

**OBLIGATORY REFLEXIVITY IN AFRIKAANS:
A MINIMALIST APPROACH**

by

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DECLARATION

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ABSTRACT

This study focuses on the phenomenon of obligatory reflexivity in Afrikaans. Despite a considerable literature on this phenomenon as it is reflected in other languages, the Afrikaans data have not received any systematic attention. Hence, a first major aim is to address this empirical gap. Secondly, informed by the Afrikaans data, the study aims to develop an analysis that can provide a conceptually adequate account for the facts, and that is amenable to extension beyond Afrikaans. The proposed *nominal shell analysis (of obligatory reflexivity)* (NSA) is developed within, on the one hand, the general framework of Minimalist Syntax and, on the other hand, the specific framework of proposals about word order and linearisation phenomena in Germanic languages worked out in, amongst others, Holmberg (2000), Biberauer (2003), Biberauer & Richards (2006), Biberauer & Roberts (2006), and Biberauer et al. (2009, 2011). The basic idea underlying the NSA is that two expressions which enter into an obligatory coreferential relationship are initially merged into a nominal shell structure headed by an identity focus light noun *n*. It is argued that the identity focus *n* belongs to a natural class of identificational elements which also includes a contrastive focus *n*, a presentational focus *n*, a possessor focus *n*, and a quantity focus *n*. In terms of the NSA, the identity focus *n* takes a reflexive pronoun as its complement, with such a pronoun being analysed as a syntactic compound that is derived by merging a category-neutral lexical root $\sqrt{\text{PRON}}$ with a D constituent containing unvalued ϕ -features. This means, then, that a reflexive pronoun is defined in syntactic terms and not in terms of special lexical features. The reflexive is subsequently raised to the identity focus *n* – which forms the locus of the suffix *-self* associated with morphologically complex reflexive pronouns – where it is spelled out as part of the compound *n* that is derived in this manner. The antecedent expression is next merged as the specifier of the compound light noun, resulting in a configuration where the antecedent can value the ϕ -features of the reflexive, with the *n* serving as mediator. In this configuration, the ϕ -valued pronoun is semantically interpreted as an anaphor and the nominal expression in the specifier position of the *n*P as its antecedent; that is, the pronoun is interpreted as obligatorily coreferential with this nominal expression. The details of the NSA and its empirical and conceptual consequences are worked out with reference to six constructions in which reflexive pronouns can occur: verbal object constructions, prepositional object constructions, double object constructions, infinitival constructions, small clause constructions, and possessive constructions. Brief attention is also given to the possibility of extending the ideas underlying the NSA to (i) languages of the Southern Bantu family, where the reflexive element surfaces as a verbal affix, and (ii) two further types of construction in Afrikaans which seem amenable to such a nominal shell approach, namely floating quantifier constructions and expletive *daar* (“there”) constructions.

OPSOMMING

Hierdie studie fokus op die verskynsel van verpligte refleksiwiteit in Afrikaans. Ten spyte van 'n aansienlike literatuur oor die realisering van hierdie verskynsel in ander tale, is daar nog geen sistematiese aandag gegee aan die Afrikaanse data nie. 'n Eerste hoofmerk van die studie is derhalwe om hierdie empiriese leemte te vul. 'n Tweede hoofmerk is om, in die lig van die Afrikaanse data, 'n analise te ontwikkel wat 'n konseptueel toereikende beskrywing en verklaring van die feite kan gee, en wat hopelik na ander tale uitgebrei kan word. Die voorgestelde *nominale skulp-analise (van verpligte refleksiwiteit)* (NSA) word ontwikkel binne, enersyds, die algemene raamwerk van Minimalistiese Sintaksis en, andersyds, die spesifieke raamwerk van voorstelle oor woordvolgorde en lineariseringsverskynsels in Germaanse tale soos uiteengesit in, onder meer, Holmberg (2000), Biberauer (2003), Biberauer & Richards (2006), Biberauer & Roberts (2006), and Biberauer et al. (2009, 2011). Die basiese idee onderliggend aan die NSA is dat twee uitdrukkings wat in 'n verhouding van verpligte koreferensie staan, inisieel saamgevoeg word in 'n nominale skulpstruktuur met 'n identiteitsfokus-*ligte* naamwoord *n* as hoof. Daar word geargumenteer dat hierdie *n* tot 'n natuurlike klas van identifikatoriese elemente behoort, waaronder ook 'n kontrasfokus-*n*, 'n presentasiefokus-*n*, 'n besittersfokus-*n*, en 'n kwantiteitsfokus-*n*. Volgens die NSA neem die identiteitsfokus-*n* 'n refleksiewe voornaamwoord as komplement, waar so 'n voornaamwoord ontleed word as 'n sintaktiese samestelling wat afgelei word deur die samevoeging van 'n kategorie-neutrale leksikale wortel $\sqrt{\text{PRON}}$ met 'n *D* wat beskik oor ongewaardeerde ϕ -kenmerke. 'n Refleksiewe voornaamwoord word dus in sintaktiese terme gedefinieer en nie in terme van spesiale leksikale kenmerke nie. Die refleksief word vervolgens gehys na die identiteitsfokus-*n* – die lokus van die suffiks *-self* wat geassosieer word met morfologies komplekse relatiewe voornaamwoorde – waar dit uitgespel word as deel van die *n*-samestelling wat op dié manier afgelei word. Die uitdrukking wat as antesedent dien, word op sy beurt saamgevoeg as die spesifiseerder van die *n*-samestelling. Dit lei tot 'n konfigurasie waarin die antesedent waardes aan die ϕ -kenmerke van die refleksief kan toeken – via die *n*, wat dus as 'n tussenganger optree. In hierdie konfigurasie word die ϕ -gewaardeerde voornaamwoord semanties geïnterpreteer as 'n anafoor en die nominale uitdrukking in die spesifiseerderposisie van die *nP* as sy antesedent; met ander woorde, die voornaamwoord word geïnterpreteer as verplig koreferensieel met dié nominale uitdrukking. Die besonderhede van die NSA en die empiriese en konseptuele konsekwensies daarvan word uitgewerk aan die hand van ses konstruksies waarin refleksiewe voornaamwoorde kan voorkom: verbale-objekkonstruksies, preposisionele-objekkonstruksies, dubbelobjekkonstruksies, infinitiefkonstruksies, beknopte-sinkonstruksies, en besitskonstruksies. Daar word ook kortliks aandag gegee aan die moontlikheid om die idees onderliggend aan die NSA uit te brei na (i) tale van die Suidelike Bantoe-familie, waar die refleksiewe element voorkom as 'n verbale affiks, en (ii) twee verdere konstruksies in Afrikaans wat moontlik aan die hand van so 'n nominale skulp-benadering ontleed kan word, nl. swewende-kwantifiseerderkonstruksies en ekspletiewe-*daar*-konstruksies.

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Chapter 1

INTRODUCTION

1.1 Focus of the study

This study focuses on the phenomenon of obligatory reflexivity in Afrikaans. Despite a considerable literature on this phenomenon as it is reflected in other languages, the Afrikaans data have not received any systematic attention. On the one hand, then, the study aims to address this empirical gap. On the other hand, informed by the Afrikaans data, a novel analysis will be proposed to account for the facts, one which seems amenable to extension beyond Afrikaans. The analysis will be developed within the general framework of Minimalist Syntax.

