositional complement in verbal collocations. Consider first the example in (14ab), repeated from (4):

(14) a. Ik verlang naar [$_{DP}$ de zomer].
I long for the summer
'I long for the summer.'
b. Ik verlang ernaar.
I long therefor
'I long for it.'

In (14ab), the fact that the DP can be pronominalised by the R-pronoun *er* indicates that the DP is the complement of the preposition. Note, too, that the R-pronoun and the DP are in complementary distribution, as in (5a) above. This provides additional evidence for the claim that the *de zomer* is the complement of *naar*, since, being a preposition, *naar* can project only one internal argument.

Consider next the example in (15), repeated from (5b):

(15) Ik verlang *(er)naar [$_{CP}$dat het eindelijk zomer wordt].
I long therefor that it finally summer becomes
'I wish that it was finally turning to summer.'

(15) shows that the CP and the R-pronoun are not in complementary distribution. This suggests that a CP, unlike a DP, is not the complement of the preposition. This suggests in turn that the presence of *er* in (15) is not the result of pronominalisation of the CP. Rather, it could be proposed that *er* is the result of R-pronominalisation of the pronoun *het* ('it'), with the CP occurring in an adjoined position. I will refer to this relation between an R-pronoun and an adjoined CP as a "cataphoric relation", and I will express this relation in terms of coindexation. Consider in this light (16). (16a) represents the "underlying" structure before R-pronominalisation has taken place; (16b) represents the "surface" form:

(16) a. Ik verlang naar het$_i$[$_{CP}$ dat het eindelijk zomer wordt]$_i$.
I long for it that it finally summer becomes

b. Ik verlang er$_i$naar [$_{CP}$ dat het eindelijk zomer wordt]$_i$.
I long therefor that it finally summer becomes
'I wish that it was finally turning to summer.'

It is possible to draw a parallel between P + CP constructions of the type in (16) and constructions of the type in (17):

(17) Ik betreur het$_i$[$_{CP}$ dat het herfst wordt]$_i$.
I regret it that it autumn becomes
'I regret that it is turning to autumn.'

where *het* is a cataphoric pronoun that signals the presence of a following CP.

Against this background, let us now consider the difference between the RP pattern and the P + CP pattern. As was observed in §4.0, there are two constructions in verbal collocations with clausal complements in present-day Dutch: the RP pattern (18a) and the P + CP pattern (18b):

(18) a. Zij heeft *erover* geklaagd [$_{CP}$ *dat het weer zo slecht was*].
she has thereabout complained that the weather so bad was
'She has complained about the bad weather.'
b. Zij heeft geklaagd over [$_{CP}$ dat het weer zo slecht was].
she has complained about that the weather so bad was
'She has complained about the bad weather.'

The preposition and the CP do not form a constituent in the resumptive pattern. One argument for this is that in sentences like (18a) *er*-P and the CP are discontinuous. Another argument is that the resumptive pattern does not behave as a unit under topicalisation:

(19) * Erover dat het weer zo slecht was heeft ze constant lopen
thereabout that the weather so bad was has she constantly walk
klagen.
complain
'She has constantly been complaining about the bad weather.'

It is striking that the German equivalent of (19) is grammatical; this would suggest that the resumptive pronoun, the preposition and the clause do form a constituent in German.[9]

(20) Damit dass du kommen würdest hatte ich nicht gerechnet.
therewith that you come would had I not counted
'I had not counted on it that you would come.'

[9] Henk van Riemsdijk (p.c.). Note that (20) is pronounced without comma intonation between *damit* and *dass*.

Note that the ungrammaticality of (19) cannot be attributed to the weak form *er*. If *er* is replaced by its strong counterpart *daar*, the sentence is still ungrammatical:[10]

(21) * Daarover dat het weer zo slecht was heeft ze constant
thereabout that the weather so bad was has she constantly
lopen klagen.
walk complain

The P+CP pattern, on the other hand, does behave as a constituent. One argument for this is that it behaves as a unit under topicalisation, as is illustrated in (22):

(22) Over [$_{CP}$ dat het weer zo slecht was] heeft ze constant lopen
about that the weather so bad was has she constantly walk
klagen].
complain
'She has constantly been complaining about the bad weather.'

In §4.2 I consider the distribution of P + CP in more detail.

4.2 The distribution of the P + CP pattern

In §4.1 I attributed the occurrence of *er* in verbal collocations to the result of R-pronominalisation. According to this view, the difference in the distribution of *er* in DP and CP complements follows from the fact that the DP is a complement of the preposition whereas the CP is not. However, in this account the question remains why verbal collocations with a clausal complement require the cataphoric pronoun *het* (which changes to *er* in R-pronominalisation contexts). Specifically, the question is why in such cases it is impossible to leave the cataphoric pronoun out:

(23) * Ik verlang naar [$_{CP}$ dat het zomer wordt].
I long for that it summer becomes
'I long for the summer.'

This question becomes all the more pressing when we bear in mind that in other cataphoric constructions, i.e. cataphoric constructions without a preposition, the presence of *het* seems to be optional:

(24) a. Ik betreur het dat het herfst wordt.
I regret it that it autumn becomes
'I regret it that it is turning to autumn.'

[10] This sentence is grammatical with comma intonation between *daarover* and *dat*, but in that case the preposition and the CP do not form a constituent.

b. Ik betreur dat het herfst wordt.
I regret that it autumn becomes
'I regret that it is turning to autumn.'

It is not entirely clear to me whether (24ab) are truly equivalent; at any rate, the presence of *het* does not appear to make any semantic contribution.

The obvious answer to the question raised above would be to say that the pronoun is required because a preposition cannot take a clause as its complement. A possible explanation for this is that clauses cannot be assigned case on account of the Case Resistance Principle (see Stowell 1981).[11] The pronoun would then function as a "dummy" absorber of the case that is assigned by the preposition. This account thus predicts that a clause can occur in the domain of a preposition only in combination with a preceding case-absorbing pronoun.

The problem with this prediction is that it is not supported by empirical evidence. Not all clauses that occur in the domain of a preposition are accompanied by a dummy case absorber, or at least not at first sight. Below, I will show that the P+CP pattern is widespread in Dutch. In §4.2.1 we will see that P+CP can occur in topic, left-dislocated, right-dislocated, and scrambled positions, and both in coordinated structures and in isolation. In addition, P + CP occurs in free relatives (§4.2.2), relatives introduced by *hoe* 'how' (§4.2.3) and temporal adjuncts introduced by *nadat* 'before' and *voordat* 'after'(§4.2.4). In §4.2.5 I will show that P + CP is also found in a number of other Germanic languages, such as Frisian, Norwegian and Swedish. What unites all these cases is that the CP has DP-like properties. Indeed, I will go on to argue in §4.3 that the CP in the Dutch P + CP must be analyzed as a DP.

4.2.1 P + CP in verbal collocations

As noted in §4.0, present-day Dutch displays sentences of the type in (25), where an extraposed tensed clause introduced by the complementiser *dat* ('that') occurs in a verbal collocation, in the position immediately following the preposition:[12]:

(25) Zij heeft geklaagd over [$_{CP}$ dat het weer zo slecht was].
she has complained about that the weather so bad was
'She has complained about the bad weather.'

For most speakers (25) is grammatical. It is at any rate considerably better than (26):

(26)?/* Ik heb verlangd naar [$_{CP}$ dat het zomer wordt].
I have longed for that it summer becomes
'I have wished it was finally summer.'

[11] According to Stowell (1981), case cannot be assigned to a category which itself bears a case-assigning feature.

[12] The term "extraposition" here simply refers to a position to the right of the finite verb.

This difference in acceptability might be related to the fact that the matrix verb in (25) is factive, whereas that in (26) is non-factive. This contrast is further illustrated by the following examples: (27) shows the P+CP pattern with factive matrix verbs, and (28) shows the same pattern with non-factive matrix verbs. For most speakers, the examples in (28) are considerably worse than those in (27).

(27) a. Zij heeft verteld over [$_{CP}$ dat het weer zo slecht was].
she has told about that the weather so bad was
'She has told us about the bad weather.'

b. Zij heeft opgeschept over [$_{CP}$ dat het weer zo mooi was].
she has bragged about that the weather so wonderful was
'She has bragged about the wonderful weather.'

(28) a.?/* Zij heeft gedacht aan [$_{CP}$ dat ze de ware zou ontmoeten].
She has thought of that she the true would meet
'She has been thinking about meeting the love of her life.'

b.?/* Zij heeft al jaren gehoopt op [$_{CP}$ dat ze de ware
she has already years hoped on that she the true
zou ontmoeten].
would meet
'She has been hoping for years that she would meet the love of her life.'

Note, too, that P+CP is grammatical when the preposition and the CP are moved to another position (see also Haslinger 2000:141):

(29) a. *Topicalisation*
Over [$_{CP}$ dat het weer slecht was] heeft ze constant lopen klagen.
about that the weather bad was has she constantly walk complain
'She has constantly been complaining about the bad weather.'

b. *Scrambling*
Zij heeft over [$_{CP}$ dat het slecht weer was] nooit lopen klagen.
she has about that it bad weather was never walk complain
'She has never been complaining about the bad weather.'

c. *Left dislocation*
Over [$_{CP}$ dat het slecht weer was], daar heeft ze nooit over lopen
about that it bad weather was there has she never about walk
klagen.
complain
'She has never complained about the bad weather.'

e. *Right dislocation*
Ze heeft daar nooit over geklaagd, over [$_{CP}$ dat het slecht weer
she has there never about complained about that it bad weather
was].
was
'She has never complained about the bad weather.'

Note, too, that the P + CP pattern occurs in coordinated structures, as in (30):

(30) Ze heeft noch over [$_{CP}$ dat het weer zo slecht was], noch
she has neither about that the weather so bad was nor
over [$_{CP}$ dat de tent lekte] lopen klagen.
about that the tent leaked walk complain
'She hasn't been complaining, neither about the bad weather, nor about the leaking tent.'

The P + CP pattern also occurs in isolation (31b), for instance as the answer to the question in (31a):

(31) a. Waar heeft ze de hele tijd over lopen klagen?
where has she the entire time about walk complain
'What has she been complaining about the whole time?'
b. Over [$_{CP}$ dat het weer zo slecht was].
about that the weather so bad was
'About the bad weather.'

Note, finally, that it is impossible to extract out of a CP that is the complement of a verbal collocation:

(32) a. Harry heeft nooit over [$_{CP}$ dat Hermelien de waarheid
Harry has never about that Hermione the truth
verzweeg] geklaagd.
withheld complained
'Harry has never complained about the fact that Hermione withheld the truth.'
b. * Wat$_i$ heeft Harry nooit over [$_{CP}$ dat Hermelien t_i verzweeg]
what has Harry never about that Hermione withheld
geklaagd?
complained

Although the P + CP pattern in verbal collocations is rejected by some, usually older speakers, there is no denying that the pattern occurs both in spoken and written present-day Dutch. Below I present a small sample of the real-life examples that I have collected over the past few years (the unreferenced examples were uttered by friends and relatives):

(33) a. Ik weet niet of dat het te maken heeft met [$_{CP}$ dat de
I know not whether that it to make has with that the
jongens weg zijn gegeven].
the boys away are given
'I do not know whether it is related to the fact that the boys have been given away.'
(Robert Maaskant, (then) manager of RBC, 7-04-2001)

b. Dat heeft te maken met dat de horloges tegenwoordig zo plat zijn.
that has to make with that the watches nowadays so flat are
'That has to do with the fact that the watches are so flat nowadays.'

c. Iedereen zat te rekenen op [$_{CP}$ dat jij 'm zou nemen].
everybody sat to count on that you it would take
'Everybody was convinced that you would take it (i.e. the free kick).'
(Kees Jansma to Pierre van Hooijdonk, 15-04-2002)

d. 'Waarin zijn ze dan dogmatisch?' vroeg Ad.
wherein are they then dogmatic asked Ad
'In [$_{CP}$ dat ze hun eigen opvattingen over het eten van vlees
in that they their own opinions about the eating of meat
proberen op te dringen aan anderen]'.
try on to push to others
'In what way are they dogmatic?' Ad asked. 'In that they try to force their own ideas about eating meat on to others.'
(H. Voskuil, *Het Bureau*, deel 3, p. 323)

e. Wij zijn gemotiveerder dan mensen die net van school komen.
we are more-motivated than people who just from school come
Die zitten op te scheppen over [$_{CP}$ dat ze zo weinig aan hun
they sit on to brag about that they so little on their
studie doen].
study do
'We are more motivated than people that have just left school. They are bragging about the fact that they spend so little time studying.'
(*NRC*, 23-10-2004)

f. Het ligt aan dat ik veertig ben.
it lies on that I forty am
'It is because I am forty years old.'

g. Aan alles komt een eind […], ook aan schrijven over dat
on everything comes an end also on write about that
je griep hebt.
you flu have
'Everything comes to an end […], also writing about the fact that you are down with the flu.'
(Aaf Brandt Corstius, *NRC next*, 05-09-2006)

An analysis of this construction is therefore required. I will offer such an analysis in §§4.3–4.5. First, however, I consider a number of other contexts in which we find P + CP in Dutch.

4.2.2 Free relatives

In free relatives (henceforth FRs), there is no overt antecedent of the relative clause. In Dutch, FRs can appear in extraposed position, which is the unmarked position for complement clauses in Dutch:

(34) Omdat Harry onthouden heeft [$_{CP}$ wat Hermelien zei].
because Harry remembered has what Hermione said
'Because Harry has remembered what Hermione said.'

The same holds for FRs that are the complement of a verbal collocation, as in (35):

(35) Omdat Harry nooit getwijfeld heeft aan [$_{CP}$ wat Hermelien zei].
because Harry never doubted has on what Hermione said
'Because Harry has never doubted what Hermione said.'

This in itself is not very surprising. More interesting is the fact that, besides extraposition, the distribution of P + FRs parallels that of P+CP cases in (29) above:

(36) a. *Topicalisation*
Aan [$_{CP}$ wat Hermelien zei] heeft Harry nooit getwijfeld.
on what Hermione said has Harry never doubted
'What Hermione said, Harry has never doubted.'

b. *Scrambling*
Harry heeft aan [$_{CP}$ wat Hermelien zei] nooit getwijfeld.
Harry has on what Hermione said never doubted
'Harry has never doubted what Hermione said.'

c. *Left dislocation*
Aan [$_{CP}$ wat Hermelien zei], daar heeft Harry nooit aan getwijfeld.
On what Hermione said there has Harry never on doubted
'What Hermione said, Harry has never doubted.'

e. *Right dislocation*
Harry heeft daar nooit aan getwijfeld, aan [$_{CP}$ wat Hermelien zei].
Harry has there never on doubted on what Hermione said
'Harry has never doubted what Hermione said.'

In addition, like P + CPs, P + FRs can occur in isolation, for instance as the answer to a question (37ab), and they can be coordinated (37c):

(37) a. Waar heeft Harry nooit aan getwijfeld?
where has Harry never on doubted
'What has Harry never doubted?'
b. Aan [$_{CP}$ wat Hermelien zei].
on what Hermione said
'What Hermione said.'
c. Harry heeft noch aan [$_{CP}$ wat HERMELIEN zei], noch
Harry has neither on what Hermione said nor
aan [$_{CP}$ wat RON zei] getwijfeld.
on what Ron said doubted
'Harry has doubted neither what Hermione said, nor what Ron said.'

Besides these specific contexts, there is another distributional parallel between (non-headed) FRs and CPs that are the complement of a verbal collocation. Consider first headed FRs. Here the relative clause can be separated from its antecedent and be extraposed (38a), or the antecedent and the relative clause can stay together in the middle field (38b):

(38) a. Ik heb [dat _] gekocht [wat je wilde].
I have that bought what you wanted
'I have bought the thing that you wanted.'
b. Ik heb [dat [wat je wilde]] gekocht.
I have that what you wanted bought
'I have bought what you wanted.'

The same holds for non-headed FRs, as is illustrated in (39ab):

(39) a. Ik heb [Ø _] gekocht [wat je wilde].
I have bought what you wanted
'I have bought what you wanted.'
b. Ik heb [Ø [wat je wilde]] gekocht.
I have what you wanted bought
'I have bought what you wanted.'

However, as soon as the FR is the complement of a verbal collocation, extraposition of the relative clause is possible with headed FRs (40a), but no longer with non-headed FRs (40b):

(40) a. Ik heb precies aan [dat _] getwijfeld [wat je nu zegt].
I have exactly on that doubted what you now say
'I have doubted exactly that what you are saying now.'
b. * Ik heb precies aan [Ø _] getwijfeld [wat je nu zegt].
I have exactly on doubted what you now say
'I have doubted exactly what you are saying now.'

The same asymmetry can be observed for P+CPs. They behave exactly the same with respect to this latter observation. As (41b) shows, the CP cannot be extraposed while the preposition stays in the middle field:

(41) a. Harry heeft nooit aan [$_{CP}$ dat Hermelien de waarheid sprak]
Harry has never on that Hermione the truth told
getwijfeld.
doubted
'Harry has never doubted that Hermione told the truth.'
b. * Harry heeft nooit aan t_i getwijfeld [$_{CP}$ dat Hermelien de
Harry has never on doubted that Hermione the
waarheid sprak]$_i$.
truth told
'Harry has never doubted that Hermione told the truth.'

Furthermore, we saw in (32) above that extraction is not possible out of a CP that is the complement of a verbal collocation. The same holds for a FR (headed or non-headed) that is the complement of a verbal collocation.[13]

[13] At this point, something should be said about the base position of CP complements in Dutch, and their behaviour with respect to extraction. CP complements usually appear to the right of the verbal cluster, which is traditionally called the 'extraposed' position (see (i) and (ii).

i. Jan zal nooit toegeven [$_{CP}$ dat hij gelogen heeft].
John will never admit that he lied has
'John will never admit that he lied.'
ii. Jan had gehoopt [$_{CP}$ dat hij de race zou winnen].
Jan had hoped that he the race would win
'John had hoped that the would win the race.'

