

Unambiguous Argument Identification
and the Distribution of
Weak Object Pronouns in the
Continental West Germanic Languages

DISSERTATION

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2 Introduction

This thesis investigates the distribution of weak object pronouns (in the sense of Cardinaletti 1991*a*; Cardinaletti and Starke 1994, 1996, 1999) in the Germanic OV languages (German, Dutch) as part of a more general theory of syntactic structure and conditions on argument identification (licensing).

The main contention is that the distribution of weak object pronouns with respect to non-pronominal subjects in German and Dutch can only be properly understood if one takes the specific organisation and principled differences in the syntactic structure of the two languages into consideration. In more concrete terms, the availability of different word order patterns in German and Dutch is tightly connected to the structural make-up of the verb phrase structure in the two languages, as this thesis attempts to show.

The distribution of weak object pronouns provides a particularly revealing testing ground because there is common agreement in the relevant literature that weak (object) pronouns have a strong ‘tendency for moving leftward’ to clause-internal positions, i.e. positions within the so-called ‘midfield’ of the German and Dutch clause (‘weak pronoun movement’).¹

Before proceeding, I should issue a small caveat and make clear what this thesis is *not* intended to do.

Weak pronoun movement and word order variation in the midfield of the clause in the Germanic OV languages is a vast topic with an extensive body of literature. However, whilst I will lay out in broad terms the empirical domain of this enquiry below (chapter 3), I will not attempt to give a full summary of the rich descriptive facts or of the many analyses of weak pronoun movement that have been brought forward over the years.

The main reason for taking this decision is this: Most of the analyses of weak pronoun movement investigate the motivation (or the ‘driving force’, the ‘trigger’) of the movement operation which applies to weak pronouns, based on the assumption that weak pronoun movement does, obligatorily, apply.

This thesis, however, will take a different perspective.

Our approach is based on the empirical observation that weak object pronouns can also stay in ‘low positions’ inside the verb phrase in (the southern variant of standard) German (contrary to what has been assumed in most of the relevant literature), although the variation does not go hand in hand with any semantic, pragmatic or information-structure difference (section 3.4.1). The focus of our study is not on the motivation that underlies the application of the movement operation (e.g., what is the trigger of weak pronoun movement?) but rather, our investigation will focus on the *structural conditions* which limit the available word order patterns in German and Dutch, respectively. However, it is also not an issue of different landing positions for weak pronoun movement in the different languages. Rather, we are going to argue that the empirical dif-

¹‘Midfield’ is the part of the clause in between the verb second (V2)/C position and the clause-final verb position in the Germanic OV languages.

ferences which are observed with weak object pronouns in German and Dutch are symptomatic of a more basic, general difference in the organisation of the syntactic structure of the two languages.

The question which is the main focus of our study is this: Provided that weak object pronouns are free to move to a higher clause-internal position in the Germanic OV languages (and also provided that the landing positions are basically the same in German and Dutch, namely the ‘edge’ position of the verb phrase), why are some ordering patterns only available in German but not in Dutch? In tight connection with this follows the next question: How is the principled difference to which the availability of the ordering patterns can be put down represented in the syntax?

Thus, our study as described in this thesis is an approach to (the organisation of) clause structure of the Germanic OV languages rather than an investigation of (the nature of) weak pronoun movement.

With respect to the motivation of weak pronoun movement, I assume, following Abraham (1991); Bobaljik (1995); Diesing (1996); Haider and Rosengren (1998, among many others), that the movement of weak pronouns is motivated (at least to a large extent) by interpretative (information-structure, etc.) factors. This does not mean, however, that I claim that there is a semantic, pragmatic or information-structure related trigger that would force weak pronouns to undergo weak pronoun movement.

Our proposal will be developed in the framework of Generative Grammar and, in particular, in a minimalist framework which is based on the assumption of specific locality domains (called ‘phases’) (based on Chomsky 2001*b*) – however, I will also include insights in the organisation of the Germanic OV languages as brought up by Hubert Haider in a large number of papers (Haider 1993, 1997*b*, 2009, etc.); note, however, that Haider’s model is based on completely different base assumptions concerning the nature of syntax and the organisation of syntactic structure.

Therefore, I will forego the customary summary of my theoretical assumptions in the introductory section. They will be provided in the course of the discussion throughout the thesis; throughout the thesis, I will also introduce and explain the technical terms and the theoretical machinery when necessary. However, I will assume the reader’s general familiarity with the (recent) minimalist framework.

The thesis is organised as follows.

Chapter 3 is concerned with the discussion of the empirical data which forms the basis of our approach to the syntactic organisation of the Germanic OV languages (German, Dutch). I will start the discussion with the concept of ‘weak pronouns’ (in the sense of Cardinaletti 1991*a*; Cardinaletti and Starke 1994, 1996, 1999) and its application to personal pronouns in German and Dutch. The discussion of the distribution of weak object pronouns in German and Dutch in section 3.4 will shed light on the different distributional patterns

of weak object pronouns with respect to non-pronominal subjects in the two languages. Furthermore, the discussion of the empirical facts will lead us to the conclusion that weak pronoun movement is, basically, a syntactically un-triggered movement operation whose ‘motivation’ lies outside purely syntactic concerns.

Chapter 4 will start with the highlighting of some basic types of approaches to the distribution of weak pronouns in the Germanic (OV) languages; however, without going into thorough discussion.

Section 4.1 discusses Bobaljik’s (1995) ‘adjacency approach’ in some depth, although I will not adopt his assumptions (neither as far as his analysis of pronoun movement is concerned nor with respect to the syntactic structure that is adopted). The reason for the discussion of the ‘adjacency approach’ lies in the fact that it leads our discussion into a direction which will be relevant throughout the thesis: namely, the issue whether or not OV languages like German and Dutch feature intermediate functional projections and whether or not these functional projections are head-initial or head-final (section 4.1.1).

Chapter 5 discusses a number of objections to analyses which treat the re-ordering of arguments (‘scrambling’) and weak pronoun movement in German as movement to functional specifier positions; our discussion will be based on empirical arguments which have been brought into the discussion by Hubert Haider (in a number of papers). Some reference to Dutch will also be made.

Chapter 6 functions as a transition to my own approach which will be developed in chapters 8 to 10.

However, before we come to that, another type of approach will be discussed, and rejected, in chapter 7: the proposal that the entire (remnant) *v*P rises to an intermediate function specifier position (Spec,TP) in German.

My own proposal will be developed in three stages, reflected in three chapters: Chapter 8 is intended to set the stage. I will discuss Haider’s approach to the syntactic organisation of the verb phrase structure in VO and OV languages according to which head-initial (VO) structures require a more complex structure than head-final (OV) structures; this is traced back to their difference in headedness in combination with the nature of argument licensing. Based on Haider’s ideas, I will suggest a more fine-grained mechanism for the licensing of arguments which allows to derive the relevant differences among the OV languages. It will be argued that the verb phrase structure of Dutch is more complex than the verb phrase structure of German and that the source of this difference in the complexity of the verb phrase structure lies in the richness of the morphological case systems of the two languages (rich case in German, poor case in Dutch). Section 8.1 is concerned with Dutch; the German situation will be discussed in section 8.2.

The theoretical implementation of these suggestions is developed in chapter

9; it will be applied to German in section 9.1 and to Dutch in section 9.2. In a nutshell, I claim that German projects an unlayered verb phrase structure because it exhibits rich morphological case which is syntactically represented in the feature matrix of arguments in German. The mechanism which controls the licensing of arguments in their base positions (condition *Unambiguity of Argument Identification*) refers to this subfeature. If the subfeature is present in the arguments in an OV language, no additional structural means must be included for unambiguous identification of the arguments. In Dutch, in contrast, the relevant subfeature is not present in the feature structure of the arguments because the language has only poor morphological case. In this situation, unambiguous argument identification can only be achieved if the arguments occupy different structural domains inside the verb phrase; therefore, Dutch has to project layered verb phrase structures.

In chapter 10, it will be discussed how this approach to the syntactic organisation of German and Dutch interacts with the application of movement operations which lead to a re-ordering of the arguments (like weak pronoun movement).

The remainder of the thesis is concerned with some prerequisites of this proposal as well as its predictions.

Chapter 11 deals with what it means for a morphological case system to be rich versus poor. We will follow Haerberli (2002) who argues that a case system which makes at least a three-way distinction of morphological cases qualifies as rich. This criterion will be applied to German and Dutch in section 11.2. Finally, the case system and the availability of the word order pattern ‘object < subject’ in Middle Dutch will be considered in section 11.2.2.

Chapter 12 is concerned with the question how in our approach, structural accusative case is assigned in German if there is no *vP* layer present in transitive verb phrases, as our approach claims.

In chapter 13, we will discuss evidence for the ‘phase’ status of the transitive verb phrase in Dutch. In more concrete terms, we will discuss Barbiers’ (1995) data on stranding of focus particles at the edge of the transitive verb phrase in Dutch and ask whether there are alternative analyses available for the data. In chapter 14, we will discuss some instances of the ‘object < subject’ ordering pattern in Dutch under the perspective of whether or not they pose a difficulty for our approach as described throughout the thesis.

Finally, chapter 15 concludes and summarises my analysis.

3 Weak personal pronouns in German and Dutch

The characteristics and the behaviour of pronominal elements have been an important field of interest in syntactic, semantic as well as morphological research in recent decades. Due to the increasing importance of comparative perspectives, the focus of research interest has somewhat shifted: In the 1970s and the beginning 1980s, the focus of research interest laid on the pronominal system of the Romance languages, but in recent decades it has expanded to the Germanic languages as well as other language families.

As is well known, the Romance languages show a morphologically distinct paradigm of reduced pronouns with specific syntactic behaviour, known as ‘clitics’, in addition to the paradigm of non-reduced ‘strong’ personal pronouns which exhibit the same syntactic properties as non-pronominal DPs.

In the Germanic languages, the morphology does not always allow to recognise a clear-cut partition of the pronominal system into different classes. Since the end of the 1980s, the status of the pronominal elements in the Germanic languages has been discussed and research in this area is still going on.²

As far as the pronominal system of German is concerned, research in the first half of the last decade of the 20th century was along the lines of two opposed positions: On the one end of the scale we find approaches which assume only one single class of pronominal elements for German, namely strong ones. The ‘exceptional’ syntactic distribution of unstressed pronouns – that is the observation that unstressed pronouns typically occur at the left edge of the so-called midfield of the German clause in the so-called ‘Wackernagel area’ – is subsumed under the general scrambling property of German (for a discussion of the pronoun data see below). Approaches along these lines are Lenerz (1992); Tomaselli and Poletto (1992); Vikner and Schwartz (1991), among others. Such approaches need additional assumptions to account for the strong tendency of the unstressed German pronouns to occur in the Wackernagel area and the ‘exceptional status’ of the German neutral singular pronoun *es* ‘it’.

On the other end of the scale there are approaches which assume a partition of the German pronominal system into strong and clitic pronouns. This actually means that the strong-clitic-distinction of the Romance languages is transferred to the Germanic languages and that the non-prominent pronouns of German and the other Germanic languages are treated on a par with the clitics of the Romance languages. For approaches along these lines see Corver and Delfitto (1993); Jaspers (1989); Zwart (1993*a*) (for Dutch); Beermann (1993); Cardinaletti (1992); Cardinaletti and Roberts (1991); Corver and Delfitto (1993) (for German); Haegeman (1992*a,b*) (for West Flemish); Déprez (1990), Josefsson (1992*a,b*) and Diesing and Jelinek (1993) (for Swedish), among others.³

²For an overview of the progress of research in the area of Germanic and Romance (personal) pronouns in the last three decades see Cardinaletti (1999).

³It goes without saying that there are also approaches in between these end points of the scale.

Cardinaletti and Starke (1994, 1996, 1999); Starke (1996) and Cardinaletti (1999) argue that none of these two positions is able to account for the actual facts because there is a series of (personal) pronouns in German as well as in the other Germanic languages with properties that do neither pattern with those of strong pronouns nor with those of clitics. The same holds true for other languages as well. For this reason, they propose a general tripartition of the pronominal system of natural languages into strong, weak and clitic forms. The overall organisation of the pronominal system of languages according to Cardinaletti and Starke will be discussed in some detail in the following section.

3.1 Weak personal pronouns in the sense of Cardinaletti (1991a); Cardinaletti and Starke (1994, 1996, 1999)

It was first worked out by Cardinaletti (1991a) on the basis of data from the Romance languages that the grammar provides not only two, but three distinct forms of one and the same (semantically/functionally defined) pronoun.⁴ The examples in (1) repeat Cardinaletti and Starke's (1994) Italian paradigm with its transparent distribution of the pronominal elements.

- (1) Distribution of the three types of pronouns in Italian
- | | | | | | | | |
|-----|------------|----------------|-------------|------------|----------------|--------------|---------------|
| (a) | <i>Non</i> | * <i>a lui</i> | <i>dirò</i> | <i>mai</i> | * <i>a lui</i> | <i>tutto</i> | <i>a lui</i> |
| (b) | <i>Non</i> | * <i>loro</i> | <i>dirò</i> | <i>mai</i> | <i>loro</i> | <i>tutto</i> | * <i>loro</i> |
| (c) | <i>Non</i> | <i>gli</i> | <i>dirò</i> | <i>mai</i> | * <i>gli</i> | <i>tutto</i> | * <i>gli</i> |
| | not | to-him/-them | I-will-say | never | | everything | |
- 'I will never tell him/them everything'
- (Italian; Cardinaletti and Starke 1994, 60 (53a))

The pronouns *gli* 'to him' in (1c) appears only adjacent to the verbal form in the position typical for Romance clitics, which are in fact proclitics. The strong pronominal form *a lui* 'to him' in (1a) on the other hand appears in the position where a full noun phrase would appear. The pronominal form *loro* 'to them' in (1b) has an in-between status, its distribution differs from both clitics and strong pronouns: With strong pronouns it shares the distributional property of not being subject to any adjacency requirement: it is not limited to a position adjacent to the verbal form (as Romance clitics) or the complementiser. On the other hand it is excluded from the base position of full noun phrases, thus differing in its distribution from strong pronouns.

Following the terminology used to refer to clitic-like Germanic pronouns (cf. den Besten 1989, 25; Koster 1978, 209), Cardinaletti and Starke call this third class of pronouns 'weak' personal pronouns. The term 'deficient pronoun' is used for the set of both clitic and weak pronouns, to the exclusion of strong

⁴That a category of 'weak' pronouns (which display clitic-like properties without being cliticised on the verb) must be assumed has also been noted by Holmberg (1990) for the Scandinavian languages and by Cardinaletti (1991b) in her comparative review of Germanic pronouns.

forms.⁵

In Cardinaletti and Starke (1994, 1996, 1999, 2000), Cardinaletti (1999) and Starke (1996), the general idea of a tripartite organisation of the pronominal system consisting of strong, weak and clitic elements with three distinct sets of properties associated with each type of pronoun and cutting across all components of grammar was further worked out.

Besides their specific syntactic distribution, the most important properties attributed to the class of weak pronouns in Italian are the following: they cannot be coordinated and they cannot be modified.

Possibly, in addition to their distributional properties, weak pronouns show also specific behaviour in other components of grammar. According to Cardinaletti and Starke there are semantic/referential, morphological and phonological differences which correlate with the strong-deficient distinction and with the three types of pronouns, respectively.

It is not clear, however, whether this is indeed a robust correlation.

As far as semantics is concerned, Cardinaletti and Starke argue that weak pronouns can refer to any entity, human and non-human, whereas strong pronouns are limited to human reference only (see Cardinaletti and Starke 1994, 1996, 1999 for discussion).

However, we find a number of counter-examples to this supposed correlation in the Germanic languages (see, for example, Haeseryn et al. 1997, 244 for data in which certain strong pronouns in Dutch also have non-human reference).

A further semantic property generally attributed to weak (or, in fact, deficient) pronouns is the requirement that they must have an antecedent already prominent in the discourse (often called the property of being ‘thematic’ or ‘familiar’); that is, weak pronouns cannot introduce a new discourse referent (cf. Cardinaletti and Starke 1994, 1999; Diesing 1992; Tasmowski-De Ryck and Verluyten 1982, 341, among others). The reverse is not true, however; it is not the case that only weak and clitic pronouns can have this property.

Thus, referential properties of personal pronouns should not be used as defining criteria for the class of weak pronoun; rather, distributional criteria serve this purpose more reliably.

The inability to be modified (like in **nur es* ‘only it’) is one of the specific characteristics of weak pronouns in syntax. Modification of a pronoun goes hand in hand with a certain degree of focus on the pronoun, however. The question, therefore, is whether the inability to be modified is an independent property of weak pronouns or whether it is reducible to the fact that weak pronouns cannot be (contrastively) stressed.

According to Cardinaletti and Starke, the latter is not true.⁶ If this is indeed

⁵For the motivation of this term see Cardinaletti and Starke (1994).

⁶They discuss data from French which shows that it is not the case that deficient pronouns can never be contrastively focussed or accompany ostension under ‘flat’ intonation; under appropriate conditions, when they refer to an entity already prominent in the discourse,

the case, the property of not being (contrastively) stressed is not a fundamental property of weak pronouns but rather the default case in the sense that weak pronouns mostly occur unstressed. Cardinaletti and Starke (1999, 161) call it “probably a historical accident” that the inability to be (contrastively) stressed has repeatedly been mentioned as a defining property of deficient pronouns (e.g., by Haider and Rosengren 1998, among others).

Throughout this thesis, the plain (in)ability to be focused will not be used as classifying property. It will be used only in combination with modification. Whenever it is mentioned that some weak pronoun cannot be focused, this has to be understood as a short cut in the sense indicated in the previous paragraph.

An essential point in Cardinaletti and Starke’s approach is the fact that this tripartition is not only seen as a property of a single language but as the reflex of the organisation of pronominal systems in general and, thus, underlying in all the languages of the world. This makes the strong assumption that there is only one system of personal pronouns provided by the human language capacity, with languages differing only as to which class(es) they lexicalise. If this is correct, then we have to assume that each and every personal pronoun in any language of the world can be classified as strong, weak or clitic through careful examination of its syntactic properties (cf. Cardinaletti and Starke 1994, 1999 for discussion of data from English, French, Hebrew, Gun and other languages; Cardinaletti 1999; Cardinaletti and Starke 1996, 2000; Starke 1996 on Germanic and Romance languages).

In the following, we will show that the syntactic properties which have been reported for weak pronouns in Italian also hold for weak pronouns in German and Dutch. For demonstration, we use the German weak third person singular neuter personal pronoun *es* ‘it’ which is the only inherently weak personal pronoun of German. All the other personal pronouns in German occur in homophonous weak-strong pairs; i.e., they are morphologically ambiguous between a strong and a weak form.

German *es* ‘it’ features exactly those syntactic properties which are characteristic for weak pronouns in Italian: *Es* is neither coordinable, (2) and (3), nor modifiable, (4), and its syntactic distribution differs from strong pronouns and nominal expressions, (5) vs. (6), (7) (German does not feature clitic pronouns). These properties are illustrated for both subject and direct object function in the examples below.

- (2) (a) **Es und diese Zeitungen sind sehr schön*
 it and these newspapers are very beautiful
- (b) **Es und diese Zeitungen hat er gekauft*
 it and these newspapers has he bought

this seems to be possible, at least in French (see Cardinaletti and Starke 1994, sect. 2.4.1; Cardinaletti and Starke 1999, sect. 2.4.1 for discussion).

(German; Cardinaletti and Starke 1996, (3a,b))

- (3) (a) **dass es und diese Zeitungen sehr schön sind*
that it and these newspapers very beautiful are
(b) **dass er es und diese Zeitungen gekauft hat*
that he it and these newspapers bought has

(German; Cardinaletti and Starke 1996, (4a,b))

The restriction on coordinating weak pronouns in German holds for all syntactic positions as the ungrammaticality of (2a,b) and (3a,b) shows; it holds for occurrence in the initial position in V2-clauses, (2a,b), as well as for occurrence in clause-internal positions, (3a,b), and it holds for occurrence as subject (2a, 3a) as well as object (2b, 3b).

The same hold true for modification; *es* cannot be modified, regardless of its position in the clause (V2 or midfield):

- (4) (a) **Sogar es ist auf den Boden gefallen*
even it is on the floor fallen

(German; Cardinaletti and Starke 1996, (5))

- (b) **Auf den Boden ist sogar es gefallen*
on the floor is even it fallen

- (c) **Er hat nur es gegessen*
he has only it eaten

(German; Haider and Rosengren 1998, (96))

- (d) **Nur es hat er gegessen*
only it has he eaten

Furthermore, the weak pronoun *es* shows a specific syntactic distribution in so far as it – typically – does neither surface in its base position where nominal expressions as well as strong pronouns typically occur nor necessarily adjacent to a syntactic head as typical for clitics. (5a) illustrates the unmarked positioning of the weak object pronoun *es* in German.⁷ In (5b), the frame adverbial *unter diesen Umständen* ‘under these circumstances’ intervenes between the weak pronoun *es* and the complementiser *dass* ‘that’; this is evidence against clitic status. (6b) with a non-pronominal object preceding the subject (scrambling order) is not ungrammatical; however, it is not the unmarked ordering (indicated by ‘[?]’) which is the base order in (6a). A scrambled order in which the non-pronominal object precedes both the subject and the frame adverbial is also marked, (6c). This order is the unmarked pattern found with weak object pronouns in German; compare (5a).⁸

⁷In the German examples, proper names will be used with a definite determiner to indicate their case and grammatical function.

⁸In (5), *es* can be replaced by any other weak object pronoun of German; the judgements remain the same.

- (5) (a) *weil es unter diesen Umständen der Peter*
 because *it*_{DO.weak} under these circumstances der Peter_{subj}
nicht gekauft hätte
 not bought would-have
 ‘because under these circumstances Peter would not have bought
 it’ (German)
- (b) *weil unter diesen Umständen es*_{DO.weak} *der Peter*_{subj} *nicht gekauft*
hätte (German)
- (6) (a) *weil unter diesen Umständen der Peter das Buch*
 because under these circumstances der Peter_{subj} the book_{DO}
nicht gekauft hätte
 not bought would-have
 ‘because under these circumstances Peter would not have bought
 the book’ (German)
- (b) [?] *weil unter diesen Umständen das Buch*_{DO.scr} *der Peter*_{subj} *nicht*
gekauft hätte (German)
- (c) [?] *weil das Buch*_{DO.scr} *unter diesen Umständen der Peter*_{subj} *nicht*
gekauft hätte (German)

The data in (7) illustrates the same for a strong object pronoun (strong pronoun status is indicated by coordination). Strong pronouns behave like scrambled non-pronominal elements; the unmarked ordering is ‘subject < strong pronoun’, (7a), whereas the inverse order is marked, (7b,c).

- (7) (a) *weil unter diesen Umständen der Peter*
 because under these circumstances der Peter_{subj}
 [*ihn und seinen Freund*] *nicht eingeladen hätte*
 him and his friend_{DO.strong} not bought would-have
 ‘because under these circumstances Peter would not have invited
 him and his friend’ (German)
- (b) [?] *weil unter diesen Umständen [ihn und seinen*
*Freund]*_{DO.strong.scr} *der Peter*_{subj} *nicht eingeladen hätte* (German)
- (c) [?] *weil [ihn und seinen Freund]*_{DO.strong.scr} *unter diesen*
*Umständen der Peter*_{subj} *nicht eingeladen hätte* (German)

It has been argued in the literature that weak object pronouns are barred from occurring in clause-initial position. As the data in (8) and (9) show, this generalisation does not hold, however. In appropriate contexts, German *es* in clause-initial position can receive an object interpretation, (8). Here, the topicalised weak object pronoun *es* in initial position does not receive any kind of stress because its referent is immediately aforementioned.⁹

⁹Susi Wurmbrand (p.c., reported in Gärtner and Steinbach 2003b, 470, fn. 24) suggests that examples like (8), (9) might be derived from expletive-initial variants through a process

- (8) (a) *Ihr Geld ist ja nicht weg, meine Damen und Herren.*
 your money is PRT not away my ladies and gentlemen.
Es haben jetzt nur andere
 it have now only others
 ‘Indeed, your money isn’t gone, ladies and gentlemen. It’s only
 that others have it now’ (German; Lenerz 1994, 162)
- (b) *Das wissen nicht nur die Experten, es wissen auch*
 that know not only the experts, it know also
die Laien
 the laymen
 ‘Not only the experts know that, even the laymen do’ (German;
 Gärtner and Steinbach 2003b, 471 (34b) < B. Santorini, p.c.)
- (c) *Das Schild können Sie ruhig wieder abmontieren. Es hat*
 the sign can you PRT again take-off. it has
ohnehin niemand beachtet
 anyway nobody considered
 ‘You can take off the sign again. Nobody has considered it anyway’
 (German; Hubert Haider p.c.)

In the context set up by questions (9), putting the object *es* into clause-initial positions appears to be unobjectionable.

- (9) A: *Wie ist denn das Kind zu dem Buch gekommen?* B:
 how is then the child to the book come?
Es hat ihm jemand geschenkt
 it_{DO.weak} has him_{IO.weak} someone_{subj.indef} presented
 ‘How did the child get the book, by the way? Someone gave it to him
 as a present’ (German; Gärtner and Steinbach 2003b, 471 (35))

For a more detailed discussion of the syntactic distribution of weak object pronouns in German and Dutch see section 3.4.

Furthermore, like weak pronouns in Italian, the weak personal pronoun *es* can refer to both humans as well as non-human entities, (10) (but recall that the restriction to human reference, which has been claimed for strong pronouns, might not be a robust generalisation).

- (10) *Ich mag es sehr gerne*
 I like it_{[+hum]/[-hum]} very much (= the child/the dress)
 (German)

like the Dutch *er-er*-contraction rule (cf. den Besten 1983, 1989). It is not possible to insert an additional *es* in clause-internal position, however; compare (i) to the grammatical version in (8c).

- (i) *Das Schild können Sie ruhig wieder abmontieren.*
 ??*Es hat es ohnehin niemand beachtet*
 **Es hat ohnehin niemand es beachtet*

3.2 Cardinaletti and Starke’s theoretical implementation

Cardinaletti and Starke (1994, 1999, 2000) argue for an analysis of deficient pronouns in terms of ‘structural deficiency’, starting from the observation that some deficient pronouns are morphologically a proper subset of the corresponding strong pronouns and that the reverse never occurs. An overt relation of systematic morphological reduction is found for example in Slovak or Italian, (11).¹⁰

(11) Morphological reduction (Cardinaletti and Starke 1999, 178 (78))

	Slovak:		Italian:
strong:	<i>je-ho</i>	<i>je-mu</i>	<i>a loro</i>
deficient:	<i>ho</i>	<i>mu</i>	<i>loro</i>
	‘him’	‘to him’	‘to them’

From this observation together with the assumption that morphemes are heads of discrete syntactic projections Cardinaletti and Starke conclude that deficient elements realise less syntactic structure than strong elements. Actually, the idea is that a more deficient pronoun is morphologically lighter than stronger pronouns because it contains less (underlying) morphemes and it contains less morphemes because it realises fewer syntactic heads. The reason that this relationship is not always visible at the surface is traced back to the existence of opaque morphology. In fact, according to Cardinaletti and Starke (1999, 180), the vast majority of known weak-strong pairs are homophonous (cf. English *him-him*, German *sie-sie*, French *elle-elle*, etc.).

This reasoning yields that weak pronouns realise less structure than their strong counterparts and along the same reasoning, clitics are structurally ‘impoverished’ with respect to their weak counterparts.

There are two possibilities as for the nature of this syntactic impoverishment: it may be either due to (i) some syntactic nodes of the reduced pronoun being (always) radically empty, or due to (ii) the syntactic structure of a deficient pronoun containing fewer projections than the syntactic structure of a strong pronoun.

For “simplicity of exposition”, Cardinaletti and Starke (1994, 1999) adopt the second version, that is the idea that the more deficient a pronoun is the less syntactic structure it contains¹¹. The choice between these two implementations is a matter of more basic and yet controversial theoretical questions about the nature of syntactic structure (e.g., must all projections always be projected? what does it mean to be a radically empty projection?, etc.). The missing structure must be some projection inside the nominal phrase, i.e. a functional projection associated with the noun (as first argued by Vergnaud

¹⁰In some strong-deficient pairs in the Germanic languages (e.g., Dutch *hem_{strong}/’m_{weak}* ‘him’, *ik_{strong}/’k_{weak}* ‘I’) there is a relation of phonological rather than morphological reduction.

¹¹Although “nothing [...] hinges upon the choice between the two implementations”, as they state (Cardinaletti and Starke 1999, fn. 43).

1974).

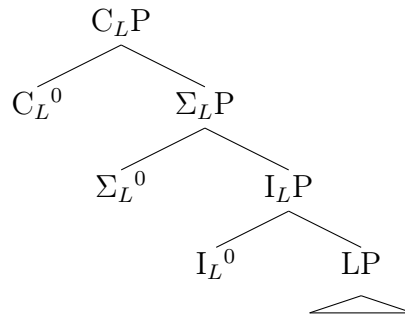
Cardinaletti and Starke conclude that the unique and purely abstract primitive, γ , underlying all asymmetries linked to deficiency is *Structural Deficiency*, (12).

- (12) *Structural Deficiency*
 γ = lacking a set of functional heads

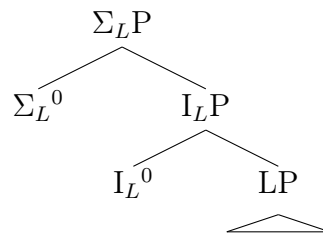
In Cardinaletti and Starke's approach, the missing structure is systematically identified with a high functional projection inside the phrase: while strong pronouns are full nominal projections, (13a), weak pronouns lack the highest functional layer, (13b), and clitic pronouns lack both of the two highest functional layers, (13c).

The labelling used by Cardinaletti and Starke (1994, 1999) is there to show the systematic parallels between the organisation of nominal and verbal (extended) projections, where IP (TP) is a cover term for a set of functional projections, and subscript L refers to any lexical category.

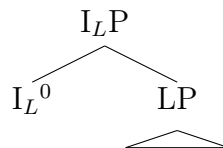
- (13) (a) Strong pronouns: (Cardinaletti and Starke 1994, 86-87 (111))



- (b) Weak pronouns:



- (c) Clitic pronouns:



Note that in this conception of the tripartite pronoun paradigm, clitic pronouns are base-generated as XPs (they have phrasal status), but they surface as heads.

According to Cardinaletti and Starke (1994, 1999), the C_{LP} layer is the locus of the functional case feature of nominal elements, and Σ^0 is the locus of prosody-related features (cf. Cardinaletti and Starke 1999, fn. 46 for their theory of functional heads). Since weak pronouns, and also clitic pronouns, lack C^0 , they do not contain (in fact, cannot contain) functional case features because the recipient of these features is absent.

In Cardinaletti and Starke's conception, the specific distributional behaviour of weak and clitic pronouns is directly related to their structural deficiency. Based on the assumption that every noun phrase must be associated with a functional case-feature, they claim that deficient, but not strong, elements must undergo an operation allowing them to be associated with a functional case-feature (see Cardinaletti and Starke 1999, sect. 5.4.7 for a precise formulation of their requirement). They assume that Agr^0 is necessary for case-assignment; therefore, weak pronouns need to occur in a local structural configuration with Agr^0 in order to compensate for their structural deficiency. Since weak pronouns have phrasal status, the only way of establishing an appropriate structural relation with Agr^0 is their movement into the specifier position of $AgrP$, which establishes specifier-head agreement in an agreement system based on local specifier-head configurations. So, according to Cardinaletti and Starke (1994, 1999), case assignment (checking) is the trigger for the movement of weak pronouns out of their base positions into higher functional specifier positions of the clause.

The choice of the type of pronoun which occurs in a given context in a given language is driven by the choice principle in (14).

- (14) *Choice of a pronoun* Cardinaletti and Starke 1994, 48 (22))
Choose the most deficient possible form

Because of its construction-specific nature, it is rather unlikely that the Choice Principle is a primitive of grammar, rather it seems to be only a descriptively adequate generalisation. The Choice Principle is an epiphenomenon, which has to be deduced from more general principles, with some kind of Economy Principle among the possible candidates (cf. Cardinaletti and Starke 1994, 1999 for a more detailed discussion).

We will follow Cardinaletti (1999); Cardinaletti and Starke (1994, 1996, 1999); Starke (1996) in assuming a tripartite organisation of the pronominal system in general, at least as far as the Germanic languages are concerned. However, we will not adopt their theoretical implementation, namely the idea that weak pronouns surface in the specifier position of an intermediate functional projection because of their lack of specific functional syntactic structure (structural deficiency) and a case feature.

The Continental West Germanic OV languages, in particular German, pose a problem to this type of approach because of the organisation of their clause structure. It has been argued convincingly by Hubert Haider in a number of papers that the assumption of an intermediate functional projection in between the verb phrase and the CP domain which is targetted by movement makes wrong predictions for German (see chapter 5 for discussion). If intermediate functional projections are excluded on independent reasons, however, there is no way to explain the distribution of weak pronouns on the basis of an interaction with intermediate functional projections in the way Cardinaletti and Starke (1994, 1999) propose (substitution into a specifier position of an intermediate functional projection which ‘assigns’ a case feature by specifier-head agreement).

There is also the fact that our approach, as developed in this thesis, is based on a minimalist model of grammar in which agreement takes place under c-command between a functional head (the ‘probe’) and a lexical element with matching features (the ‘goal’). In a model of this type, the application of movement operations like weak pronoun movement cannot be related to case ‘assignment’ under specifier-head agreement in a dedicated functional projection.

Finally, Cardinaletti and Starke’s implementation makes a wrong prediction with respect to the distribution of weak pronouns in German. From their proposal it follows that any weak pronoun should have to move to the specifier position of an intermediate functional projection where it gains its case feature.

A closer look at the data (see section 3.4.1 for discussion) shows that weak pronoun movement is not as obligatory in German as Cardinaletti and Starke’s approach predicts. Rather, weak pronouns can also stay in low positions, following non-pronominal arguments as well as frame adverbials like *unter diesen Umständen* ‘under these circumstances’ and particles like *denn, ja*, etc.

Later in this thesis we will argue, contrary to Cardinaletti and Starke, that if weak pronouns in the Germanic OV languages occur in derived positions, they do not occupy specifier positions of functional projections; rather, weak pronouns typically surface on the left edge of the verb phrase (analysed as adjoined to the verb phrase or in an outer specifier of the verb phrase, respectively).

3.3 The paradigm of weak personal pronouns in Dutch

Before we will discuss the distribution of weak object pronouns in German and Dutch in more detail in section 3.4, let us first have a closer look at the class of weak pronouns in Dutch.

In contrast to German, Dutch owns a paradigm of morphologically distinct weak personal pronouns.

In traditional work on Dutch, the two classes of personal pronouns are labelled ‘stressed/emphatic’ (*beklemtoond*) vs. ‘unstressed/unemphatic’ (*onbeklemtoond*) or ‘full’ (*vol*) vs. ‘reduced’ (*gereduceed*) pronouns. This terminology stems from the fact that, in most cases, the morphological shape of the pronouns of the second class seems to be phonologically reduced with respect to the shape of the pronouns of the first class. The terms ‘stressed/emphatic’ or ‘full’ pronouns roughly correspond to Cardinaletti and Starke’s (1994; 1996; 1999) ‘strong’ pronouns, while ‘unstressed/unemphatic’ or ‘reduced’ correspond to their class of ‘deficient’ pronouns.

In the literature, each one of the possibilities for the relation between the strong and deficient pronouns in Dutch has found its proponents: Gärtner and Steinbach (2003*a,b*), for example, regard strong pronouns as derived from ‘neutral’, i.e. weak pronouns via addition of stress. This consideration is in contrast to the more traditional view which treats the Dutch deficient personal pronouns as derived from the strong pronouns via stress reduction and subsequent phonological changes (e.g., weakening of the vowel, consonant deletion); this view is reflected in the traditional labelling as ‘full’ vs. ‘reduced’ pronouns. In either case, weak pronouns have to be (and, in most cases, are in fact) considered as lexicalised classes with differences in their syntactic behaviour, not just as pronunciation variants;¹² there is a “grammaticalized slot” for weak pronouns (Gärtner and Steinbach 2003*a*, 265) in the Dutch pronominal system.

The *Algemene Nederlandse Spraakkunst* (ANS; Geerts et al. 1984; Haeseryn et al. 1997) gives the following detailed paradigm of full and reduced personal pronouns.

¹²Contrary to de Vries (2001), for example, who distinguishes between primary (*primaire vormen*) and secondary (*secundaire vormen*) forms of personal pronouns, stating that “[m]en noemt de primaire vorm wel ‘vol’, en de secundaire ‘gereduceed’, wat alleen maar kan betekenen dat de tweede een uitspraakvariant von de eerste zou zijn” [‘The primary form is called ‘full’ and the secondary form ‘reduced’, which can only mean that the second one would be a pronunciation variant of the first one’, J.K.] (de Vries 2001, 118).

(15) Personal pronoun paradigm of Dutch according to the ANS

	Subject full	reduced	Non-subject full	reduced
1.sg	<i>ik</i>	<i>'k</i>	<i>mij</i>	<i>me</i>
2.sg.fam.	<i>jij</i>	<i>je</i>	<i>jou</i>	<i>je</i>
2.sg.pol.	<i>u</i>	<i>u</i>	<i>u</i>	<i>u</i>
3.sg.m.	<i>hij</i>	[<i>ie, die</i>]	<i>hem</i>	<i>'m</i>
3.sg.f.	<i>zij</i>	<i>ze</i>	<i>haar</i>	<i>'r, d'r; ze</i>
3.sg.n.	—	<i>het, 't</i>	—	<i>het, 't</i>
1.pl.	<i>wij</i>	<i>we</i>	<i>ons</i>	<i>ons</i>
2.pl.fam.	<i>jullie</i>	<i>jullie</i>	<i>jullie</i>	<i>jullie</i>
2.pl.pol.	<i>u</i>	<i>u</i>	<i>u</i>	<i>u</i>
3.pl.	<i>zij</i>	<i>ze</i>	<i>hen, hun</i>	<i>ze</i>

(Geerts et al. 1984, 163, 164, 167; Haeseryn et al. 1997, 237, 239, 242)

For some pronouns we find diverging classifications in the literature, depending on which classification criteria are applied (syntactic criteria, phonological reduction); for example, when only the criterion ‘phonological reduction’ is applied, *het* is classified as full form; whenever syntactic criteria are taken into account, though, *het* is classified as weak (reduced) pronoun.

There is a gap in the weak pronoun paradigm of Dutch in the third person masculine singular: the reduced subject pronoun of 3.sg.m. *ie* (and also 3.sg.m. *die*)¹³ is a clitic rather than a weak pronoun (indicated by square brackets in (15)). It always attaches to a finite verb in second position, (16a), or to the complementiser in embedded clauses, (16b), with no intervening material possible; occurrence of *ie* in clause-initial position is illicit, (16c).

- (16) (a) *toen heeft-ie ons geholpen*
then has-he us helped
‘then he helped us’ (Dutch; Weerman 1989, 63 (121b))
- (b) *dat ie niet kan komen*
that he not can come
‘that he cannot come’
(Dutch; Cardinaletti and Starke 1996, 44 (65b))
- (c) **ie wil niet komen*
he wants not come
(Dutch; Cardinaletti and Starke 1996, 43 (63b))

We will postpone a more thorough discussion of the Dutch paradigm of weak personal pronouns to section 11.2 where (pro-)nominal inflection in German and Dutch will be discussed.

¹³In contrast to the ANS, most other sources do not include *die* into the pronoun paradigm of (standard) Dutch.

- (b) *weil unter diesen Umständen es_{weak.acc} der Peter_{nom} nicht gekauft hätte*
(German)

Rather, this section will focus on an issue which has not yet received any attention in the relevant literature. In concrete terms, it will be shown that the application of weak pronoun movement in German is not as obligatory in clauses which feature a weak pronominal object and a non-pronominal subject as has generally been assumed. Under certain conditions, weak object pronouns can stay in low positions, therefore following a non-pronominal subject. Data of this kind is not accepted by all speakers of German alike; however, the pattern seems to be available to a considerable number of speakers of German, at least of the southern (Austrian) part of the language area.

In German, the occurrence of weak pronouns in intermediate positions on the left-hand side of particles¹⁴ like *ja* or *denn* (among others) as well as sentence adverbials and frame adverbials, respectively, always yields a grammatical result. This has been considered the unmarked distribution of weak pronouns in German (cf. Haider and Rosengren 1998; Lenerz 1993, 1994, among many others).

However, under certain conditions weak pronouns can stay in their base positions within the verb phrase and, thus, follow particles like *ja* and frame adverbials (for the discussion of examples along these lines see further below). The restrictions which hold for this option are not entirely clear.

There is disagreement with regard to the grammaticality judgement of double object constructions featuring weak personal pronouns in the order ‘particle < pronoun_{nom} < pronoun_{acc} < pronoun_{dat}’.

The judgements on examples like (19) vary from ‘grammatical’ or ‘in adequate contexts acceptable’, respectively (my own intuition, also judgement of some of my informants; indicated by ‘OK’), over ‘deviant’ (indicated by ‘??’; Haider and Rosengren’s 1998 judgement) up to ‘ungrammatical’ (indicated by ‘*’; Lenerz’ 1993 judgement).

- (19) (a) *OK/??/* weil ja er ihn ihr*
because PRT he_{weak.nom} him_{weak.acc} her_{weak.dat}
vorgestellt hat
introduced has
‘because he has introduced him to her’

- (b) *OK/??/* weil ja sie es ihm*
because PRT she_{weak.nom} it_{weak.acc} him_{weak.dat}
gezeigt hat
shown has
‘because he has shown it to him’

(German; Haider and Rosengren 1998: (104b))

¹⁴Throughout the thesis, I simply call them ‘particles’ and use the abbreviation ‘PRT’ in the glosses.

(c) *OK/??/* Heute hat ja er es ihr*
 today has PRT he_{weak.nom} it_{weak.acc} her_{weak.dat}

gezeigt
 shown

‘Today he has shown it to her’

(German; Haider and Rosengren 1998: (135d))

It must be admitted, however, that even those who accept the examples in (19) (as I do) do not judge the examples in (20) as equally good. Here, the order is also ‘particle > weak pronoun(s)’ but with only one or two weak pronouns following the particle.

(20) (a) **Gestern hat ja er das Buch zurückgegeben*
 yesterday has PRT he_{weak.nom} the book_{acc} returned

(German)

(b) *??/*weil ja ihn/it keiner kennt*
 because PRT him/it_{weak.acc} no-one_{strong.nom} knows

(German)

(c) **Hat denn sie ihn gestern angerufen?*
 has PRT she_{weak.nom} him_{weak.acc} yesterday called

(German)

(d) *??weil ja ihn vielleicht jemand gewarnt*
 because PRT him_{weak.acc} probably someone_{nom} warned

hat
 has

‘because possibly someone has warned him’

(German)

It might be the case that prosodic factors somehow improve (some) speaker’s judgement of the examples in (19), including my own.

An extensive search within the online text corpora of the IDS Mannheim¹⁵ brought up only a handful of examples with an unambiguously weak pronoun immediately preceded by a particle like *ja*; some of these examples are repeated in (21)-(23).

This data does not sound very natural to me so I added ‘(??)’ to the examples in (21)-(23). This should reflect my own judgement and was not given in the IDS sources.

Besides these examples, the corpora contains a considerable number of examples with pronouns immediately following the particle where it is not clear

¹⁵Online search within the public text corpora of the Institut für Deutsche Sprache (IDS), Mannheim/Germany with the help of COSMAS II; see <http://www.ids-mannheim.de/cosmas2>.

For copyright reasons, only parts of the archived corpora is accessible for public search.

whether the pronoun has weak or strong status, i.e. whether or not it is intended to carry (focus) stress. (22a)-(22c) are such cases where it cannot be completely excluded that the personal pronoun is stressed, although the unstressed variant seems much more plausible in these contexts.

In addition, there is a number of examples where it is not clear whether or not a particle (e.g. *eben*, *einfach*, etc.) carries out the function of a modal particle ('Abtönungspartikel' in German) in that case; examples of this kind have been put aside.

The example in (21a) contains the indefinite subject pronoun *man* 'one, you' preceded by the particle *ja* rather than a weak personal pronoun. Nevertheless it is taken into account here because *man* has clearly weak status in German and usually speakers' judgements regarding its distribution are even sharper with indefinite *man* than they are with weak personal pronouns. In (21b,c), *es* immediately follows the particle *ja*; however, it is not a referential weak object pronoun in these examples.

- (21) (a) (?)“(*Es wäre aber trotzdem eine Ehre für mich, einmal wie der begnadete Franzose Henri Leconte in die Geschichte einzugehen.*) *Ihm sagte ja man nach, daß er die vielleicht beste Hand im Welttennis gehabt hat, ...*”
 (it would-be but nevertheless an honour for me one-day like the highly-gifted Frenchman Henri Leconte into the history enter) him said PRT one_{weak.indef}
 had

‘(Nevertheless, however, it would be an honour for me to go down in the annals of history one day like the highly gifted Frenchman Henri Leconte.) It was attributed to him that he had perhaps the best hand in the world’s tennis circus ... ’

(German; Oberösterreichische Nachrichten, 1997, May 22nd)

- (b) (??)*Und hier geht ja es kaum darum, christliche Glaubensinhalte zu feiern*
 and here goes PRT it_{weak} hardly round-it
 Christian faith-contents to celebrate

‘And here the thing is hardly to celebrate Christian contents of faith’ (German; Züricher Tagesanzeiger, 2000, April 20th)

- (c) (??)*Auf das richtige Maß kommt eben es an*
 on the correct extent comes PRT it_{weak} on

‘It depends on the appropriate measure’

(German; Berliner Morgenpost, 1999, June 13th)

- (22) (a) (??)“(Der Markt ist doch gut so, wie er jetzt ist.)
the market is PRT good like-that as he now is
Längere Verkaufszeiten halt’ eigentlich ich für
longer sales-times hold PRT I_{weak(?)} for
unnötig...”
unnecessary
‘(The market is good as it is now.) Longer opening hours are not
necessary I think’ (German; Mannheimer Morgen, 1996, April 3rd)
- (b) (??)*Ich kenne einen, der sogar sein Leben hingab, um*
I know someone who even his life sacrificed for
einfach uns zu lieben: der wahre Gott und Mensch
PRT us_{weak(?)} to love: the true god and man
Jesus Christus
Jesus Christ
‘I know someone who even sacrificed his life to love us: the true
God and man Jesus Christ’
(German; Neue Kronen-Zeitung, 1994, July 3rd)

Data with a weak pronoun immediately following a frame adverbial sounds much more natural. (23) was brought up by corpus search.

- (23) (OK) “*Ich bezweifle, daß unter diesen Umständen*
I doubt that under these circumstances_{frameadv}
es die Briten sind, die Bedingungen stellen können”,
it_{weak} the British are who conditions place can,
so Molterer
so Molterer
‘Molterer said: “I doubt that it is the British who can place
conditions under these circumstances” ’
(German; Tiroler Tageszeitung, 1996, April 30th)

It is interesting to note in the present connection that most of these examples originate from interviews or colloquial style commentaries in Austrian newspapers (or, at least, newspapers from the southern parts of the German language area); this suggests that regional factors (regional variants of Standard German) as well as the modality (spoken vs. written language use) and the register (colloquial vs. formal) might play a role.

This could also shade a light onto the different degrees of markedness found in the evaluations of the examples in (19): Lenerz who assigned “*” to the examples in (19) is not a speaker of a southern variant of German whereas I am (my evaluation has been that the examples in (19) are acceptable in adequate contexts). However, Haider and Rosengren’s evaluation of the examples in (19) as deviant (“??”) suggests that this distinction along the lines of regional and register factors – if existent at all – is by no means sharp (Haider is a speaker

of a southern variety of German).

The occurrence of weak pronouns on the right-hand side of particles is undoubtedly possible if the particle and weak pronouns occur non-adjacent; for example, when they are separated by an intervening non-pronominal subject, (24a), a strong pronoun, (24b,c), or a frame adverbial, (24d).

- (24) (a) *weil ja seine Schwester es ihm gezeigt*
 because PRT his sister_{nom} it_{weak.acc} him_{weak.dat} shown
hat
 has
 ‘because his sister has shown it to him’
 (German; Haider and Rosengren 1998: (105))
- (b) *weil ja nur sie es ihm gezeigt*
 because PRT only she_{strong.nom} it_{weak.acc} him_{weak.dat} shown
hat
 has
 ‘because only she has shown it to him’ (German)
- (c) *weil ja keiner es/ihn kennt*
 because PRT no-one_{strong.nom} it/him_{weak.acc} knows
 ‘because no-one knows it/him’ (German)
- (d) *weil ja in diesem Fall sie es ihm*
 because PRT in this case she_{weak.nom} it_{weak.acc} him_{weak.dat}
nicht gezeigt hätte
 not shown had
 ‘because she would not have shown it to him in this case’
 (German; Haider and Rosengren 1998: (105b))

The arguments must be analysed as verb phrase internal here if one accepts the standard view that the particle is an indicator of the left edge¹⁶ of the verb projection.

The data in (25) shows that not all kinds of adverbials, but only frame adverbials (and also sentence adverbials) can precede weak pronouns in German. This has often been ignored in the relevant literature (cf., e.g., Lenerz 1993).

- (25) (a) *dass (ja) unter diesen Umständen sich/sie*
 that PRT under these circumstances_{frameadv} REFL/her_{obj.weak}
(ja) Max (ja) verstecken hätte müssen
 PRT Max_{subj} PRT hide had must
 ‘that under these circumstances Max would have had to hide
 himself/her’
 (German; modified from Haider and Rosengren 1998: (106a))

¹⁶Here, the term ‘edge’ is used only as a descriptive notion without any theoretical implications.

- (b) *dass (ja) in vielen Fällen sich/sie (ja)*
 that PRT in many cases_{frameadv} REFL/her_{obj.weak} PRT
Max (ja) nicht rechtzeitig informiert hat
 Max_{subj} PRT not in-time informed has
 ‘that Max repeatedly did not inform himself/her in time’
 (German; modified Haider and Rosengren 1998: (106b))
- (c) *??dass (ja) hier sich/sie (ja) niemand*
 that PRT here_{localadv} REFL/her_{obj.weak} PRT nobody_{subj}
(ja) verstecken musste
 PRT hide had-to
 ‘that nobody had to hide himself/her here’
 (German; modified from Haider and Rosengren 1998: (106c))
- (d) *??dass (ja) gestern sich/sie (ja) niemand*
 that PRT yesterday REFL/her_{obj.weak} PRT nobody_{subj}
(ja) rechtzeitig informiert hat
 PRT in-time informed has
 ‘that nobody informed himself/her in time yesterday’
 (German; modified from Haider and Rosengren 1998: (106d))
- (d’) *??dass (ja) gestern niemand_{subj} (ja) sich/sie_{obj.weak} (ja) rechtzeitig*
informiert hat (German)

Many researchers have taken clauses featuring temporal adverbs like *gestern* ‘yesterday’, cf. (25d,d’), as evidence that weak pronouns are always obligatorily displaced in German and cannot stay in the verb phrase (often based on the assumption that all types of adverbials are merged in verb phrase external positions).

If there is no frame adverbial, the only fully acceptable positioning of weak object pronouns within the verb phrase is following a non-pronominal subject. Serialisations with a scrambled non-pronominal object as intervening constituent are deviant, (26).

- (26) (a) *?Heute hat ja [das Buch] ihr der PEter*
 today has PRT the book_{acc.scr} her_{weak.dat} the PEter_{nom}
gezeigt
 shown
 ‘Today Peter has shown the book to her’
 (German; modified from Haider and Rosengren 1998: (136f))
- (b) *?Heute hat ja [der Mutter] es der PEter*
 today has PRT the mother_{dat.scr} it_{weak.acc} der PEter_{nom}
gezeigt
 shown
 ‘Today Peter has shown it to the mother’
 (German; modified from Haider and Rosengren 1998: (136g))

If both objects are represented by weak pronouns, the only fully acceptable order of the weak pronominal objects is ‘DO_{acc} < IO_{dat}’. Compare (27a) to (27b).

- (27) (a) *Heute hat ja der Peter es ihr gezeigt*
 today has PRT the Peter_{nom} es_{weak.acc} her_{weak.dat} shown
 ‘Today Peter has shown it to her’ (German)
- (b) ??*Heute hat ja der Peter_{nom} ihr_{weak.dat} es_{weak.acc} gezeigt* (German)

The same ordering of weak pronominal direct object and weak pronominal indirect object with respect to each other is also found when the weak object pronouns are moved across the subject. In (28), both weak object pronouns have undergone weak pronoun movement. (28a) is the unmarked ordering, whereas the ordering in (28b) is deviant.

- (28) (a) *Heute hat es ihr ja der Peter gezeigt*
 today has PRT es_{weak.acc} her_{weak.dat} der Peter_{nom} shown
 ‘Today Peter has shown it to her’ (German)
- (b) ??*Heute hat ihr_{weak.dat} es_{weak.acc} ja der Peter_{nom} gezeigt* (German)

If all arguments are realised as weak pronouns, the only fully acceptable (unmarked) ordering is ‘nominative < accusative < dative’.¹⁷ Interestingly, the order restriction ‘nom < acc < dat’ for weak pronouns holds across verbs with different base orders. This is illustrated in (29)–(30); the (a) examples show the base order of arguments. (29) contains the dative-accusative verb *zeigen* ‘to show’ while the examples in (30) feature the verb *aussetzen* ‘to expose’ which has the inverse base order of arguments (accusative-dative); however, with weak pronominal arguments the unmarked ordering is ‘nom < acc < dat’ in both cases.

- (29) (a) *weil die Maria dem Peter das Buch gezeigt hat*
 because the Maria_{nom} the Peter_{dat} the book_{acc} showed has
 ‘because Maria showed Peter the book’ (German)

¹⁷Pronominal PPs like *an ihn* ‘to him’ are not subject to weak pronoun movement; they typically follow a particle like *ja* as in (i).

- (i) *weil er_{weak.nom} es_{weak.acc} ja [an ihn] gesendet hat* (German)
 ‘because he sent it to him’
- (ii) ??/**weil er es [an ihn] ja gesendet hat* (German)

Like any other PP in German they can be scrambled, however, (iii).

- (iii) *weil [an ihn]_{scr} ja Peter das Buch gesendet hat* (German)
 ‘because Peter sent the book to him’

- (b) *weil (ja) (unter diesen Umständen) sie es*
 because PRT under these circumstances she_{weak.nom} it_{weak.acc}
ihm (ja) gezeigt hat
 him_{weak.dat} PRT showed has
 ‘because she showed it to him under these circumstances’
 (German)
- (c) **weil (ja) (unter diesen Umständen) sie_{weak.nom} ihm_{weak.dat}*
es_{weak.acc} (ja) gezeigt hat (German)
- (30) (a) *weil der Peter seinen Sohn der Gefahr ausgesetzt*
 because the Peter_{nom} his son_{acc} the danger_{dat} exposed
hat
 has
 ‘because Peter exposed his son to the danger’ (German)
- (b) *weil (ja) (unter diesen Umständen) er ihn*
 because PRT under these circumstances he_{weak.nom} him_{weak.acc}
ih_r (ja) ausgesetzt hat
 her_{weak.dat} PRT exposed has
 ‘because he exposed him to it’ (German)
- (c) ??*weil (ja) (unter diesen Umständen) er_{weak.nom} ih_r_{weak.dat}*
ihn_{weak.acc} (ja) ausgesetzt hat (German)

It is not clear what the order restriction with respect to case which is generally attested with weak pronouns must be attributed to. It is important to note, however, that it cannot be a result of (restrictions on) weak pronoun movement because it also occurs when the weak pronouns surface in low positions of the clause as in (27a) and in (29) as well as in (30) where the weak pronouns follow the particle and the adverbial. We leave this issue open for future research. The positioning of weak pronouns with respect to each other will not be a topic of discussion in the remainder of this thesis. Rather, the discussion will concentrate on the syntactic structure of German and Dutch and its interaction with the positioning of weak object pronouns with respect to non-pronominal DP subjects in the two languages.

From the distributional facts discussed in this section we conclude that the pronoun movement operation is not an operation which is induced by ‘syntactic necessities’ (like syntactic feature checking); rather, the distribution of weak (object) pronouns is (to a considerable degree, at least) controlled by conditions of the syntax-pragmatic interface. Various approaches along these lines have been proposed in the relevant literature.¹⁸ If weak pronoun movement

¹⁸For example, Gärtner and Steinbach (2003a) believe that the conditions which control the positioning of weak pronouns and lead to the general ‘pronoun_{weak} < non-pronominal arguments’ pattern belong to the syntax-discourse interface; they state:

Zooming in on the ‘microdistribution’ of RPs [= ‘reduced pronouns’, i.e. weak

were triggered by a purely syntactic need like, for example, case ‘assignment’ we would expect it to be obligatory in the language.

Formally, this will be captured by the assumption that movement of weak pronouns is essentially an undriven (i.e., not feature-driven), freely available operation in the syntax which, however, needs to be evaluated at later stages of the derivation (the phase level). In the minimalist framework, the phase level is the stage where parts of the derivation are handed over to the interfaces and interface conditions come into play. The details of our approach will be discussed in chapters 8 to 10.

3.4.2 The distribution of weak object pronouns with respect to non-pronominal subjects in Dutch

In Dutch, the existence of weak pronoun movement is less obvious than it is in German where the unmarked positioning of weak object pronouns is to the left of particles like *ja* and non-pronominal subjects. Consider the positioning of the weak object pronoun *'r* ‘her’ in the transitive clauses in (31).

- (31) (a) **dat Jan gisteren 'r gekust heeft* (Dutch)
 that Jan_{subj} yesterday her_{obj} kissed has
 smallskip
- (b) *dat Jan 'r gisteren gekust heeft* (Dutch)
 that Jan_{subj} her_{obj} yesterday kissed has
 smallskip
- (c) **dat 'r Jan gisteren gekust heeft*
 that her_{obj} Jan_{subj} yesterday kissed has
 ‘that Jan kissed her yesterday’
 (Dutch; Cardinaletti 1999: 52 (55a-c))

The only acceptable ordering of the non-pronominal subject, the weak pronominal object and the adverbial *gisteren* is ‘subject < object_{weak} < *gisteren*’, (31b). The weak object pronoun cannot precede the subject, (31c); however, this is the unmarked ordering pattern with weak pronouns in German, (32).

pronouns; J.K.], we observe that they follow a number of additional constraints. Globally, RPs have a leftward tendency in the MF [= midfield; J.K.]. the well-known word order principles in [(i)] already warrant that.

- (i) a. Thematic (or backgrounded) elements precede rhematic (or focused) ones
 b. Definite items precede indefinite ones
 c. ‘Heavy’ elements follow ‘light’ ones
 (Gärtner and Steinbach 2003a, 289)

- (32) *dass sie der Jan gestern geküsst hat*
 that her_{obj} Jan_{subj} yesterday kissed has
 ‘that Jan kissed her yesterday’ (German)

In double object construction we find a similar pattern in Dutch and weak object pronouns follow the subject in Dutch, (33).

- (33) (a) *??/*dat Jan gisteren 't 'r gegeven heeft*
 that Jan_{subj} yesterday it_{DO} her_{IO} given has
 (Dutch; Zwart 1993b: (47a))¹⁹

- (b) *dat Jan 't 'r gisteren gegeven heeft*
 that Jan_{subj} it_{DO} her_{IO} yesterday given has
 (Dutch; Zwart 1993b: (47b))

- (c) **dat 't 'r Jan gisteren gegeven heeft*
 that it_{DO} her_{IO} Jan_{subj} yesterday given has
 ‘that Jan gave it to her yesterday’ (Dutch)

The source of the ungrammaticality of the (a) and (c) examples cannot be an illicit ordering of the weak object pronouns with respect to each other because we find the same ordering of object pronouns also in (33b) which is grammatical.²⁰

¹⁹Zwart (1993b) marks this clause with ‘??’, but calls it ungrammatical.

²⁰With respect to the ordering of weak pronouns with respect to each other we find the same ordering pattern in Dutch as observed in German: ‘subject < direct object < indirect object’. This ordering of the weak pronominal objects is remarkable because of the Dutch prohibition against scrambling a direct object in front of the indirect object, compare (33b) to (ii).

- (i) *dat Jan_{subj} de jongen_{IO} het/een boek_{DO} gegeven heeft* (Dutch)
 ‘that Jan gave the/a book to the boys’

- (ii) **dat Jan_{subj} het/een boek_{DO.scr} de jongen_{IO} gegeven heeft* (Dutch)

Haider and Rosengren (1998, 71-72) take the Dutch pronoun data as evidence against the assumption of a case driven underlying order (as proposed by Müller, p.c.), an issue that would be hard to settle with German data: the invariant pronoun order in German could be identified with an invariant case-driven underlying order (nom < acc < dat) for DPs in general and the verb-dependent serialisations found with non-pronominal DPs and strong pronouns could be taken as scrambling variants. The Dutch data makes this hypothesis implausible, however: Just as in German, a weak pronominal direct object precedes a weak pronominal indirect object. For non-pronominal objects in Dutch, the inverse order is required. If the order found with weak pronouns were the typical order for DPs in general, non-pronominal objects and strong pronouns would have to be taken to be obligatorily scrambled into the inverse order. However, there is neither a trigger nor positive evidence for this kind of scrambling in Dutch (cf. Haider and Rosengren 1998, 71-72).

Note, however, that it has been reported in the relevant literature that an ‘IO_{weak.pron} < DO_{weak.pron}’ ordering of weak object pronouns is not completely excluded, but only marked in Dutch (see Gärtner and Steinbach 2003a; Zwart 1993a, 1996, 1997, among others). Laenzlinger (1998) is the only paper of which I’m aware which does not mention any preference for the ‘DO_{weak.pron} < IO_{weak.pron}’ ordering pattern with weak pronouns in Dutch; rather, he judges both orderings as equally natural.)

In general, weak object pronouns cannot precede a transitive subject in clause internal position in Dutch, (34).

- (34) (a) *dat Jan het weet* (Dutch)
 dat Jan_{subj} it_{obj.weak} knows
 smallskip
 (b) **dat het Jan weet*
 that it_{obj.weak} Jan_{subj} know
 ‘that Jan knows it’ (Dutch)

When we find a weak object pronoun preceding a subject in Dutch, it is the subject of a non-transitive verb, i.e., the subject of an unaccusative verb, (35a, b), or the subject of a passivised verb, (36a). Alternatively, the inverse order of non-transitive subject and weak pronoun (subject > weak pronoun) is possible in these cases, (35a’, b’) and (36a’), irrespective of whether the subject is definite/specific or indefinite/unspecific.

- (35) (a) *dat ’m rampen overkwamen* (Dutch)
 that him_{obj.weak} calamities_{subj} happened_{unacc}
 smallskip
 (a’) *dat rampen ’m overkwamen*
 that calamities_{subj} him_{obj.weak} happened_{unacc}
 ‘that calamities happened to him’ (Dutch)
 smallskip
 (b) *dat ’m deze ramp weer overkwam*
 that him_{obj.weak} this calamity_{subj.def} again happened_{unacc}
 (Dutch) smallskip
 (b’) *dat deze ramp ’m weer overkwam*
 that this calamity_{subj.def} him_{obj.weak} again happened_{unacc}
 ‘that this calamity happened to him again’ (Dutch)
- (36) (a) *dat ’m het boek/een boek gegeven*
 that him_{obj.weak} the book/a book_{subj.def./-indef.} given
worden_{pass} (Dutch)
was_{pass}
 smallskip
 (b) *dat het boek/een boek ’m gegeven*
 that the book/a book_{subj.def./-indef.} him_{obj.weak} given
worden_{pass}
was_{pass}
 ‘that the book/a book was given to him’ (Dutch)

It is important to note, however, that in these constructions even a strong object pronoun like *hem* or a non-pronominal DP object like *Jan* can precede the subject, (37), (38).