The study is structured as follows. Chapter 2 provides a detailed and largely non-formalistic description of the facts relating to Afrikaans reflexive pronouns and the various constructions in which they can occur. In Chapter 3 an attempt is made to develop a minimalist analysis of these facts, one which may be referred to as the “nominal shell analysis (of obligatory reflexivity)” (NSA). The question throughout will be whether the NSA is (i) empirically adequate in the sense that it can account for the relevant facts of Afrikaans and (ii) conceptually adequate in the sense that it incorporates theoretical devices which are either provided by or compatible with the basic assumptions and concepts of Minimalist Syntax. The main findings of the study are summarised in Chapter 4, the concluding chapter. In that chapter, brief attention is also given to the possibility of extending the general ideas underlying the NSA to, on the one hand, two seemingly unrelated phenomena in Afrikaans and, on the other hand, the phenomenon of obligatory reflexivity in languages that are typologically very different from Afrikaans, specifically languages belonging to the Southern Bantu family.

The remainder of the present chapter is devoted to two issues. Firstly, a brief clarification is given of some basic concepts concerning reflexivity and related phenomena which, although widely used, are often (partially) misunderstood. Secondly, an equally brief outline is given of the theoretical context of the study. This outline is deliberately concise, and serves merely to supply the general background for the discussion in Chapter 3. It is explicitly not the aim of this study to provide a detailed, critical discussion of either the assumptions and devices of (the

various models of) Minimalist Syntax, or the empirical and conceptual merits and shortcomings of existing generative analyses of reflexivity and related phenomena. References to works providing such discussions will be provided below and also in Chapter 3.

1.2 Basic concepts relating to coreferentiality

Linguistic utterances are commonly used for talking about states of some world, whether the real or an imagined world. Referents in that world – say, objects or persons – are picked out by means of so-called referential expressions (as distinct from referring expressions; see below). For instance, *John*, *the girl*, *herself* and *him* in the utterances in (1a-d) are all examples of referential expressions.

- (1) a. John hurt the girl.
b. The girl hurt herself.
c. John says that the girl hurt him. (i.e. someone other than John)
d. John says that the girl hurt him. (i.e. John himself)

Referential expressions like those in (1) fall into two broad kinds: those that are “referentially independent” and those that are “referentially dependent”. Note that the entities that are picked out by referential expressions (that is, their referents) are not independent of the mental states of the language user. This means that any referential relationships that are established through the use of linguistic expressions are internal to the language user. In short, there does not exist a “referential relationship” between the expressions of language on the one hand, and a world outside of and separate from the mental states of the language user on the other.¹ In this study, the phrase “a linguistic expression refers” is conveniently used for the more precise phrase “the language user refers to an entity or state of affairs in his conceptualised (or cognitive) reality through the utterance of a linguistic expression”.

The relations of referential (in)dependence among certain expressions in utterances have been a core topic of investigation in generative linguistics over the past almost fifty years. These relations can be described by means of the following approximate generalisations.² First generalisation: some referential expressions can be used independently – that is, solely by virtue of their intrinsic meaning – to pick out a referent. Both *John* and *the girl* in the utterances in (1)

are examples of such an expression, generally known as a “referring (r)-expression”. This means, then, that r-expressions are referentially independent.

Second generalisation: some referential expressions, generally known as “anaphors”, cannot be used to pick out a referent solely by virtue of their own intrinsic meaning; they are referentially dependent on some other expression in the utterance. An example of an anaphor is the reflexive pronoun *herself* in (1b); in this utterance, *herself* gets its reference from the expression *the girl*, the latter known as the “antecedent” of the anaphor. An anaphor is said to be “coreferential” with its antecedent. Note, however, that although the anaphor picks out the same referent as the antecedent, it does so derivatively, that is, via the antecedent. In this sense, then, the anaphor *herself* in (1b) enters into a (derivative) coreferential relationship with its antecedent *the girl*.

Third generalisation: some referential expressions can be used both like r-expressions and like anaphors. An example of these expressions, generally known as “pronominals”, is the personal pronoun *him* in (1c,d). In (1c) *him* is used, just like an r-expression, to refer to someone in the world solely by virtue of its own intrinsic meaning; that is, it independently picks out a referent other than that picked out by *John*, itself an r-expression. In (1d), however, *him* is used like an anaphor: taking *John* as its antecedent, it derivatively picks out the same referent as that picked out by *John*.

Fourth generalisation: the establishment of a coreferential relationship between a referentially dependent expression and an antecedent is subject to several grammatical conditions. One such condition is that the referentially dependent expression must agree with its antecedent in regard to ϕ -features, that is, the formal grammatical features of person, number and gender. This means that (the values of) the ϕ -features of the antecedent must be exactly the same as that of the referentially dependent expression, as is the case in (1b). The utterances in (2), by contrast, do not meet this requirement, hence their unacceptability.

- (2) a. *The girl hurt myself.
b. *The girl hurt themselves.
c. *The girl hurt himself.

A second condition is that a referentially dependent expression – more specifically, an anaphor – and its antecedent must not be “too far apart”; in technical terms, they must both occur in the same “local domain” in a sense that has to be made precise. For example, in (3a) the anaphor *himself* and the r-expression *the boy* are both contained in the subordinate clause. This utterance is acceptable with *himself* taking *the boy* as its antecedent; in fact, this is the only possible interpretation of the anaphor. In (3b), by contrast, *himself* forms part of the subordinate clause whereas *the boy* serves as the subject of the main clause. In this case, *himself* cannot enter into a coreferential relationship with *the boy*, as is illustrated by the unacceptability of the utterance. In short, in (3a) the anaphor and its antecedent are “close enough” for a coreferential relationship to be established, but not in (3b).³

- (3) a. John said that the boy hurt himself.
 b. *The boy said that Mary hurt himself.

Fifth generalisation: within a given local domain, the interpretation of an anaphor differs systematically from that of a pronominal in the sense that the anaphor must take its reference from an antecedent in that domain whereas the pronominal cannot. This is illustrated in (4).⁴

- (4) a. John said that the boy hurt himself. (himself = the boy)
 b. John said that the boy hurt him. (him = John or some other male individual)

Various attempts have been made in the generative literature to provide a systematic account of the above generalisations. A few background remarks on some of these accounts and the theoretical frameworks in which they have been presented are given in the next subsection. The sole purpose of these remarks is to provide, in brief outline, the relevant theoretical context for the discussion in Chapter 3.

1.3 Theoretical context

Any proper account of the generalisations mentioned above has to provide answers to the following questions, amongst others:

- A. By what formal means can the distinction between anaphors, pronominals and r-expressions be described?

- B. By what formal means can the establishment of a coreferential relationship between an anaphor (specifically, a reflexive) and some other expression (its antecedent) be accounted for?