Matters are complicated by the fact that there is a debate about the question of whether this 'extraposed' position should be regarded as the base position for CPs or as a derived position, which is suggested by the notion 'extraposed.' I will discuss this issue briefly in §4.3; for a detailed discussion of this issue, see e.g. Zwart (1993) and Barbiers (2000).

CPs that are the complement of a factive verb may also occur in a position immediately following the finite verb, but this position is not available for complements of propositional verbs.

(42) a. Harry heeft nooit verteld over [$_{CP}$ wat hij Hermelien gaf]
Harry has never told about what he Hermione gave
'Harry has never said anything about what he gave Hermione.'

b. * Wie heeft Harry nooit verteld over [$_{CP}$ wat hij _ gaf]
who has Harry never told about what he gave
told

(Indeed, there appears to be a general ban on extraction out of FRs in Dutch).
FRs are generally analyzed as DPs that contain a CP (see e.g. Van Riemsdijk 2006). Over the years, the discussion has concentrated on the internal structure of FRs. One issue concerns the question of whether FRs contain a head, and, if they do, whether this head is empty, or whether it is phonetically realised in some way or other (see e.g. Van Riemsdijk 2006 for discussion). Another issue concerns the question whether the relative pronoun in an FR occupies the head of the relative clause or its canonical complementiser position [Spec, CP]. The former position is usually referred to as the "Head Hypothesis" (see Bresnan & Grimshaw 1978); the latter as the "COMP hypothesis" (see Groos & Van Riemsdijk 1981). The reader is referred to Van Riemsdijk (2006) for discussion of these issues.

In this thesis, I will not examine these matters any further. For my purposes, the important point is that FRs are complex DPs. This is in line with my interpretation of P + CPs in §4.3.1, which I will also analyze as DPs. This analysis gains support if, as we have seen here, FRs and P+CPs have a parallel distribution in the context of verbal collocations.[14]

4.2.3 *Hoe*-clauses

Another environment in which we find P + CP configurations is in clauses that are introduced by the *wh*-word *hoe* ('how'). Consider the examples in (43ab), taken from Janssen (1992:161):

---

i. Jan zal [$_{CP}$ dat hij gelogen heeft] nooit toegeven.
John will that he lied has never admit
'John will never admit that he lied.'

ii.* Jan had [$_{CP}$ dat hij de race zou winnen] gehoopt.
Jan had that he the race would win hoped
'John had hoped that he would win the race.'

A CP complement of a verb that allows both factive and propositional CPs is disambiguated in this position, and can only receive a factive interpretation (see Barbiers 2000:192).

Finally, factive complements are usually considered to be weak islands for extraction, contrary to propositional complements which do not allow extraction (see Szabolcsi & Zwarts 1993).

[14] This is not to say that there are no differences between FRs and CPs in P + CP configurations. Whereas FRs always involve movement, and thus contain a gap, this is not the case for CPs. In addition, while the DP layer in a FR can be filled by lexical material, it cannot always be filled in a P + CP configuration, namely in those cases where the matrix verb is propositional.

(43)a. De respondent lijkt eigenlijk van mening te zijn dat zo'n
the respondent seems actually of opinion to be that such-an
antwoord niet overeenkomt met [$_{CP}$ hoe hij de feiten ziet].
answer not agrees with how he the facts sees
'The respondent seems to think that such an answer does not agree with how he sees the facts.'

b. Gorbatsjov had ons in Moskou uitgenodigd zodat heel de wereld
Gorbatsjov had us in Moscow invited so-that whole the world
zou kijken naar [$_{CP}$ hoe hij een toespraak hield tot Claudia
would look at how he a speech gave to Claudia
Cardinale en Marcello Mastroianni].
Cardinale and Marcello Mastroianni
'G. had invited us to Moscow so that the entire world would watch him give a speech to C.C. and M.M.'

I would like to propose that these clauses are FRs as well. The point is that the *hoe* relative can be paraphrased as *de manier waarop* ('the manner in which'). On the basis of (43ab) it would appear as though the antecedent, presumably a noun like *manier* ('manner'), cannot be overtly realised. However, the overt presence of the antecedent is in fact often attested, particularly in spoken language:[15]

(44) a. De manier hoe de doelpunten tot stand komen.
the manner how the goals to stand come
'The way in which the goals arise.'
(Dirk Kuyt)

b. De manier hoe de CD-Roms worden behandeld.
the way how the CD-Roms are treated
'The way in which the CD-Roms are treated.'
(Website *Koninklijke Bibliotheek*)

c. Het verschil zit hem alleen in de manier hoe je werkt.
the difference sits him only in the manner how you work
'The difference lies in the way in which you operate.'

d. Het begint met de manier hoe de telefoon wordt opgenomen.
it begins with the manner how the phone is answered
'It starts with the way in which the phone is answered.'

Arguments in favour of an FR status involve the distribution of *hoe*-clauses as well as evidence from extraction. The distribution of *hoe*-clauses parallels that of FRs that are the complement of a verbal collocation. That is, in addition to the extraposed position, *hoe*-clauses can appear in topic position, in scrambled positions, in right-dislocated and left-dislocated positions, as well as in isolation and coordination

[15] The unreferenced examples were uttered by friends or relatives.

contexts. I give two examples below, one involving topicalisation (45a) and one involving right-dislocation (45b):

(45) a. *Topicalisation*
Naar [$_{CP}$ hoe hij voetbalt] zou iedereen willen kijken.
at how he soccer-plays would everyone want look
'The whole world wants to see how he plays soccer.'
b. *Right dislocation*
Iedereen heeft ernaar gekeken, naar [$_{CP}$ hoe hij voetbalt]
Everyone has there-at looked at how he soccer-plays
'The whole world has watched how he plays soccer.'

Second, *hoe*-clauses pattern like non-headed FRs and P + CP constructions with respect to the possibility of separating clause and antecedent by extraposition:

(46) a. Ik heb naar [$_{CP}$ hoe hij een toespraak hield] zitten kijken.
I have at how he a speech gave sit look
'I have been watching how he gave a speech.'
b. * Ik heb naar _ zitten kijken [$_{CP}$ hoe hij een toespraak hield].
I have at sit look how he a speech gave
'I have been watching how he gave a speech.'

Third, just as with FRs and P+CPs, extraction is not possible:

(47) a. Ik heb zitten kijken naar [$_{CP}$ hoe hij een gedicht voordroeg].
I have sit look at how he a poem recited
'I have been watching how he recited a poem.'
b. * Wat heb ik naar zitten kijken [$_{CP}$ hoe hij _ voordroeg]?
what have I at sit look how he recited

The facts considered lead me to conclude that *hoe*-clauses are a subtype of FR. Their distribution in the context of verbal collocations provides additional evidence for the claim that the CPs in P + CP constructions are DPs as well.

4.2.4 Temporal adjunct clauses

A third context in which a preposition takes a CP as its complement involves temporal adjunct clauses. The internal syntax of these clauses will be discussed below.

As the examples in (48ab) illustrate, Dutch CPs can also occur as the complement of a temporal or locative preposition:

(48) a. Na [$_{CP}$dat Jan binnenkwam], ging de telefoon.
after- that John entered rang the phone
'After John entered, the phone rang.'

b. Om [$_{CP}$dat Jan binnenkwam], hield iedereen z'n mond.
for- that 'because' John entered held everyone his mouth
'Because John entered, everyone fell quiet.'

In Larson (1990) it is argued that in similar constructions in English, the specifier of the CP contains a temporal operator. Larson's reasoning is as follows: in sentences of the kind in (49), the temporal preposition *before* is ambiguous between two readings:

(49) I saw Mary in New York [$_{PP}$ before [$_{CP1}$ she claimed [$_{CP2}$ that she would arrive]]].

Readings
a. I saw Mary in New York before she made a certain claim, namely that she would arrive (some time).
b. I saw Mary in New York prior to some time *t* that she alleged would be the time of her arrival.
(Larson 1990:170)

In other words, *before* is construed either with the event denoted by CP_1 or with the event denoted by CP_2. The same ambiguity can be found in (50), which contains the temporal preposition *after*:

(50) I encountered Alice [$_{PP}$ after [$_{CP1}$ she swore [$_{CP2}$ that she had left]]].

Readings
a. I encountered Alice subsequent to her swearing that a certain proposition was true, namely that she had left (sometime).
b. I saw her after some time *t* that she swore would be the time of her arrival.
(Larson 1990:170)

Larson observes that the same sort of ambiguity arises in adverbial clauses involving *when*, where *when* can be construed either with the event in the least embedded clause, i.e. CP_1 in reading (51a), or with the event in the most deeply embedded clause, i.e. CP_2 in reading (51b):

(51) I saw Mary in New York [$_{CP1}$ when she claimed [$_{CP2}$ she would arrive].

Readings
a. I saw her when she uttered the words.
b. I saw her at the alleged arrival time.
(Larson 1990:170)

In the case of *when*-clauses, such ambiguities have standardly been analysed as involving movement (Larson 1990:170-171). In relation to this, Larson proposes

that the ambiguities observed in the context of *before* and *after* also involve movement. Thus, Larson assumes the presence of a temporal operator O of the category NP, which is generated in the adjunct position occupied by the bare-NP *when*. As a result, the reading in which *before* is construed with the most deeply embedded CP (i.e. CP_2), for instance, has the structure in (52):

(52) $[_{PP}$ before $[_{CP1}$ she claimed $[_{CP2}$ that she would arrive O]]]

In (52) O is base-generated in the most deeply embedded complement of *before*, and moves through successive cyclic movement to the specifier of CP_1. This results in the structure in (53) (see also Larson 1990:178):

(53) $[_{PP}$ before $[_{CP1}$ O_i she claimed $[_{CP2}$ t_i that she would arrive t_i]]]

If the temporal preposition is construed with the event in CP_1, then the temporal operator starts out in the adjunct position in CP_1 and subsequently moves to the specifier of CP_1, leaving a trace. The location of the trace(s), either in CP_1 or in CP_2, accounts for the ambiguities.

Larson further assumes that the temporal operator in the specifier of CP_1 receives case from *before*. This case is thus a property of the chain O_i … t_i …(t_i)… The empty category must bear case in order to be interpreted as a variable bound by O. Without such a variable, the operator O would bind nothing, and the structure would violate the general ban on vacuous quantification (Larson 1990:177). *Before* has the property to assign case because it can also take a nominal complement, as in a PP like *before the party*. Larson's account is summarised in (54), and exemplified for a reading in which the preposition is construed with the highest CP:

(54) $[_{PP}$ before $[_{CP1}O_i$ … t_i …]]
↘ Case ↗

Below, I will follow Larson and assume that a CP that functions as the complement of a temporal preposition contains an operator in its specifier.

As far as Dutch is concerned, it should be noted that Dutch shows the same ambiguities with adverbial clauses introduced by *voordat* ('before'). *Voordat* can be construed either with the event denoted by CP_1 or with the event denoted by CP_2.

(55) Ik zag Jan in Den Haag $[_{PP}$ voordat $[_{CP1}$ ik dacht $[_{CP2}$ dat
I saw John in The Hague for-that I thought that
ik hem zou ontmoeten]]].
I him would meet

Readings

a. I saw John before the moment I thought that that I would meet him.
b. I saw John before the moment I would meet him.

Furthermore, Larson observes that the prepositions *although*, *because*, *unless*, *in case* and *while* are not ambiguous between a high and low reading in the way *before*, *after*, *since* and *until* are. This is not because such ambiguity is conceptually inaccessible. As (56) shows, the lower reading, while conceptually conceivable, is ungrammatical:

(56) I visited New York [$_{PP}$ because [$_{CP1}$ Mary dreamed [$_{CP2}$ that Max was there]]]

Readings

a. I visited New York because of Mary's dreaming that Max was in New York.

b. * I visited New York because of what Mary dreamed, namely that Max was in New York.

It is tempting to relate the lack of ambiguity with prepositions such as *because* to the fact that these prepositions are not temporal, while *before* and *after* are. However, as Larson (1990:174) points out, this cannot be correct, given that the temporal preposition *while* also resists a long-distance reading. Rather, so Larson argues, the explanation for this division lies in the complement-taking properties of the prepositions concerned: while prepositions like *before* and *after* can select both CPs or DPs, prepositions like *although* and *because* can select CPs only.[16] From this, Larson concludes that *before* and *after* are case-assigning prepositions, whereas *although* and *because* are not.

Recall at this point that Larson assumes that the preposition *before* in (54) assigns case to the operator in [spec, CP_1] to avoid vacuous quantification. The trace in the lowest CP is in adjunct position, and so does not receive case from any element inside CP_2; hence, it must receive case by forming a chain with the operator. In other words, the principle of vacuous quantification is violated if a preposition is unable to assign case to the operator. This leads Larson to conclude that prepositions like *although* and *because* do not allow a long-distance reading, since if they did, they would violate vacuous quantification.

There is a general discussion going on about the relation between case assignment and argument status that must be mentioned at this point. Larson assumes that case must be assigned to the temporal operator (or, more precisely, to the trace that is part of the chain headed by the temporal operator) in order to avoid vacuous quantification. This begs the question of why an adjunct should receive case. Larson assumes that the trace occupies an adjunct position of the bare NP-adverb *when*. I surmise that Larson's assumes that all nouns should receive case, and therefore also *when*. Consider in this respect sentences like the one in (57):

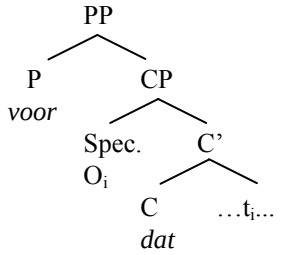
[16] *Because* and *in case* can select a DP complement if *of*-insertion takes place, as in *because of the weather*. This supports Larson's claim that prepositions such as *because* and *in case* do not assign case.

(57) Jan heeft [$_{DP}$ de hele winter] hout gehakt.
John has the whole winter wood chopped
'John has been chopping wood for the whole winter.'

Given the case filter, the adverbial DP *[$_{DP}$ de hele winter]* must have received case, but there is no thematic relation between DP and the predicate *hakken* ('chop'). Note that there is no case-assigning preposition involved either. This kind of case assignment to an adverbial DP is problematic with respect to the traditional T-model that is used in the Government & Binding framework (see Chomsky 1981). In this T-model, there is a high amount of overlap between case theory and theta-theory. Given that an argument must have both case and a thematic role, the class of argument positions that is defined by case theory is largely identical to the one that is defined by theta-theory. In order to reduce this unnecessary machinery, Neeleman & Weerman (2001) propose a theory of case that is not intertwined with theta-theory. As a consequence, the licensing of case in their framework is no longer restricted to D-structure (inherent case) or S-structure (structural case), but it is more flexible instead. They propose a theory of case in which the PF and LF interface play a role. At PF, so-called "unspecified case" is licensed, i.e. case on constituents that cannot be associated with semantic functions. At the semantic interface (LF), on the other hand, case is interpreted by theta-theory. This means that at this level, there is a set of LF principles by which constituents (syntactic arguments) can be associated with semantic functions (semantic arguments) (see Neeleman & Weerman 1999:3-4). Within this kind of approach, case assignment to the adverbial DP *[$_{DP}$ de hele winter]* probably takes place at PF.

Despite these theoretical complications, I will follow Larson's claim that the specifier of a CP that is the complement of a preposition that introduces a temporal adverbial clause contains a temporal operator:

(58)



The presence of this operator in spec. CP enables the predicate, in this example the preposition *voor* ('for'), to assign case to the complement clause. This is necessary given the principle of predicate saturation, which requires the syntactic saturation (or discharge) of obligatory functional features, such as case (see Radford 1990:236). Consider for instance the assignment of nominative case. Case features that are obligatorily assigned by a case assigner (let us assume it is the functional head I for nominative case, but see also chapter 3, §3.4 above), must be syntactically saturated.

This means that they must be projected onto an appropriate constituent that is projected in the syntactic structure of a sentence. If there is no argument available to receive the discharged features, a dummy element is needed. This can be demonstrated on the basis of the *easy to please* construction:

(59) a. This book is easy to read.
b.* Is easy to read this book.
c. It is easy to read this book.

In (59a), the nominative case features can be discharged onto the DP *this book*. In (59b), however, there is no appropriate constituent available to receive the nominative case features, and the sentence is ungrammatical. Finally, in (59c), the sentence is fine because the presence of a dummy element, in this case the expletive *it*, enables the predicate to discharge its features.

Regular CPs headed by the complementiser *dat* lack this kind of temporal operator in their specifier, and I would like to propose that this is why they are not able to receive case. On the assumption that P is a case assigning category, it follows that regular CPs cannot appear in the complement position of a P.

This analysis raises the question of why regular CPs seem to be able to occur in the complement position of a VP, since V is also a case assigning category and syntactic saturation must take place. I will come back to this issue in §4.3 where I will discuss a proposal by Barbiers (2000). Barbiers argues that DPs and CPs occupy different base positions in the syntactic structure because they bear a different *semantic* relation to the verb. This difference in semantic status leads to the claim that DPs are arguments whereas CPs are (mostly) predicates. In this thesis, I will remain agnostic about whether case is always assigned to adjuncts, and the level of interaction between case theory and theta theory.

So far, I have argued that two kinds of CPs in the complement position of P can be distinguished: (1) CPs that are in fact complex DPs. This holds for FRs and *hoe*-clauses, (2) CPs that have a temporal operator in their specifier, which can absorb the case feature that is assigned by the P. In the remainder of this chapter, I will focus on P+CP constructions that are part of a verbal collocation.

4.2.5 The P + CP pattern from a cross-linguistic perspective

To conclude my overview of the P + CP pattern, I briefly consider some data from other Germanic languages to show that Dutch is not unique in displaying the P+CP pattern.