- (37) (a) *dat hem_{obj.strong}/Jan_{obj} rampen_{subj} overkwamen_{unacc}* (Dutch)
 (a') *dat rampen hem/Jan overkwamen*
 (b) *dat hem/Jan deze ramp weer overkwam*
 (b') *dat deze ramp hem/Jan weer overkwam*
- (38) (a) *dat hem_{obj.strong}/Jan_{obj} het boek/een boek_{subj} gegeven worden_{pass}*
 (b) *dat het boek/een boek hem/Jan gegeven worden_{pass}* (Dutch)

Haider (1993) suggests that this data points to the existence of a specific intermediate position for transitive subjects in Dutch. Under this assumption, the subjects of the unaccusative and passivised verb in (37a, b) and (38a) surface in their base positions inside the verb phrase while they occupy the intermediate subject position in (37a', b') and (38a'). Transitive subjects, on the other hand, are obligatorily moved to a dedicated intermediate subject position in Dutch.

We will suggest a similar solution in later chapters of this thesis.

In summary, one can say that from analysing the ordering of weak object pronouns with respect to non-pronominal subjects in Dutch we do not gain any clear indication with respect to the question of whether weak pronoun movement has taken place.²¹ In transitive clauses in Dutch, weak object pronouns do not precede the subject argument; this ordering corresponds to the base ordering of subject and object inside the verb phrase. In unaccusative and passivised clauses, the subject follows the object in the base ordering inside the verb phrase. With weak object pronouns we find two ordering patterns of subject and weak pronominal object: they can either precede the subject (= base ordering of arguments) or the subject precedes the object in clauses of this type; the latter ordering, however, could be explained without recurring to weak pronoun movement (movement of the subject to a higher clause-internal position).

If we also take into account, however, that the class of weak pronouns shows similar syntactic behaviour across languages and that weak pronouns in German ('weak pronoun movement') as well as in the Scandinavian languages ('(pronominal) Object Shift') can be shown to be displaced under appropriate conditions, we will have to take it as the null hypothesis that weak pronoun movement does also apply in Dutch.

The existence of weak pronoun movement in Dutch has been assumed by many researchers (e.g., Cardinaletti 1999; Haider and Rosengren 1998; Jaspers 1989; Zwart 1993a, 1997, among many others), and we will follow this course.

Later on in this thesis, we will present empirical evidence which supports the

²¹The decision would be clear only if one is willing to assume that the relative ordering of weak pronouns with respect to adverbials like *gisteren* 'yesterday' is a reliable indication; we do not believe, however, that adverbials occupy functional positions outside the verb phrase in OV languages, so that elements which precede an adverbial must be analysed as verb phrase-external.

conclusion that weak object pronouns in Dutch move to a position which precedes the base position of the subject of transitive clauses like they do in German as we have seen in section 3.4.1.

4 Some notes on previous accounts for weak pronoun movement

Various accounts on weak pronoun movement and ‘Holmberg’s Generalisation’ in the Germanic languages have been brought forward in the relevant literature, within various frameworks and based on different assumptions with regard to the nature of the underlying mechanism(s).

The research on the distribution of weak pronouns is characterised by a wealth of different positions. Some of them have already been mentioned in the previous chapter. As far as German is concerned, we find these main types of analyses: Weak pronoun movement has been subsumed under the general scrambling property of German or weak pronouns have been treated on a par with clitics (for references see the first page of section 3). Besides approaches along these lines, we find mainly semantic approaches (like Yoshida 1999) and approaches which connect the distribution of weak pronouns to discourse pragmatics or information structure (cf. Abraham 1991; Haider and Rosengren 1998, among others).

The approaches to weak pronoun movement can also be divided according to another criterion, namely what type of landing position is assumed (movement to the specifier position of a functional projection or adjunction to the verb phrase, for example).

However, we will not go into the details of different approaches to weak pronoun movement as found in the relevant literature because our perspective in this thesis is a different one: We are not concerned with the question of what motivates (‘triggers’) the movement of weak object pronouns but rather our focus of interest lies on the structural conditions which limit the available word order patterns in German versus Dutch.

Throughout the thesis, we will argue that the empirical differences which we can observe with weak object pronouns in German (‘object_{pron.weak} < subject’ is generally available) and Dutch (typically ‘subject < object_{pron.weak}) are symptomatic of a more basic, general difference in the organisation of the syntactic structure of the two languages.

With respect to the motivation of weak pronoun movement, we assume, following Abraham (1991); Bobaljik (1995); Diesing (1996); Haider and Rosengren (1998, among others), that the movement of weak pronouns is motivated (at least to a large extent) by interpretative (information-structure, etc.) factors. This is not to claim, however, that there is a semantic, pragmatic or information-structure related trigger that would force weak pronouns to undergo weak pronoun movement.

In the next section, we will discuss Bobaljik’s (1995) ‘adjacency approach’ to weak pronoun movement. However, our interest is not so much on this approach in its own right but rather it is due to the fact that Bobaljik makes specific assumptions about the functional architecture of the Germanic lan-

guages.

4.1 The adjacency approach: Bobaljik (1995)

Bobaljik (1995) presents a unifying account of weak pronoun movement in Germanic OV and VO languages which has been influential in the discussion of the status of Germanic OV languages in syntactic theory. More important for our present concerns, however, is the fact that it leads the discussion into a direction which will be relevant throughout this thesis: namely, the issue whether OV languages like German and Dutch feature intermediate functional projections and whether these functional projections are head-initial or head-final.

Although it is an interesting and influential approach, we will not follow Bobaljik's (1995) adjacency approach for various reasons neither as far as its analysis of pronoun movement is concerned nor with respect to the syntactic structure it adopts. The reasons will become clear in the course of the discussion.

In the Scandinavian languages, the distribution of weak object pronouns is described by a movement operation, which is generally called 'Object Shift'. Object Shift moves a weak object pronoun across the negation; consider the data in (39a,b).

- (39) (a) *Nemandinn las hana_i ekki e_i*
student-the read it_{pron.weak} not
'The Student didn't read it' (Icelandic, Thráinsson 2001, (3a))
- (b) *Varför läste studenterna den_i inte e_i*
why read students-the it_{pron.weak} not
'Why didn't the students read it?'
(Swedish, Thráinsson 2001, (12a))
- (c) **Varför har studenterna den_i inte [läst e_i]*
why have students-the it_{pron.weak} not read
(Swedish, Thráinsson 2001, (12b))

It is important to note that the pronoun movement operation (Object Shift) in the Scandinavian languages is contingent upon the displacement of the pre-pronominal, verb phrase internal material. In most cases, this concerns movement of the verb into a higher functional position, a condition described by 'Holmberg's Generalization'.²² If the verb stays in its verb phrase internal base

²²The interplay of verb movement and Object Shift is referred to as 'Holmberg's Generalization' in some of the literature. In Holmberg (1986), the generalisation was referred to as 'the phonetic adjacency condition' on Object Shift because the object has to be 'phonologically adjacent' to the adjuncts around which it is shifted. It is important to note that it is not just an unmoved verb, but any 'phonologically visible' verb phrase internal element preceding the object which blocks Object Shift in the Scandinavian languages.

position, as in (39c), Object Shift cannot apply in the Scandinavian languages.

Bobaljik (1995) offers an account of Holmberg's Generalisation which relies on a notion of morphological adjacency between the verb and inflectional morphology. It is put forth in a stacking model of clause structure (as introduced by Koizumi 1993, 1995; Travis 1992)²³, assuming a copy theory of movement as well as a version of Distributed Morphology (cf. Halle and Marantz 1993; Noyer 1992). It is a main assumption of Distributed Morphology that verb stems and inflectional affixes are generated independently in the syntax, under different head nodes, and have to combine throughout the derivation through a process of *morphological merger* (Marantz 1984) which ensures that the affix is realised phonetically on a stem which it is adjacent to.

Object shift, which in Bobaljik's use of the term covers both movement of pronominal as well as non-pronominal DPs in both VO and OV languages, is analysed as movement to a functional specifier position to the left of the verb phrase, targetting Spec,AgrOP in the case of non-pronominal objects and the specifier position of some higher intermediate functional projection in the case of weak pronouns.

The idea is that the syntactic movement operation is always applied to check features (semantic/information-structure features in the case of weak pronouns: old information or topicality, respectively; for further approaches assuming a semantic trigger for the movement of weak pronouns see, for example, de Hoop 1992; Haider and Rosengren 1998, among others), but its results are not visible when the required adjacency relation would be disrupted. In this case, the lower copy is pronounced.

In the Germanic VO languages, overt shift of an object to the specifier of an intermediate functional projection (i.e. pronunciation of the higher copy) would disrupt the adjacency relation between the verb stem and inflectional affix, if the verb has not raised to the head position hosting the affix in the syntax (only adverbs, or perhaps more generally adjuncts, like the sentence negation can intervene without disrupting the adjacency relation). In that case, the lower copy is pronounced.

In OV languages, such a situation never occurs under Bobaljik's assumption which says that both VO as well as OV languages own intermediate functional projections where the inflectional affix and the participle affix are derived and under the additional assumption that these functional projections are in fact to the right in the Germanic OV languages. It follows that leftward movement of the object (i.e. pronunciation of the higher copy of the object) will not disrupt the adjacency relation between the functional I head (where inflectional morphology is generated) or the Pred head (where auxiliaries are generated) and the verb stem – irrespective of whether or not the latter has overtly been rising in the syntax since the heads are string-adjacent on the right periphery of the clause.

Thus, for languages with underlying OV order Bobaljik's (1995) approach –

²³This model detects the derived position of the object below the base position of the subject.

correctly – predicts the absence of the effects of Holmberg’s Generalisation.

On the other hand, however, this kind of approach faces some serious problems as far as the Germanic OV languages are concerned. The most serious one is the following: Bobaljik’s approach relies on the premise that there exist intermediate functional head positions to the right of the verbal projection in German and Dutch.

The general objections to the assumption of right-headed functional projections (FPs), however, are quite strong and have been recognised by a number of syntacticians (cf. e.g., Haider 1997*c*; Kayne 1994; Sells 1995, among others; but see e.g. Vikner 1995 for work assuming the existence of right-headed intermediate functional projections in the Germanic OV languages).

4.1.1 Excursus: (Theoretical) objections against head-final functional projections

There is a high degree of consensus that head-final F-projections are non-existent for general reasons. However, various proposals have been brought forward regarding where this can be derived from (cf., e.g., Haider’s *Branching Constraint*, Haider 1992/2000*a* and subsequent work; Kayne’s *Linear Correspondence Axiom*, Kayne 1994 and the literature based on it, which rules out right-headed XPs in general). In this section, we will not enter into a thorough discussion of these approaches but rather will only mention the main ideas of Haider’s and Kayne’s theories. Furthermore, we will refer to Sells’ (1995) objections to head-final functional projections based on Japanese and Korean without discussing them in details, however.

Haider derives the non-existence of head-final functional projections from his *Branching Constraint (BC)*, originally formulated as *Branching Conjecture (BC)* in Haider (1992/2000*a*)²⁴. This constraint on the organisation of syntactic structure reappears in Haider’s work with alternating names (*Branching Constraint (BC)*, *Basic Branching Conjecture (BBC)*, *Basic Branching Condition (BBC)*), each time defined in a slightly different way;²⁵ in more recent

²⁴Haider (1992/2000*a*, 147):

Branching Conjecture (BC): For any two nodes directly attached to the same (extended) projection line, the node that precedes *c*-commands the node that follows.)

²⁵In Haider (2000*b*, 47), for example, it is formulated like this:

Branching Constraint (BC): Projection-internal branching nodes on the (extended) projection line *follow* their sister node.

The formulation in Haider (1993, 28) is:

Basic Branching Conjecture (BBC): Basisprojektionen sind rechtsrekursiv.
[= basic projections are right recursive, J.K.]

In Haider (1997*c*, 20), it is formulated like this:

Branching constraint (BC): The (extended) projection line is left associative:

work the relevant condition is called ‘*asymmetric merger*’, Haider (2004, 2005, 2008a,b, 2009).²⁶ Despite this variety of labels and definitions, the core of the restriction remains unchanged: The *Branching Constraint* (*BC*; or *asymmetric merger*, respectively) is a universal restriction on the branching of the main projection line with respect to the placing of projected positions: they are projected on the left-hand side of the projection line because the BC only allows right-branching structures. The BC (or *asymmetric merger*) is intended to describe a primitive property of the language faculty (that is, Universal Grammar (UG)) by characterising the structural property of data structures that are conform with UG.

To keep the discussion short, Haider’s argumentation proceeds along the following lines: If a functional head position is targeted by a moved lexical head, the functional projection becomes the functionally extended projection of the projection of the lexical head and the BC applies. Since the BC requires the branching node preceding instead of following, head-final functional projections are ruled out. The same reasoning applies to right-adjunction and head-final specifiers: any kind of movement to the right as well as base-generated adjunction to the right is ruled out. Head-final lexical projections, in contrast, are allowed; the branching restriction is independent of the order of head and complement. For a detailed argumentation see Haider’s work (especially Haider 1992/2000a, 1993, 1997c, 2000b, 2004, 2009).

According to Kayne’s (1994) LCA-approach, on the other hand, right-headed projections are non-existent, even with lexical projections (Kayne 1994, 47: UG unfailingly imposes S[pecifier]-H[ead]-C[omplement] order; all languages have S-H-C order); this follows from his formulation of the *Linear Correspondence Axiom (LCA)*²⁷. There is no directionality parameter in Kayne’s approach, all languages are assumed to have a universal SVO basis. In Kayne’s system, all word orders in which some complement precedes the associated head are derived by the application of movement operations, in more concrete terms: by movement of the complement leftward past the head into some

*...[X [Y ----]----]... [if X,Y are nodes on the same (extended) projection line].

²⁶Haider (2009, ch. 1):

[T]he structural build-up (‘merger’) of phrases is asymmetric. It is universally right branching: If a phrase α is merged to a phrase β , the resulting structure is [β^n α β].

(with ‘merge α with β ’ =_{def.} combine α with β into a phrase structure [γ α β], where γ is a projection of either α or β .)

²⁷*Linear Correspondence Axiom* (Kayne 1994, 6): $d(A)$ is a linear ordering of T . Compare Rohrbacher’s (1994) formulation of Kayne’s LCA:

Linear Correspondence Axiom:

Let P be a phrase marker, T the set of P ’s terminals and A the maximal set of ordered pairs $\{<X,Y>\}$ such that X and Y are non-terminals in P and X asymmetrically c-commands Y . Then $d(A)$ is a linear ordering of T .

(functional) specifier position.

Since our approach as described in this thesis is not based on Kayne's LCA approach, we will not go any deeper into the details here (see Chametzky 2000; Kayne 1994; Rohrbacher 1994; Schallert 2006, a.o., for discussion).

Sells' (1995) objections to the assumption of head-final functional projections come from different sources. He argues against the existence of a cascade of clause-final functional head positions in Korean and Japanese.²⁸

Both Japanese and Korean are radical OV languages. Therefore, an issue becomes evident which does not arise in a discussion that centers around the Germanic languages, namely the question of how to handle the topmost functional (C) domain of the clause.

In all the Germanic languages, including the OV ones, the functional C layer is left-headed. That is, the C position precedes its complement so that the complementiser as well as the finite verb in 'V2-contexts' in the Continental West Germanic and North Germanic languages occur in the 'beginning' of the clause and not in the 'end', as one would expect for consistently right-headed languages. The assumption of a split CP approach would not change the situation essentially.

In Japanese and Korean, on the other hand, the counterparts of Germanic complementisers surface at the end of the clause – a fact that might suggest a head-final C projection. (40) illustrates an example of the verbal part of a Korean sentence, repeated from Sells (1995).

- (40) *ilk -usi -i anh -ass -ta -ko*
read -HON -COMP1 NEG -PAST -DECL -COMP4
'that (someone_{honorific}) did not read' (Korean, Sells 1995, 290 (25))

On the basis of Japanese and Korean data, Sells (1995) does not only argue against the postulation of intermediate head-final functional projections, but he also questions the existence of the functional category C, which would have to be postulated as a head-final functional projection, in the two languages.²⁹ Sells' (1995) proposal will not be of any importance for the reasoning in this

²⁸He raises objections of the following kinds: (i) problems of providing consistent underlying structures: doubly marked information, e.g. double marking of subjects with honorific marker (lowest) and nominative marker (highest), (ii) problems of selection: missed generalisations in categorisation because there is no consistent hierarchy of functional projections based on the selection relations between verbal morphological categories, and (iii) a paradox of selection: evidence regarding the point at which selection applies would be paradoxical as far as the situation before and after movement to the functional head positions are concerned, e.g. the tensed final verb selects the form of the preceding verb but some other affix may or may not intervene.

²⁹Instead, Sells (1995) proposes an analysis of syntactic formation in terms of his notion of *combinatoric type*. In essence, he proposes a view of morphology and its projection into syntax which is based on the principle of lexical integrity (which states that inflectional affixes are all attached in the lexicon) and the idea of unification of information. This lexical theory does not get back to the ideas that inflectional elements are instantiations of head positions of functional projections nor that words are derived by movement (contrary to Bobaljik 1995 who assumes a version of Distributed Morphology).

thesis or the analysis which will be described later on. Therefore, it will not be discussed in any more depth here.

This excursus was intended to highlight the fact that the conceptual objections to the assumption of right-headed functional projections come from different sources and different languages and that they are quite strong. Therefore, they should be taken seriously.

Let us now come back to the discussion of Bobaljik’s (1995) adjacency approach.

4.1.2 Back to Bobaljik’s (1995) adjacency approach

Bobaljik’s (1995) account runs into serious problems if we change his premise into ‘F-head to the left of the verbal projection’ for all languages. The reason for this lies in the fact that morphological adjacency between a VP³⁰-final verb and an inflectional affix in the head position of a higher head-initial functional projection would only be achieved in OV languages like German and Dutch if all non-verbal material had been moved out of the VP into some intermediate functional positions higher than the head position in which the inflectional affix is projected.³¹

This is not the case in German, however, as becomes evident from clauses featuring a clause-final finite verb and VP-internal material which does not scramble easily (or, in fact, refuses to scramble at all), like resultatives, but nevertheless surface to the left of the finite verb, (41a). Scrambling of the resultative *klein* ‘small’ across the object as in (41b) yields the clause ungrammatical; the same holds for the other scrambled orders.

- (41) (a) *dass der Peter das Fleisch klein schnitt*
 that the Peter the meat small cut
 ‘that Peter cut the meat into small pieces’ (German)
- (b) **dass der Peter klein das Fleisch schnitt* (German)
 that the Peter small the meat cut

This pattern is unexpected under the assumption that (41a) is derived by movement of the non-verbal elements out of their verb phrase-internal base

³⁰In the discussion in this chapter, the label ‘VP’ is used without any implications as for the structural make-up of the verb phrase (layered vs. non-layered verb projection). In later chapters of this thesis, however, the distinction between layered and non-layered verb projections, which we will call ‘vP-VP’ and ‘V(v)P’, will become a crucial factor in the explanation of word order differences as observed in the Germanic OV languages.

³¹Notice that Bobaljik’s (1995) notion of adjacency is defined at the spell-out or interface between syntax and phonology and it is sensitive only to phonetically overt material with the exception of adjuncts while traces (or unpronounced copies) are irrelevant. It is not entirely clear why the presence of an adjunct should not result in a disruption of the adjacency relation. It indicates, however, that the adjacency condition can not be a purely phonetic restriction. Unfortunately, Bobaljik does not provide any further motivation for the exceptional status of adverbs or adjuncts, more generally. However, there is a long list of literature dealing with the relevance of the argument vs. adjunct distinction for morphophonological processes, for references see Bobaljik (1995, 58).

positions in order to achieve adjacency between a left-headed intermediate functional projection (which hosts the inflectional affix) and the verb in its base position.

Furthermore, it is unclear what trigger(s) these movements could be attributed to and, also, which status the landing positions have, (42a, a').

(42) (a) [_{CP} *dass* [_{FP?} *der Peter*_i F [_{FP?} *das Fleisch*_j F [_{FP?} *klein*_k F [_{IP} ...
affix_I [_{VP} *e_i e_j e_k schnitt*]]]]]]]]

or

(a') [_{CP} *dass* [_{FP?} *der Peter*_i F [_{FP?} *das Fleisch*_j F [_{IP} *klein*_k affix_I [_{VP}
e_i e_j e_k schnitt]]]]]]

If the non-verbal elements are not moved out of their base positions, adjacency between the inflectional morphology which is hosted by a left-headed intermediate functional projection and the lexical verb could be established by raising of the verb.³² However, this predicts wrong word orders for embedded clauses in German because the finite verb would no longer be clause-final, contrary to facts.

There is, however, an alternative option for how morphological adjacency between the verb and an inflectional affix in a head-initial intermediate functional projection could be established: Instead of successively evacuating the verb phrase by moving out all non-verbal material until eventually only the verb is left behind, it could be the case that the whole verb phrase rises to the specifier position of the intermediate function projection which hosts the inflectional affix in its head position, (43). Thereby, a relation of morphological adjacency between the verb inside the raised VP and the inflectional affix would be established.

(43) (a) [_{CP} C [_{IP} [_{VP} ... V]_i affix_I e_i]]

(b) [_{CP} *dass* [_{IP} [_{VP} *Peter das Fleisch klein schnitt*]_i I e_i]]

³²If this were the correct analysis, finite verbs with separable particles like *anrufen* 'to call up' would always have to strand their particle, even in embedded clauses; this is not true, however, (i).

- (i) *weil die Maria ihren Freund gerne anrief* (German)
'because Maria liked to call up her boyfriend'

Under this suggestion, embedded clauses featuring finite denominal verbs which are derived from complex nouns (like *uraufführen* 'première') would not be derivable at all because these verbs can only occur in their clause-final base position, (ii) (cf. Haider 1993, 1997b; Höhle 1991, among others).

- (ii) *weil sie das Musical uraufführten* (German)
'because the musical was première'
(lit. because they première the musical)

Analyses along these lines are faced with serious weaknesses, however. For example, the raised verb phrase should be opaque for extraction, i.e. frozen in place, like other elements in functional specifier positions. As shown in (44), this is not the case, however.

- (44) *Was_i glaubst du dass Peter e_i klein schnitt?*
what think you that Peter small cut
'What do you think Peter cut into small pieces?' (German)

We will come back to the discussion of evidence from (non-)opacity for extraction in section 5.1, and also in the discussion of Mohr's (2004) approach in section 7.1. Mohr (2004) suggests an analysis according to which the entire verb phrase moves to an intermediate functional specifier position (Spec,TP) in German and Dutch, though not for establishing adjacency between the lexical verb and inflectional morphology but for a different motivation.

Our approach, as developed in chapters 8 to 10 of this thesis, will not follow Bobaljik's (1995) adjacency approach (in neither of the discussed versions), neither as far as its analysis of pronoun movement is concerned nor with respect to the syntactic structure that is adopted.

In the next section, we will discuss whether or not weak object pronouns which have undergone weak pronoun movement occupy positions in the intermediate functional domain of the clause and will mainly focus on German. This is done by comparison to properties of scrambling in German, based on Haider's argumentation (e.g. Haider 2002).

5 Objections to weak pronoun movement analysed as movement to a functional specifier position

When we consider the positioning of weak pronouns in the Continental West Germanic languages, the issue of scrambling becomes important because the interaction of the distribution of weak pronouns with the positioning of scrambled constituents in Dutch and German can give us helpful indications for deciding the status of the possible landing site(s) of weak pronoun movement.

There is at least one conclusion which can be drawn immediately: Since the unmarked position for weak pronouns in German is a position to the left of, i.e. higher than scrambled constituents, an adjunction-to-VP analysis can be ruled out immediately if scrambling is proven to target functional specifier positions (substitution into or adjunction to an FP).

A number of researchers have argued in favour of such an analysis of scrambling (especially substitution into a functional specifier) for a variety of scrambling languages. See, for example, some of the papers in Corver and van Riemsdijk 1994 and references cited there, and, more recently, Zwart (1997) on scrambling in Dutch, among others.

However, Hubert Haider has argued repeatedly (e.g. Haider 2002) that there are at least three independent issues that are hard to reconcile with the assumption that scrambled constituents are in a functional specifier position:

- (i) Scrambled constituents are transparent for extraction.
- (ii) Scrambling may occur within a constituent which has been fronted to clause-initial position. If this constituent was a higher functional projection, crossing violations are predicted for head-movement chains that involve the finite verb.
- (iii) Scrambling in German is characterised by a considerable amount of freedom that can neither be captured by a multiple F-spec analysis nor by a multiple F-projection analysis.

Instead, Haider has argued for an adjunction analysis of scrambling in Dutch and German (see for example Haider 2002, and in particular the joint work with Inger Rosengren: Haider and Rosengren 1998, 2003), analysing scrambling as adjunction to the extended lexical projection of the verb in OV languages.

If Haider's and Haider and Rosengren's conclusions turn out to be correct, the possibility that weak pronouns are adjoined to the extended lexical projection of the verb (adjoined to or in the outer specifier of the verb phrase) in OV languages remains intact and, thus, needs to be taken into consideration.

As far as the positioning of weak pronouns is concerned, tests for the properties of constituents in functional positions are of interest. In fact, their usefulness can be twofold:

- (a) Applied to scrambled constituents, they should give us indications about or at least help us limit the possibilities for the canonical derived positions of weak pronouns which are higher in the syntactic structure than the positions of scrambled elements in German.
- (b) Applied to weak pronouns, they should inform us directly about the status of the position(s) that are occupied by weak pronouns in German. More concretely, they should help us to decide whether or not weak pronouns in German occupy specifier positions of intermediate functional projections.

In the following sections we will discuss two of Haider's arguments, (i) transparency for extraction and (ii) topicalisation, and (try to) apply them to scrambled arguments as well as weak pronouns in German. Unfortunately, however, both tests cannot be directly applied to weak pronouns as we will see.

5.1 Properties of elements in functional specifier positions: opacity for extraction (freezing)

Let us briefly go through the first two tests mentioned above, starting with the argument from extraction patterns: namely, transparency for extraction.

Before we come to that, however, a short remark should be devoted to another property of scrambling, namely the amount of freedom by which scrambling is characterised.

With respect to this property, there is a difference between scrambling and the positioning of weak pronouns: for many speakers, weak pronoun movement is not really optional, at least not as optional as application of scrambling. Rather, for many native speakers of German pronouns movement of weak pronouns is (nearly) obligatory while others also allow non-moved weak pronouns (remember the discussion relating to this variation within the speaker community in section 3.4.1). In a careful formulation, application of pronoun movement seems to be the unmarked option in clauses featuring weak (personal) pronouns in German. Clauses in which weak pronoun movement has applied are judged grammatical by all speakers of German while clauses in which weak pronouns surface in low positions (arguably, in their base positions inside the verb phrase) are not accepted by all speakers alike. Note, however, that in many cases they are judged degraded rather than ungrammatical, and their acceptance can be improved by insertion of certain types of adverbials and by establishing adequate contexts.

Haider's reference to the amount of freedom found with scrambling, however, does not refer to this type of optionality (optionality of application). Rather

it refers to another difference between scrambling and pronoun movement, namely (non-)rigidity of the ordering of arguments. It is not only the case that scrambling may lead to a reorganisation of the argument order but this reordering of arguments is the defining property of scrambling in the use of the term as coined by Haider and Haider and Rosengren, among others.³³ Pronoun movement, on the other hand, is characterised by a high rigidity of the ordering of the weak pronouns (typically ‘nominative < accusative < dative’); in particular, when the weak 3rd person singular neuter pronoun *es* ‘it’ is involved. With the other weak personal pronouns a permutation of direct object and indirect object is not totally ruled out though marked.

This difference between scrambling and pronoun movement is not sufficient to draw the conclusion that scrambling and pronoun movement cannot target the same kind of position(s); it is at the most a (weak) indication for such a conclusion. Rather, another factor(s) must be responsible for the ordering pattern found with weak pronouns. It is especially data like (45) which points into that direction (cf. the discussion in section 3.4.1).

- (45) (a) *weil er es ihm*
because *he_{weak.nom} it_{weak.acc} him_{weak.dat}*
(*unter diesen Umständen*) *ja*
(under these circumstances)_{adv} PRT
(*unter diesen Umständen*) *gegeben hätte*
(under these circumstances)_{adv} given had
‘because (under these circumstances) he would have given it to
him’ (German)
- (b) *weil (unter diesen Umständen) ja*
because (under these circumstances)_{adv} PRT
(*unter diesen Umständen*) *er es ihm*
(under these circumstances)_{adv} *he_{weak.nom} it_{weak.acc} him_{weak.dat}*
gegeben hätte
given had
‘because (under these circumstances) he would have given it to
him’ (German)

The ordering pattern ‘nom < acc < dat’ found with weak pronouns cannot simply be caused by application of the pronoun movement operation since weak pronouns occur in the order ‘nom < acc < dat’ even in very low positions of the clause, (45b). Here, the weak pronouns *er* ‘he_{nom}’, *es* ‘it_{acc}’ and *ihm* ‘him_{dat}’ are preceded by the particle *ja* as well as by the frame adverbial *unter diesen Umständen* ‘under these circumstances’ which both mark the left edge of the lexical projection of the verb.

Even an ordering pattern in which the weak object pronouns follow the frame adverbial and the particle as well as a non-pronominal subject is acceptable,

³³In the Dutch tradition, the notion of ‘scrambling’ is used in a different way, viz. referring to changes in the relative order of arguments with respect to adverbials.

(46), which is evidence that the weak object pronouns occupy their base positions inside the verb phrase here; nevertheless, they display the ordering pattern ‘nom < acc < dat’.

- (46) *weil* (unter diesen Umständen) *ja* *Peter* *es*
 because under these circumstances PRT Peter_{nom} it_{weak.acc}
ihm (bestimmt) *gegeben* *hätte*
 him_{weak.dat} certainly given had
 ‘because (under these circumstances) he certainly would have given it
 to him’ (German)

If the ordering pattern ‘nom < acc < dat’ were indeed a result of pronoun movement, its occurrence would be expected only when the weak pronouns surface in derived positions, namely when pronoun movement has applied. Under this assumption, (45b) and (46) should be ungrammatical, contrary to the facts.

Thus, the existence of examples like (45b) and (46) indicates that the ordering ‘nom < acc < dat’ is not a result of displacement (i.e. no displacement effect); rather, it seems to be conditioned by more fundamental factors or properties of weak pronouns. It is not entirely clear, yet, what the factor(s), which condition the ordering pattern ‘nom < acc < dat’ as generally found with weak pronouns, might be. Additional research is called for.

5.1.1 Scrambling in German

We will now come to a detailed discussion of syntactic evidence against analyses of scrambling and pronoun movement, which treat them as movement to functional specifier positions, starting with the argument from extraction patterns: namely, transparency for extraction.³⁴

There is well-known empirical evidence from languages with easily identifiable specifier positions, such as English, that phrases in functional specifier positions are opaque for extraction, (47b).³⁵

- (47) (a) *A picture of Picasso has been sold* (English)
 (b) **Who_i has [a picture of e_i] been sold?* (English)

³⁴For more detailed argumentation on scrambling the reader is referred to Haider (2000*c*, 2002); Haider and Rosengren (1998), a.o.

³⁵There is disagreement in the literature concerning the question of whether items which have been moved to a higher specifier position are always opaque for extraction to a higher position (cf., e.g., Boeckx and Grohmann 2004; Broekhuis 2005; Chomsky 1995 who postulate that Spec,TP is always opaque for extraction), or whether a moved item may stay transparent for extraction in some well-defined cases (cf. Chomsky to appear; Gallego and Uriagereka 2006; Neeleman and van de Koot 2007, among others who suggest that this is not (or not always) the case.).

XPs in positions in between the functional subject position and the CP layer are opaque as well, (48d). This can be taken as an indication that this position is either a specifier position or it is a position which is adjoined to a functional projection. In both cases, extraction is illicit as the data in (48) suggests.

- (48) (a) *(that) a picture of Picasso virtually everybody has admired*
 (b) **Who_i has [a picture of e_i] virtually everybody admired?*
 (c) *(that) [with him] I should talk at once*
 (d) **Who_i should [with e_i] I talk at once?*
 (English; Haider 2002: 61 (24))

Scrambling in German, on the other hand, does not create domains which are opaque for extraction. This can be easily demonstrated with scrambled infinitival clauses.

Extraction out of infinitival clauses is not affected by scrambling or by extraposition: In any position, extraction out of an infinitival clause is permissible, (49). (49a) and (49b) feature the base order of arguments. In (49b), *wen* ‘who_{acc}’ is extracted from the embedded infinitival clause; the presence of *verzweifelt* ‘desperately’ indicates that we are dealing with a bi-clausal structure. (49c) is a scrambled order and in (49d) extraposition has applied. In both non-base orders, extraction out of the infinitival clause is licit.³⁶

- (49) (a) *dass schon mal jemand [PRO ihn damit zu*
 that already PRT someone_{subj} him_{acc} with-that to
überzeugen] versucht hat
 convince_{obj} tried has
 ‘that someone has already tried to convince him with this’
- (b) *Wen_i hat (denn) schon mal jemand [PRO e_i*
 who_{acc} has PRT already PRT someone_{subj}
damit zu überzeugen] (verzweifelt) versucht?
 with-that to convince_{obj} desperately tried
 ‘who did someone desperately try to convince him with this?’
- (c) *Wen_i hat (denn) [PRO e_i damit zu überzeugen]_j*
 who_{acc} has PRT with-that to convince_{obj.scr}
schon mal jemand e_j versucht?
 already PRT someone_{subj} tried
 ‘who did someone try to convince him with this?’
- (d) *Wen_i hat (denn) schon mal jemand versucht*
 who_{acc} has PRT already PRT someone_{subj} tried
[PRO e_i damit zu überzeugen]?
 with-that to convince_{obj.extrapos}

³⁶This kind of evidence runs contra Diesing’s (1992) claim that scrambling creates opaque domains for extraction.

‘who did someone try to convince him with this?’

(German, Haider 2002, 61 (25))

Diesing (1992); Haider (1993); Webelhuth (1992) and others have proposed that certain items (like the particles *ja*, *denn*, *doch*, *etwa*, etc.) demarcate the edge of the verb phrase. Thus, the presence of particles like *ja* and *denn* gives us indications about where the verb phrase boundary is supposed to be. However, this does not force the conclusion that elements which precede the particles must be verb phrase external. They could also be adjoined to the verb phrase or occupy an outer specifier of the verb projection, respectively; in both cases, they are part of the (extended) lexical projection of the verb.

Note that the German examples discussed so far in this chapter have all involved extraction from a scrambled infinite object rather than a subject. Thus, one might suggest that they do not allow to decide whether German behaves like English in the relevant respect unless we can be absolutely sure that the moved object, which has been proven to be transparent for extraction, occupies a position higher than a derived subject position.

As noted by Fanselow (2001, 422), many of the putative counter-examples to the generalisation that subjects are opaque for extraction also in German involve unaccusative constructions or passives with the nominative DP in situ, as in (50).

(50) (a) passive:

[*Über wen*]_i *wurde* [*ein Buch e_i*] *gelesen?*
about whom was a book_{nom} read
‘About whom a book was read?’

(German; Müller 2008, Fn. 15 (i.a) < Fanselow 2001)

(b) unaccusative:

[*Über wen*]_i *ist* [*ein Buch e_i*] *erschienen?*
about whom is a book_{nom} appeared
‘About whom a book was published?’

(German; Müller 2008, Fn. 15 (i.b) < Fanselow 2001)

Other counter-examples, which have been put forth, involve constructions for which a non-movement analysis seems available, according to Müller (2008, Fn. 15), (51).

(51) (a) [*Zu diesem Problem*] *haben* [*einige Briefe (e_i)*] *den Sender*
to this problem have several letters_{nom} the station_{acc}
erreicht
reached

‘Several letters concerning this problem reached the station’

(German; Müller 2008, Fn. 15 (iii.a))

- (b) [*Briefe*] *haben mich* [*keine (e_i)*] *erreicht*
 letters have me no_{nom} reached
 ‘I didn’t get any letters’ (German; Müller 2008, Fn. 15 (iii.b))

Recently, Müller (2008) has argued that “the most convincing counter-examples” to the generalisation that subject DPs are opaque for extraction in German “typically involve configurations where the subject DP is adjacent to V as a result of object scrambling” (Müller 2008, Fn. 15). He argues that this is due to a systematic ‘melting effect’; if there is no object scrambling, the subject element is opaque for extraction (‘freezing effect’), (52a), (53a). Subjects in derived positions in German are typically frozen in place (i.e., opaque for extraction), while only under very specific conditions they get transparent for extraction (‘melting effect’), (52b), (53b). The grammaticality judgements in (52) – (54) are stem from Müller (2008).

In (52), according to Müller, one and the same subject DP does not allow *was für* ‘what for’ split if it precedes the object DP, but is transparent for extraction of *was* if the object DP is scrambled in front of the subject (the bracketing around the asterisk in the (a) example is meant to indicate that I do not share Müller’s grammaticality judgement).³⁷

- (52) (a) (*) *Was_i haben (denn) [e_i für Bücher] [den Fritz]*
 what have PRT for books_{nom} the Fritz_{acc}
beeindruckt? (German; Müller 2008, 20 (38a), 25 (50a))
 impressed
- (b) *Was_i haben (denn) [den Fritz]_j [e_i für Bücher] e_j*
 what have PRT the Fritz_{acc} for books_{nom}
beeindruckt?
 impressed
 ‘Which books/what kind of books impressed Fritz?’
 (German; Müller 2008, 20 (38b), 25 (50b))
- (c) *Was_i haben [den Fritz]_j denn [e_i für Bücher] e_j*
 what have the Fritz_{acc} PRT for books_{nom}
beeindruckt?
 impressed
 ‘Which books/what kind of books impressed Fritz?’
 (German; Müller 2008, 25 (50c))

The same effect is reported for extraction of a PP, (53). But again, I do not share Müller’s grammaticality judgement of the (a) example (indicated by the bracketing around the asterisk).

- (53) (a) (*) [*Über wen*]_i *hat (wohl) [ein Buch e_i] [den Fritz]*
 about whom has PRT a book_{nom} the Fritz_{acc}
beeindruckt? (German; Müller 2008, 20 (39a), 25 (50d))
 impressed

³⁷Grewendorf (1989) argued on the basis of a number of tests that a psych verb like *beeindrucken* ‘impress’ selects for a regular external argument in German.

- (b) [*Über wen*]_i *hat* (*wohl*) [*den Fritz*] [*ein Buch e_i*] *e_j*
 about whom has PRT the Fritz_{acc} a book_{nom}
beeindruckt?
 impressed
 ‘A book about whom impressed Fritz?’
 (German; Müller 2008, 20 (39a), 25 (50e))
- (c) [*Über wen*]_i *hat* [*den Fritz*] *wohl* [*ein Buch e_i*] *e_j*
 about whom has the Fritz_{acc} PRT a book_{nom}
beeindruckt?
 impressed
 ‘A book about whom impressed Fritz?’
 (German; Müller 2008, 25 (50f))

Even with a verb like *treffen* ‘meet’ Müller (2008) found the same effect, (54a) vs. (54b). Again, the bracketing around the asterisk in (54a) indicates that I do not share his grammaticality judgement.

- (54) (a) (*) *Was_i haben* (*denn*) [*e_i für Leute*] [*den Fritz*]
 what have PRT for people_{nom} the Fritz_{acc}
getroffen? (German)
 met
- (b) *Was_i haben* [*den Fritz*]_j (*denn*) [*e_i für Leute*] *e_j getroffen?*
 what have the Fritz_{acc} PRT for people_{nom} met
 ‘What kind of people did Fritz meet?’ (German)

Müller (2008, 20) mentions that this data has been checked with a number of native speakers who seem to have agreed with his grammaticality judgement.

To me, examples like (52a), (53a) and (54a) do not sound ungrammatical, though. Rather, I would judge them only slightly marked; in informal speech, they are even completely acceptable. The (Austrian) native speakers whom I presented the data did not reject them either, although they judged the (b) examples more natural.³⁸

Haider (1993) argues that *was für* split constructions in German do not allow to make a clear distinction. He claims that *was für* split from the ‘structurally highest’ constituent in the midfield is not available,³⁹ irrespective of

³⁸Diesing’s (1992, 32) judgements on similar data also contradict Müller’s judgements; she judges (i) grammatical.

(i) *Was haben denn für Ameisen einen Postbeamten gebissen?*
 ‘What kind of ants have bitten a postman?’ (German; Diesing 1992, 32 (26b))

³⁹According to his judgement as ‘??’ and ‘?’, the data seem to be marked rather than ungrammatical when the constituent, which is the source of the *was* extraction, is the left-most element in the midfield.

whether it is the subject or the object argument. Consider the data in (55). As soon as there is linguistic material inserted in between the finite verb in verb second position and the constituent from which the extraction takes place, all examples are judged as grammatical by Haider.

- (55) (a) *Was ist ??(denn da) für Frauen übel geworden?*
 what is PRT there for women sick become
 ‘What kind of women felt sick?’
- (b) *Was ist ??(denn da) für Linguisten gratuliert worden?*
 what is PRT there for linguists congratulated become
 ‘What kind of linguists was congratulated?’
- (c) *Was mussten ?(denn da) für Häuser abgerissen werden?*
 what had-to PRT there for houses demolish become
 ‘What kind of houses had to be demolished?’
- (d) *Was mussten ?(denn da) für Linguisten dozieren?*
 what had-to PRT there for linguists teach
 ‘What kind of linguists had to teach?’
- (e) *Was verschwanden ?(denn da) für Jungfrauen
 von der Bühne?*
 what disappeared PRT there for maids
 from the stage
 ‘What kind of maids disappeared from the stage?’
- (f) *Was spukten ?(denn da) für Gespenster im Verlies?*
 what haunted PRT there for ghosts in-the dungeon
 ‘What kind of ghosts haunted the dungeon?’

(German; Haider 1993, 229 (93))

Like the data from Müller (2008) presented above, for me this data is not ungrammatical either, not even without material in between the finite verb and the argument from which *was* is extracted.

To come back to the kind of evidence discussed in the beginning of this section, it is much less controversial that wh-extraction from infinitives is available in German. It has been reported on various occasions in the relevant literature that subject and object infinitives are transparent for extraction (cf. Haider 1993, Sternefeld 1985, Grewendorf 1989, among others). The example in (56a) shows this effect for an infinitival subject clause. In the (b) and (c) example, the infinitival clause is extraposed which does not affect its transparency for extraction. Note that *sich gehören* is an inherently reflexive verb.

- (56) (a) *Was_i hat [PRO e_i zu beanstanden] sich nicht gehört?*
 what has to object-to_{subj} REFL not be-proper
 ‘What has it not been proper to object to’

(German; Müller 2008, 29 (55b))

- (b) *Was_i hat es sich nicht gehört [PRO e_i zu
 what has it REFL not be-proper to
 beanstanden]?*
 object-to_{subj.extrapos}
 ‘What has it not been proper to object to’
 (German; Müller 2008, 29 (55a))
- (c) *Was_i hat sich nicht gehört [PRO e_i zu
 what has REFL not be-proper to
 beanstanden]*
 object-to_{subj.extrapos}?
 ‘What has it not been proper to object to’
 (German; Müller 2008, 29 (55c))

On the basis of our own judgements on the data discussed in this section as well as the evidence from extraction out of (scrambled) infinitival complement clauses, we conclude that scrambled elements are not opaque for extraction in German. Furthermore, subjects in German are not opaque for extraction either. This is evidence for the conclusion that these elements do not occupy the specifier position of some intermediate functional projection because in that case they would be expected to show an opacity effect.

5.1.2 Weak pronouns in German

Unfortunately, this test (opacity for extraction) cannot be applied to weak pronouns directly, because they are, by definition, non-complex elements which are not modifiable (see Cardinaletti 1991*a*, 1992, 1999; Cardinaletti and Starke 1994, 1996, 1999, 2000; Starke 1996). Therefore, even the general possibility of demonstrating syntactic extraction out of a weak pronoun is out of question.

However, there is German data like the following, (57), which provides us with indirect evidence regarding the status of the position that is occupied by the weak pronoun.

- (57) (a) *Wen_k hat [PRO e_k damit zu beindrucken]_j er_i
 who_{obj} has with-that to impress he_{weak.nom}
 ja schon öfter e_i e_j versucht?
 PRT already repeatedly tried
 ‘Who did he try to impress with this repeatedly?’*
- (b) *Wen_k ist [PRO e_k damit zu beindrucken]_j ihm_i
 who_{obj} is with-that to impress him_{weak.dat}
 ja bekanntlich e_i e_j nicht gelungen?
 PRT known not succeeded
 ‘Whom could he not impress with this?’*
 (German, Hubert Haider, p.c.)

In (57a), a scrambled infinitival object clause precedes a weak subject pronoun which occurs in front of the particle *ja* and, thus, not in its base position. Nevertheless, the infinitival clause remains non-opaque for extraction. The clause in (57b) contains the unaccusative matrix verb *gelingen* ‘succeed’ which exhibits the dative-nominative base order generally found with unaccusative verbs in German (cf., e.g., *auffallen* ‘to notice’, *gelingen* ‘to succeed in doing sth’); with unaccusative verbs, the base position of the subject is the position following the indirect object. In (57b), a scrambled subject infinitival clause precedes a weak indirect object pronoun which occurs in front of a particle. Again, the infinitival clause is non-opaque for extraction.

In both clauses we can insert a frame adverbial like *unter diesen Umständen* ‘under these circumstances’ which follows the weak pronoun, (58).

- (58) (a) *Wen_k hat [PRO e_k damit zu beindrucken]_j er_i unter diesen Umständen ja schon öfter e_i e_j versucht?* (German)
- (b) *Wen_k ist [PRO e_k damit zu beindrucken]_j ihm_i unter diesen Umständen ja bekanntlich e_i e_j nicht gelungen?* (German)

From these examples we gain two conclusions: First, the scrambled infinitival clause does not occupy a functional specifier position since in that case it would be predicted to be opaque for extraction. Furthermore, it cannot be the case that the weak pronoun occupies the specifier position of a functional projection in examples of this kind either because in that case the only available analysis for the infinitival clause which precedes the pronoun would be to analyse it as also situated within the functional domain of the clause (occupying a functional specifier position or adjoined to an intermediate functional projection). In both cases, the infinitival clause should be opaque for extraction, contrary to the facts.

However, the order ‘scrambled infinitival clause < weak pronoun’ is clearly not the unmarked order and so it might be possible that it is not accepted to the same extent by all native speakers of German.

In the unmarked ordering, weak pronouns precede scrambled constituents, (59).

- (59) (a) *Wen_k hat er_i [PRO e_k damit zu beindrucken]_j*
who_{acc} has he_{weak.nom} with-that to impress
(unter diesen Umständen) ja schon öfter e_i e_j
under these circumstances PRT already repeatedly
versucht? (German)
tried

- (b) *Wen_k ist ihm_i [PRO e_k damit zu beindrucken]_j*
 who_{acc} is him_{weak.dat} with-that to impress
 (*unter diesen Umständen*) *ja bekanntlich e_i e_j nicht*
 under these circumstances PRT known not
gelingen? (German)
 succeeded

For this reason, unfortunately, the evidence coming from data like (57) is weak – in so far as it can only tell us about an intermediate (alternative) position which weak pronouns occupy in German. With respect to this position, at least, we can conclude that it is not a position in the functional domain of the clause.

5.1.3 Dutch

In Dutch, infinitival clauses never occur in the midfield: sentential arguments are ungrammatical in clause internal positions. Infinitival clauses can only occur extraposed or topicalised; these contexts are not relevant for the present concerns, however.

Furthermore, Dutch does not allow a clause-internal reordering of arguments; and extraction out of weak pronouns is excluded for independent reasons (because weak pronouns are non-complex elements). Thus, unfortunately, most of the examples discussed for German in the previous section cannot be replicated for Dutch.

Interestingly enough though, the Dutch *wat voor* ‘what for’ split construction allows us to make the crucial point.

Broekhuis (2005) argues on the basis of examples like those in (60) and (61) that *wat voor* split is possible from verb phrase internal subjects, but not from subjects which occupy Spec,TP.⁴⁰ The examples in (60) feature a passivised verb, whereas the examples in (61) contain a transitive verb.

- (60) (a) [*Wat voor rare verhalen*] *zijn (er) jouw vader verteld?*
 what for strange stories_{subj} are there your father_{obj} told
 ‘What kind of strange storied have been told to your father?’
 (Dutch; Broekhuis 2005, 64 (9b) < den Besten 1985)
- (b) *Wat_i zijn (er) jouw vader_{obj} [e_i voor rare verhalen]_{subj} verteld?*
 (Dutch; Broekhuis 2005, 64 (9b’) < den Besten 1985)
- (c) **Wat_i zijn [e_i voor rare verhalen] jouw vader_{obj} verteld?*
 (Dutch; Broekhuis 2005, 65 (10a))

⁴⁰The actual intention of Broekhuis (2005) is to reject a claim made by Chomsky (to appear) that extraction from subjects is possible when the subject is an internal argument, but not when it is an external argument.

- (61) (a) [*Wat voor mensen*] hebben je moeder bezocht?
 what for people_{subj} have your mother_{obj} visited
 ‘What sort of people have visited your mother?’
 (Dutch; Broekhuis 2005, 64 (9c) < den Besten 1985)
- (b) *Wat_i hebben er [e_i voor mensen]_{subj} je moeder_{obj} bezocht?*
 (Dutch; Broekhuis 2005, 65 (10b))
- (c) **Wat_i hebben [e_i voor mensen]_{subj} je moeder_{obj} bezocht?*
 (Dutch; Broekhuis 2005, 64 (9c’) < den Besten 1985)

The crucial examples are the (b) examples in comparison to the (c) examples. In (60b) and (61b), the subject which is the source of the extraction of *wat* occupies a low position, arguably its verb phrase internal base position. From this position extraction is possible, irrespective of the verb type. (60c) and (61c), in contrast, are ungrammatical constructions. For the passive clause in (60c) it is obvious that the subject, from which *wat* is extracted, occupies a derived position because it would follow *jour vader_{IO}* in the base order. According to Broekhuis, the ungrammaticality of (61c) is due to the same reason: the subject which is the source of *wat*-extraction occupies the “regular subject position” (Spec,TP) which is an illicit extraction site. This is evidence for the predicted contrast.

Let us now consider Dutch data which features a weak object pronoun and ask whether it gives us evidence for the status of the landing position of weak pronoun movement. The prediction is this: If we find transitive *wat voor* split constructions in which a weak object pronoun precedes the subject, which is the source of the *wat*-extraction, then this is two-fold evidence. First, it is evidence that the subject stays low in this data. Secondly and even more importantly, it is also evidence for the conclusion that weak object pronoun movement crosses the base position of the subject even in Dutch. Unfortunately, however, data of this kind would not allow us to make a decision with respect to the status of the position which the weak pronoun is occupying (functional specifier position? adjoined to or situated in an outer specifier of the verb phrase?) because a weak pronoun which precedes a non-pronominal subject is higher in the structure than the subject.

Consider the data in (62). In (62b), the weak object pronoun ‘*m* ‘him’ precedes the subject from which *wat* is extracted; however, since it is a passivised clause, this is the base order of arguments and the subject is expected to be non-opaque for extraction.

- (62) (a) [*Wat voor rare verhalen*] zijn (er) ‘*m* verteld?
 what for strange stories_{subj} are there him_{obj.weak} told
 ‘What kind of strange storied have been told to him?’ (Dutch)
- (b) *Wat_i zijn (er) ‘*m*_{obj.weak} [e_i voor rare verhalen]_{subj} verteld?*
 (Dutch)

The transitive clauses featuring *wat voor* split in (63) are more telling. According to my informants, the (b) example is acceptable in Dutch (both with or without *er*), whereas (63c) is impossible (irrespective of whether *er* is inserted or not). (63b) is a construction in which weak pronoun movement of the weak object pronoun *d'r* ‘her’ has applied. This is very interesting evidence because it shows that a weak pronominal object of a transitive verb can precede (the base position of) the subject in constructions of this kind. In (63c), on the other hand, the weak object pronoun *d'r* follows the subject, and, interestingly enough, this clause is judged as ungrammatical although it features the general ‘subject < object’ word order pattern.

- (63) (a) [*Wat voor mensen*] hebben *d'r* bezocht?
 what for people_{subj} have her_{obj.weak} visited
 ‘What sort of people have visited her?’ (Dutch)
- (b) *Wat_i hebben (er) d'r_{obj.weak} [*e_i voor mensen*]_{subj} bezocht?* (Dutch)
- (c) **Wat_i hebben (er) [*e_i voor mensen*]_{subj} d'r_{obj.weak} bezocht?* (Dutch)

We can hypothesise that the source of the ungrammaticality of (63c) lies in one of the following facts: If we assume that the subject argument from which *wat*-extraction takes place occupies its base position in (63c) then we have to conclude that no weak pronoun movement has applied. Under this view, the ungrammaticality of (63c) indicates that weak pronoun movement must apply in Dutch, at least in constructions of this type; if it does not apply, the result is ungrammatical.

We have to be cautious about this conclusion, however, because it might as well be the case that two movement operations have applied in (63c) (weak pronoun movement of *d'r* across the subject, (followed by subsequent) raising of the subject to an intermediate functional specifier position); in that case, the ungrammaticality of (63c) would have to be attributed to illicit extraction of *wat* out of a subject which occupies a derived functional position (Spec,TP), in parallel to Broekhuis’ (2005) reasoning on (61c) above. The insertability of *er* in (63c) does not force the conclusion that the subject stays in its verb phrase internal base position because it is controversial that *er* is a subject expletive in Dutch (cf. Bennis 1986; Koenenman 2000; see the discussion in section 8.1).

On closer inspection, however, the situation in Dutch might be more complicated than this. In contrast to Broekhuis’ (2005) reasoning, as discussed above, one of my Dutch informants judged (64) as well as (60c) and (61c) acceptable, although she does not accept (63c).

- (64) *Wat_i zijn [*e_i voor rare verhalen*] ’m verteld?*
 what are for strange stories_{subj} him_{obj.weak} told
 ‘what kind of strange stories have been told to him’ (Dutch)

With respect to the contrast between this speaker’s judgements on (63c) and (64), none of the two lines of reasoning suggested in the previous paragraph allows to shed light on the difference in acceptability, however. According to Broekhuis’ reasoning, both clauses should be unavailable in Dutch because the subject argument which is the source of *wat*-extraction occupies a derived position in both sentences. The alternative suggestion, that (63c) is bad because the weak object pronoun has not undergone weak pronoun movement, is not able to capture the contrast either because weak pronoun movement does not seem to have applied in (64), just as in (63c).

It is not clear to me how this contrast could be explained best; therefore, the clarification of the details must be left open for future research.

5.2 Topicalisation (fronting)

5.2.1 Scrambling in German

A second area of counter-evidence to an F-spec analysis of scrambling (scrambling as substitution into a functional specifier position), which was brought into the discussion by Hubert Haider (cf. e.g. Haider 2002), is the topicalisation of a constituent which contains a scrambled element.

Haider’s argument proceeds along the following lines: If scrambling is substitution into the specifier position of a functional projection above the verb phrase, a topicalised constituent with scrambled arguments like (65a) must be analysed as a topicalised functional projection whose specifier is hosting the scrambled XP.

The topicalised constituent may not contain a trace of the finite verb, however, which is easy to demonstrate with verbs with a separable particle, (65b,e). In (65a), the V2 position is filled by an auxiliary and with this the main verb remains connected with its particle. In this case, topicalisation of the verb phrase is possible; the topicalised constituent does not contain any trace of the head-chain of the finite verb.

(65) (a) [*Ein Fehler_i einem Linguisten e_i aufgefallen*] *ist dabei*
 an error_{nom.scr} a linguist_{dat} up-struck is at-that
noch nie
 yet never
 ‘In this connection, no linguist ever noticed an error’

(b) **[Ein Fehler_j einem Linguisten e_j auf-e_i] fiel_i dabei*
 an error_{nom.scr} a linguist_{dat} up-e_i struck_i at-that
noch nie
 yet never

(c) *Es fiel_i dabei einem Linguisten ein Fehler auf-e_i*
 it struck at-that a linguist_{dat} an error_{nom} up-_i
 ‘In this connection, a linguist noticed an error’

- (d) [*Einem Linguisten ein Fehler aufgefallen*] *ist dabei noch*
 a linguist_{dat} an error_{nom} up-struck is at-that yet
nie
 never

‘In this connection, no linguist ever noticed an error’

(German, Haider 2002, 63 (29))

- (e) **[Einem Linguisten ein Fehler auf-e_i] fiel_i dabei noch nie* (German)

The clauses in (65b,e), in contrast, feature only the main verb. In V2 environments, a head chain of the finite verb is established between the base position inside the lexical projection of the verb and the functional V2-position; when the finite verb moves to the V2 position, the separable particle is left behind, (65c). Topicalisation of the verb phrase is illicit in this case; (65b,e) show that the topicalised constituent cannot contain the trace of the finite verb. According to Haider, topicalising the constituent, which contains the trace of the verb, incurs a crossing violation; the trace of the verb fails to be in the c-commanding domain of the moved verb.⁴¹

(65d) illustrates the case of VP topicalisation without scrambling inside the topicalised constituent. Since *auffallen* ‘notice’ is an unaccusative verb, the base position of the subject is a position following the dative element.

According to Haider’s argumentation, if the target position of scrambling in (65a,d) is the specifier position of a functional projection which dominates the base position of the finite verb, the corresponding functional head is a head on the movement path of the finite verb on its way up to the V2 position passing through all the intermediate functional heads up to the top projection.

However, even if one does not assume successive-cyclic head movement of the verb passing through all head positions in V2 contexts, there must be at least one trace within the topicalised constituent in case it is a functional projection, namely in the base position of the finite verb which surfaces in the V2 position. Therefore, if the topicalised constituent in (65a) which features a scrambling order contained the trace of the finite verb it would be predicted to be ungrammatical, contrary to the facts.

The only way to capture the grammaticality of (65a) in contrast to (65b), and at the same time maintaining the assumption that scrambling targets a functional specifier position, would be to assume that there is a functional projection below the base position of the auxiliary, and that this functional specifier position is targetted by the scrambled constituent. Only in this case, the topicalised constituent would not contain any link of the head movement chain of the finite auxiliary.

However, the assumption of a functional projection in between the verb phrase

⁴¹Notice that Haider’s argumentation presupposes a trace theory of movement. Within a copy theory of movement, on the other hand, the ungrammaticality of (65b) could only be captured if a principle which claims that the evaluation of verb movement chains does only operate on pronounced copies is active.

- (b) [*Ihr (unter solchen Umständen) ausgeholfen*] *hat Peter*
 her (under such circumstances) out-helped has Peter
(unter solchen Umständen) allerdings noch nie
 (under such circumstances) PRT still never
 ‘Even though Peter has never helped her out under such
 circumstances’ (German)
- (c) [*Es ihr ausgeredet*] *hat Peter leider nicht*
 it her out-talked has Peter unfortunately not
 ‘Unfortunately, Peter hasn’t talked her out of it’ (German)
- (d) [*Es ihr (unter diesen Umständen) ausreden*] *konnte Peter*
 it her (under these circumstances) out-talk could Peter
(unter diesen Umständen) leider nicht
 (under these circumstances) unfortunately not
 ‘Unfortunately, under these circumstances Peter couldn’t talk her
 out of it’ (German)

However, one might suggest that the data in (66) does not force the conclusion that weak pronoun movement has applied inside the topicalised constituent, because the only evidence towards this conclusion comes from the presence of an adverbial in (66b,d).⁴³ Therefore, we have to present more convincing evidence which shows that the weak pronouns inside the topicalised constituent do not occupy their base positions but must have moved.

Constructions in which a complex constituent of the structure ‘[weak object pronoun – non-pronominal subject – verb_{transitive}]’ is topicalised would provide us with the clearest evidence because, obviously, the weak object pronoun has crossed the subject argument and, thus, must have undergone weak pronoun movement. Unfortunately, however, constructions of this type cannot be provided in German, (67f).

However, the ungrammaticality of constructions of this type should not be taken as evidence for the conclusion that weak pronoun movement inside topicalised constituents is illicit; rather, they are ruled out for independent reasons, as becomes evident from (67c,d)⁴⁴ which are also ungrammatical although they do not contain a moved weak object pronoun. The possibility to topicalise a complex constituent which contains the subject of a transitive verb is strongly restricted in German, independently of whether a weak object pronoun is included in the topicalised constituent or not. The topicalisation constructions in (67a,b) which contain only indefinite arguments are acceptable, though marked. (67c) features a definite non-pronominal objects inside

⁴³This is potentially problematic because we find suggestions in the literature that adverbials can be merged in alternative positions inside the clause structure (see, for example, Hetland 1992, among others; Frey and Pittner 1998 propose fixed base positions for adverbials and (modal) particles plus scrambling).

⁴⁴I have replaced the transitive verb *speisen* ‘to eat, to dine’ which is used in Haider’s (1993) example, (67b), by a verb with roughly the same meaning (*essen* ‘to eat’) which is much more frequent in German.

the topicalised constituent and (67d) contains the strong demonstrative object pronouns *diese* ‘these’ and *das* ‘that’, respectively, inside the topicalised constituent. Interestingly enough, both clauses are ungrammatical; their unacceptability seems to be connected with the definiteness of the object argument inside the complex topicalised constituent. Thus, it is expected that this construction is also unavailable with weak object pronouns, (67e,f), irrespective of whether the weak object pronoun precedes or follows the subject argument.

- (67) (a) ?[*Ein Außenseiter ein Derby gewonnen*] *hat da wohl noch*
 an outsider_{nom} a derby_{acc} won has there PRT never
nie (German; Haider 1993, 153 (63-b))
 ever
- (b) ?[*Linguisten Langusten gespeist*] *haben da wohl noch nie*
 linguists_{nom} crayfish_{acc} eaten have here PRT never ever
 ‘linguists have never ever eaten crayfish here’
 (German; Haider 1993, 153 (63-a))
- (c) ??/*[*Linguisten diese Langusten gegessen*] *haben da wohl*
 linguists_{nom} these crayfish_{acc} eaten have here PRT
noch nie (German)
 never ever
- (d) *[*Linguisten diese/das gegessen*] *haben da wohl noch*
 linguists_{nom} these/that_{strong.acc} eaten have here PRT never
nie (German)
 ever
- (e) *[*Linguisten sie/es/ihn gegessen*] *haben da wohl*
 linguists_{nom} them/it/him_{weak.acc} eaten have here PRT
noch nie (German)
 never ever
- (f) *[*sie/es/ihn_{weak.acc} Linguisten_{nom} gegessen*] *haben da wohl noch*
nie (German)

Another type of evidence, which is available in German and guarantees that weak pronoun movement has applied, is provided by the topicalisation constructions in (68).

In the examples in (68a,d), we can be sure that weak pronoun movement of the direct object pronoun *es* ‘it’ has applied because the weak direct object pronoun precedes the indirect object, in contrast to the base order of the objects with respect to each other which is ‘dative < accusative’. (68b,e) illustrate their counterparts in which weak pronoun movement has not applied inside the topicalised constituent. (68c,f) show the base order of the object argument inside the topicalised constituent, illustrated with non-pronominal arguments.

- (68) (a) [*Es_i Kindern e_i verständlich erklären*] *konnte*
it_{acc.weak} children_{dat} comprehensible explain could
bisher noch keiner
yet still no-one_{nom}
 ‘No-one could ever make children understand it’ (German)
- (b) [*Kindern es verständlich erklären*] *konnte bisher*
children_{dat} it_{acc.weak} comprehensible explain could yet
noch keiner
still no-one_{nom}
 ‘No-one could ever make children understand it’ (German)
- (c) [*Kindern das Problem verständlich erklären*] *konnte*
children_{dat} the problem_{acc} comprehensible explain could
bisher noch keiner
yet still no-one_{nom}
 ‘No-one could ever make children understand the problem’
 (German)
- (d) [*Es_i seinen Gegnern e_i gezeigt*] *hat nur Fritz*
it_{acc.weak} his opponents_{dat} shown has only Fritz_{nom}
 ‘Only Fritz has shown it to his opponents’
 (German; Hubert Haider, p.c.)
- (e) [*Seinen Gegnern es gezeigt*] *hat nur Fritz*
his opponents_{dat} it_{acc.weak} shown has only Fritz_{nom}
 ‘Only Fritz has shown it to his opponents’
 (German; Hubert Haider, p.c.)
- (f) [*Seinen Gegnern das Beweisstück gezeigt*] *hat*
his opponents_{dat} the piece-of-evidence_{acc} shown has
nur Fritz
only Fritz_{nom}
 ‘Only Fritz has shown the evidence to his opponents’
 (German; Hubert Haider, p.c.)