The most influential account of the referential relationships involving anaphors, pronominals and r-expressions has been the Binding theory set out in Chomsky (1981) and developed further in, for example, Chomsky (1982, 1985, 1986) and Chomsky and Lasnik (1993, in Chomsky 1995). As regards question A, this theory incorporates a threefold distinction in terms of the lexical features [a(naphor)] and [p(ronominal)]: anaphors are described as [+a, -p], pronominals as [-a, +p] and r-expressions as [-a, -p]. As regards question B, the version of the Binding theory presented in Chomsky (1995) incorporates the following principle of anaphor interpretation:

- (5) Given a local domain D, ... if α is an anaphor, interpret it as coreferential with some c-commanding phrase in D. (1995:100)

The principle in (5) presupposes the concept of ϕ -agreement referred to above: the anaphor must agree with its antecedent in regard to ϕ -features (person, number, gender). In the standard version of the Binding theory, an anaphor α is said to be “co-indexed” with an expression β – the antecedent of α – if the ϕ -features of α agree with those of β . This is conventionally indicated by means of the subscripted letters i, j, k, etc.; for example, α agrees with β in [... γ_j ... β_i ... α_i ...], but not with γ . In more precise terms, co-indexing means that the antecedent’s “referential index” is assigned to the anaphor. Chomsky (1995:217, n. 53) states that “(i)ndices are basically the expression of a relationship, not entities in their own right”. Reuland & Everaert (2001:635) characterise such an index as representing “perhaps, the sole aspect of a lexical item that is visible for whatever mental faculty assigns reference”; Reuland (2001:440) furthermore describes the concept ‘index’ as “in principle semantic”. These views highlight a significant problem facing analyses of coreferentiality: how to “spread the burden” of accounting for this phenomenon between the domains of syntax and semantics (and/or pragmatics).

The principle in (5) also incorporates the concept ‘c(onstituent)-command’: an anaphor must be c-commanded by its antecedent, where c-command entails the following structural relationship (Chomsky 1995:35):

- (6) A constituent A c-commands a constituent B if A does not dominate B and every C that dominates A also dominates B.

The concept ‘local domain’ in the principle in (5) addresses the point that was made in the previous subsection: for a coreferential relationship to be established, an anaphor and its antecedent must not be structurally “too far apart”. The precise content of this concept was, and still is, a major topic in generative research on the referential relations between nominal expressions. In the standard Binding theory, the restriction on the “structural distance” between anaphors and their potential antecedents is expressed in terms of the concept ‘government’, and “local domain” is equated with “governing category”.⁵

The Binding theory formed a module of the Government & Binding (GB) theory, the leading theory of Universal Grammar within the generative framework during the 1980s. In light of several non-trivial empirical and conceptual problems, however, it has become clear since the early 1990s that GB theory cannot be maintained.⁶ Hence an attempt was made to develop an alternative to GB theory, an approach that has since come to be known as Minimalist Syntax. In this new approach, many of the core concepts of GB theory have been eliminated, amongst others ‘government’ as a basic structural relation, ‘barriers’, ‘d-structure’, ‘s-structure’, ‘indices’ and ‘traces’. Aside from the elimination of concepts central to GB Binding theory, it is important to note that this approach to the binding phenomena also failed to account for a range of empirical facts (cf. e.g. Reuland & Everaert 2001:641-5; Zwart 2002; Hornstein et al. 2005:ch. 8 and the references cited there). Taken together, these theoretical and empirical considerations raised serious questions about the merit of the GB Binding theory. The elimination of government, in particular, required a reconsideration of binding principles such as the one in (5) in which “local domain” is defined in terms of this concept.

Since the early 1990s, various attempts have accordingly been made to develop an alternative theory of binding phenomena that would, in the first instance, be compatible with the assumptions and concepts of the minimalist approach and that could additionally overcome the empirical flaws of the GB Binding theory. Among these are the analyses put forward by Reinhart & Reuland (1993), Reuland (2001), Kayne (2002), Zwart (2002), Heinat (2005, 2006a,b) and Hicks (2006). Although going a long way towards overcoming many of the conceptual and empirical problems associated with the GB Binding theory, these analyses are not unproblematic.

For instance, a conceptual objection that arises in relation to the analyses of Reinhart & Reuland (1993) and Zwart (2002) concerns the means by which coreferential relationships are established. Both these analyses appeal to features ([reflexive] and [referential] in the case of Reinhart & Reuland, and [coreferential] in the case of Zwart) which cannot plausibly be viewed as part of a minimalist inventory of *formal* features.

Hicks's (2006) analysis similarly appeals to a particular feature that enters into the establishment of a coreferential relationship. On his analysis, two types of "semanticsyntactic" features, [OP(erator)] and [VAR(iable)], are required for establishing operator-variable dependencies at the level of Logical Form (LF). The value of [VAR] serves to identify one DP with respect to another: if a DP π acquires its [VAR]-value from a DP β carrying a valued [VAR]-feature, then π is interpreted at LF as being referentially dependent on β . Besides being a new type of feature, at least from a narrow minimalist syntactic perspective, the values that are associated with [VAR] and the manner in which they are assigned, are not unproblematic, as Hicks (2006:117 n. 13) acknowledges.⁷

As regards Heinat's (2005, 2006a,b) analysis, Oosthuizen (2007) points out several potentially serious problems relating to, amongst others, ϕ -valuation. In terms of Heinat's analysis, a coreferential relationship can only be established when an anaphor gets its ϕ -features valued by an appropriate antecedent expression. This view also forms the basis of the nominal shell analysis of obligatory reflexivity that will be put forward in Chapter 3 of this study. However, in Heinat's framework, there is no formal way of distinguishing between two pronominal expressions which have the same ϕ -values but which acquired these values in different ways (one entering the derivation with its ϕ -values already specified and the other obtaining its values via agreement with some other expression in the structure). This is clearly problematic in the context of a theory where the establishment of a coreferential relationship crucially depends on being able to identify the source of an anaphor's ϕ -values. As pointed out by Oosthuizen (2007), Heinat's analysis moreover makes incorrect predictions when it is extended to, for example, reflexive small clause constructions in Afrikaans such as the one in (7). In Heinat's framework, it is predicted that the pronoun *hom* ("him") in (7) is interpreted as non-coreferential with the subject *Jan*; this prediction is incorrect.

- (7) Jan hou hom 'n kenner.
Jan behaves him an expert
“John puts himself forward as an expert”

In short, the existing analyses of binding phenomena all face, to differing extents, conceptual and/or empirical problems. This does not imply, however, that these analyses are without merit. In fact, some of the ideas employed by, specifically, Heintz (2006a,b) and Zwart (2002) are incorporated into the nominal shell analysis of (obligatory) reflexivity that is proposed in Chapter 3. This analysis is developed within the general framework of Minimalist Syntax (Chomsky 2000, 2001, 2004, 2005a, 2005b, 2006) and the specific framework of proposals about word order and linearisation phenomena in Germanic languages set out in, amongst others, Holmberg (2000), Julien (2002), Biberauer (2003), Biberauer & Richards (2006), Biberauer & Roberts (2006), Biberauer et al. (2009, 2011) and Roberts (2010).