As the data in (60) show, P + CPs are also found in all mainland Scandinavian languages. These languages differ from Dutch in that P+CP does not alternate with a resumptive pronoun+P+CP pattern:[17]

[17] Thanks to Kaja Borthen for providing me with the Norwegian data, and for much helpful discussion.

(60) a. *Danish*
Peter tvivlar på at Maria ofte ryger disse cigarer.
Peter doubts on that Mary often smokes these cigars.

b. *Swedish*
Peter tvivlar på att Maria talar sanning.
Peter doubts on that Mary speaks the truth.

c. *Norwegian*
John tvilte på at Maria forteller sannheten.
John doubted on that Mary tells truth-DEF

The P+CP pattern is also found in Frisian, where, as in Dutch, it alternates with a resumptive pronoun pattern (in Frisian *der*+P+CP): [18]

(61) a. Ik warskôge har foar dat it glêd wie.
I warned her for that it slippery was

b. Ik warskôge har *der* foar dat it glêd wie.
I warned her there for that it slippery was.

Frisian is similar to Dutch in that there seems to be a correlation with factivity to the extent that the CP can occur in complement position only if the matrix verb is factive:

(62) a. *Factive*
Hy klage oer dat de besine sa djoer wie.
he complained about that the petrol so expensive was

b. *Non-factive*
* Ik hope op dat ik de trein helje soe.
I hoped on that I the train catch would

Furthermore, as in Dutch, extraction out of P+CP constructions is not allowed:

(63) * *Hokker boek* betanke er dy foar datst t_i meinommen hiest?
which book thanked he you for that-2SG brought had-2SG

Frisian and Dutch differ in this respect from Norwegian, where extraction out of P + CP is possible:

(64) *Hva*$_i$ tvilte John på at Maria ville si t_i ?
what doubted John on that Mary would say?

[18] With "Frisian" I mean West-Frisian, i.e. the language spoken in the Dutch province of Friesland. I am grateful to Jarich Hoekstra for providing me with the Frisian data, and for much helpful discussion.

In addition, Norwegian P + CPs do not display any restrictions with respect to the factivity of the matrix predicate:

(65) a. *Factive*
Hun led [under [at sjefen hennes drakk]].
she suffered under that boss-DEF her drank.
b. *Non-factive*
Han regent [med [at hun ville behandle ham pent]].
he counted with that she would treat him nice.

The facts in (65) suggest that in Norwegian (and, more generally, in mainland Scandinavian), the CP is the direct complement of the preposition. Given that Scandinavian allows P stranding, the possibility of extraction in P + CP is in fact expected. In Dutch and Frisian, on the other hand, the impossibility of extraction suggests that the CP is not the direct complement of the preposition, despite the fact that the P + CP configuration behaves as a constituent. This suggests, then, that in Dutch and Frisian there is intervening structure between the P and the CP. I will argue in §4.3 that the structure in question is a DP shell. This makes it possible to relate the ban on extraction to the complex NP condition of Ross (1967).

To conclude this section, consider the following data from English:

(66) a. * We had forgotten to remind him about that he had not paid yet.
b. * He did not wish to comment on that the trains are so often late.
(Seppänen 1989:322)

(66ab) show that English verbal collocations do not allow P + CP structures. The sentences in (66ab) can be made grammatical by inserting a "dummy" DP between the preposition and the CP, as in (67):

(67) He did not wish to comment on {the fact/it} that the trains are so often late.

But now consider (68ab), where the CPs have been preposed:

(68) a. *That he had not yet paid* we had forgotten to remind him about.
b. *That the trains are so often late* he did not wish to comment on.

(68ab) suggest an analysis in which the CP has been topicalised and the preposition has been stranded. However, the problem with such an analysis is that the facts in (66ab) appear to imply that the P + CP order does not form part of the underlying representation.[19]

[19] Note that there is a difference between Dutch and English with respect to LDL that might play a role in this context. In Dutch LDL structures, it is possible to use an R-pronoun or a demonstrative directly following the dislocated constituent:

This brief cross-linguistic overview presented above shows that the P + CP pattern is not a unique property of Dutch. It also shows that languages display often quite subtle variation in respect of the syntactic behaviour of P + CP structures. This variation involves differences in constituency, extraction and P-stranding, as well as differences in sensitivity to the semantic properties of the matrix verb. I leave this variation as a topic for further research. In the remainder of this chapter I will focus on the P + CP structure found in Dutch collocations.

4.2.6 Conclusion

In this section I have considered the distribution of the P+CP pattern in Dutch. I have argued that FRs and *hoe*-clauses in verbal collocations are complex DPs. These nominal properties can be formalised if it is assumed that an empty DP shell is projected on top of the CP layer. The P+CP pattern that was introduced in §4.2.1 shows many similarities with the FRs and the *hoe*-clauses with respect to distribution and extraction. It is therefore likely that these CPs have nominal properties as well. I will discuss this issue in §4.3. Finally, I discussed P+CPs that are part of a temporal adjunct clause. For these cases, I extended a proposal by Larson (1990) for English temporal adjunct clauses to Dutch temporal adjunct clauses. I follow Larson (1990) in that the specifier of the CP contains a temporal operator. I suggested that the presence of this operator enables the clause to receive case. Given the principle of predicate saturation, this explains why a clause can appear in the complement position of a *temporal* preposition, but not in the complement position of *any* preposition.

4.3 On the status of CP and DP in Dutch

In this section I will focus on the distribution of DPs and CPs in Dutch, taking as my background the work of Barbiers (2000).

Consider first of all once more the "standard" situation in Dutch. (69a) shows that the preposition in a verbal collocation can take a DP-complement. (69b) shows that this preposition can also take a CP-complement. In that case, the CP is typically accompanied by the resumptive pronoun *er*, which directly precedes the preposition:

(i) a. Dat hij nog niet betaald had, *daar* heb ik hem niet aan herinnerd.
that he not yet paid had there have I him not of reminded
b. Die man, *die* ken ik niet.
that man that know I not

This kind of resumptive pronoun is not possible in English, or at least, it cannot be overt:

(ii) a.* That he had not yet paid *that* we had forgotten to remind him about.
b.* That man, *that* I don't know.

(69) a. Ik verlang naar [$_{DP}$ de zomer].
I long for the summer
'I long for the summer.'
b. Ik verlang ernaar [$_{CP}$ dat het eindelijk zomer wordt].
I long there for that it finally summer becomes
'I wish it was finally turning to summer.'

As I observed in §4.1, a possible explanation for the appearance of *er* is provided by the Case Resistance Principle of Stowell (1981), which states that clauses cannot function as the complement of a preposition.[20] Given the standard assumption that prepositions are a case-assigning category, this implies that clauses are unable to receive case. This is in fact another formulation of the principle of syntactic saturation of the predicate. In line with this principle, the case-absorbing pronoun *er* is required to fill the complement position of the preposition in (69b). According to this account, the CP in (69b) occupies an adjoined position and forms a chain with the resumptive pronoun. As we saw earlier, the presence of a temporal operator might also enable syntactic saturation. CPs therefore differ from DPs in that the latter require case, and hence can appear in the complement position of a preposition, whereas CPs can only appear in the complement position of a P if "corrective" measures are taken to ensure that the case features can be discharged. If no such measures are taken, CPs are unable to receive the case that would be assigned to them by a case-assigning category.

This complementary distribution of DPs and CPs is not only found in relation to prepositions, but also in relation to verbs, the other case-assigning category.[21] On the assumption that DP and CP complements bear the same *semantic* relation to a verb, this means that they must be generated in the same base position with respect to the case-assigning verb, as is required by the Universal Theta Alignment Hypothesis (UTAH):

(70) *Universal Theta Alignment Hypothesis*
Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure.
(Baker 1988:46)

The Case Resistance Principle and the UTAH make an important prediction with respect to the location of DPs and CPs in Dutch. In the Government and Binding framework of Chomsky (1981) case assignment takes place under government; in this framework Dutch has been analysed as an OV language with leftward governing (see e.g. Bennis & Hoekstra 1989a). In this approach, DPs can stay in their base position to the left of the verb because they require case. Clauses, on the other hand,

[20] Actually, Stowell's (1981) Case Resistance Principle states that case cannot be assigned to a category which itself bears a case-assigning feature.
[21] See also Emonds (1970, 1976) for a detailed discussion of the distribution of DP and CP.

cannot stay in their base position; in order to escape case assignment, they must extrapose.

A problem with this approach is that it incorrectly predicts that extraposed clauses are always islands for extraction (see Hoekstra 1983, Zwart 1993, Barbiers 2000). That is, sentences of the type in (71) are predicted to be ungrammatical:

(71) *Wat*$_i$ heeft Jan gezegd [$_{CP}$ dat hij t_i mee zou nemen van de winkel]?
what has John said that he with would bring from the shop
'What did John say he would bring along from the shop?'

Barbiers (2000) observes that a further problem with this approach is that extraposed clauses will still receive case via the chain that they form with their trace. This is the case even when the CP is generated as an adjunct and forms a chain with a pronoun in the complement position of the verb, as in (69b).

In order to solve these problems, Barbiers (2000) argues that DPs and CPs do not originate in the same base position. According to the UTAH, this implies that DPs and CPs do not bear the same *semantic* relation to the verb. This is indeed what Barbiers proposes: he claims that whereas DPs are arguments, CPs are predicates.

Let us first evaluate the claim that DPs and CPs do not originate in the same base position with respect to Dutch and English. As noted above, the traditional view is that in Dutch (an OV language) DP and CP complements are generated in a position to the left of the verb, with CP being extraposed in order to avoid case marking. For English (a VO languae) it has been claimed that DP and CP arguments are generated in a position to the right of the verb, with CPs again being extraposed to avoid case marking – though for English this movement is "invisible" since it does not result in a change in surface word order.

On the basis of these assumptions, and following the antisymmetry framework of Kayne (1994), Zwart (1993) argues that in both Dutch and English DP and CP complements originate in a position to the right of the verb, with the DP moving to a position to the left of the verb to get its case checked, and the CP remaining in situ. The difference between Dutch and English can then be explained on the assumption that in English the DP complement is spelled out in its base position, while in Dutch it is spelled out in its checking position. Zwart's analysis is summarised below (see also Barbiers 2000:189):

(72) English: ~~DP~~$_i$ V DP$_i$
V CP

Dutch: DP$_i$ V ~~DP~~$_i$
V CP

Barbiers (2000:189) observes that this analysis implies that in English DP and CP complements appear as a right-hand sister of the verb. However, as Barbiers notes, the following data show that this prediction is not borne out:

(73) a. I will [$_{V}$ say] <$_{CP}$*that I was sick> [$_{PP}$ to Mary] <$_{CP}$ that I was sick>.
b. I will [$_{V}$ say] <$_{DP}$ these things> [$_{PP}$ to Mary] <$_{DP}$*these things>.
(Barbiers 2000:188)

Rather, in both English and Dutch a CP complement must follow a PP complement, while a DP complement must precede a PP complement. Consider for instance the Dutch example in (74):

(74) a. Ik zal niet <$_{CP}$*dat ik ziek was> [$_{PP}$ tegen Maria]
I will not that I ill was to Mary
[$_{V}$ zeggen] <$_{CP}$dat ik ziek was>.
say that I ill was
'I won't tell Mary that I was ill.'
b. Ik zal <$_{DP}$deze dingen> [$_{PP}$ tegen Maria] [$_{V}$ zeggen] <$_{DP}$*deze dingen
I will these things to Mary say these things
'I will tell Mary about these things.'
(Barbiers 2000:188)

Barbiers argues that these facts can be accommodated if it is assumed that the complements stay in their base position and it is the *verb* that moves. Note that Barbiers assumes that the base position for direct objects is to the left of the verb, both in English and in Dutch.The difference between English and Dutch is then that the verb is spelled out in its landing site in English, but in its base position in Dutch (Barbiers 2000:189):

(75) English: V DP PP ~~V~~
V PP ~~V~~ CP

Dutch: ~~V~~ DP PP V
~~V~~ PP V CP

If it is the verb that moves, then DP and CP complements must have different base positions: a DP complement is base generated to the left of a PP complement and to the left of the verb in its base position, while a CP complement is base generated to the right of a PP complement and to the right of the verb in its base position.

This analysis implies in turn that DP and CP complements must bear a different *semantic* relation to the verb. Barbiers suggests that DPs are arguments whereas CPs are (mostly) predicates. As a result, only DPs can occupy the unmarked argument position, i.e O in the linear order in (76):

(76) S O (PP) V X

However, as Barbiers observes, it is possible for a CP to appear in O. In this case the CP will receive a very specific interpretation, namely a quote reading:

(77) Ed heeft ['dat ik ga'] tegen de leraar gezegd.
Ed has that I go to the teacher said
'Ed has said 'that I go' to the teacher.'
(Barbiers 2000:190)

The observation that the interpretation of a constituent depends on its position in the syntactic structure is a familiar one (see e.g. Barbiers 1995, 2000). Barbiers' explanation for the quote reading in (77) is that a CP in the DP-complement position of a verb enters into the same *semantic* relationship with the verb as a DP complement does. A DP complement is projected as the subject of the verbal root, and is interpreted as an element of the set denoted by that root; the same holds for a CP that is projected in this position (see Hale & Keyser 1993). For instance, if the root is GIFT, then the subject of the root (i.e. the complement of the verb) is interpreted as an element of the set of gifts. Some DPs fit this bill more easily than others. When the subject is *flowers*, a natural interpretation is that *John gave the flowers to Mary*. However, when the subject is *the destruction*, the only way to make sense of the sentence is to interpret *the destruction* as the title of a book, given that a book is a natural member of the set of gifts.

In a similar vein, the phrase in (77) must be interpreted as an element of the set of things said, given that the verbal root is SAY. The only way to get this reading is to interpret the phrase as a quote. Note that a CP occupying position O cannot receive the more common propositional or factive reading. This is because the position in O is associated with D-like properties; hence, if a CP occurs in this position, it can only be interpreted if it has DP-like characteristics. This shows, therefore, that factive and propositional CPs do not entertain the same semantic relationship with a verb as DP complements. This is precisely what is predicted if, as Barbiers claims, CP complements originate in another base position than DP complements.

Below I will extend Barbiers' account of the difference between DPs and CPs to prepositions. I will claim that only DPs can be the complement of a preposition, since only DPs are arguments. The implication of this view is that a CP which occupies the complement position of a preposition must have DP-like properties. As we have seen in §4.2 this is indeed the case. First, in those cases where a preposition is followed by a FR or a *hoe*-clause, the CP projects an empty DP shell on top of the CP layer. Second, in adjunct clauses in which a temporal operator occupies [spec, CP], the filled specifier gives the CP DP-like properties to the extent that the case features of the preposition can be discharged onto the temporal operator.

4.3.1 The CP as a DP in verbal collocations

Recall that verbal collocations can take clausal complements and that these complements occur in two configurations: the pattern with the resumptive pronoun (RP pattern) as in (78a), in which the resumptive pronoun is coindexed with the clause, and the pattern without the resumptive pronoun, the P+CP pattern, as in (78b):

(78) a. Zij heeft *er*$_i$*over* geklaagd [$_{CP}$ dat het weer zo slecht was]$_i$.
she has thereabout complained that the weather so bad was
'She has complained about the bad weather.'

b. Zij heeft geklaagd over [$_{CP}$ dat het weer zo slecht was].
she has complained about that the weather so bad was
'She has complained about the bad weather.'

As I mentioned in the introduction to this chapter, it might seem tempting to assume a derivational relation between these two configurations. However, I will not speculate on such a derivational relation because it has not been part of my research. I will simply observe that the two constructions coexist, and that both are in need of a proper analysis.

Following Barbiers (2000), who claims that DPs and CPs are in complementary distribution, and that only DPs are arguments, I would like to propose that there are two possible scenarios as far as CPs in the complement position of a P are concerned.

(79) a. *Scenario 1*
The CP retains its CP status
Nevertheless, the preposition must be able to assign its case in accordance with the principle of syntactic saturation. Following Barbiers (2000), who claims that only DPs are arguments, this means that the CP must either relate to a DP, or obtain DP properties itself. Coindexation with the resumptive pronoun *er* ('there') is an example of the first stategy. The projection of a temporal operator in the specifier of a clause that is part of a temporal adjunct clause is an example of the second strategy. This operator is capable of receiving the case that is assigned by the preposition.

b. *Scenario 2*
The CP is a DP.
This strategy occurs in verbal collocations in which the P is followed by a FR or a *hoe*-clause. These clauses are complex DPs, whose head may but need not be lexicalised.

In §§4.2.2 and 4.2.3, I analysed FRs and *hoe*-clauses as complex DPs. In many respects, P+CP configurations in verbal collocations pattern with FRs and *hoe*-clauses. Although the CPs in the P+CP pattern in (78b) are not a relative clauses, I

would like to propose that they project an empty DP shell as well. This means that they have the following structure:

(80) $[_{DP}$ [D Ø[CP]]]

Note that the head of the DP in (80) cannot always be filled by any lexical material, contrary to FRs and *hoe*-clauses.[22] I will come back to this issue below.

Recall, however, that the acceptability of extraposed P + CPs depends to some extent on whether the verbal collocation selects a factive (81b), or a propositional clause (81a) (see also §4.2.1):

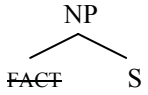
(81) a. * Ik heb verlangd naar $[_{CP}$ dat het zomer wordt].
I have longed for that it summer becomes
'I have wished it was finally summer.'

b. ? Zij heeft geklaagd over $[_{CP}$ dat het weer zo slecht was].
she has complained about that the weather so bad was
'She has complained about the bad weather.'