The same reasoning that is outlined for scrambled orders inside a topicalised constituent applies here: As demonstrated by the data in (65) above, a topicalised constituent cannot contain a trace of the finite verb.

If weak pronouns are analysed as occupying functional specifier positions, the topicalised constituent featuring weak pronouns in (66) must be analysed as a functional projection. As a functional projection, it contains at least one link of the head chain of the verb (or, under the assumption of successive-cyclic head movement, even more than one because the verb has to move up in a successive-cyclic fashion without skipping any of the functional head positions). Consequently, the sentences in (66) should be just as bad as (65b,e) because under this analysis both types of constructions contain a trace of the

head chain of the finite verb which fails to be in the c-commanding domain of the moved verb. This prediction is clearly not borne out, however.

Therefore, we conclude that in German, weak pronouns do not occupy the specifier position of an intermediate functional projection; rather, weak object pronouns which have undergone weak pronoun movement are contained in the (extended) lexical projection of the verb (adjoined to the verb phrase or occupying an outer specifier of the verb phrase, depending on the syntactic framework that is assumed).

6 Viewed from a minimalist perspective

From the properties of German syntax as discussed in sections 5.1.1 and 5.2.1 (and taking additional evidence into consideration as well), Haider concludes in a number of papers (cf. Haider 1997*b*, 2009, etc.) that there is no empirical evidence which supports (or even forces), but massive counter-evidence against the assumption of intermediate functional projections in the syntactic architecture of the German clause.

Therefore, German is claimed to display a radically different syntactic organisation of clause structure in comparison to the Germanic VO languages, for example: German does not project a functional TP (IP) projection, for reasons of (projective) economy.

Viewed from a perspective which is based on minimalist reasoning (especially, Chomsky 1999, 2001*b* and work based on it), the conclusion that there is no TP present in the syntactic structure of German is problematic for theory-internal reasons. There is also the fact that the assumption of a TP-less account for German is not forced by the types of Haider's empirical objections because under minimalist assumptions, there is another option which has not yet received any attention in the present discussion: namely, that there exists an intermediate functional projection in German, but its effects are limited to participating in agreement (feature checking/matching) operations while it does not cause any displacement effects (it is not targeted by movement).

As far as current reasoning in the minimalist framework is concerned, the question whether or not TP is projected in a given language does not even arise because the TP projection is of great theoretical impact in the minimalist model: it is integral to the minimalist clause-level functional structure given by the three Core Functional Categories C, T, and *v*. Consider, furthermore, the minimalist assumption that T has universal semantics, being the locus of what Chomsky (2001*a*, 13) designates 'true tense' (cf. also Chomsky 1999, 9; Chomsky 2001*b*), and, in particular, the central role which T, as the locus of an uninterpretable set of phi features, is supposed to play in argument licensing. Viewed against this theoretical background, postulating the absence of the TP projection for languages like Dutch and German would be a drastic departure from 'universal design' (cf. Richards and Biberauer 2004; Wurmbrand 2004*a* for discussion). Therefore, TP-less accounts appear to face serious problems from a theoretical – minimalist – point of view.

Thus, the question can only be whether T carries an EPP feature or not, or whether the EPP feature on T is obligatory or optional.⁴⁵ In the latter case,

⁴⁵Speaking in terms of features, it could be argued that German is an OV language without an EPP feature present on the T head; for Dutch, in contrast, no entirely consistent picture emerges with respect to this classification. In German, the subject does not occupy a dedicated functional position in the midfield and there is no subject expletive inserted there either; furthermore, other arguments are allowed to precede a clause-internal subject in German. In Dutch, in contrast, the word order is much more rigid; in most cases, the subject argument precedes the other arguments, while under a limited number of well-defined

contra Chomsky (2000, 109), T is assumed to be no different from other functional heads in the sense that it is optionally associated with an EPP feature. When the feature is present, it triggers the usual EPP-type phenomena (subject raising and expletive-insertion, where relevant); when it is absent, these phenomena do not occur.

There are proponents of both positions: The major part of minimalist literature seems to assume the obligatory presence of an EPP feature on T, even in German and Dutch (see, for example, Chomsky 2000; Richards and Biberauer 2004 who raising of *vP* to Spec,TP; among others); the existence of an optional EPP feature on T has been postulated by Rosengren (2002); Wurmbrand (2004*a*), among others. An approach along the former lines – obligatory EPP on T even in German – faces exactly those kinds of problems which lead Haider to postulate a TP-less structure for German, among them the lack of opacity effects.⁴⁶

Thus, if one adopts a minimalist approach to syntax and wants to capture the German facts, one has to rid oneself of the assumption that there is an universal (obligatory) EPP feature on T⁴⁷ unless one is willing to assume a null expletive in Spec,TP (although there is no empirical motivation for such an element; see Richards and Biberauer 2004; Wurmbrand 2004*a*, a.o., for argumentations against such theories) or raising of the entire *vP* to the specifier of TP as has been proposed by Mohr (2004); Richards and Biberauer (2004), among others.

Note, however, that in minimalist approaches, which assume that movement is an operation which is triggered by the presence of an EPP feature on a functional head, *any* type of phrasal movement (not just rising of the subject argument to Spec,TP) can only take place if there is such a movement-triggering feature present on a functional head.⁴⁸

In the approach described in this thesis, we will take a different path, however. It is a base assumption of our analysis that movement of phrasal constituents (XPs) is a freely available untriggered operation which needs to be evaluated and justified at a later stage of the derivation, however. As a consequence, the filling of the specifier position of TP should not be modelled in terms of a movement-triggering EPP feature either.⁴⁹

conditions we also find an ‘object < subject’ ordering; an apparently semantically vacuous element *er* can occur in clause-internal position in Dutch; however, it is not obligatorily present in subject-less clauses.

⁴⁶Although not all of Haider’s empirical objections to the assumption of a TP which is targetted by movement in German can be traced back to this issue.

⁴⁷From the absence of an EPP feature on T, the absence of evidence for the occurrence of the subject in an intermediate functional specifier position in German would follow. However, the overt filling of the head position of T (i.e. phonological material surfacing in T) must be prevented as well because the finite verb in German does either occur in the V2 position or in its base position inside the verb phrase, but never in a position in between.

⁴⁸In Chomsky (2001*a*), the feature which is assumed to trigger movement is called ‘OCC’, which is short for ‘I must be an occurrence of some β ’ (Chomsky 2001*a*, 11).

⁴⁹In more concrete terms: We will argue that untriggered movement within the so-called

However, before we come to the discussion of our own approach in chapters 8–10, we have to evaluate another type of analysis which has been brought forward in the relevant literature and which would allow to subsume German among those languages in which the specifier of TP is obligatorily filled, although German does not show the expected properties (fixed derived position in which the subject occurs, obligatory subject expletives): the raising of the (remnant) *v*P to Spec,TP as proposed by Richards and Biberauer (2004) and Mohr (2004).

‘midfield’ of the clause, typically, targets the ‘edge’ of the verb phrase. The specifier position of the TP, in contrast, is only targetted if this is the only way to achieve a ‘structural differentiation of the arguments’ if unambiguous argument identification (licensing) cannot be achieved by other means. In German, this situation does never occur. For the details of our approach see chapters 8 to 10 in particular.

We will not be concerned with head movement of the verb to positions outside the verb phrase, however.

7 Raising of *v*P to Spec,TP in German?

As a representative of the approaches along these lines we will discuss Mohr (2004) in more detail in this chapter.

In a nutshell, the most severe difficulty of approaches, which assume raising of the entire *v*P to the specifier of TP, is this: When the *v*P has been moved to Spec,TP, it is in the specifier position of an intermediate functional projection.

According to standard assumptions, however, the specifier position of a functional projection (TP) is predicted to be opaque for extraction. Thus, extraction out of the *v*P, which occupies Spec,TP, should be blocked and German should parallel the prohibition against extraction out of phrases which occupy Spec,TP as has been argued for subjects in languages like English, for example.

This well-established generalisation must be given up in approaches along these lines because otherwise even the derivation of simple non-embedded verb-second clauses with an initial argument would be blocked.

This as well as more specific shortcomings of Mohr's (2004) approach will be discussed in section 7.2.

7.1 The proposal of Mohr (2004)

Mohr (2004) assumes a raising of the (remnant) *v*P to Spec,TP in order to fulfil what I call the 'traditional EPP' requirement in Dutch and German. What is meant by that is the requirement that some constituent has to move to the specifier of the intermediate functional T projection. Mohr (2004) makes the nature of the EPP and the set of possible subject positions a topic of discussion. The former issue, i.e. the nature of the EPP, will also be of importance in the discussion of the specific syntactic architecture of the Germanic OV languages which I will develop in section 8.

Let us now consider the organisation of Mohr's (2004) system in more detail.

Mohr adopts a version of the so-called cartographic approach to syntactic structure, developed by Belletti (2004); Cinque (1999); Rizzi (2002) among others. This approach is based on the idea that each functional category is specified by a particular feature. The 'core functional categories' C, T and *v*, which are thought of as feature bundles in standard minimalism (cf. Chomsky 2001*b*), are decomposed into individual functional features with each one projecting its own phrase. Therefore, there is a split CP, a split IP, and a split *v*P⁵⁰.

Mohr (2004) assumes the fine-grained functional system given in (69) where each category takes the next one to its right as its immediate structural complement. The functional categories are specialised with respect to certain features. Mohr includes both formal functional features (e.g. phi features) and semantic categories (like topic, focus, etc.). Feature checking takes place

⁵⁰Mohr (2004) uses the notion 'Split-VP' in this connection.

in local spec-head or head(-in-spec)-head relations⁵¹ in her approach.⁵² The brackets indicate optionality.

- (69) C-system: (Force) (Top) (Foc) (Fin)
 I-system: (Top) (Foc) (Ref) (Top) (Foc) T (Aux)
 V-system: (Top) (Foc) *v* V

In this connection, optionality has to be understood like this: As far as Fin is concerned, its presence or absence depends on the language you look at because in Mohr’s (2004) system Fin is considered to be the position of verb second: Fin is obligatory in V2 languages while it is absent in non-V2 languages. In English it is only present in residual verb second constructions. Thus, Fin is ‘optional’ in a rather abstract sense. In all other cases, the presence or absence of an optional function projection (Force, Top, Ref, etc.) depends on semantic, interpretational or discourse related necessities. For example, RefP⁵³ is present when the construction contains a definite subject while RefP is absent when no definite subject is present. Definite subjects have to go to Spec,RefP (Kiss 1996; Koopman and Szabolcsi 2000).

Mohr (2004) adopts a basically minimalist framework (for example, the individual phrases can lack the specifier whenever it is not needed); however, there are some momentous departures from recent standard minimalism. But we have to consider that she does not rely on Chomsky’s (2001*b*) phases approach nor does she assume multiple specifiers.

First, she follows a version of the universal base hypothesis in assuming that all languages are underlyingly head-final (OV) (cf. Hale and Keyser 1993; Roberts 2005; contrary to Kayne 1994) and that the direct object is merged into the specifier of VP universally. In VO languages, the participle and the lexical verb, respectively, move to *v*, thereby creating a VO order. Thus, without exception, VO orders are derived orders in Mohr’s system⁵⁴; in standard minimalism, on the other hand, VO orders are considered underlying orders (in

⁵¹I use the notion ‘head(-in-spec)-head relation’ to indicated that in Mohr’s (2004) approach feature checking in a head-head relation can be instantiated either by head movement of the verb to a functional head position (e.g. the finite verb moving to T) or by movement of a full phrase to the specifier of a functional head which then establishes a checking relation with the head contained within the phrase in its specifier (like *v*P-to-Spec,TP movement, which Mohr proposes for Nominative Case checking in languages like German).

⁵²There are some instances of feature checking under c-command (long-distance Agree) in Mohr’s (2004) approach, however, inducing a certain degree of inconsistency to her system (see section 7.2 below for discussion).

⁵³RefP stands for ‘Referential Phrase’.

⁵⁴According to Mohr (2004), this applies to VO languages with rather poor verbal inflectional morphology (“*Sprachen mit weniger Endungen*” [= ‘languages with fewer endings’, J.K.], Mohr 2004, 10) like English or the Continental Scandinavian languages. In languages of this type, the verb must be identified as a verb by virtue of checking its *v*-feature against the *v*-head; in order to do so, it moves to *v*, crossing the base position of the object (Spec,VP). The result is a VO order of elements within the *v*P. In languages with rather rich verbal inflectional morphology (“*relativ viel Endungen*” [= ‘rather many endings’, J.K.], Mohr 2004, 10) like German, on the other hand, the verb is base-generated fully inflected

most approaches, at least). Recently, there are attempts within minimalism which do no longer preclude the possibility that OV orders might be base-generated (e.g., Chomsky 2001*b*, 36: “Suppose L is an OV language, the order base-generated or derived by object raising.”).

Furthermore, Mohr claims that *v*P is obligatorily present in all types of verb phrases both in OV and VO languages; however, there is a difference between verb phrase types as far as realised vs. unrealised Spec,*v*P are concerned. In her system, *v*P is universally present but does not contain a specifier when the verb is passive or unaccusative. This is a departure from standard minimalist assumptions where a *v*P layer is only present in (di)transitive verb phrases and (perhaps) unergative verb phrases (e.g. Chomsky 1998; Hornstein et al. 2005; but see Bennis 2004).

In Mohr’s functionally split midfield, not just any filling of a functional specifier position of the I system qualifies as fulfillment of the traditional ‘EPP property’. Mohr limits this property to a specific way in which the specifier of TP is filled: If a verb movement or an auxiliary movement to T takes place in a language, then, as an immediate consequence of this head movement, the specifier of T must be filled by either merge (external merge) or move (internal merge) (New Extension Condition⁵⁵, Mohr 2004). If there is no feature associated with T that triggers (internal or external) merge to Spec,TP then it is guaranteed by the insertion of an EPP feature on T which is a ‘specifier creating feature’ in Mohr’s approach. Thus, since head movement is immediately followed by an operation that creates the specifier of the head that triggered head movement, head movement does not violate the Extension Condition in Mohr’s reasoning. If there is no movement to *v*, as in the case of clauses that feature a compound tense in OV languages, or if the verb first moves to *v* but moves out of this position afterwards, as in V2 clauses in all Germanic V2 languages and German and Dutch embedded clauses⁵⁶, the feature(s) associ-

and, therefore, it need not check a *v*-feature. As a consequence, the underlying OV order is maintained since the verb does not move to *v* for checking reasons. Note, however, that Mohr (2004) does even classify Dutch as a language with rather rich verbal inflectional endings but without applying any specific criterion concerning what counts as ‘(rather) rich’ or ‘(rather) poor’ inflection.

⁵⁵New Extension Condition (Mohr 2004, 60):

A given category C is EC[Extension Condition, J.K.]-compatible iff C is extended at the root once all F_C , formal features of C (including semantic features, such as Foc, Top and subject-of-predication) entering into checking operations, are checked.

In Mohr’s (2004) approach, this requirement is universal, i.e. any instance of head movement requires the creation of the corresponding specifier because this head movement alone would not extend the phrase marker and it is not a property of T only. There is one exception, however: Spec,*v*P is not subject to the New Extension Condition because the presence or absence of Spec,*v*P is regarded to be determined by selection (unaccusative and passive verb phrases do not contain Spec,*v*P).

⁵⁶According to Mohr, in German/Dutch and the Mainland Scandinavian languages the finite lexical verb undergoes V-to-*v*-to-T(-to-...)-Fin movement in the relevant clauses. However, in German and Dutch the first step (V-to-*v*) of this long verb movement is only trig-

ated with T can (or, in fact, must) be checked by the movement of the entire residual *v*P to the specifier of T. In order to enable the establishment of a checking relation⁵⁷ between the T head and the nominative DP contained in the *v*P in its specifier, Mohr assumes that the T head can look into the phrase which is situated in its specifier.

This indirect spec-head checking relation can, however, not be established if the potential checker is involved in a direct spec-head checking configuration (within this specifier) that has been established through movement and that is still active, i.e. has not been resolved by one element moving out (Mohr 2004, 89).

Mohr's approach differs from the 'standard' EPP-approach in (at least) two important respects: First, she assumes that the feature(s) of the T head, although in most cases checked locally in a spec-head relation (or head(-in-spec)-head relation, respectively) in TP, cannot only be checked by moving the subject DP to this position but also by the merger of a head in T or by the raising of the (remnant) *v*P to the specifier of TP. This depends on the specific properties of the language at hand, and, most importantly, on the verb movement pattern(s) that is (are) instantiated in a particular language. A second departure from the EPP-approach as it is usually conceptualized lies in the fact that Mohr argues that in most cases the EPP can be reduced to a subject-of-predication feature which is in non-V2 languages associated with the T head. In V2-languages, in contrast, the subject-of-predication feature is associated with the Fin head of the C-domain. The assumption that the XP which checks the subject-of-predication feature in Fin has to move successive-cyclically through all the intermediate specifier positions which are present in the structure combined with the assumption that in most cases the T head is associated with a nominative case feature which guarantees that the specifier of TP is projected and the nominative case is checked there⁵⁸ leads to the situation that the specifier of TP is in most cases targetted by the subject (or a constituent containing the subject, respectively) in the course of derivation. Problematic for her attempt to completely get rid of the EPP feature are, however, cases in V2-languages in which the T head is not associated with a nominative case feature. In these cases, Spec,TP should not be filled. This conclusion is difficult for Mohr's approach and she has to stick to the concept

gered by the Head Movement Constraint while V-to-*v* movement is forced in the Mainland Scandinavian languages by the need to check a categorial *v* feature.

⁵⁷As far as the feature checking mechanism is concerned, Mohr assumes that for this checking mechanism to work a matching pair of features ([+/-] pair) is needed; however, there is no such distinction like interpretable versus uninterpretable features. Mohr uses the [+/-] notation only "for sake of illustration", the [+] and [-] version of features are "just notational devices to make identification of matching pairs simpler" (p. 87). Unchecked features cause the derivation to crash.

It is interesting to note that in Mohr's approach – like in other minimalist approaches – the EPP feature stands out from the other classes of features in that it comes in a [+] version only.

⁵⁸According to Mohr (2004, section 4.3), Icelandic is an exception because it checks the features of the T head by merger of inflectional morphology.

of an EPP feature whose presence is required to make verb movement to T pass the New Extension Condition in such cases, otherwise Mohr could not derive impersonal passives and impersonal psych-verb constructions like (70a,b) in German.⁵⁹

- (70) (a) *dass getanzt wurde*
 that danced was
 ‘that there was dancing’ (German)
- (b) *weil mir kalt war*
 because me-dat cold was
 ‘because I felt cold’ (German)

In all other German cases, Mohr (2004) does not have to assume a EPP feature on T for German because the need to check the nominative feature, which is associated with the T head, triggers the creation of the TP-specifier which is filled by raising of the (remnant) *vP*.⁶⁰ There is no need for the assumption of an universal EPP feature on T because in Mohr’s approach other features trigger movement as well.

This is the reason why for Mohr (p.c.) German classifies as a [–EPP] language, although in her approach the specifier of TP needs to be filled in general.

From the perspective of the approach advocated in this thesis, however, it is irrelevant *which feature* is actually held responsible for the need to fill the specifier position of TP. Here it is only relevant *whether* the specifier of TP has to be filled or not. In the approach described in this thesis, any language which requires the specifier of an intermediate functional projection of the I system to be filled classifies as [+EPP]. This holds for German in Mohr’s (2004) approach. Thus, I subsume Mohr’s treatment of German under [+EPP] approaches.

Mohr (2004) circumvents the problem of ‘non-opacity for extraction contrary to expectation’ (namely, that according to standard assumptions, extraction out of the specifier position of TP is impossible) by claiming that extraction out of a *vP*, which has been raised to the specifier of TP, is allowed whenever there is no active checking relation established between *v* and its specifier *Spec, vP*. This, in fact, leads to the claim that opacity for extraction is not a universal property of elements occupying the specifier position of a functional projection.

For the sake of concreteness, I reproduce Mohr’s (2004: 98, fn. 101) formulation:

⁵⁹Problematic for her approach is also the obligatory presence of *der* ‘there’ in intermediate position in impersonal passives (and further conststructions) in Danish; see Mohr (2004, 116).

⁶⁰Remember that in Mohr’s (2004) approach the EPP feature is nothing but a specifier-creating feature.

German among them, functional specifier positions are not opaque for extraction.

In all probability, Mohr would analyse the positioning of weak (object) pronouns in the German midfield parallel to scrambling, that is, targeting a functional specifier position of the I domain. Obviously, weak pronoun movement cannot target a focus projection because, as a defining property, weak pronouns are not focusable and therefore leave us with some topic position(s) as the most probable landing site(s) of weak pronoun movement in Mohr's (2004) approach (cf. Erteschik-Shir's 1997, 21 claim that pronouns are necessarily topical; but see Frey 2000, 151 for the claim that only subject pronouns and not object pronouns are necessarily topical; only pronouns which precede a sentence adverbial function as sentential topics while pronouns which follow a sentence adverbial do not).⁶²

7.2 Problems of Mohr (2004)

Mohr (2004) offers a broad cross-linguistic analysis of impersonal constructions in the Germanic languages.

From the viewpoint of recent minimalist approaches it is a shortcoming, however, that in Mohr's system the establishment of (almost any) feature matching (checking) relation requires locality in spec-head relations. This assumption forces an analysis that leads to rather complex phrase markers in which the elements – even those for which we do not have evidence from distributional word order facts that they have been displaced (string-vacuous movement) – occupy rather high positions in the functional domain of the clause while hardly any elements ever occupy their base positions.

In my opinion, the most serious problem of Mohr's (2004) approach arises in connection with the functional specifier positions of the I system; in more concrete terms, a crucial weakness of her approach lies in the status she attributes to the opacity-for-extraction property of functional projections.

In my argumentation so far, the opacity property, i.e. (non-)opacity for extraction, has been used as cardinal evidence for deciding whether or not a DP occupies a specifier position in the functional domain (cf. Haider 2002; Haider and Rosengren 1998, among others; the general ban on extraction from functional specifiers is known as a subcase of the Condition on Extraction Domains (CED), first proposed by Huang 1982). Mohr (2004), on the other hand, denies the relevance of the opacity-for-extraction factor for German – and in fact this is the only possible solution for deriving German clauses as long as one is not

⁶²Note that it is not true that weak pronouns cannot be topicalised to clause-initial position in German, as Cardinaletti and Starke (1996) claim for the unambiguously weak object pronoun *es* 'it'; cf. (i).

- (i) (*Sie können das Schild ruhig abmontieren*) (German; H. Haider, p.c.)
Es pers.pron.weak.3sg.n.DO hat ohnehin niemand beachtet
'(You can remove the sign.)
Nobody has observed it anyway'

willing to give up neither the assumption that feature matching (checking) is limited to local spec-head (or local head(-in-spec)-head) configurations nor the assumption that matching (of formal functional features) takes place within the functional domain of the clause.

In a nutshell, Mohr (2004) gives up an empirically testable and well-established criterion in favour of the fulfillment of a purely theory-internal requirement – namely, the universality of the requirement that the specifier of TP needs to be filled⁶³ and that formal and semantic feature matching is limited to local spec-head relations within functional projections.

As for languages like German, movement of the entire *vP* to Spec,TP, for reasons of feature checking, is not empirically refutable in Mohr's (2004) approach because of her additional stipulation that *vP* in the specifier of TP is not opaque for extraction. One might suggest that Mohr (2004) assumes AuxP as an intermediate functional projection between TP and *vP* and that this fact should allow us to distinguish between an order in which only a DP has raised to Spec,TP (AuxP < elements occupying (base) positions within *vP*) and derived orders which involve movement of *vP* to the specifier of TP (elements occupying (base) positions within *vP* < AuxP).

However, in Mohr's system AuxP generally does not project a specifier since there is no feature to check and, consequently, there is no movement to a specifier position of AuxP; a finite auxiliary raises to T to get its inflection. There is also the fact that the assumption of *vP* raising to Spec,TP itself is basically motivated by theory-internal considerations.

Although Mohr (2004) assumes that in general feature checking takes place in local spec-head or head(-in-spec)-head relations, she cannot do without allowing some instances of feature checking under c-command (long-distance Agree⁶⁴), thereby inducing a certain amount of inconsistency to her system. These cases are tense feature checking in English and the Mainland Scandinavian languages, which she presumes to take place at long distance between the T head and the verb which stays in little *v*, as well as between the T head and the Aux head when an auxiliary is merged in Aux. It is not clear what property would single out the Tense feature from the other features, so that it is justified to allow a matching of the T feature under (long-distance)

⁶³Note again that in Mohr's (2004) terminology there is no 'universal EPP' (understood as the requirement that an intermediate functional subject position must be obligatorily filled). The reason why we nevertheless use the formulation 'universality of the requirement that the specifier of TP needs to be filled' in this connection lies in the fact that in Mohr's (2004) approach in the course of derivation, all languages (with the exception of Icelandic) fill Spec,TP either by movement of a DP or *vP* to Spec,TP or by insertion (external merge) of an expletive (e.g. Danish *der* 'there' in impersonal passives), though in most cases this is not triggered by an EPP feature but it applies for reasons of case checking in a local relation between the head and specifier of the T projection.

⁶⁴'Agree' is a syntactic operation which establishes a relation between a functional head (in recent minimalism called 'probe') and an element in its c-command domain (called 'goal'); the features of both elements are 'checked' against each other and unvalued features get valued.

Agree. At the same time this operation should be unavailable for the checking of other types of features; in fact, I do not see any essential difference between the nature of the T feature and other types of features which would force such a conclusion (apart from the fact that tense is realised on the verbal head rather than an XP).^{65,66} Indeed, in Mohr’s system T does not only ‘check’ the Tense feature but also phi features and the nominative case, usually in a local spec-head relation or by looking into spec within the TP; however, in some cases by Agree. Nominative case and phi features are realised on DPs. Thus, the ‘verbal nature’ of the Tense feature cannot be the decisive factor. Consider Mohr’s (2004, 169) formulation (emphasis by italics is mine):

“I [...] assume that in clauses in which the subject does not target SpecTP for interpretational reasons it is possible for Nominative case to be checked via Agree (just as Tense- and phi-features are *checked via Agree in the default case* in English)”

If we keep this statement in mind, however, we must conclude that feature checking via Agree is, in fact, not really exceptional (i.e. limited to very specific syntactic configurations or constructions) in Mohr’s (2004) system but has a broader area of application. This suggests that movement of an XP to a (functional specifier and other) position(s) in the intermediate domain of the clause should not be directly linked to feature checking in local specifier-head configurations, but they should rather be treated as independent operations. Contrary to Mohr, I assume that feature checking in general takes place under (long-distance) Agree and that it is dissociated from internal merge (move) (for details and applications see the discussion in later chapters of this paper).

Besides, Mohr’s approach is not able to explain why it should only apply to OV languages like German or Latin that the Left Branch Condition does not hold while at the same time it holds in VO languages like English. Thereby, Mohr (2004) misses a convincing generalisation in connection with the head-

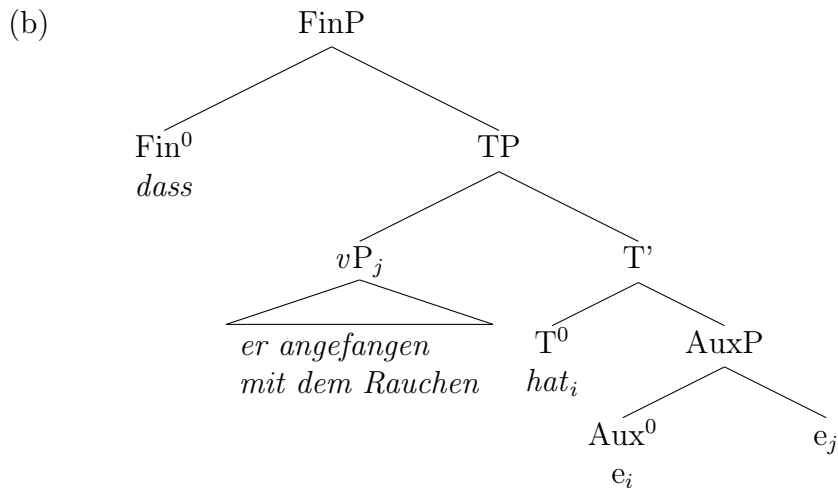
⁶⁵There is also the fact that it must be considered an unwanted conclusion that the checking of particular features applies purely top-down in particular languages or constructions while all other operations target the highest layer (the root) of the phrase marker at the respective step of the derivation.

⁶⁶An alternative option Mohr (2004) mentions for checking of the Tense feature (and the other features associated with the T head) in English, checking of the feature(s) in the Spec,*v*P-*v* relation, is not an satisfactory option either because it would presuppose the existence of some kind of feature lowering or feature percolation mechanism because the T feature originates in T, not in little *v*. Furthermore, this would be a cyclicity violation because Tense feature checking in a local spec-head relation within the *v*P would not only have to be postponed until the T head has been merged into the phrase marker but it would apply at a section of the structure which is not the root layer; this is an unwanted conclusion in a system that defines cyclicity in terms of individual projections and not in terms of bigger locality domains like phases. On the other hand, feature matching (checking) under Agree does not violate cyclicity because it is instantiated immediately as soon as the relevant head is merged into the structure and applies to its c-command domain (but see Hiraiwa to-appear: T is a probe by inheritance from C or by activation by C; note, however, that both C and T are contained within the same phase).

edness of languages.

Additionally, we have to consider that one of the objections Haider (1993, 1997b) raised against movement of the finite verb to a right-headed functional I projection in German also applies to Mohr (2004) even though she does not assume movement to a head-final functional projection. Her approach predicts, contrary to the facts, that we should find extraposed material in between a finite verb which occupies the T head position and a non-finite verb within the *v*P which raises obligatorily to the specifier of TP in German – no matter what the correct analysis of extraposition might be. In all probability, extraposed material is contained in the *v*P and, thus, comes along when the (remnant) *v*P is raised to Spec,TP. This predicts an ordering as in (72a) which is ungrammatical in German, however. (72b) gives the structural analysis of (72) in Mohr’s (2004) approach.

- (72) (a) **dass er angefangen mit dem Rauchen hat*
 that he started (lit. on-caught) with the smoking has
 (German)



An alternative solution in Mohr’s system would be that extraposed material is occupying the specifier position of AuxP which is situated to the right of TP within the I domain. However, this is problematic in so far as, in general, there is no AuxP specifier projected because AuxP does not have any feature(s) to check; in Mohr’s system AuxP, or more precisely Aux, is simply the position where auxiliaries are merged into the phrase marker. All the other functional projections that Mohr proposes are higher in the structure than TP and, consequently, cannot be targetted by extraposed material – otherwise the operation would not result in ‘extraposition’.

A technical solution in Mohr’s (2004) approach would be to analyse extraposition as movement of an XP to a functional projection of the I system – for the time being we will call it ‘ExtP’ – higher than AuxP but lower than TP, triggered by a kind of ‘extraposition feature’ (note, however, that Mohr 2004 does not propose the existence of such a projection). The derivation would be like this: The XP that undergoes extraposition moves to the specifier of ExtP

and the auxiliary moves to T and thereby crosses the function projection that hosts the extraposed element. As a result we would get a structure as in (73).

- (73) *dass* [_{TP} [_{vP} *er* *e_i* *angefangen*]_k *hat*_j [_{ExtP} [*mit dem Rauchen*]_i
 that he started has with the smoking
 Ext⁰ [_{AuxP} *e_j* [_{vP} *e_k*]]]]

‘that he has started to smoke’ (German)

However, such an analysis would raise a number of questions. First, it is unclear what kind of projection ‘ExtP’ could be and what type of feature it is associated with to trigger the movement to Spec,ExtP. Interrelated with this issue is the question why only PPs and CPs can be extraposed; what feature is it that only PPs and CPs can be associated with? Furthermore, why is the projection situated between TP and AuxP while all other (semantic) projections are located higher than TP? It is also unclear how extraposition in non-finite clauses could be explained because in non-finite clauses the auxiliary does not move to T to pick up inflectional morphology. Finally, if this is indeed the correct analysis of extraposition, how can we derive a clause like (74)?

- (74) [*Angefangen mit dem Rauchen*] *hat er noch nicht*
 started with the smoking has he yet not
 ‘He has not started to smoke, yet’ (German, Haider 1997b, 86 (7a))

If the analysis of extraposition just mentioned is correct, it should not be possible to topicalise [*angefangen mit dem Rauchen*] because it would not form a constituent on its own. However, the fronted constituent in (74) is indeed a verb phrase (*vP* or *VP*, respectively, depending on the analysis you apply), as the ungrammaticality of (75) indicates (see Haider 1997b for more detailed discussion).

- (75) [*An-e_i mit dem Rauchen*] *fing_i er*
 on with the smoking caught he
 (German, Haider 1997b, 86 (7a))

Thus, Mohr’s (2004) approach does not make the right predictions with respect to German clauses with a compound tense featuring extraposition.

Having highlighted some serious problems of approaches which assume raising of the *vP* to check some feature(s) of the T head for German and of Mohr’s (2004) approach in particular, we will now turn to the essentials of the approach advocated in this thesis.

From the discussion in the previous sections we conclude that approaches which assume an obligatory filling of a functional TP projection in German run into serious problems: It is not only the case that there is no positive evidence for, but strong evidence against the movement of subject DPs to Spec,TP in German; but also overt filling of the specifier of the TP projection through

raising of the entire *vP*, as proposed by Richards and Biberauer (2004) and Mohr (2004), is excluded as the discussion in the previous section has made clear.

The approach advocated in this thesis detects the source of the observed differences in the availability of word order patterns as found in German and Dutch not within the intermediate functional structure of the clause, but in the lexical projection of the verb. This, however, should not mean that the structural position of the subject does not play a relevant role in the explanation. On the contrary, the status of the subject argument is among the central factors which will be used to develop a solution to the problem. The remainder of this thesis will be concerned with the discussion of the proposal, its prerequisites as well as its predictions. The discussion will concentrate mainly on the Germanic OV languages; only sporadic reference will be made to the Germanic VO languages.

8 The approach: The essentials of the analysis

In this section, we will sketch a first outline of our approach to the syntactic structure of German and Dutch and its interaction with the distribution of the weak object pronoun. In order to capture and explain the distributional differences of weak pronouns in the Germanic OV languages, we will propose an analysis which concentrates especially on the internal organisation of the lexical projection of the verb. It will be argued that differences in the internal organisation of the verb phrase can explain the availability of different ordering patterns as found in the Germanic OV languages. The details of the approach as well as its consequences will be worked out and discussed in detail throughout the remainder of the thesis.

(Pronominal) Object Shift in the Scandinavian languages has received a considerable amount of attention within the minimalist framework, not least because it has been addressed by Noam Chomsky in certain parts of his influential work on the framework (cf. especially Chomsky 2001*b*).⁶⁷

In contrast, the positioning of weak pronouns in the Continental West Germanic languages has received less attention within the minimalist framework. In this and the following chapters, we will develop an approach which is based on minimalist assumptions (Merge (external Merge), Move (internal Merge), Agree; an Agree model of Case licensing; feature matching in probe-goal relations; cyclicity, etc.). However, in addition, we will include insights in the causes of ‘exceptional behaviour’ of the Germanic OV languages, in particular German, which have been brought up especially by the work of Hubert Haider.

Data from the distribution of weak pronouns in German on the one hand and in Dutch on the other hand does not only show that there are different ordering patterns found in the distribution of weak pronouns in the Continental West Germanic languages, but also that it is the transitive (unergative) subject which is of specific relevance in this connection.

In general, there is a range of possibilities how the observed differences in the availability of the ‘object_{weak.pron} < subject_{non-pron}’ in transitive clauses can be interpreted. First, the observed difference can be caused by a difference of the landing site(s) of weak pronoun movement in the two languages (in German, weak pronoun movement crosses the base position of the subject in transitive clauses while the landing position of weak object pronoun movement is below the base position of the transitive subject in Dutch). This idea corresponds to a literal limitation of the domain size of weak pronoun movement in Dutch, as opposed to German. However, in section 5.1.3, we have already discussed one piece of evidence from Dutch which indicates that weak pronoun movement, in fact, crosses the base position of the subject in transitive

⁶⁷Note, however, that in Chomsky’s use of the term, ‘Object Shift’ is a wider notion which covers both Object Shift of the Scandinavian type as well as a general movement operation which moves objects to the outer specifier of *v*P.

clauses; in later chapters of the thesis we will present additional evidence for this conclusion (see chapter 14.2). From this we conclude that weak pronoun movement in Dutch does also target the edge of the verb phrase like weak pronoun movement does in German.

If this is the case, we have to consider a different type of explanation for the empirical fact that the ordering pattern ‘object_{weak.pron} < subject_{non-pron}’ is not generally available in transitive clauses in Dutch while it is in German. If weak object pronouns are moved across the base position of the subject in transitive clauses, although this pattern is not realised in the surface ordering of arguments in Dutch, then it points to the conclusion that the subject argument has been raised to a position from where it precedes weak object pronouns which have undergone weak pronoun movement. This position could either be the specifier position of an intermediate functional projection or it could be another outer specifier of the verb phrase (and another adjunction site at the edge of the verb phrase respectively). The former assumption is more attractive in the present connection because it precludes the possibility that argument reorderings occur (recall that the variability, which is typically found with scrambling in German, has been attributed to an analysis of scrambling as adjunction to the (extended) lexical projection of the verb). There is also the fact that the existence of a specific intermediate specifier position, which hosts the subject in Dutch, has been assumed by many researchers in literature on Dutch syntax. One of the main questions that need to be answered is what the raising of the subject to an intermediate functional specifier position should be attributed to. Stated in more concrete terms: What is the motivation for the additional movement step in transitive clauses featuring weak pronoun movement in Dutch? In chapter 10, we will argue that the raising of the subject in constructions of this type is not triggered by the presence of an EPP feature on an intermediate functional head (T) in Dutch. Rather, it is connected to the general make-up of the syntactic structure in Dutch in contrast to German which, in turn, is conditioned by the nature of argument licensing (see chapter 9 for a detailed discussion).

The Scandinavian languages, which are all VO languages, clearly fall into one group as far as the distribution of weak pronouns is concerned: In all of them the pronoun movement operation (Object Shift) is contingent upon the displacement of the pre-pronominal *vP*/*VP*-internal material. In most cases, this concerns movement of the verb into a higher functional position, a condition described by ‘Holmberg’s Generalization’.

However, no such condition is at work in the Germanic OV languages: Movement of weak (object) pronouns out of their base position does not depend on verb movement or displacement of any other lexical material.

Hubert Haider has argued in a number of papers (cf., e.g., Haider 1992/2000*a*, 1994, 1997*b*, 2002, 2004, 2005, 2009) that VO languages and OV languages do not only differ with respect to the *headedness* of the verbal projection but – in connection with this – also as far as the *complexity* of the organisation of

the lexical projection of the verb is concerned. According to Haider, the verbal projection of VO languages is necessarily of considerable complexity due to left-headedness in combination with canonical directionality of licensing, which leads to an inevitably layered internal structure. Furthermore, in VO languages the base subject position has a structurally unique status: It is the only thematic position which is not in the (licensing) directionality of the verb. In OV verbal projections, on the other hand, a layered internal structure as well as a structurally unique status of the subject position is not forced, neither by headedness (head-final) nor by directionality. For reasons of economy (projective economy), only the minimal convergent structure is projected. The verb phrase structures of a three place verb as proposed in Haider (2009) are illustrated for head-initial verb phrases in (76) and for head final verb phrases in (77).⁶⁸

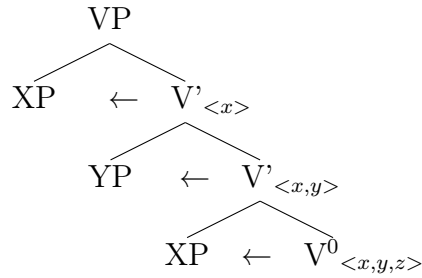
In Haider's approach, head-initial structures require a more complex structure than head-final structures, for principled reasons. As main reasons he suggests headedness of the verb phrase in combination with a parametrised directionality of licensing (left-to-right, i.e. \rightarrow , in VO languages vs. right-to-left, i.e. \leftarrow , in OV languages). The directionality value is the grammatical feature that governs the application of merger.

As a consequence, in OV languages all arguments are within the directional licensing domain of the verb and, therefore, can all be directionally licensed from the base position of the verb. Thus, only one verbal head position must be instantiated in OV languages in order to guarantee directional licensing of the arguments.

⁶⁸According to recent versions of Haider's approach (Haider 2004, 2008*a*, 2009, a.o.), the different structures for VO and OV languages are due to argument identification (licensing) for which he regards the following factors as crucial (with slightly different formulations in the different papers):

- (i) endocentricity (V^0 is merged in the deepest position of VP),
- (ii) directionality of licensing (the canonical licensing direction is parametrised, symbolised by an arrow: VO: \rightarrow vs. OV: \leftarrow ; cf. also Baker 2001 and literature cited there for the claim that phrasal heads are parametrised for their canonical directionality),
- (iii) minimal mutual c-command as a general condition on identification of selected elements,
- (iv) asymmetric merger (merge is always to the left; cf. Haider's (1993) Branching Constraint).

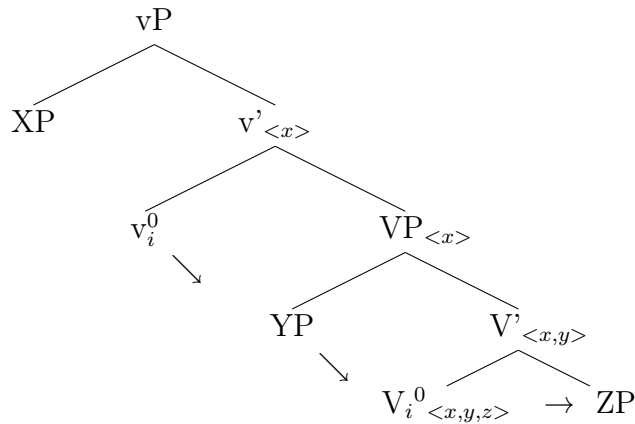
(76) Head-final verb phrase structure according to Haider (2009)⁶⁹



In head-initial (VO) projections, in contrast, the need for another verb head arises as soon as the second argument is merged into the verb phrase. The YP in (77) is not in the directionality domain of the verb head V^0 , so the structure is merged again with a verb head (v^0 in (77)); this results in a verb shell structure.⁷⁰

In addition, head-initial (VO) projections require a functional identifier for the pre-head argument in the verb phrase (due to left-to-right directionality of licensing: \rightarrow); when the highest ranked argument (XP in (77)) is merged it ends up in a verb phrase-internal position, but this position is not in the directionality domain of the verb head. According to Haider (2009), this argument is treated as subject and receives its directionality-dependent licensing from a preceding functional head outside the verb phrase, i.e. from a functional licenser. This is the head which attracts the verb that agrees with the subject.

(77) Head-initial verb phrase structure according to Haider (2009)⁷¹



In OV languages, in contrast, the need for a functional licenser from outside the verb phrase does not arise, according to Haider's conception, nor is there a need for projecting a layered verb phrase in OV languages.

⁶⁹With verbs, which take only two arguments, the highest 'layer' would be absent and YP would be the highest argument.

⁷⁰Note that in Haider's (2009) conception, 'vP' and 'VP' are just two instantiations of projection a VP, there is no inherent semantic feature associated with the distinction between V and v; the vP is just the re-application of building up a VP. We should bear in mind that the need for having two verb phrase-internal layers in (77) is a purely structural one.

⁷¹With verbs, which select only two arguments, the higher shell would be absent and YP would get functionally licensed from outside the verb phrase.

The different structural organisation of head-initial and head-final (verb) projections goes hand in hand with a number of properties which differentiate head-final and head-initial structures (like the compactness property of head-initial structures, different particle distributions, etc.); see Haider (2009, ch. 1) for discussion.

From the perspective taken in this thesis, however, the conclusion that right-headed verb projections are necessarily non-layered is not motivated. Rather, it will be proposed that OV languages have the ‘choice’ (informally spoken) of being either amorphously or non-amorphously organised inside their verb phrase. Strictly speaking, this is not a question of optionality, however; rather, it is tightly connected with case (for discussion of morphological richness in the case system of Dutch and German see section 11): Dutch, in contrast to German, displays an internally structured, layered transitive verb projection (*vP*-VP) because it does not have a system of rich morphological case which is syntactically represented in the feature matrix of DPs. The relevant mechanisms will be discussed in section 9. In a layered transitive verb projection (*vP*-VP), the position of the subject argument is structurally distinguished from the base positions of the object argument inside the verb phrase.

Haider has argued in a number of papers that there is no positive evidence for the existence of an intermediate functional projection (TP or IP, respectively) in German; from this, he concluded that the functional projection is completely absent from the syntactic structure of German for reasons of (projective) economy.

A crucial advantage of our approach in comparison to Haider’s account is the fact that in our approach, the language-specific variation is largely concentrated in the verb projection. Since the verb phrase is the *lexical* projection of the verb’s argument structure, we are dealing with ‘lexical’ variation in this case (in a broad sense of the term). From a minimalist point of view this is a desirable conclusion (cf. Chomsky 2001*b*: variation is only found in the lexicon as well as in the phonological component; Chomsky 1995, 169-179: micro-variation should be reduced to variation in the lexicon).

If this approach turns out to follow the right course, the differences between German and Dutch with regard to the behaviour of subjects and weak object pronouns in the midfield of the clause can be analysed as a direct consequence of the specific make-up of the basically merged structure. Roughly speaking, in our approach variation in the higher structure is a reflex of the variation in the internal organisation of the verbal projection, which in turn is determined by the lexicon which contains lexical items together with their feature matrices.

Another advantage of this approach lies in the fact that general differences as found between OV languages like German and Dutch with respect to the availability of specific word order patterns in clause-internal position are traced back to general properties which control the organisation of syntactic structure and refer to morpho-syntactic information which is represented in the syntax.

The remainder of this thesis will be concerned with the discussion of the details of our proposal as well as its advantages and consequences.

To put the proposal in more concrete terms, we will now turn to a discussion of the verb phrase structure of Dutch (section 8.1), followed by a discussion of the organisation of the verb phrase structure of German in section 8.2.

8.1 Dutch

Dutch is an OV language with poor morphology, both as far as nominal as well as verbal elements are concerned. For our purposes, the lack of rich nominal case morphology in Dutch in particular is relevant.

The morphological shape of nominal elements in Dutch does not allow an unambiguous identification of case and grammatical function;⁷² it does not allow to achieve a distinction of the syntactic functions of the nominal elements, neither between subject and object(s) nor between direct and indirect object. Only pronouns have retained a morphological marking of case distinctions. This holds for both strong as well as weak pronouns (for details the reader is referred to section 11.2.1 where the organisation of the personal pronoun paradigm of Dutch will be discussed in more detail).

Therefore, other means are used in order to guarantee the successful identification of the grammatical function that a nominal element carries out. As far as syntax is concerned, this is guaranteed by a constant ordering of subject and object(s). Ideas along these lines have been suggested by many researchers in the relevant literature on Dutch. We will argue that the grammatical functions of (pro-)nominal elements are relationally identified in Dutch; arguments in Dutch are structurally distinguished in their base positions.

In this connection, the question of how this relational distinction of grammatical functions can be captured theoretically needs to be addressed.

Below, it will be argued that the identification of arguments is directly related to the actual shape of the merged structure.

The argument which will be proposed proceeds along the following lines: If, in an OV language, the arguments are not distinguishable – and, as a consequence, not unambiguously identifiable – on morphological grounds, then a syntactic structure is projected which is organised in such a way that it undertakes the function of unambiguously identifying (i.e. distinguishing) the arguments. In other words, in a language like Dutch, the syntactic structure has to provide a structurally unique position for each of the arguments,

⁷²Whenever reference to the morphological shape of argument is made or whenever a formulation like ‘on morphological grounds’ is used in the discussion of our approach, it should be understood as a reference to the morpho-syntactic representation of features which underlies inflectional marking in morphology.

which means that a structure is merged so that each of the arguments occupies a different structural domain within the verbal projection. In the resulting structure, subject and object(s) are differentiated by the respective domain in which they have been merged.

For verbs which take only one argument, an unambiguous identification of the argument is self-evident due to the absence of another argument.

For transitive verbs, however, it follows that a structurally layered verbal projection has to be built up. Through this, a syntactic structure emerges which distinguishes different domains and differentiates subject and objects structurally. The structural differentiation is forced for reasons of argument identification because the arguments cannot be unambiguously identified on the basis of the morphological shape and, even more, their morpho-syntactic feature matrices.

In a nutshell, this is the situation found in Dutch. We will come back to the discussion of the details of our approach further below.

From a minimalist point of view, the projection of a layered verb phrase with transitive verbs is by no means unexpected. Quite the opposite, a layered verbal projection (*vP-VP*) is exactly what is assumed by most minimalist standards for transitive verbs.⁷³

However, we will argue that it is unmotivated to take the projection of a layered verbal projection with transitive verbs as a base assumption which holds true for language in general (although this has been the custom within the majority of minimalist accounts on syntax). Rather, the *vP-VP* layering, as found in languages of the English or Scandinavian type as well as in Dutch, is the result of the combination and interaction of various factors: (i) the nature of the mechanism of argument identification, (ii) the headedness of lexical projections and (iii) the richness or poverty of morphological case marking.

If, on the other hand, an OV language shows ‘sufficiently rich’⁷⁴ morphological case distinctions of the arguments, an unlayered verbal projection is sufficient for the licensing of arguments. A structural differentiation of subject and object(s) is not necessary and, thus, no layered *vP-VP* structure is merged. This is the situation which is found in German, as will be argued below.

Note that in this connection, economy considerations play an important role: Only the minimal structure, which allows for both syntactic case licensing as well as unambiguous identification of the arguments, is projected (merged). The implications of this approach to case feature valuation under Agree will be discussed in chapter 12.

Therefore, the difference between Dutch and German, as far as unambiguous

⁷³See Müller and Sternefeld (1994) for pre-minimalist work which assumes a layered ‘VP-shell’ verb phrase structure for German, following Larson (1988, 1990).

⁷⁴It needs to be put in concrete terms what this actually means; for a discussion what classifies as a ‘rich morphological case’ the reader is referred to chapter 11.

identification of the arguments is concerned, leads to a decisive difference in the structural organisation of the base projection of transitive verbs: in Dutch, transitive verb phrases are characterised by a layered *vP*-VP structure whereas in German they are structurally unlayered (i.e. homogeneous projections with a single verbal head).

This difference in the structure of transitive verb projections has important consequences even in later stages of the derivation in Dutch and German, as we will argue (for discussion of the mechanisms see chapters 9 and 10).

Let us suppose that movement of weak pronouns is a process which applies freely. Weak pronouns move from their base positions within the verb phrase to the edge of the verb phrase whenever they have the chance to, thereby crossing the base position of the subject. The resulting configuration is illustrated schematically in (78).

(78) ... obj_{weak} [$subj_{base}$ $e_{obj.weak}$ V]

In German, a configuration of this kind is unproblematic with respect to the identification of the arguments because unambiguous identification and differentiation of the arguments do not need to be achieved on the basis of syntactic structure only. Rather, the arguments are distinguishable and, therefore, unambiguously identifiable on morphological grounds. As a result, even after weak pronoun movement has applied and the weak object pronoun precedes a non-pronominal subject, the availability of unambiguous identification of subject and object is not prevented because the arguments are identifiable as subject and object on the basis of their morpho-syntactic feature matrices.

In Dutch, in contrast, a surface configuration like the one in (78) would pose problems for unambiguous argument identification at higher levels of the derivation. In general, Dutch is forced to make use of a purely ‘representational’ (structural) mechanism of case identification because it lacks rich nominal case morphology: in Dutch, subject and object can only be differentiated – and, thereby, unambiguously identified – by the structural domain within the verb phrase in which they are first merged⁷⁵ (the object is merged in the lower (VP) layer while the subject is merged in the higher (*vP*) layer).

Movement of the weak object pronoun across the base position of the subject undermines the mechanism of unambiguous syntactic argument identification by identifying structural domains at higher levels of the derivation. In (78), the weak object pronoun occupies a position which is higher in the structure than the base position of the subject; thus, the ordering relation between the subject and the object is reversed. However, structurally the derived position of the weak object pronoun is a position inside the same structural domain like the subject in its base position. In this structural configuration, unambiguous argument identification by identification of the structural domains which the

⁷⁵‘First merge’ refers to the insertion of an element in its base position because it is merged into the syntactic structure for the first time (in contrast, if an element is moved, it gets ‘remerged’ into the syntactic structure).

at work when arguments occur in higher positions of the clause.⁷⁸ We suggest that this strategy is performed in Dutch.

Let us come back to configuration (78) which is repeated in (80) for convenience.

$$(80) \dots \text{obj}_{weak} [\text{subj}_{base} \text{e}_{obj.weak} \text{V}]$$

What are the consequences for a structure like (80) if Dutch indeed acts out the latter strategy (relational identification of arguments at each relevant level of the derivation)?

In a nutshell, we argue that a moved weak object pronoun, which has crossed the base position of the subject, can only be structurally identified when the original ordering relation between subject and object ('subject < object') is re-established. This is not enough, however; in addition, the position to which the subject moves and the position which is occupied by the moved weak object pronoun must belong to different structural domains. This is guaranteed by an intervening functional head position; the resulting configuration is schematically represented in (81b).

$$(81) \quad (a) \text{ weak object pronoun movement, subject stays low:} \quad (= (80))$$

$$\dots \text{obj}_{weak} [\text{subj}_{base} \text{e}_{obj.weak} \text{V}]$$

(b) weak object pronouns movement + raising of the subject argument to a structurally distinguished position which precedes the moved object pronoun:

$$\dots \text{subj F}^0 \text{obj}_{weak} [\text{e}_{subj} \text{e}_{obj.weak} \text{V}]$$

One might hypothesise that the re-establishment of the original ordering of the arguments after application of weak pronoun movement itself is somehow connected to the condition which controls unambiguous argument identification at the level of first merge (we will call the relevant condition *Unambiguity of Argument Identification* (UAI); see chapter 9 for details) and interacts with syntactic structure building. This issue will be discussed in chapter 10.

Consider the structural configuration in (82) in which the higher intermediate position has been filled by external merge rather than internal merge (move).

In (82), however, a weak object pronoun is moved across the subject which stays in its base position. In a higher intermediate position of the clause, an expletive element is inserted (merged) which is 'in a relation' with the subject and precedes the moved weak object pronoun. As far as the surface configuration is concerned, the original ordering of subject and object is re-established in (82), provided that the expletive is a place-holder for the subject (i.e. an expletive subject).

⁷⁸In chapter 10, we will argue that the higher phase level in particular is relevant.

- (82) weak object pronoun movement, subject stays low + insertion of a subject expletive in a (structurally distinguished?) position which precedes the moved object pronoun:

... expl (...) obj_{weak} [$\text{subj}_{\text{base}}$ $e_{\text{obj.weak}}$ V]

The diagram shows a horizontal line under the entire phrase in brackets. An upward-pointing arrow starts from the obj_{weak} position and points to the expl position, indicating movement.

One might argue that the configuration in (82) is sufficient to guarantee an unambiguous ‘assignment’ of syntactic functions to the arguments (also in the course of comprehension) because the first element (the expletive) is assigned subject function and the second argument (the weak object pronoun) is correctly assigned object function; the subject argument in its base position is also assigned the subject function because it is in a relation with the subject expletive. The trace of the moved object pronoun is unproblematic because it is the bottom link of the movement chain of weak object pronoun which has undergone weak pronoun movement.

Note, however, that the moved weak object pronoun and subject, which occupies its base position, are situated within the same structural domain in configuration (82). Thus, (82) runs counter to our proposal as outlined in this section. According to our approach, unambiguous argument identification cannot be established in (82) because the moved weak object pronoun and the subject argument occupy the same structural domain. The fact that there is an expletive element in a higher intermediate position does not compensate for this violation of the requirement that argument identification must be unambiguous. Thus, our approach predicts that the configuration in (82) should not be possible in clauses which feature a movement of a weak object pronoun in Dutch.

The question of whether or not Dutch makes use of the strategy schematised in (82) could be immediately decided if we look at transitive constructions which feature a weak object pronoun and where the subject argument stays low (for whatever reasons), (83). If weak object pronouns in Dutch move to the edge of the verb phrase, thereby crossing the base position of the subject argument, we would expect to find an ordering of arguments as in (83).

(83) ... obj_i *pron.weak* $\text{subj}_{\text{base}}$ e_i $V_{\text{transitive}}$ (Dutch)

It has been frequently reported that a reordering of nominal arguments (as found with scrambling of the German type) is not attested in Dutch. Nevertheless, it is worth to consider a specific construction for which it has been argued that the subject argument stays in its base position inside the verb phrase and check whether pronoun movement of the weak object argument across the subject is licit there: transitive expletive constructions (TECs) are a potential case in point. As far as I know, this issue has not received any attention in the relevant literature so far.

According to Bennis (1986), the ungrammaticality of this transitive expletive construction can be attributed to a definiteness effect holding for TECs in Dutch: the acceptability of *er* is dependent on the (in)definiteness of both the subject and object argument. The acceptability of the insertion of expletive *er* decreases if the sentence contains a definite argument, (86).⁷⁹

- (86) (a) *dat er niemand/*Jan een olifant/*hem gezien heeft*
 that EXPL nobody/*John_{subj} an elephant/*him_{obj} seen
 heeft
 has
 ‘that nobody/John has seen an elephant/him’
 (Dutch, Bennis 1986, 214 (80))
- (b) *Er leest iemand een boek /*
 EXPL reads somebody_{subj.indef} a book_{obj.indef} /
 ?*dat boek / *het*
 that book_{obj.def} / *it_{obj.weak}
 ‘Somebody is reading a book/that book/it’
 (Dutch, Haeberli 2002, 276, fn. 16 (i.b) < Hoekstra 1991, 64-65)

The data in (87) illustrates the same point: as an answer to the question *how are things with your friend?*, only (87a) can be used. If *er* is inserted, the result becomes unacceptable, (87b,c).⁸⁰ Compare (87) with the German example with *da* in (92) above.

- (87) (*How are things with your friend?*)
- (a) *Niemand heeft 'm de laatste tijd gezien*
 no-one has him_{obj.weak} the recent time seen
 ‘Nobody has seen him recently’ (Dutch; Koeneman 2000, 191 (58a))
- (b) #*Er heeft niemand 'm de laatste tijd gezien*
 EXPL has no-one him_{obj.weak} the recent time seen
 (Dutch; Koeneman 2000, 191 (58b))
- (c) #*De laatste tijd heeft er niemand 'm gezien*
 the recent time has EXPL no-one him_{obj.weak} seen
 (Dutch; Koeneman 2000, 191 (58c))

⁷⁹A similar effect can be observed if the verb selects for a prepositional argument, as in (i) and (ii).

- (i) *dat er niemand op een cadeau rekende*
 that EXPL nobody on a present counted
 ‘that nobody counted on a present’ (Dutch; Bennis 1986, 214 (81)a)
- (ii) ??*dat er niemand daar op rekende*
 that EXPL nobody there op counted (Dutch; Bennis 1986, 214 (81)b)

⁸⁰‘#’ indicates that the clauses are ungrammatical with the intended reading.

This cannot be the whole explanation, though, since we find TECs which violate the definiteness condition but seem to be only slightly degraded, (88). This indicates that the indefiniteness requirement on the object of transitive expletive constructions in Dutch might be not a very strong condition. In spite of this fact, however, an indefiniteness requirement seems to be operative in transitive expletive constructions in Dutch.

- (88) *?dat er veel mensen dat boek gisteren gekocht hebben*
 that EXPL many people the book yesterday bought have
 ‘that many people have bought the book yesterday’
 (Dutch, Zwart 1992, 489 (31))

Clauses featuring a weak object pronoun seem to be more degraded than TECs with other types of definite objects, (89).

- (89) (a) *??dat er een jongen het doet*
 that EXPL a boy it does
 ‘that a boy does it’ (Dutch)
- (b) *??dat er niemand het gekocht heeft*
 that EXPL nobody it bought has
 ‘that nobody bought it’ (Dutch; Bennis 1986, 213 (78b))

Since the weak object pronouns follow the subject arguments in (89), the unacceptability of the construction cannot be attributed to a violation of any condition on possible word orders of arguments in Dutch. Rather, it must have to do with the definiteness of the weak object pronouns as such. The acceptability does not increase if the weak object pronoun is moved across the subject argument, as in (90). Rather, TECs featuring the ordering ‘object_{pron.weak} < subject’ are completely ungrammatical in Dutch while the examples with the opposite ordering above have been judged as only degraded.

- (90) (a) **dat er het een jongen doet* (Dutch)
 that EXPL it_{obj.weak} a boy_{subj} does
- (b) **dat er het niemand gekocht heeft* (Dutch)
 that EXPL it_{obj.weak} nobody_{subj} bought has

In principle, this fact could receive different explanations (provided that the effect is really existent): First, it could be interpreted as an indication that pronoun movement of the weak object pronoun so that it precedes the subject argument is completely ruled out in Dutch (at least in examples of this kind). Second, the ungrammaticality could be attributable to the resulting syntactic configuration which is not allowed in Dutch. The former interpretation claims that it is the application of pronoun movement itself which disqualifies the clause, while in the latter interpretation the reason(s) for the ungrammaticality lie(s) in some other factor(s) beside application pronoun movement.

We claim that the latter line of interpretation is on the right track: In a nutshell, after applying weak pronoun movement, the weak object pronoun is in the same syntactic domain as the unmoved subject argument – a fact that prevents unambiguous identification of the syntactic functions of the arguments and rules out the clause. See chapters 9 and 10 for discussion.

It should be kept in mind, however, that there is no sharp contrast in acceptability between the examples that feature and do not feature weak pronoun movement, as illustrated above. There is also the fact that the occurrence of weak pronoun *het* ‘it’ in (86b) was judged as completely ungrammatical (*) by Bennis (1986), rather than only degraded (?), although it does not precede the subject argument. So, we should not lay too much stress on the degrading in acceptability between (89) and (90) or try to draw conclusions from it.

For the reasons mentioned, we cannot use TECs, which contain a definite weak object pronoun, for deciding whether or not the weak object pronoun can occur in a position immediately preceding the subject argument which stays in its base position.

What we would have to look at are transitive constructions which feature an expletive as well as an indefinite object pronoun. They should allow us to make the relevant decision because they are unproblematic for the indefiniteness requirement of TECs in Dutch. Unfortunately, however, Dutch does not feature weak object pronouns which are indefinite – and other types of indefinite elements are not expected to undergo pronoun movement.

Consider the examples in (91) which contain two indefinite arguments, a non-pronominal subject and an indefinite pronoun as object.⁸¹ The ordering in which the indefinite object pronoun precedes the subject is ruled out, (91b).

- (91) (a) *dat* (*er*) *een jongen iets* / *wat* /
 that (EXPL) a boy_{subj} something_{obj.indef} / what_{obj.indef} /
niets *leest*
 nothing_{obj.indef.neg} reads
 ‘that a boy reads something’/‘that a boy doesn’t read anything’
 (Dutch)
- (b) **dat* (*er*) *iets* / *wat* /
 that (EXPL) something_{obj.indef} / what_{obj.indef} /
niets *een jongen leest* (Dutch)
 nothing_{obj.indef.neg} a boy_{subj} reads

We should also pay attention to the following fact: In the relevant literature, there has been a long discussion on the status of the element *er* ‘there’ which occurs in transitive expletive constructions in Dutch. Roughly speaking, we find two main positions. The first, more traditional solution is that Dutch *er* is an expletive element which occupies the functional subject position in the

⁸¹In the (a) example we get two different readings depending on whether *er* is present or not: with *er* we get an unspecific reading only, whereas without *er* we get a specific reading.

intermediate functional layer of the clause. The second approach is based on the observation that there is no unique relation between *er* and (properties of) the subject argument or a specific functional position, respectively, with the latter only being able to be occupied by the subject of the clause. Proponents of the latter position are Bennis (1986) and Koeneman (2000), for example; Mohr (2004) analyses Dutch *er* as an event argument.