The basic idea underlying the NSA is that two expressions which enter into an obligatory coreferential relationship are initially merged together into the same constituent. This is hardly a novel idea. It forms the basis of several analyses, often informally referred to as “big DP analyses”, that have been proposed to account for a variety of dependency relationships between expressions. Such analyses include Szabolsci’s (1984) analysis of possession constructions in Hungarian, Kayne’s (1994) analysis of relative pronouns and the nominal expressions with which they are semantically associated, Uriagereka’s (1995) analysis of clitic doubling and Cecchetto’s (1999) analysis of clitic dislocation in Romance languages, Zwart’s (2002) analysis of anaphors and their antecedents, Boeckx’s (2003) analysis of resumptive pronouns and their antecedents, Zeller’s (2008) analysis of subject markers in Bantu, and Kayne’s (2008) analysis of expletive *there* and its associate. What is novel in the context of the present study, however, is the manner in which the above idea is implemented in the proposed analysis. It will be argued that the NSA can provide an empirically adequate account of the facts of obligatory reflexivity without appealing to any theoretical devices or features that are not provided by or that are incompatible with the basic assumptions and concepts of Minimalist Syntax. It will moreover be argued that a generalised nominal shell approach makes it possible to give a unifying account of various (often seemingly unrelated) phenomena, including the relationship between PRO and its antecedent in subject and object control constructions, between a possessive pronoun and the

expression representing the possessor, between a floating quantifier and its antecedent, and between the expletive pronoun *daar* (“there”) and its associate.

Having briefly introduced the conceptual and theoretical background to this study, our first objective will now be to give a systematic exposition of the empirical facts that are central to it, namely the facts of obligatory reflexivity in Afrikaans.

Chapter 2

REFLEXIVES AND REFLEXIVE CONSTRUCTIONS IN AFRIKAANS

2.1 Introductory remarks

This chapter provides a largely non-formalistic description of the various reflexive pronouns in Afrikaans and the constructions in which they can occur; these represent some of the facts which have to be accounted for by a proper syntactic theory of obligatory reflexivity.

Before proceeding, a few remarks are in order about the terms “construction” and “reflexive construction”. The term “construction” is used here in an informal, non-technical way, in line with the following comments by Chomsky (1995:170):

The notion of grammatical construction is eliminated [in minimalist syntax – JO], and with it, construction-particular rules. Constructions such as verb phrase, relative clause, and passive remain only as taxonomic artefacts, collections of phenomena explained through the interaction of the principles of UG, with the values of parameters fixed.

The term “reflexive construction” is similarly used in a non-technical way as a convenient label to refer to a collection of phenomena involving the syntactic distribution of reflexives (cf. also Rizzi 2010:3). Moreover, describing a particular construction as “reflexive” when it contains a reflexive pronoun, does not necessarily entail that it cannot also be used with a non-reflexive pronoun, as will be illustrated below.

2.2 Reflexives

Afrikaans items belonging to the traditional lexical category of reflexives (or reflexive pronouns) come in two forms:¹ (i) morphologically simplex forms which are indistinguishable from personal pronouns displaying accusative case, and (ii) morphologically complex forms where the pronoun takes the suffix *-self*.² The various forms are shown in the table in (1) below.³

In older varieties, and also some present-day varieties like those spoken in the north-western parts of South Africa, the suffix *-self* can take the form *-selwers*. *Sig* and *sigself/sigselwers* (third person forms lacking a gender specification) also occur, but are mainly associated with older varieties. Current use of the reflexive *sig(self)* is occasionally found when the standard

(1) Table of reflexive pronouns in Afrikaans

Person	Number	Gender	Simplex	Complex	Formal
1	SG	–	my	myself	–
1	PL	–	ons	onself	–
2	SG	–	jou	jouself	u/yourself
2	PL	–	julle/jul	julleself/julself	u/yourself
3	SG	M/N	hom	homself	–
3	SG	F	haar	haarself	–
3	PL	M/F/N	hulle/hul	hulleself/hulself	–

(SG = singular; PL = plural; M = masculine; F = feminine; N = neuter.)

third person masculine form *hom* is deliberately avoided in contexts where the reflexive takes as its antecedent an expression which is unspecified for gender, as illustrated in (2).

- (2) a. Die gedig_i leen sig(self)_i tot verskeie interpretasies.
the poem lends itself to several interpretations
“The poem lends itself to several interpretations”
- b. Die Vroueliga_i distansieer sig(self)_i van enige vorm van diskriminasie.
the women-league distances itself from any form of discrimination
“The Women League dissociates itself from any form of discrimination”

Although Afrikaans has a third person singular neuter pronoun, *dit* (“it”), this form cannot be used as a reflexive as illustrated by the unacceptability of the examples in (3); in these cases, as in the examples in (2), the standard form of the reflexive is *hom*.

- (3) a. *Die hond_i het dit(self)_i hees geblaf.
the dog has it(self) hoarse barked
- b. *Die storm_i sal dit(self)_i uitwoed.
the storm will it(self) spend
- c. (Ek onthou daardie toneel.) *Dit het dit(self) afgespeel in die kerk.
(I remember that scene.) it has it(self) out-played in the church

2.3 Reflexive constructions

2.3.1 Verbal object constructions

Several constructions in Afrikaans can be informally described as “reflexive” in the sense that they contain pronominal forms (i) which are not (and sometimes cannot be) used on their own to identify a referent and (ii) which are (and sometimes have to be) interpreted reflexively (or, in broader terms, anaphorically; cf. Chapter 1). One such construction is illustrated by the examples in (4); in each case, the pronoun obligatorily enters into a coreferential relationship with the subject of the sentence.

- (4) a. Die vrou_i ontferm haar_i / *haar_j oor die kinders.
 the woman pities her over the children
 “The woman takes pity on the children”
- b. Jan_i het hom_i / *hom_j verset teen die aanval.
 Jan has him resist against the attack
 “Jan resisted the attack”
- c. Die seuns_i moet hulle_i / *hulle_j gedra.
 the boys must them behave
 “The boys must behave themselves”

The verbs in (4a-c) belong to the class of “inherently reflexive” verbs. These are verbs which are semantically intransitive in that they lack a complement functioning as an argument, yet at the same time syntactically transitive in that they select a reflexive as their complement.⁴ With these verbs the reflexive is standardly used without the *-self* suffix, although *-self* forms are commonly found in everyday speech and often also in written texts.⁵

Since the reflexive complement selected by an inherently reflexive verb does not function as a argument – in Buring’s (2005:22) words, it is “semantically inert” – it cannot be replaced with a full nominal expression. This is illustrated by the unacceptability of the example in (5b); that the verb requires a reflexive complement is shown by the difference in acceptability between (5a) and (5c).⁶

- (5) a. Jan_i het hom_i gedra.
 Jan has him behave
 “Jan behaved himself”

- b. *Jan het die seun gedra.
 Jan has the boy behave
- c. *Jan het gedra.

Some other characteristics of semantically inert reflexives are that they cannot be fronted and, as implied by (5b), cannot be coordinated or right-node raised in coordinate structures where one of the conjoined clauses contains a verb which is not inherently reflexive.⁷ These characteristics are illustrated by the unacceptability of the examples in (6). The reflexive has been fronted in the focalisation construction in (6a) and the passive construction in (6b), coordinated with another (pro)nominal expression in (6c), and right-node raised in (6d).