According to my informants, a P+CP pattern is more acceptable if the CP has a factive interpretation instead of a propositional interpretation.[23]

The idea that there is a syntactic correlation between factivity (or presupposition) and a DP is not new. Indeed, Kiparsky & Kiparsky (1971:356) propose that factive clauses are preceded by an NP which is headed by the noun FACT.[24] A rule of FACT-deletion ensures that this noun is not actually pronounced; rather, its function is that it gives the following CP factive status:

(82)



Sentences of the type in (81b) are therefore quite similar to Kiparsky & Kiparsky's deep structure of factive clauses:

(83) I regret {THE FACT} that John is ill.

I depart from Kiparsky & Kiparsky in that I do not assume a silent noun in the head position of the DP. The reason is that the P+CP pattern also occurs with verbal collocations that cannot select a factive complement. Instead, I will argue that the DP layer, which I propose in (80), gives the CP a *DP status*. and as a consequence it enables the CP to occur in the complement position of a P. This is motivated by Barbiers' proposal that only DPs have argument status. Note that in this analysis, the

[22] Namely in verbal collocations that select a propositional complement clause.
[23] This correlation seems to be even stronger in Frisian (see § 4.2.5).
[24] For a more recent approach that makes use of silent nouns, see Kayne (2003).

D-head is not specified for a factive or propositional status of the following CP, but it just assigns a DP-status to the clause. It is not unreasonable to assume that the P+CP pattern originated from the pattern in which the DP *het feit* ('the fact') intervened between the P and a complement CP with a factive interpretation. Possibly, the (overt) presence of *het feit* became optional at a certain moment, and the P+CP pattern was then extended to verbal collocations that select a propositional complement by analogy. However, this issue has not been part of my research, so I leave this rather speculative scenario as a topic for further (diachronic) research.

Finally, note that the structure in (80) offers a straightforward account of the ban on extraction from the P+CP pattern. An example of this was given in § 4.2.1, and is repeated below:

(84) a. Harry heeft nooit over [$_{CP}$ dat Hermelien de waarheid
Harry has never about that Hermione the truth
verzweeg] geklaagd.
withheld complained
'Harry has never complained about the fact that Hermione withheld the truth.'

b. * Wat$_i$ heeft Harry nooit over [$_{CP}$ dat Hermelien t$_i$ verzweeg]
what has Harry never about that Hermione withheld
geklaagd?
complained

As the result of the presence of an empty DP-shell, the construction is subject to the "complex NP condition" of Ross (1967). This condition states that extraction out of a CP that is contained inside a DP is ruled out, irrespective of whether this CP is a complement of DP (85a) or a relative clause (85b):

(85) a. * *Wat*$_i$ hoorde Hermelien [$_{DP}$een verhaal [$_{CP}$ dat Harry t$_i$ had
what heard Hermione a story that Harry had
gekocht?]]
bought

b. * *Welk* boek$_i$ kent Hermelien [$_{DP}$ een vriend [$_{CP}$ die t$_i$ heeft
which book knows Hermione a friend who has
gelezen?]]
read

So far I have discussed the distribution of the P+CP pattern and following Barbiers (2000), who argues that only DPs are arguments, I proposed that there are two scenarios which enable a CP to occur in the complement position of a P:

Scenario 1
The CP retains its CP status
The preposition must be able to assign its case in accordance with the principle of syntactic saturation. This means that the CP must either relate to a DP, or obtain DP

properties itself. Coindexation with the resumptive pronoun *er* ('there') is an example of the first stategy. The projection of a temporal operator in the specifier of a clause that is part of a temporal adjunct clause is an example of the second strategy.

Scenario 2
The CP is a DP.
This strategy occurs in verbal collocations in which the P is followed by a FR or a *hoe*-clause. These clauses are complex DPs whose head may but *need not* be lexicalised. This strategy also occurs in verbal collocations in which the P is followed by a CP that has either a factive or a propositional interpretation. These clauses are analysed as complex DPs whose head may but *cannot* always be lexicalised.

In the next section I will look into the thematic properties of the arguments in verbal collocations. This will provide insight into the nature of verbal collocations, which, as I will claim, are in fact causative constructions.

4.4 The nature of the preposition in verbal collocations

In this section I shift the focus to the role of the preposition in verbal collocations. First, in §4.4.1, I will argue that (the majority of) verbs that occur in collocations are of a specific semantic type. In Levin (1993), the verbs concerned are referred to as subject experiencer verbs of the *marvel*-type, which form a subset of the class of psych-verbs.[25] Psych-verbs typically involve two arguments. One is the experiencer;

[25] In this chapter I focus on subject experiencer verbs. The class of verbal collocations also includes at least two other major subgroups. The first contains verbs like *luisteren naar* ('listen to'), *strijden tegen* ('fight against'), *kijken naar* ('look at'). Interestingly, these verbs have transitive counterparts that contain the prefix *be-*: *beluisteren*, *bestrijden*, *bekijken*. The prefix *be-* and the preposition are in complementary distribution, e.g. **beluisteren naar*. Since *be-* is a transitivity marker, the semantic relation between the subject and the object of these verbs is transitive and not causative. For this reason, I do not consider this subgroup here.

The second subgroup contains verbs like *wemelen van* ('swarm with') and *krioelen van* ('bulge with'). (i) shows that these verbs display locative alternation; (ii) shows that there is even a third possibility:

(i) De mieren$_{locatum}$ krioelen in de tuin$_{location}$ > De tuin$_{location}$ krioelt van de mieren$_{locatum}$
'The ants are swarming in the garden.' 'The garden is swarming with ants.'

(ii) Het krioelt van de mieren$_{locatum}$ in de tuin$_{location}$
'It is swarming with ants in the garden.'

Another type of locative alternation is displayed by verbs such as *besmeren met* ('spread with') and *beladen met* ('load with'):

(iii) Jan smeert verf$_{locatum}$ op de muur$_{location}$ > Jan besmeert de muur$_{location}$ met verf $_{locatum}$
'John spreads paint on the wall.' 'John paints the wall with paint.'

The relation between location and locatum is clearly not causative either. I therefore leave these verbs out of my investigation as well. For an extensive discussion of locative alternation, see Mulder (1992).

the other is alternatively known as the stimulus, the theme, the cause, the object or the target of emotion. I will show that in verbal collocations the second argument is generally associated with the role of CAUSE, which suggests that verbal collocations are in fact causative constructions (see also Den Hertog 1973 and Postma 1995).

Next, in §4.4.2, I present diachronic data from Dutch and (Old) English which indicates that the thematic role of CAUSE is typically associated with inherent case marking (in Dutch genitive and oblique accusative case). Based on these data, I suggest a diachronic development in which the rise of verbal collocations is the result of the loss of inherent case marking by the verb. At some point in the history of Dutch, verbs lost the ability to assign inherent case, so that case marking by verbs became restricted to structural case marking. Given that the second argument of a psych-verb has a different thematic role (i.e. CAUSE) than the object of a normal transitive verb (i.e. THEME), and given that the thematic role of CAUSE is marked by inherent case, it follows that the verb was no longer capable of establishing this causative relation. However, prepositions did not lose the ability to assign inherent case, and they therefore took over this role from verbs. It is this shift in case marking that accounts for the emergence of verbal collocations.

The above scenario indicates that the role of the preposition in a verbal collocation is functional rather than lexical; that is, its main function is to establish a causative relation between two events, rather than to make a lexical contribution to the matrix verb.

4.4.1 The classification of verbs in verbal collocations

In Levin (1993) an overview of English verb classes is provided, based on the kind of syntactic alternations displayed by verbs. Levin classifies the psych-verbs into four subgroups:

(86)

	Verb type	*Example*
a.	Transitive experiencer subject	*admire*
b.	Experiencer object	*amuse*
c.	Intransitive experiencer subject + PP	*marvel at*
d.	Experiencer object of P	*appeal to*

Levin (1993:193) notes that some of the *marvel* verbs can also be used transitively as *amuse* verbs. The same holds for Dutch, as is shown by the examples in (87) and (88):

(87) a. $\text{Jan}_{\text{SUBJ.EXP.}}$ ergert zich [$_{\text{PP}}$ aan Marie].
John irritates himself at Mary
'John gets annoyed about Mary.'

b. Marie$_{CAUSE}$ ergert Jan$_{OBJ.EXP.}$
Mary annoys John
'Mary gets on John's nerves.'

(88) a. Ik$_{SUBJ.EXP.}$ verheug me [$_{PP}$ op je komst].
I enjoy myself on your coming
'I look forward to your visit.'

b. Je komst$_{CAUSE}$ verheugt mij$_{OBJ.EXP.}$
your coming delights me
'Your visit delights me.'

Note, though, that not all *marvel* verbs can be used transitively as *admire* verbs:

(89) a. Jan$_{SUBJ.EXP.}$ maakt zich zorgen [$_{PP}$ over de toekomst].
John makes himself worried about the future
'John is worried about the future.'

b. * De toekomst$_{CAUSE}$ maakt Jan$_{OBJ.EXP.}$ zorgen
the future makes John worried
'The future worries John.'

However, in such cases there is a paraphrase available to express the cause/object experiencer relation:

(90) *Paraphrase*
"The future causes John to be worried."

The possibility of a causative paraphrase holds for many other verbal collocations as well. Consider for instance the examples in (91ab):

(91) a. Jan$_{SUBJ.EXP.}$ klaagt over zijn verlies$_{CAUSE}$.
John complains about his loss

Paraphrase
"His loss causes John to complain/makes John complain."

b. Jan$_{SUBJ.EXP.}$ tobt over zijn huwelijk$_{CAUSE}$.
John broods over his marriage

Paraphrase
"His marriage causes John to brood/makes John brood".

Levin (1993) also discuss a number of other syntactic alternations in relation to subject experiencer verbs. These are summarised in (92):[26]

(92) 1. Possibility of:
   a. Possessor Object Possessor–Attribute Factoring Alternation (POP)
   b. Attribute Object Possessor–Attribute Factoring Alternation (AOP)
2. Lack of middle alternation
3. Possibility of sentential complements
4. Derived nominal has active interpretation only (DNA)
5. Existence of an -able adjective that modifies the PP object.

If we apply these alternations to the subject experiencer subgroup of Dutch verbal collocations we find the same properties. Clearly, not all Dutch subject experiencer verbs take part in the alternations in (92) on account of independent (phonological or morphological) factors. (This is not surprising, given that the alternations in (92) are based on the syntax of English verbs.) Consider the examples in (93)-(98):

(93) *POP*

a. Jan ergerde zich aan haar eerlijkheid.
John annoyed himself at her honesty
'John got annoyed about her honesty.'

b. Jan ergerde zich aan haar vanwege haar eerlijkheid.
John annoyed himself at her because of her honesty
'John got annoyed at her because of her honesty.'

(94) *AOP*

a. Jan ergerde zich aan haar eerlijkheid.
John annoyed himself at her honesty
'John got annoyed about her honesty.'

b. ? Jan ergerde zich aan de eerlijkheid in haar.
John annoyed himself at the honesty in her
'John got annoyed about the honesty she had in her.'

(95) * *Middle Alternation*

a. Jan ergert zich aan die kinderen.
John annoys himself at those children
'John is annoyed about those children.''

[26] Levin illustrates (1a) with *I admired his honesty > I admired him for his honesty*, (1b) with *I admired his honesty > I admired the honesty in him*, and (4) with *The children's enjoyment of the movie > *The movie's enjoyment by the children*.

b. * Die kinderen ergeren makkelijk.
those children annoy easily
'Those children can be easily annoying.'

(96) *Sentential complement*

Jan ergert zich eraan dat Marie altijd zo eerlijk is.
John annoys himself thereon that Mary always so honest is
'John gets irritated because Mary is always so honest.'

(97) *DNA*

a. ? Jan's ergernis aan Marie.
John's annoyance at Mary

b. * Marie's ergernis door Jan.
Mary's annoyance by John

(98) *-able adjective* (*-baar* or *-lijk* in Dutch)

Marie is ergerlijk.
Mary is annoying

Pesetsky (1995) discusses alternations of the kind mentioned above in relation to Baker's UTAH, which I repeat in (99) for convenience:

(99) *Universal Theta Alignment Hypothesis*
Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure.
(Baker 1988:46)

Experiencer predicate pairs such as *to be angry at* and *anger* seem to contradict the UTAH in that the experiencer is projected or linked with the subject position in the first case, but with the object position in the second case.

(100) a. Bill_{EXP} was very angry at the article in the Times.
b. The article in the Times angered Bill_{EXP}.

One way to save the UTAH is to assign a finer-grained syntax to such constructions. This is the aim of Belletti & Rizzi (1988), who argue that there is a single linking principle for experiencer verbs, in accordance with the UTAH. Belletti & Rizzi's principle is given in (101):

(101) Given a θ-grid [Experiencer, Theme], the Experiencer is projected to a higher position than the Theme.
(Belletti & Rizzi 1988)

The experiencer position sometimes coincides with the traditional subject position, as (100a) above. It can also be linked with a VP-internal position that is higher than the direct object position, which is always associated with the Theme. This is what Belletti & Rizzi assume for the object experiencer construction in (100b). On the assumption that the predicate *anger* is unaccusative, Belletti & Rizzi derive the surface order of (100b) by raising the Theme argument to the subject position.

Another way to save the UTAH is by assigning a finer-grained semantics. If it can be shown that the thematic roles involved in the pairs are different, then there is no problem with respect to the UTAH. This is the approach taken by Pesetsky (1995). Pesetsky demonstrates that a distinction must be made between target and cause and between causer and subject matter, on the basis of different truth conditions that come with these different roles.

The preceding discussion indicates that the syntactic interpretation of causatives faces a number of challenges: (1) the relation between causative formation and the UTAH, (2) the question of whether alternating pairs of causatives are derivationally related, and (3) the issue of whether causative arguments are underlying subjects or objects. An extensive investigation of Dutch causatives is clearly beyond the scope of this dissertation. For my purposes, the important observation is that the subgroup of verbal collocations discussed in this chapter are subject experiencer verbs, given that they allow causative alternations (or a causative paraphrase), and meet the other descriptive generalisations listed by Levin (1993).

In §4.4.2 I will provide diachronic evidence for the causative nature of Dutch verbal collocations. Furthermore, I will show that the thematic role of CAUSE is typically associated with inherent case.

4.4.2 Diachronic evidence: verbal collocations as causatives

It has frequently been observed that many verbs in Middle Dutch assigned genitive case to their object (see e.g. Stoett 1923, Den Hertog 1973 and Van Duinhoven 1989). Examples of such verbs include *proeven* ('taste'), *beginnen* ('begin'), *zich herinneren* ('remember'), *ontwijken* ('avoid'), and *vergeten* ('forget'). Stoett (1923) observes that these verbs can be further divided into the following subgroups: (1) verbs with a partitive genitive, (2) verbs expressing a mental or physical experience, (3) verbs with a genitive that expresses separation, origin or cause, and (4.) a rest category containing verbs like *beginnen met* ('start with'), *zorgen voor* ('take care of') and *beschuldigen* ('accuse').

For speakers of present-day Dutch it is difficult, if not impossible, to grasp the precise semantic relations that were originally associated with genitive case. In older stages of the language, a genitive could express separation, deprivation or possession, or it could express the origin or starting point of an event expressed by the verb. In abstract terms, the genitive denotes "origin", which can be interpreted

literally in the sense of a starting point (as in the verb *beginnen met*), but also metaphorically, for instance in the sense of a CAUSE argument that initiates an emotional experience which affects the subject argument.

Van Duinhoven (1989) and Den Hertog (1973) both argue that Dutch has undergone a diachronic development in which a genitive object became either an accusative object or a prepositional object. Van Duinhoven (1989:44) suggests that this was triggered by the loss of the morphological distinction between the genitive and accusative case endings (so-called paradigmatic levelling), in combination with the fact that the semantic distinction between a causative and theme argument is in itself rather abstract. In other words, a *causative* relation between a verb and its complement could not be morphologically distinghuished anymore from a *transitive* relation between a verb and its complement. Probably, this resulted in a reduction of case assigning properties of the verb to the extent that a subset of the verbs that used to assign genitive case came to assign accusative case.

According to this scenario, other verbs that used to assign genitive case, however, developed into verbal collocations. The examples mentioned by Van Duinhoven (1989:45) include *zich bemoeien met* ('meddle in'), *genieten van* ('enjoy'), *zich ontfermen over* ('have mercy on') and *sterven aan* ('die from'). Historical grammars place the first occurrences of verbal collocations in late Middle Dutch (1400-1500) and in the language of the 16th century.[27] An example of this transition is given below.

(102) a. Ontferm u mijner.
have-mercy you me-GEN
'Have mercy upon me.'

b. Ontferm u [PP over mij].
have-mercy you upon me
'Have mercy upon me.'

The 18th and 19th century witnessed a rapid and widespread emergence of verbal collocations. In this period, verbs that have a fixed preposition in present-day Dutch still allowed for some variation; consider for instance (103ab), taken from De Vooys (1931):[28]

(103) a. Zo had ik er al geen zin *aan* (nowadays *in* 'in')
so had I there already no sense on
'I did not feel like it.'

[27] Historical grammars usually distinguish between Old Dutch (500–1150) and Middle Dutch (1150–1500). Note that the terms Old and Middle Dutch do not refer to a specific language, but rather to a variety of dialects that were spoken in the area that is nowadays known as The Netherlands and Belgium.

[28] A certain amount of variation is still found in Dutch dialects, e.g. Standard Dutch *geloven in* ('believe in') vs. eastern parts of The Netherlands *geloven aan* ('believe at').

b. Wij wachteden er twee uren *naar* (nowadays *op* 'on')
we waited there two hours to
'We waited for it for two hours.'