Bennis (1986) comes to the conclusion that Dutch *er* should not be analysed as a ‘dummy subject’, although it displays a variety of syntactic functions, some of which might look like expletive usages on first sight. Rather, he suggests that in those cases in which *er* is generally taken to be a ‘dummy subject’ it has only a semantic and/or pragmatic function. On a par with other R-pronouns he analyses Dutch *er* as a PP.

Koeneman (2000) argues that Dutch *er* “does not mark the LF [= logical form; J.K.] position of the logical subject” (p. 189) but rather exhibits very similar behaviour to the German ‘semi-locative expression’ *da* ‘there’⁸² which is not a subject expletive but rather an adverb (for details see Koeneman 2000, 189-190). *Da* does not necessarily have a locative meaning, however; instead, it can have a pragmatic function, indicating that the sentence introduces new information (or, in terms of Bennis 1986, that its preposition set is empty). Among the reasons for not analysing *da* as an expletive in the sense of a placeholder for the LF subject, he mentions that it affects both the subject and the object. If *da* is inserted, the subject must express new information; but the object is also affected. Like the subject, the object in sentences containing *da* may not refer back to entities mentioned in the earlier discourse. As an answer to the question *how are things with your friend?*, only answer (92a) is felicitous, while the insertion of *da* is unacceptable, (92b,c). ‘#’ indicates that the clauses are ungrammatical in the intended reading. If *da* were a subject expletive, this behaviour would be extremely unexpected.

The examples in (92)⁸³ are repeated from Koeneman (2000).

(92) (*How are things with your friend?*)

- (a) *Es hat ihn die letzte Zeit keiner gesprochen*
 EXPL has him recently no-one spoken
 ‘Recently, no one has spoken to him’

(German; Koeneman 2000, 189 (52a))

⁸²In German, *da* exists alongside *es* (cf. Cardinaletti 1990) which can function as an expletive in clause-initial position; however, not clause-internally:

- (i) *Es hat jemand einen Apfel gegessen* (German)
 ‘Someone has eaten an apple’ (lit. EXPL has someone an apple eaten)
- (ii) **dass es jemand einen Apfel gegessen hat* (German; Koeneman 2000, 190 (54a))
 (lit. that EXPL someone an apple eaten has)

⁸³In my variety of German, it would be more natural to use the PP *in letzter Zeit* instead of the temporal DP *die letzte Zeit* ‘recently’.

(b) #*Da hat ihn die letzte Zeit keiner gesprochen*
 there has him recently no-one spoken
 (German; Koeneman 2000, 190 (52b))

(c) #*Die letzte Zeit hat ihn da keiner gesprochen*
 recently has him there no-one spoken
 (German; Koeneman 2000, 190 (52c))

As has been illustrated in the discussion above, the Dutch *er* shows a very similar behaviour (cf. Bennis 1986, 213-124). Analyses of this type allow to capture the definiteness effect which holds in transitive expletive constructions in Dutch as well as the fact that in many cases the presence of *er* is not obligatory in Dutch.

Thus, there we strongly doubt the assumption that an analysis of *er* as an expletive subject in Dutch is justified.

To summarise the matter, these facts disqualify TECs as a testing ground for our purposes; therefore, we will have to present other pieces of evidence to prove that weak object pronouns do, in fact, cross the base position of the subject argument in Dutch, i.e., that there is an operation of pronoun movement across an argument position existent in Dutch. This proof will be offered in section 14 where we will discuss ‘exceptional cases’ in which an object pronoun precedes a non-pronominal subject argument in Dutch. This ordering pattern (‘object_{pronoun} < subject’) is attested with ‘ethical’ datives and the weak reflexive *zich* in Dutch, for example. While ethical datives do not provide an argument in favour of our approach (because they are adverbial in nature as will be argued below), constructions featuring the weak reflexive *zich* are more telling for our concerns.

8.2 German

It has been argued above that German does not make use of a purely syntactic, i.e. structural strategy of argument identification (licensing). In this respect, German differs from Dutch.

This has consequences not only for the distribution of weak object pronouns with respect to non-pronominal (or strong pronoun) subjects but also for a further kind of re-arrangement of arguments, namely scrambling.

Scrambling as found in German is the true re-ordering of arguments, (93).

- (93) (a) *dass der Mann dem Kind das Buch zeigte*
 that the man_{subj} the child_{IO} the book_{DO} showed
 ‘that the man showed the book to the child’
- (b) *dass der Mann das Buch dem Kind zeigte* (subj<DO<IO)
- (c) *dass das Buch der Mann dem Kind zeigte* (DO<subj<IO)

- (d) *dass das Buch dem Kind der Mann zeigte* (DO<IO<subj)
 (e) *dass dem Kind der Mann das Buch zeigte* (IO<subj<DO)
 (f) *dass dem Kind das Buch der Mann zeigte* (IO<DO<subj)
 (German; Haeberli 2002, 105 (2a-f))

The existence of this kind of word order variation in German is not surprising if our assumption is right that German does not have to make reference to structural argument identification (which is argument identification by reference to the structural domain which the argument occupies). German does not have to stick to a fixed word order of arguments which corresponds to a fixed relative ordering of unambiguously identifiable structural domains (as in the case of Dutch) because in German arguments are unambiguously identified on the basis of other means.

Interestingly enough, in German we find a correlation between the non-distinguishability of arguments on morphological grounds and a fixed relative order of arguments only on a different level of grammar. Consider example (94).

- (94) *weil es es gemalt hat*
 because *it_{nom} it_{acc} painted has*
 *because *it_{acc} it_{nom} painted has*
 ‘because it painted it’ (= e.g., ‘because the child painted the picture’)
 (German)

If there are two morphologically identical weak pronouns one after the other, as in (94), they can only be interpreted in accordance with the order restriction ‘Nom < Acc’; another interpretation is not available. This is the base order reading.⁸⁴ If we replace one *es* in (94) with another weak pronoun, which is also morphologically ambiguous between the subject and the direct object form, we get a similar result, (95).

- (95) *weil es sie gemalt hat* (German)
 because *it_{nom} she_{acc} painted has*
 *because *it_{acc} she_{nom} painted has*

However, if we replace *sie* with a non-pronominal DP, a different picture emerges, (96). Again, ‘subject < object’ is the unmarked reading. Although both arguments are morphologically ambiguous between a subject and object form, we also get a reverse reading (‘object < subject’) in (96).

- (96) *weil es die Frau gemalt hat*
 because *it_{nom} the woman_{acc} painted has*
 because *it_{acc} the woman_{nom} painted has*
 ‘because it (e.g., the child) painted the woman’/
 ‘because the woman painted it’ (German)

⁸⁴Recall that it is not entirely clear what the source of the general order restriction ‘Nom < Acc < Dat’ which is observed with weak pronouns in German is.

The reason for this pattern seems to lie in a general preference for the unmarked ‘subject_{nom} < object_{acc}’ pattern, rather than in a syntactic constraint. This conclusion gets support from studies on language comprehension (e.g., Meng and Bader 2000, among others) where it has been argued that there is a strong tendency for assigning a ‘subject < object’ structure to ambiguous clauses in German.

This unmarked assignment of grammatical roles and cases can be revised, however, if the ambiguity is released at a later point of the clause, e.g. by the use of a disambiguating clause-final finite verb in embedded clauses, as in (97a,b). Both clauses are ambiguous up to the point when the disambiguating finite auxiliary (*haben* vs. *hat*) obtains; in the (b) example we get a reanalysis.

- (97) (a) *weil die Frauen das Kind gemalt haben*
 because the women_{nom} the child_{acc} painted have
 *because the women_{acc} the child_{nom} painted have
 ‘because the women painted the child’ (German)
- (b) *weil die Frauen das Kind gemalt hat*
 *because the women_{nom} the child_{acc} painted has
 because the women_{acc} the child_{nom} painted has
 ‘because the child painted the women’ (German)

In the German data discussed in this section, we are faced with plain morphological indistinguishability of the (grammatical functions of the) arguments which is detected on the surface level only. Thus, German data of this kind does not reflect the same situation as found in Dutch in general. In Dutch, subjects and objects are indistinguishable with respect to their availability of morphological case marking on the level of the morpho-syntactic feature matrix; however, this is not necessarily reflected on the surface level where the subject and object(s) of a clause might have different morphological shapes if they are pronominal (compare the inflectional paradigms of pronominal and non-pronominal arguments in Dutch in sections 11.2.1.4 and 11.2.1.2, respectively).

With respect to German, our argumentation proceeds along the following lines:

There is a correlation between the strategy of argument identification used in German (i.e. argument identification based on morpho-syntactic information) and the availability of scrambling across the subject. According to the same logic, there is a correlation between argument identification on the basis of the morpho-syntactic feature specification which underlies case morphology, instead of purely structural argument identification like in Dutch, and the positioning of weak object pronouns in relation to a non-pronominal DP subject. Both phenomena can be traced back to the same grammatical source: a non-layered verb projection which does not differentiate a structurally unique position for the subject argument. In both situations, the syntactic organisation of German does not block application of movement operations which

results in a reordering of arguments, nor does it trigger a repair mechanism which re-establishes the original ordering of the arguments with respect to each other after application of a movement operation which has led to a change in the order of arguments. This is the case because arguments in German are unambiguously identifiable on the basis of their morpho-syntactic feature matrices, irrespective of whether a reordering process (scrambling, weak pronoun movement) has applied or not.

In German, weak object pronouns and scrambled object arguments can occur in front of subjects of transitive verbs because these have no special structural status in German. The base position of a transitive subject within the verb phrase is not a structurally distinguished position. The transitive verb phrase is unlayered in German⁸⁵ and it is no strong phase. In fact, any type of verb phrase is unlayered in German. German does not make use of the purely structural mechanism of argument identification which has been suggested to hold for Dutch.

In the next chapter, we will discuss the theoretical implementation of the ideas outlined in this chapter.

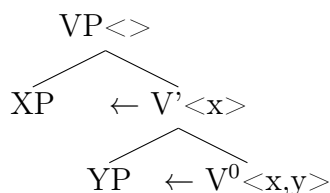
⁸⁵Strictly speaking, we will argue in the next chapter that transitive verb phrases in German are ‘V(*v*)Ps’ rather than pure VPs.

9 The approach: *Unambiguity of Argument Identification* at the level of first merge

As already indicated, we basically follow Haider’s reasoning concerning argument identification. We assume, following Haider (1993, 1997*b*, 2004, 2005), that the Germanic OV languages are underlyingly, i.e. base generated, OV (contra e.g. Kayne 1994, 1998; Zwart 1993*a*, 1997 for Dutch). The verb phrase structures as proposed in Haider (2009) have been illustrated in (76) and (77) for verbs which take three arguments; (98) gives the structure which Haider assumes for transitive verb phrases in OV languages.⁸⁶ However, in some important respects, our own suggestion departs from Haider’s approach.

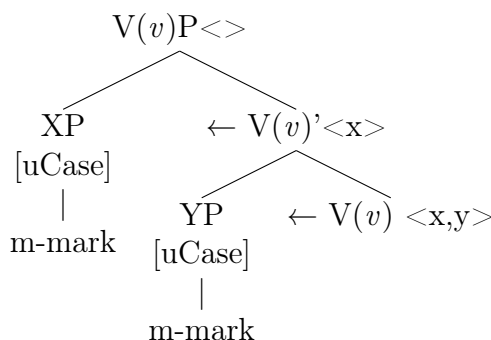
In Haider’s (2009) approach, in OV languages all arguments are within the directional licensing domain of the verb and can, therefore, all be directionally licensed from the base position of the verb. Consequently and according to Haider’s reasoning, only one verbal head position needs to be instantiated in OV languages in order to guarantee directional licensing of the arguments.

(98) Structure of head-final verb phrases according to Haider



The syntactic structures ,which we propose for transitive verb phrases in the Germanic OV languages, do not fully coincide with Haider’s structure (98). Rather, we suggest that (98) is basically the *appropriate verb phrase structure for German only* and is not valid for Dutch. We will attribute this fact to a condition on argument identification (*Unambiguity of Argument Identification*) which is sensitive to morpho-syntactic case features. Compare (98) with the structure in (99), which illustrates the verb phrase structure which we propose for German (the feature matrices of the arguments are simplified, however). The details will be discussed further below in this chapter.

(99)



⁸⁶The arrows refer to the directionality of argument identification (VO: \rightarrow vs. OV: \leftarrow) as suggested by Haider.

Furthermore, we assume that argument identification is a mechanism which is distinct from case checking (matching) (cf. Harley 1995; Marantz 1991; McFadden 2004; Sigurðsson 2003, among others, for argumentations that case and licensing should be separated).

According to Haider’s approach to argument identification, which is summarised in the tree structure (98), right-headed (OV) languages are predicted to behave uniformly with respect to the structural projection of clause structure. In more concrete terms, they are expected to behave uniformly with respect to syntactic phenomena, which are structure-sensitive. According to Haider, in OV languages, all identification of nominal and pronominal arguments is done solely within the verbal projection and no licensing from outside the verb phrase (i.e. from a higher functional head) is needed in order for the arguments to be directionally licensed.

Haider’s approach in the form outlined above does not predict a different syntactic structure for German and Dutch. In spite of that, Haider and Rosengren (2003, 247) state that the “lack of overt case in Dutch necessitates a positional system of identification; consequently, arguments must keep their relative order (see Neeleman and Weerman 1999, 78 for Dutch)”. Even though they may be right in assuming this correlation – and, in fact, we believe that they are right –, this does not follow from Haider’s structure building mechanism, nor from his proposal regarding argument identification.

Therefore, we suggest the inclusion of an additional factor which allows for a differentiation between German and Dutch, viz. the relevance of morpho-syntactic case features for argument licensing. This means that the morpho-syntactic nature of a language (rich vs. poor morphological case)⁸⁷ has important implications for the organisation of its syntactic architecture. To put it in more concrete terms, we argue that languages with rich case morphology own a subfeature, which we will call ‘m-mark’ for expository purposes, on the uninterpretable case feature *uCase* of argumental DPs.⁸⁸ ‘M-mark’ is short for ‘to be marked morphologically’, and it is (per stipulation) present on every argumental DP in languages which show rich case morphology. In fact, the subfeature m-mark is the explicit inclusion of a parameter that distinguishes between languages which make use of rich morphological case-marking and languages which do not. Note, however, that the presence of m-mark on an argumental DP does not necessarily imply that the DP will end up with a morphologically unambiguous inflectional ending; the decision on the actual inflection marker is a matter of post-syntactic morphology.

The presence of the subfeature m-mark has far-reaching consequences for the

⁸⁷Note that there is some disagreement in the literature as to how the distinction between rich and poor morphology can be established, cf. Haerberli 2002; Müller 2005 for some recent proposals.

⁸⁸One might think of m-mark as an interpretable feature of argumental DPs of its own, instead of a subfeature of *uCase*. It is not clear, however, how the connection between m-mark and the case feature (*uCase*) could be captured in that case.

projection of verb phrase structure in the course of syntactic derivation.

(108) below illustrates the feature structure of argumental DPs in languages with rich morphological case like German. The feature structure of argumental DPs in languages with poor case morphology like Dutch, on the other hand, does not include the subfeature *m-mark*; see (111) below.

The relevance of the subfeature *m-mark* goes far beyond controlling morphological case marking only. In our approach, it is a decisive factor in argument identification and structure building as well. The presence of *m-mark* on *uCase* in the feature structure of argumental DPs has important syntactic consequences inasmuch as it interacts with structure building, as we argue.

In languages in which *m-mark* is present in the feature matrix of argumental DPs, no additional syntactic device is necessary to guarantee successful unambiguous identification of argumental DPs.

The relevant conditions which control argument identification are stated in (100) and (101): (100) is the general requirement that arguments must be unambiguously identified at the point of their first merge and (101) defines what it means when an argument is unambiguously identified in the minimal structural projection domain of first merge (condition *Unambiguity of Argument Identification*). These conditions must be added to those factors that are, according to Haider (2004, 2005, 2008*a,b*, 2009), crucial for argument identification. By including condition (100) together with condition (101), the differences between German and Dutch fall out.

(100) *Argument Identification Requirement*:

Arguments must be unambiguously identified in the minimal structural projection domain of their first merge.

The ‘minimal structural projection domain of first merge’ is that part of the verb phrase structure, which is limited by the closest lower verbal head position on the one side, and the position, in which the argument is first merged into the phrase marker, on the other.

The definition of the condition on unambiguous argument identification in the minimal structural projection domain of first merge is given in (101); a formulation along these lines was proposed in Kainhofer (2006*b*, 2008).

(101) *Unambiguity of Argument Identification (UAI)*: (to be revised)

An argument is *unambiguously identified in the minimal structural projection domain of its first merge* iff (i) and (ii) hold:

- (i) it is in the directional licensing domain of the verbal head, and
- (ii) it is unambiguously identifiable, which means that (ii.a) and/or (ii.b) hold:
 - (ii.a) it is identified on the basis of its morpho-syntactic features and/or

- (ii.b) it is the only argument in the minimal structural projection domain of its first merge.

We claim that successful identification on the basis of morpho-syntactic features presupposes a positive specification with respect to the parameter which distinguishes between languages with a rich morpho-syntactic case system and languages without. Technically spoken, for successful argument identification on the basis of morpho-syntactic feature to be achieved, presence of subfeature ‘m-mark’ on the DP is necessary.

- (102) Argument identification on the basis of morpho-syntactic features:
An argument is identified on the basis its morpho-syntactic feature matrix if it carries m-mark as a subfeature of *uCase* on argumental DPs.

Thus, in the course of argument identification, the feature matrix of the argumental DP is inspected for presence of subfeature m-mark on *uCase*. If m-mark is present as a subfeature in the feature specification of a DP argument, the argument is unambiguously identifiable according to (101ii.a). Note that there might be additional (types of) subfeatures which allow for unambiguous argument identification on the basis of the morpho-syntactic feature matrix of an argument (one candidate will be introduced in section 14.2). If unambiguous argument identification cannot be achieved on the basis of the morpho-syntactic feature specification on the argumental DPs, different structural domains must be distinguished inside the verb phrase, so that the arguments can be unambiguously identified on the basis of the structural projection domain of their first merge according to (101ii.b). In languages with rich case morphology like German, (101ii.a) and (101ii.b) are simultaneously fulfilled in verb phrases which contain only one argument. We claim that condition *Unambiguity of Argument Identification* holds for language in general, not only for the Germanic OV languages.⁸⁹

For languages with a system of rich case morphology, an economy condition must be introduced additionally in order to prevent the following situation: the language makes use of a relational system of argument identification (i.e., unambiguous argument identification by distinguishing different structural domains) within the base projection of the verb even though unambiguous argument identification could also be achieved on the basis of the morpho-syntactic feature specification of DPs (i.e., presence of m-mark on *uCase*). This situation, however, is unwanted because it leads to a more complex phrase marker than is necessary for achieving unambiguous argument identification, and, thus, it runs counter to (derivational as well as representational) economy considerations. An even more unwanted situation, which could arise without

⁸⁹Although it might be the case that not all languages, in which unambiguous argument identification is achieved on the basis of the morpho-syntactic feature specifications of argumental DPs, make reference exclusively to the presence of subfeature m-mark on *uCase*. Further research is needed to clarify this point.

the assumption of economy principle (103), is this: In the course of projecting a complex verb phrase which contains three arguments, a language which owns subfeature *m-mark* on DPs shows inconsistent behaviour with respect to unambiguous argument identification throughout the verb phrase by shifting from one way of unambiguously identifying its arguments to the other (e.g., the argument that is merged first is identified by distinguishing different structural domains while the other arguments are identified on the basis of their morpho-syntactic feature matrices and, thus, without being structurally distinguished from each other); the result would be an inconsistently structured verb phrase.

The relevant economy principle is stated in (103).

(103) *Economy of Unambiguous Argument Identification:*
morpho-syntactic features < structural differentiation

According to the economy principle in (103), unambiguous argument identification on the basis of morpho-syntactic features is more economic than unambiguous argument identification by distinguishing different structural domains for each of the arguments.

The licensing of argumental DPs is a two-step process. First, the identification of the argument in its position of first merge is important. Argument identification applies simultaneously with external (first) merge and inspects the minimal structural domain for unambiguity of argument identification (i.e. for the presence of subfeature *m-mark* on *uCase* of DPs). As a second step, the case feature is licensed (matched) in a probe-goal relation with a functional head. This second part of the argument licensing process will be the center of our discussion in chapter 12.

In addition, there must be a way of determining the syntactic functions of the elements also at later levels of the derivation. It is intuitively plausible that this must be guaranteed in one way or the other and, obviously, it must be guaranteed with respect to language comprehension. In a minimalist framework assuming phases, as the one underlying our approach, there is also a theory-internal necessity for this which comes from the nature of the syntactic derivation which proceeds phase by phase. When the relevant part of the derivation is handed over to the interfaces, the grammatical functions of the arguments must be clear and the arguments must be properly licensed.

It has been claimed that movement is only justified if it has an effect on outcome (cf. Chomsky 2001*a,b*, to appear, among others), which, roughly speaking, means that there must be some semantic or information-structure effect of movement. In other words, a derived order must have some ‘added value’ in comparison to the original order because otherwise the application of movement would not be justified for economy considerations; this is because its application is ‘costful’ in the sense that it adds complexity to the derivation and the phrase marker, respectively.

We claim that it is even more important that basic syntactic requirements like unambiguous identification of the grammatical functions of the arguments are met at the higher level of the derivation.

In our view, neither the ‘effect on outcome’ (i.e., semantic/information-structure consideration) nor the condition on unambiguous argument identification are the driving forces behind weak pronoun movement but, rather, they are part of the justification of the movement operation at the relevant higher level of the derivation (the phase level).

We have assumed that movement is a freely available operation in the syntax which, however, needs to be justified at the next higher phase level. Weak pronoun movement is not a syntactically triggered movement operation; in any way, the resulting structural configuration (representation) after application of weak pronoun movement must be such that it respects the relevant constraints on convergent syntactic structures.

The justification of the movement operation at the higher phase level is determined representationally rather than derivationally. What is examined there is the resulting configuration, not the individual derivational steps which led to this configuration or their ‘triggers’ – although it should be obvious that there must also be constraints on possible derivations (like what (types of) positions can be targetted by certain types of movement operations, how agreement and feature valuation (matching) works, etc.).

Let us come back to condition *Unambiguity of Argument Identification* and its effects on projecting verb phrase structures in German and Dutch. The crucial factor which differentiates between German and Dutch is (101ii). In Dutch, DPs do not carry a subfeature m-mark in their feature structure,⁹⁰ therefore (101ii.a) does not apply. In order for *Unambiguity of Argument Identification* to be respected nonetheless, every argument has to constitute the only argument within the minimal structural projection domain of its first merge (= (101ii.b)). This requirement is only fulfilled if there is one minimal structural projection domain of first merge per argument. Therefore, Dutch is forced to project a layered verb phrase structure which distinguishes the arguments on purely structural grounds. The actual shape of the layered verb phrase structure of Dutch will be discussed in section 9.2.

The relation to later levels of the derivation and, in particular, the question of how unambiguous argument identification is achieved at the higher phase level will be addressed in chapter 10.

Before we go on with the discussion of what the specific consequences of these claims for the structural make-up of verb phrases in German (section 9.1) and Dutch (section 9.2) are, we have to clarify an important issue in connection with the definition of *Unambiguity of Argument Identification* as stated in (101).

⁹⁰Recall that subfeature m-mark is the explicit inclusion of the parameter which distinguishes between languages with a system of ‘rich morphological case’ (in the sense of Haeblerli 2002) and languages without.

Like Haider (2004, 2009, etc.), we consider directionality to be a factor that is relevant for the licensing of arguments. However, the question is whether directionality should be part of the condition on unambiguous argument identification, which holds at the level of first merge of arguments inside the verb phrase, as proposed in the formulation above, or not. Consider again the definition of *Unambiguity of Argument Identification* as presented in (101); it is repeated in (104) for convenience. The definition consists of two parts: in (ii) it states what it actually means for an argument to be unambiguously identifiable, and in (i) the definition includes the claim that the argument to be licensed must be contained in the directional licensing domain of the verbal head which it is selected by.

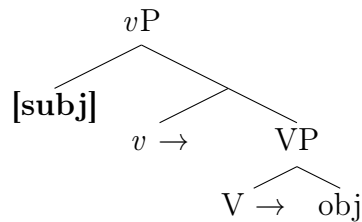
(104) *Unambiguity of Argument Identification (UAI)*: (to be revised)
 An argument is *unambiguously identified in the minimal structural projection domain of its first merge* iff (i) and (ii) hold:

- (i) it is in the directional licensing domain of the verbal head, and
- (ii) it is unambiguously identifiable, which means that (ii.a) and/or (ii.b) hold:
 - (ii.a) it is identified on the basis of its morpho-syntactic features and/or
 - (ii.b) it is the only argument in the minimal structural projection domain of its first merge.

As far as OV languages like German and Dutch are concerned, the inclusion of the directionality requirement (i) in (104) is unproblematic because any argument which is first merged into the verb phrase is automatically included in the directional licensing domain of the verbal head. Note, however, that no substantial changes would arise for German and Dutch if we leave out the directionality part of the condition.

For VO languages, in contrast, it is crucial whether there is a directionality requirement for unambiguous argument identification in the minimal structural projection domain of first merge or not. In SVO languages, *Unambiguity of Argument Identification (UAI)* in the current formulation can never be fulfilled for the highest argument in the verb phrase at the point of the derivation when the argument is first merged. Given left-to-right directionality of licensing, the highest argument ('subj' in (105)) is not included in the directional licensing domain of a verbal head (licensing direction: \rightarrow) at the point when it is first merged because the highest verb position in the existing phrase marker is lower in the structure (indicated by bold type and square brackets).

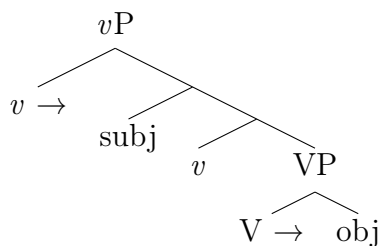
(105)



Furthermore, the subject argument cannot even be directionally licensed from a functional head from outside the verb phrase because there is no such head existent yet at the point when the argument is first merged into the structure. Thus, there is no way to fulfil the directionality requirement in an SVO language under these conditions.

The only way out, if directionality of licensing must be respected at first merge of the arguments in an VO language, is this: the v head is split up into two individual heads so that the highest argument is in the directional licensing domain of the higher v head. This gives us a VSO structure, however.⁹¹ Consider (106).

(106)



Thus, in an approach which claims that directionality of licensing must be respected even at the stage of the derivation when the individual arguments are first merged into the structure, SVO languages cannot be derived at all. For SVO languages like English or the Scandinavian languages, we will never get a convergent structure at the point when the highest argument is first merged into the phrase marker if condition (i) is an integral part of the condition on unambiguous argument identification (104).

From this we conclude that the directionality-of-licensing requirement should not be part of the condition *Unambiguity of Argument Identification (UAI)* which holds at the level of first merge of the arguments. Rather, we follow Haider (2009) in assuming that the value of directionality (\Leftarrow , \Rightarrow) is part of the conditions which are valid for the syntactic operation of merge; it is “the grammatical feature that governs the application of merger” (Haider 2009, ch. 1, 23) when the verb is merged with its complement. This should not be mixed up with directionality of licensing (\Leftarrow , \rightarrow), however. Therefore, we propose the following revision of the condition *Unambiguity of Argument Identification* which holds at the level of first merge of the arguments, (107).

⁹¹If the v head does not split up but is merged in the position from where it c-commands the highest argument we will also get a VSO structure: [v_P v subj [V_P V obj]].

(107) *Unambiguity of Argument Identification (UAI)*: (revised version)

An argument must be unambiguously identified in the minimal structural projection domain of its first merge.

An argument is *unambiguously identified in the minimal structural projection domain of its first merge* iff

- (i) it is identified on the basis of its morpho-syntactic features, or
- (ii) it is the only argument in the minimal structural projection domain of its first merge.

This formulation of the condition is unproblematic for both OV languages as well as VO languages at the level of first merge of the arguments. According to (107ii), even the highest argument in SVO languages is unambiguously identified at the level of first merge because it is the only argument in the minimal structural projection domain of its first merge.

We will now turn to the discussion of what the specific consequences of these claims for the structural make-up of verb phrase structures in German (section 9.1) and Dutch (section 9.2) are, thereby mainly concentrating on the structure of transitive verb phrases.

9.1 German: non-layered transitive verb phrases (V(*v*)P)

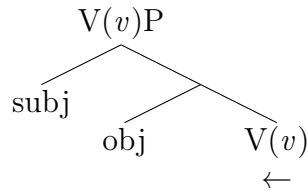
German exhibits rich morphological case which is syntactically represented by the presence of m-mark as a subfeature of uCase on every DP argument in German. The feature structure of argumental DPs, which receive structural case in German, is illustrated in (108).

(108) Feature structure of argumental DPs which get structural case in German:

DP
ϕ -features (i.e. number, person, gender)
uCase[]
m-mark

In German, arguments are unambiguously identifiable on the basis of their morpho-syntactic features because of the presence of subfeature m-mark in the morpho-syntactic feature structure of argumental DPs, in accordance with condition (107i) above. As a consequence, no structural differentiation of subject and object for reasons of unambiguous argument identification at the level of first merge is necessary, and, therefore, the verbal projection ends up non-layered for reasons of economy. (109) illustrates the internal structure of transitive verb phrases in German.

(109) Internal structure of transitive verb phrases in German



Note that the structural organisation of (109) coincides to a large extent with the structure which Haider (2004, 2005, 2009, etc.) has proposed for OV languages in general.

In recent generative literature it is assumed as a standard that transitive verbs are v heads which select for a VP complement, thereby projecting a v P-VP shell structure. We do not follow this assumption; rather, we suggest that transitive verbs are in fact ‘ $V(v)$ s’ which project ‘ $V(v)$ P’s’. Our line of argumentation is this: In transitive verb phrases, V and v are basically non-distinct because they are just two instances of a single lexical verb; V and v are of the same underlying category (they are both verbal heads) and transitive V includes v (indicated by the notion ‘ $V(v)$ ’). There is a crucial difference between V and v , however: v is associated with certain functional features which are relevant for feature matching under Agree (for details see the discussion in later chapters of the thesis). V and v are split up only when it is necessary for argument identification, in accordance with condition (107). Whenever *Unambiguity of Argument Identification* can be established without distinguishing different structural domains inside the verb phrase, a splitting of $V(v)$ into two separate layers is avoided for reasons of economy (as in the German case).

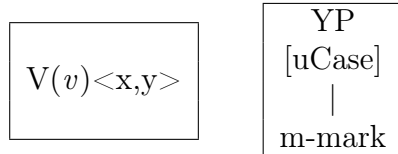
As far as OV languages are concerned, we find two types of verb phrase structures with transitive verbs depending on the make-up of the feature structure of the argumental DPs in the language; as argued above, the crucial factor is whether the subfeature *m-mark* is present on the case feature of argumental DPs or not.

The procedure which produces transitive verb phrase in German is illustrated in (110) (note that the feature matrices are simplified so that only relevant features are represented in the arguments).

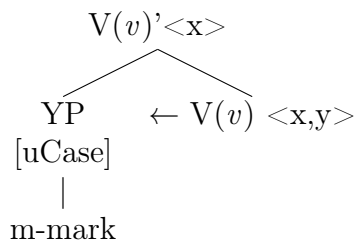
The basic mechanism is this: While the verb phrase is projected, argument identification in accordance with condition (107) proceeds in parallel.

(110) Procedure: projecting a non-layered transitive verb phrase ($V(v)$ P) in OV languages

- 1) $V(v)$ selects the object argument YP from the numeration

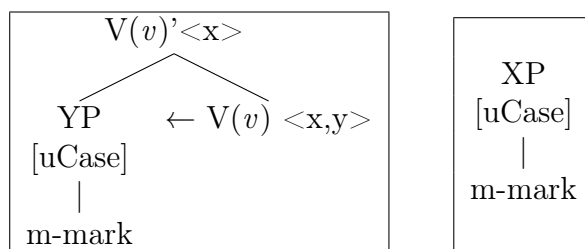


- 2) *Unambiguity of Argument Identification* (UAI) inspects the feature matrix of YP for unambiguous argument identification on the basis of morpho-syntactic features (i.e. presence of m-mark) (no splitting up of $V(v)$ due to condition (107i))



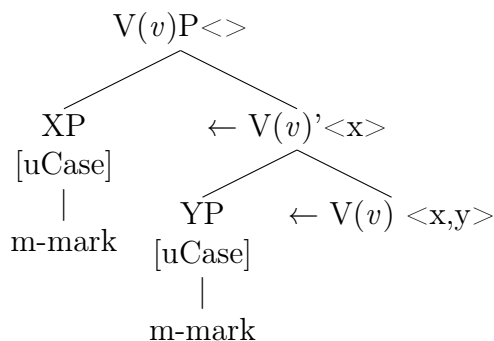
simultaneously:

- 3) Merge($V(v)$,YP) according to the directionality requirement (\Leftarrow) of OV languages
- 4) $V(v)'$ selects the subject argument XP from the numeration



- 5) *Unambiguity of Argument Identification* (UAI) inspects the feature matrix of XP for presence of m-mark (no splitting up of $V(v)$ due to condition (107i)) simultaneously:

- 6) Merge($V(v)'$,XP)⁹²



(no further selection because of $\langle \rangle$ on $V(v)P$)

⁹²According to the universal restriction on merger: merge is always to the left, cf. Haider (2009): *universal right-branching merger*, Haider (1993): *Branching Constraint*.

What are the consequences if v is included in the V head and this complex head does not split up in the course of derivation, as we claim for German? Through being ‘encapsulated’ inside the lexical V head, the v head is set inactive and, therefore, it does neither participate in establishing probe-goal relations nor in feature valuation in the language as long as it is not activated by splitting up of the complex $V(v)$ head for reasons of argument identification. This, however, does not lead to a crash at the interfaces since – because of being encapsulated inside the lexical V head – the feature matrix of v is not accessible for the computational system, neither in syntax proper (where it would otherwise function as a probe) nor at the interfaces (where unvalued features would lead to a crash of derivation). In German, as a consequence, v does not act as a probe (since it is blocked by being encapsulated inside the lexical V head), and the transitive verb phrase is not a phase. See chapters 12 and 13 for discussion.

Through splitting up the complex $V(v)$ head, the v head gets activated and its feature matrix becomes accessible for the syntactic computation. This situation is realised in Dutch. Therefore, as soon as the v head is activated by splitting up $V(v)$ for reasons of argument identification, the result is that v acts as a probe and participates in feature matching and case ‘assignment’. Since a vP shell is projected in the transitive verb phrase, the transitive verb phrase gains phase status in the language.

The details of the derivation and the structural organisation of transitive verb phrases in Dutch will be discussed in the next section.

9.2 Dutch: layered transitive verb phrases (vP -VP)

Dutch differs from German in the fact that it only featuring poor morphological Case.⁹³ In the approach described in this thesis, this means that the arguments are not unambiguously identifiable on the basis of their morpho-syntactic features because of the absence of the subfeature m -mark on $uCase$ in Dutch. (111) illustrates a simplified version of the feature structure of argumental DPs which receive structural case in Dutch.

(111) Feature structure of argumental DPs which receive structural case in Dutch:

DP
ϕ -features (i.e. number, person, gender)
$uCase$ []

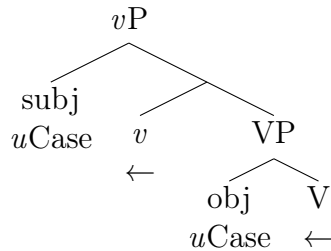
By parity of reasoning, a layering of the verb phrase is forced by the need to unambiguously identify subject and object in the absence of rich morphological case by distinguishing different structural domains (due to condition (107ii)). This leads to a vP -VP structure for transitive verb phrases in Dutch. The

⁹³See section 11 and Kainhofer (2006b) for discussion.

complex $V(v)$ head is split up into two separate heads which both project their own phrase, resulting in a structurally layered transitive verb phrase structure (vP -VP).

Note, however, that there are two main options for what the required structural layering might look like in Dutch; they are illustrated in (112) and (113).

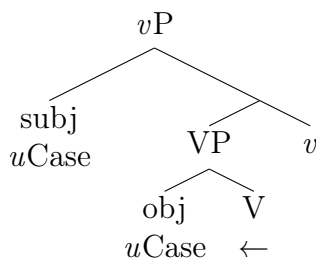
(112) Internal structure of transitive verb phrases in Dutch? – No!



In the verb phrase structure in (112), the lower shell (VP) is headed-final because of the directionality requirement (\Leftarrow) which holds for the merge of the verb and its complement in OV languages. The higher verb phrase internal projection (the vP shell), in contrast, is left-headed. The resulting configuration is non-uniform insofar as it features a ‘mixed’ headedness of the verb projection, although V and v are instantiations of a single underlying verb head $V(v)$.⁹⁴ This is an unwanted situation. Thus, although (112) serves well in distinguishing different structural domains for the individual arguments, it cannot be the adequate transitive verb phrase structure for Dutch (for further argumentation in support of this conclusion see below).

If V and v are indeed non-distinct (as we have assumed above), one would expect that the vP layer should also be right-headed in OV languages (according to Hubert Haider; p.c.). If this is correct, we have to assume (113) as the appropriate structure for layered verb phrases in Dutch.

(113) Internal structure of transitive verb phrases in Dutch? – Yes!



In contrast to (112), the transitive verb phrase structure in (113) is uniform with respect to its headedness: both the VP shell as well as the higher

⁹⁴With respect to licensing direction, the verb phrase structure in (112) is uniform. Recall, however, the discussion above that directionality of argument identification should not be included in the formulation of condition *Unambiguity of Argument Identification* which applies to arguments in their position of first merge.

vP shell are right-headed.⁹⁵ Nevertheless, the arguments occupy structurally distinguished domains.

One might suggest that, if the function of splitting up the $V(v)$ head into two separate heads is indeed first and foremost to distinguish different structural domains inside the verb phrase, structure (112) should be superior because it allows a clearer distinction of different structural domains inside the verb projection. This observation might be true.

Nevertheless, however, we will assume that structure (113) is the adequate structure of transitive verb phrases in Dutch because this structure is more suitable for capturing the empirical facts. Furthermore, it is also superior from a theoretical point of view. Some arguments for this conclusion will be discussed below.

It is a well-known empirical fact that in the Germanic OV languages the finite verb surfaces either in the verb second position (in non-embedded clauses and in clauses which are embedded under certain matrix verbs) or in a clause final verb position (in embedded clauses). Neither in German nor in Dutch the finite verb surfaces in a functional head position in between the two (*‘complementiser (subj?) V_{fin} ... obj’). Thus, if there is a head-initial intermediate functional projection existent in the two languages, its head position is obviously not targeted by verb movement (at least not when the finite verb does not move further up).

The structure in (112) is similar to the verb phrase structure which is assumed for VO languages in minimalist approaches (apart from the headedness of the lower (VP) shell). What is particularly relevant in the present context is the fact that transitive verb phrases in VO languages contain two verb positions (v and V) which both precede their complements ($[_{vP} \text{subj}_{base} v [_{VP} V \text{obj}]]$), and both verb positions take part in projecting the lexical projection (the argument structure) of the verb. Stated differently, transitive verbs in VO languages are argued to be vP s; the base position of the subject argument is in the pre-head position of the vP .

Let us consider the English situation. In transitive clauses like (114a) in English, we cannot be sure whether the lexical verb is realised in the v head or the V head position because the two positions are adjacent and no material surfaces in between them ($[_{vP} e_{subj} v [_{VP} V \text{obj}]]$). Thus, the verb phrase structure of (114a) is either (114b) or (114c). The same issue applies to the embedded clause in (114d).

⁹⁵In contrast to Dutch, the German situation, as discussed in the previous section, does not give rise to any discussion of the uniformity issue. This is because when the complex $V(v)$ head is not split up into two separate heads, which gives rise to a shell structure, the ‘(non-)uniformity of headedness’ issue is trivial: If projection is always to the left (as follows from Haider’s *Branching Constraint* and *universal right-branching merger* there is no other option than a uniform organisation with respect to headedness of the verb phrase in German.

- (114) (a) *John had kissed Mary* (English)
 (b) *John_j had (...) [_{VP} e_j v [_{VP} kissed_V Mary]]*
 (c) *John_j had (...) [_{vP} e_j kissed_v [_{VP} V Mary]]*
 (d) *that John had kissed Mary* (English)

The insertion of adjuncts in between these positions does not help because in English verb phrases (like in other VO languages) we cannot insert adjuncts in between the verb and the nominal arguments of the head as Haider (2009, etc.) has argued in a number of papers (he refers to this property as the compactness property).⁹⁶

However, in clauses with a more complex verb phrase like (115) we are able to make a clear decision because here it is clear that the lexical verb is realised in a high position inside the verb phrase (and not in the lower verb position which immediately precedes the lower argument).

- (115) (a) *John has [_{e_{subj}} given the man (*given) a book]* (English)
 (b) *John has [_{e_{subj}} given the book (*given) to the man]* (English)

Let us return to the discussion of the transitive verb phrase structure in Dutch, (112) versus (113).

If the transitive verb phrase in Dutch does also contain two verb head positions, we would expect that the lexical verb is also realised in the higher of the two verb head positions. This is predicted for both alternatives, (112) and (113).

The decision can be made on empirical grounds: if the lexical verb occupies the higher verb position verbal head position and if the higher verb position (*v* is on the left-hand side of its complement, as in the structure (112)), we will get the ordering ‘verb < object’ inside the verb phrase, just like in English. This order is ungrammatical in Dutch, however, both in main clauses as well as embedded clauses as (116b,d) shows.

- (116) (a) *Jan_j heeft [_{vP} e_j v [_{VP} Marie gekust]]*
Jan_{subj} has Marie_{obj} kissed
 ‘Jan (has) kissed Marie’ (Dutch; Zwart 1997, 23 (10a))
 (b) **Jan_j heeft [_{vP} e_j gekust_V [_{VP} Marie V]]*
Jan_{subj} has kissed Marie_{obj}
 (Dutch; Zwart 1997, 23 (10b))
 (c) *dat Jan_j [_{vP} e_j v [_{VP} Marie kust]]*
Jan_{subj} has Marie_{obj} kisses
 ‘that Jan kissed Marie’ (Dutch)

⁹⁶If the adequate verb phrase structure of transitive verbs in SVO languages like English is ‘[_{vP} subj v [_{VP} V obj]]', as we assume, this does also allow to account for the fact that a weak object pronoun like *it* surfaces in between the verb and a stranded verb particle in constructions like *to give it up*. If, however, there is only a single left-headed verb position inside the transitive clause existent in languages like English, then we cannot offer an explanation.

- (d) **dat Jan_j [_{vP} e_j kust_v [_{VP} Marie V]]* (Dutch)
 that Jan_{subj} kisses Marie_{obj}

Under the assumption that (112) is the adequate transitive verb phrase structure in Dutch, it is surprising that the higher verb position (*v*) cannot be occupied by a lexical verb, not even optionally.

Stated more theoretically, short verb movement to the *v* head position is excluded in Dutch;⁹⁷ otherwise the surface configuration in (117a) would arise and the examples in (116b,d) should be grammatical.

- (117) ... [_{vP} (subj) verb_v [_{VP} obj e_{verb}]]

Furthermore, we find empirical indications for verb phrase internal verbal head positions in English although the verb does not surface there: verb particles, which are stranded verb phrase internally, can surface in different positions inside the verb phrase. It has been argued in the relevant literature that the positions of the stranded particle indicate verb phrase internal verb positions.⁹⁸ Optional verb particle stranding is also found in Norwegian, for example.

- (118) *the secretary sent (out) the stockholders (out) a pay check *(out)*
 (English; H.Haider, p.c.)

By parity of reasoning, if (112) is the correct structure for transitive verb phrases in Dutch, we would expect that verb particles can occur in a position which immediately precedes the object. However, as (119c) shows, a verb particle cannot surface on the left-hand side of a verb phrase internal object argument in Dutch. This, however, corresponds to the left-headed *v* head position in the structure (112). Strictly speaking, in OV-languages like Dutch (and German), verb particles are always adjacent to the verb and in preverbal position (except under verb second).

- (119) (a) *dat Jan dat boek opbergt*
 that Jan_{subj} that book_{obj} up-files
 ‘that Jan files that book’ (Dutch; Broekhuis 2008, 86 (50a))
- (b) *Jan bergt_i dat boek op-e_i*
 Jan_{subj} files that book_{obj} up
 ‘Jan files that book’ (Dutch; Broekhuis 2008, 86 (50b))
- (c) **Jan bergt op dat boek_{obj}* (Dutch)
 Jan_{subj} files up that book

⁹⁷Nevertheless, in many approaches to the syntax of Dutch, short verb movement is assumed (see Mohr 2004, among others) – however, for theory-internal rather than empirical reasons; that is, short verb movement is used only as a technical device in approaches of this kind.

⁹⁸As argued in Haider (1997a), the stranded particle marks a possible verb position in the VP-shell structure of complex, VP-initial V-projections.

Interestingly, we find verb particle stranding in Dutch not only in verb second contexts when the lexical verb has moved to the verb second position, thereby leaving the particle behind, (119b), but also in verb complexes, (120a,b). This is evidence that Dutch is a particle stranding language. Therefore, it would be even more striking that the particle cannot occur in a position immediately preceding the object argument in Dutch if we assumed the existence of a head-initial *vP* layer in Dutch.

- (120) (a) *dat Jan dat boek op zal moeten bergen*
 that Jan_{subj} that book_{obj} up shall must file
 ‘that Jan should have to file that book’
 (Dutch; Broekhuis 2008, 86 (51a))
- (b) *dat Jan dat boek zal op moeten bergen*
 (Dutch; Broekhuis 2008, 87 (53a))
- (c) *dat Jan dat boek zal moeten opbergen*
 (Dutch; Broekhuis 2008, 86 (52a))

In short, there is no empirical evidence for the existence of a head-initial *v* position inside the transitive verb phrase in Dutch. From this we conclude that there are no good empirical reasons to assume a left-headed *vP* layer within the transitive verb phrase in Dutch. Rather, we conclude that (113) is the adequate structure for transitive verb phrase structure in Dutch.

In addition to the empirical evidence, there is also a conceptual issue which points to this conclusion. Within a minimalist approach that assumes phases, there is also a conceptual counter-argument to the assumption of a left-headed *vP* layer for Dutch coming from the *Phase Impenetrability Condition (PIC)* (Chomsky 2000, 2001*b*, to appear), which is standardly assumed to hold. In Chomsky’s version, the PIC is formulated as in (121):

- (121) *Phase Impenetrability Condition (PIC)* (Chomsky 2001*b*, 14 (11))
 The domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations.

The PIC states that, once a phase has been completed, the internal domain of the phase (= ‘the domain of H’, i.e., the complement of the phase head) is not accessible to operations at the next higher phase (= ‘ZP’ in Chomsky’s 2001*b* formulation of the PIC). If a constituent which is contained in the complement of *v* is supposed to move out of the *vP* to a position of the CP domain, it has to move to the edge position of *vP* first, because otherwise, given strict cyclicity, cyclic Spell-Out⁹⁹ and the PIC, it would no longer be accessible for

⁹⁹‘Cyclic Spell-Out’ was originally proposed by Chomsky (2000) as a way to eliminate the feature-deletion/erasure distinction in Chomsky (1995) and the problems that the distinction gave rise to by eliminating uninterpretable features before the interface is reached as the derivation proceeds. See Epstein and Seely (2002); Legate (2003) for arguments against phase-based computational memory; see also Bouchard (2002).

movement at later stages of the derivation.

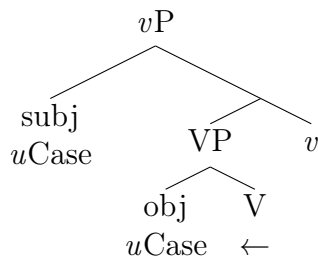
With respect to phrasal movement, the PIC forces successive-cyclic movement via phase edges. For verb movement, however, the situation is slightly different. Being a head, the verb does not move through the (outer) specifier of *vP* on its way out of the *vP* like XPs do, but rather it must be moved from the *v* head position, which is the phase head. Given the PIC, it cannot be directly moved from the lower verb head position V of the transitive verb phrase because this low position is no longer accessible for operations at the next higher phase level after the *vP* phase has been completed.

If there is a head-initial *vP*-layer existent in Dutch, the transitive verb must occupy the *v* head position inside the verb phrase, otherwise it would be blocked from ever being moved to the verb-second position in any derivation in Dutch, due to the PIC.

As has been shown above, the lexical verb does not occupy a verb position which precedes the position of the complement within the Dutch transitive verb phrase, however, and no particle stranding is possible there either.

We take this as additional evidence for our conclusion that the *vP* layer in Dutch must be head-final, just like the lower (VP) shell. As a consequence, transitive verb phrases in Dutch show a uniform organisation with respect to headedness: both, the VP layer as well as the *vP* layer in the transitive verb phrase are head-final in Dutch. Thus, the appropriate transitive verb phrase structure of Dutch is (122) (repeated from (113)) rather than (112).

(122) Internal structure of transitive verb phrases in Dutch



In the discussion so far, it has not been clarified what the actual relation between the lower (V) and the higher (*v*) verb head position inside the transitive verb phrase structure is in Dutch: is it a relation of incorporation (the verb moves to the *v* head as in VP-shell structures in VO languages) or is it a relation of adjunction (head-to-head adjunction as in the formation of verbal complexes)?

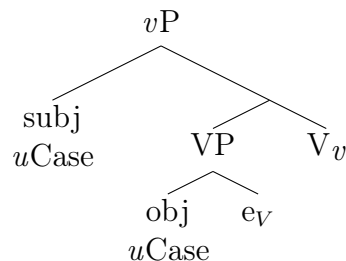
We claim that the former solution is the more adequate one: during the course of projecting a transitive verb phrase in Dutch, the verb V is incorporated into the *v* head of the higher shell. When a transitive verb phrase is projected in Dutch, the complex V(*v*) head is split into two separate heads (V, *v*) for reasons of unambiguous argument identification at the level of first merge of the arguments and a layered (shell) structure is projected, according to the condition *Unambiguity of Argument Identification* as defined in (107). V is merged with its complement (the object); in the higher shell of the transitive

verb phrase in Dutch, the verbal v features are merged in the higher verb position, but there is not lexical element on which these features could be realised. Recall that a transitive verb is a $V(v)$ head (in a less technical way of speaking, it is a V head which includes v features that are inactivated by being encapsulated); thus, V is the element which will get lexically realised. As a consequence, when the $V(v)$ head is split up, V is raised and incorporated into the v head position, thereby taking up the v features.¹⁰⁰

The exact procedure of verb phrase formation with transitive verbs in Dutch will be illustrated in section 9.2.2.

In the tree structure of (123), this information is included. V is incorporated into the verbal head position of the higher verb phrase layer (indicated by ‘ e_V ’ in the lower verb head position and ‘ V_v ’ in the higher verb head position) where it will get realised if it does not move to the verb second position.

(123) Internal structure of transitive verb phrases in Dutch



Let us make a few comments on the above mentioned alternative, namely that V could be adjoined to the higher (v) head instead. In a short excursus we will outline some of the serious difficulties which analyses along these lines are faced with.

9.2.1 Excursus: Is there head-to-head adjunction inside transitive verb phrases in Dutch?

Dutch as well as German are known to be languages which display a verb clustering property in constructions which contain more than one verb (see Haider 2003; Koopman and Szabolcsi 2000; Wurmbrand 2004*b*, among many others, for discussion). In both languages, the verbs of the verb cluster are strictly adjacent to each other, they cannot be separated by any intervening material,¹⁰¹ (124)¹⁰² (in contrast to the corresponding construction in VO languages like English, consider the English translation of the (b) example).

¹⁰⁰This is basically the same procedure as in VP shell structures in VO languages.

¹⁰¹But recall that verb particles may be stranded in the verb cluster in Dutch; in German this is not possible.

¹⁰²Additional orders are available in Dutch.

- (124) (a) *dat hij niets kan (...) hebben (...) gezien*
 that he nothing can have seen
 ‘that he cannot have seen anything’
 (Dutch; Haeseryn et al. 1997, 1069 (1b))
- (b) *dass die Theorie wohl tatsächlich schlecht formuliert*
 that the theory possibly indeed badly formulated
 (...) *worden (...) sein (...) mag*
 been be may
 ‘that the theory may possibly have indeed been badly formulated’
 (German; Haider 2003, (1b))

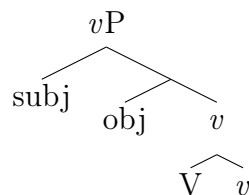
The transitive verb phrase structure that we have proposed for Dutch contains two verb positions which are both head-final, and, thus, adjacent to each other. In this respect, the configuration is superficially similar to the situation found in clustering contexts. Therefore, the question arises whether or not clustering applies to the two verb positions in the uniformly head-final layered verb phrase as proposed for Dutch.

Various accounts of verb clustering in German and Dutch have been proposed in the literature (see Haider 2003 for an analysis in terms of base generation (plus head-to-head adjunction or cliticisation to derive the different orders in the verb cluster in Dutch), Koopman and Szabolcsi 2000 for an analysis in terms of remnant verb projections, among others). These approaches deal with constructions which feature more than one verb, and in many cases the verbs of the cluster can be realised in various orders.

This property does not carry over to the situation we are faced with in connection with the transitive verb phrase structure of Dutch as proposed above. Here, however, we are dealing with a single lexical verb which is argued to project a complex, layered verb phrase. The layering of the transitive verb phrase in Dutch is conditioned by the necessity to unambiguously identify the arguments by virtue of the structural domain they are occupying in their position of first merge, in the absence of rich morpho-syntactic case.

The assumption of base-generated verb clustering would be problematic in this connection, because in that case an unambiguous structural distinction of the arguments could not be achieved. Consider the structure in (125).

- (125) Internal structure of transitive verb phrases in Dutch: base generated verb clustering? – No!

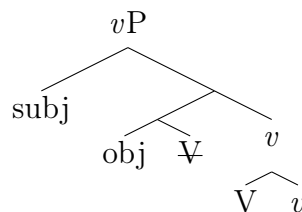


The verb phrase structure in (125) does not distinguish different structural domains. Through base-generated verb clustering we only get a single

(although complex) verbal head within the transitive verb phrase. As a consequence, the arguments occupy the same structural domain and they are differentiated only by the order in which they are merged. It is crucial to be aware of the fact that structure (125) violates the condition *Unambiguity of Argument Identification (UAI)* which has been argued to be strongly involved in determining the structural make-up of the verb phrase structure.¹⁰³

Compare the verb phrase structure (126) which features a derived rather than base generated verbal complex (head-to-head adjunction) (indicated by crossing out of V in the tree structure).

(126) Internal structure of transitive verb phrases in Dutch: derived verbal complex? – No!



In the structure in (126), unambiguous argument identification by virtue of distinguishing different structural domains for the arguments can be achieved. However, this structure is faced with other kinds of problems. For example, it has been argued that, in general, verbal complexes in German and Dutch are base generated rather than derived (cf., for example, Haider 2003). Thus, the assumption of a structure as in (126) would be a plain stipulation.

Furthermore, head movement, as in the case of verb second, would be difficult for any analysis which assumes head-to-head adjunction in the context of transitive verb phrase formation in Dutch, irrespective of whether the verbal complex is base generated or derived. For example, it is unclear which one of the two heads of the verbal complex should be moved because in any case one part of the verb must be left behind (recall that only V and *v* together constitute the transitive verb).

9.2.2 Back to our approach to the structure of transitive verb phrases in Dutch

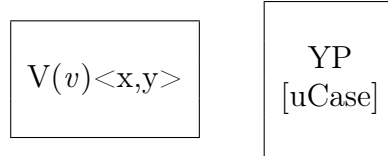
Having clarified the appropriate make-up of transitive verb phrases in Dutch, we will now come to the discussion of the actual procedure which projects a transitive verb phrase structure in Dutch.

In (127), the individual steps of the procedure in an OV language like Dutch are illustrated (again, the feature matrices are simplified; only relevant features are represented in the arguments).

¹⁰³In contrast to the transitive verb phrase structure which has been proposed for German in the previous section, the complex $V(v)$ head is split up, however. As a theory-internal consequence of this, *v* is activated as a probe in the Dutch verb phrase structure while it stays inactive in German.

(127) Procedure: projecting a layered transitive verb phrase (vP -VP) in OV languages

- 1) $V(v)$ selects the object argument YP from the numeration

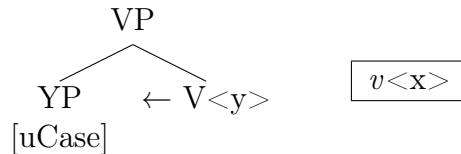


- 2) *Unambiguity of Argument Identification (UAI)* inspects the feature matrix of YP for presence of m-mark; simultaneously:

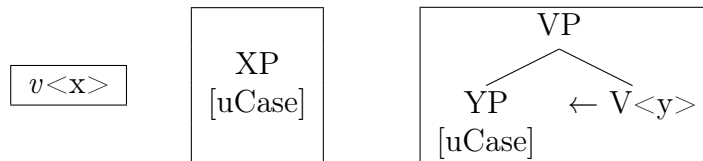
- 3) Splitting up of $V(v)$ into individual heads V and v (because of absence of subfeature m-mark);



- 4) Merge(V , YP) according to the directionality requirement (\Leftarrow) of OV languages

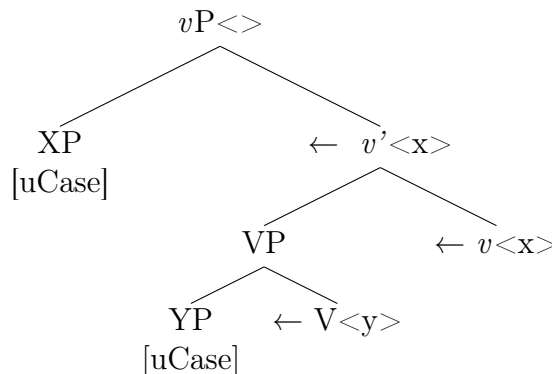


- 5) $v<x>$ selects the subject argument XP from the numeration



- 6) *Unambiguity of Argument Identification (UAI)* inspects the feature matrix of XP for presence of m-mark¹⁰⁴

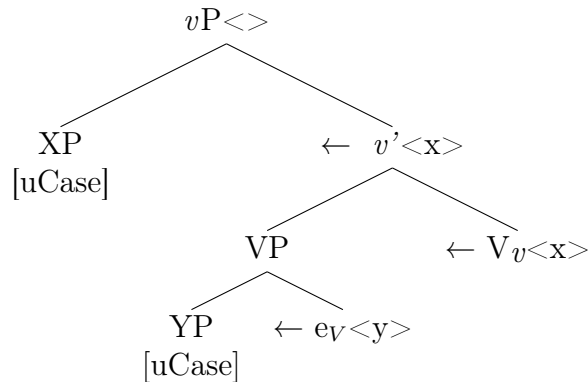
- 7) Merge(v , VP) and Merge(XP, (v , VP))¹⁰⁵



¹⁰⁴Although m-mark is not present as a subfeature in the feature matrix of XP, there is no further splitting of the verb head at this point because unambiguous argument identification by virtue of distinguishing different structural domains for the arguments can already be achieved on the basis of the existing structure and the elements which are in the work space (where they wait to be merged into the structure).

¹⁰⁵According to the universal restriction on merger, merge is always to the left (cf. Haider's 1993 *Branching Constraint*; Haider's 2009 *universal right-branching merger*)

8) Incorporation of V into v



(no further selection from the numeration because of $\langle \rangle$ on vP)

There is a consequence of our approach to the transitive verb phrase structure of Dutch which might look like a conceptual disadvantage: The assumption of a head-final vP is a drastic departure from standard minimalist reasoning, because according to standard assumptions, all functional projections are uniformly head-initial (note that v is treated as a ‘semi-functional’ head in minimalist theorising).

However, we do not see any compelling reason(s) why a head-final vP shell structure should be difficult for syntactic derivations under minimalist assumptions. Still, one issue is crucial: since in the minimalist framework v takes part in feature matching under Agree, it must be guaranteed that the mechanism of establishing an Agree relation with a goal in a given locality domain is not affected by the headedness issue. As far as we can see, this is not the case.

Typically, feature matching under Agree presupposes that a relation between a probe and a goal is established under c-command. The c-command relation is not affected by headedness, however. From this, we conclude that establishing an Agree relation in a head-final vP shell proceeds in exactly the same way as in head-initial vPs .¹⁰⁶

There is also the fact that the vP shell is obviously part of the lexical projection of the verb because it hosts the base position of the subject argument of the transitive verb in its specifier and, as has been argued above, only V and v together form the transitive verb. Therefore, variation should even be strongly expected because the lexicon is a locus where we typically find cross-linguistic variation.

As has already been suggested in chapter 8, one might speculate that *Unambiguity of Argument Identification* does not only have consequences for first merge but also beyond that.

Recall that movement of weak object pronouns targets the edge of the verb phrase (i.e., it is movement to the outer specifier of the verb phrase or adjunction to the verb phrase, depending on the framework that is adopted).

¹⁰⁶A head-final vP should also be unproblematic for the *Phase Impenetrability Condition (PIC)* because the PIC is neither defined in terms of directionality nor in terms of precedence (at least not as far as the phase head is concerned).

Once the weak object pronoun has moved to the edge of vP , it is in the minimal structural projection domain of the subject argument, however; thus, the unique relation between the argument and its structural domain is destroyed. This time, however, no further layering of the transitive verb phrase occurs because the weak object pronoun is remerged in this position rather than first merged.¹⁰⁷ It is a well-known empirical generalisation that weak object pronouns do not precede the subject of a transitive verb in Dutch, however.

In the next chapter, we will suggest an account of this along the following lines: If a weak object pronoun has undergone weak pronoun movement and the application of this movement results in a structural configuration in which the arguments are inside the same structural domain, although they cannot be unambiguously identified on the basis of their morpho-syntactic feature matrix, there will be a crash of the derivation if this illicit configuration is not ‘repaired’ before the relevant part of the phrase marker is handed over to the interfaces. This can be achieved by the application of another movement operation which targets a different structural domain – in more concrete terms, by movement of the subject argument to an intermediate functional specifier position (Spec,TP), thereby crossing a verbal head position. As a result, after raising the transitive subject to the specifier of TP, subject and object argument again occupy different structural domains despite the application of weak pronoun movement. As a side effect, the original ordering of the arguments is re-established.

The details of this approach will be discussed in chapter 10.

Our treatment of Dutch presupposes that the parameter which distinguishes between languages with rich vs. poor case morphology is set to a ‘negative value’ throughout the Dutch language. Therefore, we will have to show that it is justified to assume ‘poor morphological case’ even for the pronoun system of Dutch which displays some case marking. This is discussed in section 11 (subsection 11.2.1) where it is argued that the pronoun system of Dutch is by far not rich enough to be classified as ‘rich case morphology’.¹⁰⁸ Supporting circumstantial evidence comes from the diachrony of Dutch; this will be discussed in detail in subsection 11.2.2 below.

Section 12 will be concerned with a theory-internal issue which is another crucial consequence of our approach, viz. the question of how accusative case valuation (matching) works in a minimalist approach if there is no distinct vP layer existent in transitive clauses in German.

¹⁰⁷Recall the formulation of the condition *Unambiguity of Argument Identification* in terms of first merge.

¹⁰⁸See also Kainhofer (2006a) for discussion.