- (6) a. *Hom_i, het Jan_i gedra.
 him has Jan behave
- b. *Hom_i is gedra deur Jan_i.
 him was behaved by Jan
- c. *Jan_i gedra hom_i en haar / Marie / die meisie.
 Jan behaves him and her / Marie / the girl
- d. *Jan_i gedra en Pieter_j haat hom_i.
 Jan behaves and Pieter hates him

Consider next the class of semantically transitive verbs in Afrikaans. This class includes three subclasses which, although not inherently reflexive, can all occur in reflexive constructions. One subclass comprises syntactically transitive verbs which can take both morphologically complex and simplex reflexives as their complement. The construction involving verbs of this subclass is illustrated by the examples in (7) and (8);⁸ notice that the simplex form of the pronoun can be interpreted reflexively as well as non-reflexively, whereas the *-self* form can only be interpreted reflexively.⁹ As illustrated by the unacceptability of the (b) sentences, these verbs cannot be used without a syntactic complement.

- (7) a. Jan_i het homself_i / hom_i / hom_j beseer.
 Jan has himself / him hurt
 “John hurt himself / him”
- b. *Jan het beseer.

- (8) a. Marie_i kon haarself_i / haar_i / haar_j nie bedwing nie.
 Marie could herself / her not control NEG
 “Marie couldn’t restrain herself / her”
 b. *Marie kon nie bedwing nie.

The members of the second subclass of semantically transitive verbs can also take both morphologically complex and simplex reflexives as their syntactic complement. However, unlike verbs of the type illustrated in (7) and (8), the verbs of this second class do not require a syntactic complement. Consider the examples in (9) and (10). In the (a) sentences, the verb selects a pronoun as its syntactic complement; the *-self* form of the pronoun is interpreted as a reflexive, whereas the simplex form can be interpreted reflexively and non-reflexively. When these verbs are used without a syntactic complement, as in the (b) examples, the interpretation is the same as that of the corresponding sentence containing a reflexive.¹⁰

- (9) a. Jan_i skeer homself_i / hom_i / hom_j elke oggend.
 Jan shaves himself / him every morning
 “Jan shaves himself / him every morning”
 b. Jan skeer elke oggend.
- (10) a. Marie_i het haarself_i / haar_i / haar_j na die venster toe gedraai.
 Marie has herself / her towards the window to turned
 “Marie turned herself / her towards the window”
 b. Marie het na die venster toe gedraai.

Semantically transitive verbs of the third subclass are similar to those of the class illustrated in (7) and (8) in that they require a syntactic complement, which moreover can be in the form of a morphologically simplex or complex pronoun. As in all the previous cases, the complex form of the pronoun is obligatorily interpreted as a reflexive. However, in contrast to the other two subclasses, with verbs of this third class a morphologically simplex pronoun can only be interpreted non-reflexively, as illustrated by the examples in (11a) and (12a).¹¹ That the verbs in question cannot be used without a syntactic complement is shown by the unacceptability of the (b) sentences.¹²

- (11) a. Jan_i haat homself_i / *hom_i / hom_j.
 Jan hates himself / him
 “Jan hates himself / him”
 b. *Jan haat.
- (12) a. Marie_i wil haarsel_i / *haar_i / haar_j nomineer as voorsitter.
 Marie wants-to herself / her nominate as chairperson
 “Marie wants to nominate herself / her as chairperson”
 b. *Marie wil nomineer as voorsitter.

In contrast to the three subclasses of semantically transitive verbs which allow a reflexive interpretation for their pronominal complements, as illustrated in (7)-(12), there are at least two subclasses of “inherently non-reflexive” verbs, that is, verbs where the reflexive interpretation is normally disallowed. The first comprises verbs which express movement of one entity relative to another (usually also moving), with the former remaining in a position before, after or alongside the latter or changing from one of those positions to another. Some of the interpretations allowed and disallowed by verbs of this subclass are illustrated by the examples in (13).¹³ The verbs of the second subclass, illustrated by the examples in (14), express some sort of action by one entity on another, possibly involving physical contact, and causing the latter to move away from or towards the former.¹⁴ In both cases the pronominal complement of the verb is interpreted non-reflexively.¹⁵

- (13) a. Jan_i het *homself_i / *hom_i / hom_j net voor die brug verbygesteek.
 Jan has himself / him just before the bridge by-passed
 “Jan overtook him just before the bridge”
 b. Marie_i sal *haarsel_i / *haar_i / haar_j na die funksie toe vergesel.
 Marie will herself / her to the function to accompany
 “Marie will accompany her to the function”
 c. Jan_i het *homself_i / *hom_i / hom_j huis toe gevolg.
 Jan has himself / him home to followed
 “Jan followed him home”

- (14) a. Marie_i het *haarself_i / *haar_i / haar_j omgestamp.
 Marie has herself / her over-pushed
 “Marie pushed her over”
- b. Jan_i wink *homself_i / *hom_i / hom_j nader.
 Jan beckon himself / him near
 “Jan beckoned him to come nearer”
- c. Marie_i sal *haarself_i / *haar_i / haar_j seker inroep.
 Marie will herself / her probably in-call
 “Marie will probably call her in”

In the constructions in (7)-(12), the pronoun functions as the direct object argument of a transitive verb and has the thematic (θ -)role of theme (or patient).¹⁶ In the double object construction illustrated by the examples in (15), by contrast, the pronoun functions as the indirect object argument of a ditransitive verb and is assigned the θ -role of goal.¹⁷ In this construction, the complex form of the pronoun is interpreted as a reflexive and the simplex form as a non-reflexive.¹⁸

- (15) a. Marie_i het haarself_i / *haar_i / haar_j ’n guns bewys.
 Marie has herself / her a favour proved
 “Marie did herself / her a favour”
- b. Jan_i gun homself_i / *hom_i / hom_j geen rus nie.
 Jan grants himself / him no rest NEG
 “Jan doesn’t allow himself / him any rest”

2.3.2 Prepositional object constructions

In all the constructions considered so far, the reflexive occurs either as the semantically inert syntactic complement of an inherently reflexive verb, as in (4) and (5), or as the (in)direct object argument of a (di)transitive verb, as in (7-12) and (15). The reflexive can however also occur as the object argument of a preposition, as shown by the examples in (16). In both cases, the preposition selects a morphologically complex or simplex pronoun as its complement; the *-self* form is interpreted reflexively and the simplex form non-reflexively. The pronoun is assigned the θ -role of patient in (16a) and source in (16b).¹⁹

- (16) a. Marie_i het met haarself_i / *haar_i / haar_j gepraat.
 Marie has with herself / her talked
 “Marie talked to herself / her”
- b. Jan_i het seker van homself_i / *hom_i / hom_j ’n Valentynskaartjie gekry.
 Jan has likely from himself / him a valentine-card got
 “Jan probably received a Valentine card from himself / him”

Different, and often less firm, patterns of acceptability than the one illustrated in (16) are found with prepositions that assign θ -roles other than patient or source to their pronominal complement. Firstly, with a preposition assigning the agent θ -role, the simplex form of the pronoun can be interpreted reflexively as well as non-reflexively, as shown in (17); in this case the reflexive is standardly used without the *-self* suffix.²⁰