This diachronic development in Dutch can also be seen in English. Van Kemenade (1987:83) observes that in Old English (OE), genitive case predominantly occurs with verbs of mental action or experience. In those cases, the genitive expresses the object of the mental action (not the experiencer) or the cause of the experience. Examples of mental action verbs include *forgitan* ('forget'), *tweogan* ('doubt'), *recan* ('care about'), *wundrian* ('wonder about'); examples of mental experience verbs include *hiofan* ('complain'), *fægnian* ('rejoice'), *sceamian* ('shame') and *hreowsian* ('rue'). The history of English seems to parallel that of Dutch. Probably because of paradigmatic levelling, English verbs gradually lost the ability to assign inherent (or oblique) case. As a result, verbs could no longer establish a semantic relation with a CAUSE argument, since CAUSE arguments require inherent case. As is the case in Dutch, assignment of inherent case was taken over by prepositions, which gave rise to the emergence of verbal collocations.

In OE, both patterns are attested. In the following examples, that were taken from Mitchell (1985), the verb *tweogan* ('doubt') may either take a causative complement that has genitive case (104a), or it combines with a preposition, in this case *ymb* ('about'). Note that Van Kemenade (1987:84) assumes that OE prepositions always assigned oblique case. This means that instances where a preposition assigns accusative case, as in (104b), must be analyzed as involving "oblique" accusative case marking.[29]

(104) a. Nanne mon *ðæs* tweogan ne þearf, ðæt ealle men
no man this-GEN doubt not need that all men
geendiað on ðam deaþe.
end in the death
'No man needs to doubt that his life will end with death.'

b. Hie sculon, ðonne hie *ymb hwæt* tweoþ, cyrran…
they should when they about something-OBL.ACC doubt turn-to
'They should, when they have doubts about something, turn to…'

The diachronic data from Dutch and English indicate that the thematic role of CAUSE was typically associated with inherent case marking (and more specifically, with genitive case). One possible diachronic scenario could then be that at some point in the history of Dutch case marking by verbs became restricted to structural case. Since the internal argument of psych-verbs has a different thematic role (i.e. CAUSE) than the object of 'normal' transitive verbs (i.e. THEME), and since the thematic role of CAUSE is typically associated with inherent case, psych-verbs were no longer able

[29] Van Kemenade (1987:85) suggests that accusative case assigned by a P is a subcase of dative case as used to indicate motion.

to establish this causative relation. However, prepositions did not lose their ability to assign inherent case, and they therefore took over this role from verbs. It is this shift that resulted in the emergence of verbal collocations. According to this scenario, then, the rise of verbal collocations would be due to the loss of inherent case marking by verbs. However, before this account is accepted, it should be backed up by historical evidence, in particular from text corpora.[30]

4.4.3 Synchronic evidence: verbal collocations as causatives

Besides the diachronic facts that support the claim that verbal collocations are causative constructions, there are some synchronic facts that point into the same direction. Postma (1995:85,130) discusses the phenomenon of negative voiding. This concerns a process in which the negative value of a negation disappears. As such, negative voiding fits into Postma's general idea that the meaning of functional elements like negation is not inherently specified. Postma places these functional elements in "zero semantics", and makes their interpretation dependent on the specific syntactic configuration in which they occur. Consider as an illustration (105), where the negative element *niets* ('nothing') has a free-choice reading. In the first reading, *niets* represents negation, so that the interpretation is that John gets angry about nothing. In the second, most prominent reading, *niets* expresses positive universal quantification, so that its interpretation is equivalent to *alles* ('everything'):

(105) Jan wordt boos om niets.

Readings

a. John gets angry about nothing (negation)
b. John gets angry about everything (∀-reading)

As Postma observes, this free-choice reading, i.e. the possibility of negative voiding, occurs with verbal collocations (106a) and causative constructions (106b):

(106) a. *Collocation*
Jan lacht om niets. (negation and ∀-reading)
John laughs at nothing
'John laughs at nothing/anything.'

[30] The account suggested above might also offer an explanation for the fact that a subset of verbal collocations contains reflexive verbs. In these cases, the reflexive fulfils the direct object role. This means that if the verb selects another argument that has a specific semantic relation with the verb (i.e. CAUSE), the language must resort to a construction with a PP instead of a double-object construction. Note finally that the fact that *sentential* "complements" may occur in verbal collocations might be due to extension of [+animate] CAUSE to [–animate] CAUSE. This extension from concrete to more abstract causative arguments (entire propositions) should also be substantiated by historical evidence from text corpora.

b. *Causative*
Niets kan Jan in woede doen ontsteken. (negation and ∀-reading)
nothing can John in rage make enflame
'Nothing/anything can enrage John'
(Postma 1995:86)

This observation suggests that there is a relationship between the possibility of negative voiding and causative formation. In other words, collocations that allow negative voiding must be regarded as causatives.

Further evidence for the (synchronic) relation between collocations and causatives comes from the observation that both constructions have the same semantics. Postma (1995:130) asserts that sentences which involve negative voiding are generic in nature, or, in more formal terms, contain a universal quantifier that has scope over the event:

(107) Jan wordt boos om niets. (negation and ∀-reading)
John gets angry at nothing
Semantic paraphrase
(always) if x occurs on time t, then John is angry about x on time t

This semantic paraphrase with *if* shows that the collocation has conditional semantics. If we assume that collocations and causatives are identical since they both allow negative voiding, then we also expect them to have the same conditional semantics. That this is indeed the case can be seen from the licensing of the negative polarity item (NPI) *het minste of geringste*, ('the slightest'). This NPI can be licensed by negation, but also by a conditional:

(108) Als er *het minste of geringste* geluid uit de zaal kwam,
if there the least or smallest noise out the hall came
raakte de violist van de wijs.
got the violin player of the tune
'If the audience made only the slightest noise, the violin player got confused.'
(Postma 1995:131)

Postma shows that this NPI can occur in collocations (109a) and as the subject of a causative (109b), but not as the subject of, for instance, an unaccusative verb (109c). The reason for this is that collocations and causatives have conditional semantics, while unaccusative verbs do not, and hence cannot license the NPI:[31]

[31] Note that the term '*negative* polarity item' does not imply that NPIs can only be licensed by negation. It has been observed that some NPIs are sensitive to negation whereas others are not (see Van der Wouden 1994) Example (108) illustrates that a conditional may also license a NPI. There are, however, cases in which neither negation nor conditional semantics seem to license a NPI. This holds for the NPI

(109) a. Jan is blij met het minste of geringste. (collocation)
John is happy with the slighest.

b. Het minste of geringste maakt hem bang. (causative)
the slightest makes him afraid

c. * Het minste of geringste gebeurt daar. (unaccusative)
the slightest happens there
(Postma 1995:131)

These facts therefore provide further evidence for the claim that collocations are causative constructions.[32]

4.4.4 Classification of prepositions in verbal collocations

As I argued in §4.4.2, the function of the preposition in a verbal collocation is predominantly functional in that it assigns inherent case to its complement in order to establish the causative relation between the verb and the complement. I also noted, in §4.4.2, that in the early stages of the emergence of verbal collocations some variation could be observed in the choice of preposition. In present-day Dutch, only a limited number of prepositions occur in verbal collocations. These prepositions are listed in (110):

(110)

	Preposition		Example	
a.	*aan*	'at'	*zich ergeren aan*	'get annoyed at'
b.	*achter*	'behind'	*zich verschuilen achter*	'hide behind'
c.	*bij*	'near'	*gebaat zijn bij*	'be of (no) avail to'
d.	*in*	'in'	*geloven in*	'believe in'
e.	*met*	'with'	*dwepen met*	'dote on'
f.	*naar*	'to'	*verlangen naar*	'long for'
g.	*om*	'(a)round'	*bidden om*	'pray for'
h.	*onder*	'under'	*lijden onder*	'suffer from'
i.	*op*	'on'	*schelden op*	'scold at'

---

het minste of geringste ('the slightest') in (i) below, but also for the NPI *ook maar één* (so much as one) in (ii), (Sjef Barbiers, p.c.).

(i) Jan raakt in paniek bij het *minste of geringste* geluid.
John gets in panic with the slightest noise
'John panicks when he hears only the hint of noise.'

(ii) John belt ons bij *ook maar één* verontrustend geluidje.
John calls us with also but one alarming noise
'John calls us the moment he hears so much as one disturbing sound.'

[32] Postma's example in (109a) involves a collocation that is headed by an adjective; however, his observations also hold for verbal collocations.

j.	*over*	'over'	*zich opwinden over*	'get enraged at'
k.	*tot*	'till'	*besluiten tot*	'settle for'
l.	*tegen*	'against'	*vechten tegen*	'fight against'
m.	*uit*	'out'	*volgen uit*	'follow from'
n.	*van*	'of'	*genieten van*	'enjoy'
o.	*voor*	'for'	*zich uitsloven voor*	'put oneself out'

The prepositions in (110) are usually called the "core prepositions". Phonologically, they are "light", in that most of them are monosyllabic (except for *achter*, *onder*, *over* and *tegen*). Morphologically, they are simplex, unlike prepositions such as *blijkens* ('according to') and *gedurende* ('during') (see chapter 3, §3.5.2). Semantically, they have a core meaning that is locative or directional.

In Den Hertog (1973:73) it is claimed that the specific combination of a verb and a preposition is not entirely coincidental. Den Hertog argues that the preposition makes explicit, or "visualises", the relation between the CAUSE argument and the verb.[33] For instance, Den Hertog argues that the reason why we find *voor* ('in front of') in the collocation *vrezen voor* ('fear for') is because the object of fear is visualised *in front of* the experiencer. Similarly, Den Hertog argues that the occurrence of the preposition *tegen* ('against') in the collocation *strijden tegen* ('struggle against') "visualises" the (literal) clash with the enemy.

The problem with this account is that it only works for some collocations. There would seem to be at least as many collocations in which the preposition does not "visualise" the relation between the object and the predicate. Consider for instance *houden van* ('love'), *zich vergapen aan* ('gape at'), *eindigen met* ('end with'), etc. What is more, Den Hertog's account sidesteps the issue of cross-linguistic variation between languages with verbal collocations. If prepositions make a semantic contribution to the verbal collocation that they occur in, then it seems reasonable to expect that (say) stative verbs tend to combine with locative prepositions, and dynamic verbs with directional prepositions. This correlation is supported by Dutch examples like *wachten op* ('wait for') and *zoeken naar* ('look for'). However, as the English glosses show, English stative and dynamic verbs both combine with *for*. This would be unexpected if there is some sort of semantic relation between the verb and the preposition. It is possible, that originally the combinations of a verb and preposition were based on the semantic concept expressed by the verb, but I conclude that the specific combination of verb and preposition in present-day Dutch is mostly coincidental.[34] Due to standardization of the language, specific combinations became fixed in the sense of lexicalized. Recall though, that a certain amount of variation is still found in Dutch dialects (see ftn. 27).

[33] "Door eigen waarneming kan men opmerken dat de voorzetsels er in het bijzonder toe geëigend zijn de grammaticale betrekking van de oorzakelijke voorwerpen tot de gezegden te veraanschouwelijken." ['As can be observed, the prepositions make explicit the grammatical relation between the object and the predicate', my translation IH].

[34] The arbitrary relation between verb and preposition makes the correct use of collocations one of the more difficult aspects of learning a foreign language.

4.4.5 Feature specification of the preposition

In the preceding sections I have argued that the function of the preposition in verbal collocations is to assign inherent case to its complement. As regards the syntactic implementation of this claim, I propose that prepositions in a verbal collocation are specified for the feature [+inherent Case], or iC:[35]

(111) *P, feature = iC*
if P combines with a subject experiencer verb, i.e. a verb that assigns the thematic role of CAUSE to its complement

Despite the fact that the assignment of inherent case by verbs is not a productive process in Dutch anymore to the extent that the typical association between the thematic role of CAUSE and inherent case is no longer felt, there are some indications that the syntax still makes a distinction between prepositional objects and objects of transitive verbs. Consider for instance the observation that prepositional objects cannot be passivised:

(112) a. Jan ergert zich aan Marie.
John annoys himself about Mary
'John get annoyed about Mary.'
b. * Marie wordt door Jan aan geërgerd.
Mary is by John at annoyed

Consider also the observation that not all the verbs that used to take a genitive complement and came to select an accusative complement easily allow passivisation. (Van Duinhoven 1989:45). This is illustrated below for two verbs that assigned genitive case in Middle Dutch and changed into transitive verbs, namely *behoeven* ('need') and *lusten* ('like').

(113) a. Jan behoeft meer aandacht van z'n ouders. (active)
John needs more attention of his parents
'John needs more attention from his parents.'
b. * Meer aandacht wordt behoeft door Jan. (passive)
more attention is needed by John

(114) a. Deze kinderen lusten geen melk. (active)
these children like no milk
'These children don't like milk.'
b. ? Melk wordt door deze kinderen niet gelust. (passive)
milk is by these children not liked

[35] Note in (111) that *i*C stands for *inherent* case, and not for *interpretable* case.

This could be taken to suggest that not all verbs which historically assigned genitive case have developed into transitive verbs "to the same extent". The data in (113) and (114) show that in verbs like *behoeven* and *lusten*, the original distinction between a genitive and an accusative object has not completely disappeared.

The above account begs the question how a preposition with the feature iC relates to a preposition with the feature iT, which I claimed forms part of the specification of the *with*-infinitive of the Wambeek dialect (see chapter 3). Pesetsky & Torrego (2001) claim that structural case features are in fact tense features (nominative and accusative is uT on D). With respect to PP complements in English, such as in *Bill was afraid of the storm*, Pesetsky & Torrego argue that the P-head also bears a tense feature iT. The difference with a DP is that Pesetsky & Torrego consider a PP to be "self-sufficient", in the sense that it contains a T that may agree with the uT on its DP complement. DPs in English are not self-sufficient because they do not contain a T. DPs must therefore occur in the canonical structural case configurations, so that an external iT feature can enter into an Agree relation with the uT feature on D. In terms of Pesetsky & Torrego, PP is a special self-sufficient type of DP.

I will not follow Pesetsky & Torrego's approach here. Although I argue that P may be associated with a T feature, as in the Wambeek *with*-infinitive, I do not want to go as far as to claim that this is always the case. The reason is that it is difficult to see why the preposition in a verbal collocation would have a T feature. Note, for instance, that prepositions in verbal collocations lack the aspectual properties that are displayed by Wambeek *mè*. Another reason is that there are differences between Dutch and English with respect to the role of structural and inherent case. Whereas inherent case might still play a role in Dutch in passivisation (as was shown in (113) and (114) above), English is more liberal when it comes to the passivisation of prepositional subject experiencer verbs:

(115) a. London bridge was marveled at by many people.
b. The child was doted on by her loving grandmother.

This suggests that only structural case plays a role in English. In view of Pesetsky & Torrego's proposal that *structural* case features constitute T features, I do not take the PP in Dutch verbal collocations to be a self-sufficient DP on account of the presence of an iT feature.

4.5 Internal syntax of verbal collocations

In the preceding sections, I focused on the distribution of the P + CP construction and on the relation between the preposition and the CP. I argued that in order to be able to occupy the complement position of a preposition, a CP must be capable of receiving case (senario 1), or in fact be a DP (scenario 2).

In this section, I focus on the relation holding between the verb and the preposition in a verbal collocation. I wish to propose, somewhat tentatively, that the DP is base-generated as a complement of the verb, from which it receives the thematic role of CAUSE. In the course of the derivation, the DP combines with the preposition, which,

following Kayne (1999), I assume is generated in a VP-external position. In this configuration, the preposition assigns inherent case to the DP, thus establishing the causative relation syntactically.

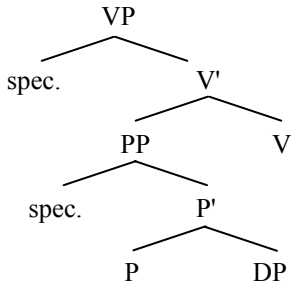
The above analysis is attractive from a conceptual point of view, given that the functional status of the preposition is reflected by its position in the syntactic tree. However, we will see that it is difficult to support this derivation on empirical grounds. More specifically, we will see that it is difficult to see whether this "PP-external" analysis is more appropriate than the traditional "PP-internal" analysis.

In §4.5.1 I consider the traditional PP-internal analysis. Next, in §4.5.2, I discuss the alternative PP-external analysis. Finally, in §§4.5.3–4.5.4 I discuss two specific problems which concern the internal syntax of verbal collocations, taking as a starting point observations from Den Besten & Webelhuth (1990).

4.5.1 The PP-internal hypothesis

The traditional account of verbal collocations is based on the general representation in (116) (see e.g. Van Riemsdijk 1978, Bennis 1986, Den Besten & Webelhuth 1990, Model 1991):[36]

(116)



(116) makes the right predictions for DP complements, given that the preposition and the noun form a constituent:

(117) [$_{PP}$ Naar Jan] heeft Maria te vaak geluisterd.
to John has Mary too often listened
'Mary has listened to John too often.'

As regards cataphoric *het*, (116) correctly predicts that after R-pronominalisation has taken place, *er* + P is a constituent. Observe, however, that *er* + P cannot be topicalised: [37]

(118) * [$_{PP}$ erop] rekent Jan niet.
thereon counts John not

[36] In (116) I ignore the issue of whether Dutch is underlyingly OV or VO, since this is not relevant here.
[37] I assume that *er* has moved from the complement position of P to the specifier of the PP.

Note, however, that PP fronting is possible with the phonologically strong form of *er*, i.e. *daar*:

(119) [$_{PP}$ daarop] rekent Jan niet.
thereon counts John not
'John doesn't count on that.'

This asymmetry is related to the contrastive reading that is associated with the topic position. (119) is most felicitous with contrastive stress on *daar*, although this is not a prerequisite for grammaticality.

When the verbal collocation consists of *er* + P and a following CP, the PP-internal hypothesis assumes that the CP is generated in an adjoined position. Note that this is consistent with the observation that *er* + P and the CP do not form a constituent. Support for this view comes from topicalisation (120b) and from constructions with more than one verb (120c). In such cases we find the so-called "split-pattern", which signals the extraposed position of the clause.