10 The approach: Unambiguous argument identification at later stages of the derivation

In the framework, on which our analysis is based, there are (at least) two options with respect to how a correlation between the (order of the) arguments in their base positions and their order relation at later levels of the derivation could be conceptualised: Either it is formulated in terms of features which motivate (trigger) the relevant steps of the derivation or it is representationally conceptualised in that the relevant mechanism refers to the existing syntactic representation.

As has been mentioned in this discussion before, in the cases under consideration it is especially the positioning of the subject of transitive clauses in Dutch which needs to be considered. The typical ordering pattern of a non-pronominal subject and a weak object pronoun in Dutch is ‘subject < object_{weak}’. However, we have argued that weak object pronouns undergo weak pronoun movement to the edge of the verb phrase in Dutch. If this is the case, why don’t we find this ordering as a typical ordering pattern with weak object pronouns in Dutch?

In this chapter, two alternative conceptualisations will be discussed. In the first type of conceptualisation, a movement triggering feature (traditionally termed ‘EPP’ feature¹⁰⁹) must be represented on an intermediate functional head which attracts the subject argument to the corresponding specifier position; whereas in the second conceptualisation, we are faced with a kind of ‘repair strategy’ which applies to save a derivation which would otherwise crash because a representational constraint on the proper organisation of the phrase marker is not respected.

The two options will be discussed in turn. We will come to the conclusion that the latter conceptualisation is superior and should therefore be assumed. The other conceptualisation (an EPP feature-driven raising of the subject to a dedicated functional specifier position) faces a number of problems in the present context.

We will begin our discussion with the formulation in terms of an EPP feature on T and discuss in what respects it is difficult.

In a more technical style of speaking, in order for us to be able to capture the generalisation that the subject of a transitive verb typically precedes a weak object pronoun in Dutch, although weak pronoun movement has applied, we can formulate the following hypothesis in connection with our approach as discussed so far: Speaking in terms of features, there is an obligatory EPP feature on T in Dutch for structural reasons (argument identification by distinguishing different structural domains for the subject and object argument) in the cases under consideration.

The assumption of a generalised EPP feature on T, which demands the overt

¹⁰⁹Other theoretical options like the checking of other features in local spec-head configurations, are not compatible with the base assumptions of our approach.

filling of the corresponding intermediate functional specifier position in any finite clause, is not an adequate analysis for Dutch because we find a considerable number of clauses in the language which do not feature a subject nor an expletive element in a dedicated functional subject position. The strongest evidence comes from impersonal passives like those in (128) in which the occurrence of *er* is optional in Dutch.¹¹⁰

- (128) (a) *dat (er) gedanst wordt*
 that (there) danced becomes
 ‘that there is dancing’
 (Dutch; Richards and Biberauer 2004, 16 (35b))
- (b) *Tijdens het eten werd (er) flink gedronken*
 during the meal became (there) heartily drunk
 ‘During the meal, people were drinking heartily’
 (Dutch; Wurmbrand 2004a, 26)

From data like this we conclude that Dutch is not an ‘EPP-language’ of the traditional kind, i.e., it is not a language in which the subject obligatorily rises to an intermediate functional subject position (Spec,TP) or, if the subject does not rise or if there is no subject available, the constraint is fulfilled by insertion of an expletive subject.

Thus, if we want to stick to a conceptualisation in terms of an EPP feature on T, we will have to limit the relevant constraint to transitive clauses. Speaking in terms of features, we hypothesised in Kainhofer (2008) that there is an obligatory EPP-feature on T for structural reasons whenever there is a structural distinction between subject and object inside the verb phrase (i.e., a distinction by layering) because of the necessity to distinguish subject and object in structural terms. The EPP feature on T is checked by movement of the subject DP to the specifier of TP rather than by merge of a subject expletive (despite the familiar preference for merge over move). This can be connected to the fact that there is no subject expletive in Dutch (cf. Bennis 1986; Koenenman 2000 for argumentation that Dutch *er* is adverbial in nature and does not occupy Spec,TP).

However, a formulation in terms of an EPP feature on T is not an appropriate way of stating the condition because (i) it is conceptually problematic and (ii) it is also empirically inadequate.

¹¹⁰Richards and Biberauer (2004) report an observation which was brought to their attention by Hans Bennis: *Er* is only optional in impersonal passives featuring a preverbal passive participle (cf. (128a) above); where this participle surfaces postverbally, *er* is obligatory, (i).

(i) *dat *(er) wordt gedanst* (Dutch; Richards and Biberauer 2004, 16 (35b))

However, for our argumentation in the present connection, it is only crucial that *er* is not obligatorily present in any subjectless clause in Dutch.

Technically spoken (formulation in terms of features), this would mean that there is an obligatory EPP feature present on T in transitive clauses in Dutch. If, on the other hand, a non-layered verbal projection is merged in Dutch, the EPP feature on T is not (obligatorily) present – at least not for purely structural reasons. This is the case with verbs which take only one argument. The verb phrase structure of unaccusative (and passivised) verbs in Dutch will be discussed below.

A formulation in terms of an EPP feature on T predicts that in each and every transitive clause in Dutch an intermediate functional specifier position, which hosts the subject, needs to be filled – irrespective of whether weak object pronoun movement has applied or not. This is tantamount to the claim that there is a ‘generalised EPP’ in transitive clauses in Dutch.

In section 8.1.1 above we discussed transitive expletive constructions (TECs) for which it has been argued that the ‘expletive’ element *er* is in fact not a subject expletive which occupies a functional position dedicated to the subject of the clause. If this analysis is on the right track, TECs pose a problem to the suggested correlation between a layered organisation of the verb phrase and the presence of an EPP feature on the functional T head. If not all transitive verbs – although projecting a layered *v*P-VP structure in Dutch – feature a T head, which carries an EPP feature, it is hard to see how a formulation in terms of an EPP feature on T could be used to capture the facts.

As for the conceptual problems with the assumption of an obligatory EPP feature on T along the indicated lines, it is not obvious how the T head in the numeration should know whether or not it will have to carry an EPP feature in its feature matrix in the relevant cases. There are several options as for how this could be established; however, each of them is (conceptually) problematic in one way or another as will be indicated in the following paragraphs.

It has already been argued above that there cannot be a simple correlation between finite T and the presence of an EPP feature on the T head because this would give us a situation in which all finite clauses must have an intermediate functional head position that has to be overtly filled; this is not the case in Dutch, however.¹¹¹ Other options pose conceptual problems: First, there cannot be a correlation between the presence of a transitive verb ($V(v)$) in the numeration and a [+EPP] feature specification of T because it is not a matter of being a transitive verb per se which ‘triggers’ obligatory filling of the Spec,TP position.

Another option would be that T inspects the feature specification of the argumental DPs in the numeration for presence of the subfeature *m*-mark on *u*Case; if there is no such feature specification present on the DPs, T gains an EPP feature. This conception is problematic for various reasons: first, it is a plain stipulation and the argument is cyclic (the EPP feature on T is added

¹¹¹The assumption of null subject expletives is highly controversial and unmotivated.

in exactly those cases for which we would like to have one, and the insertion of the EPP feature is motivated only by the desire to have such a feature; there is no independent source for the justification of the insertion operation). There is also the fact that the operation, which inspects the feature matrices of the DPs for presence of *m*-mark, would assimilate the Agree relation which exists in the syntax; it is conceptually implausible that such an operation is available in the numeration. Furthermore, the conception makes the wrong prediction with respect to unaccusative and passivised verbs: whenever there is no subfeature *m*-mark present on the DPs, an EPP feature would be inserted in T, leading to the prediction that in any such clause the subject will have to rise to the specifier of TP. In Dutch, this would lead to a generalised EPP property of T in Dutch in any kind of finite clause which contains at least one nominal argument. It is well-known that this prediction is not borne out; with unaccusative and passivised verbs we also find a general ‘object < subject’ ordering of arguments in Dutch.

Finally, we are left with the options that the EPP feature is not yet present on T in the numeration but that it is inserted during the course of the derivation. This option is conceptually problematic in a minimalist approach because it is a violation of the Inclusiveness Condition (Chomsky 1995, 2001*b*).

From this brief discussion, we conclude that a formulation in terms of an EPP feature on T in the cases under consideration is not an adequate conceptualisation of the relevant mechanism.

In the remainder of this section, we will present our own approach which mainly relies on the assumption that the decision whether or not a layered verb phrase structure is projected is made only in the course of the derivation and not independently of it (as, for example, in the numeration). For this reason, we will have to reject the formulation of the hypothesis in terms of an EPP feature on T. Instead we will argue in favour of a different mechanism which guarantees that the subject argument occupies a derived and structurally distinguished position in the relevant constructions in Dutch. The mechanism that we are going to propose does not make reference to movement triggering features so that it does not pose problems in terms of the Inclusiveness Condition.

In a nutshell, our argumentation in this chapter proceeds along the following lines: When in Dutch the base position of the subject is structurally distinguished from the base position of the object – that is, whenever there is a layered *v*P-VP structure merged – this configuration is ‘mirrored’ or ‘repeated’ at the relevant higher level of the derivation (the higher phase). Through this, the subject of a transitive verb and a moved weak object pronoun are structurally differentiated in Dutch even when they occupy derived clause-internal positions.

In connection with the movement of weak object pronouns, the following

picture emerges: When weak pronoun movement has applied in Dutch, subjects of transitive verbs must occur in a designated position in the intermediate functional layer of the clause (Spec,TP). This is demanded by a principle of argument identification (licensing) which demands that unambiguous argument identification must be guaranteed even at a later level of the derivation, see the definition in (130).

It has been frequently observed in the literature that even subjects of unaccusative and passivised verbs can occur in a higher clause-internal position than a weak object pronoun; – importantly, however, they need not do so as the examples in (129) show. Haider (1993); Neeleman and van de Koot (2007), among others, analyse this as an optional filling of the structurally dedicated subject position within the midfield.¹¹²

- (129) (a) *dat rampen 'm overkwamen*
 that calamities_{subj} him_{obj.weak} happened_{unacc}
 ‘that calamities happened to him’ (Dutch)
- (b) *dat het boek 'm gegeven worden*
 that the book_{subj} him_{obj.weak} given was_{pass}
 ‘that the book was given to him’ (Dutch)

We suggest that the motivation for the additional movement step in constructions of this type (raising of the subject of non-transitive verbs) lies outside purely syntactic, structural requirements while with transitive clauses which feature weak pronoun movement the additional movement operation is forced because otherwise the derivation would crash at the higher phase level when it is handed over to the interfaces.

What is important here is the difference in obligatoriness: Subjects of unaccusative and passivised verbs in Dutch occupy Spec,TP only optionally. There is no *structural necessity* for subjects of unaccusative and passive verbs to rise to Spec,TP. Further below in this chapter we will come back to this issue.

With transitive verbs, on the other hand, the subject argument is moved to Spec,TP for reasons of unambiguous argument identification. Thus, there is a structural necessity for rising the subject of a transitive verb to an intermediate functional specifier position (Spec,TP) from where it precedes the moved weak object pronoun. Thereby, the original ordering relation of subject argument and object argument is re-established at the higher level of the phrase marker. This guarantees successful and unambiguous identification of syntactic functions even at later steps of the derivation in Dutch.¹¹³

The situation in German is different: Even at the higher level of the derivation, the arguments are unambiguously identifiable on the basis of their morpho-syntactic feature matrices. Formulated in terms of the alternative

¹¹²Neeleman and van de Koot (2007, 23): “A-movement in Dutch is optional, giving rise to what is sometimes referred to as nominative-dative inversion”

¹¹³Also in language comprehension.

mechanism which we hold responsible for the ‘last resort’ rising of the transitive subjects in the cases under consideration in Dutch, nothing additional needs to be said about a language like German: since argument identification is not achieved on the basis of distinguishing different structural domains in German, the indicated repair mechanism never applies.

We will now come to the theoretical implementation of these suggestions. We claim that condition (130) holds at the higher phase level (CP).

(130) *Unambiguity of Argument Identification at the higher phase level (UAI-phase):*

An argument must be unambiguously identified at the higher phase level.

An argument is unambiguously identified at the higher phase level iff

- (i) it is identified on the basis of its morpho-syntactic features, or
- (ii) it is the only argument in the minimal structural projection domain at the level of the phase.

In essence, *UAI-phase* is a condition on possible representations which applies at a specific level of the derivation (the higher phase level); however, it is not the case that any derivational step is subject to this condition.

Unambiguous identifiability is defined along the lines suggested in connection with the condition *Unambiguity of Argument Identification (UAI)*, (107) in chapter 9, which holds at the level of first merge.

Unambiguity of Argument Identification at the higher phase level (UAI-phase) is also subject to the economy principle which is stated in (103). According to the economy principle (*Economy of Unambiguous Argument Identification: morpho-syntactic features < structural differentiation*), unambiguous argument identification on the basis of morpho-syntactic features is more economic than unambiguous argument identification by distinguishing different structural domains and will, thus, be preferred.

It is also crucial to be aware of the status of the condition: The condition *Unambiguity of Argument Identification at the higher phase level (UAI-phase)* in (130) does not trigger the ‘repair mechanism’ which re-establishes the original order relation of subject and object in transitive clauses in Dutch after weak pronoun movement of the object argument across the base position of the subject has applied. Rather, *UAI-phase* rules out a representation in which a moved weak object pronoun and a non-pronominal subject occupy the same structural domain at the CP phase level because of the application of weak pronoun movement to the edge of *vP*; a representation of this type violates the condition *UAI-phase* because the arguments cannot be unambiguously identified at the higher phase level. The ‘repair mechanism’ (i.e. raising of the subject argument to Spec,TP) applies untriggered (just like other movement operations).

One might speculate that both conditions on unambiguous argument identification (*Unambiguity of Argument Identification (UAI)* which holds at the level of first merge and *Unambiguity of Argument Identification at the higher phase level (UAI-phase)*) can be unified into a single condition which, vaguely, states that arguments must be unambiguously identified *at the phase level*. This attempt might be motivated by the minimalist assumption that transitive verb phrases (*vPs*) are phases, just like *CPs*.

However, the condition on unambiguous argument identification at the level of first merge, *UAI*, is also relevant for other types of verb phrases which do not have phase status according to minimalist standard assumptions.

Therefore, we will keep to the two formulations of the condition as stated in (107) and (130) which apply at different levels of the syntactic derivation.

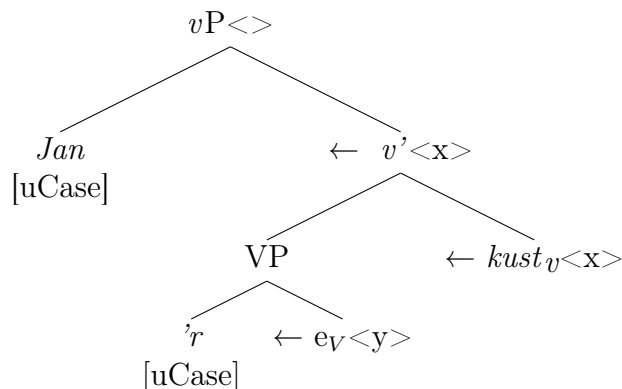
Consider the sample derivations of transitive clauses which contain a weak object pronoun from Dutch in (131) and (132) (the tree structures are simplified and only the relevant information is represented).

In (131a), the arguments occupy their base positions in a layered *vP-VP* shell structure; the arguments are unambiguously identified by virtue of their structural domains of first merge (according to condition *Unambiguity of Argument Identification (UAI)*). After the application of weak pronoun movement the weak object pronoun *'r* and the subject argument are inside the same structural domain, (131b), (highlighted by bold type).

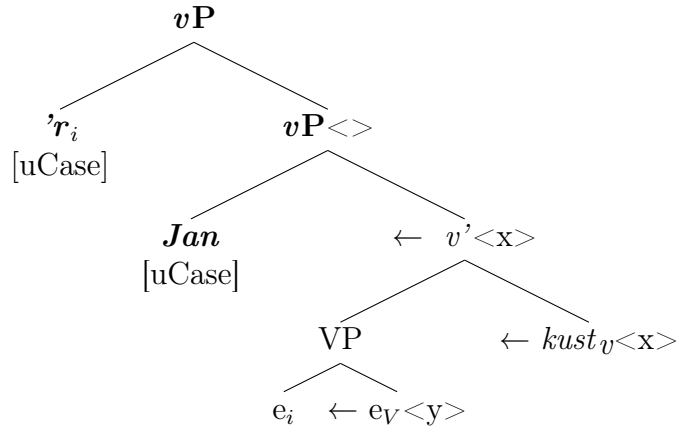
If no further movement applies and a complementiser is merged into the phrase marker, we eventually end up with the representation in (131c); this is an ungrammatical construction in Dutch (**dat 'r Jan kust*). According to our approach, it is illicit because the moved weak object pronoun and the non-pronominal subject are not structurally distinguished at the level of the higher (*CP*) phase although unambiguous argument identification cannot be achieved on the basis of the morpho-syntactic feature specifications on the arguments; thus, the representation in (131c) violates the condition *Unambiguity of Argument Identification at the higher phase level (UAI-phase)*, (130), and leads to a crash of the derivation at the *CP* phase level.

- (131) **dat 'r_i Jan e_i kust* (Dutch)
 that her_{obj.weak} Jan_{subj} kisses

(a) base structure: *vP-VP*

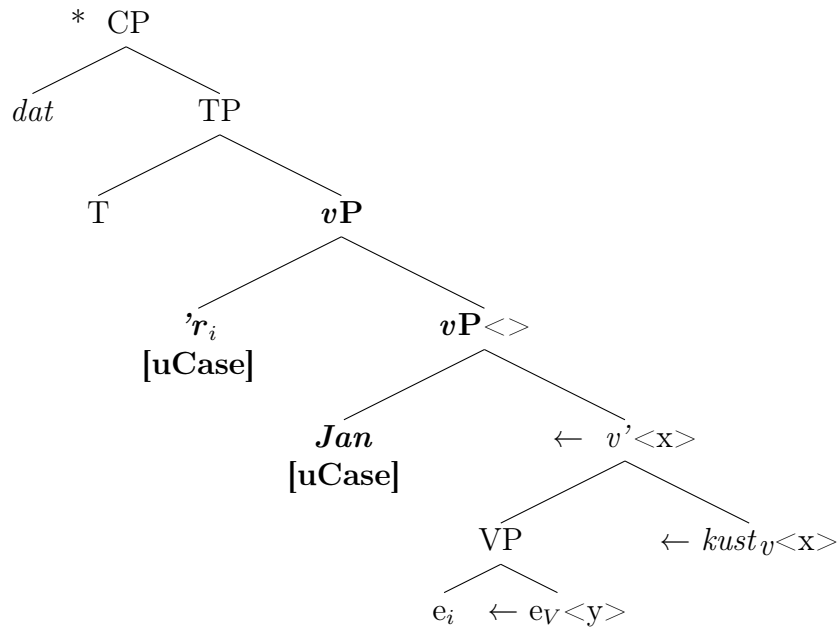


(b) application of weak pronoun movement



(c) [merge of TP]

(d) merge of complementiser *dat* – violation of *UAI-phase*:
CRASH!



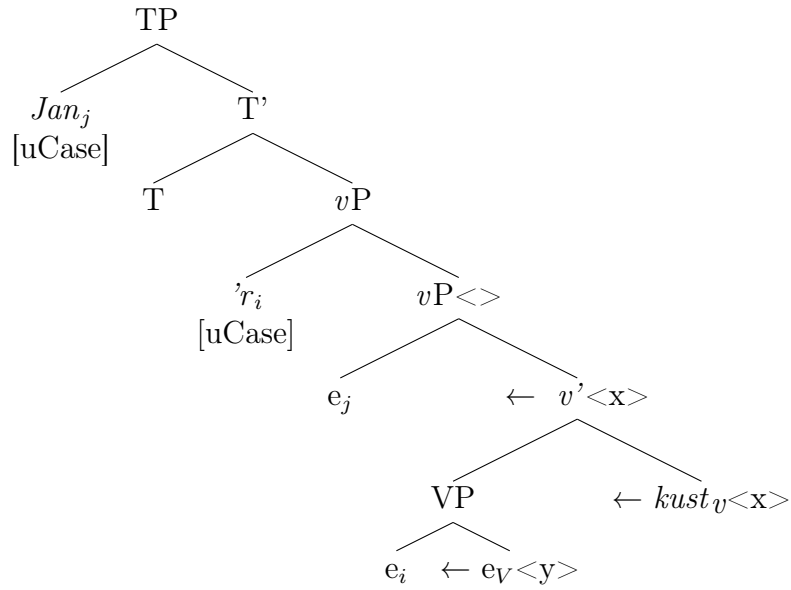
(132), in contrast, illustrates the derivation of a grammatical transitive clause which contains a moved weak object pronoun.

Until the level of TP, the derivation proceeds exactly like in (131). Then the subject argument *Jan* moves to the specifier of TP, (132d), and the complementiser *dat* is merged. In the resulting representation, (132e), the arguments are unambiguously identified according to the condition *Unambiguity of Argument Identification at the higher phase level (UAI-phase)* because they occupy different structural domains.

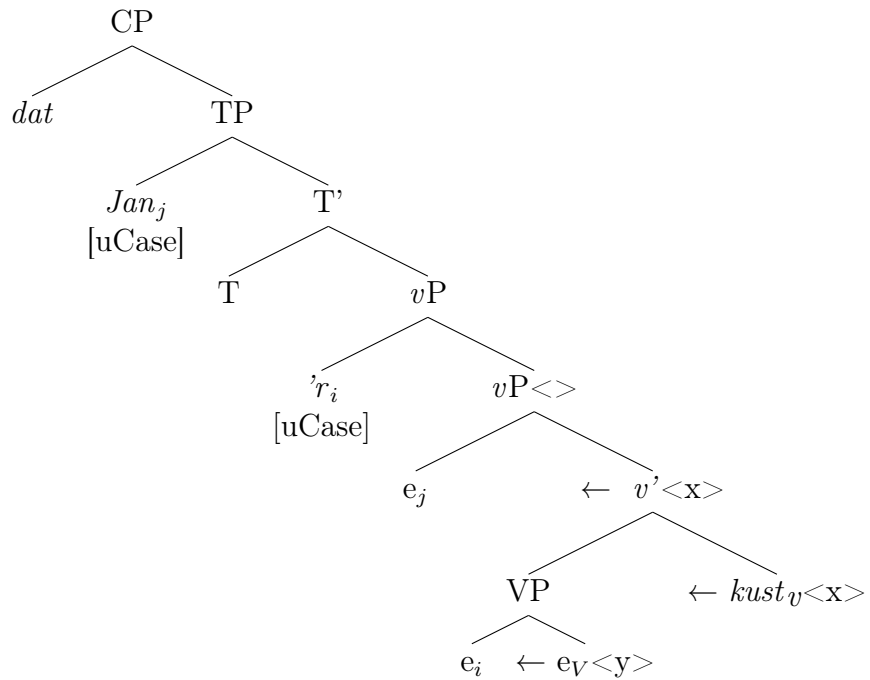
(132) *dat Jan 'r kust* (Dutch)
that *Jan_{subj} her_{obj.weak} kisses*

(a)-(c) [derivation like in (131)]

(d) raising of the subject to Spec,TP



(e) merge of complementiser *dat* – **no violation of UAI-phase**



The discussion so far has mainly concentrated on the structural make-up of transitive verb phrases. For Dutch, we have proposed an analysis in terms of a structural layering (*vP*-*VP*) of the transitive verb phrase (achieved by splitting up the complex *V(v)* head into two individual heads) in order for the arguments to be unambiguously identified in their positions of first merge. If an argument has moved to the edge of the *vP* in the course of derivation, a structural identification of the arguments can only be achieved at the higher phase level if a structural differentiation of the arguments is re-established by

rising of the subject. The resulting configuration is unproblematic for condition (130) at the higher phase level.

For German, in contrast, we have argued that a structural layering of the transitive verb phrase is not necessary (and, thus, not realised for economy reasons) because the arguments are unambiguously identifiable (and identified) on the basis of their morpho-syntactic feature matrices, both in their position of first merge as well as at the higher phase level.

What has not been considered in any more detail yet, is the internal structure of other verb types in Dutch and German. The crucial question is this: Do non-transitive verb phrases in Dutch also feature a layered internal structure, whereas they are unlayered in German?

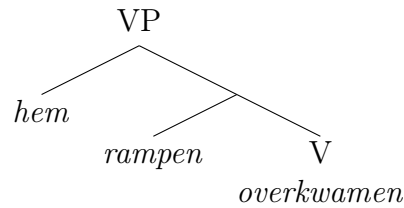
Given our approach as described in the previous chapters, we claim that any verb phrase which contains more than one (pro-)nominal argument should be layered in Dutch, basically for the same reason that applies to transitive verb phrases. The reasoning is this:

The condition *Unambiguity of Argument Identification (UAI)* claims that any argument must be unambiguously identified at its position of first merge, irrespective of verb type. Whenever there is a second argument merged into a verb phrase in Dutch, it would be contained in the same structural domain inside the verb phrase if no structural layering applied. (Pro-)nominal arguments in Dutch are never unambiguously identifiable on the basis of their morpho-syntactic feature matrices because of their morpho-syntactic feature specification which lacks subfeature *m-mark* on *uCase* of argumental DPs. Therefore, a structural layering of the verb phrase is the only possibility to fulfil the requirement that any argument must be unambiguously identified in its position of first merge according to condition *Unambiguity of Argument Identification*, (107). Thus, we expect that any type of verb phrase which contains more than one (pro-)nominal argument should have a layered internal structure. If this reasoning holds for the base positions of arguments inside the verb phrase, we expect that it should apply to the higher phase level as well, in accordance with condition *UAI-phase* in (130).

Consider the sample derivation in (133).

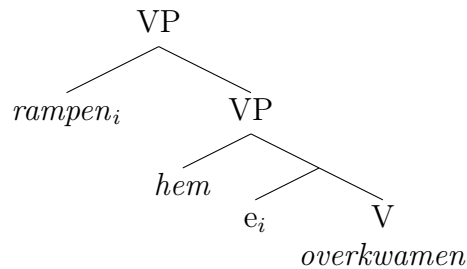
(133a) illustrates the base structure of an unaccusative verb phrase in Dutch without a verb phrase internal layering. Both arguments are within the same structural domain and, thus, the structure in (133a) violates *Unambiguity of Argument Identification (UAI)* because the arguments are not unambiguously identified in their position of first merge. Thus, a base order as in (133a) is not justified in our approach; however, this ordering of arguments is attested in Dutch, (133a').

- (133) (a) base configuration: unlayered unaccusative verb phrase –
violation of UAI: CRASH!

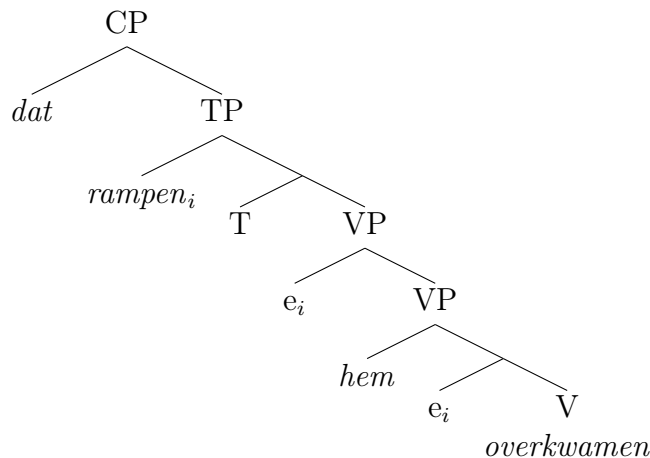


- (a') *dat hem rampen overkwamen* (Dutch)
 that *him_{obj.strong} disasters_{subj} happened*

- (b) intermediate movement step: raising of *rampen* to the edge of VP



- (c) ‘repair strategy’: rising of *rampen* to the Spec,TP → violation of UAI, no violation of UAI-phase



Rising of *rampen* to the edge of the VP as a repair strategy does not solve the problem; the two arguments are still inside the same structural domain and are therefore not unambiguously identified according to condition *Unambiguity of Argument Identification* because the movement operation targets a position inside the same structural domain. So, even after the movement, the landing position of *rampen* and the base position of *hem*¹¹⁴ are not structurally distinguished. Thus, in order for unambiguous argument identification to be fulfilled, *rampen* would have to move to the specifier position of some intermediate functional projection so that the additional verbal head position undertakes the function of distinguishing different structural domains. The

¹¹⁴Note that *hem* ‘him’ is a strong pronoun which does not undergo weak pronoun movement.

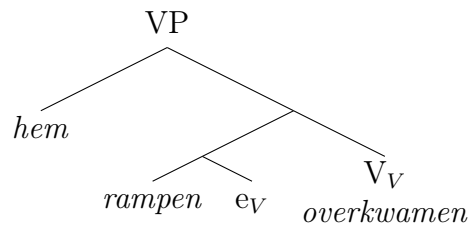
resulting configuration is illustrated in (133c); here unambiguous argument identification according to *UAI-phase* is respected.

One might object that in a minimalist framework assuming phases, the outer specifier of VP should not (necessarily) be targeted by movement because the VP is not a phase. In that case, the intermediate movement step (133b) would not apply; however, the result would exactly be the same: In the base configuration, the arguments are not structurally distinguished and, thus, (133a') would be an illicit verb phrase structure in Dutch; only in the derived structure there is a structural distinction of the arguments by virtue of the structural domain they are occupying. However, a structurally illicit base structure cannot be saved by the application of further syntactic operations.

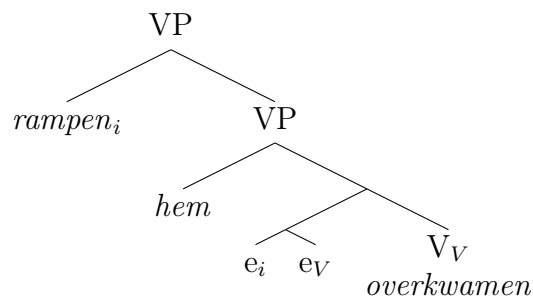
Therefore, we conclude that (133a) cannot be the adequate base structure for an unaccusative verb like *overkomen* in Dutch if *Unambiguity of Argument Identification* is operative in the language. The reason for this is the lack of a structural layering in the base order and the arguments are not unambiguously identifiable in their positions of first merge; this is a violation of the condition *Unambiguity of Argument Identification* which holds at the stage of first merge.

Now, consider the phrase markers in (134) which feature a layered verb phrase structure for reasons of unambiguous argument identification at the level of first merge, in accordance with *Unambiguity of Argument Identification (UAI)* as defined in chapter 9.

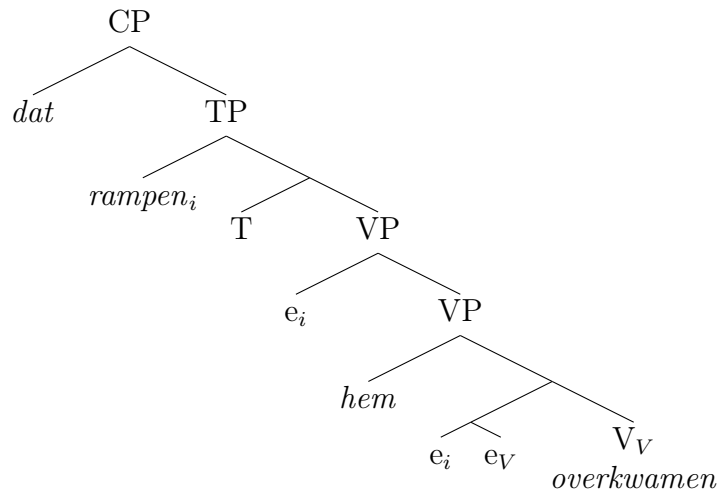
(134) (a) base configuration: layered VP – *UAI* is respected



(b) intermediate movement step: movement to outer Spec,VP



- (c) ‘repair strategy’: rising to Spec,TP – **both, *UAI* and *UAI-phase* are respected**



In contrast to (133), the base configuration in (134) is unproblematic: There is a structural differentiation of the arguments inside the verb phrase and, thus, successful and unambiguous identification of the arguments in their position of first merge is guaranteed. The condition *Unambiguity of Argument Identification* is respected in (134a).

Consider what happens when movement of *rampen* to the outer specifier VP applies: after the application of the movement operation, the arguments are contained within the same structural domain (i.e. they are not separated by an intervening verb head position), (134b). As far as the derivation is concerned, this step is unproblematic; however, if the resulting configuration is not ‘repaired’ before the point of transfer to the interfaces at the higher phase level is reached, it will lead to a crash at the interfaces because the representation violates the condition *UAI-phase* (130). However, if the ‘repair strategy’, which raises *rampen* to the specifier position of the intermediate functional projection (Spec,TP), applies, then the arguments are structurally distinguished once again, (134c); this is in accordance with condition (130) which requires unambiguous identification of the arguments at the higher phase level and the structure will converge at the interfaces.

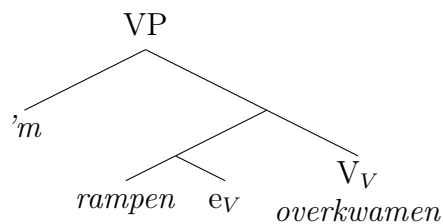
Both the base structure (134a) as well as the derived structure (134c) are licit syntactic configurations in which unambiguous argument identification by virtue of the syntactic domain, which the arguments are occupying, is guaranteed and both orders are licit orders in Dutch. Under (134) it is expected that both word orders are attested with unaccusative (and passivised) verbs in Dutch.

The formulation in terms of a ‘repair strategy’, which has been used in the previous paragraph, might be misleading, though: In fact, there is no trigger of the movement operation that moves *rampen*; rather, movement applies untriggered (it is a freely available syntactic operation, as has been assumed throughout the thesis) but the resulting representation is evaluated at the higher phase level (the CP). The effect of a freely available, untriggered movement of this

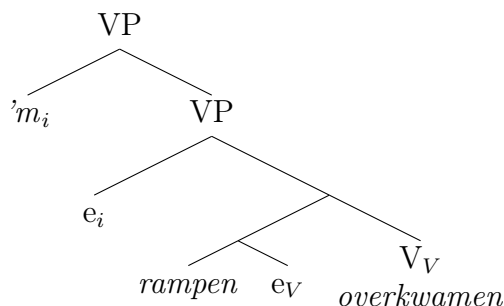
type is an optional filling of the specifier position of the intermediate functional TP-projection as found in unaccusative (and also passivised) clauses in Dutch.

In the unaccusative construction in (135) weak object pronoun movement has applied. Both the base configuration in (135a) as well as the representation in (135c) after the application of weak pronoun movement and merge of TP and the complementiser are unproblematic with respect to unambiguous argument identification because the arguments occupy different structural domains and can therefore be unambiguously identified. If the subject argument rises to the specifier of TP, the resulting configuration is also unproblematic at the CP level, (135c').

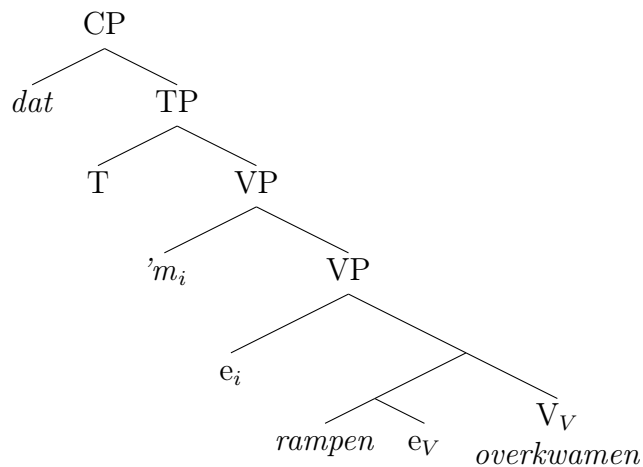
(135) (a) base configuration: layered VP – ***UAI*** is respected



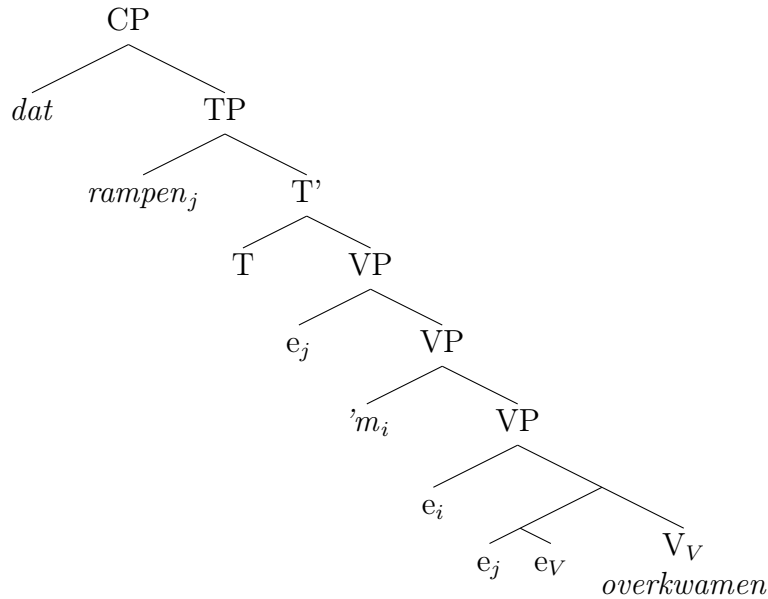
(b) weak pronoun movement to outer Spec,VP



(c) merge of TP and complementiser – **both, *UAI* and *UAI-phase* are respected**



(c') rising of the subject to Spec,TP – **both, *UAI* and *UAI-phase* are respected**



There is a crucial issue which we have not yet commented on: Why is it the subject argument (and not the object argument) which rises to the specifier of TP? In any case, the resulting syntactic representation would be unproblematic for the evaluation of unambiguous argument identification at the higher phase level because the arguments occupy different structural domain. Thus, there seems to be a constraint on what elements can occupy the specifier position of TP.

Consider the nature of the TP. The head of the TP serves an important function in the derivation by establishing an Agree relation with a goal with matching features inside its locality domain and by valuating the structural case on the subject argument. In the minimalist framework, T is not a probe by itself but rather by inheritance from C (C activates T as a probe, as has been suggested by Chomsky 2001*a*, to appear). The specifier position of the TP has also specific properties: in contrast to the outer specifier position of the verb phrase (especially Spec,*vP*), the specifier of TP is not a position which is freely accessible as an intermediate landing site for any XP that will be moved to a higher position (in contrast to T, *v* in transitive verbs is a probe by itself). We suggest that these properties are connected: Spec,TP is accessible only for the subject argument because the corresponding head T is the locus of features which make it establish an Agree relation with the subject argument (under *c*-command). It is important, however, that this must not be mixed up with the idea that T might ‘attract’ the argument to its specifier position. This is not the case. Again, we have a representational scenario in mind: if an argument which does not serve the subject function rises to Spec,TP the resulting configuration is not well-formed, at least not in Dutch; only subject arguments are licensed in the Spec,TP position.¹¹⁵

¹¹⁵If it turns out that some types of adverbials might also occupy this position, it would

There is another conceptual question which has not been answered yet: why can V be split up into two individual verb heads (V, V) although it is not a complex head from the beginning (like transitive $V(v)$ is)?

We suggest that it is basically the same issue as the one that arises in connection with splitting up of the verb head $V(v)$ with transitive verbs in Dutch. The two verb heads are two instances of a single head (a single lexical verb, and they are non-distinct) and there is a relation of incorporation between the two head positions inside the verb phrase (in the course of the derivation, the verb is incorporated into the higher verb phrase internal V head position). Through incorporation we get a verb phrase shell structure and the verb will be realised in the higher head position inside the verb phrase. The crucial difference, however, is this: with unaccusatives and passivised verbs there is no additional feature specification activated by splitting up the verb head and, thus, V does not take up any features when it incorporates into the higher verb head. As a consequence, unaccusative and passivised verb phrases are not (strong) phases in Dutch; this stems from the fact that, in Dutch, the features which activate v as a probe in transitive verb phrases are not present in other types of verb phrases (they are inherently associated with the v head).

So far, our discussion presupposes that German is a language with a system of rich case morphology which is represented as a subfeature m -mark in the feature matrix of argumental DPs in the syntax while this does not hold true for Dutch.

In the next chapter, the ‘morphological richness’ of German and Dutch will be the center of the discussion.

essentially not be problematic for our suggestion.

11 What does it mean for a morphological system to be rich vs. poor?

11.1 Some concepts of ‘rich (poor) morphological system’

It has generally been observed in the relevant literature that the presence of morphological case marking allows nominal constituents to occur in a relatively free order within the clause. One source for this observation is the fact that in diachronic developments the loss of morphological case systems and the loss of free word order generally seem to be closely linked (cf. for example Jespersen 1922; Meillet 1921; Sapir 1921 for such observations in traditional work).

A non-accidental correlation between case morphology and word order is also assumed in more recent work, as for example Baker (1996); Haerberli (2002); Haider and Rosengren (1998, 2003); Hawkins (1986), among others.

This shows that many researchers seem to agree on the general intuition that the overt morphological marking of morpho-syntactic properties is among the factors which (can) influence the positioning of elements in the syntactic structure. Although the correlation is intuitively plausible, it is far from clear how it can be captured formally and, furthermore, how it can be used for a theoretical account of word order differences; thus, it is not clear how the presence or absence of case morphology can be related to the distributional options of argument DPs within the clause structure.

The question which arises then is of what kind the correlation between case morphology and word order is and why such a correlation should exist. Hawkins (1986, 40) summarises the traditional and intuitively attractive answer to this question as follows:

The reason most commonly advanced for this [= the correlation between case morphology and word order freedom, J.K.] is that ‘fixed’ word order at the sentence level in a language like English encodes grammatical relations such as subject, direct object and indirect object, which are morphologically encoded in a case-marked language. And word order permutations are possible in a case-marked language since grammatical relations are recoverable morphologically.

Apart from the conceptual questions about the correlation between surface case morphology and syntactic structure we are faced with more practical questions.

Even when we assume that such a correlation between morphological case and variable word order exists and that it can be captured theoretically, it is still not clear, however, how much morphological marking is necessary for a language to allow the relevant kind of word order freedom.

The correlation is clearly not so direct that the presence of a single case of case

morphology would suffice to increase the distributional possibilities of the syntactic constituents which show this morphological marking or that the absence of an overt morphological marker on a DP would strictly limit the number of its distributional options down to only one. If this were indeed the case we would expect, for example, that the English weak object pronouns *it* and *you* should show a more rigid syntactic placement than *me*, *him*, *her*, *us* and *them* since the latter differ morphologically from their subject counterparts while the former do not. On the other hand, proper names and bare nouns in a language like German which generally allows for a considerable amount of word order freedom should be strictly limited to one non-initial syntactic position (their base position), whereas only other nouns and more complex DPs that show a morphological marking of case should be able to occur in various positions. This would be predicted if there were a 1:1 correlation between surface morphological case marking and word order freedom. Obviously, however, this is not the case.

In other words, it is obviously not a matter of the presence of individual morphological case markers which results in word order freedom, but it is rather the organisation of the entire morpho-syntactic case system which needs to be considered. Therefore, we have to sort out relevant characteristics of languages which qualify as morphologically rich and allow of the word order freedom under consideration, and languages which do not. Thus, we have to provide an answer to the following question: How many (and what kind of) morphological distinctions must a case system display in order to qualify as rich? This question is addressed in the current chapter.

There is some disagreement in the relevant literature as to how to establish the distinction between rich and poor morphological systems. Haeberli (2002) and Müller (2005) are two recent proposals addressing this question.

Altogether, we have three questions that need to be answered in this connection. First, how can the morphological make-up of a DP on the surface have an influence on the syntactic distribution (or distributability) of the DP, i.e., of what kind is the connection between morphology and syntax? Second, what properties must a case system feature in order to qualify as rich vs. poor? And third, what is the relation between syntactic case and morphological case? It is obvious that the first and the third question are closely related in that the answer to the one question is to a high degree dependent on the answer to the other.

One can think of various possibilities concerning the emergence of syntactic effects of morphological case. Here, only a few main positions will be mentioned. As a first option, morphological case could be determined before a DP is merged into the syntactic structure; that is, elements are inserted into the syntax fully inflected (whatever the theoretic modelling might be). Therefore, morphological considerations should be able to influence (i.e., increase,

decrease, or limit) the syntactic options of lexical items, whereas an influence in the other direction is ruled out in principle. If morphology precedes syntax, morphology should be blind to syntactic configurations.

Alternatively, morphological case could be a consequence of syntactic, i.e. structural considerations. This view is often taken in representational frameworks, as for example in Distributed Morphology (DM) (Halle and Marantz 1993 and work based on it). Here it is assumed that the syntactic computation manipulates items which completely lack morphological content, resulting in structural configurations which then are interpreted by post-syntactic morphology. Since morphology is post-syntactic, it is predicted that morphological considerations cannot be of any relevance for the syntactic computation.

Bobaljik (2002) points out the following observation with respect to V-to-I movement and its treatment in Distributed Morphology:¹¹⁶ If inflectional morphology is post-syntactic, properties of the morphological inventory cannot be held responsible for V-to-I movement in syntax. The Rich Agreement Hypothesis according to which V-to-I movement takes place if a language has a sufficiently rich morphological system of verbal inflection (Holmberg and Platzack 1995; Roberts 1993; Rohrbacher 1999; Vikner 1997) must therefore be given up in a Distributed Morphology approach. If there is any correlation at all, it must be in the other direction: Rich verbal morphology can be a *reflex* of movement, but not the *reason* for it.

According to Müller (2005), the same reasoning applies to the licensing of *pro*. Assuming post-syntactic morphology, the licensing of *pro* cannot be determined by morphological properties such as ‘richness’ of the verbal morphology of a given language because these properties are not yet visible at the point of derivation where they would be needed in order to allow for the licensing of *pro*.

As a consequence, licensing of *pro* would either have to be a syntactic phenomenon which is independent of the richness of morphological systems, or licensing of *pro* would have to be characterised as a post-syntactic (PF) phenomenon (Adger 2003; Holmberg 2004).¹¹⁷

Müller (2005) suggests an analysis of *pro*-drop which extends the model of Distributed Morphology in such a way that it includes pre-syntactic morphology. Furthermore, he aims at providing an abstract measure of the richness of morphological inventories in terms of a Distributed Morphology-specific operation. In more concrete terms, Müller (2005) proposes that the value setting of morphological richness of a given language (rich vs. poor morphology) is determined by inspecting whether or not the language includes pre-syntactic impoverishment rules which neutralise phi features. If a language has such pre-syntactic impoverishment rules it qualifies as morphologically rich.

However, we will not discuss the details of Müller’s (2005) analysis because our analysis is not based on a Distributed Morphology framework. Müller (2005) is only concerned with verbal morphology, whereas in our approach first and foremost the richness of nominal case morphology is relevant.

¹¹⁶This observation was brought to my attention by Müller (2005).

¹¹⁷This consequence does not arise if inflectional morphology is pre-syntactic.

There are some conceptual problems with the notion of ‘richness’. First of all, it has been proven difficult to properly define morphological richness. Furthermore, morphological richness is usually determined on the basis of standard, fully specified paradigms. As pointed out by Müller (2005), paradigms are descriptive generalisations and, thus, epiphenomena but not objects which grammatical principles should be able to refer to. In Distributed Morphology, paradigms do not have any status as theoretical objects. In this respect, Distributed Morphology differs from other theories in which paradigms have a privileged status and can be referred to by statements of the grammar. Moreover, Müller (2005) points out that richness is a global property which cannot be checked locally for any given node in the syntactic architecture.¹¹⁸

We basically agree with this: Richness should be considered a global property of the morpho-syntactic (case) system and should not only be seen as a matter of individual (functional) heads. However, contrary to Müller, we believe that the specification of the richness parameter must be represented in the feature matrix of nominal elements in the syntax – if morphological richness can have effects on the syntactic distribution (or distributability) of arguments.

This brings us to the discussion of Haeberli’s (2002) conception of morphological richness. Haeberli (2002) offers an approach to morphological richness which is based on different assumptions than Müller’s. The analysis is related to the traditional observation that there is a correlation between rich morphological case and word order freedom. In a nutshell, Haeberli (2002) proposes that case is syntactically represented in languages which have a rich morphological case system (like German) whereas in languages with poor or no case morphology (like Dutch or English) case is generally not represented in the syntax.¹¹⁹ He assumes that the presence of syntactically represented case triggers processes which lead to variable word orders.

How is the distinction between languages with a rich system of case morphology and languages with poor morphological case determined in Haeberli’s (2002) approach? According to Haeberli (2002), the distinction cannot be made in terms of presence vs. absence of any detectable case morphology because some reflexes of case morphology are also found in languages which otherwise do not systematically differentiate morphological cases. For example, both Dutch and English have some remnant of morphological case in the pronominal system (e.g., *we/us* in English). Rather, he proposes a measure which helps to decide whether the available case morphology qualifies as rich in the relevant sense or not: In order for a morphological case system to qualify

¹¹⁸Concerning V-to-I (V-to-T) movement and *pro*-drop this implies that the ‘local’ richness of inflection marking in T is irrelevant, as can be seen from the existence of, e.g., fully distinctive null markers.

¹¹⁹Cf. also Emonds (1985); Hudson (1995) for the conclusion that case in languages like English can be determined without the use of specific syntactic features for case.

as strong in Haerberli's (2002) sense, it needs to display more than a structurally determinable two-way distinction of morphological cases. If a language only had a two-way distinction of morphological cases this would be a simple default/non-default distinction rather than a genuine distinction of different types of cases.

Haerberli assumes that in languages with (at least) a three-way distinction of morphological case and, thus, a rich system of morphological case, case is syntactically encoded by specific case features (like NOM, ACC, DAT or GEN) on verbal elements.

Haerberli's (2002) formulation of the parameter is reproduced in (136).

- (136) Case features are syntactically represented: Yes/No
Yes, if a language has rich case morphology.
(rich = more than a structurally determinable two-way distinction)
(Haerberli 2002, 182 (92))

A case feature on a verbal head like T or V determines the morphological case of nominal elements which enter into a checking relation with this head (according to Haerberli, nominative is generally related to T; the object case feature is always related to the V-head responsible for external theta role assignment). Haerberli (2002) considers case as a reflex of categorial feature checking between a verbal and a nominal element. In Haerberli's conception, case features are the manifestation of a checking relation between an uninterpretable and an interpretable V-feature and they are therefore generally subfeatures of categorial features. Case features on nominal elements start out with an unspecified value; the exact value is then determined in the course of a derivation when the nominal element enters into a checking relation with a verbal head (T or V).¹²⁰ Since Haerberli assumes a one-to-one relation between a given type of licensing position and a specific type of feature (categorial features, case features, etc.) and since the items carry more than one type of features which are hierarchically ordered, Haerberli assumes that case features cannot be checked in the TP or VP directly. Rather, the case features of the verbal heads are moved to 'proxy categories' above TP¹²¹ and the nominal elements are attracted to the corresponding specifier positions to license their value for case. It is also important to mention that Haerberli does not allow any licensing of case features in the base positions of arguments; rather, arguments have to move to functional specifier positions which are rather high in the syntactic structure. In Haerberli (2002), this situation is argued to be the source of the word order variation found in languages like German: different word orders arise depending on what case feature moves first to a proxy head.

¹²⁰According to Haerberli (2002), the feature matrices of verbal and nominal elements consist of categorial features as well as (in languages with rich morphological case) case features.

¹²¹A proxy head is a functional head which has no features of its own and which is only created in the course of the syntactic derivation. Following Nash and Rouveret (1997), Haerberli (2002) assumes that features on a head H which have to satisfy licensing requirements outside HP move to a proxy head above TP.

The conception of richness of the morphological case system used in this thesis is based on Haeberli's (2002) criterion according to which a case system which makes at least a three-way distinction of morphological cases qualifies as rich.

The details of our analysis differ from Haeberli's implementation in crucial points, however. Actually, we do not share most of Haeberli's assumptions about how the syntactic system works. Among the most important differences to Haeberli's (2002) conception are the following: In our approach, case 'assignment' is not a reflex of categorial feature checking, nor is case feature checking limited to local specifier-head configurations in functional proxy projections above TP. Structural case is not represented by specific NOM and ACC features on verbal heads which trigger movement of a nominal element to the corresponding specifier position.

Note that in Haeberli's (2002) system, argument reordering occurs high in the syntactic structure, i.e. above TP; for example, scrambling is treated as the result of case feature checking in proxy projections. This is problematic because proxy projections are functional projections and, thus, elements in their specifier position would be expected to be opaque for extraction, for example. However, in chapter 5 it has been shown that this does not hold for scrambled arguments nor for moved weak pronouns in German.

Another wrong prediction of Haeberli's (2002) theoretical implementation is that nominal arguments in German should not be able to stay in their verb phrase internal base positions because they could not get licensed their case feature there. This is not true.

11.2 Contrary to Dutch, German has a rich morphological system

The reasoning about the different make-up of the structure of transitive verb phrases in Dutch and German brought forward in chapters 8, 9, and 10 presupposes that Dutch DPs (both non-pronominal as well as pronominal DPs) can be shown to be less morphologically marked than DPs in German. In more concrete terms, in order for condition *Unambiguity of Argument Identification*, (107), to make the correct predictions for Dutch data featuring a non-pronominal DP subject and a weak pronominal object, it must be shown that both types of DPs (non-pronominal as well as pronominal ones) do not carry a subfeature m-mark on *uCase*.

More specifically, we have to show that it is justified to assume rich morphological case (and, thus, presence of m-mark as a subfeature on *uCase*) for German, but no rich case morphology (and, thus, absence of subfeature m-mark) for DPs in Dutch, even for personal pronouns.

If the subfeature m-mark on *uCase* is the explicit inclusion of the parameter deciding between languages which have a system of rich morphological case-marking and languages which do not, as has been argued above, it follows

that a language should be consistent with respect to the presence or absence of m-mark on each and every DP (of a given paradigm) in that language. So far it has only been stipulated, however, that the subfeature m-mark on *uCase* of DPs is the representative of a positive parameter setting holding for the morpho-syntactic case system of a language as a whole. At the current stage of discussion, it could just as well be the case that the presence or absence of m-mark on *uCase* of a DP is a property of individual DPs or certain subclasses of DPs. A demonstration that it is a global property is still to be provided.

We have to take this question serious because it is a crucial point for the following reason: If it turns out that weak pronouns in Dutch carry m-mark as a subfeature of their *uCase* feature just as weak pronouns and non-pronominal DPs in German do, a situation would arise which is not captured by condition (107) as it is stated. The problem is this: In that case a non-pronominal subject and a weak object pronoun would be unambiguously identifiable on the basis of their morpho-syntactic features because the weak pronominal object carries a subfeature on *uCase* while the subject DP does not. Presence versus absence of a subfeature would be a clear indication of morpho-syntactic distinctness.

In that case, both the fact that in transitive clauses in Dutch neither non-pronominal nor pronominal objects precede the subject as well as the reasoning that this can be related to the absence of subfeature m-mark on *uCase* would not be covered.

Therefore, we have to provide evidence for the conclusion that the ‘generalisation’ of the negative setting of the richness parameter from the non-pronominal system (where the negative setting of the parameter – i.e., absence of a subfeature m-mark – is obvious in Dutch) to the system of weak pronouns is justified. This cannot be done without presenting empirical evidence which shows that there is no *rich* morphological case marking in the Dutch pronominal paradigm either. The present chapter is concerned with this topic.

It is important to keep in mind that here we are concerned with the concept of ‘*rich morphological case*’ according to Haeberli (2002). Thus, the question is not whether the inflectional paradigm of Dutch features any morphological detectable case distinctions but rather whether the morphological marking of case on nominal expressions and pronouns is rich enough to qualify as rich morphological case.

In the second part of this chapter we will be concerned with diachronic data. In section 11.2.2 we will discuss the Middle Dutch paradigm of personal pronouns which must be classified as rich in the sense of Haeberli (2002). We will also discuss the availability of different word order patterns of non-pronominal subjects and pronominal objects in Middle Dutch and compare it to modern Dutch and German.

Before we come to that, let us first have a look at the nominal and pronominal paradigms of German and modern Dutch and determine their status with respect to Haeberli's (2002) definition of richness of the morphological case system.

11.2.1 Evidence from the synchronic perspective

It is textbook knowledge that German and Dutch differ with respect to the richness of the actual morphological marking of case distinctions not only in the nominal paradigm, but also within the paradigm of personal pronouns.

11.2.1.1 Nominal inflection in German

With respect to nominal inflection the contrast is fairly obvious: In German, nominal expressions are morphologically inflected for case (nominative, genitive, dative, accusative) and number according to several declension types; on the head noun itself hardly any morphological marking is expressed in German (only on masculine and neuter nouns in genitive case: *(des) Mannes* 'of the man'; *(des) Kindes* 'of the child'). Importantly, however, determiners are systematically inflected for case and gender (see any reference grammar of German for illustration).

The paradigm does not allow a distinction of all four cases on morphological grounds. However, a three-way distinction of morphologically detectable case-marking is attested throughout the paradigm on the basis of determiner inflection morphology. Thus, according to Haeberli's (2002) criterion, the morphological case system found with non-pronominal DPs in German qualifies as rich. Stated in terms of the make-up of the morpho-syntactic feature matrix of nominal expressions as proposed above, non-pronominal DPs in German feature *m*-mark as a subfeature of *uCase*.

11.2.1.2 The situation in Dutch: nominal inflection

In Dutch, on the other hand, hardly any noun inflection is present. Almost all traces of its former nominal case system (which was still maintained in Middle Dutch) have disappeared. Apart from a few lexicalised expressions (like *ten getale van (drie)* 'three in number', *ten tijde van* 'at the time of' in which the nouns feature an *e*-ending), the only case which is morphologically marked in Dutch is the genitive, but this case is no longer verbally governed (as it was in Middle Dutch); rather, it only appears adnominally to signal possession (e.g. *Karels auto* 'Karel's car', *grootmoeders huis* 'grandmother's house'). The morphological case system of Middle Dutch, which served rather well in distinguishing object from subject forms on morphological grounds, has collapsed completely in modern Dutch nouns, to the extent that today non-pronominal DPs contain no morphological signal concerning their grammatical function whatsoever. (137) illustrates the inflectional paradigm of Middle Dutch¹²²

¹²²For a short outline of the characteristics of Middle Dutch see van der Wal and Quak (1994).

(repeated from van der Wal and Quak 1994, 79); (138) below illustrates its modern Dutch counterpart.

(137) The Middle Dutch nominal inflection paradigm
(van der Wal and Quak 1994, 79)

	Singular			Plural		
		Strong	Weak		Strong	Weak
Masc						
Nom	<i>die goede</i>	<i>gast</i>	<i>mensche</i>	<i>die goede</i>	<i>gaste</i>	<i>menschen</i>
Gen	<i>des goets/ goeden</i>	<i>gast(e)s</i>	<i>menschen</i>	<i>der goeder</i>	<i>gaste</i>	<i>menschen</i>
Dat	<i>dien goeden</i>	<i>gaste</i>	<i>mensche</i>	<i>dien goeden</i>	<i>gasten</i>	<i>menschen</i>
Acc	<i>dien goeden</i>	<i>gast</i>	<i>mensche</i>	<i>die goede</i>	<i>gaste</i>	<i>menschen</i>
Fem						
Nom	<i>die goede</i>	<i>daet</i>	<i>siele</i>	<i>die goede</i>	<i>dade</i>	<i>sielen</i>
Gen	<i>der goeder</i>	<i>daet/ dade</i>	<i>siele(n)</i>	<i>der goeder</i>	<i>dade</i>	<i>sielen</i>
Dat	<i>der goeder</i>	<i>daet/ dade</i>	<i>siele(n)</i>	<i>dien goeden</i>	<i>daden</i>	<i>sielen</i>
Acc	<i>die goede</i>	<i>daet</i>	<i>siele</i>	<i>die goede</i>	<i>dade</i>	<i>sielen</i>
Neut						
Nom	<i>dat goede</i>	<i>hof</i>	<i>herte</i>	<i>die goede</i>	<i>hove</i>	<i>herten</i>
Gen	<i>des goets/ goeden</i>	<i>hoves</i>	<i>herten</i>	<i>der goeder</i>	<i>hove</i>	<i>herten</i>
Dat	<i>dien goeden</i>	<i>hove</i>	<i>herte</i>	<i>dien goeden</i>	<i>hoven</i>	<i>herten</i>
Acc	<i>dat goede</i>	<i>hof</i>	<i>herte</i>	<i>die goede</i>	<i>hove</i>	<i>herten</i>

(137) illustrates the Middle Dutch declension of a non-pronominal DP consisting of a definite determiner, an adjective (*goet* ‘good’) and a noun (*gast_{masc}* ‘guest’, *mensche_{masc}* ‘man’, *daet_{fem}* ‘action’, *siele_{fem}* ‘soul’, *hof_{neuter}* ‘garden, court’, *herte_{neuter}* ‘heart’).

Inflection in Middle Dutch nominal expressions is realised according to a system which distinguishes between two declensions, four cases, and three genders. The strong and the weak declensions are the two main declension classes. Nouns ending in a consonant mostly belong to the strong declension and nouns ending in *-e* generally belong to the weak declension. Middle Dutch distinguishes between four cases: nominative, genitive, dative and accusative. These are signalled by inflectional endings on the noun, the adjective and the determiner. The gender distinctions in Middle Dutch are masculine, feminine¹²³ and neuter; the number distinctions are singular and plural. Adjectives vary according to the case, gender and number of the noun which they are combined with. The Middle Dutch adjectives have only one inflectional paradigm.¹²⁴

¹²³In the feminine singular strong and weak paradigm, genitive and dative *dade* and *sielen* are found alongside *daet* and *siele*.

¹²⁴The former distinction between strong and weak adjectives is no longer found in Middle Dutch, but in genitive singular masculine and neuter both *goets* and *goeden* ‘good’ occur.

Differentiating the cases is achieved mainly through inflectional morphology on the determiner. Note, that nominative and accusative are formally non-distinct throughout the paradigm in Middle Dutch, with the exception of masculine singular where a morphological distinction is made on the determiner and the pre-nominal adjective. Nevertheless, we are left with a three-way morphological distinction of cases which, according to Haeberli (2002), qualifies Middle Dutch as a language with rich case morphology. Only in the feminine singular paradigm, genitive and dative (can) also fall together, with the effect that there are only two distinct forms. Unsurprisingly, this coincides with the situation in German (cf. *die Frau_{nom}/der Frau_{gen}/der Frau_{dat}/die Frau_{acc}* ‘the woman’).

In comparison, the inflectional paradigm of modern Dutch is extremely poor, (138). Neither the noun, nor the determiner is inflected for case. Overt inflection is limited to the morphological marking of the plural (in most cases by suffixation of *-en* or *-s*). Pre-nominal (i.e. attributively used) adjectives normally occur in an *e*-extended form, except when nouns denote male human beings in some attributive constructions (e.g., *een goed man* ‘a good man’, *een goed leraar* ‘a good teacher’)¹²⁵, and indefinite noun phrases featuring singular neuter nouns. In these cases an *e*-less form, i.e. the stem, is used.¹²⁶

(138) The modern Dutch nominal inflection paradigm

	Singular	Plural	
Masc	<i>de oude man</i>	<i>de oude mannen</i>	‘old man’
Fem	<i>de oude vrouw</i>	<i>de oude vrouwen</i>	‘old woman’
Neut	<i>het oude paard</i>	<i>de oude paarden</i>	‘old horse’

According to Haeberli’s (2002) criterion, for nominal inflection in Dutch it is obvious that the morphological case paradigm has to be classified as poor. Stated in terms of the parameter proposed in chapter 9 of this thesis, we therefore conclude that non-pronominal DPs in Dutch do not carry *m*-mark as a subfeature of *uCase* in their morphosyntactic feature matrix.

Case marking in pronouns has also declined considerably in Dutch (see the discussion in section 11.2.1.4 below).

11.2.1.3 Pronominal inflection in German

German has a rather robust pronominal inflectional system with a four-way morphological case distinction; in most grammatical persons, German differentiates all four cases on personal pronouns on morphological grounds – which does not mean, however, that there are no morphologically ambiguous forms in the paradigm.