- (17) a. Marie_i beweer die boek is deur haar_i / haar_j geskryf.
 Marie claims the book was by her written
 “Marie claims the book was written by her”
- b. Jan_i sê daardie moontlikheid is deur hom_i / hom_j oorweeg.
 Jan says that possibility was by him considered
 “Jan says that possibility was considered by him”

Consider, secondly, constructions in which the preposition assigns the θ -role of goal to its pronominal complement. In this case, there appear to be two patterns of acceptability. On the one hand, with verbs that typically imply (physical or abstract) movement *away* from the agent, the simplex form of the pronoun can only be interpreted non-reflexively, which means that the *-self* form is required for expressing reflexivity. This is illustrated by the examples in (18). On the other hand, with verbs that typically imply (physical or abstract) movement *towards* the agent, the *-self* form is not standardly used and the simplex form can have both a reflexive and a non-reflexive interpretation, as in (19).²¹

- (18) a. Jan_i het die Valentynskaartjie vir homself_i / *hom_i / hom_j gestuur.
 Jan has the valentine-card for himself / him sent
 “Jan sent the Valentine-card to himself/him”

- b. Marie_i kon die aandele aan haarself_i / *haar_i / haar_j verkoop het.
 Marie could the shares to herself / her sold have
 “Marie could have sold the shares to herself / her”
- (19) a. Marie_i het vir haar_i / haar_j koffie bestel.
 Marie has for her coffee ordered
 “Marie ordered coffee for herself / her”
- b. Jan_i wil ’n motorfiets vir hom_i / hom_j koop.
 Jan wants-to a motorcycle for him buy
 “Jan wants to buy a motorcycle for himself / him”

Consider next constructions where the preposition assigns the θ -role of (physical or abstract) location to its pronominal object. As illustrated by the examples in (20), the general pattern in these constructions is that the simplex form of the pronoun can be interpreted reflexively and non-reflexively; the morphologically complex form is not standardly used.

- (20) a. Marie_i sit die boek langs haar_i / haar_j neer.
 Marie puts the book next-to her down
 “Marie puts the book down next to her”
- b. Jan_i het baie wagte om hom_i / hom_j geplaas.
 Jan has many guards around him placed
 “Jan placed many guards around him”

The pattern illustrated in (20) does not hold, however, for constructions where the preposition assigns a θ -role of what may be called “subject-associated (physical or abstract) location” to its pronominal complement. In this case, as in the case of inherently reflexive verbs (cf. (4) and (5) above), the pronoun cannot receive a non-reflexive interpretation. This is clear from the examples in (21); the reflexive standardly takes the morphologically simplex form.

- (21) a. Marie_i kry ’n snaakse gevoel in haar_i / *haar_j.
 Marie gets a strange feeling in her
 “Marie is getting a funny feeling”
- b. Jan_i het dit nie in hom_i / *hom_j om ’n leier te wees nie.²²
 Jan has it not in him COMP a leader to be NEG
 “Jan doesn’t have it in him to be a leader”

- c. Marie_i het dit op haar_i / *haar_j geneem om hulle te help.
 Marie has it on her taken for them to help
 “Marie took it upon herself to help them”
- d. Jan_i sal Marie se woorde altyd met hom_i / *hom_j saamdra.
 Jan will Marie POSS words always with him along-carry
 “Jan will always carry Mary’s words with him”
- e. Marie_i het die baba oral met haar_i / *haar_j saamgeneem.
 Marie has the baby everywhere with her along-took
 “Marie took the baby everywhere with her”

In the examples in (22), the pronominal complement of the preposition is also assigned the θ -role of subject-associated location and, as in the case of (21), the pronoun can only be interpreted reflexively. However, in contrast to the pattern in (21), the reflexive must take the complex *-self* form.²³

- (22) a. Jan_i glimlag by homself_i / *hom_i / *hom_j.
 Jan smiles by himself / him
 “Jan is smiling by himself”
- b. Marie_i was buite haarself_i / *haar_i / *haar_j van woede.
 Marie was out herself / her of rage
 “Marie was beside herself with rage”
- c. Jan_i is nogal baie in homself_i / *hom_i / *hom_j gekeer.
 Jan is rather much in himself / him turned
 “Jan is rather wrapped up in thought”
- d. Marie_i is uit haarself_i / *haar_i / *haar_j tot niks in staat nie.
 Marie is out herself / her to nothing in state NEG
 “Marie is not capable of anything of her own will”

One further pattern which seems to involve the location θ -role should be mentioned here. Consider the examples in (23). In each case, the pronominal complement of the preposition is assigned what appears to be a “non-subject-associated location” role. In contrast to the patterns illustrated in (20)-(22), the pronouns in (23) can only be interpreted non-reflexively.²⁴

- (23) a. Jan_i stap agter *homself_i / *hom_i / hom_j.
 Jan walks behind himself / him
 “Jan is walking behind him”
- b. Marie_i het op *haarself_i / *haar_i / haar_j gelê.
 Marie has on herself / her lain
 “Marie was lying on her”
- c. Marie_i het iets by *haarself_i / *haar_i / haar_j gelos.
 Marie has something by herself / her left
 “Marie left something with her”
- d. Jan_i sal die pakkie met *homself_i / *hom_i / hom_j saamstuur.²⁵
 Jan will the parcel with himself / him along-send
 “Jan will send a parcel with him”

We turn our attention now to constructions where the PP comprising a preposition and its object argument functions as the complement of a noun. Consider the examples in (24). In all these cases, the pronominal complement of the preposition can be interpreted reflexively and non-reflexively, with the simplex form of the pronoun standardly used for the reflexive interpretation.²⁶ The pronoun is assigned the location θ -role in (24a), the agent θ -role in (24b) and the possessor θ -role in (24c).

- (24) a. Jan_i ken nie die mense langs hom_i / hom_j nie.
 Jan knows not the people next-to him NEG
 “Jan doesn’t know the people next to him”
- b. Marie_i het daardie opmerking deur haar_i / haar_j bevestig.
 Marie has that remark by her confirmed
 “Marie confirmed that remark by her”
- c. Jan_i wil ’n verlangse oom van hom_i / hom_j besoek.
 Jan wants-to a distant uncle of him visit
 “Jan wants to visit a distantly related uncle of him”

The pattern illustrated in (24) – that is, where the simplex form of the pronoun can have both a reflexive and a non-reflexive interpretation – is also displayed by the examples in (25). Here, the pronoun is assigned the θ -role of theme.