(120) a. Jan rekent erop [dat Maria komt eten].
John counts thereon that Mary comes eat
'John counts on Mary for dinner.'

b. * [Erop [dat Maria komt eten]] heeft Jan gerekend.
thereon 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
'because John has counted on Mary for dinner'

The traditional PP-internal approach did not take into account the P + CP pattern without the resumptive pronoun, presumably because the pattern had not been observed at the time.

Although the PP-internal approach handles the above data quite successfully, it is not entirely unproblematic. One problem concerns the issue of selectional relations. (116) suggests that the verb selects a preposition, and that this preposition selects a DP. As far as selection is concerned, however, it is rather difficult to distinguish between (121a) and (121b), where a collocation is compared with a transitive construction:

(121) a. Maria ziet Jan.
Mary sees John
b. Maria luistert naar Jan.
Mary listens to John

The intuition of speakers seems to be that in (121b) the DP is a verbal rather than a prepositional complement. Neeleman (1997) considers this to be an instance of a

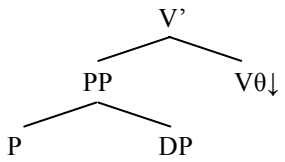
bracketing paradox, in that the syntactic interpretation of collocations differs from their semantic interpretation. This is shown in (122) for the collocation *geloven in* ('believe in'):[38]

(122) a. [$_{VP}$ geloven] [$_{PP}$ in [DP]] (syntax)

b. [$_{VP}$ geloven [$_{PP}$ in]] [DP] (semantics)

The semantic interpretation in which the DP is a complement of the verb and the preposition could be expressed in terms of the verb (and not the preposition) theta marking the DP, despite the fact that the DP is generated as the complement of the preposition:

(123)



Neeleman discusses this approach, and he demonstrates that theta marking by the verb is theoretically problematic. The problem concerns the following general restriction on predication, first noted in Williams (1980):

(124) A predicate may not assign its theta-role to a DP that does not c-command it.
(Neeleman 1997:94)

This restriction can be illustrated for Dutch on the basis of the example in (125), taken from Neeleman (1997:95). The secondary predicate *naakt* can assign its thematic role to both the subject DP *Jan* and the object DP *Marie* because both DPs c-command the predicate:

(125) Dat [Jan$_i$ [Marie$_j$ [naakt$_{i/j}$ ontmoette.]]]
that John Mary naked met
'that John met Mary naked'

In (126) (which, according to Neeleman, involves a non-scrambled order in which the object is base-generated in a position adjacent to the verb), the secondary predicate cannot assign a theta role to the direct object DP *Marie* because this DP does not c-command the predicate:

[38] Note that this bracketing paradox does not hold for English, because in English both transitive objects and prepositional objects can be passivized.

(126) Dat [Jan$_i$ [naakt$_{i/*j}$ [Marie$_j$ ontmoette.]]]
that John naked Mary met
'that John met Mary naked'

The same holds for the example in (127), which contains a verbal collocation. Note that the DP inside the PP does not c-command the secondary predicate, and hence cannot be theta marked by it:

(127) Dat [Jan$_i$ [naakt$_{i/*j}$ [met Marie$_j$][sprak]]]
that John naked with Mary spoke
'that John spoke to Mary naked'

For my purposes, the crucial point is that predication into a PP is ruled out in these cases, even if this PP c-commands a secondary predicate. The reason for this is that the DP inside the PP cannot c-command out of the PP, because this is blocked by the PP node. This is illustrated in (128ab):

(128) a. Dat Jan$_i$ [aan Marie$_j$] de boeken naakt$_{i/*j}$ gegeven heeft.
that John to Mary the books nude given has
b. Dat Jan$_i$ [naar Marie$_j$] niet langer naakt $_{i/*j}$ wil kijken.
that John to Mary not longer nude want look
(Neeleman 1997:95)

However, it is not true that PPs in Dutch are opaque for all sorts of syntactic licensing (see Barbiers 1995, Pesetsky 1995). For instance, in (129) the NPI *ook maar* is licensed by the negation *niemand* that is contained inside a PP:

(129) Aan niemand had Jan ook maar even gedacht.
of nobody had John also but a while thought
'John had not thought of anybody at all.'

This makes the restriction on predication rather puzzling; I will leave this as a topic for further research.

To summarise, the predication restriction of Williams (1980) seems to rule out an analysis in which the verb in a collocation theta marks the DP that is contained in the PP. In the PP-internal analysis it is therefore impossible to express the semantic intuition that the DP is a complement of the verb, and not a complement of just the preposition, as is suggested by the syntactic structure.

I will now turn to an observation made by Den Besten & Webelhuth (1990) that relates to the internal structure of verbal collocations as well. As Den Besten & Webelhuth (1990) show, languages like Dutch and German in which scrambling is allowed (130a), also allow topicalisation of the remnant VP after scrambling (130b):

(130) a. omdat Jan [$_{I'}$ het boek$_i$ [$_{I'}$ niet [$_{VP}$ t$_i$ gelezen] heeft]]
because John the book not read has

b. [$_{VP}$ t$_i$ gelezen]$_j$ heeft Jan [$_{I'}$ het boek$_i$ [$_{I'}$ niet t$_j$]].
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 verbal collocation) is possible with R-pronouns, since R-pronouns can strand prepositions. In (131) *daar* is an example of such an R-pronoun:

(131) omdat Jan [$_{I'}$ daar$_i$ [$_{I'}$ niet [$_{VP}$[$_{PP}$ t$_i$ op] gerekend] had]].
because John there not on counted had

However, subsequent VP topicalisation that includes the remnant PP is impossible:

(132) * [$_{VP}$[$_{PP}$ t$_i$ op] gerekend]$_j$ had Jan [$_{I'}$ daar$_i$ [$_{I'}$ niet t$_j$]].
on counted had John there not

The ungrammaticality of (132) is not predicted by the 'traditional' structure in (116). There is no reason why remnant VP topicalisation after scrambling of the R-pronoun should be excluded in this representation. The only difference with the grammatical case of remnant VP topicalisation in (130b) is that in (132) the trace is now positioned in a PP that is itself contained in the VP.

Den Besten & Webelhuth also mention the example in (133), in which it is the *grammaticality* that is unexpected:

(133) [$_{VP}$ t$_j$ Gerekend]$_k$ had Jan daar$_i$ niet [$_{PP}$ t$_i$ op]$_j$ t$_k$.
counted had John there not on

This derivation presents a paradox if it is assumed that XP movement is allowed to [spec, CP], but not head movement. The R-pronoun *daar* must have been scrambled out of a PP, but since this PP is not part of the topicalised remnant VP, it must itself have moved out of the VP, after which the remnant VP has been topicalised. The problem with this scenario is that (further) movement out of a moved constituent generally causes a freezing effect. That is, (133) is expected to be ungrammatical; the problem is that it is not.

4.5.2 The PP-external hypothesis

Kayne (1999) proposes an analysis for French and Italian infinitival constructions of the kind in (134) (here and below I focus on Italian):

(134) Cecilia ha tentato di cantare.
Cecilia has tried to sing

The main claim of this analysis is that the infinitival complementiser *de*/*di* is generated in a position external to VP. More specifically, Kayne argues that the complementiser and the infinitive do not form a constituent. A theoretical argument for this is that it brings the complementiser *de*/*di* closer to the possessive *de*/*di* and to other instances of *de*. In addition to this, Kayne also has two empirical arguments for this interpretation. However, discussing these would take us too far afield; the reader is referred to Kayne (1994, 1999) for discussion. Below I will summarise the derivation of *de/di* plus infinitive constructions, based on the example in (134).

First, 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:[39]

(135) a. tentato cantare >>
b. di tentato cantare

The infinitive is then moved from the verbal complement position to the specifier of this *di* projection. This establishes the required licensing relation between the infinitive and the infinitival complementiser:

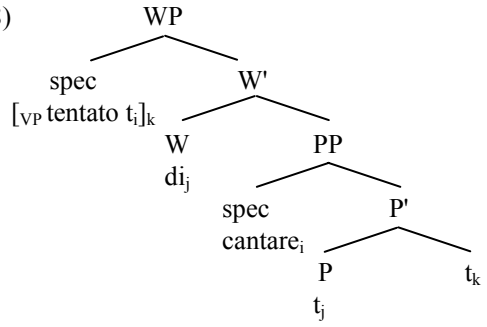
(136) cantare_i di tentato t_i >>

Subsequently, a functional projection (which Kayne labels "WP") is merged on top of *di*, which is followed by head movement of *di* to the head of WP, and, finally, by remnant VP movement to [spec, WP].

(137) a. WP cantare_i di tentato t_i >>
b. W+di_j cantare_i t_j tentato t_i >>
c. $[\text{tentato } t_i]_k$ W+di_j cantare_i t_j t_k

This derivation is illustrated by the tree diagram below:

(138)



[39] Note that Kayne uses the symbol ">>" to indicate the different steps in the syntactic derivation. I will follow this convention below.

In this derivation *di* and the infinitive do not form a constituent, despite the fact that the two are adjacent in the surface word order.

If we apply Kayne's approach to Dutch verbal collocations, then a collocation like *geloven in sprookjes* ('believe in fairy tales') will have the underlying structure in (139):

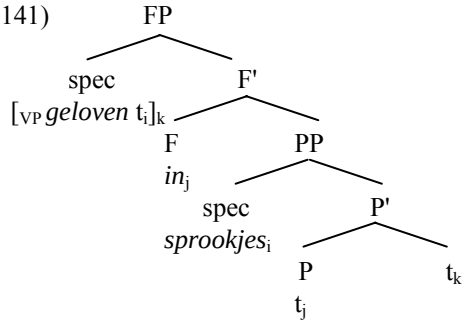
(139) $[_{PP}$ in $[_{VP}$ geloven $[_{DP}$ sprookjes]]]
in believe fairy-tales

The derivation will take the following form (note that in (140) FP is equivalent to Kayne's WP):

(140) *geloven sprookjes* >> merger of *in*
in geloven sprookjes >> movement of DP object to spec P
sprookjes$_i$ *in geloven* t_i >> head movement of P to functional head F
F+*in*$_j$ *sprookjes*$_i$ t_j *geloven* t_i >> remnant VP movement to spec of FP[40]
[*geloven* t_i]$_k$ F+*in*$_j$ *sprookjes*$_i$ t_j t_k

This derivation can also be represented in a syntactic tree, as in (141):

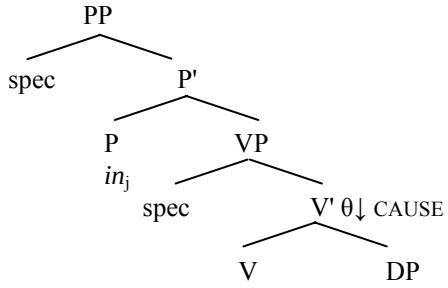
(141)



An approach along these lines has the advantage of solving two theoretical problems that are posed by the traditional PP-internal approach. These problems concern the bracketing paradox of Neeleman (1997) and the restriction on predication into PPs of Williams (1980). To appreciate this, consider the PP-external structure in (142):

[40] I ignore here the issue of whether Dutch is underlyingly OV or VO. This has obvious consequences for the final step in the derivation.

(142)



In (142) the verb can theta mark the DP because the DP c-commands the verb. This configuration therefore does justice to the *semantic* part of the bracketing paradox, in that it formalises the intuition that the DP is a verbal rather than a prepositional complement. Given the causative nature of verbal collocations, I suggest that the verb assigns the thematic role of CAUSE to the DP. Furthermore, the fact that the preposition occupies a structural position that is higher than that of the lexical verb captures the observation that the preposition in a verbal collocation has undergone (partial) grammaticalisation. In this respect, the PP-external approach fits in with the general idea that grammaticalisation involves the raising from a lower (lexical) to a higher (functional) head (see IJbema 2002; see also §3.5.4).

However, the PP-external approach also has some serious drawbacks. First of all, note in (142) that the *syntactic* part of Neeleman's bracketing paradox is no longer reflected in the structure. In the derivation in (141), the preposition and the DP do not form a constituent: the preposition occupies the head of the FP, while the DP occupies [spec, PP]. The problem here is that topicalisation of the P + DP sequence is possible:

(143) In sprookjes geloofde zij niet meer.
in fairy-tales believed she no longer
'She no longer believed in fairy tales.'

This suggests therefore that the preposition and the DP must form a constituent at some point in the derivation. If we rule out F' movement, then the remnant VP that occupies [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 have been proposed in a VO framework for Dutch verb raising constructions; see for instance Hinterhölzl 1997). Subsequent verb movement out of [spec, FP] would also be necessary for V2, though this would have to involve XP movement in the present analysis, although V2 is usually analysed in terms of head movement.[41]

[41] Note, though, that Nilsen (2003) argues that V2 in Norwegian involves XP rather than head movement. See also Müller (2004) for an analysis of V2 in terms of remnant movement.

In §§4.5.3–4.5.4, I will examine whether there are any empirical arguments in favour of a PP-external analysis, taking as my starting point the observations made by Den Besten & Webelhuth (1990).

4.5.3 Problem 1: remnant VP topicalisation

Dutch and German allow remnant VP topicalisation after the object has been scrambled out of the VP. However, they do not allow remnant VP topicalisation when the verb is part of a collocation and the scrambled R-pronoun is the object of a preposition. This was illustrated for Dutch in §4.5.1, and is repeated below for convenience:

(144) a. $[_{VP}\ t_i$ gelezen$]_j$ heeft Jan $[_{I'}$ het boek$_i$ $[_{I'}$ niet $t_j]]$.
read has John the book not.

b. * $[_{VP}\ [_{PP}\ t_i$ op$]$ gerekend$]_j$ had Jan $[_{I'}$ daar$_i$ $[_{I'}$ niet $t_j]]$.
on counted had John there not

The impossibility of (144b) cannot be predicted by an analysis in which the PP is projected internal to VP.[42]

Note first of all that the ungrammaticality of (144b) cannot be reduced to an instance of a general ban on topicalisation of collocations. (145ab) contain topicalised collocations. The only difference between these examples and (144b) is that in those in (145) the R-pronoun has not been scrambled out of the VP, but has been topicalised along with the VP:

(145) a. $[_{VP}\ [_{PP}$ erop$]$ gerekend$]_j$ had Jan niet t_j.
thereon counted had John not

b. $[_{VP}\ [_{PP}$ daarop$]$ gerekend$]_j$ had Jan niet t_j.
thereon counted had John not

In fact, (144b) and (145ab) present a paradox: (144b) suggests that the PP cannot be part of VP, while the examples in (145ab) suggest that it is.

Note further that the remnant VP topicalisation cases must be kept distinct from cases that involve PP fronting (with or without scrambling of the R-pronoun), and with the finite verb moving on account of V2:

[42] There is a sharp contrast in grammaticality between (144b), which contains the R-pronoun *daar*, and the equivalent with the weak form of the R-pronoun, i.e. ?*op geREkend heeft Jan er niet*, which is much better, and perhaps marginally acceptable. Den Besten & Webelhuth (1990) do not observe this contrast, let alone explain it.

(146) a. [PP daarop] rekent Jan niet.[43]
thereon counts John not

b. * [PP t_i op] rekent Jan $daar_i$ niet.
on counts John there not

Rather, the facts in (146) suggest that there is a general problem with fronted PPs whose object position is empty.

Finally, it could be argued that the ungrammaticality of (144b) is due to pragmatic rather than syntactic reasons. Note that constituents in topic position are often contrastive, as in (147):

(147) LEzen wil zij dat boek, niet WEGgooien.
read wants she that book not throw-away
'She wants to read the book, not throw it away.'

The fact that a verbal collocation like *rekenen op* ('count on') cannot be contrasted with a counterpart such as, say, **rekenen onder* ('count under') might account for the ungrammaticality of (144b). It is difficult to find potentially contrasting pairs; perhaps an appropriate example comes from the adjectival domain, where we find *verlegen mee* ('having something in abundance') versus *verlegen om* ('being in want of something'). Given an appropriate context, and given the appropriate intonation, some speakers accept the following sentence (here and below the accented syllable is capitalised):

(148) ? MEE verlegen zat zij er niet, maar juist OM (verlegen).
with in-need-of sat she there not but rather for (in-need-of)
'She didn't have it in abundance, but she was in need of it.'

On the other hand, in collocations it is always the verbal part that is contrasted and not the prepositional part:

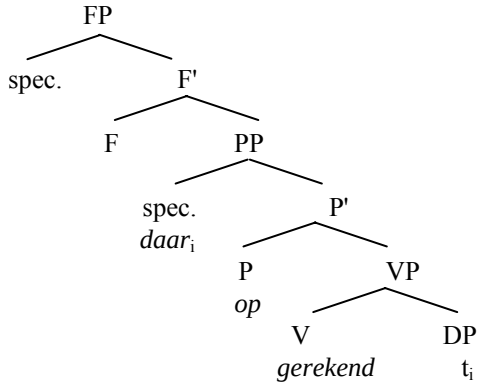
(149) [VP [PP erop] geREkend]$_j$ had Jan niet t_j.
thereon counted had John not

It is therefore unlikely that Den Besten & Webelhuth's problem is pragmatic in nature. Indeed, the fact that the prepositions in verbal collocations have undergone semantic bleaching suggests that the prepositional part of a collocation cannot be used contrastively in any case.

[43] 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 this is not absolutely necessary for the sentence to be grammatical.