¹²⁵*Een goed leraar* denotes somebody who is good as a teacher, different from *een goede leraar* which would refer to a teacher who has a good character.

¹²⁶In southern varieties of Dutch, the *e*-less forms may also be used in definite DPs with neutral nouns, according to de Schutter (1994, 463).

The personal pronoun paradigm of German is repeated in (139). Recall that German has no distinct forms for weak and strong pronouns.

(139) The German personal pronoun paradigm

		Nom	Gen	Dat	Acc
Sg	1.	<i>ich</i>	<i>meiner</i>	<i>mir</i>	<i>mich</i>
	2.	<i>du</i>	<i>deiner</i>	<i>dir</i>	<i>dich</i>
	3.m	<i>er</i>	<i>seiner</i>	<i>ihm</i>	<i>ihn</i>
	3.f	<i>sie</i>	<i>ihrer</i>	<i>ihr</i>	<i>sie</i>
	3.n	<i>es</i>	<i>seiner</i>	<i>ihm</i>	<i>es</i>
Pl	1.	<i>wir</i>	<i>unser</i>	<i>uns</i>	<i>uns</i>
	2.	<i>ihr</i>	<i>euer</i>	<i>euch</i>	<i>euch</i>
	3.	<i>sie</i>	<i>ihrer</i>	<i>ihnen</i>	<i>sie</i>

Those forms which are morphologically ambiguous between any two (or more) syntactic functions are marked in bold type in (139). The pronominal form *sie* is four-way ambiguous: it is used in the singular paradigm as 3.f.sg.nom ‘she’ as well as as 3.f.sg.acc ‘her’; in the plural paradigm it is used as 3.pl.nom ‘they’ and 3.pl.acc ‘them’. The form *es* is ambiguous between 3.n.sg.nom ‘it’ and 3.n.sg.acc ‘it’. *Uns* is used for 1.pl.dat ‘us’ as well as 1.pl.acc ‘us’; *euch* is ambiguous between 2.pl.dat ‘you’ and 2.pl.acc ‘you’. *Ihm* turns up in 3.m.sg.dat ‘him’ as well as in 3.n.sg.dat ‘it’. *Seiner* is used for 3.m.sg.gen ‘of him’ and 3.n.sg.gen ‘of it’, and *ihrer* is used for 3.f.sg.gen ‘of her’ as well as 3.pl.gen ‘of them’.

That is, 16 out of 32 pronominal forms are morphologically ambiguous in one way or the other.

It is not the absolute number of (un-)ambiguous pronominal forms which is relevant for establishing the status of the personal pronoun paradigm (rich vs. poor case morphology), however. Rather, we have to consider each line in (139) separately.

It turns out that at least a three-way morphological distinction of pronoun forms in each person is retained. 3.f.sg *sie*, 3.n.sg *es*, and 3.pl *sie* show non-distinct morphological forms for nominative and accusative; however, in all three cases genitive as well as dative are differentiated from the nom-acc ambiguous form (3.f.sg: *sie* - *ihrer* - *ihr* - *sie*; 3.n.sg: *es* - *seiner* - *ihm* - *es*; 3.pl: *sie* - *ihrer* - *ihnen* - *sie*).

Thus, the morphological case paradigm of personal pronouns in German is rich in the sense of Haeberli (2002). Therefore, we conclude that it is justified to assume the presence of subfeature m-mark – which is the representation of the positive specification of the parameter distinguishing between rich and poor morphological case systems – on the case feature (*uCase*) of personal pronouns in German.

11.2.1.4 Pronominal inflection in Dutch

In contrast, the personal pronoun paradigm of Dutch shows a considerably smaller degree of morphological distinctness. Consider table (140). Dutch has a distinct paradigm of weak personal pronouns (= right columns in (140)); for the sake of completeness, (140) also includes the Dutch strong personal pronouns (= left columns in (140)).

(140) The Dutch personal pronoun paradigm¹²⁷

		Strong		Weak	
		Subject	Object	Subject	Object
Sg	1.	<i>ik</i>	<i>mij</i>	<i>'k</i>	<i>me</i>
	2.	<i>jij</i>	<i>jou</i>	<i>je</i>	<i>je</i>
	3.m	<i>hij</i>	<i>hem</i>	[<i>ie_{clitic}</i>]	<i>'m</i>
	3.f	<i>zij</i>	<i>haar</i>	<i>ze</i>	<i>d'r, 'r; ze</i>
	3.n			<i>het, 't</i>	<i>het, 't</i>
Pl	1.	<i>wij</i>	<i>ons</i>	<i>we</i>	<i>ons</i>
	2.	<i>u</i>	<i>u</i>	<i>u</i>	<i>u</i>
		<i>jullie</i>	<i>jullie</i>	<i>jullie</i>	<i>jullie</i>
	3.	<i>zij</i>	<i>hen, hun</i>	<i>ze</i>	<i>ze</i>

The Dutch weak personal pronoun paradigm consists only of a row of nominative forms (for subject function) and a row of oblique forms (for objects functions). In sharp contrast to German, the Dutch pronoun paradigm does not include any differentiations with respect to different object cases. In those cases where an individual cell in (140) contains more than one pronoun (3.sg.fem.obj *ze/d'r/'r*, 3.sg.n.subj *het/'t*, 3.sg.n.obj *het/'t*), it is not a distinction in terms of case; rather, different forms for the same function coexist in the language.^{128,129}

One might expect that a differentiation of subject versus object forms within the weak pronoun paradigm should be sufficient to guarantee successful and unambiguous identification of subject and object.

Recall, however, that richness of the morphological case system is not a matter of counting distinct morphological forms, but rather a property of the morpho-syntactic (case inflection) system as a whole. Therefore, we have to consider

¹²⁷Note, that there is one enclitic form contained in the column headed by ‘weak’ in (140): the 3rd personal masculine singular subject pronoun *ie* ‘he’ is a clitic element rather than a weak subject pronoun. There is no weak pronoun for the subject function of 3.m.sg. existent in Dutch.

¹²⁸According to the ANS (Haeseryn et al. 1997, 243), *d'r* ‘her’ is the most commonly used form for 3.sg.f.obj.

¹²⁹According to the ANS (Geerts et al. 1984, 171; Haeseryn et al. 1997, 248), the decision between the use of *hen* and *hun* is one in stylistic terms: “*Meestal worden hen and hun zonder onderscheid gebruikt, met dien verstande dat hen stilistisch hoger gewaardeerd wordt*” [‘Generally *hen* and *hun* are used without distinction, in the sense that *hen* is stylistically higher appreciated’; J.K.]. In spoken Dutch, *hun* is used predominantly, but *hen* also occurs, though less frequently.

the overall make-up of the (pro-)nominal inflectional system of a given language. This is why it turns out that, in the sense of Haeberli (2002), even languages with a systematic two-way morphological distinction of grammatical functions qualify as morphologically poor.

On closer inspection, the situation in Dutch case is even ‘worse’ than this: Dutch does not even exhibit a systematic two-way morphological distinction in the personal pronoun paradigm, although this is the sub-paradigm in which Dutch has retained the greatest amount of inflectional morphology. In four out of eight persons (person corresponds to lines in (140)) there is no morphological distinctness between the weak subject and object personal pronoun. As a consequence, the distinguishability of grammatical functions on morphological grounds is completely levelled out within a line in (140) as soon as the subject and object form fall together. This is the case in 2.sg *je* ‘you’, 3.sg.n *het* and *’t* ‘it’, as well as in 3.pl *ze* ‘they, them’; potentially also in 3.sg.f. *ze* ‘she, her’. In the strong pronoun paradigm, on the other hand, all forms (with the exception of 2.pl) are morphologically unambiguous between subject and object function; but there are no distinct forms for different object functions.

We, thus, come to the following conclusion: In Dutch, not even the pronominal inflectional paradigm can be classified as rich in the sense of Haeberli (2002) because it does not feature a three-way distinction of morphological cases. From there we come to the conclusion, with respect to the morpho-syntactic feature matrix of pronouns, that m-mark is not present as a subfeature of *uCase* on weak (and strong) personal pronouns in modern Dutch.

In earlier stages of Dutch, personal pronouns featured considerably richer inflection. This will be discussed in the next section where we take a closer look at the organisation of the Middle Dutch paradigm of personal pronouns and the distribution of object pronouns relative to non-pronominal subjects in Dutch.

11.2.2 Supporting circumstantial evidence from diachrony: Shannon (1997, 2000, 2003) on Dutch

Shannon (1997, 2000, 2003) offers studies which deal with the ordering of the (pro-)nominal arguments in clause-internal position in modern Dutch and German, contrasting it with findings from earlier stages of the two languages. In the (2000; 2003) papers in particular, he examines the word order frequencies in a corpus of modern German and Dutch prose texts, comparing and contrasting the two languages.

From a synchronic perspective, his findings once again confirm the descriptive statements reported in the literature: the unmarked ordering of clause-internal nominal subjects and pronominal objects in German is the one in which the pronominal object precedes the nominal subject (‘object_{pron.weak} < subject’), whereas we find the reverse order in Dutch.

Shannon compares his results for the modern languages with 16th century

texts, the Middle Dutch and Early New High German versions of the *Ulen-
spiegel/Eulenspiegel*. We will discuss his findings below.

Before we turn to this we will first have a look at the personal pronoun paradigm of Middle Dutch as illustrated in (141) (repeated from van der Wal and Quak 1994, 78). The forms marked with a hyphen are pronominal clitics, whereas the others are full DPs. There is no morphologically distinct paradigm for weak pronouns in Middle Dutch. It is not clear if some of the pronouns displayed properties of weak pronoun (or whether they were ambiguous between a strong and weak pronoun use, like in German).

(141) The personal pronoun paradigm of Middle Dutch^{130,131}

	Nom	Gen	Dat	Acc
1.SG	<i>ic</i>	<i>mijns</i>	<i>mi</i>	<i>mi</i>
2.fam	<i>du</i>	<i>dijns</i>	<i>di</i>	<i>di</i>
2.pol	<i>ghi</i>	<i>uwer, uw(es)</i>	<i>u</i>	<i>u</i>
3.m	<i>hi, -i</i>	<i>sijns, -(e)s</i>	<i>hem, -em, -en</i>	<i>hem, -ene, -ne, -en</i>
3.f	<i>si, -se</i>	<i>haer, -ere, -er, -re</i>	<i>haer, -ere, -er, -re</i>	<i>haer, -se</i>
3.n	<i>het, -(e)t</i>	<i>-(e)s</i>	<i>hem, -em</i>	<i>het, -(e)t</i>
1.PL	<i>wi</i>	<i>onser</i>	<i>ons</i>	<i>ons</i>
2.	<i>ghi</i>	<i>uwer, uw(es)</i>	<i>u</i>	<i>u</i>
3.	<i>si, -se</i>	<i>haer, -ere, -er, -re</i>	<i>hem, hen, -en</i>	<i>hem, hen, -se</i>

In Middle Dutch, the system of personal pronouns largely kept subject vs. object functions clearly separated. In modern Dutch the number of unambiguously oblique forms for personal pronouns has shrunk drastically. Most Middle Dutch pronouns clearly distinguish between nominative and oblique forms. None of the pronouns fail to distinguish between nominative on the one hand and genitive and dative on the other (note that in Middle Dutch both genitive and dative case could be governed by verbs and hence cooccur with subject DPs). Moreover, with nominative vs. accusative, only one pronoun is ambiguous, viz., the neuter singular (*het, -(e)t* for both cases). There are two more instances of a potential nominative-accusative ambiguity, the clitic forms of the 3.sg.f. and the 3.pl. *-se*; however, this ambiguity did apparently not frequently occur since, according to Frank (1910, 178), *si* was usually used for nominative, *se* for accusative.

Despite of the fact that (most of the) dative and accusative forms of the personal pronouns fall together in most persons in Middle Dutch, we are still

¹³⁰Note that there does not seem to be agreement in the literature as to what the personal pronoun paradigm of Middle Dutch actually looked like. We find reproductions of the Middle Dutch pronoun paradigms which differ in some respects from that given in (141), cf., for example, Burridge (1993, 245, table 6); van Gestel et al. (1992, 54 (51)).

¹³¹According to Jos Wilmots (p.c.), the Middle Dutch paradigm of personal pronouns as given in (141) is not fully comparable in its status to the modern Dutch personal pronoun paradigm in that it includes a number of regionalisms. This fact might be (partly) responsible for the differences between the Middle Dutch personal pronoun paradigms reported in the literature (cf. the previous footnote).

faced with an inflectional paradigm which must be classified as ‘rich’ according to Haeberli’s (2002) criterion.

Only in the 3.sg.f. the non-clitic forms of the object cases fall together completely. In all other persons, however, there is at least a three-way distinction of pronominal forms.

Note that the non-clitic accusative and dative forms of the personal pronouns are morphologically identical in all cases with the exception of 3.sg.n. (*hem* for dative vs. *het* for accusative).

We find an additional clitic form in 3.sg.m. for the accusative (*-ne*) which is not available in the dative; a similar situation appears in 3.sg.f. (clitic *-se* for accusative only) and 3.pl. (clitic *-se* for accusative only). In some cases there are also additional clitic forms which are available only for dative but not for accusative (3.sg.f. *-ere*, *-er*, *-re*; 3.pl. *-en*).

Modern Dutch has abandoned a number of pronoun case distinctions which were existent in Middle Dutch. For instance, whereas second person pronouns in Middle Dutch were systematically distinguished between nominative and object cases, in modern Dutch there is only little distinction in the strong forms (*jij* – *jou* in the singular, but *u* – *u*, *jullie* – *jullie* in the plural) and none whatsoever among the weak pronouns (*je* – *je* in the singular). Moreover, the 3.sg.n. forms are ambiguous (*het*, *’t* for all grammatical functions), as are the weak forms of the 3.pl. (*ze* for subject and object form). The weak form of the 3.sg.f. are at least potentially ambiguous (*ze* as subject form and object form (besides the object forms *d’r* and *’r*)); however, the unmarked form for 3.sg.f. object seems to be *d’r* (cf. Haeseryn et al. 1997, 243).

In the strong pronoun paradigm there is a systematic morphological differentiation of subject and object pronoun, with the exception of 2.pl.

From the discussion of the inflectional paradigms of modern Dutch and Middle Dutch we conclude that the decline of the case system during the Middle Dutch period is obvious: distinct case endings collapsed or disappeared. The decline of pronoun case marking together with the complete loss of morphological case in nouns increased the number of instances where ambiguity as to what is subject and what is object could appear.¹³²

In modern Dutch, prepositional phrases take over functions previously performed by case endings (for example, possession is now indicated by *van* ‘of’; verbs which originally governed the genitive now occur together with PPs, cf. e.g. modern Dutch: *hij schaamde zich [voor zijn grote woorden en zijn opschepperij]_{PP}* vs. Middle Dutch: *hi schaemde him [sijnder groter worden ende sijns beroemens]_{genitive}* ‘he was ashamed of his big words and his bragging’ (examples from Shannon 1997, 363 (10)); similarly, verbs which originally governed the dative may now occur together with PPs), cf. *na den wolf slachten* ‘to be like the wolf, to take after the wolf’ (lit. after the wolf take-after)).

¹³²A decline of morphological distinctions took place also in the Dutch verbal inflectional paradigm.

Let us now return to the discussion of Shannon’s findings concerning the ordering patterns attested with non-pronominal subjects and pronominal objects in Dutch and German. Shannon (1997, 2000) compares his results for the ordering of object pronouns relative to non-pronominal subject for the modern languages with 16th century texts, the Early New High German and late Middle Dutch versions of the *Eulenspiegel/Ulenspieghel*¹³³.

To sketch the overall picture first, in the Middle Dutch *Ulenspieghel* preposed object pronouns predominate. The figures for the Middle Dutch original and its modern Dutch translation (Geeraedts 1986) are given in table (142) (reproduced from Shannon 2000, 174); those frequencies which are particularly relevant for our concerns are set in bold type.

(142) Frequencies of the ordering patterns found with non-pronominal subject (N_S) and pronominal object (P_O) in the Middle Dutch *Ulenspieghel* (n = 88) and its modern Dutch translation (n = 68)

	$N_S + P_O$	$P_O + N_S$	Total
Middle Dutch	16 (18.2%)	72 (81.8%)	88 (100%)
Modern Dutch	58 (85%)	10 (15%)	68 (100%)

Like in modern German, but unlike modern Dutch, the ordering ‘object pronoun < non-pronominal subject’ predominates in Middle Dutch (81.8% as opposed to 18.2% for the reverse pattern).

One has to be careful in generalising these findings, however, because they are not extracted from a representative sample of Middle Dutch texts but rather based on a single text, the Middle Dutch *Ulenspieghel*, which comprises only 88 relevant examples.

In a more recent paper (Shannon 2003), Shannon compensates for this shortcoming by basing the analysis on a broader data base collected from several other Middle Dutch texts in addition to the *Ulenspieghel*.¹³⁴ The overall picture of results remains the same, therefore we will not discuss Shannon’s (2003) findings separately.

Particularly illuminating are those cases in which the modern Dutch translator reverses the order of the Middle Dutch original from preceding object pronoun to the modern norm of ‘non-pronominal subject < object pronoun’. Relevant examples are presented and discussed in Shannon (1997); the examples in (143)-(146) are repeated from this source.

In the (a) examples which represent the Middle Dutch ordering, the object pronoun immediately precedes the non-pronominal subject. This contrasts with the ordering in the (b) examples from modern Dutch: Here we find the

¹³³Actually, the *Ulenspieghel* was published slightly after the traditional Middle Dutch period (1170-1500), Geeraedts (1986) dates it around 1525-1546. Despite of this fact, Shannon refers to it as ‘Middle Dutch’; we will keep this terminology.

¹³⁴Through inclusion of three additional chapbooks (Dutch ‘*volksboeken*’) in addition to the Middle Dutch *Ulenspieghel* (Geeraedts 1986), the number of relevant examples featuring a non-pronominal subject and a pronominal object increases to a total number of 586 (as opposed to only 88 in total in Shannon 1997, 2000).

reverse pattern; the non-pronominal subject immediately precedes the object pronoun.

(143) (a) Middle Dutch: (Geeraedts 1986, 119)

Op een tijt verhuerde hem Ulespieghel by eenen backer
 at one time hired himself_{refl} Owlglass_{subj} at a baker

(b) Modern Dutch: (Geeraedts 1986, 118)

Op een keer verhuurde Uilenspiegel zich bij een bakker
 at one time hired Owlglass_{subj} REFL at a baker
 ‘One time Owlglass hired himself to (= ‘got a job with’) a baker.’

(144) (a) Middle Dutch: (Geeraedts 1986, 123)

Doe gaf hem die grave oorlof
 then gave him_{pron.obj} the count_{subj} leave
 ‘Then the count dismissed him (lit. then the count gave him leave)’

(b) Modern Dutch: (Geeraedts 1986, 122)

Toen ontsloeg de graaf hem
 then dismissed the count_{subj} him_{pron.obj}
 ‘Then the count dismissed him’

(145) (a) Middle Dutch: (Geeraedts 1986, 129)

... willen mi die sotten die waerheyt seggen so ...
 want me_{pron.IO} the fools_{subj} the truth_{DO} tell so

(b) Modern Dutch: (Geeraedts 1986, 128)

Als de zotten mij de waarheid gaan vertellen, dan
 if the fools_{subj} me_{pron.IO} the truth_{DO} go tell then
 ...

‘If the fools are going to tell me the truth, then ...’

(146) (a) Middle Dutch: (Geeraedts 1986, 189)

Doe dit die bisscop hadde geseyt ...
 when this_{pron.dem.obj} the bishop_{subj} had said

(b) Modern Dutch: (Geeraedts 1986, 188)

Toen de bisschop dit gezegd had, ...
 when the bishop_{subj} this_{pron.dem.obj} said had
 ‘When the bishop had said this, ...’

There are several issues one has to be conscious of when considering these examples: First, the (b) examples do not always feature the same type of construction as their Middle Dutch counterparts. For example, the conditional clause in the modern Dutch example (145b) is introduced by *als*, whereas the Middle Dutch (a) example features a verb-first clause; (144a) contains the expression *oorlof* [*geven*] (lit. ‘[to give] leave’) which is now archaic and hence translated differently, in (144b) by *ontslaan* ‘to dismiss’.

Furthermore, some of the Middle Dutch examples above contain a direct object pronoun preceding a non-pronominal subject, while others contain an indirect object pronoun in this configuration.

Finally, note that none of the modern Dutch examples in (143)-(146) contains a weak personal pronoun. (143b) contains the reflexive *zich*;¹³⁵ (144b) and (145b) contain personal pronouns; however, modern Dutch *mij* ‘me’ and *hem* ‘him’ are strong pronouns (their weak counterparts are *me* and *'m*, respectively); (146b) contains the demonstrative object pronoun *dit* ‘this’.¹³⁶

Interestingly enough, Shannon (1997) reports the following data from the Middle Dutch Ulenspieghel and its modern Dutch translation (Geeraedts 1986), (147)-(150). This is a rare cases where he did not find any difference in the relative ordering of subject and pronominal object in modern Dutch as opposed to Middle Dutch.

In these data an object pronoun precedes the subject argument even in modern Dutch, although they feature transitive (but not in any case agentive) clauses. In (148), for example, the subject DP is an experiencer rather than an agent. The thematic role of the subject in (147) is a matter of some debate since the subject of a verb with the meaning ‘to disturb (somebody)’ does not necessarily involve ‘volitional force’ or control over the action expressed by the verb, as prototypical agents do.¹³⁷

(147) (a) Middle Dutch: (Geeraedts 1986, 127)

<i>op dat hem</i>	<i>niemant</i>	<i>en soude</i>	<i>stooren</i>
on that hem _{pron.obj}	no-one _{indef.neg.subj}	PRT _{neg} should	disturb
<i>in sijn conste</i>			
in his art			

¹³⁵Morphologically, its Middle Dutch counterpart in (143a) is not a reflexive but a personal pronoun. The modern Dutch reflexive pronoun *zich* did not exist in Middle Dutch times since it is a sixteenth-century loan from High German; in Middle Dutch personal pronouns could also function as reflexives.

¹³⁶That no weak personal pronouns are represented does not only hold of the examples reproduced here but of all examples explicitly mentioned in Shannon (1997).

I do not want to draw any conclusion from this, since it might very well be the case that it is nothing more than accidental. As already mentioned above, Shannon does not distinguish weak and strong pronouns.

¹³⁷In a footnote Shannon (2003, 155, fn. 18) states that when in doubt about the determination of the correct thematic role, he tended to assign an agentive role.

(b) Modern Dutch: (Geeraedts 1986, 126)

opdat hem niemand zou storen
on-that him_{pron.obj} no-one_{indef.neg.subj} should disturb
bij zijn kunst
in his art
'so that no one should disturb him in his art'

The statistics in Shannon (1997, 370, table 2) report that the modern Dutch translation of the *Ulenspieghel* (Geeraedts 1986) contains only two examples of an object pronoun preceding a subject pronoun; (147b) is one of them. It involves the indefinite negative subject pronoun *niemand* 'no one, nobody'. The second example of an object pronoun preceding a subject pronoun found for modern Dutch is reproduced below in (152) and it contains a passivised verb rather than a transitive one.

(148) (a) Middle Dutch: (Geeraedts 1986, 173)

Doe dit die weert hoorde ...
when this_{pron.dem.obj} the innkeeper_{subj} heard

(b) Modern Dutch: (Geeraedts 1986, 172)

Toen dit de waard hoorde, ...
when this_{pron.dem.obj} the innkeeper_{subj} heard
'When the innkeeper heard this, ...'

(149) (a) Middle Dutch: (Geeraedts 1986, 175)

... eten ons die wolven soe ...
eat us_{pron.obj} the wolves_{subj} so

(b) Modern Dutch: (Geeraedts 1986, 174)

Als ons de wolven eten, dan ...
if us_{pron.obj} the wolves_{subj} eat then
'If the wolves eat us, then ...'

(150) (a) Middle Dutch: (Geeraedts 1986, 107)

Daer na wat hem die maget hiete dat dede
then after what him_{pron.IO} the maid_{subj} ordered that did
hi half
he half

(b) Modern Dutch: (Geeraedts 1986, 106)

Daarna deed hij maar half wat hem de meid
thereafter did he only half what him_{pron.IO} the maid_{subj}
opdroeg.
ordered

‘Thereafter he only did half what the maid ordered him [to do]’

Note that these data from modern Dutch contain strong object pronouns rather than weak ones. This is particularly unexpected in the light of the fact that usually a reordering of arguments is illicit in transitive clauses in Dutch (unlike scrambling in German), and in other cases Middle Dutch ‘obj_{pron} < subj’ orders are reversed in the modern Dutch translation, cf. (143)-(146) above.¹³⁸

And, indeed, Shannon (1997) admits that we might be faced with a ‘translational effect’ in (147)-(150):

Of course the influence of the word order in the Middle Dutch text on the Modern Dutch translation cannot be ruled out in such cases, and [...] examples with ‘ergative’ subjects [...] are apparently acceptable to all speakers. However, [...] at least some Modern Dutch speakers accept examples like [(147)-(150)], especially when an indirect object pronoun of some sort is involved. (Shannon 1997, 372)

Referring to one of his tables stating the percentages of the word order options found in the Middle Dutch *Ulenpiegel* and its modern Dutch translation, Shannon (1997, 387, fn. 8) states that “[t]he percentage of cases of pronominal object before nominal subject in Modern Dutch seems higher than one might expect [...]. We cannot dismiss the possibility that the translator was influenced by the order in Middle Dutch. Dr. Geeraedts has admitted (p.c.) that this may indeed be the case.”

This conclusion gains additional support from the fact that in Segers and Visscher (1996), another edition of the modern Dutch *Uilenspiegel*, we find a ‘subject < object_{pron}’ ordering in those cases in which Geeraedts (1986) uses the unexpected ‘object_{pron} < subject’ pattern with transitive verbs in modern Dutch (in two cases, Segers and Visscher 1996 use a different syntactic construction or a paraphrase, however). This suggests that the unexpected ordering pattern in Geeraedts (1986) cannot be due to specific considerations of the respective verbs, for example, because in that case the same ordering should also be attested in Segers and Visscher’s edition of the modern Dutch text.

¹³⁸One of my Dutch informants judged the modern Dutch data in (147)-(150) “acceptable, but old-fashioned”.

Of course, we do find instances of the ordering pattern ‘pronominal object < non-pronominal subject’ in modern Dutch, however, typically not with transitive verbs.¹³⁹

Thus, we find regular examples of the ordering pattern ‘object < subject’ in both stages of Dutch, since, as a matter of fact, the data in (151) and (152) represent a regular pattern in modern Dutch. These data are taken from the *Uilenspiegel*, as well.

Both examples include a passivised verb in the main clause. In (151) the main clause subject is a non-pronominal indefinite DP (*een priester* ‘a priest’), while it is a demonstrative pronoun (*dit* ‘this’) in (152). In both examples the pronominal object *hem* precedes the subject in the main clause.

The ‘object < subject’ ordering is regularly available with unaccusative and passivised verbs in Dutch.

(151) (a) Middle Dutch: (Geeraedts 1986, 197)

Als Ulespiegel dus cranck was so wert hem
 when Owlglass so sick was so was him_{pron.IO}
een priester bracht
 a priest_{subj} brought

(b) Modern Dutch (Geeraedts 1986, 196)

Toen Uilenspiegel zo ziek was, werd hem een priester
 when Owlglass so sick was was him_{pron.IO} a priest_{subj}
gebracht
 brought
 ‘When Owlglass was so sick, a priest was brought to him’

(152) (a) Middle Dutch: (Geeraedts 1986, 177)

Als die weert sach dat hem dit
 when the landlord saw dat him_{pron.IO} this_{pron.dem.subj}
gedaen was in schimpe so ...
 done was in mocking so

(b) Modern Dutch: (Geeraedts 1986, 176)

Toen de waard zag dat hem dit werd
 when the landlord saw that him_{pron.IO} this_{pron.dem.subj} was
aangedaan om hem te bespotten ...
 done for him to mock
 ‘When the landlord saw that this was done to him to mock him ...’

What differentiates the examples in (151) and (152) from those repeated in (147)-(150) above is the fact that, here, the verb is passivised, whereas it is

¹³⁹There is a restriction to the generalisation that in modern Dutch pronominal objects cannot precede a non-pronominal subject of a transitive verb: we find instances of this ordering pattern with (certain types of) reflexive verbs. See section 14.2 for discussion.

transitive in the data in (147)-(150) above.

Let us come back to Shannon's frequency data on word order differences in Middle Dutch and modern Dutch.

(153) reports Shannon's (2000) Middle Dutch frequencies in terms of pronoun type; those which are particularly relevant for our concerns are set in bold type.

(153) Ordering of non-pronominal subject and pronominal object in the Middle Dutch *Ulenspieghel* (n = 88) by pronoun type

Pronoun Type	$N_S + P_O$	$P_O + N_S$	Total
Reflexive	4 (20%)	16 (80%)	20 (100%)
Personal	7 (11.5%)	54 (88.5%)	61 (100%)
Demonstrative	5 (71.4%)	2 (28.6%)	7 (100%)
Total	16 (18.2%)	72 (81.8%)	88 (100%)

Compare table (154) which gives the frequencies of the two ordering pattern in modern Dutch original works by pronoun type (repeated from Shannon 2000, 152); those frequencies which are particularly relevant for our concerns are set in bold type.

We observe an across-the-board decline in object pronoun 'preposing' (in a non-technical sense of the term) from Middle Dutch to modern Dutch, with differences according to pronoun type. The decline of the frequency of the 'object pronoun < nominal subject' pattern is greatest for personal pronouns (decline of approximately 80%: Middle Dutch 88.5%, modern Dutch 9.4%)¹⁴⁰, followed by reflexives (decline of 65%: Middle Dutch 80%, modern Dutch 15%). The 'object < subject' ordering pattern is attested only once with a demonstrative object pronoun in the modern Dutch sample, whereas 15 instances of the reverse ordering are attested; because of the low number of data featuring a pronominal demonstrative object in the Middle Dutch *Ulenspieghel* a comparison is not very helpful. For indefinite object pronouns and negative object pronouns the 'object < subject' pattern is not attested in Shannon's sample of modern Dutch.

(154) Word order frequencies in modern Dutch original works (n = 467) by pronoun type

Pronoun Type	$N_S + P_O$	$P_O + N_S$	Total
Reflexive	130 (85.0%)	23 (15%)	153 (100%)
Personal	221 (90.6%)	23 (9.4%)	244 (100%)
Demonstrative	15 (93.75%)	1 (6.25%)	16 (100%)
Indefinite	39 (100%)	0 (0%)	39 (100%)
Negative	15 (100%)	0 (0%)	15 (100%)
Total	420 (89.9%)	47 (10.1%)	467 (100%)

¹⁴⁰Recall, however, that Shannon (1997, 2000, 2003) does not distinguish strong and weak forms of object pronouns.

Shannon (2000) offers a functional account for the observed diachronic developments. He places these changes within the drift in Germanic, specifically from pragmatically (topic-prominent) to grammatically (subject-prominent) determined word order. As a major catalyst for this he detects the decline of clear morphological indications of subject versus object through losses in the inflectional system. He also points out further changes in the constructional system which might have played a part in the change of the word order patterns (changes in the verbal system, decreasing frequency of certain constructions, etc.), especially in Dutch. These are, however, not so relevant for our concerns here and, therefore, we will leave them aside .

It is interesting to note, however, that Shannon correlates the change in the ordering pattern as observable in the history of Dutch with the decline (or, for the most part, even loss) of morphological subject-object distinctiveness in the development from Middle Dutch to modern Dutch.

Shannon (2000) (following Shannon 1997) argues that the observed changes are best understood with respect to the “gradual grammaticalization of word order” which Burridge (1993) discerned for Dutch. To keep the discussion short, this shift is argued to encompass a drift from topic prominence to subject prominence. Burridge argues that Middle Dutch was in fact much more topic prominent, with evidence coming from a number of constructions in Middle Dutch.¹⁴¹ Their loss appears to be closely connected to the reduction or loss of topic prominence which led to increased subject prominence.¹⁴² We will not go into a discussion on the issue of topic prominence vs. subject prominence in the history of Dutch and German because it will not be of any relevance for our argumentation in the remainder of the thesis (see, for example, the discussion in Abraham 1982, among others, who also came to the conclusion that modern Dutch is more a subject prominent language, whereas modern German is more topic prominent).

¹⁴¹As evidence, Burridge (1993) discusses a number of constructions which are argued to demonstrate the more topic-prominent character of Middle Dutch, specifically: presence and heavy use of topic marking constructions like the ‘double subject construction’ (‘floating topic’), left dislocation (resumptive pronouns), topic-controlled deletion of like constituents (instead of the present-day deletion under identity of grammatical relations, especially subjects), and the accusative subject construction. All of these constructions can be found in earlier stages of Dutch (and German, except perhaps for accusative subjects).

¹⁴²They see the rise of the following elements as symptomatic of this shift towards increased subject prominence where every sentence must have a grammatical subject: obligatory subject pronouns, obligatory subjects for impersonal verbs (and the gradual loss of impersonal verbs), special ‘dummy indefinite pronouns’ (e.g. Dutch *men*, German *man*), obligatory ‘dummy’ subjects, e.g. to signal the presence of extraposed sentences (*het* in Dutch, *es* in German), and ‘dummy’ subject slot fillers (subject expletives) like *er* in Dutch and *es* in German.

It is not the case that all of these criteria are realised in present-day Dutch, however. For example, Dutch allows for impersonal passives without an expletive element; do also recall the discussion on the status of Dutch *er* in section 8.1.1 above (cf. Bennis 1986; Koenenman 2000, among others).

Let us instead bring the discussion of Shannon (2000) to an end. According to Shannon, the drift to a more rigid ‘subject < object’ ordering in Dutch has been driven in large parts by the loss of fairly consistent inflectional marking for subject vs. object. This is a link to the proposal I am advocating in this thesis and also a reason why the discussion of Shannon’s account was conceded so much space.

As he argues, with the reduction or loss of robust non-linear morphological cues to what was subject and object, speakers more and more frequently stuck to a fixed ordering of an ambiguous non-pronominal subject before an object pronoun. The grammaticalisation of this ordering now unambiguously signals grammatical functions in Dutch without reverting to cues from case morphology.

Before we finish our discussion of Shannon (2000), some critical remarks on his papers need to be said as well. They are basically functionally oriented pieces of work which do not take into account structural considerations to a degree which would allow us to decide the structural positioning of syntactic elements. This is evident with respect to the variables chosen for the statistical analysis. Regarding nominal subjects in Dutch, Shannon distinguishes the factors subject type (proper nouns vs. common nouns), definiteness, animacy, semantic role, and length (in terms of words). With respect to the pronominal objects he uses pronoun type (reflexive, personal, demonstrative, indefinite, and negative), animacy (human, animate; concrete, abstract), and case (accusative vs. dative) as variables for statistical analysis.

Shannon’s functional orientation becomes also evident when we take his interpretation of the statistical tables into consideration. Here he remains on a rather descriptive level, without even commenting on the structural configurations which are involved in his examples or the positions nominal subject and object pronoun are actually occupying (cf. Shannon 2000, 146: “Note also that the use of the terms ‘postpose’ and ‘prepose’ are purely for descriptive convenience”). In more concrete terms, Shannon remains completely silent about whether the nominal subject as well as the pronominal object turn up in their base positions or whether one or both of them have moved to a derived position. In the same vein, he does not take verb phrase types (transitive verb phrases vs. unaccusative and passivised ones) into consideration.¹⁴³

¹⁴³Some weak indications about the impact of the verb phrase type can be derived indirectly from one of the factors Shannon takes into account, namely the semantic role of the subject; although the two factors are different in nature: ‘verb phrase type’ is primarily a syntactic notion, whereas ‘semantic (or thematic) role’ is not.

‘Verb phrase type’ is a syntactic notion and describes how many arguments a verb selects for and whether the subject is the highest argument (external subject). Of course, there is an interaction of the syntactic concept ‘verb phrase type’ and the semantic concept ‘semantic role’; however, there is no one-to-one correspondence. Although ‘agent’, for example, is the prototypical semantic role of the subject of transitive verbs, not all external arguments are in fact (true) agents but we also find external arguments which are, for example, experiencers. Only if one wants to classify the semantic roles ‘experiencer’ and ‘cause’ as subclasses of agents we get nearer to the syntactic classification in terms of verb phrase type (at least for verbs which take two arguments). Prototypical transitive verbs are verbs whose arguments

The inclusion of structural considerations of these kinds into the analysis would have been illuminating for our concerns because the ‘object < subject’ ordering is the base order of arguments with unaccusative and passivised verbs. Moreover, Shannon does not present any analysis which takes into consideration factors of both subject and object, e.g. a combination of factors such as pronoun type (reflexive, personal, demonstrative, indefinite, or negative) and semantic role of the nominal subject (agent, patient, theme, or recipient).

Unfortunately, Shannon generally does not distinguish between weak and strong pronouns in the sense of Cardinaletti and Starke (1994). Therefore, no reliable conclusions about the distributional differences of *weak* object pronouns in relation to nominal subjects can be drawn from his findings.

Despite all reservations with respect to the conception of Shannon (1997, 2000, 2003), let us conclude this section.

Speaking in terms of features we can take Shannon’s findings on the word order differences found with non-pronominal subjects and pronominal objects in Middle Dutch and modern Dutch as additional, though only circumstantial evidence for a consistently negative setting of the ‘richness parameter’ (i.e., absence of subfeature *m*-mark on *u*Case of DPs) throughout the nominal and pronominal system of modern Dutch, as proposed in chapter 9.

In contrast, in Middle Dutch the richness parameter is set to a positive value. Shannon’s findings pattern nicely with what we expect from languages with rich case morphology. According to our argumentation in the previous chapters, languages with rich case morphology own a subfeature *m*-mark which is represented in the feature matrix of DPs. According to *Unambiguity of Argument Identification*, an additional *v*P layer is only projected for transitive verbs when necessary for unambiguous argument identification; i.e., the *V(v)*P is only split up into two separate layers when unavoidable. Middle Dutch does not split up its verb phrase since arguments can be unambiguously identified on the basis of their morpho-syntactic feature matrix due to their subfeature *m*-mark; they do not have to be structurally differentiated. Thus, we expect from Middle Dutch that object pronouns can precede a non-pronominal subject, like in German, because, even after application of weak pronoun movement or argument-reordering operations like scrambling, the arguments are unambiguously identifiable on the basis of their morpho-syntactic features. This prediction is borne out.

However, Shannon seems to assume a rather direct correlation between surface morphological information (case marking) which allows to distinguish subject and object on morphological grounds and the availability of variable word order, whereas we assume that the correlation is represented on a more abstract, syntactic level (in the morpho-syntactic feature matrix) and it is determined according to Haerberli’s (2002) definition of rich morphological case.

get structural case (nominative and accusative on the external and the internal argument, respectively, in nominative-accusative languages), which is a purely syntactic property.

12 On the nature of the syntactic operation Agree: How structural accusative case gets valued in German

Among the theory-internal consequences of the approach described in this thesis, there is a crucial and far-reaching one which has not received enough attention in the discussion so far.

We have argued that German completely lacks a vP ¹⁴⁴ layer because unambiguous argument identification in German works without distinguishing different structural domains within the transitive verb projection. In recent minimalism, however, it is the standard approach that v crucially participates in case matching: it probes for a DP to ‘assign’¹⁴⁵ (value) accusative case.

As soon as one questions the universality of a vP layer in transitive clauses, as we do, standard minimalist reasoning regarding the matching of accusative case is not solid any more, at least in those languages which do not project a vP layer as we have claimed for German. Standard minimalism assumes that structural accusative case is valued in a unique, strictly local agreement relation between the head of the vP phase (probe with uninterpretable features) and the respective argument DP (goal with matching features) by matching and valuating features. According to standard assumptions, in order for Agree to successfully apply, probe and goal must be within the same locality domain and no other goal may be closer (more local) with respect to the probe. However, if the vP layer is completely absent in German, as we have argued, this mechanism cannot be held responsible for accusative case ‘assignment’ in German.

In this section, we will discuss the structural conditions and the mechanism which are at work in ‘assigning’ structural accusative case to the direct object in German. The critical question is this: How does the direct object DP value its unvalued case feature (uCase) in the absence of any vP layer in German?

At first sight, our approach seems to predict that there should be no structural accusative on objects of transitive verbs in German at all. Obviously, however, this is not what we find in the empirical data. (155a) shows a regular transitive clause with nominative case on the subject and accusative case on the object DP. In the passive construction, (155b), the subject of the clause (i.e. the argument corresponding to the object in the transitive clause) turns up in the nominative. This behaviour indicates that the accusative on the object in the (a) example is indeed a structural case.

¹⁴⁴For sake of simplicity, we will use the labels ‘ v ’ and ‘ vP ’ in the following. We will leave aside the issue of whether or not there is reason to distinguish between v/vP (a weak phase) and v^*/v^*P (a strong phase) as suggested in Chomsky (2001*b*).

¹⁴⁵Whenever we use a formulation like ‘assign case’, this is meant in a non-technical sense.

- (155) (a) *Peter las den Brief*
 Peter_{nom} read_{past} the letter_{acc}
 ‘Peter read the letter’ (German)
- (b) *Der Brief wurde gelesen*
 the letter_{nom} was read
 ‘the letter was read’ (German)

In standard minimalist reasoning on feature matching under Agree, this syntactic behaviour presupposes that there is a *vP* layer present in German.

In this section, we are going to argue for a more ‘liberate’ interpretation of the nature of the syntactic operation Agree. In concrete terms, we will argue that Agree is not limited to a strictly local one-to-one relation between a probe and a given goal; rather, the syntactic operation Agree can establish a relation between an active probe and *any number* of matching goals within a given locality domain. In particular, we claim that it is the notion of ‘locality domain’ that is crucial for Agree (rather than notions like ‘closest c-command’, ‘closest matching goal’, ‘most local’, etc.).

This is our proposal in a nutshell: In general, the structural accusative is not valued by the *v* head, but rather it is valued in an *Agree relation with the next higher functional head (v, T) that is available*. In languages which feature a *vP* layer, structural accusative case is matched in an Agree relation between the *v* head and the argumental DP because *v* is the next higher functional head; this coincides with the standard analysis.

If there is no *vP* layer present, however, like in German, accusative case is matched in an Agree relation between the next higher functional head (T) and the argumental DP. In this case, T is in an Agree relation with both the subject DP as well as the object DP; that is, it probes ‘all the way down’ until the bottom of its locality domain.

This conception of Agree presupposes that matching features of the probe T are not immediately set inactive and deleted from the computation as soon as a matching goal is detected but, rather, they stay active until all Agree relations within the locality domain (phase) have been established.

Furthermore, T does not explicitly ‘assign’ ‘nominative’ and ‘accusative’ to subject and object respectively, but rather it ‘assigns’ ‘structural case’ which is, later on, interpreted as nominative and accusative by the morphological component. In this conception of Agree, as a consequence, the relation between the T head and nominative case and the *v* head and accusative case is not an original one (contrary to what is standardly assumed); rather, the frequently observed connection between T and nominative case and *v* and accusative case follows from the syntactic architecture of the respective languages.

We are not the first to argue that Agree can relate more than only one goal to a given probe. In the relevant literature, we find a few proposals which

go into this direction. Two of these proposals (Hiraiwa 2001*a*, to-appear; van Koppen 2005, 2006*a,b*) will be discussed in the following sections.

As for the theoretical implementation of a mechanism for multiple case matching by a single probe, a promising suggestion has been made by Hiraiwa (2001*a,b*, 2002*a,b*, to-appear).

Hiraiwa (2001*a*, 2002*a,b*, to-appear) suggests that an operation, which he calls ‘Multiple Agree’ and which allows to establish an agreement relation between one probing head and multiple active goals, should be included into the minimalist framework.

Another conception of agreement between a single probe and multiple goals has been proposed by van Koppen (2005, 2006*a,b*) to account for complementiser agreement phenomena as found in dialects of Dutch.

We will start our discussion with van Koppen’s proposal which is not capable of deriving the agreement relations between a single probing functional head and both arguments of a transitive verb as we have proposed for German, however. Therefore, the discussion will be kept brief.

Hiraiwa’s (2001*a*; 2001*b*; 2002*a*; 2002*b*; to-appear) conception of Multiple Agree, in contrast, is suited to this work. We will discuss Hiraiwa’s conception of Multiple Agree in section 12.2.

12.1 Van Koppen (2005, 2006*a,b*) on complementiser agreement in dialects of Dutch

Van Koppen (2005, 2006*a,b*) introduces her conception of agreement between a single probe and multiple goals in order to explain the different patterns of so-called complementiser agreement as found in dialects of Dutch.

Complementiser agreement is a phenomenon whereby a complementiser agrees in phi features with the embedded subject, indicated by overt inflectional morphology on the complementiser.

In short terms, in clauses which feature a coordinated subject, Dutch dialects differ with respect to whether they show complementiser agreement with only the first conjunct of the coordinated subject (‘partial agreement’ in van Koppen 2005, 2006*b*/‘First Conjunct Agreement’ in van Koppen 2006*a*) or whether they feature complementiser agreement with the subject as a whole (‘resolved agreement’ in van Koppen 2005, 2006*b*/‘Full Agreement’ in van Koppen 2006*a*).

These different options of complementiser agreement are illustrated in (156a) from Tegelen Dutch (complementiser agreement with the first conjunct of the coordinated subject) and (156b) from Tiel Dutch (complementiser agreement with the coordinated subject as a whole).

(156) (a) ‘Partial complementiser agreement’/‘First Conjunct Agreement’:

Ich dink de-s doow en ich ôs kenne
 I think that_{2sg} [you_{2sg} and I]_{1pl} each-other-1pl can-pl
treffen
 meet
 ‘I think that you and I can meet.’

(Tegelen Dutch; van Koppen 2006*b*, 26 (3a))

(b) ‘Resolved complementiser agreement’/‘Full Agreement’:

Oa-n Bart en Liesje nie ipletn ...
 if_{3pl} [Bart and Liesje]_{3pl} not watch-out
 ‘When Bart and Liesje don’t watch out ...’

(Tielt Dutch; van Koppen 2006*b*, 26 (3b))

According to van Koppen’s (2005, etc.) analysis, the different patterns of complementiser agreement are different morphological realisations of the same syntactic configuration. In more concrete terms, van Koppen (2005, etc.) argues that the C head (the probe) is in a syntactic Agree relation with two goals (the coordinated subject and the first conjunct of the coordinated subject) in both clauses; the different morphological marking is due to language-specific considerations in post-syntactic morphology (the dialects differ with respect to which one of the syntactic Agree relations is morphologically realised).

Concerning the nature of the Agree mechanism, van Koppen makes the following assumptions: C in dialects with complementiser agreement has uninterpretable phi features; therefore, C can function as a probe. The syntactic mechanism Agree has to search for a matching goal within the *c*-command domain of C. Agree identifies an element as a suitable goal when it meets the following requirements: it has to be local (van Koppen defines locality in terms of *c*-command) and it has to have matching features. As soon as Agree detects the closest matching goal, the Agree relation is established and no further probing applies. However, when two goals are equally local with respect to the probe, they are identified as suitable goals simultaneously and Agree establishes a relation between both of these goals and the probe. This is the case in the examples in (156): The coordinated subject (which is a ‘Coordination Phrase (CoP)’ in van Koppen’s terminology) and the first conjunct of the coordinated subject (which is a DP) are equally local with respect to the probe C and, therefore, Agree establishes a relation between the probe C and both the CoP and the DP. However, only one of these Agree relations will get spelled out by post-syntactic morphology; this is the source of the language-specific variation in (156a,b).

For the details of the analysis see van Koppen (2005, 2006*a,b*).

Van Koppen’s (2005, etc.) conception of Agree and feature valuation differs in crucial respects from the conception advocated in this thesis.

Most important, she assumes that Agree applies strictly locally in the sense that it only ‘sees’ the most local goal with respect to the probe, i.e. the most local goal in the c-command domain of the probe. In her approach, she states that whenever a probe is able to establish an Agree relation with more than one goal, this is always due to the fact that both goals are equally local with respect to the probe. When two goals are equally local, they are found in the same application of the operation Agree; the probing is stopped as soon as the closest matching goal is detected.¹⁴⁶ This is a crucial assumption in van Koppen’s approach: Agree always relates the probe to the most local goal(s). Only in a very specific situation, two goals are in an Agree relation with a single probe: namely, when the two goals are equally local with respect to the probe and no other suitable goal intervenes.

In the conception of Agree advocated in this theses, in contrast, the syntactic mechanism Agree ‘scans’, so to speak, its entire locality domain for available goals; it searches ‘all the way down’ until the bottom of the locality domain and establishes an agreement relation with all suitable matching goals. Thus, in our conception, ‘equally local’ with respect to the probe means to be *within the same locality domain* as the probing head and to be detected *during the course of a single application of the syntactic operation Agree*. The crucial point is this: Agree does not stop probing as soon as the closest matching goal is detected but it stays active until the end of the locality domain is reached. As a consequence, Agree can relate two goals which would not count as equally local in van Koppen’s terms to a given probe, provided that no other probe intervenes.

If there is no *vP* layer present in transitive clauses, as we have proposed for German, both the subject argument and the direct object argument get related to the same probe which values their case features as ‘structural’. The specification for structural case on the subject and the object will get realised as nominative and accusative respectively by post-syntactic morphology.

In van Koppen’s (2005; 2006*a*; 2006*b*) conception of multiple Agree, in contrast, it is excluded that a subject argument and an object argument get ever related to the same probe.

We will now come to the discussion of Hiraiwa’s (2001*a*; 2001*b*; 2002*a*; 2002*b*; to-appear) conception of agreement between a single probe and multiple goals, which is much closer to the conception of the syntactic operation Agree that we have adopted.

¹⁴⁶As far as I can see, her reasoning would also be compatible with an alternative interpretation, namely, that Agree ‘sees’ all available goals in the c-command domain of the probe, but only relates the most local goal to the probe.

12.2 Hiraiwa (2001*a,b*, 2002*a,b*, to-appear): Multiple Agree

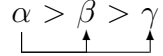
Hiraiwa (2001*a*; 2001*b*; 2002*a*; 2002*b*; to-appear, a.o.) suggests the inclusion of an operation called Multiple Agree into the minimalist framework. Multiple Agree is a syntactic operation that is characterised by a one-to-many relation between one probe and multiple goals within a given locality domain. In Chomsky (to appear), Multiple Agree is mentioned as an integral part of the computational system of natural languages.

Hiraiwa's definition of the operation Multiple Agree is provided in (157), in the words of Hiraiwa (2001*a*).¹⁴⁷ (158) illustrates the derivation of 'covert multiple feature-checking' under (157), i.e. Multiple Agree without Move.¹⁴⁸

(157) MULTIPLE AGREE: (Hiraiwa 2001*a*, 69)

MULTIPLE AGREE (multiple feature checking) with a single probe is a single simultaneous syntactic operation; AGREE applies to all the matched goals at the same derivational point derivationally simultaneously.

(158) MULTIPLE AGREE as a single simultaneous operation

$\alpha > \beta > \gamma$ (Hiraiwa 2001*a*, 70)

 (AGREE (α, β, γ), where α is a probe and both β and γ are matching goals for α .)

Hiraiwa describes the course of events in the syntactic derivation in the following way (highlighting by bold type is mine):

Under the proposed theory of MULTIPLE AGREE [= (157), J.K.], at the point of the derivation where the probe P is merged, the probe feature starts to search down for a closest matching goal β . However, this does not result in an immediate AGREE under [(157), J.K.]; rather the probe feature, being [+multiple], continues to probe for a next closest goal, resulting in matching with γ . **This continues until the probe locates all the matching goals within an 'accessible' domain.** Now at this point of the derivation, AGREE applies to all the matched goals *derivationally simultaneously*, establishing AGREE (α, β, γ). Thus under MULTIPLE AGREE, a superficial 'covert multiple feature-checking' is not multiple instances of the syntactic operation AGREE; rather it is reduced to a single syntactic operation. (Hiraiwa 2001*a*, 70)

¹⁴⁷For a revised, more formal definition see Hiraiwa (to-appear, 34 (2.8))

¹⁴⁸The syntactic operation Multiple Agree is motivated by empirical evidence for 'multiple covert feature-checking' as found in various languages. Specifically, Hiraiwa discusses raising-to-object (ECM) and raising-to-subject (raising) constructions in Japanese, nominative-genitive conversion in Japanese and various other languages, raising constructions and participle agreement in Icelandic, gender agreement in Hindi, among others. For further empirical support for Multiple Agree see also Boeckx (2004); Chomsky (2004); Collins (2003).

Hiraiwa argues that the syntactic operation Agree is a *derivationally simultaneous* operation and, therefore, a one-to-many relation is established simultaneously in a derivation. He called this the theory of Multiple Agree. The leading idea is that the sequentiality (i.e. order of derivational steps) of the syntactic derivation is at least relaxed enough to allow an ‘is simultaneous with’ relation as well as a ‘is before/after’ relation in a derivation. He calls this notion ‘Derivational Simultaneity’.¹⁴⁹

According to Hiraiwa, in fact, any instance of an Agree relation can be treated as an instantiation of Multiple Agree. ‘Standard’ Agree (one probe, one goal) is a special case of Multiple Agree that arises when a searching probe detects only one active matching goal within its locality domain.¹⁵⁰

The syntactic operation Multiple Agree is a complex bi-directional operation which consists of two symmetric relations. In the agreement relation between the probe and the goal(s), the probe values the unvalued (uninterpretable) case feature (*uCase*) of the goal(s) and the goal(s) value(s) the unvalued phi features (*uφ*) of the probe. In some languages, reflexes of the feature valuation by multiple goals can be observed in the inflectional morphology on a verb which occupies T.

Note that this kind of symmetry is also contained in Chomsky’s (2001*b*) version of Agree, although it is not explicitly detailed there. A functional probe head with unvalued features starts probing for an active goal with matching features in its local *c*-command domain. Once an Agree relation is established between a probe and a given goal, probe and goal mutually value each others unvalued features. The symmetry of features valuation under Agree is not complete, however. A head that ‘assigns’ structural case contains unvalued phi features in its feature matrix; however, it does not explicitly contain a case feature. The feature matrix of DPs, on the other hand, contains both interpretable (valued) phi features as well as an unvalued Case feature that needs to be valued.

The Agree operation incorporates mechanisms for providing a value to unvalued features under appropriate conditions. In Chomsky’s conception, probe

¹⁴⁹In Hiraiwa (to-appear), he proposes a ‘Probe theory of Parallel Derivation (PTPD)’ under which Derivational Simultaneity plays a key role at each probe-level. In concrete terms, Derivational Simultaneity applies phase-by-phase, under the ‘Probe theory of Parallel Derivation (PTPD)’ which is, as he states, “an optimal solution to the problem of cyclicity/Earliness” (Hiraiwa to-appear, 32).

¹⁵⁰Under the principle of Simultaneity,

multiple relations are established simultaneously in parallel when more than one matching goal exists in the search domain of the probe P. Note that, under this conception, **Multiple Agree should be a null hypothesis**, just as Merge is unrestricted (see Chomsky 2004). The superficial one-to-one correspondence of Case and agreement (e.g. in English) is nothing but a subcase of Multiple Agree. (Hiraiwa to-appear, 35; highlighting by bold type is mine)

and goal match if features have values for the goal but not for the probe. Matching of probe and goal induces Agree, eliminating uninterpretable features that activate them. While unvalued phi features of the probe are ‘checked’ against the valued phi features of the goal (feature matching), and are thereby valued, valuation of the unvalued case feature of the goal is so to speak ‘parasitic’ upon phi feature valuation. Case is not matched, but the Case feature deletes under matching of phi features. Structural Case features on nominals start out unvalued and become valued (i.e., are ‘assigned’ structural case) via phi feature agreement with a case-‘assigning’ head.

Note that this minimalist (standard) conception of Agree in combination with Hiraiwa’s suggestion of a *one-to-many* agreement relation (Multiple Agree) gives us a natural solution for an approach to explaining the case ‘assignment’ to the subject and object argument in transitive clauses in German. Under our approach, which claims that there is no *v* head present in German, case ‘assignment’ cannot be achieved in a one-to-one relation between T and the subject and *v* and the object argument. However, by application of the syntactic operation Multiple Agree, both arguments can receive their case ‘assignment’ from a single functional head (T).

With respect to locality, Hiraiwa’s operation Multiple Agree is essentially unrestricted in that it has to search all the goals in a given search domain. Note that this assumption distinguishes Hiraiwa’s conception of Multiple Agree from van Koppen’s (2005; 2006*b*) conception of agreement between a single probe and multiple goals as discussed in the previous section. In van Koppen’s (2005; 2006*b*) proposal, the operation Agree establishes a relation between one probe and multiple goals only if the available goals are equally local with respect to the probe, ‘equally local’ being defined as ‘c-commanded by the same set of nodes’.

However, in both conceptions of agreement with multiple goals, a situation is excluded in which Agree establishes a relation between a probe and a matching goal that is not the most local one with respect to the probe, skipping an intermediate (i.e. intervening) matching goal.

The examples in (159) show Transitive Expletive Constructions (TECs) with dative-nominative raising complement clauses from Icelandic (they are repeated from Hiraiwa *to-appear*, 48 and are originally due to Thorbjörg Hróarsdóttir, p.c.).¹⁵¹ Compare in particular the inflectional morphology on the raising verb in (159a) to (159b).

¹⁵¹Hiraiwa (*to-appear*) refers to Holmberg and Hróarsdóttir (2003, 2004) who report this observation about agreement in TECs in Icelandic.

- (159) (a) *það virðist/*virðast einhverjum stúdent líka*
 EXPL seem_{dft/*-pl} some student_{dat.sg} to-like
hestarnir
 horses_{def.nom.pl}
 ‘It seems that some student likes the horses’ (Icelandic)
- (b) *það virðist/virðast mörgum stúdentum líka*
 EXPL seem_{dft/-pl} many students_{dat.pl} to-like
hestarnir
 horses_{def.nom.pl}
 ‘It seems that many students like the horses’ (Icelandic)
- (c) *það virðist/*virðast mörgum stúdentum líka hestar*
 EXPL seem_{dft/*-pl} many students_{dat.pl} to-like horse_{nom.sg}
 ‘It seems that many students like a horse’ (Icelandic)

In the Icelandic examples in (159), the dative element is the subject of the construction (‘non-nominative subject’, also ‘quirky subject’); however, the lower argument realises nominative case inflection.

Note that agreement marking on the finite verb is nominative-controlled in Icelandic (cf. Sigurðsson 1996, 2000; Taraldsen 1995, among many others); agreement morphology on the finite verb correlates with the nominative case, not with subject status. With non-nominative (‘quirky’) subjects, we never find subject-verb agreement in Icelandic (cf. Sigurðsson 1996).¹⁵²

As shown in (159), if the intervening ‘quirky’ dative is singular, plural agreement on the finite raising verb is blocked, (159a).¹⁵³ However, if both the intervening experiencer and the downstairs nominative element are plural, plural agreement becomes licit, while default agreement is also allowed as in (159b). (159c) shows that the ‘quirky’ dative cannot value the probe’s phi features, otherwise plural agreement on the raising predicate would be allowed.

Hiraiwa’s reasoning to capture these facts is along the following lines: T is in an agreement relation with both the dative subject as well as the nominative object in (159) because both arguments are within the locality domain of probe T and, therefore, Multiple Agree establishes a relation between the probe and both goals.¹⁵⁴ Both the subject and the object participate in establishing the actual morphological form of the finite raising verb (verbal inflectional morphology; i.e. valuation of the unvalued phi features of the probe), resulting in default agreement on the finite verb when subject and object do not coincide with respect to their specification for number, (159a).

Plural agreement with the nominative object becomes possible when the intervening embedded (quirky) dative subject is also plural, (159b).

¹⁵²For discussion of ‘quirky’ accusative subject constructions in Icelandic see Kainhofer (2002).

¹⁵³Note that Hiraiwa glosses *virðist* ‘seem’ in (159) as default form although it is identical in shape with an agreeing 3.sg form of the raising predicate.

¹⁵⁴Hiraiwa assumes that T is a probe by inheritance from C.

It is interesting to note that a feature valuation conflict does not prevent Multiple Agree. Rather, as Hiraiwa claims, Multiple Agree is automatic as long as feature matching (not feature *value* matching!) is satisfied. It depends on other factors, what value a probe gets from multiple goals (see Hiraiwa to-appear for comprehensive discussion).

Let us now come back to the situation in transitive clauses in German and discuss how the accusative case on the object argument is ‘assigned’ in our approach as described throughout the thesis.

12.2.1 Back to accusative case ‘assignment’ in German and Dutch in our approach

In parallel fashion, we can make use of Hiraiwa’s operation Multiple Agree for establishing agreement relations between T and the subject as well as the object DP in German transitive clauses.¹⁵⁵ Since there is no *vP* layer in German, as we have proposed, feature matching starts only when T is merged into the structure.¹⁵⁶ Probe T inspects its locality domain for available matching goals; since it finds two available matching goals, T establishes an Agree relation with both DPs within its locality domain and values their case features for ‘structural case’.¹⁵⁷

Note that German does not show reflexes of (failure of) multiple agreement relations (Multiple Agree) in the verbal agreement system. However, it is important to be aware of the fact that nothing in Hiraiwa’s conception or the definition of Multiple Agree nor in the general organisation of the syntactic computation forces the establishment of a syntactic relation (Multiple Agree) during the syntactic derivation to result in overt morphological reflexes on the probe (since this is a matter of the (post-syntactic) morphological component where the actual markers are determined).

Therefore, the absence of morphological reflexes of (failure of) multiple agreement relations in German which are similar to those found in Icelandic is by no means convincing evidence against our suggestion that Multiple Agree is responsible for the valuation of the *uCase* features on both the subject as well as the object argument in transitive constructions in German.

¹⁵⁵In van Koppen’s (2005; 2006*b*) conception of agreement between one probe and multiple goals, in contrast, the derivation is predicted to crash in our approach. The reason is that the *uCase* feature of the object cannot be valued because the probe T stops probing for further suitable goals as soon as it detects the closest matching goal (the subject) and establishes an Agree relation with it.

¹⁵⁶Probably, even only when C is merged (if T gets activated by C as a probe as has been suggested by Chomsky 2001*a*, 2004; see also Hiraiwa 2001*b*; Pesetsky and Torrego 2001); for our present concerns it does not make any difference which one of these alternatives is assumed.

¹⁵⁷Note, however, that Hiraiwa (to-appear) adopts the standard minimalist assumption that accusative Case comes from the *v*-probe system while nominative Case comes from T.

As already indicated above, both case features are valued as ‘structural’; the determination of the actual inflection marker on the subject and the object is a matter of (post-syntactic) morphology (in accordance with the well-known nominative-accusative dependency of structural case: the highest ranked argument gets structural nominative, the lower ranked argument gets structural accusative).

Having discussed how accusative ‘assignment’ in German proceeds by application of Multiple Agree, we now turn to the situation in Dutch. According to our approach, Dutch owns a layered verb phrase (*v*P-VP) for reasons of unambiguous argument identification. In more concrete terms, in order to differentiate the arguments by structural means (i.e. by occupying distinct structural domains inside the verb phrase) in Dutch, the ‘complex’ $V(v)$ head of transitive verbs is split up into two separate heads (V, v) and a shell structure is projected; thereby, the probe features of the *v* head get activated and *v* can function as a probe.

This brings up the question whether or not accusative ‘assignment’ in Dutch is completely unproblematic and proceeds according to the standard mechanism: accusative ‘assignment’ in a local unique probe-goal relation between the *v* head (the probe) and the argumental DP (the goal) in its base position. As far as the main ingredients of feature valuation under Agree are concerned, all conditions are complied with: The goal (the object) is within the *c*-command domain of the *v* head (the probe), it is the closest matching goal (although this is not crucial in the light of Multiple Agree), it has unvalued features (i.e. it is active) and can, therefore, enter into an Agree relation with the probing *v* head.

The only departure from the standard assumptions is this: We have argued in chapter 9 that the *v*P layer is head-final in Dutch (like any other type of verb phrase in Dutch and German). As far as we can see, establishing an Agree relation between a probe and a goal under *c*-command is not affected by headedness.