- (25) a. Marie_i sal die gerugte oor haar_i / haar_j ontken.
 Marie will the rumours about her deny
 “Marie will deny the rumours about her”
- b. Jan_i het ’n foto van hom_i / hom_j in die koerant gesien.²⁷
 Jan has a photo of him in the newspaper seen
 “Jan saw a photo of him in the newspaper”

In the examples in (26) and (27), the pronoun also appears to be assigned the theme θ -role. However, in contrast to (25), the simplex form of the pronoun in (26) and (27) cannot be interpreted reflexively; in these cases, reflexivity can only be expressed by the *-self* form.²⁸

- (26) a. Jan_i het almal behalwe homself_i / *hom_i / hom_j vertrou.
 Jan has all except himself / him trusted
 “Jan trusted everyone except himself / him”
- b. Marie_i kan niemand buiten haarself_i / *haar_i / haar_j blameer nie.
 Marie can no-one except herself / her blame NEG
 “Marie can blame no-one but herself / her”
- (27) a. Marie_i het interessante dinge van haarself_i / *haar_i / haar_j gesê.²⁹
 Marie has interesting things of herself / her said
 “Marie said interesting things about herself / her”
- b. Jan_i sal niks oor homself_i / *hom_i / hom_j verklap nie.
 Jan will nothing about himself / him divulge NEG
 “Jan won’t give away anything about himself / him”

In all the constructions described so far in this section, the reflexive takes as its antecedent the subject of the sentence. Consider, however, the example in (28). In this construction, *Piet* functions as the indirect object argument of the ditransitive verb *wys* (“show”) and the expression *’n foto van [pronoun]* as the direct object argument; these two arguments are assigned the θ -roles of goal and theme, respectively. The pronominal complement of the preposition *van* is also assigned a theme θ -role, and standardly takes the morphologically simplex form (although the complex *-self* form is commonly used as well; cfsee notes 9 & 20). The pronoun can be interpreted reflexively (the *-self* form obligatorily so), taking as its antecedent either the

subject or the indirect object. The simplex form can moreover also be interpreted non-reflexively, referring on its own to an entity not mentioned in the sentence.

- (28) Jan_i het (vir) Piet_j ’n foto van homself_i / homself_j / hom_i / hom_j / hom_k gewys.
 Jan has (for) Piet a photo of himself / him shown
 “Jan showed Piet a photo of himself / him”

2.3.3 Infinitival constructions

This brings us to constructions where the reflexive forms part of an infinitival clause. Consider the examples in (29), where the infinitival clause is the complement of the verb *probeer* (“try”).³⁰ The pronoun functions as the direct object in (29a) and as the indirect object in (29b). In both cases, the simplex form is interpreted non-reflexively and the complex form reflexively. The *-self* form (indirectly) enters into a coreferential relationship with the subject of the matrix clause: it takes as its antecedent the PRO subject of the infinitival clause, which in turn is semantically controlled by the subject of the matrix clause.³¹

- (29) a. Marie_i probeer (om) PRO_i haarsel_i / *haar_i / haar_j (te) teken.
 Marie tries (COMP) herself / her (to) draw
 “Marie is trying to draw herself / her”
 b. Jan_i probeer (om) PRO_i homsel_i / *hom_i / hom_j die kontrak toe(te)ken.
 Jan tries (COMP) himself / him the contract (to) award
 “Jan is trying to award himself / him the contract”

As shown in (30), the pattern of acceptability in (29) is also found in sentences where the pronoun occurs in the infinitival complement of the raising verbs *blyk* and *skyn* (“appear”, “seem”). In this case, the *-self* form is interpreted coreferentially with the expression which functions as the subject argument of the infinitival clause, but which has been raised to the structural subject position of the matrix clause.

- (30) Jan_i skyn homsel_i / *hom_i / hom_j te haat.
 Jan seems himself / him to hate
 “Jan seems to hate himself / him”

If the infinitival clause contains an inherently reflexive verb, however, the pronoun can only be interpreted reflexively and is standardly used without *-self*, as illustrated in (31).

- (31) a. Jan_i probeer (om) PRO_i hom_i / *hom_j (te) verset teen die aanval.
 Jan tries (COMP) him (to) resist against the attack
 “Jan is trying to resist the attack against him”
- b. Marie_i skyn haar_i / *haar_j goed te gedra.
 Marie seems her well to behave
 “Marie seems to behave herself well”

Consider next the examples in (32) and (33).³² The pronoun functions as the direct object in (32) and as the indirect object in (33). The simplex form can be interpreted non-reflexively as well as reflexively in both constructions; in the latter case, the pronoun can be coreferential with any one of the arguments in the matrix clause. The *-self* form is also commonly used to express reflexivity in these constructions. In such cases, however, the pronoun takes as its antecedent the PRO subject of the infinitival clause, which – depending on the properties of the matrix verb – can be semantically controlled by the subject of the matrix clause (as in the (a) sentences) or by a non-subject expression (as in the (b) sentences).

- (32) a. Jan_i belowe vir Piet_j om PRO_i homself_i / *homself_j / hom_i / hom_j / hom_k te skeer.
 Jan promises for Piet COMP himself / him to shave
 “Jan promises Piet to shave himself / him”
- b. Jan_i vra vir Piet_j om PRO_j *homself_i / homself_j / hom_i / hom_j / hom_k te skeer.
 Jan asks for Piet COMP himself / him to shave
 “Jan asks Piet to shave himself / him”
- (33) a. Marie_i belowe vir Susan_j om PRO_i (vir) haarself_i / *haarself_j / haar_i / haar_j / haar_k
 Marie promises for Susan COMP (for) herself / her
 ’n rok te koop.
 a dress to buy
 “Marie promises Susan to buy herself / her a dress”
- b. Marie_i vra vir Susan_j om PRO_j (vir) *haarself_i / haarself_j / haar_i / haar_j / haar_k
 Marie asks for Susan COMP (for) herself / her
 ’n rok te koop.
 a dress to buy
 “Marie asks Susan to buy herself / her a dress”

On the face of it, the pronoun can also function as the subject of an infinitival clause, as in (34) and (35).³³ In such cases, the *-self* form is interpreted reflexively and the simplex form non-reflexively.

- (34) a. Jan_i laat homself_i / *hom_i / hom_j die ondersoek lei.³⁴
 Jan lets himself / him the investigation lead
 “Jan puts himself / him in charge of the investigation”
- b. Marie_i maak haarself_i / *haar_i / haar_j die medisyne drink.
 Marie makes herself / her the medicine drink
 “Marie forces herself / her to drink the medicine”
- (35) a. Jan_i hoor homself_i / *hom_i / hom_j lag.³⁵
 Jan hears himself / him laugh
 “Jan hears himself / him laugh”
- b. Marie_i sien haarself_i / *haar_i / haar_j op die strand lê.
 Marie sees herself / her on the beach lie
 “Marie sees herself / her lying on the beach”

2.3.4 Small clause constructions

We now turn to sentences where the reflexive forms part of a small clause (SC).³⁶ Consider the examples in (36). Here, the SCs all function as the complement of a resultative verb, that is, a verb denoting an activity which affects the SC subject, the result of which is described by the (often hyperbolic) SC predicate.³⁷ In each case, the pronominal subject of the SC can be interpreted reflexively and non-reflexively. On its reflexive interpretation, the pronoun standardly takes the morphologically simplex form, although the *-self* form is also commonly used.³⁸ The non-verbal predicates are the AP *bankrot* (“bankrupt”) in (36a), the PP *in ’n depressie in* (“into a depression”) in (36b) and the DP *’n wrak* (“a wreck”) in (36c).