Let us now consider whether the PP-external analysis can account for Den Besten & Webelhuth's remnant VP topicalisation problem. I assume that the underlying order is as in (150):

(150)



where the object of the verb has moved to the [spec, PP].[44] The only difference between (151ab) is then that the R-pronoun has scrambled to a position to the left of the PP in (151a), but not in (151b):

(151) a. * $[_{PP}$ t_i op $[_{VP}$ gerekend $t_i]]_j$ had Jan $daar_i$ niet t_j.
on counted had John there not

b. $[_{PP}$ $daar_i$op $[_{VP}$ gerekend $t_i]_j$ had Jan niet t_j.
thereon counted had John not

In a PP-external analysis, Den Besten & Webelhuth's constructions are no longer instances of remnant VP topicalisation; instead they involve PP topicalisation with pied-piping of the remnant VP. This aside, it is not immediately obvious how the PP-external approach would solve the problem. Rather, it reformulates the problem: why is it possible to front a PP + VP when the R-pronoun has not been scrambled, but why is this impossible when the R-pronoun has left the PP? As was illustrated in (146b), it might be the case that there is general problem with the fronting of PPs that contain traces.[45]

4.5.4 Problem 2: extraction and discontinuous constituents

In addition to remnant VP topicalisation, Den Besten & Webelhuth (1990) discuss a closely related pattern that they are unable to account for. The pattern in question is illustrated for German (152a) and Dutch (152b):

[44] Note that a PP-external approach raises a number of issues regarding obligatory R-pronominalisation, given that (1) the (neuter) pronoun is no longer the complement of the preposition, and (2) R-pronominalisation takes place in a head-complement relation.

[45] See Den Besten & Webelhuth (1990) for an approach along these lines.

(152) a. Gerechnet hatte Peter da nicht mit.
counted had Peter there not with

b. Gerekend had Jan daar niet op.
Counted had John there not on
(Den Besten & Webelhuth 1990:87)

In a PP-internal approach the *grammaticality* of (152) is unexpected.

Taking German first, consider in this respect first of all the observation that in discontinuous constituents such as arise in remnant VP topicalisation, R-pronoun extraction, *was für*-extraction and split DPs, the extracted element cannot be extracted when the containing phrase has been scrambled out of its base position across a negation element.[46]

(153) a. * Da_i hatten wir $[t_i$ 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 example in (152b), then we are forced to conclude that extraction of the R-pronoun has taken place after scrambling of the PP out of the VP:

(154) $[_{VP}$ t_j gerekend$]_k$ had Jan $daar_i$ niet $[_{PP}$ t_i op$]_j$ t_k.
counted had John there not on

The reason why the PP must have been scrambled (or at least must have left the VP), is that the PP is not part of the topicalised VP. Den Besten & Webelhuth note that the topicalised verb cannot be interpreted as a V^0 since, in line with Chomsky (1986), only maximal projections are allowed to move to the specifiers of COMP and INFL. Note, too, that the position of PP cannot be attributed to PP extraposition, since in that case we would expect to find a freezing effect. Thus, the grammaticality of (152) presents another paradox. If the notion of XP movement is to be maintained

[46] The occurrence of freezing effects after scrambling in Dutch is not as straightforward as the data in (153) suggest. For instance, most speakers accept the sentence in (i), provided the negation is stressed:

(i) Wat heeft Jan voor boeken NIET gelezen?
what has John for books not read
'Which books didn't John read?'

I am grateful to Sjef Barbiers for pointing this out to me.

then we are forced to conclude that (154) involves extraction out of a moved phrase. Yet, the examples in (153) suggest that such extraction is impossible (but see fnt. 46).

However, it would appear to be the case that this paradox can be solved in the PP-external analysis. According to this analysis, the basic structure is as in (155):

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

The crucial point here is that the PP is in its base position. The object of the verb undergoes R-pronominalisation and moves to [spec, PP]. From this position it subsequently scrambles, after which the remnant VP is topicalised.[47]

Consider next the variant in (156):

(156) [$_{VP}$ gerekend]$_j$ had Jan niet [$_{PP}$ daarop t_j].
counted had John not there-on

(156) is also problematic for the PP-internal approach, where it would have to be analysed as involving VP topicalisation without the PP, even though there is no reason to assume that the PP has left the VP. (Observe that the PP cannot have scrambled since it follows rather than precedes the negation.) In a PP-external approach, on the other hand, the derivation of (156) can simply be analysed as involving VP topicalisation.

Finally, consider the variant in (157):

(157) [$_{VP}$ gerekend]$_j$ had Jan [$_{PP}$ daarop t_j] niet.
counted had John there-on not

This order is difficult to account for under the PP-external approach. Given that the PP occurs to the left of the negation, (157) would have to involve scrambling of the PP + VP followed by topicalisation of the VP. The latter operation involves movement out of a scrambled constituent, which, in view of the data in (153), should be impossible. In a PP-internal approach, this variant can be analyzed as involving scrambling of the PP out of VP, followed by remnant VP topicalisation.

[47] See Broekhuis (2007, fnt. 17) for a PP external approach in relation to PP scrambling in Dutch, and Broekhuis (forthcoming).

4.5.5 Conclusion

In this section I have considered the internal syntax of verbal collocations against the backdrop of two analyses, the traditional PP-internal hypothesis and the PP-external hypothesis. I have proposed, somewhat tentatively, that the DP is base-generated as a complement of the verb, from which it receives the thematic role of CAUSE. In the course of the derivation, the DP combines with the preposition, which, following Kayne (1999), I assume is generated in a VP-external position. In this configuration, the preposition assigns inherent case to the DP, thus establishing the causative relation syntactically.

The PP-external hypothesis relates the functional nature of the preposition as a case-assigning category to its location in the syntactic structure. Furthermore, this approach resolves the problems concerning the predication restriction as observed by Williams (1980) and Neeleman (1997). In a PP-external approach, the verb simply assigns the thematic role of CAUSE to the DP complement. With respect to the semantic part of the bracketing paradox, the PP external approach formalises the intuition that the DP is a verbal rather than a prepositional complement. Furthermore, the grammaticality of *gerekend had Jan daar niet op* (see (152b) above) follows directly from a PP-external approach. In this respect, it is superior to the traditional PP-internal hypothesis.

The PP-external approach is not entirely unproblematic. One problem concerns the observation that in verbal collocations the preposition and the DP form a constituent (the syntactic part of the bracketing paradox). In order to establish constituency at a later stage in the derivation, the PP-external approach requires a lot of technical machinery that involves the assumption of functional projections like FP (Kayne's WP), and a number of rather complex derivational steps. The movement operations that are involved will have far reaching consequences for other empirical domains, such as verb second, which must be reinterpreted in terms of XP movement. The PP-external approach would also seem to require a reinterpretation of the phenomenon of R-pronominalisation, since, given that the (neuter) pronoun here is not the complement of the preposition, there is no head-complement configuration. Obviously, further research is required to account for the questions that are raised by the PP-external approach.

4.6 Summary and conclusion

In this chapter I have provided an in-depth discussion of Dutch verbal collocations, and in particular of the P + CP construction. In §4.2 I argued that the distributional similarities between the CP in P + CP constructions and FRs and *hoe*-clauses suggests that this CP has nominal properties. I formalised these properties in terms of an (empty) DP shell on top of the CP. With respect to adjunct clauses, I followed Larson (1990), who argues that CPs following a temporal preposition have an operator in their specifier position.

In §4.3 I outlined Barbiers' (2000) claim that DPs are arguments whereas CPs are (mostly) predicates. I extended this claim to prepositions (the other case-assigning

category), which, I argued, can only take arguments in their complement position. This suggests that there are two options for a CP in a P + CP construction: (1) The CP retains its CP status. Nevertheless, the preposition must be able to assign its case in accordance with the principle of syntactic saturation. This means that the CP must either relate to a DP, or obtain DP properties itself. Coindexation with the resumptive pronoun *er* ('there') is an example of the first stategy. The projection of a temporal operator in the specifier of a clause that is part of a temporal adjunct clause is an example of the second strategy. (2) The CP has DP status. This strategy occurs in verbal collocations in which the P is followed by a FR or a *hoe*-clause. These clauses are complex DPs whose head may but *need not* be lexicalised. This strategy also occurs in verbal collocations in which the P is followed by a CP that has either a factive or a propositional interpretation. These clauses are analysed as complex DPs whose head may but *cannot* always be lexicalised.

In §4.4 I looked in some detail at the argument structure of verbal collocations. I argued that the internal argument in verbal collocations is predominantly associated with the thematic role of CAUSE, which suggests that verbal collocations are causative constructions. Diachronic data from Dutch and English indicate that the thematic role of CAUSE is typically associated with inherent case. Synchronic data from Dutch show that verbal collocations pattern like causatives in a number of ways.

Based on these observations, I subsequently proposed a diachronic development in which the loss of inherent case marking by verbs was balanced by the emergence of verbal collocations. Presumably, the reason for this is that prepositions did not lose their ability to assign inherent case, and thus took over the assignment of inherent case from verbs. As such, prepositions were capable of establishing a causative relation syntactically. The function of prepositions in verbal collocations is therefore primarily functional. I proposed that the functional status of prepositions in verbal collocations is reflected by their feature specification, which contains an inherent case (iC) feature.

Finally, in §4.5 I considered the internal structure of verbal collocations. To this end I discussed the traditional PP-internal approach and compared it to an alternative PP-external approach. The PP-external approach offers a solution for the semantic part of the so-called bracketing paradox, but at the same time it raises a number of questions regarding the syntactic part of the bracketing paradox for which further research is required.

5 Summary and Conclusion

5.1 Summary

In this final chapter, I will briefly summarize the main points made in chapters 2, 3 and 4. I will then discuss some of the theoretical implications that follow from the issues addressed in those chapters, and suggest a number of topics that require further research.

5.1.1 The absentive (chapter 2)

In chapter 2 I focused on the Dutch absentive, a construction which consists of the auxiliary *zijn* and a following bare infinitive, and which signals absence of its subject. The canonical example used throughout this dissertation is given in (1):

(1) Jan is vissen.
John is fish-INF
'John is off fishing.'

I showed that the absentive implies a shift in location of the subject from its deictic centre, the "subject's origo". I also showed that the verbs that can occur in the absentive are restricted to activities and accomplishments. I presented an analysis of the absentive in which the specific semantics of the absentive were accounted for in terms of binding. This analysis led me to propose the semantic interpretation of the absentive in (2):

(2) **Semantic interpretation of the absentive**
The absentive entails disjoint reference in the spatial dimension between two arguments, the lexical subject and the PRO subject of the infinitive. Disjoint reference in the spatial dimension is enforced by principle B of the Binding Theory.

The binding analysis is based on the idea that absentive *zijn* functions as a subject control verb, which, as I have shown, is supported by empirical evidence. I also showed that the absentive as found in Dutch and a number of other Germanic languages is not the only type of a grammatically conditioned "shift in location", since similar shifts occur in switch-reference languages such as Amele.

The binding approach to the absentive is both superior to an approach in terms of deletion of the motion verb *gaan*, and to an approach in terms of an absentive projection (AbsP). Both approaches must be rejected on empirical and theoretical grounds. However, the binding approach to the absentive has an important implication for other syntactic phenomena, in the light of the following prediction:

(3) Absentive semantics are forced when there is coreference at the pronominal (*x*) level and at the temporal (*t*) level.

I considered a number of contexts which involve coreference at the pronominal and temporal level, and are thus predicted to have a shift in the spatial dimension. The facts encountered suggest that a shift in location, i.e. disjoint reference at the spatial level, can have a literal interpretation, as in the absentive, or a metaphorical interpretation, for instance in epistemic modality contexts.

5.1.2 The *with*-infinitive (chapter 3)

In chapter 3, I provided an analysis of the *with*-infinitive in the dialect of Wambeek, a village in the Belgian province of Flemish Brabant. The *with*-infinitive is one instantiation of the more general *with*-absolute construction that is found in standard Dutch. An example of the Wambeek *with*-infinitive is given in (4):

(4) Mè zaai te werken moest-n-aai de gieln dag toisj blaaiven.
with she-NOM to work had to-CL-he the whole day home stay
'With her working, he had to stay home all day.'

The *with*-infinitive in Wambeek Dutch posed three analytical challenges: (1) the amount of structure that it projects, (2) the nominative case of the subject, and (3) the properties (or more specifically, the feature specifications) of *mè*.

As to the first challenge, I argued that the *te*-infinitive in the *with*-infinitive contains a VP, vP, an AspP and the lower modal projections that are associated with root modality, but no higher functional domain:

(5) $[_{ModP}\,[_{Mod}\;\;[_{AspP}\,[_{Asp}\;\;$ mè $[_{vP}$ zaai $[_{v}\,[_{VP}\,[_{V}$te werken]]]]]]]]

As to the second and third challenge, I have argued, following Pesetsky & Torrego (2001), that *mè* has an iT feature, which has also been argued to be part of the specification of the Dutch preposition *van* (see Barbiers 2002). The presence of an iT feature on *mè* accounts for the nominative case on the subject of the infinitive:

(6) $[_{ModP}\,[_{Mod}\;\;[_{AspP}\,[_{Asp}\;\;$ mè $[_{vP}$ zaai $[_{v}\,[_{VP}\,[_{V}$te werken]]]]]]]]
~~iT~~ ~~uT~~
~~u phi~~ ~~i phi~~

In the structure in (6) nominative case is assigned in an Agree configuration before the preposition undergoes optional movement to a higher functional head (e.g. ModP). This accounts for the possibility of adverb interpolation between the preposition and the subject.

Finally, I argued that the presence of an iT feature on *mè* is due to a process of grammaticalisation which occurred in the Wambeek dialect, but not in Standard Dutch. As a result of this process, the distribution of *mè* was extended to AspP, a

projection that is normally reserved for verbs. The fact that *mè* can occupy AspP implies that it can select a verbal complement, i.e. the *te*-infinitive that is part of the *with*-infinitive construction.

5.1.3 Verbal collocations (chapter 4)

In chapter 4, I focused on P + CP constructions, i.e. constructions in which a full CP is preceded by a preposition, which is in turn preceded by a verb. An example is given in (7):

(7) Jan ergert zich er$_i$aan [$_{CP}$ dat Marie altijd zo hard praat]$_i$.
John annoys himself thereon that Mary always so loud speaks
'John gets annoyed about the fact that Mary always speaks so loudly.'

In (7) the PP contains the resumptive pronoun *er* ('there'), which is associated with the CP. However, Dutch also allows a similar construction without *er*, the "P + CP pattern". An example is given in (8):

(8) Iedereen zat te rekenen op [$_{CP}$ dat jij 'm zou nemen].
everybody sat to count on that you it would take
'Everybody was convinced that you would take it (i.e. the free kick).'
(Kees Jansma to Pierre van Hooijdonk, 15-04-2002)

I argued that the distributional similarities between the CP in P + CP constructions and FRs and *hoe*-clauses suggests that the CP in a P+CP construction has nominal properties. With respect to temporal adjunct clauses, I followed Larson (1990), who argues that CPs following a temporal preposition have an operator in their specifier position.

Following Barbiers (2000), who argues that only DPs are arguments, I then proposed that there are two scenarios which enable a CP to occur in the complement position of a P:

> *Scenario 1*
> <u>The CP retains its CP status</u>
> Nevertheless, the preposition must be able to assign its case in accordance with the principle of syntactic saturation. This means that the CP must either relate to a DP, or obtain DP properties itself. Coindexation with the resumptive pronoun *er* ('there') is an example of the first stategy. The projection of a temporal operator in the specifier of a clause that is part of a temporal adjunct clause is an example of the second strategy.

Scenario 2
The CP is a DP.
This strategy occurs in verbal collocations in which the P is followed by a FR or a *hoe*-clause. These clauses are complex DPs whose head may but *need not* be lexicalised. This strategy also occurs in verbal collocations in which the P is followed by a CP that has either a factive or a propositional interpretation. These clauses are analysed as complex DPs whose head may but *cannot* always be lexicalised.

As regards the argument structure of verbal collocations, I argued that the internal argument in verbal collocations is predominantly associated with the thematic role of CAUSE, which suggests that verbal collocations are causative constructions. Diachronic data from Dutch and English indicate that the role of CAUSE is typically associated with inherent case. Synchronic data from Dutch show that verbal collocations pattern like causatives in a number of respects.

Based on these observations, I subsequently proposed a diachronic development in which the loss of inherent case marking by verbs was balanced by the emergence of verbal collocations. Presumably, the reason for this is that prepositions did not lose their ability to assign inherent case, and thus took over the assignment of inherent case from verbs. This makes prepositions the only category in present-day Dutch that is capable of establishing a causative relation. The function of prepositions in verbal collocations is therefore primarily functional. I proposed that the functional status of prepositions in verbal collocations is reflected by their feature specification, which contains an inherent case (iC) feature.

Finally, I considered the internal structure of verbal collocations. To this end I discussed the traditional PP-internal approach and compared it to an alternative PP-external approach.

5.2 Theoretical implications and topics for further research

In this dissertation I have considered three syntactic phenomena (the absentive, the *with*-infinitive and verbal collocations) against the backdrop of two questions that are captured by the title of this thesis *The Syntactic Location of Events*. These questions are: (1) How is the location of an event expressed syntactically (as opposed to lexically)?, and (2) Where in the syntactic structure is an event located?

With respect to the first question, I argued that the syntactic principles of binding can account for the semantics of the Dutch absentive. This requires an extension of Binding Theory to include the entire deictic field, which I represented in terms of a triple index (*x, t, l*) on the arguments. Zagona (1992, 1995) and Stowell (1995, 1996) have proposed to analyze the interpretation of tense in terms of binding. Given that the deictic field comprises pronominal, temporal and spatial reference, it is therefore reasonable to assume that binding is relevant for the interpretation of place as well.

Stirling (1993) argues that switch-reference phenomena cannot be adequately accounted for in terms of the Binding Theory of Chomsky (1981) and later work. In

canonical cases of switch-reference, a marker on the verb of one clause indicates whether its subject has the same or a different reference as that of the subject of an adjacent, syntactically related clause. One of Stirling's objections to a binding analysis of this phenomenon is that switch-reference markers have many more functions than signalling obligatory co/disjoint reference. Stirling shows that switch-reference is inextricably linked with, for instance, the marking of both temporal and nominal meaning. She concludes that the interpretation of switch-reference involves agreement or disagreement between *parameters of the eventualities*. The impact of Stirling's objections may be lessened if binding is extended to include the entire deictic field, so that it covers a richer range of functions. This is especially promising if disjoint reference is given a metaphorical dimension as well. This is what I proposed for epistemic modality contexts in chapter 2.