Therefore, we conclude that the ‘assignment’ of accusative case to the object argument of transitive clauses proceeds in exactly the same way as in head-initial *v*Ps.

13 Barriers (1995): Stranding of focus particles at the edge of *vP* in Dutch

In this section, I will discuss one of the crucial consequences of this kind of approach within a minimalist framework that is assuming phases (following Chomsky 2001*b*). The proposal outlined in the previous sections makes the testable prediction that properties associated with the phase status of *vP* should not turn up in German since the *vP* layer there is absent. If the *vP*-layer is indeed crucial for phase status, the transitive verb phrase in German should not be a (strong) phase, and, as a consequence, not exhibit (strong) phase properties. In Dutch, on the other hand, we should find evidence for phase properties of the *vP*. This is indeed confirmed as the differences in the data from Dutch (160) and German (161) illustrate. Unfortunately, however, the absence of evidence for phase properties is not a proof of non-layered transitive verb projections in German, but merely circumstantial evidence.

In the minimalist literature assuming phases (following Chomsky 2001*b*), a whole range of properties has been attributed to the phase status of *vP*: for example, reconstruction to the edge of *vP*, providing a target for quantifier raising, licensing of parasitic gaps, and isolability of PF, among others. However, many of these properties are controversial and problematic from a conceptual and/or empirical point of view (cf. especially the discussion in Boeckx and Grohmann 2004 and references cited there). Therefore, they cannot be used as decisive evidence to support our concerns.

Fortunately, however, there is one property of (strong) phases which seems to be uncontroversial. This is stranding under successive-cyclic movement through phase edges. Stranded elements are taken to be evidence for intermediate landing sites of successive-cyclic movement through phase edges because in the minimalist phase model, successive-cyclic movement is assumed to target (strong) phases (CP, *vP*) only.

In his 1995 dissertation, Barriers presents evidence for focus particles occurring at the edge of *vP* in Dutch which must have been stranded under successive-cyclic wh-movement. Therefore, focus particles can be used as a diagnosis for a movement. The relevant examples are replicated in (160a,b). What is crucial here is the fact that these examples are ambiguous in interpretation. The focus particle *maar* ‘only, just’¹⁵⁸ surfaces within the main clause which is particularly obvious in (160b), nevertheless it can be interpreted as part of the topicalised DP (reading 1). This is the stranding reading, i.e.

¹⁵⁸According to Barriers (1995, 80), the Dutch focus particle *maar* provides the most reliable test case: whereas it can qualify a dynamic verb and then receives a durative interpretation (cf. *Jan praat maar over emigreren* ‘John talks about nothing but emigrating’ (lit. John talks only about emigrate), Barriers 1995, 80 (63a)), it cannot qualify stative verbs such as *zien* ‘see’, *weten* ‘know’, etc. When *maar* is combined with a stative verb, a numeral-containing constituent is required as the focus constituent (i.e., as the constituent which is modified by the focus particle); otherwise the sentence is ungrammatical (cf. **Jan weet maar het antwoord* (lit. John knows only the answer), but *Jan weet maar EEN antwoord* ‘John knows only one answer’).

maar must have been stranded in the specifier of *vP* of the matrix clause in the course of successive-cyclic movement of *maar twee vogels* ‘just two birds’ through phase edges on its way up to its topicalisation site within the CP domain of the matrix clause.

- (160) (a) [*TWEE vogels*]_i *zei Jan maar* [_{CP} *dat ie e_i*
two birds said John just_{foCPRT} that he
gezien had]
seen had
reading 1: ‘John said that he had seen just two birds’
reading 2: ‘John just said that he had seen two birds’
(Dutch; Barbiers 1995, 84 (70b))

- (b) [*TWEE vogels*]_i *had Jan maar gezegd* [_{CP} *dat ie*
two birds had John just_{foCPRT} said that he
e_i gezien had]
seen had
reading 1: ‘John had said that he had seen just two birds’
reading 2: ‘John had just said that he had seen two birds’
(Dutch; Barbiers 1995, 85 (71a))

In German, in contrast, no such ambiguity arises. The German focus particle *nur* ‘just’ cannot be interpreted as part of the topicalised DP, (161); which means that reading 1 is unavailable in German. Note that *nur* precedes the matrix clause subject *Jan* in (161) in contrast to the ordering in Dutch. This is due to the fact that subjects do not move to a intermediate subject position (Spec,TP) in German. Rather, they stay in their base position within the verb phrase (i.e. German is [-EPP] in the traditional sense). For independent reasons, even reading 2 is unavailable here. The only possible reading of (161) is reading 3. This, however, is the non-stranded reading. Even if we imitate the surface ordering of Dutch (*Jan* < focus particle), as in (161b), reading 1 is not available in German.

- (161) (a) [*ZWEI Vögel*]_i *hatte nur Jan gesagt* [_{CP} *dass er*
two birds had just_{foCPRT} John said that he
e_i gesehen hatte]
seen had
*reading 1: ‘John had said that he had seen just two birds’
*reading 2: ‘Jan had just said that he had seen two birds’
reading 3: ‘Only Jan had said that he had seen two birds’
(German)
- (b) [*ZWEI Vögel*]_i *hatte Jan nur gesagt* [_{CP} *dass er e_i gesehen hatte*]
*reading 1: ‘John had said that he had seen just two birds’
(German)

Therefore we can conclude that for German there is no positive evidence from the stranding of focus particles that there should be a *vP* phase. As

mentioned before, however, this cannot be taken as a proof that the *vP* layer is absent in German since it is possible that the ‘inaccessibility’ of Spec,*vP* as a stranding site in German is due to other factors. Rather, the fact that we do not find stranding of focus particles in an intermediate landing site (Spec,*vP*) under successive-cyclic wh-movement in German is only a piece of circumstantial evidence which at best points into that very direction.

13.1 Is stranding under successive-cyclic movement through phase-edges the only possible analysis for the Dutch data?

13.1.1 The minimalist phase theory and successive-cyclic movement

One might suggest that demonstrating that in Dutch a focus particle *maar* within the matrix clause can modify a long-distance topicalised phrase is not sufficient because there might be an alternative analysis available for explaining the data (e.g., association with focus). We have to preclude this option, of course (we develop this discussion further below).

Furthermore, one might suggest the necessity to show that the entire DP *maar twee vogels* can alternatively turn up in the medial matrix clause position so that the argument that this position is an intermediate link in the \bar{A} -movement chain of the topicalised constituent (intermediate landing site) is justified.¹⁵⁹ Is this a relevant objection at all? I claim it is not.

Recall which type of construction we are faced with in the Dutch examples above. Clearly, (160a,b) are declarative clauses consisting of a matrix V2 clause and an embedded complement clause, introduced by the complementiser *dat* ‘that’ and with V-final order. The DP (*maar*) *twee vogels* is the direct object argument of the embedded verb *zien* ‘to see’. On its way up to the clause-initial topicalisation site (Spec,CP of the matrix clause), the DP moves successive-cyclically through intermediate landing sites until it eventually reaches the Spec,CP position of the matrix clause. It has been accepted as a standard that long-distance wh-movement targets (at least) the Spec,CP position of each clause it crosses. In minimalist approaches assuming phases, further intermediate landing sites of successive-cyclic wh-movement have been added: Movement proceeds through the edge (outer spec) position of each locality domain (phase), with (at least) CP and *v*^(*)P relevant phases.^{160,161}

¹⁵⁹Cf. Hubert Haider, p.c.

¹⁶⁰See Legate (1998) for arguments in favour of VP level phases.

¹⁶¹To deal with Legate’s findings, without giving up the idea that transitive *vP* is extraordinary, Chomsky (2001*b*) makes a distinction between strong phases (his original phases, CP and *v*) and weak phases (e.g. raising verbs, passive verbs). This distinction does not seem to play any role in his theory, except that it restricts phase properties to strong phases. To make the distinction clear, Chomsky introduces the label *v*^{*} for the strong phase head. In what follows, for the sake of simplicity, we will use the notion *vP* to refer to the transitive *vP* phase (Chomsky’s *v*^{*}P).

that all movement is feature driven, how is the movement of an XP to the ‘escape hatch’-position (edge position of the phase, i.e., outer spec-position of the phase) triggered? Here, we are faced with what proponents of this conception of movement call ‘indirect feature driven movement’ which is triggered by a ‘P(eripheral)-feature’ in Chomsky (2000) and by what Boeckx and Grohmann (2004) call a ‘generalized EPP’ in Chomsky (2001*a,b*) (either understood as a feature in the technical sense or simply taken to be a property of some sort). It is this indirect feature-driven movement¹⁶⁶ which ensures that long movement proceeds phase-edge by phase-edge, i.e., successive-cyclically. Note that the use of EPP features, especially if taken as a feature in the technical sense, in the phase-based theory is a pure stipulation. In order for movement (internal Merge) to apply, there must be a movement-triggering EPP feature present in the structure which triggers movement to a certain position, namely, the specifier position of the head that carries the EPP feature. According to this conception, if there is no movement-triggering feature present, movement cannot apply.

Especially in connection with movement operations which seem to apply only optionally (like scrambling and also weak pronoun movement in German, as has been argued above), this conception of movement is problematic. From a theoretical point of view, it seems conceptually problematic to me that there is no direct connection between a certain functional head and the presence or absence of an EPP feature in its feature structure in connection with optional movement operations; note that it could even be the case that a head would have to carry more than one movement-triggering feature.¹⁶⁷ What also plays a role again in connection with the purely feature-driven conception of movement is the question concerning the status of the landing positions in a language like German.

With respect to successive cyclic movement through phase edges, it is required that all items which will have to move to higher positions in the course of the derivation first move to the phase edge (because of the PIC). In this connection, Müller (2008) calls the movement-triggering features ‘edge features’. Edge features cannot be obligatorily present on phase heads, however, because they lead to a crash at the interfaces if the number of items that need to be attracted to a phase edge in the course of a successive-cyclic movement does not equal the number of movement-triggering features on the phase head. This problem is solved by the assumption that edge features for intermediate movement steps are only present on a phase head if they are needed (see Chomsky 2000, 109; Chomsky 2001*b*, 34; Chomsky to appear, 14). Müller (2008, 2 (2)) refers to this condition as the *Edge Feature Condition (EFC)*: *The head X of phase XP may be assigned an edge feature after the phase XP is otherwise complete, but only if that has an effect on outcome.* Given this condition, phase

¹⁶⁶As Boeckx and Grohmann (2004, 5) point out, in a minimalist setting, the existence of indirect-feature-driven movement clashes with the general tendency to reduce look-ahead and enforce Last Resort on syntactic processes locally.

¹⁶⁷In a copy theory of movement, it would be a technical solution to the problem to analyse optionality as observed with certain types of constructions involving movement as optional spell-out of different links of the movement chain of the displaced.

heads can be assigned additional edge features in the course of the derivation ‘if that has an effect on outcome’.¹⁶⁸

However, under the feature-driven conception of movement, also any type of (non-head) movement in clauses which do not contain any *v*P phase, movement must be triggered by EPP features.

The approach provided in this thesis is based on a different conception of movement: it assumes that movement is an untriggered operation which needs to be evaluated (and, thus, representationally ‘licensed’) on a later level of the derivation.

Although in some recent versions of the minimalist theory (Chomsky 2001*a*, to appear), movement is a freely available, cost-free and untriggered option, this does not mean that movement in these approaches is neither unrestricted nor unmotivated. Movement obeys strict cyclicity (i.e., it proceeds successive-cyclically through phase-edges), it is only licit when it has an effect on outcome (new interpretation, etc.) (cf. also Chomsky 2001*b*), and it is evaluated at the higher phase level.¹⁶⁹ Of great importance is also the fact that freely available untriggered movement does not imply that any type of movement can target any (type of) position. The approach provided in this thesis is based on the conception of movement as a freely available operation.

Chomsky’s general (conceptual) argument for phases is computational load reduction.

In the minimalist literature, a number of properties have been associated with phases, e.g. (Chomsky 2001*b*):

- (a) phases are ‘propositional’
- (b) phases are reconstruction sites
- (c) phases have a degree of phonetic independence¹⁷⁰

¹⁶⁸Note that an introduction of edge features in the derivation seems to violate the *Inclusiveness Condition* (see Chomsky (1995, 2000, 2001*b*)).

¹⁶⁹Chomsky (2001*b*, 14 (10)): Ph₁ is interpreted/evaluated at Ph₂.

¹⁷⁰Chomsky (2001*a*, 25):

Ideally, phases should have a natural characterization in terms of IC [= interface conditions, J.K.]: they should be semantically and phonologically coherent and independent. At SEM, *v*P and CP (but not TP) are propositional constructions: *v*P has full argument structure, CP is the minimal construction that includes Tense and event structure, [Footnote, N.Chomsky: Recall that T has these properties only as a reflex of C-T.] and (at the matrix at least) force. At PHON, these categories are relatively isolable (in clefts, VP-movement, etc.). These properties do not, however, yield exactly the right distinctions: *v*P with *v* nontransitive is relatively isolated and is a domain for QR [= quantifier raising, J.K.], though these cannot be phases for Spell-Out. Call these *weak phases*. Then the strong phases are those that have an EPP position as an escape hatch for movement, and are therefore the smallest constructions that qualify for Spell-Out.

- (d) strong phases are potential targets for movement; C and *v* have an EPP feature which provides a position for XP-movement (Chomsky 2001*b*, 12)
- (d) cyclic Spell-Out takes place at the strong phase level (CP, *v*P (*v**P))

Note that most of the properties that have been attributed to (strong) phases in the relevant literature are highly controversial and problematic from a conceptual and/or empirical point of view (see especially the criticism in Boeckx and Grohmann 2004 and references cited therein).¹⁷¹

A phase property that seems rather uncontroversial to me is the evidence from stranded elements as evidence for intermediate landing sites of successive-cyclic movement.

For the time being, only the phase-properties of *v*P are relevant because we are concerned with evaluating whether the syntactic position of the Dutch focus particle *maar* in (160) is due to stranding in Spec,*v*P under successive-cyclic movement through phase edges or not.

The cluster of properties associated with *v*P's status of a phase include:

- (a) reconstruction to the edge of *v*P (Nissenbaum 2001)
- (b) verbal agreement triggered by wh-movement, presumably through Spec,*v*P (Bruening 2001 for Passamaquoddy)
- (c) *v* gives rise to anti-locality effects: the VP complement of the *v* phase head is frozen in place (no VP-topicalisation) (Abels 2003a)
- (d) focus particles can be stranded under successive-cyclic movement in Dutch (Barbiers 1995)

Unfortunately, the evidence from stranding under successive-cyclic movement is not helpful since the argument would be cyclic: we cannot use evidence from stranding under successive-cyclic movement to motivate stranding under successive-cyclic movement.

That is, we need either further and independent evidence or we have to rule out all the alternative explanations for data that seem to involve stranding under successive-cyclic movement. This would leave us with stranding under

¹⁷¹For example, Legate (1998, 2002a, 2003) shows that the 'reconstruction to the phase edge' test does not allow to distinguish strong phases (CP, *v*P) from TP and VP. A further argument against reconstruction as a test for phasehood is that the reconstruction of scope and binding can be captured without invoking intermediate movement traces (Abels 2003a, 25, fn. 5). The absence of reconstruction effects (anti-reconstruction effects) cannot be analysed in terms of non-movement (cf. Boeckx and Grohmann 2004, 10-11).

Likewise, isolability at PF is problematic as a criterion for phases (cf. Bošković 2002 who shows that the TP in right-node raising constructions is PF-isolable as well; Legate 2002a shows that passive and raising verbs are as isolable at PF as full-fledged transitive verbs). Boeckx and Grohmann (2004) present a compilation of problems that are related to the concept of phases, both problems of identification of phases as well as problems that come up when it comes to their alleged properties. These include the problems mentioned above as well as many others (see Boeckx and Grohmann 2004 and the references cited therein).

successive-cyclic movement as the only conclusive explanation for the data. We will use the latter strategy since, as mentioned above, most properties that have been associated with phase status are controversial.

13.1.2 On the status of the position that *maar* occupies: Should we expect that the whole DP *maar twee vogels* can occupy this position?

Let us return to the issue raised by H. Haider (p.c.), viz. that it is necessary to show that the whole DP *maar twee vogels* can alternatively turn up in the position which *maar* occupies in (160); the data is repeated as (164) for convenience.

- (164) (a) [*TWEE vogels*]_i *zei Jan maar* [_{CP} *dat ie e_i*
 two birds said John just_{locPRT} that he
gezien had]
 seen had
 reading 1: ‘John said that he had seen just two birds’
 reading 2: ‘John just said that he had seen two birds’
 (Dutch; Barbiers 1995, 84 (70b))

- (b) [*TWEE vogels*]_i *had Jan maar gezegd* [_{CP} *dat ie*
 two birds had John just_{locPRT} said that he
e_i gezien had]
 seen had
 reading 1: ‘John had said that he had seen just two birds’
 reading 2: ‘John had just said that he had seen two birds’
 (Dutch; Barbiers 1995, 85 (71a))

First, we have to clarify what it would tell us about the status of this position if the DP *maar twee vogels* appeared there.

Typically, minimalist approaches adopt the trace theory of movement which states that movement leaves a copy of the moved item in each (intermediate) landing site; however, only one of these copies is interpreted, i.e. spelled out at the PF interface. Chomsky (to appear, 21) states:^{172,173}

¹⁷²To complete the picture, in a trace theory of movement theory, on the other hand, the only available option is to spell out a moved element at the head position of its movement chain since intermediate positions as well as the bottom link of the movement chain (its base position) are only filled by movement traces without any phonological content.

¹⁷³Cf. also one of the objections Haider (1993, 1997b) raises against the claim that German has a head-final IP (TP) to which the finite verb moves in embedded contexts: finite denominal verbs derived from complex nouns occur in finite verb-final clauses in German, but not in V2- or V1-clauses:

- (i) *dass sie es uraufführten* (lit. that they it ur-performed)
 (German; Haider 1997b, 86 (4))
 (ii) **Uraufführen_i sie es e_i?* (lit. ur-perform they it, ‘Do they ur-perform it?’)

In a probe goal relation, the goal can be spelled out only in-situ (under long-distance Agree) or at the probe (under internal Merge). [...] The goal cannot stop at some intermediate point of the derivation.

If it is true that a linguistic item can only be spelled out at its base position or the final landing site, we would have to assume for the configuration in (165) that the matrix clause internal position is the final landing site of some kind of movement process. Obviously, it cannot be the base position of *maar twee vogels* which originates within the embedded clause since it is the direct object argument of the embedded verb.

(165) [_{CP} (XP) *had* [_{TP} *Jan* [_{VP} [*maar twee vogels*]_i *gezegd*] [_{CP} *dat ... e_i ...*

This position, however, is not a potential ultimate landing site for topicalisation (wh-movement) since topicalisation targets the left periphery of the clause (the CP area).

Would we expect to find the constituent *maar twee vogels* in clause-internal position of the matrix clause under any other movement operation?

Scrambling is out of question since we know that scrambling (= a reordering of arguments as it is found in German) is clause-bound (cf., e.g., Haider and Rosengren 1998). Anyway, it is textbook knowledge that Dutch does not allow for this type of rearrangement of arguments.

Further movement processes that are possible candidates are long-distance scrambling (as found, for example, in Japanese or Korean) and focus scrambling.

As for long-distance scrambling, it is considered a different operation from ordinary clause-bound scrambling (cf. Grewendorf and Sabel 1994, a.o.). If there is an embedded clause, long-distance scrambling can move elements out of the embedded clause into the matrix clause.

In German, however, long-distance scrambling never proceeds out of tensed clauses (166). Long-distance scrambling of a constituent out of the tensed clause results in ungrammaticality, irrespective of whether the embedded clause has verb-final order (166b,c) or whether it is an embedded verb-second clause (166e). The examples are repeated from Grewendorf and Sabel (1994, 264 (1); fn. 2)).

(iii) **Führen_i sie es e_i urauf?*

Haider's (1997b) argumentation is this: The fact that fronting the finite verb to the root functional head of the clause is blocked implies that the finite verb does not move to intermediate functional heads either. If it moved to a lower functional head, it could not be prevented from moving higher up. If, however, it is in its base position, it can be blocked from moving. Haider's conclusion is that the clause-final position of the finite verb in the (i) example is the base position of a verb and not a position of a functional head.

- (166) (a) *Gestern hat der Lehrer den Schüler darauf*
yesterday has the teacher_{nom} the pupil_{acc} on-it
hingewiesen [dass Berber eine schwere Sprache ist]
referred that Berber_{subj} a difficult language_{nom} is
‘Yesterday the teacher pointed out to the pupil that Berber is a
difficult language’ (German)
- (b) **Gestern hat der Lehrer [eine schwere Sprache]_i*
yesterday has the teacher_{nom} a difficult language_{nom.scr}
den Schüler darauf hingewiesen [dass Berber e_i ist]
the pupil_{acc} on-it referred that Berber_{nom} is
(German)
- (c) **Gestern hat [eine schwere Sprache]_i der Lehrer*
yesterday has a difficult language_{nom.scr} the teacher_{nom}
den Schüler darauf hingewiesen [dass Berber e_i ist]
the pupil_{acc} on-it referred that Berber_{nom} is
(German)
- (d) *dass der Lehrer glaubt [Berber sei*
that the teacher_{nom} believes Berber_{nom} is
eine schwere Sprache]
a difficult language_{nom}
‘that the teacher thinks that Berber is a difficult language’
(German)
- (e) **dass der Lehrer [eine schwere Sprache]_i glaubt*
that the teacher_{nom} a difficult language_{nom.scr} believes
[Berber sei e_i] (German)
Berber_{nom} is

Only with specific verbal infinitival constructions we find long-distance scrambling in German (cf. Grewendorf and Sabel 1994). The combination of post-verbal infinitival placement and scrambling in (167c) is called the ‘Third Construction’ (cf., e.g., den Besten and Rutten 1989 for Dutch, Geilfuß 1991 for German), see also the Dutch examples in (168) below.

- (167) (a) *dass den Hund_i keiner [t_i zu füttern] versuchte*
that the dog_{acc} no-one_{nom} to feed tried
‘that nobody tried to feed the dog’
(German; Grewendorf and Sabel 1994, 284 (39a))
- (b) *dass [den Hund zu füttern]_i keiner e_i versuchte*
that the dog_{acc} to feed no-one_{nom} tried
‘that nobody tried to feed the dog’
(German; Grewendorf and Sabel 1994, 284 (39e))
- (c) *dass den Hund_i keiner e_j versuchte [t_i zu füttern]_j*
that the dog_{acc} no-one_{nom} tried to feed
‘that nobody tried to feed the dog’ (German)

Note that long-distance scrambling is not associated with a specific intonation pattern (in contrast to focus scrambling which will be discussed below).

The situation in Dutch is parallel to the situation in German: For Dutch there is no evidence of the availability of long-distance scrambling, except with restructuring verbs (168a). (168b,c) shows that scrambling is only possible from infinitival complement clauses that do not hold a complementiser.

- (168) (a) *dat Jan haar_i besloten heeft [e_i op te bellen]*
 that Jan_{subj} her_{strong.obj} decided has up to call
 ‘that Jan has decided to call her up’

(Dutch; Johnson 2004, 13 (30a); den Besten and Rutten 1989)

- (b) **dat Jan Marie_i heeft geprobeerd [om e_i te kussen]*
 that Jan_{subj} Marie_{obj} has tried for to kiss

(Dutch; Johnson 2004, 17 (37a))

- (c) **dat Jan Marie_i geprobeerd heeft [om e_i te kussen]*
 that Jan_{subj} Marie_{obj} tried has for to kiss

(Dutch; Johnson 2004, 17 (37b))

Finite clauses in Dutch never allow their material to bleed into the higher clause. Therefore, long-distance scrambling does not provide a reason to expect that *maar twee vogels* should turn up in clause internal position of the matrix clause since the embedded clause is a tensed *dat*-clause.

Another type of movement operation to a matrix clause-internal landing site is ‘focus scrambling’ (Neeleman 1994a; also ‘I-topicalization’, Jacobs 1997; ‘T-scrambling’, Haider and Rosengren 1998, ‘S-scrambling’, Hinterhölzl and Pili 2003) which affects stressed items (contrastive topics) and can affect arguments as well as predicates.

Focus scrambling typically comes with a special intonation, the so-called ‘hat contour’ which comprises a rise tone on the moved topic and a fall tone on the (contrastive) focus-element. In Dutch, contrary to German, the object argument cannot scramble across a subject (169a); however, if the movement is accompanied by a special intonation of the contrastive topic then the movement across the subject is fine, (169b).

- (169) (a) **dat de boeken_i Jan e_i niet koopt*
 that the books_{obj} Jan_{subj} not buys
 ‘that Jan does not buy the books’

(Dutch; Neeleman 1994b, 395 (15a))

- (b) *dat ZULke boeken_i zelfs JAN e_i niet koopt*
 that such books_{obj.focscr} even Jan_{subj} not buys
 ‘that even Jan does not buy such books’

(Dutch; Neeleman 1994b, 396 (16a))

- (c) *dat Jan ZULke boeken_i zelfs MaRIE e_i niet geeft*
 that Jan_{subj} such books_{DO.focscr} even Marie_{IO} not gives
 ‘that not even to Mary would Jan give such books’
 (Dutch; Neeleman 1994*b*, 396 (16b))

Consider the examples in (170) which show non-clause-bound focus scrambling in Dutch. Note that the focus scrambled object *zulke boeken* can either precede or follow the subject of the matrix clause (the rise-fall intonation contour is not specified in the examples).

- (170) (a) *dat zulke boeken_i Jan zelfs onder vier ogen niet*
 that such books_{obj.focscr} Jan_{subj} even under four eyes not
zegd [dat hij e_i gekocht heeft]
 says that he_{subj} bought has
 ‘that Jan does not even say in private that he has bought such books’
 (Dutch; Neeleman 1994*b*, 398 (21a))
- (b) *dat Jan zulke boeken_i zelfs onder vier ogen niet*
 that Jan_{subj} such books_{obj.focscr} even under four eyes not
zegd [dat hij e_i gekocht heeft]
 says that he_{subj} bought has
 ‘that Jan does not even say in private that he has bought such books’
 (Dutch; Neeleman 1994*b*, 398 (21b))

Focus scrambling is the only movement operation that could produce the configuration under discussion; however, focus scrambling moves contrastive topics and presupposes a special intonation contour (hat contour). This means that focus scrambling is a syntactic operation that is licensed only under very specific conditions. With neutral intonation, i.e. in the absence of a rise-fall intonation contour, movement of the direct object DP out of the embedded clause to a matrix clause internal position is not licensed in Dutch.

To conclude, I do not see any reason why we should expect that the overt movement of the DP *maar twee vogels* ‘only two birds’ to a clause-medial position within the matrix clause is justified as a ‘prerequisite’ for a ‘stranding under successive-cyclic movement analysis’ in (160).

The occurrence of the embedded object in this position could only be explained by focus scrambling; however, focus scrambling is a very specific syntactic operation which differs in its licensing conditions from ‘unmarked’ syntactic (wh-)movement. The positioning of a focus scrambled element does not provide evidence for the available landing positions under ‘unmarked’ movement.

13.1.3 Are there alternative analyses available for the Dutch data?

Let us return to the Dutch data with the stranded focus particle *maar* in a medial position within the matrix clause (160) that I repeated in (171) for

convenience.

Is stranding under successive-cyclic wh-movement the only possible explanation for these data?

- (171) (a) [*TWEE vogels*]_i *zei Jan maar* [_{CP} *dat ie e_i*
 two birds said John just_{foCPRT} that he
gezien had]
 seen had
 reading 1: ‘John said that he had seen just two birds’
 reading 2: ‘John just said that he had seen two birds’
 (Dutch; Barbiers 1995, 84 (70b))

- (b) [*TWEE vogels*]_i *had Jan maar gezegd* [_{CP} *dat ie*
 two birds had John just_{foCPRT} said that he
e_i gezien had]
 seen had
 reading 1: ‘John had said that he had seen just two birds’
 reading 2: ‘John had just said that he had seen two birds’
 (Dutch; Barbiers 1995, 85 (71a))

A potentially alternative explanation is association with focus (see the discussion below). However, there is another possibility we have not excluded yet.

If one of the following (types of) explanations could be applied, this would be evidence against the ‘stranding under successive-cyclic wh-movement analysis’: (i) *maar* has been moved on its own from inside the DP *maar twee vogels* within the embedded *dat*-clause into the matrix clause (possibly in connection with subsequent raising of the focus constituent to the position of the focus particle at LF), or (ii) *maar* is a genuine part of the matrix clause that is associated with a focus constituent in its c-command domain (association with focus). The following sections are concerned with the discussion of these issues. In short, we argue that there are good reasons to reject both of these alternative analyses in favour of a ‘stranding under successive-cyclic wh-movement’ analysis.

13.1.4 Particle Shift? LF-raising of the focus constituent?

Starting with the first issue, we have to point out that it is problematic to adopt an approach that assumes movement of the focus particle which leaves behind its focus constituent.

Linguistics in the 70s and 80s (especially, Rooth 1985; see also the discussion of Rooth’s 1985 approach in Bayer 1996)¹⁷⁴ already found out that (i) analyses according to which a focusing particle is adjacent to its focus constituent in the base structure and undergoes subsequent movement (particle shift) to

¹⁷⁴In the following, we refer to the discussion of Rooth (1985) offered by Bayer (1996).

a higher position of the sentence (cf. Anderson's 1972 criticism) as well as (ii) approaches which assume LF-raising of the focus constituent to a position where it becomes the sister of the focus particle ('scope theory') are problematic.

They are problematic for (at least) two reasons: First, they cannot explain constructions in which the focus particle is associated with more than one focus constituent (172) (this problem was already noticed by Anderson 1972). Another problem for an account of focus raising as a syntactic movement process is posed by constructions in which focusing particles associate with a focus constituent over domains which cannot be crossed by overt syntactic movement (175).

The sentence in (172) contains two focus constituents *whiskey* and *Indians* with which the focusing particle *even* is associated.

- (172) *Jones claimed that he could sell refrigerators to the Eskimos, but in fact he couldn't even sell WHISKEY to the INDIANS*
 (Anderson 1972; Bayer 1996, 26 (43))

Sentences of this kind are difficult for an approach that assumes that the focus particle forms a constituent with the focus constituents in the base structure since under that assumption we would expect that a focus particle can only be associated with one focus constituent, the sister of which it is in the base structure (*WHISKEY (to the) INDIANS* does not form a single constituent). Alternatively, one could assume that each focus constituent is associated with a separate instance of the focus particle although only one focus particle is overtly realised in (172) (one occurrence is deleted from 'derived structure'). However, in this case we would expect it to be synonymous to (173) in which both focus constituents are associated with separate instances of *even*, contrary to fact.

- (173) *...but in fact he couldn't even sell WHISKEY to even the INDIANS
 (Bayer 1996, 26 (44))

In Rooth's (1985) reinterpretation of Anderson's (1972) work in terms of LF movement, the relevant part of (172) would lead to the LF representation (174) in which the two foci, together with *even*, form a single operator; however, such an operator is not in a position to bind the verb phrase internal variables.

- (174) *he couldn't* [_{VP} *even WHISKEY_i the INDIANS_j*] [_{VP} *sell e_i to e_j*]
 (Bayer 1996, 26 (45))

Sentences like (175b) pose the other problem for an account of focus raising as a syntactic process.

- (175) (a) **Who_i do you dislike [the idea [that e_i is tall for a Watusi]]?*
 (Bayer 1996, 27 (46a))

- (b) *John even has [the idea [that HE is tall for a Watusi]]*
 (Bayer 1996, 27 (46b))

Here, the focusing particle *even* associates with the focus constituent *he* although the latter is contained in a *that*-clause which is the complement of the noun *idea*. The association of *even* with the focused subject DP *he* is fine. In the same syntactic configuration, however, literal movement of the subject DP *he* out of the *that*-clause which is embedded under a noun phrase is illicit, as (175a) shows. (175a) violates the ‘Complex-NP Constraint’ (Ross 1967) as well as the ‘Empty Category Principle’ (*that*-trace effect) (Chomsky 1981). If the construction with bound focus in (175b) involved movement of either the focus particle (in overt syntax) or the focus constituent (at LF) into the matrix clause we would expect to find the same restrictions on movement. Therefore, we would expect that (175b) is ruled out as well; however, it is not. The different overt landing sites of the moved *wh*-element *who* in (175a) and the focusing particle *maar* ‘only’ in the (b) example should not have an effect on grammaticality because the source of the ungrammaticality is movement out of an illicit domain. The fact that this expectation is not confirmed is a strong argument against focus particle shift approaches and focus raising approaches.¹⁷⁵

We can observe the same asymmetry in German as well, (176a) vs. (176b). The grammaticality of (176c) shows that we do not observe the *that*-trace effect in German; however, extraction out of a DP is unavailable in German as well (176a).

¹⁷⁵Note, however, that it seems to be the case that constituents which are modified by a particle of the relevant kind (focusing particle) but are not possible scope domains must be treated in some other way (see the discussion in Bayer 1996). This applies to nominal constituents which are modified by focus particles ([PRT DP]), for example. How this is done is to some extent controversial. The shared assumption is that for semantic reasons the particle must be able to quantify into some domain. Semantically, focus particles like *only* and *even* are operators that must have propositional scope; where they arise as co-constituents of DPs, etc. scope must be supplied by quantifier raising (QR) or by some other semantic operation that yields access to a scope domain. Choosing the latter option, Rooth (1985) develops a cross-categorial semantics for these elements. According to Bayer (1996), a.o., on the other hand, the particle has to get to a scope position by movement in the course of deriving an interpretable LF from the surface structure.

It is crucial to note that this type of movement analysis is essentially different from analyses which assume syntactic movement of the focus particle from a position in which it is the sister of the focus constituent to the position in which it is overtly realised (particle shift approaches), it is also essentially different from focus raising approaches which assume movement of the focused constituent to a position where it is the sister of the focus particle. There seems to be general agreement that the focus phrase does not move toward a distant (c-commanding) particle; such movement is syntactically unwarranted and it results in LFs which are not readily interpretable (cf. Bayer 1996, ch. 1).

Note also that the Dutch examples discussed above do not simply involve [*maar* DP] in their bound focus reading, but rather a constituent in which *maar* operates on a quantified/degree expression.

- (176) (a) **Wer_i missfällt dir [die Idee [dass e_i für einen Watusi
 who dislike you the idea that for a Watusi
 groß sei]]?* (German)
 tall is
- (b) *Hans hat sogar die [Meinung [dass ER für einen Watusi
 John has even the opinion that HE for a Watusi
 groß sei]]*
 tall is
 ‘John even has the idea that HE is tall for a Watusi’ (German)
- (c) *Wer_i glaubst du [dass e_i für einen Watusi groß sei]?*
 who think you that for a Watusi tall is
 ‘Who do you think is tall for a Watusi’ (German)

Given the problems of such analyses for languages like English and German, and given the uniformity hypothesis that syntactic/semantic operations do not work essentially differently in the languages of the world, we can conclude for the Dutch data in (171) [= (160)] that it is extremely unlikely – if not entirely excluded – that the focus particle *maar* has been moved on its own to the matrix clause internal position in which it surfaces in (171) while the focus constituent *twee vogels* it is associated with has undergone long-distance topicalisation without pied-piping the focus particle.

For the long-distance topicalisation of the focus constituent we would have to assume that it moves simultaneously¹⁷⁶ but in one fell swoop from Spec,CP of the embedded clause to Spec,CP of the matrix clause, without intermediately targetting the matrix clause internal landing position of *maar* – otherwise we could not distinguish between an analysis which claims that the focus particle has been stranded under successive-cyclic movement of the DP (*maar*) *twee vogels* on the one hand and an analysis that assumes two separate movement operations for the focus particle and the focus constituent on the other. In the latter case, however, we would need two different (types of) features to trigger (or license, respectively) the movement operations: an operator feature that triggers (licenses) the topicalisation and another feature of a different type that triggers (licenses) the movement of the focus particle; however, as already discussed above, a plausible candidate for the latter is not available.

I conclude that there is no good evidence for but rather conclusive evidence against analyses that propose particle shift of a focus particle from a position where it is a sister of the focus constituent it is associated with to a higher c-commanding position, as well as evidence against analyses that propose that the focus constituent moves at LF to a position where it is a sister of the focusing particle. Furthermore, there is no independently motivated candidate for a

¹⁷⁶The alternative option, that the focus constituent *twee vogels* stays behind and does not move until the focusing particle has reached its landing site in the matrix clause internal position, is excluded on independent grounds since it would pose a severe problem for cyclicity.

feature that could trigger movement of the focus particle (in a framework that allows only for triggered movement operations) or a feature that would license this kind of movement (in a framework that allows for untriggered movement but requires subsequent evaluation of the operation at a higher level of the derivation), respectively. As a further theoretical problem, in a minimalist framework the position of the focus particle occupies in (171) is not a final landing site for any type of non-clause-bound movement that is attested in Dutch, with the exception of focus scrambling which, however, would require a special intonation contour.

Hence, it is safe to conclude that the focus particle has not been moved to this position on its own but must have been stranded there under successive-cyclic movement of the long-distance topicalised DP (*maar*) *twee vogels* through phase edges – provided that the focus particle has undergone a movement operation at all, i.e. that the position it occupies in (171) is not its base position.

13.1.5 Association with focus?

We now come to the second issue that we have already raised above: Can the positioning of the focus particle as well as the availability of a second reading (the bound focus reading, i.e., the ‘stranding reading’) in (171) [= (160)] be explained by association with focus (in the sense of Bayer 1996; Rooth 1985; etc.)? If this turns out to be the case, the data in (171) cannot be taken as conclusive evidence for the phase status of *vP* in Dutch (drawn from the argument of ‘stranding under successive-cyclic movement through phase-edges’) since they are independently available.

As we will see below, however, this is not the case.

Particles like *only*, *even*, etc. and their counterparts in other languages are focus sensitive, i.e. they must associate with some phrase which is phonologically prominent (i.e. focused). Most commonly, the notion ‘bound focus’ is used to refer to this type of focus which is triggered by the presence of a focus particle (in contrast to ‘free focus’). (177) states the minimal assumptions about the syntax of focus which is bound by a focusing particle (bound focus) in the formulation of Bayer (1996, 16 (18)).

- (177) (a) A focusing particle must c-command a focused constituent.
 (b) The focused constituent may be unboundedly far away from the focusing particle.

Thus, c-command is a structural condition for association with focus (statement (a)). Once c-command cannot hold for structural reasons, association between particle and focus is impossible:

- (178) *[*John even went home*] [*although he hadn't met his ADVISER*]
 (Bayer 1996, 16 (17b))

Statement (b) in (177) describes the fact that the focused element can be arbitrarily deeply embedded in the syntactic domain of the particle (which is the c-command domain of the particle). As the example from Bayer (1996, 16 (16)) in (179) shows, there does not seem to be an upper limit on the depth of embedding of the constituent the focus particle is associated with. In (179), the focus particle *even* can associate with the focused DP *jeans* although it occurs three major constituents deeper.

- (179) *John even had [the idea [that his boss would be mad at him [when he wears JEANS]]]* (Bayer 1996, 16 (16))

While (179) shows that the focusing particle and the focused element it is associated with can be rather far away from each other, (180) shows that extraposition does not prevent association with focus.

- (180) *dass Hans nur e_i gesagt hat [DASS DER KANZLER
that Hans only_{locPRT} said has that the chancellor
ZU DICK SEI]_i
too fat is
'that Hans has only said that the chancellor is too fat'*
(German; Bayer 1996, 17 (20))

Given these properties of association with focus, if the bound focus in the Dutch examples (171) [= (160)] above is simply due to association with focus, we would expect to find bound focus between the focus particle *maar* and the constituent *twee vogels* also when the DP *twee vogels* stays in its base position within the extraposed *dat*-clause (under the assumption that extraposition in Dutch is the same syntactic process as extraposition in German). However, this is not the case as (181) shows: Reading 1 (the bound focus reading) is not available.

- (181) *Jan zei maar [CP dat hij TWEE vogels gezien had]
John said just that he two birds seen had
*reading 1: 'John said that he had seen just two birds'
reading 2: 'John just said that he had seen two birds'*
(Dutch; Barbiers 1995, 84 (70a))

The fact that *maar* cannot be interpreted as modifying the DP *twee vogels* when it occurs inside the matrix clause while *twee vogels* occupies its base position within the embedded clause is a strong argument against an 'association with focus analysis'. The contrast between (171a) [= (160a)] and (181) shows that the possibility to interpret *twee vogels* 'two birds' as the argument of the focus particle *maar* really is dependent upon movement of *twee vogels* to the matrix Spec,CP position. Reading 1 (the 'stranding reading', i.e. the bound focus reading) cannot be obtained when *maar* surfaces within the matrix clause while *twee vogels* stays in its base position within the embedded

- (183) (a) *Honden (*altijd) bijt Jan (altijd)*
 dogs_{obj} (*always) bite Jan_{subj} (always)
 ‘Dogs, John always bites’ (Dutch; Zwart 1997, 216 (38a))
- (b) **honden dat Jan altijd bijt*
 dogs_{obj} that Jan_{subj} always bites
 ‘that Jan always bites dogs’ (Dutch; Zwart 1997, 216 (38b))

This constraint has been subsumed under the condition that came to be called the ‘Doubly-filled COMP filter’ (Chomsky and Lasnik 1977: $*[COMP\ wh\text{-phrase}\ \varphi], \varphi \neq e$), a generalisation with the status of a surface filter which was originally invented to account for the impossibility of the co-occurrence of both an overt wh-phrase and an overt complementiser inside a single CP. The filter was instrumental in accounting for the form of relative clauses (cf. **I wonder who that left, *the man who that Mary met*). In a more general version, the filter bans any sentence containing a CP where both the complementiser and the phrase in its specifier are overtly realised, thus extending to cases like (183b).

It is well-known that the Doubly-filled COMP filter does not seem to hold universally; it is a language-specific restriction which holds, for example, for modern English but not for Middle English, colloquial French or Bavarian dialects.

In Dutch, the Doubly-filled COMP filter does not hold in general; it is only operative in non-interrogative contexts in Dutch. The interrogative C element *of* ‘if, whether’ occurs with an overtly filled Spec,CP position in Dutch, as (184) illustrates.

- (184) *Ik weet niet [CP wie [C of Jan gezien heeft]]*
 I know not whom whether Jan seen has
 ‘I don’t know whom Jan has seen’ (Dutch)

It is obvious, however, that the Doubly-filled COMP filter has no theoretical status in a minimalist framework and it is not explanatory; it can only function as a pre-theoretical descriptive tool (but see Koopman 1996 for an attempt to derive the Doubly-filled Comp filter from a revised version of Kayne’s 1994 LCA).

14 Further instances of the ‘object < subject’ ordering pattern in Dutch

There are a number of constructions, however, which do not neatly fit into the picture generally drawn in the literature that examines the positioning of weak pronouns in Dutch. Interestingly enough, these constructions have not received much attention in the relevant literature so far. The discussion in this chapter will be concerned with this data.

Three kinds of data stand against the generalisation that Dutch does not allow the object argument to precede the subject argument in transitive clauses. The three constructions which constitute exceptions to the general ‘subject < object’ ordering pattern for transitive clauses in Dutch are:

- (a) constructions involving an ‘ethical’ dative,
- (b) constructions involving the SE-type reflexive *zich*,
- (c) constructions involving the demonstrative pronoun *dat* as a subject.

This section is dedicated to a discussion of these constructions in Dutch; it is mainly concerned with the empirical facts. Furthermore, it will be discussed if and in how far they pose a difficulty to the approach to phrase structure advocated in this thesis.

14.1 The positioning of ‘ethical’ (free) datives in Dutch

The *Algemene Nederlands Spraakkunst* (ANS) (Haeseryn et al., 1997) reports several examples of ethical datives in Dutch. Selected examples are repeated in (185).

- (185) (a) *Nu heeft me die vuilnik z'n handen weer
now has me_{dat.eth} the dirty-fellow_{subj} his hands_{obj} again
niet gewassen!
not washed
‘Once again the dirty pig has not washed his hands!’
(Dutch; Haeseryn et al. 1997, 1313 (1))*
- (b) *Wat zeg je me daarvan?
what_{obj} say you_{subj.weak} me_{dat.eth} thereof
What do you say of that? (Dutch; Haeseryn et al. 1997, 254 (29))*
- (c) *En toen werd ie me toch kwaad!
and then was he_{clit.subj} me_{dat.eth} after-all angry
‘And now he did become angry!’
(Dutch; Haeseryn et al. 1997, 254 (30))*

In Dutch, the weak personal pronouns of the first and second person singular can be used as ethical datives;¹⁷⁸ without exception, only *me* and *je* can be used to express this function, namely “een zekere emotionele betrokkenheid van de spreker bij het door de zin uitgedrukte“ (Haeseryn et al. 1997, 254) [= a certain emotional involvement of the speaker in the information expressed by the sentence, J.K.].¹⁷⁹

In connection with the (a) example in (185), Haeseryn et al. (1997) state that the position immediately following the finite verb in verb second contexts is the only available position for the ethical dative in Dutch. Note, however, that this generalisation is not tenable in the light of (185b) where the weak subject pronoun *je* ‘you’ intervenes between the finite verb and the dative element although *je* is not a clitic.¹⁸⁰ However, it is not entirely clear that *me* in (185b) is an ethical dative (although Haeseryn et al. 1997 mention the examples in connection with this keyword); rather, it could be interpreted as an indirect object argument of *zeggen* ‘to say’. In this case, the example can be disregarded in the present connection. The (c) example, on the other hand, is not difficult for Haeseryn et al.’s (1997) generalisation because *ie* ‘he’ is a subject clitic in Dutch.

The standard analysis treats ethical datives as free datives (cf., for example, Eisenberg 1986 as a descriptive source for German).

As an instance of a free dative, the pronoun does not express an argument of the verb, however. Therefore, ethical datives are not subject to the conditions of unambiguous *argument* identification as defined in chapters 9 and 10 and their occurrence in a clause-internal position, from where they precede a non-pronominal subject, is completely unproblematic for our approach as described in this thesis.

¹⁷⁸Van Eynde (1999, 146) takes the fact that the first person singular pronoun *me* ‘me’ in the function of an ethical dative cannot be replaced with any other element in Dutch as evidence for “*its expletive nature*”. We do not agree with this view but treat ethical datives as ‘adverb-like’ elements.

¹⁷⁹Eisenberg (1986, 284-285) characterises the function of the ethical dative in German as follows:

Mit dem Ethicus bringt der Sprecher sich selbst oder den Adressaten auf einer kommunikativ-pragmatischen Ebene ins Spiel. Seine Leistung ist zu Recht mit der von Abtönungspartikeln verglichen worden (*Du bist mir ein Schwätzer* - *Du bist vielleicht ein Schwätzer* - *Du bist mir vielleicht ein Schwätzer* [...]).

[With the help of the ethical dative, the speaker brings himself or the addressee into play on a communicative-pragmatic level. Rightly, its function has been likened to that of ‘Abtönungspartikeln’. (*Du bist mir ein Schwätzer* (lit. you are *me_{eth.dat}* a chatterer) - *Du bist vielleicht ein Schwätzer* (lit. you are PRT a chatterer) - *Du bist mir vielleicht ein Schwätzer* (lit. you are *me_{eth.dat}* PRT a chatterer) [...]); J.K.]

¹⁸⁰A similar distribution of ethical datives is found in German: An ethical dative typically surfaces in between the position of the finite verb in V2 contexts and a non-pronominal subject in the midfield (cf. Eisenberg 1986, 284) while it immediately follows a weak subject pronoun in German ($V_{fin} < \text{subj}_{weak.pron} < \text{eth.dat}$).

Hoekstra (1995) links the existence of (certain types of) free datives in a language to its particular morpho-syntactic properties; in more concrete terms, he says that dative languages like German possess free datives which carry the thematic role ‘affective benefactive’ while non-dative languages like English or Dutch do not, (186).¹⁸¹

In this connection, it is important to note that Dutch, as a ‘non-dative language’ (Hoekstra 1995), does not license datives in the result benefactive construction nor in the affective benefactive construction, (186). The latter construction involves a free dative.

(186) (a) Result benefactive construction

**Ik heb hem een boek gekocht*
I_{subj} have him_{dat} a book_{obj} bought
 ‘I have bought a book for him’ (Dutch; Hoekstra 1995, 127 (35d))

(b) Affective benefactive construction

**Ik heb hem de/zijn auto gewassen*
I_{subj} have him_{dat} the/his car_{obj} washed
 ‘I have washed the/his car’ (Dutch; Hoekstra 1995, 127 (36d))

German, in contrast, licenses datives in both constructions. Compare the result benefactive construction in (187a) and the affective benefactive construction in (187b) with its Dutch counterparts in (186a,b).

(187) (a) *Ich habe ihm ein Buch gekauft*
I_{nom} have him_{dat.weak} a book_{acc} bought
 ‘I have bought him a book’ (German; Hoekstra 1995, 127 (35b))

(b) *Ich habe ihm das/sein Auto gewaschen*
I_{nom} have him_{dat.weak} the/his car_{acc} washed
 ‘I have washed the/his car for him’
 (German; Hoekstra 1995, 127 (36b))

German makes frequent use of free datives like ethical datives, the ‘dativus iudicantis’ (as in *Er ist mir zu freundlich* (lit. he is me_{dat.iud} too friendly), Eisenberg 1986, 285 (6a)), or the ‘dativus commodi/incommodi’, which is the traditional terminology for the affective benefactive construction.

¹⁸¹Pijnenburg (1990, with reference to Kayne’s 1985 class lectures in Salzburg) introduces a terminological distinction between ‘Small Clause Datives (SCD)’, which involve possession as a result of the activity denoted by the verb and cover both result benefactives (e.g. *I have bought him a book*; Hoekstra 1995, 127 (35e)) and recipients (e.g. *I have given John a book*; Hoekstra 1995, 127 (34e)), and ‘Free Datives (FD)’ which are not so dependent on the verb. Affective benefactive constructions are included in the latter class. As example (i) shows, affective benefactive constructions with a free dative are ungrammatical in English.

(i) **I have washed him the/his car* (Hoekstra 1995, 127 (36e))

With respect to ethical datives, German allows free insertion of ethical datives into various types of clauses. Consider the examples in (188).¹⁸²

- (188) (a) *Der Maier überreicht mir dem Schulze*
 the Maier_{nom} presents me_{dat.eth} the Schulze_{dat}
das Bundesverdienstkreuz
 the order of the Federal Republic of Germany_{acc}
 ‘Mr. Maier decorates Mr. Schulze with the order of the Federal
 Republic of Germany’ (German; Eisenberg 1986, 284)
- (b) *Ich lobe mir das Landleben*
 I_{nom} praise me_{dat.eth} the country-life_{acc}
 ‘Country life is most laudable’
 (German; Eisenberg 1986, 284 < Becker 1843)

Free insertability (which is characterised by being insertable into a clause whenever it is semantically compatible with the construction) is a typical property of adverbials while it is typically not found with arguments. Note that the free datives in the Dutch examples in (185) do not express the affective benefactive semantic role; rather, they are instances of an ethical dative.

The existence of free ethical datives in Dutch might be unexpected in the light of the ungrammaticality of the affective benefactive free dative constructions in Dutch, (186b).

To put it in concrete terms, it might be tempting to expect that only languages with a rich morphological system allow for free datives to be licensed while they are not licensed and, therefore, ruled out in languages with only poor (or even without any) case morphology. Thus, one would not expect free datives to be attested as a (regular) option in Dutch at all, obviously contrary to fact. Note, however, that ethical datives are not frequently used in Dutch.

As a conclusion we can say that the positioning of free datives in Dutch is completely unproblematic for the account advocated in this thesis because free datives are not part of the argument structure of the verb, and, therefore, they have no impact on the formation of the verb phrase, which is the projection of the argument structure of the verb into the syntax. Free datives do not take part in the operation of argument identification either (for the same reason: they are not part of the argument structure of the verb and, thus, they are not licensed as arguments). Since ethical datives are not licensed as arguments, they are not subject to the condition *Unambiguity of Argument Identification* (*UAI*) which is among the factors that are responsible for the limited word order freedom as found in Dutch arguments.

Thus, the positioning of ethical datives in Dutch does not pose any problems for the approach to argument licensing and word order variation described in this thesis.

¹⁸²The example in (188a) does not sound very natural to me.

14.2 The positioning of reflexive pronouns in Dutch

This section will be dedicated to the discussion of Dutch data featuring a (weak) ZE-type reflexive pronoun as object. Dutch owns both ZELF-type reflexives (like 3.sg./3.pl. *zichzelf*) and ZE-type reflexives (like 3.sg./3.pl. *zich*). In our discussion in this section, we will be only concerned with the latter.

The long form of the Dutch reflexive belongs to the class of strong pronouns while the short form of the reflexive counts as weak by the standard criteria: it cannot be stressed or conjoined, for example. It is important to note, however, that the reflexive is not a particle but it agrees with the subject element in phi features (number, person; but not gender). This is clear evidence that a feature matrix is present in the reflexive. The Dutch paradigm of reflexive pronouns is given in (189). Note that all reflexive pronouns (with the exception of third person singular and third person plural *zich*) are homophonous with some element in the personal pronoun paradigm.

(189) Dutch paradigm of ZE-type reflexive pronouns

1.sg	<i>mij, me</i>	‘myself _{refl.strong} ’, ‘myself _{refl.weak} ’
2.sg	<i>je</i>	‘yourself’
3.sg	<i>zich</i>	‘himself; herself; itself’
1.pl	<i>ons</i>	‘ourselves’
2.pl	<i>je, u</i>	‘yourselves _{familiar} ’, ‘yourselves _{polite} ’
3.pl	<i>zich</i>	‘themselves’

In this section, we will discuss the distribution of the reflexive pronoun *zich* in the midfield of the Dutch clause. With the weak reflexive *zich* we frequently observe deviations from the general ordering pattern ‘subject < object’ of Dutch.

The weak reflexive *zich* appears in two types of constructions. In the one type of construction, *zich* expresses a reflexive object of regular transitive verbs, (190a). In these cases, *zich* can be replaced with any non-reflexive object-DP which is semantically compatible, (190b).

(190) (a) *Münchhausen trekt zich uit het moeras*
 Münchhausen_{subj} pulls REFL_{weak} out-of het swamp
 ‘Münchhausen pulls himself out of the swamp’
 (Dutch; Veraart 1996, 21 (23a) < Reinhart and Reuland 1993)

(b) *Münchhausen trekt zichzelf / de jongen /*
 Münchhausen_{subj} pulls REFL_{strong} / the boy_{obj} /
hem uit het moeras
 him_{obj.strong} out-of the swamp
 ‘Münchhausen pulls himself/the boy/him out of the swamp’
 (Dutch; cf. Veraart 1996, 21 (23b) < Reinhart and Reuland 1993)

In the other type of construction, *zich* is used as an inherent object ('quasi-argument') of inherently reflexive verbs like *zich vergissen* 'to be mistaken' in (191) and *zich schamen* 'to be ashamed' in (192). In these cases, *zich* is in fact an 'expletive' object which cannot be replaced by any other pronominal or non-pronominal element, (191b), (192b). Verbs of this type are often called 'lexically reflexive verbs' or 'inherently reflexive verbs'. We will use the latter terminology to refer to verbs of this type. Constructions with an inherent reflexive *zich* are of particular relevance in connection with the availability of the 'object < subject' ordering pattern in Dutch, as will be demonstrated throughout this section.

(191) (a) *Karin vergist zich*
 Karin mistakes REFL_{weak}
 'Karin is mistaken' (Dutch; Haeseryn et al. 1997, 55 (1a))

(b) **Karin vergist zichzelf / de baby / haar /*
 Karin mistakes REFL_{strong} / the baby_{obj} / her_{obj.strong} /
 'r (Dutch; cf. Haeseryn et al. 1997, 55 (1b-d))
 her_{obj.weak}

(192) (a) *Ian schaamt zich*
 Ian is-ashamed REFL_{weak}
 'Ian is ashamed' (Dutch)

(b) **Ian schaamt zichzelf / Ian / hem /*
 Ian is-ashamed REFL_{strong} / Ian_{obj} / him_{obj.strong} /
 'm (Dutch)
 him_{obj.weak}

In German, in a clause-internal position the reflexive element of both types of verbs precedes the subject argument in the unmarked case. Syntactically, the word order in the (a) examples in (193) and (194) can be analysed as derived by the application of a movement operation which moves the reflexive object across the subject.

(193) (a) *dass sich der Mann irrt*
 that REFL_{weak} the man_{nom} is-mistaken
 'that the man is mistaken' (German)

(b) *dass der Mann sich irrt* (German)
 that the man_{nom} REFL_{weak} is-mistaken

(194) (a) *dass sich der Mann anmeldet*
 that REFL_{weak} the man_{nom} enrolls
 'that the man enrolls (for something)' (German)

(b) *dass der Mann sich anmeldet* (German)
 that the man_{nom} REFL_{weak} enrolls

However, the weak reflexive pronouns can also stay in a low position (arguably, their base position) so that they follow the subject argument; this is illustrated in the (b) examples in (193) and (194).

The distribution of weak reflexive pronouns in German is characterised by an extraordinary syntactic unrestrictedness, as the examples in (195) and (196) from Frey (2000, 151-152) illustrate. It is not entirely clear which factors control their distribution.^{183,184}

- (195) (a) *weil sich gestern Hans bedauerlicherweise beschwert hat*
 because REFL_{weak} yesterday Hans_{nom} unfortunately
 complained has
 ‘because unfortunately Hans complained yesterday’
 (German; Frey 2000, 151 (47b))
- (b) *weil Hans sich gestern bedauerlicherweise beschwert hat*
 (German; Frey 2000, 152 (48a))

¹⁸³Frey (2000, 152):

Das Reflexivpronomen kann sich in vielen syntaktischen Nischen plazieren. Sein Vorkommen zwischen den beiden Topiks [in (195b)] oder zwischen einem Topik und dem Satzadverbial [in (196b)] sind daher weitere Belege seiner außerordentlichen syntaktischen Unrestringiertheit, welche allerdings noch einer Erklärung harrt.

[The reflexive pronoun can be placed in many syntactic slots. Its occurrence between the two topics in (195b) or between a topic and the sentence adverbial in (196b) are, therefore, further pieces of evidence for its extraordinary syntactic unrestrictedness which still awaits explanation, though; J.K.]

¹⁸⁴In constructions which feature a weak object personal pronoun rather than a weak reflexive, some of the ordering patterns are marginal, though not completely ungrammatical, (iii), (v). These are those cases in which the weak object personal pronoun follows a temporal adverb(ial).

- (i) *weil ihn gestern Hans bedauerlicherweise verpasst hat* (German)
 ‘because unfortunately Hans missed him yesterday’
- (ii) *weil Hans ihn gestern bedauerlicherweise verpasst hat*
- (iii) *?weil Hans gestern bedauerlicherweise ihn verpasst hat*
- (iv) *weil ihn Hans gestern bedauerlicherweise verpasst hat*
- (v) *?weil Hans gestern ihn bedauerlicherweise verpasst hat*

This becomes even clearer when we use the unambiguously weak third person singular neuter object personal pronoun *es* ‘it’.

- (i’) *weil es gestern Hans bedauerlicherweise übersehen hat* (German)
 ‘because unfortunately Hans overlooked it yesterday’
- (ii’) *weil Hans es gestern bedauerlicherweise übersehen hat*
- (iii’) *?weil Hans gestern bedauerlicherweise es übersehen hat*
- (iv’) *weil es Hans gestern bedauerlicherweise übersehen hat*
- (v’) *?weil Hans gestern es bedauerlicherweise übersehen hat*

- (c) *weil Hans gestern bedauerlicherweise sich beschwert hat*
 (German; Frey 2000, 152 (48b))
- (d) *weil sich Hans gestern bedauerlicherweise beschwert hat* (German)
- (e) *weil Hans gestern sich bedauerlicherweise beschwert hat* (German)
- (196) (a) *weil offenbar keiner sich*
 because apparently no-one_{nom.indef.neg} REFL_{weak}
die Ausstellung anschauen will
 the exhibition_{acc} watch wants
 ‘because apparently nobody wants to visit the exhibition’
 (German; Frey 2000, 152 (48c))
- (b) *weil die Ausstellung sich offenbar keiner anschauen will*
 (German; Frey 2000, 152 (48d))
- (c) *weil sich die Ausstellung offenbar keiner anschauen will* (German)

The argumentation throughout the previous chapters of this thesis and the discussion of empirical data have lead us to the conclusion that, generally speaking, (weak) object pronouns cannot precede the subject argument within the Dutch midfield. This generalisation coincides with the standard analysis of Dutch that is commonly referred to in the literature. We have argued in section 11.2.1.4 that the few instances of the reverse order ‘object_{weak.pers.pron} < subject’, which were found in Geeraedts’ (1986) modern Dutch translation of the Middle Dutch *Ulenspieghel*, are only seemingly counter-examples and that, most likely, they have to be considered translation ‘errors’ (i.e., they are due to the influence of the Middle Dutch original); they do not represent a regular, synchronically productive syntactic option in the language.

With unaccusative verbs and passivised verbs in Dutch, we generally find regular optionality with respect to the relative ordering of subject and object: both ordering patterns (‘subject < object’, ‘object < subject’) are equally permissible. This coincides with the behaviour of unaccusative and passivised constructions with non-pronominal objects. This distributional pattern has been explained by referring to the specific argument structure of the verbs under consideration: with unaccusative verbs and passivised verbs, the object argument precedes the argument which appears as the clausal subject in the base order. Thus, an ‘object < subject’ order with unaccusative and passivised verbs is expected.

It is a crucial observation, however, that we also find instances of the ‘object < subject’ ordering pattern in Dutch with specific agentive verbs which cannot be rejected on the basis of alleged influence of a source of translation. These are examples which contain the weak ZE-type reflexive *zich* as their object. Relevant data will be discussed below.

The *Algemene Nederlandse Spraakkunst* (ANS; Haeseryn et al. 1997, 1314–1317) presents us with descriptive information about the ordering patterns

which are instantiated with *zich* in Dutch, concentrating mainly on functional considerations. Interestingly enough, the ANS states that it is not entirely clear, (i) under which conditions both the order ‘subject < *zich*_{refl.DO}’ as well as the reversed order ‘*zich*_{refl.DO} < subject’ are allowed in Dutch, and (ii) it is also not clear whether one of these ordering patterns is more unmarked than the other.¹⁸⁵ Note that in this connection the formulation ‘unclear whether one of the orderings is more unmarked’ can only mean that it is not obvious whether one of them is more generally distributed (and not controlled by any specific conditions); it is difficult to conceive that this formulation is meant to imply that both orderings are base generated sequences.

It is obvious, however, that functional considerations play an important role in the syntactic organisation of the clause structure in Dutch (cf. the Definiteness Effect observed with Transitive Expletive Constructions in Dutch, the different distribution of definite versus indefinite elements or specific versus non-specific elements, respectively, in Dutch, etc.).

In the previous section on the positioning of ethical datives in Dutch it has been argued that the availability of the ordering pattern ‘object_{eth.dat.} < subject’ is due to the specific nature of the object which appears in the construction. The ethical dative, as an adverbial-like element, can occur in front of the subject element because it is not part of the argument structure of the verb and, thus, it is not subject to the condition *Unambiguity of Argument Identification*, which holds for arguments only.

With respect to the positioning of weak reflexive pronouns in Dutch we will have to provide an answer to a similar question: Is it a matter of the (nature of the) reflexive element, subject element or (type of) verb, respectively, that makes the ordering pattern ‘object < subject’ available in these cases?

In more concrete terms: Is one of the following factors a suitable criterion for establishing the distinction between cases in which the ordering ‘*zich* < subject’ is allowed and cases in which it is not: specificity/definiteness, anaphoricity, referentiality, structural verb type, thematic role of the subject, or status of the reflexive?