Note that it is conceivable that the concept of binding has a much wider range than just the calculation of reference. Postma's explanation of the distribution of the Dutch roots *zij-* en *wez* ('be') suggests that binding principles are not only active in the syntactic component, where they control the interpretation of pronominal, temporal and spatial reference, but also in the morphological component, where they control the selection of the auxiliary roots *zij-* en *wez*. Needless to say, such an approach to binding should be investigated in the face of a range of cross-linguistic phenomena.

Another issue that requires further research concerns the theoretical implementation of Binding Theory. In the Government and Binding framework of Chomsky (1981), the referential interpretation of arguments is calculated on the basis of indices. In later work, Chomsky has argued against the use of indices on account of the inclusiveness condition, which states that only features may be part of the enumeration (see Chomsky 1995). More recently, Chomsky has proposed to analyze Binding in terms of features that may or may not take part in the operation *agree* (see Chomsky 2005, see also Cecchetto 2000). In this respect, an important question concerns the relation between the temporal index of a triple and Pesetsky & Torrego's (2001) T-features (as discussed in chapter 3). The data presented in chapter 2 show that some of the properties of binding are not fully understood yet.

The binding approach to the Dutch absentive also has important implications for the verb *zijn*. Following earlier proposals by Partee (1977), Rothstein (1999) and Becker (2004), I argued that *zijn* makes a semantic contribution to a predicational sentence. Furthermore, on the basis of the semantic properties of the subject in the absentive, I suggested that absentive *zijn* assigns an agentive theta-role to its subject. This implies that absentive *zijn* is in fact a subject-control verb rather than, as is more commonly assumed, a raising verb. Further research is required to corroborate the position that Dutch has both a raising verb *zijn* and a control verb *zijn*.

As regards the second question, (where in the syntactic structure are events located?), I argued in chapters 3 and 4 that prepositions play an important role in the syntactic representation of events. This includes properties of an event such as tense or aspect (as in the Wambeek *with*-infinitive), or the thematic structure of the eventive predicate (as in causative verbal collocations).

With respect to tense and aspect, the data presented in chapter 3 shed new light on the issue of nominative case assignment and its relation to finiteness. I argued that the occurrence of an iT feature need not necessarily coincide with the presence of a finite verb, but can also be a property of a preposition. It would be interesting to see to what extent we find a relation between prepositions and nominative case in other languages as well.

With respect to thematic structure, I showed that (a subset of) verbal collocations can be viewed as causatives from both a diachronic and a synchronic perspective. In verbal collocations, the causative relation between the experiencer subject and causative object is syntactically established by the preposition. However, further research is needed to explore the role of structural and inherent case, and the way in which these are realized in a language like Dutch. It goes without saying that this research should take into account both synchronic and diachronic aspects. As such, it will provide further insight into the process of grammaticalization and its representation within a generative syntactic framework.

In addition to the questions that are implied by the title of this thesis, I argued in chapter 1 that there is a more general question underlying this thesis. This question involves the way in which relations between categories are established. Whereas the way in which relations between two DPs or a verb and a DP are established are rather straightforward, the way in which relations between events are established is not so clear. The three constructions I analysed in detail, namely the absentive, the *with*-infinitive and verbal collocations, share the following properties: (1) a relation between two events is established, (2) a preposition plays a role in establishing this relation (although I have argued that this is not the case in the absentive).

The outcome of these case-studies contributes the following results to the general picture of how relations between events are established:

a. Binding principles play a role in determining the location of an event.

b. Prepositions can occupy syntactic positions that are usually associated with verbs. This is because the presence of an iT feature is not a unique property of verbs, but this feature can also be part of the feature specification of a preposition. As a consequence, a preposition may select a verbal complement, e.g. a *te*-infinitive. In such a context, a preposition functions as a finite verb to the extent that it is capable of establishing a relation with the event expressed by a *te*-infinitive.

c. Prepositions are involved in establishing a semantic type of relation between two events, e.g. a causative relation between a verb and the event expressed by its complement clause.

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Samenvatting in het Nederlands

In dit proefschrift onderzoek ik drie syntactische constructies, de absentief, de *met*-infinitief en de verbale collocatie, die ik elk in een apart hoofdstuk behandel. In dit onderzoek staan twee algemene vragen centraal, die beide tot uitdrukking komen in de titel van dit proefschrift, *The Syntactic Location of Events*:

1. Op welke manier(en) kan in een taal als het Nederlands de locatie van een handeling syntactisch (d.w.z. niet lexicaal) worden uitgedrukt?

2. Op welke locatie(s) in de syntactische structuur staan de elementen die samen een handeling uitdrukken?

Deze vragen komen aan de orde in elk van de drie hoofdstukken, waarvan ik de inhoud in deze samenvatting kort zal bespreken.

De ondertitel van het proefschrift, *Aspects of Verbal Complementation in Dutch*, verwoordt een tweede verbindend element tussen de hoofdstukken. In alledrie de hoofdstukken wordt een vorm van verbale complementatie besproken. De verbale complementen worden naarmate het proefschrift vordert steeds uitgebreider: in de absentief-constructie is er sprake van een kale infinitief, in de *met*-infinitief neemt het verbale complement de vorm aan van een *te*-infinitief, en in het geval van een verbale collocatie vormt een finiete zin het verbale complement.

Een derde verbindend element tussen de drie hoofdstukken betreft de rol van voorzetsels. In het geval van de *met*-infinitief en de verbale collocaties laat ik zien dat sententiële complementatie door middel van voorzetsels een directe relatie vertoont met de structuur van de handeling (*event*-structuur). In het geval van de absentief bespreek ik een mogelijke analyse waarin wederom een (locatief) voorzetsel een rol speelt, maar deze analyse wordt uiteindelijk verworpen ten gunste van een analyse in termen van de bindingstheorie (Chomsky 1980, 1981).

Hieronder volgt een beknopte samenvatting van ieder hoofdstuk.

Hoofdstuk 2: De absentief

In hoofdstuk 2 geef ik een gedetailleerde beschrijving en analyse van de absentief. Deze constructie, die bestaat uit een combinatie van het hulpwerkwoord *zijn* en een kale infinitief, drukt uit dat het subject van de absentief afwezig is. De zin in (1) is het standaardvoorbeeld dat ik in dit proefschrift gebruik:

(1) Jan is vissen.

De absentief geeft weer dat het subject, in dit voorbeeld *Jan*, een verandering van locatie heeft ondergaan ten opzichte van zijn eigen deiktische centrum, dat wil zeggen, ten opzichte van de plaats waar *Jan* zich normaal gesproken bevindt. Werkwoorden die in de absentief kunnen voorkomen beschrijven *activities* (2a) en *accomplishments* (2b), maar geen *states* (2c) en *achievements* (2d).

(2) a. Jan is vissen. (activity)
b. Jan is de kinderen halen. (accomplishment)
c.* Jan is het huis bezitten. (state)
d.* Jan is de top bereiken. (achievement)

Ik stel een analyse van de absentief voor waarin de semantische eigenschappen volgen uit de bindingstheorie (Chomsky 1980, 1981). De semantische interpretatie van de absentief kan dan formeel worden gedefinieerd als volgt:

(3) De absentieve lezing wordt veroorzaakt door een niet-coreferentiële interpretatie van de locatieve index van twee argumenten, te weten het lexicale subject en het PRO-subject van de infinitief. Het ontbreken van coreferentie wordt afgedwongen door principe B van de bindingstheorie.

Deze bindingsanalyse berust voor een groot gedeelte op het idee dat het hulpwerkwoord *zijn* in de absentief de status heeft van een controlewerkwoord, en niet van een koppelwerkwoord. Ik geef een aantal argumenten voor deze benadering. De absentief-constructie die we in het Nederlands (alsmede in andere Germaanse talen) vinden is overigens niet de enige manier waarop talen verandering wat betreft de locatie van het subject grammaticaal kunnen uitdrukken. In het Amele, een Papuataal van Nieuw-Guinea, wordt zo'n verandering in locatie bijvoorbeeld uitgedrukt door middel van *switch-reference* (Stirling 1993).

De bindingsanalyse van de absentief heeft verstrekkende gevolgen voor een aantal andere syntactische processen, aangezien deze de volgende voorspelling doet:

(4) Een absentieve lezing ontstaat wanneer de pronominale (x) en temporele (t) indices van twee argumenten coreferentieel zijn.

Om deze voorspelling te toetsen onderzoek ik een aantal gevallen van pronominale en temporele coreferentie. Deze gevallen suggereren dat een verandering in locatie, (d.w.z. het voorkomen van niet-coreferentiële locatieve indices), zowel een letterlijke interpretatie kan hebben, zoals in de absentief in (1), als een figuurlijke. Dit wordt geïllustreerd op basis van de voorbeelden in (5), aan de hand van perceptie-werkwoorden waarbij het subject en het reflexief coreferentieel zijn.

(5) a. Ik_i zie mezelf_i een boek schrijven.
b. Ik_i zie mezelf_i (nog wel eens) een boek schrijven.

Het voorbeeld in (5a) kan een letterlijke betekenis hebben waarin het onderwerp *ik* bijvoorbeeld in de spiegel kijkt terwijl ze aan het schrijven is. Maar deze constructie kan ook nog een epistemische interpretatie hebben, die versterkt wordt door het toevoegen van *nog wel eens* in (5b). Voor dit laatste geval beargumenteer ik dat er net als in de absentief sprake is van een verandering in locatie, maar nu wordt er geschakeld tussen twee werelden, namelijk van de wereld waarin het onderwerp zich bevindt op het moment dat ze (5b) uitspreekt, naar een mogelijke wereld. Met andere woorden, (5b) heeft (ook) een epistemische lezing die geparafraseerd kan worden als: Het is waarschijnlijk dat (er is een mogelijke wereld waarin) ik ooit een boek zal schrijven.

Een bindingsanalyse van de absentief is te verkiezen boven een analyse waarin de absentief het resultaat is van deletie van onderliggend *gaan*. Een bindingsanalyse is eveneens adequater dan een analyse waarin een absentiefprojectie (AbsP) wordt aangenomen. Ik laat zien dat deze alternatieven zowel uit empirisch als theoretisch oogpunt onvoldoende zijn.

Hoofdstuk 3: de *met*-infinitief

In hoofdstuk 3 geef ik een analyse van de *met*-infinitief in het dialect van Wambeek, een Belgisch dorp in de provincie Vlaams-Brabant. De *met*-infinitief is een speciaal geval van de absolute *met*-constructie, die in het Standaardnederlands voorkomt, als in (6):

(6) Met Van Nistelrooy in de spits worden we Europees kampioen.

In (7) zien we een voorbeeld van een Wambeekse *met*-infinitief:

(7) Mè zaai te werken moest-n-aai de gieln dag toisj blaaiven.
met zij-NOM te werken moest-CL-hij de hele dag thuis blijven
'Omdat ze werkte, moest hij de hele dag thuisblijven.'

De *met*-infinitief roept een drietal vragen op. (a) Welke syntactische structuur moeten we voor deze constructie aannemen? (b) Waarom heeft het subject nominatieve casus? (c) Welke eigenschappen of, preciezer gezegd, kenmerk-specificaties heeft het voorzetsel *mè*?

Wat de eerste vraag betreft beargumenteer ik dat de *te*-infinitief die deel uitmaakt van de *met*-infinitief bestaat uit een VP, een vP en een AspP, alsmede de lagere modale projecties, zoals in (8):

(8) $[_{ModP}\,[_{Mod}\;\;[_{AspP}\,[_{Asp}\;$ mè $[_{vP}$ zaai $[_{v}\,[_{VP}\,[_{V}$te werken]]]]]]]

Wat de tweede en derde vraag betreft volg ik Pesetsky & Torrego's (2001) analyse van interpreteerbare *tense* (iT). Ik stel voor dat *mè* gespecificeerd is voor het kenmerk iT. Dit kenmerk maakt ook deel uit van de specificatie van het voorzetsel

van (zie Barbiers 2002). De aanwezigheid van het kenmerk iT biedt een verklaring voor de gedachte dat *mè* de nominatieve casus op het subject *zaai* kan licenseren:

(9) $[_{ModP}\ [_{Mod}\ \ [_{AspP}\ [_{Asp}$ mè $[_{vP}$ zaai $[_{v}\ [_{VP}\ [_{V}$te werken]]]]]]]
~~iT~~ ~~uT~~
~~u phi~~ ~~i phi~~

In (9) vindt nominatieve casusmarkering plaats in een *Agree*-configuratie, voordat het voorzetsel optionele verplaatsing ondergaat naar een hoger gelegen functioneel hoofd (bijv. ModP). Deze analyse doet de correcte voorspelling dat er een bijwoord tussen het voorzetsel en het onderwerp kan staan, als in (10):

(10) Mè gisteren zaai te werken moest-n-aai de gieln dag toisj blaaiven.

Ik beargumenteer dat de aanwezigheid van het iT-kenmerk in de specificatie van *mè* het gevolg is van grammaticalisatie. Dit proces heeft zich in het Wambeeks voorgedaan, maar niet in het Standaardnederlands. Als gevolg van dit grammaticalisatieproces kan *mè* voorkomen in AspP, waarin normaliter alleen werkwoorden kunnen staan. Het feit dat *mè* hier in het Wambeeks ook kan voorkomen biedt een verklaring voor de observatie dat *mè*, net als werkwoorden, een verbaal complement kan selecteren. In het geval van *mè* is dit complement de *te*-infinitief die deel uitmaakt van de *met*-infinitief.

Hoofdstuk 4: verbale collocaties
In hoofdstuk 4 verleg ik de aandacht naar voorzetselvoorwerpen (verbale collocaties) met een zinscomplement. Dit zijn constructies waarin een volledige CP voorafgegaan wordt door een voorzetsel, dat op zijn beurt voorafgegaan wordt door een werkwoord. De zin in (11) bevat een voorbeeld van zo'n constructie:

(11) Jan ergert zich er_i aan $[_{CP}$ dat Marie altijd zo hard praat$]_i$.

Het voorbeeld in (11) bevat het resumptieve voornaamwoord *er*, dat verwijst naar de CP. Sommige sprekers van het Nederlands gebruiken echter een constructie waarin dit resumptieve voornaamwoord ontbreekt, de zogenaamde "P+CP"-constructie. (12) is hier een voorbeeld van:

(12) Iedereen zat te rekenen op $[_{CP}$ dat jij 'm zou nemen].
(Kees Jansma tegen Pierre van Hooijdonk, 15-04-2002)

De distributie van CP's in P+CP-constructies lijkt op die van CP's in vrije relatieven en *hoe*-zinnen. Ik concludeer hieruit dat de CP in een P+CP-constructie nominale eigenschappen heeft. Ik volg in dit kader Larson (1990), die stelt dat CP's die een temporeel voorzetsel volgen een operator in hun specificeerder hebben. Vervolgens evalueer ik twee mogelijke analyses van de CP in een P+CP-constructie, die beide

zijn gebaseerd op de hypothese dat argumenten noodzakelijkerwijs de status van DP hebben (zie Barbiers 2000):

> *Scenario 1*
> De CP behoudt de status van CP
> Gegeven het feit dat het voorzetsel casus moet toekennen, moet de CP in deze analyse een syntactische relatie bewerkstelligen met een DP, of zelf DP-achtige eigenschappen verwerven. Coïndexering met het resumptieve voornaamwoord *er* is een voorbeeld van de eerste strategie. Projectie van een temporele operator in de specificeerder binnen een temporele adjunctzin is een voorbeeld van de tweede strategie.
>
> *Scenario 2*
> De CP is een DP
> Deze strategie vinden we in verbale collocaties waarin het voorzetsel wordt gevolgd door een vrije relatief of een *hoe*-zin. Zulke zinnen zijn complexe DP's waarvan het hoofd gelexicaliseerd kan (maar niet hoeft te) zijn. Deze strategie vinden we ook in verbale collocaties waarin het voorzetsel wordt gevolgd door een CP met een factieve of propositionele interpretatie.

Voorts laat ik zien dat het interne argument in een (subset van) verbale collocaties doorgaans geassocieerd wordt met de thematische 'CAUSE-rol'. Hieruit valt af te leiden dat verbale collocaties causatieve constructies zijn. Er is diachrone evidentie uit het Nederlands en het Engels die aantoont dat de CAUSE-rol verband houdt met inherente casus. Ook is er synchrone evidentie uit het Nederlands die aantoont dat verbale collocaties in een aantal opzichten hetzelfde gedrag vertonen als causatieven.

Tot slot bespreek ik kort twee mogelijke analyses van de interne structuur van verbale collocaties, de traditionele PP-interne analyse en een alternatieve PP-externe analyse. Ik concludeer dat de tweede analyse de voorkeur verdient, hoewel deze benadering een aantal vragen oproept die nader onderzocht en uitgewerkt moeten worden.

Curriculum Vitae

Irene Haslinger was born on 17 December 1972 in The Hague, The Netherlands. After completing her secondary school at the Marnix Gymnasium in Rotterdam (Gymnasium α), she started her undergraduate studies at the Department of English at Leiden University in 1991, and General Linguistics in 1993. In April 1997 she graduated from the English Department with a specialisation in historical syntax (Old English), and in September 1997 from the General Linguistics Department with a specialisation in theoretical syntax. From 1997 to 2002 she was employed by Tilburg University (department of *Grammaticamodellen*) as a PhD researcher. During this period she did part of her research at the University of Vienna, the University of Trondheim and at the ZAS Institute in Berlin. From 2002 to 2004 she combined her research with a part-time position as a project coordinator and researcher with the SAND project at the Meertens Instituut (KNAW) in Amsterdam. Since 2005 she has held a permanent position at the Koninklijke Bibliotheek (the National Library of the Netherlands) in The Hague as a policy advisor.