In the remainder of this section, we will go through these criteria and evaluate their relevance for capturing the distribution of the weak reflexive pronoun *zich* with respect to non-pronominal subjects in clause-internal positions in

¹⁸⁵Haeseryn et al. (1997, 1314):

De mogelijkheden voor de plaatsing van het onderwerp ten opzichte van het wederkerende voornaamwoord *zich* als lijdend voorwerp variëren naargelang van het geval. Het is vooralsnog niet helemaal duidelijk wanneer zowel de volgorde onderwerp – *zich* als de volgorde *zich* – onderwerp mogelijk is (en of er dan een voorkeur is) en wanneer slechts één van beide volgordes kan.

[The possibilities for the positioning of the subject with respect to the reflexive pronoun *zich* as direct object vary according to the case. It is as yet not entirely clear under what conditions both the ordering subject – *zich* and the ordering *zich* – subject are possible (and if there is a preference then) and under what conditions only one of these orderings is possible; J.K.]

Dutch. In a nutshell, it will be shown that the decisive factor is the status of the reflexive ('quasi argument' of an inherently reflexive verb vs. reflexive object of a non-inherently reflexive verb).

Some of the criteria (definiteness/specificity, anaphoricity) can be rejected immediately because they predict that all weak reflexives should behave alike as far as their syntactic positioning in Dutch is concerned – which is not the case, however.

With respect to the factor referentiality, the decision is not so easy. Referentiality is a semantic notion and is closely related to nominal specificity. According to Fodor and Sag (1982), a nominal expression is understood to be referential if it has a fixed referent in the (model of the) world. This means that it can be identified by the speaker or by one of the people whose propositional attitudes are being reported. An indefinite DP is referential if the speaker has its referent 'in mind' and intends to refer to it.

As far as pronominal elements are concerned, we have to be careful with the notion of referentiality. Pronouns are not referential in the same sense as non-pronominal (definite) referential expressions are. Non-pronominal referential expressions are inherently referential; they have independent reference in that they select a referent from the universe of discourse. (Personal) pronouns, on the other hand, do not select a referent from the universe of discourse. Pronouns inherently specify certain properties of the referent (nominal features) but they do not allow to identify a uniquely specified referent from the universe of discourse. A pronoun merely selects for a subgroup from a wider domain of entities which are possible referents; for a complete determination of the referent contextual information (linguistic or otherwise) is needed. However, when the speaker uses a definite pronoun (like a personal pronoun) he has its referent in mind; therefore, we can classify personal pronouns as being referential in the sense of Fodor and Sag (1982).

Reflexives are referentially dependent which means that they cannot refer independently but receive their referential interpretation by being bound by an antecedent. The reference of a reflexive is fully determined by the antecedent which it is bound by. The reflexive element and its antecedent have to agree with respect to their nominal features (person, gender, number) which stems from the fact that the reflexive depends on the antecedent for its interpretation (the reflexive and its antecedent share their referent). Since both full lexical DPs and pronouns may function as antecedents for reflexives, this gives us a natural distinction between full lexical DPs, personal pronouns and some other types of pronouns (like demonstratives, etc.) which can be classified as referential on the one hand, and reflexives (as well as reciprocals), which completely lack independent reference and, thus, have to be classified as non-referential, on the other hand.

Thus, the label 'referential pronoun' captures personal pronouns, demonstrative pronouns, etc., whereas it does not include reflexives nor does it include

expletive pronouns. Although both reflexives and personal pronouns lack inherent reference, they can be distinguished on the basis of their referentiality: reflexives lack referentiality completely while personal pronouns own (a certain degree of) referentiality; they freely may be coindexed with a DP outside the local binding domain but they do not require an antecedent.

There is an important thing to note, however: If referentiality is the relevant distinguishing factor in the cases under consideration, we would most plausibly expect to find referential objects in a higher position within the phrase marker than non-referential ones. This can be derived from the following generalisation which seems to hold for ‘scrambling’ in Dutch: Only referential or specific object elements can scramble across adverbials and, therefore, be in a higher position than their non-referential (non-specific) counterparts would occupy.

With regard to the constructions under consideration, however, the hypothesis can only be the other way round, namely that reflexives (non-referential object elements) (can) precede the subject argument while referential elements do not (cannot) precede it. This hypothesis derives from the fact that we find clear cases in which non-referential object pronouns – inherently reflexive instances of the weak reflexive *zich* – precede the subject argument, (197).

- (197) (a) *Hier heeft zich een drama/dat drama afgespeeld*
 here has REFL a drama/that drama_{subj} happened
 ‘A/that drama happened here’
 (Dutch, Haeseryn et al. 1997, 1315 (14a), (15a))
- (b) *Parallel met de schilderkunst ontwikkelde zich*
 parallel with the art-of-painting developed REFL
de literatuur verder
 the literature_{subj} further
 ‘Parallel to the art of painting, the literature developed further’
 (Dutch, Haeseryn et al. 1997, 1316 (19))
- (c) *In de kelder bevonden zich (gisteren) nog*
 in the cellar were-located REFL (yesterday) still
drie vaten bier
 three barrels beer_{subj}
 ‘Yesterday there were still three barrels in the cellar’
 (Dutch; Haeseryn et al. 1997, 1314 (10a))

There is also the fact that the weak reflexive *zich* does not behave uniformly in the sense that it always precedes the subject argument in Dutch, nor is it the case that whenever the weak reflexive *zich* turns up, both ordering patterns (*zich* < subject, subject < *zich*) were optionally possible. Rather, in certain cases only the pattern ‘*zich* < subject’ is allowed while in other cases only the reverse pattern ‘subject < *zich*’ turns up, and in some cases both orderings are available (see Nieuwborg 1973 for a classification of

Dutch reflexive verbs according to the ordering patterns of their subject and object arguments they are attested with; for discussion see below).

In summary, the availability of the ‘object < subject’ ordering pattern in Dutch is not directly related to the referentiality of the object pronoun because reflexives are non-referential in general and would, therefore, be predicted to show a uniform pattern of distribution, contrary to the facts.^{186,187}

Intuitively, one might feel that there is a decrease in referentiality from ‘true’ reflexives (reflexive objects of verbs which allow reflexive as well as non-reflexive elements as their objects) to reflexives of inherently reflexive verbs. However, this intuition cannot be turned into a fact by reference to a divergent degree of referentiality of the reflexive: Since, in general, reflexives are not referential but rather referentially dependent on the antecedent they are bound by (i.e. they cannot have independent reference but depend on their reference on the binder), the distinction between those cases, which allow the ordering ‘reflexive < subject’, and those cases, which do not, cannot be a distinction in terms of referentiality of the two ‘classes’ of reflexives. Rather, the intuitively discernible difference in referentiality seems to be a property of the construction as a whole: in the one case we are faced with constructions which

¹⁸⁶We are not claiming, of course, that referentiality does not play any role in controlling the distribution of arguments within the Dutch clause structure. Several proposals have been made which link the specific distribution of the subject argument to referentiality (cf., a.o., Kiss 1996; Koopman and Szabolcsi 2000: definite subjects have to go into Spec,RefP; Mohr 2004: Spec,RefP hosts definite/specific subject DPs while Spec,TP hosts indefinite subject DPs) and various accounts state that only referential/specific object elements can scramble across adverbials in Dutch.

¹⁸⁷Within a minimalist framework, referentiality would have to be represented as an interpretable feature on nominal elements (like [referential] on DPs). In order for feature checking (matching) to apply, an uninterpretable version of the same feature would have to be represented on an intermediate functional head against which the feature specification of the nominal element gets checked in syntax proper. In cartographic approaches, the presence of a semantic feature like [referential] on a nominal element is assumed to trigger obligatory movement of the DP to the specifier position of an intermediate functional projection that is headed by the corresponding functional head (Ref).

However, such a solution is not forced in the standard minimalist approach assuming feature checking under Agree on which we have based our analysis. Inherent semantic features do not necessarily require syntactic feature checking (matching) because they are interpretable on the nominal element and, thus, have to ‘survive’ the syntactic feature checking operation in order to be handed over to the LF interface where they get interpreted. There is no principled theory-independent reason which would demand that an intermediate functional head must be associated with an uninterpretable version of a semantic feature like referentiality in the standard minimalist approach. It is crucial to note that not all kinds of semantic information of the lexical entries are represented in the feature matrix of the DP which is subject to the syntactic feature checking operation Agree (or Multiple Agree). Note, however, that even if we assume that ‘checking’ or matching of the referentiality feature, which is a semantic rather than syntactic feature, is required in syntax proper at all, it would take place under c-command within the locality domain (the phase) in the framework adopted in our approach. Raising of a DP which has a specification for referentiality in its syntactic feature matrix would have to be independently motivated or, rather, evaluated and justified at the next higher phase level.

contain inherent reflexives while in the other case we are faced with ‘true’ not inherently reflexive constructions. As a clear tendency, only with the first type of construction we find the ordering pattern ‘reflexive < subject’ in Dutch. This will be illustrated and discussed further below.

However, before we come to that, we will have to evaluate the role of the verb type (transitive, unaccusative, etc.) and the semantic role of the subject (agentive or not).

According to this criterion, we would expect to find a different distribution of subject and object arguments in constructions which contain different types of verbs. In particular, we would expect to find a specific behaviour of the subject and object arguments of transitive verbs, especially agentive verbs, in contrast to the arguments of other types of verbs .

So far, the generalisation has been – and this is in line with the criterion under consideration – that among the class of verbs that allow the ordering ‘object < subject’ in clause-internal position in Dutch there are no verbs that select for an agentive subject (agentive transitive verbs).

However, in the light of data like (198), we have to revise the descriptive generalisation which has been taken as a basis so far, namely that there is a general prohibition against the ‘object < subject’ ordering pattern with arguments of transitive verbs, in particular agentive transitive verbs. At the same time, this pattern is attested and unproblematic with other types of verb phrases (unaccusative verbs, passivised verbs).

- (198) (a) *Hoe gedroegen zich*
 how behaved REFL
de gasten (die je voor dat feest uitgenodigt had)?
 the guests (which you for that party invited had)_{subj}
 ‘How did the guests who you had invited to the party behave themselves?’ (Dutch, Haeseryn et al. 1997, 1317 (29a))
- (b) *Op deze plaats heeft zich een vrouw opgehangen*
 on this place has REFL a woman_{subj} up-hang
 ‘In this place a woman hung herself’ (Dutch)
- (c) *Dat heeft zich de professor al lang afgevraagd*
 that_{obj} has REFL the professor_{subj} yet long wondered
 ‘The professor has been wondering about that for a long time’
 (Dutch; Eelke Teitsma, p.c.)

The verbs in (198) are transitive and their subjects carry the agent semantic role (the subject in the (c) example is more an experiencer); nevertheless and contrary to the expectation on the basis of the criterion under consideration, the ordering pattern ‘*zich* < subject’ is grammatical.

Thus, we have to reject this criterion as well;¹⁸⁸ the verb type cannot be the source of the observed distribution of ordering patterns with the weak reflexive *zich* in Dutch because there is no systematic one-to-one relation between the availability of the ‘*zich* < subject’ ordering pattern and the verb type and thematic role of the subject.¹⁸⁹

Let us now turn to a closer examination of the relevance of the ‘status’ of the reflexive elements (quasi-argument of an inherently reflexive verb vs. reflexive object of a verb which is not inherently reflexive) for the availability of the ordering pattern ‘*zich* < subject’ in Dutch.

On the basis of the assumption that reflexive objects of non-inherently reflexive verbs (like *wassen* ‘to wash’) behave like their non-reflexive counterparts (i.e., they follow the subject in transitive clauses while in unaccusative and passivised clauses, they can either precede or follow the subject), we make the following prediction: The ordering pattern ‘*zich* < subject’ is only available with inherently reflexive verbs in Dutch.

Nieuwborg (1973) presents us with a collection of reflexive verbs which are attested with either only the ordering ‘subject < *zich*’, with only the ordering ‘*zich* < subject’ or with both orderings in Dutch. His collection is based on a corpus of half northern and half southern Dutch reflexive clauses which have been collected from newspapers and novels (see Nieuwborg 1973, 273-273, fn. 2 for the bibliographic information). In his corpus, which contains a total number of 1160 reflexive clauses with non-pronominal subjects, 337 clauses show the ordering ‘reflexive < subject’ in clause-internal position.

Nieuwborg’s (1973) list is repeated in (199); the English translations have been added by me. Note that the list does only include verbs which appeared with a reflexive construction at least ten times within Nieuwborg’s (1973) corpus. The numbers in brackets concern the number of occurrences of this verb with the relevant ordering pattern in the corpus.

¹⁸⁸However, we do not want to object to the well-founded assumption that the internal organisation of the verb phrase is a crucial factor and that it is tightly connected to the verb type. On the contrary, this is, in essence, what we have proposed and defended throughout this thesis (except for the relevance of the thematic roles issue).

¹⁸⁹Among the verbs which allow the ordering ‘*zich* < subject’ there is a considerable number of verbs which select for an agent thematic role, but there is also many verbs which select for some other thematic role for their subject argument (in particular, theme: e.g., *zich vormen* ‘to form’, *zich vinden* ‘to be, find oneself’, *zich voltrekken* ‘to take place’; also experiencer: e.g., *zich (ziek, verloren, sterk, etc.) voelen* ‘to feel (ill, lost, strong, etc.)’, *zich herinneren* ‘to remember’). Similarly, the verbs which occur with the reverse ordering pattern (‘subject < *zich*’) assign a range of different thematic roles to their subjects (e.g., agent, experiencer, theme).

- (199) (i) **Verbs which are exclusively attested with the ordering ‘reflexive < subject’:**
zich afvragen ‘to wonder, ask oneself, (be in) doubt (as to)’ (40),
zich begeven ‘to proceed, to go’ (15),
zich beperken tot ‘to restrict oneself to, confine oneself to’ (12),
zich gedragen ‘to behave (oneself), conduct oneself’ (11),
zich (koest, rustig, flink, etc) houden ‘to keep ...: to keep quiet (*koest*); to keep calm (*calm*); to put on a brave face (*flink*)’ (14),
zich richten op, tot ‘to turn to (*op*); to address oneself to (*tot*)’ (18),
zich terugtrekken ‘to retreat, withdraw, retire, stand down’ (16),
zich (akkoord, bereid, tegenstander van, etc.) verklaren ‘to declare oneself ...: to agree with (*akkoord*); to agree to do (*bereid* ‘willing’); to declare oneself an opponent of (*tegenstander van* ‘opponent of’) (15),
zich wenden tot ‘to apply to, turn to’(10)
- (ii) **Verbs which show a clear preference for the ordering ‘subject < reflexive’ but also allow the ordering pattern ‘reflexive < subject’:**
zich (verbaasd, tevreden, standvastig, etc) tonen ‘to show oneself...: to be surprised (*verbaasd* ‘surprised, astonished’); to be contented (*tevreden* ‘satisfied, contented’); to be firm (*standvastig* ‘firm, perseverant, persistent’) (23: 21 ‘subj < REFL’/2 ‘REFL < subj’) ¹⁹⁰,
zich witspreken over, voor, tegen ‘to give one’s opinion on; to declare oneself in favour of; to declare oneself against’ (15: 14/1),
zich (ziek, verloren, sterk, etc.) voelen ‘to feel (ill, lost, strong, etc.)’ (25: 24/1),
zich herinneren ‘to remember, recollect, recall’ (10: 9/1),
zich (ongerust, klaar, etc) maken ‘to make oneself...: to worry (*ongerust*); to get ready (*klaar*)’ (38: 35/3),
zich laten + inf. ‘to let oneself...’: *zich niet onbetuigd laten* ‘to rise to the occasion, to be quick to respond’ (34: 32/2),
zich bezighouden met ‘to occupy/busy oneself with, engage oneself in’ (13: 12/1)
- (iii) **Verbs which show a clear preference for the ordering ‘reflexive < subject’ but also allow the ordering ‘subject < reflexive’:**
zich voordoen ‘to act, appear, pose’ (53: 4 ‘subj < REFL’/49 ‘REFL < subj’),
zich bevinden ‘to be, find oneself’ (103: 16/87),
zich vormen ‘to form’ (18: 2/16)

¹⁹⁰The notation indicates this: ‘total number of occurrences: number of occurrences with the pattern ‘subject < REFL’/ number of occurrences with the pattern ‘REFL < subject’.

(iv) **Verbs which allow both orderings without a clear preference for one of them:**

- zich aftekenen* ‘to stand out, become visible’ (16: 7 ‘subj < REFL’/9 ‘REFL < subj’),
zich bewegen ‘to move, stir’ (14: 5/9),
zich ontwikkelen ‘to develop (into)’ (21: 11/10),
zich opdringen ‘to force oneself on, impose oneself on, impose one’s company’ (10: 5/5),
zich (kandidaat, verkiesbaar, etc.) stellen ‘to run/stand (for...): to stand/run for election, stand for office (*kandidaat* ‘candidate’; *verkiesbaar* ‘eligible’)’ (23: 15/8)

All the verbs of the first group, which are only attested with the ordering pattern ‘reflexive < subject’, are inherently reflexive verbs. They either do not have a non-reflexive counterpart (as for example in the case of ‘*zich afvragen* ‘to wonder, ask oneself’) or there exists a non-reflexive counterpart but the inherently reflexive and non-reflexive variants of the verbs show a considerable, unpredictable difference in meaning (e.g. *zich begeven* ‘to proceed, to go’ vs. *begeven* ‘to break down, fail, collapse, give way’). Because of the unpredictable shift in meaning, these inherently reflexive constructions can be treated as idioms (cf. Everaert’s 1986 class-1 inherent reflexive constructions). With respect to the semantic role of the subjects, no uniform picture emerges: most of the subjects can be considered agents, but we also find themes (cf. *zich beperken tot* ‘to restrict oneself to, confine oneself to’). Some verbs (like *zich beperken tot*) assign either an agent or a theme role to their subject argument, depending on whether the subject is animate or not.

The second group of reflexive verbs in Nieuwborg’s (1973) list contains only verbs which have an inherently reflexive variant. The same fact holds for the verbs in the third and fourth group. However, these three groups of verbs differ with respect to which pattern is the most frequent one in Nieuwborg’s (1973) corpus: The reflexive verbs of group two are reported to prefer the ordering ‘subject < reflexive’, the verbs of group three give preference to the ordering ‘reflexive < subject’ (but both groups of reflexive verbs also allow the reverse ordering of reflexive and subject); the verbs of the fourth group show no clear preference for either pattern.¹⁹¹

¹⁹¹It is not entirely clear which factor(s) might be responsible for this patterning. It seems to be connected – at least partly – to the verb type (agentive, unaccusative, etc.) of the individual verbs.

The three verbs in Nieuwborg’s (1973) third group are all inherently reflexive verbs which assign a theme role to their subject; they are unaccusative verbs (besides that, *zich voordoen* ‘to act, appear, pose’ has a non-unaccusative, agentive variant with the meaning ‘to show, demonstrate’). These verbs give preference to the ordering ‘reflexive < subject’, but they also allow the reverse ordering of reflexive and subject.

Four out of five verbs in Nieuwborg’s (1973) fourth group are unaccusative or have an unaccusative variant (*zich aftekenen*, *zich ontwikkelen*; unaccusative variant: *zich bewegen*, *zich opdringen*); the only exception is *zich (kandidaat, verkiesbaar, etc.) stellen* which seems to be agentive. This fact might be responsible for the observed optionality of the ordering

It is a crucial observation for our concerns that all the reflexive verbs in Nieuwborg's (1973) list allow an ordering pattern in which the weak reflexive pronoun preceding the subject. This is clear evidence for the availability of the word order pattern 'object_{weak} < subject' with weak (reflexive) object pronouns in Dutch, though only in very specific contexts.

Furthermore, those inherently reflexive verbs which are transitive allow us to derive a crucial conclusion: In Dutch there *is* a movement operation which moves weak object pronouns (the weak reflexives) across the subject argument. This is evidence for weak pronoun movement of the same type as in German. With inherently reflexive transitive verbs, the application of weak pronoun movement leads to a re-ordering of the subject and the weak reflexive ('reflexive_{weak} < subject').

At the end of this section, we will present a formal analysis of how the availability of the ordering pattern 'reflexive < subject' with inherently reflexive verbs fits into our approach as developed in chapters 8 to 10 of the thesis.

However, before we will come to that, we will have to discuss some apparent counter-examples to the generalisation that the ordering pattern 'reflexive_{weak} < subject' is only available with inherently reflexive verbs in Dutch.

In the *Algemene Nederlandse Spraakkunst* (Haeseryn et al. 1997) we find a few constructions which – on first sight – seem to go against this generalisation. The exceptions concern the verbs *zich ophangen* 'to hang oneself' and *zich vergassen* 'to gas oneself'. One might be willing to classify these verbs as regular non-inherently reflexive transitive verbs because both verbs are clearly agentive verbs (because the subject argument has (voluntary) control over the expressed action) and they select two arguments, the killer and the one that is being killed.

Consider the data in (200) which features the verb *zich ophangen*. In (200a), the weak reflexive *zich* precedes the subject *een meisje* while in (200b,c) we find the reverse ordering pattern of *zich* and the subject argument.

- (200) (a) *Op deze plaats schijnt zich (gisteren) een meisje*
on this place seems REFL_{weak} (yesterday) a girl_{subj}
opgehangen te hebben
up-hang to have
'In this place, (yesterday) a girl seems to have hung herself up'
(Dutch, Haeseryn et al. 1997, 1314 (11a))

patterns found with these verbs.

- (b) *Op deze plaats schijnt een meisje zich opgehangen te hebben*
 on this place seems a girl_{subj} REFL_{weak} up-hang to

have

‘In this place, a girl seems to have hung herself up’

(Dutch, Haeseryn et al. 1997, 1314 (12))

- (c) *Een dag na de afwijzing van de asielaanvraag hing de gevangene zich in zijn cel op*
 one day after the rejection of the application-for-asylum hung
 the prisoner_{subj} REFL_{weak} in his cell up

‘One day after the rejection of the application for asylum, the prisoner hung himself in his cell’

(Dutch, Haeseryn et al. 1997, 1316 (23))

It is important to keep in mind, however, that both *zich ophangen* and *zich vergassen* (for examples with *zich vergassen* see below) express alternative ways of committing suicide. Conceptually, ‘to commit suicide’ and ‘to kill somebody (who happens to be oneself)’ are not the same thing. To commit suicide (for example, by hanging) is an action that is invariably self-targeted; therefore, as far as the conceptualisation is concerned, both *zich ophangen* and *zich vergassen* are inherently reflexive.¹⁹²

Also note that *zich ophangen* is stated in the dictionary¹⁹³ together with the reflexive object (i.e. as *zich ophangen*) which suggests that this is a fixed, though not semantically unpredictable or idiomatic expression in Dutch; thus, *zich ophangen* can in fact be considered an inherently reflexive verb.

Further evidence for this conclusion comes from the fact that there exists a non-inherently reflexive variant of the verb *ophangen* in Dutch, which features different constraints on the available word order patterns, however: *iemand ophangen* ‘to hang somebody’, (201).

The data in (201) shows that it is not the case that *ophangen* always allows for the ordering pattern ‘object < subject’ in clause-internal position, irrespective of whether the object argument is a weak reflexive pronoun or some other phrase. Rather, a strong object (like *zichzelf* or a coordinated object) cannot precede the subject; compare (201a) and (201b,c).

¹⁹²A similar point is made by Geurts (2004, 1) in connection with ‘grooming verbs’ like *zich wassen* ‘to wash (oneself)’ and *zich scheren* ‘to shave (oneself)’. He subsumes this class of verbs under inherently reflexive verbs although they occur with the strong reflexive *zichzelf* as well as the weak reflexive *zich* and can, alternatively, even be used as a non-reflexive predicate (to wash/shave somebody). He hypothesises that these verbs are ambiguous between reflexive and transitive readings; only when they occur with *zich* they can be considered inherently reflexive verbs. Geurts’ (2004) view is remarkable in light of the fact that verbs like *to wash* are usually treated as standard cases of agentive transitive verbs.

¹⁹³See Langenscheidt (1996): *Taschenwörterbuch Niederländisch*; Coenders (1996): *Kramers handwoordenboek*.

- (201) (a) *Op deze plaats heeft een vrouw [haar baby en zichzelf]*
 on this place has a woman_{subj} [her baby and REFL_{strong}]_{obj}
opgehangen
 up-hang
 ‘In this place a woman hung herself and her baby’ (Dutch)
- (b) **Op deze plaats heeft zichzelf een vrouw opgehangen*
 on this place has REFL_{strong} a woman_{subj} up-hang
 (Dutch)
- (c) **Op deze plaats heeft [haar baby en zichzelf]*
 on this place has [her baby and REFL_{strong}]_{obj}
een vrouw opgehangen (Dutch)
 a woman_{subj} up-hang

Only when the verb *ophangen* takes the weak reflexive *zich* as its object, the ordering pattern in which the object precedes the subject is licit in Dutch. (202a) is ungrammatical in Dutch because the reflexive *zich*, being a weak pronoun, cannot be coordinated. In (202c), which is also ungrammatical in Dutch, the weak object personal pronoun *'m* ‘him’ precedes the subject argument. The ungrammaticality of this example is in sharp contrast to the inherently reflexive construction with *zich ophangen* in (202b) in which the ordering pattern ‘object_{refl.inherent} < subject’ is available.

- (202) (a) **Op deze plaats heeft [haar baby en zich]*
 on this place has [her baby and REFL_{weak}]_{obj}
een vrouw opgehangen (Dutch)
 a woman_{subj} up-hang
- (b) *Op deze plaats heeft zich een vrouw opgehangen*
 on this place has REFL_{weak.obj} a woman_{subj} up-hang
 ‘In this place a woman hung herself’ (Dutch)
- (c) **Op deze plaats heeft 'm een vrouw opgehangen*
 on this place has him_{weak.obj} a woman_{subj} up-hang
 (Dutch)

The fact that we find a difference in the word order patterns that are available for the necessarily self-targeted verb *zich ophangen* and the verb (*zichzelf/iemand*) *ophangen*, which is not determined with respect to which person is selected as its object (in a manner of speaking, *zichzelf ophangen* can be interpreted as ‘to hang somebody, namely myself’), suggests that we are faced with two different ‘types’ of verbs, not only on a conceptual (semantic) but also on a syntactic level. *Zich ophangen* is in fact a variant of a transitive verb, the reflexive object of which is represented as an inherent reflexive.

Therefore, we conclude that it is justified to classify *zich ophangen* as an inherently reflexive verb. Therefore, it does no longer come as a surprise that

the ordering pattern ‘*zich* < subject’ is attested with *zich ophangen* in Dutch. Whenever the verb *ophangen* appears with the weak reflexive *zich* as its object it exhibits the same syntactic behaviour as other inherently reflexive verbs in Dutch: namely, the weak reflexive can precede the subject argument.

The same reasoning applies to the Dutch verb *vergassen* ‘to gas one-self/somebody’. In its inherently reflexive variant, the weak reflexive *zich* can precede the subject argument, (203a)¹⁹⁴; whereas this ordering pattern is excluded when *vergassen* takes a non-reflexive element as its object, compare (203b,d) and (203c,e).

- (203) (a) *Een dag na het verstrijken van het ultimatum heeft zich*
 one day after the expiration of the ultimatum has REFL_{weak}
de student vergaast
 the student_{subj} gased
 ‘One day after the expiration of the ultimatum the student gased himself’ (Dutch)
- (b) **Een dag na het verstrijken van het ultimatum heeft*
 one day after the expiration of the ultimatum has
zichzelf de/een student vergaast (Dutch)
 REFL_{strong} the/a student_{subj} gased
- (c) *Een dag na het verstrijken van het ultimatum heeft*
 one day after the expiration of the ultimatum has
de/een student zichzelf vergaast
 the/a student_{subj} REFL_{strong} gased
 ‘One day after the expiration of the ultimatum the/a student gased himself’ (Dutch)
- (d) **Gisteren vergaste [haar baby en zichzelf] een vrouw*
 yesterday gased her baby and REFL_{strongobj} a woman_{subj}
 (Dutch)
- (e) *Gisteren vergaste een vrouw [haar baby en zichzelf]*
 yesterday gased a woman_{subj} her baby and REFL_{strongobj}
 ‘Yesterday a woman gased herself and her baby’ (Dutch)

In sum, *zich vergassen* and *zich ophangen* show the same syntactic behaviour as other inherently reflexive verbs in Dutch: the weak quasi-argument *zich* of inherently reflexive verbs can precede the subject in a clause-internal

¹⁹⁴The *Algemene Nederlandse Spraakkunst* (Haeseryn et al., 1997) states the following example, (i); according to one of my informants, the use of the analytic perfect tense would be much more natural in Dutch, however.

- (i) *Een dag na het verstrijken van het ultimatum vergaste zich de 18-jarige studente B.N.*
 ‘One day after the expiration of the ultimatum the 18-year-old student B.N. gased himself’ (Dutch, Haeseryn et al. 1997, 1316 (21))

position in Dutch. This is not a two-way generalisation, however, and it only holds in the direction outlined above. The weak reflexive of inherently reflexive verbs is not forced to move across the subject (by weak pronoun movement) and surface in a position where it precedes the subject argument, but it can also follow the subject, (204).

- (204) (a) *Op deze plaats heeft zich_{REFL.inherent} een vrouw_{subj} opgehangen*
 (b) *Op deze plaats heeft een vrouw_{subj} zich_{REFL.inherent} opgehangen*

To conclude, the data which has been discussed in this section is clear evidence for the conclusion that the weak reflexive quasi-argument *zich* of inherently reflexive verbs undergoes a movement operation which may result in the surface ordering pattern ‘*zich_{weak.inherent}* < non-pronominal subject’ in Dutch. We consider this movement as an example for the generally available, untriggered movement operation that moves weak object pronouns to the edge of the verb phrase, thereby crossing the base position of the subject argument (in transitive verb phrases). As long as there are no compelling reasons that force another conclusion, we will stick to this appealing and, in our opinion, natural analysis of the matter.

In contrast to other types of weak pronouns (weak object personal pronouns, weak reflexive object *zich* of non-inherently reflexive verbs) which have been moved across a non-pronominal subject in Dutch, the ordering pattern ‘*object_{weak.pronoun}* < subject’ is unproblematic with inherently reflexive verbs in Dutch.

The remainder of this section will be concerned with the implementation of these ideas into the approach as advocated in this thesis.

We will argue that the occurrence of a weak quasi-argument *zich* in front of a non-pronominal subject in Dutch is unproblematic for the evaluation of unambiguous argument identification at later stages of the derivation (the CP phase level) according to the condition *Unambiguity of Argument Identification at the higher phase level (UAI-phase)* as defined in chapter 10. This argument is based on the assumption that the weak quasi-argument *zich* of inherently reflexive verbs can be unambiguously identified on the basis of its morpho-syntactic feature specification and, thus, it is not structurally distinguished from the subject argument.

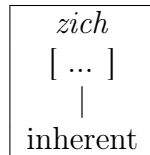
Let us begin with the question of what the syntactic difference is between a reflexive object argument of a non-inherently reflexive verb (like *zich wassen* ‘to wash’) and the weak reflexive *zich* of an inherently reflexive verb. The relevant answer is this: It is crucial that the latter element is only a *quasi-argument* of an inherently reflexive verb.

The weak reflexive *zich* of inherently reflexive verbs cannot be replaced with any other element nor can it serve any other syntactic function. Rather, it is only limited to this very syntactic context and function: being the quasi-argument of an inherently reflexive verb.

We claim that this ‘exceptional’ status is represented in the feature matrix of the weak quasi-argument *zich*: the weak reflexive *zich* carries a subfeature referring to this ‘exceptional status’ in its feature matrix (since nothing hinges on the terminology that is used, we will simply call it ‘inherent’).

The feature structure of the quasi-argument *zich* of inherently reflexive verbs is illustrated in (205) (only the relevant information is included).

(205) Simplified feature structure of the quasi-argument *zich* in Dutch



Recall the formulation of the conditions which, as we have claimed, control argument identification; the definitions are repeated in (206) and (207) for convenience.

(206) *Unambiguity of Argument Identification (UAI)*: (revised version)

An argument must be unambiguously identified in the minimal structural projection domain of its first merge.

An argument is *unambiguously identified in the minimal structural projection domain of its first merge* iff

- (i) it is identified on the basis of its morpho-syntactic features, or
- (ii) it is the only argument in the minimal structural projection domain of its first merge. (= repeated from (107))

(207) *Unambiguity of Argument Identification at the higher phase level (UAI-phase)*:

An argument must be unambiguously identified at the higher phase level.

An argument is unambiguously identified at the higher phase level iff

- (i) it is identified on the basis of its morpho-syntactic features, or
- (ii) it is the only argument in the minimal structural projection domain at the level of the phase. (= repeated from (130))

Due to the economy principle, which states that unambiguous argument identification on the basis of morpho-syntactic features is more economic than unambiguous argument identification by distinguishing different structural domains for each of the arguments, repeated in (208), arguments are always unambiguously identified on the basis of their morpho-syntactic feature specification if this is possible.

- (208) *Economy of Unambiguous Argument Identification:*
 morpho-syntactic features < structural differentiation
 (= repeated from (103))

Thus, the quasi-argument *zich* of inherently reflexive verbs in Dutch can be unambiguously identified without reference to the syntactic domain which it is occupying, both in its base position (the position of first merge) as well as after weak object pronoun movement has applied.

There is a minor difference to the situation as found in German, which does also make use of this type of argument identification strategy (as discussed in previous chapters of the thesis): Argumental DPs (non-pronominal DPs, strong pronouns, weak pronouns) in German are identified on the basis of their morpho-syntactic feature matrix specifications; in more concrete terms, on the basis of the subfeature ‘m-mark’ which is present on the uninterpretable Case feature (*uCase*) of argumental DPs, because German features a rich case morphology (according to Haerberli’s (2002) definition of rich morphological case, cf. section 11).

The weak reflexive *zich* in Dutch, in contrast, does not carry a subfeature m-mark, which would represent strong case inflection; rather, it is unambiguously identified on the basis of being a weak quasi-argument of an inherently reflexive verb, represented in its feature matrix by the subfeature ‘inherent’.

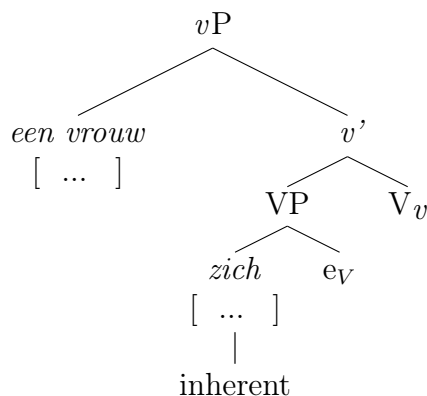
The weak quasi-argument *zich* of inherently reflexive verbs can always be unambiguously identified without reference to a specific structural domain within the verb phrase. Since no ambiguity can ever arise, no structural distinction of different structural domains within the verb phrase is necessary in order for the weak quasi-argument *zich* to be unambiguously identified according to the condition *Unambiguity of Argument Identification (UAI)* as defined in (206).

However, we claim that, nonetheless, the verb phrase structure of inherently reflexive verbs is layered in Dutch. However, the reason for the structural layering is connected to the subject argument: the subject argument cannot be unambiguously identified on the basis of its morpho-syntactic feature specification because it does not carry any subfeature which would allow this. Therefore, the subject must be structurally distinguished from the quasi-argument *zich* because, otherwise, the subject argument violates the condition *Unambiguity of Argument Identification (UAI)* which holds for the level of first merge.

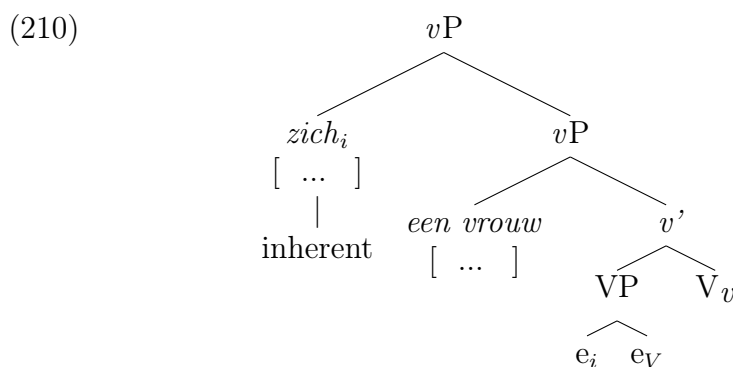
This gives us a verb phrase structure as in (209b) for the Dutch inherently reflexive transitive construction (209a).

- (209) (a) *dat zich een vrouw ophing*
 that REFL_{weak.inherent} a woman up-hung
 ‘that a woman hung herself’ (Dutch)

(b) Verb phrase structure of inherently reflexive transitive verbs in Dutch



When *zich* has undergone weak pronoun movement to the edge of the verb phrase, it is contained in the same structural domain as the subject argument, (210).



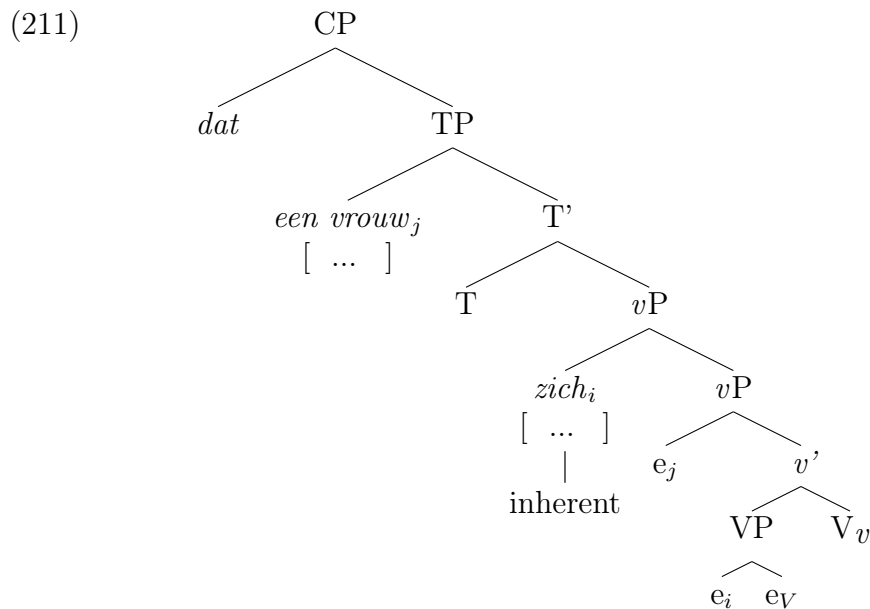
However, this configuration is unproblematic in connection with inherently reflexive verbs in Dutch and does not need to be ‘repaired’ before the derivation reaches the CP level because *zich* is unambiguously identifiable (and, thus, identified) on the basis of the morpho-syntactic subfeature ‘inherent’.

In more concrete terms, the movement of the weak reflexive quasi-argument *zich* across the subject argument in (210) passes the conditions on argument identification; it does not induce any violation of the condition of *Unambiguity of Argument Identification* at the higher phase level (*UAI-phase*) because, even after weak pronoun movement has applied, *zich* can be unambiguously identified on the basis of its morpho-syntactic feature specification (namely, presence of subfeature ‘inherent’ on the weak reflexive) and the subject argument is automatically analysed as being inside the structural projection domain of its first merge.

In short, the crucial part of the argumentation is this: While at the level of first merge of the arguments *any* argument must be unambiguously identified, either on the basis of its morpho-syntactic subfeatures or by being the only argument in the structural projection domain of its first merge, the requirement at the relevant higher level of the clause is different: at the higher phase

level, it is sufficient that *one (namely, the higher)* of the two arguments, which are contained in the same structural domain at the edge of the verb phrase, is unambiguously identified on the basis of its morpho-syntactic feature specification (i.e. presence of a relevant subfeature). We suggest that this is the case because the second (the lower) argument in this structural domain is automatically analysed as the highest ranked argument of the verb which occupies its base position (where it is structurally distinguished because only structurally licit base structures which respect to the condition *Unambiguity of Argument Identification* are allowed, as has been argued above).

However, it is always an alternative in Dutch that the subject argument rises to the Spec,TP position; in that case, the subject and the weak quasi-argument *zich* occupy different structural domains when unambiguous argument identification is examined at the CP level, (211).



To conclude, Dutch constructions with inherently reflexive verbs do not create a difficulty to the approach advocated in this thesis because the weak reflexive quasi-argument *zich* of inherently reflexive verbs is unambiguously identifiable on the basis of its morpho-syntactic feature specification. Thus, both ordering patterns ('*zich_{weak.inherent}* < subject', 'subject < *zich_{weak.inherent}*') are licensed with inherently reflexive constructions in Dutch.

14.3 On the 'object < subject' ordering observed in connection with the demonstrative subject pronoun *dat* in Dutch

The 'object < subject' ordering pattern is also attested with the demonstrative pronoun *dat* 'that' as subject in Dutch. In this section, it will be argued that

nothing special needs to be said in order to explain why this ordering pattern is available in constructions of this type.

The data in (212) is not particularly telling because it contains an inherently reflexive verb. Like in most of the cases discussed in the previous section, both orderings of the subject argument and the weak quasi-argument *zich* are available in this case.

- (212) (a) *Hoe ontwikkelde zich dat verder?*
 how developed REFL_{weak.inherent} that_{subj} further
 ‘How did that develop?’ (Dutch; Haeseryn et al. 1997, 1317 (28a))
- (b) *Hoe ontwikkelde dat zich verder?*
 (Dutch; Haeseryn et al. 1997, 1317 (28b))

The example in (213a) contains a free dative which precedes the demonstrative subject *dat*; this pattern is completely unproblematic because the free dative is not even an argument of the verb.

- (213) *Hoeveel zou me dat kosten?*
 how-much would me_{free-dative} that_{subj} cost
 ‘How much would that cost me?’
 (Dutch; Haeseryn et al. 1997, 1311 (17a))

Other examples are more interesting in the present connection because they do not contain inherently reflexive verbs or free datives but, nevertheless, display an ‘object < subject’ ordering with the demonstrative pronoun *dat* ‘that’ as subject.

However, on closer inspection the availability of the ‘object < subject’ ordering pattern in these examples does also have a natural explanation.

Consider the data in (214) to (216).

The verb *overkomen* ‘to happen, to befall’ in (214) is an unaccusative verb; therefore, the ordering ‘object < subject’ is the base order of arguments and, thus, not unexpected. Typically, unaccusative verbs do also turn up with the reverse ordering pattern of arguments, (214b).

The verb *interesseren* ‘to interest, be interested’ in (215a,b) is not unaccusative in the technical sense of the term (*interesseren* is a psych verb); however, its base ordering of arguments is also ‘object < subject’. Therefore, it is not surprising that both ordering of the arguments are allowed.

- (214) (a) *Toen overkwam jou dat*
 then happened you_{obj.strong} that_{subj}
 ‘then this happened to you’
 (Dutch; Haeseryn et al. 1997, 1318 (30a))
- (b) *Toen overkwam dat_{subj} jou_{obj.strong}*
 (Dutch; Haeseryn et al. 1997, 1318 (30b))

- (215) (a) *Nog nooit heeft hem dat geïnteresseerd*
 still never has him_{strong.obj} that_{subj} interested
 ‘He has never been interested in that’
 (Dutch; Haeseryn et al. 1997, 1318 (34a))
- (b) *Nog nooit heeft dat_{subj} hem_{strong.obj} geïnteresseerd*
 (Dutch; Haeseryn et al. 1997, 1318 (34b))

The data in (216) features the verb *opleveren* ‘to yield, produce’ which selects for three arguments; however, again, the base order of arguments is such that the demonstrative subject *dat* is not the highest ranked argument. Rather, the ordering pattern in (216a) coincides with the argument structure of the verb and, thus, with the base ordering of the arguments. (216b), however, illustrates that *dat* (which expresses the source of the ‘yielding’) can also occur in front of the experiencer (which is the highest ranked argument in the argument structure of the verb *opleveren*). This can be explained as rising of the subject argument to the Spec,TP position, whereby it crosses the base position of the argument which again expresses the experiencer semantic role.

- (216) (a) *Nooit heeft u dat enig voordeel opgeleverd*
 never has you_{IO} that_{subj} some advantage_{obj} delivered
 ‘You have never taken any advantage of that’
 (Dutch; Haeseryn et al. 1997, 1318 (33a))
- (b) *Nooit heeft dat_{subj} u_{IO} enig voordeel_{obj} opgeleverd*
 (Dutch; Haeseryn et al. 1997, 1318 (33b))
- (c) *Toch heeft hem/’m dat*
 however has him_{IO.strong/IO.weak} that_{subj}
geen voordeel opgeleverd
 no advantage_{obj.neg} delivered
 ‘He has not taken advantage of that, however’
 (Dutch; Haeseryn et al. 1997, 1313 (2))

(216c) shows that a strong (*hem*) as well as a weak personal pronoun (*’m*), which expresses the experiencer semantic role can precede the demonstrative subject *dat* ‘that’ in the relevant constructions in Dutch; this is the base ordering of arguments.

Interestingly enough, any type of re-arrangement of the arguments (apart from the one illustrated in (216b)) yields an ungrammatical result in Dutch, (217).¹⁹⁵ Again, this patterning is expected.

- (217) (a) **Toch heeft geen voordeel_{obj} dat_{subj} hem/’m_{IO} opgeleverd* (Dutch)
 (b) **Toch heeft hem/’m_{IO} geen voordeel_{obj} dat_{subj} opgeleverd* (Dutch)
 (c) **Toch heeft geen voordeel_{obj} hem/’m_{IO} dat_{subj} opgeleverd* (Dutch)

¹⁹⁵The grammaticality judgements do not improve if a definite direct object is used.

The only (type of) data which is potentially difficult for the analysis that deals with the ordering pattern ‘object < *dat_{subj}*’ which does always express the base ordering of arguments in the arguments structure of the verb, is data like (218a) which features the verb *storen* ‘to disturb’.

However, on closer inspection, it turns out that this view can be kept.

Storen ‘to disturb’ is a transitive psych verb which can occur with different types of subjects depending on what the source of disturbance, which is expressed by the subject argument, is: it is either an animate agentive subject or an inanimate source of disturbance. Compare (218a) and (218b).¹⁹⁶

In (218a), the subject *dat* is an inanimate source of disturbance and the ordering pattern ‘object < *dat_{subj}*’ is available. Again, this ordering of arguments coincides with their ordering in the argument structure of the verb.

In (218b), in contrast, the subject is expressed by an animate element. In this case, the grammaticality judgements of my Dutch informants on the ordering pattern ‘object < subject_{animate}’ go from marked (‘?’) to ungrammatical (*). This patterning is expected because *storen* in combination with an animate subject most likely gets an agentive interpretation (although the other reading is not completely ruled out); the agentive reading can even be strengthened by insertion of an adverbial like *opzettelijk* ‘intentionally, deliberately’ or *met opzet* ‘on purpose, deliberately’, (218c).

- (218) (a) *dat hem dat (niet) stoort*
 that him_{strong.obj} that_{subj} not disturbs
 ‘that this does not disturb him’ (Dutch; H. Haider, p.c.)
- (b) ?/**dat hem Piet (niet) stoort*
 that him_{strong.obj} Piet_{subj} not disturbs
 ‘that Piet does not disturb him’ (Dutch; H. Haider, p.c.)
- (c) **dat hem Piet opzettelijk/met opzet stoort*
 that him_{strong.obj} Piet_{subj} deliberately/on purpose disturbs
 (Dutch)

To summarise, depending on the type of the subject, the ‘object < subject’ order is or is not available with *storen*. According to Hubert Haider (p.c.), it should be barred when the subject is agentive, as in (218b), but possible when the subject is an inanimate argument, as in (218a). This prediction is borne out. The source of the difference is this: In its agentive variant, the argument structure of *storen* ‘to disturb’ equals other agentive transitive verbs: the subject argument is the highest ranked argument; whereas in its non-agentive variant, the argument ranking is reversed (the subject is the lower ranked argument).

As has been discussed extensively throughout the thesis, transitive verbs do not allow for the ordering pattern ‘object < subject’ in Dutch (with the exception of inherently reflexive verbs). This has been put down to the specific structural organisation of the verb phrase structure in Dutch in combination with

¹⁹⁶With the reverse ordering of subject and object, all sentences in (218) are grammatical.

the requirement that arguments must be unambiguously identifiable according to the conditions *Unambiguity of Argument Identification (UAI)*, which holds at the level of first merge, and *Unambiguity of Argument Identification at the higher phase level (UAI-phase)*, which holds at the CP level.

For other types of verbs, which show the ordering ‘object < subject’ already in their base structure (because this is the ranking in the argument structure of the verb), this ordering pattern is freely available in Dutch; although the reverse ordering pattern (which is achieved by raising of the subject to the specifier position of TP) is also possible.

Therefore, we conclude that the Dutch data featuring an ‘object < subject’ ordering with the subject pronoun *dat* ‘that’ does nicely fit into the general picture of available word order patterns for different verb types in Dutch and nothing extraordinary needs to be said to account for the data discussed in this section.

14.4 An open issue: Why are the ordering patterns ‘object_{PP} < subject’ and ‘subject < IO_{PP} < DO_{DP}’ not available as general patterns in Dutch?

It is textbook knowledge that Dutch, in contrast to German, does not allow for a free re-ordering of non-pronominal arguments in clause-internal positions. As far as the prohibition of a re-ordering of argumental DPs in transitive clauses is concerned, this behaviour is predicted by our approach described above: In Dutch, argumental DPs do not carry a subfeature *m*-mark on the uninterpretable case feature in their morpho-syntactic feature matrices; therefore, the positions in which the arguments are first merged have to be structurally distinguished so that unambiguous argument identification can be achieved according to the condition *Unambiguity of Argument Identification* as defined in chapter 9. Any syntactic representation in Dutch that contains movement of the object argument across the subject argument, which is not ‘repaired’ by (subsequent) raising of the subject argument, will lead to a crash at the higher phase level when the derivation is handed over to the interfaces. This is the case because unambiguous argument identification cannot be achieved, neither on the basis of morpho-syntactic features (presence of a relevant subfeature) nor on structural grounds (different structural domains for the arguments). Thus, the non-availability of re-ordering of argumental DPs in transitive clauses is predicted.

However, it has often been reported in the relevant literature that even prepositional object arguments cannot be scrambled across a DP argument in Dutch. How can this be captured in our approach?

Consider the specific nature of prepositional object arguments: They are of a specific syntactic category, namely they are PPs. However, they are cer-

tainly not specified for rich morphological case (which would be represented in the morpho-syntactic feature matrix by presence of the subfeature *m*-mark). Prepositional object arguments are also not ‘exceptional’ in the same sense as the quasi-argument *zich* of inherently reflexive verbs is in Dutch. For the quasi-argument *zich*, we have suggested that its exceptional status is represented by the subfeature ‘inherent’ in its morpho-syntactic feature matrix. Due to the presence of this subfeature, the quasi-argument *zich* can be unambiguously identified on the basis of its morpho-syntactic feature specification and, thus, can occur in front of a non-pronominal subject in clause-internal position in Dutch (because this does not result in a violation of the condition *Unambiguity of Argument Identification at the higher phase level (UAI-phase)* as defined in chapter 10).

If we accept this view, it is natural to assume that prepositional object arguments do not carry a subfeature which would allow for them to be unambiguously identified on the basis of their morpho-syntactic feature matrices according to the condition *Unambiguity of Argument Identification* as defined in chapter 9.

If this assumption is justified, the unavailability of the ordering pattern ‘object_{PP} < subject’ with non-pronominal arguments in transitive clauses in Dutch receives the same explanation as outlined in the previous paragraph for non-pronominal argumental DPs.

Unfortunately, however, our approach does not easily carry over to the ordering patterns found with verbs which select three arguments in Dutch. To be more concrete, our approach gives us the correct result, namely that the ordering ‘subject < IO_{PP} < DO_{DP}’ is excluded as a derived order, only if we make an additional assumption: We have to accept the assumption that the preposition indirect object argument (IO_{PP}) moves into the domain of the non-pronominal direct object DP (DO_{DP}) (rather than to the edge of the verb phrase). Without this assumption, our approach makes incorrect predictions. Consider the reason for this: If prepositional objects do not carry a subfeature in their morpho-syntactic feature matrices through which they would be unambiguously identified, we get a three-way layered verb projection (shell structure) with ditransitive verbs in Dutch. Now, if the IO_{PP} (which is the lowest ranked argument) moves into the structural domain of the DO_{DP}, this configuration must be ‘repaired’ (in the way discussed in chapter 10) before the higher phase level because IO_{PP} and DO_{DP} are not unambiguously identifiable on the basis of their morpho-syntactic feature specifications (they do not carry relevant subfeatures). The DO_{DP} moves to the outer specifier of *vP* ; however, the same type of ‘problem’ arises again (subject and DO are in the same structural domain and, thus, they cannot be unambiguously identified on the higher phase level) if the configuration is not ‘repaired’ by another application of movement. Thus, the subject rises to the specifier of TP, thereby the original order relation of the arguments is re-established, (219). This is a convergent structure at the CP level, *Unambiguity of Argument Identification*

at the higher phase level (*UAI-phase*) is not violated.

(219) [*dat* [_{TP} subj_k T [_{vP} DO_j e_k [_{VP} IO_i e_j [_{VP} e_i e_V] e_V]] V_v]]

However, a crucial weakness of this analysis is this: Our assumption that the lowest ranked argument (the IO_{PP}) moves into the structural domain of the DO_{DP} rather than to the edge of the vP is unwanted in a minimalist framework which is based on the assumption that (untriggered) movement always targets the outer specifier position of the vP. However, if we give up the assumption that the movement of the IO_{PP} is very local, our approach makes a wrong prediction. Consider the syntactic representation after two movements have applied (movement of the IO_{PP} to the outer specifier of the vP, subject raising to Spec,TP; the DO_{DP} stays in its base position) in (220).

(220) [*dat* [_{TP} subj_j T [_{vP} IO_i e_j [_{VP} DO [_{VP} e_i e_V] e_V]] V_v]]

According to the definition of the condition *Unambiguity of Argument Identification at the higher phase level (UAI-phase)*, this representation is convergent at the level of the CP because all arguments occupy different structural domains and, thus, can be unambiguously identified in accordance with *UAI-phase*.

Therefore, with these assumptions, it is predicted that the ordering pattern ‘subject < IO_i < DO e_i’ should be available as a general word order pattern with verbs which select for three arguments in Dutch – contrary to the facts, however. Consider (221).¹⁹⁷

- (221) (a) *dat Jan Marie om de krant vraagt*
 that Jan_{subj} Marie_{obj} for the newspaper_{PP} fragt
 ‘that Jan asks Mary for the newspaper’
 (Dutch; Neeleman and Weerman 1999, 135 (63a))
- (a’) **dat Jan om de krant Marie vraagt*
 that Jan_{subj} for the newspaper_{PP} Marie_{obj} fragt
 (Dutch; Neeleman and Weerman 1999, 135 (63a’))
- (b) *dat Jan Marie van zijn onschuld overtuigt*
 that Jan_{subj} Marie_{obj} of his innocence_{PP} convinces
 ‘that Jan convinces Marie of his innocence’
 (Dutch; Neeleman and Weerman 1999, 135 (63c))
- (b) *dat Jan van zijn onschuld Marie overtuigt*
 that Jan_{subj} of his innocence_{PP} Marie_{obj} convinces
 (Dutch; Neeleman and Weerman 1999, 135 (63c’))

Unfortunately, I do not see any solution of the problem at this point (apart from the assumption which has been made in connection with (219)) and we have to leave this issue open for further clarification in the future.

¹⁹⁷Note, however, Neeleman and Weerman’s (1999) (1999, 134f.) claim that selected PPs which carry the semantic role Goal have a freer distribution than Theme-PPs: scrambling across arguments is possible with the former but not with the latter.

15 Conclusion

In this study, I have presented an approach to the syntactic structure of the Germanic OV languages German and Dutch which tries to unify (some of the) base assumptions of a minimalist framework that assumes certain locality domains, namely ‘phases’ (based on Chomsky 2001*b*). Additionally, I have included insights into the structural organisation of VO versus OV languages which have been brought forward by Hubert Haider in a number of papers; however, these are based on a completely different model of grammar (for example, it is non-minimalistic and representational rather than derivational). The unification of these ideas in our approach was not without any problems; however, I am convinced that it is insightful to take this path.

The thesis consists of three parts. In the first part, which include chapters 3 to 7, the main focus was on the preliminaries that have motivated our approach: First, I have presented a thorough discussion of the distribution of weak object pronouns with respect to a non-pronominal subject in clauses that contain a verb which takes two arguments in German and Dutch. In this connection, it was shown that weak object pronoun movement is not as obligatory in German as is standardly assumed; at least it is not completely obligatory for many speakers of a southern variety of the language (including myself). As far as the general distribution pattern in German and Dutch is concerned, the well-known picture is this: in German, weak object pronouns (can) precede the subject argument in any type of clause (i.e., independent of the verb type). In Dutch, in contrast, the pattern ‘object_{pron.weak} < subject’ is not allowed with transitive verbs while it is unproblematic with unaccusative verbs and passivised verbs (however, in a later chapter of the thesis, section 14.2, this picture was refined: the reflexive quasi-argument *zich* of inherently reflexive verbs is free to precede the subject argument of any type of verb in Dutch).

After the discussion of the distributional patterns, the perspective of our investigation became a more theoretical one: In a couple of chapters, we were concerned with the question whether the Germanic OV languages own an intermediate functional projection (under a minimalist perspective, the answer to this question must be ‘yes, they do’, cf. chapter 6) and whether this intermediate functional projection is head-initial or head-final. Principled (theoretical) objections against the assumption of right-headed intermediate functional projections were discussed in connection with Bobaljik’s (1995) ‘adjacency approach’ in chapter 4.

The issue of whether or not there is a head-initial functional projection, which is targetted by movement to its specifier position, present in German was addressed under two different points of view. The first one, which was taken in chapter 5, was mainly concerned with the question whether weak pronoun movement across the subject argument shows the same behaviour as scrambling with respect to a number of properties which have been argued to be difficult when assuming a head-initial functional specifier position in the mid-

field of the German clause (these issues have been brought up by Hubert Haider). We have discussed (non-)opacity for extraction and topicalisation of a complex constituent which contains a scrambled argument or weak pronouns respectively. However, with respect to weak pronouns, no entirely clear picture has arisen because these tests could not be easily applied to weak object pronouns which have undergone weak pronoun movement. With respect to (non-)opacity for extraction, this test could only be indirectly applied because weak pronouns are, by definition, non-complex elements and, therefore, nothing can be extracted from them. The difficulty with respect to topicalisation of a complex constituent that contains a moved weak object pronoun is of a different type: topicalising a complex constituent which includes a subject of a transitive verb which is preceded by a moved weak object pronoun is impossible in German. However, for independent reasons, even the possibility to topicalise a complex constituent which contains the subject of a transitive clause (without weak pronoun movement of an object pronoun) is very limited in the language.

Another perspective on the issue whether there is movement to an intermediate functional specifier position in German is taken by proposals which assume raising of the entire (remnant) *v*P to this functional specifier position. One representative of analyses along these lines (Mohr 2004) was discussed – and rejected – chapter 7. In a nutshell, the most severe disadvantage of approaches like these is this: When the *v*P has been moved to Spec,TP it is in the specifier position of an intermediate functional projection and would therefore, according to standard assumptions, be opaque for extraction (like other elements in functional specifier positions). This well-established generalisation must be given up in approaches along these lines because otherwise even the derivation of simple non-embedded verb-second clauses with an initial argument would be blocked.

In the second part of the thesis, my own approach was developed.

The proposal mainly concentrates on the internal organisation of the lexical projection of the verb as well as on the specific mechanism of argument identification, and the interaction of both. It has been argued throughout the thesis that the identification (licensing) of arguments is directly related to the morpho-syntactic feature specification of arguments in the language as well as to the actual shape of the syntactic structure which is merged.

The argument proceeds along the following lines: If in an OV language the arguments cannot be unambiguously identified on the basis of their morpho-syntactic feature specifications, then a syntactic structure is projected which is organised in such a way that it undertakes the function of unambiguously identifying (i.e. distinguishing) the arguments.

We basically follow Haider's (2004; 2008*a*; 2009) reasoning concerning argument identification. However, we suggest the inclusion of an additional factor which allows for a differentiation between German and Dutch, namely the relevance of morpho-syntactic case features for argument licensing. To put it in more concrete terms, we have argued that languages with rich case mor-

phology (in the sense of Haeberli 2002) own a subfeature ‘m-mark’ on the uninterpretable case feature *uCase* of argumental DPs. The presence of the subfeature m-mark has far-reaching consequences for the projection of the verb phrase structure in the course of syntactic derivation as well as for argument identification at a later relevant level (the CP phase level). The relevant conditions on argument identification (licensing) which refer to this subfeature are *Unambiguity of Argument Identification (UAI)* and *Unambiguity of Argument Identification at the higher phase level (UAI-phase)*.

Thus, in a language like Dutch, which has no subfeature ‘m-mark’ on its DPs, the syntactic structure has to provide a structurally unique position for each of the arguments and this means that a structure is merged so that each of the arguments occupies a different structural domain inside the verbal projection. In the resulting structure, subject and object(s) are differentiated by the structural domain in which they are merged. It is a crucial part of my argumentation that the layered verb phrase structure which is projected in Dutch is the result of the combination and interaction of various factors: (i) the nature of the mechanism of argument identification, (ii) the headedness of the lexical projections and (iii) the poverty of the morphological case marking. If, on the other hand, an OV language has the subfeature m-mark on its arguments, an unlayered verbal projection is sufficient for the licensing of arguments. A structural differentiation of subject and object(s) is not necessary and, thus, a non-layered verb phrase structure is merged (for reasons of economy). This is the situation found in German.

With respect to the movement of weak object pronouns we have assumed that the movement operation is syntactically untriggered, and thus it can freely apply (as the landing position of weak pronoun movement we detected the outer specifier position of the verb phrase). However, the resulting syntactic configuration (representation) must be evaluated and justified at the higher phase level (the CP) where it is subject to the condition *Unambiguity of Argument Identification at the higher phase level (UAI-phase)*, which requires that arguments must be unambiguously identifiable (and identified) also at the level of CP. Again, unambiguous argument identification can be achieved either on the basis of the morpho-syntactic feature matrix of the argument or on the basis of differentiating different structural domains for the arguments. Note that the justification of the movement operation at the higher phase level is determined representationally, rather than derivationally. What is examined there is the resulting configuration, not the individual derivational steps which led to it nor their ‘triggers’.

Thus, in Dutch, a representation in which a moved weak object pronoun precedes the subject of a transitive verb at the level of the CP is ruled out because the arguments cannot be unambiguously identified and the reasons for this are that they are neither identifiable on the basis of their morpho-syntactic feature specifications nor by virtue of being the only argument inside a given structural domain (because the moved weak object pronoun and the subject argument occupy the same structural domain); this is a violation of the condition *UAI-phase* and induces ungrammaticality.

In the third part of the thesis (chapters 11 to 14), some prerequisites of our approach as well as some of its consequences have been discussed. Most importantly, we have suggested in chapter 12 that in our approach, the ‘assignment’ of structural accusative case in German is unproblematic if one assumes a conception of the syntactic operation Agree which allows for a one-to-many relation between one probe (the T head) and multiple goals (the subject argument and the object argument), as has independently been suggested by Hiraiwa (2001*a*, to-appear, etc.). Furthermore, we have discussed the phase status of the transitive verb phrase in Dutch on the basis of data stranding of the focus particle *maar* on the edge of the *vP* in Dutch (Barbiers 1995) (chapter 13). The richness (or poverty, respectively) of the nominal and pronominal case system of German and Dutch (in the sense of Haeblerli 2002) has been in the center of our discussion in section 11. Finally, we have evaluated some instances of the ordering pattern ‘object < subject’ in Dutch under the perspective whether or not they are difficult for our approach as described in the thesis (chapter 14).

To conclude, not all difficulties which our approach is faced with could be completely solved (for example, in some respects the minimalist framework and Haider’s 2004; 2009, etc. base assumptions are hardly compatible). However, the perspective of our analysis seems to be promising because, in my view, it can only be desirable that insights coming from both kinds of approaches are brought together under a common perspective.

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