- (36) a. Jan_i koop hom_i / hom_j bankrot.
 Jan buys him bankrupt
 “Jan is shopping away all his money”
- b. Marie_i praat haar_i / haar_j in ’n depressie in.
 Marie talks her in a depression in
 “Marie is talking herself / her into a depression”

- c. Jan_i het hom_i / hom_j 'n wrak gedrink.
 Jan has him a wreck drunk
 “Jan drank himself / him to dereliction”

The pattern of acceptability in (36) is also found in constructions containing what may be called “mental appraisal” and “institutional performative” verbs, as illustrated in (37) and (38) respectively.³⁹

- (37) a. Jan_i ag hom_i / hom_j die beste kandidaat.
 Jan deems him the best candidate
 “Jan deems himself / him the best candidate”
- b. Marie_i vind haar_i / haar_j bekwaam genoeg.
 Marie finds her competent enough
 “Marie finds herself / her competent enough”
- (38) a. Jan_i noem hom_i / hom_j die leier van die beweging.
 Jan names him the leader of the movement
 “Jan calls himself / him the leader of the movement”
- b. Marie_i verklaar haar_i / haar_j beskikbaar vir die pos.
 Marie declares her available for the post
 “Marie declares herself / her available for the position”

There are, however, at least two types of construction where the pronominal subject of the SC is obligatorily interpreted as a reflexive. In the first type, the SC functions as the complement of an inherently reflexive verb, as in (39).

- (39) a. Jan_i het hom_i / *hom_j stokflou teengesit.
 Jan has him dead-tired resist
 “Jan resisted to the point of exhaustion”
- b. Marie_i skaam haar_i / *haar_j bloedrooi.
 Marie shames her blood-red
 “Marie is turning crimson with shame”
- c. Jan_i het hom_i / *hom_j heeltemal deur die wind verslaap.
 Jan has him completely through the wind overslept
 “Jan was in a state of confusion after oversleeping himself”

The second type, by contrast, does not lend itself to a characterization in terms of the properties of the matrix verb alone.⁴⁰ Rather, in this case, the semantic properties of the SC predicate seem to be crucial in determining whether the construction is obligatorily reflexive or not. Consider the examples in (40).

- (40) a. Jan_i het hom_i / *hom_j hees geskree.
 Jan has him hoarse shouted
 “Jan shouted himself hoarse”
- b. Marie_i drink haar_i / *haar_j in ’n koma in.
 Marie drinks her in a coma in
 “Marie is drinking herself into a coma”
- c. Jan_i staar hom_i / *hom_j blind teen die hoë misdaadsyfer.
 Jan stares him blind against the high crime-rate
 “Jan is blind to everything but the high crime rate”
- d. Marie_i skrik haar_i / *haar_j lam.
 Marie startle her paralysed
 “Marie is paralysed with fright”
- e. Jan_i lag hom_i / *hom_j ’n boggel.
 Jan laughs him a hunchback
 “Jan is convulsed with laughter”

It is not clear which properties of the SC predicate (presumably in conjunction with the properties of the matrix verb) are involved in bringing about the obligatorily reflexive nature of the construction illustrated in (40). On the face of it, the pronoun in the schema [*subject verb [pronoun XP]*] receives an obligatorily reflexive interpretation if (i) the matrix verb describes an internally caused activity or event,⁴¹ and (ii) the predicate XP describes an inalienable or non-transferable attribute which results from this activity or event (e.g. becoming hoarse, paralysed, blind, etc.). Whether these observations represent a valid generalization, however, remains a topic for further investigation.

2.3.5 Possessive constructions

It was stated in section 2.2 that Afrikaans items belonging to the traditional lexical category of reflexive pronouns come in two forms, both displaying accusative case: morphologically simple

forms, which are indistinguishable from personal pronouns, and morphologically complex forms comprising the pronoun and the suffix *-self*. We turn our attention now to the items in table (41), that is, items belonging to the traditional category of possessive pronouns.

(41) Table of (prenominal) possessive pronouns in Afrikaans

Person	Number	Gender	Pronoun	Formal
1	SG	–	my	–
1	PL	–	ons	–
2	SG	–	jou	u
2	PL	–	julle/jul	u
3	SG	M/N	sy	–
3	SG	F	haar	–
3	PL	M/F/N	hulle/hul	–

(SG = singular; PL = plural; M = masculine; F = feminine; N = neuter.)

As illustrated by the examples in (42), possessive pronouns can also be used reflexively;⁴² however, these pronouns cannot take the complex *-self* form.⁴³ In (42a) the nominal expression containing the possessive pronoun functions as the direct object argument, in (42b) as the indirect object argument, and in (42c-e) as the complement of a preposition. In all these examples, the pronoun can be interpreted reflexively as well as non-reflexively.

- (42) a. Jan_i verf *syself_i huis / sy_i huis / sy_j huis.
 Jan paints his house
 “Jan is painting his house”
- b. Marie_i het (vir) *haarself_i ma / haar_i ma / haar_j ma ’n geskenk gegee.
 Marie has (for) her mother a present given
 “Marie gave her mother a present”
- c. Jan_i speel met sy_i kinders / sy_j kinders.
 Jan plays with his children
 “Jan is playing with his children”

- d. Marie_i doen dit vir haar_i plesier / haar_j plesier.
 Marie does it for her pleasure
 “Marie is doing it for her enjoyment”
- e. Marie_i praat met Susan_j oor haar_i probleme / haar_j probleme / haar_k probleme.
 Marie talks to Susan over her problems
 “Marie is talking to Susan about her problems”

As a rule, the possessive pronoun is interpreted reflexively when it occurs in a whole-part genitive construction, as shown in (43).⁴⁴ In these examples, the pronoun is used to express a possessor relation involving a person and a body part (or a person and an internally caused activity or event; see note 41).

- (43) a. Marie_i spits haar_i ore / *haar_j ore.
 Marie pricks-up her ears
 “Marie pricks up her ears”
- b. Jan_i kon sy_i lag / *sy_j lag nie hou nie.
 Jan could his laugh not keep NEG
 “Jan couldn’t stop himself from laughing”
- c. Marie_i het die nuus in haar_i hart / *haar_j hart bewaar.
 Marie has the news in her heart preserved
 “Marie kept the news close to her heart”
- d. Jan_i het dit met sy_i eie oë / *sy_j eie oë gesien.⁴⁵
 Jan has it with his own eyes seen
 “Jan saw it with his own eyes”

Consider next the examples in (44). The verbs in these examples denote various types of action directed at a non-agent entity, including actions which entail a range of intentions or mental states on the part of the agent (spitefulness, maliciousness, kindness, compassion, anxiety, etc.), physical contact (often by impact and directed at a specific body part), and/or sudden movement. As in (43), the pronouns in (44) can only be interpreted reflexively; in these cases, however, the pronoun cannot take the subject as its antecedent.

- (44) a. Marie_i gryp vir Susan_j aan *haar_i arm / haar_j arm / *haar_k arm.
 Marie grabs for Susan on her arm
 “Marie grabs Susan by the arm”

- b. Jan_i het die man in *sy_i voet / sy_j voet / *sy_k voet geskiet.⁴⁶
 Jan has the man in his foot shot
 “Jan shot the man in his foot”
- c. Marie_i het vir Susan_j op *haar_i wang / haar_j wang / *haar_k wang gesoen.
 Marie has for Susan on her cheek kissed
 Marie kissed Susan on her cheek”
- d. Jan_i slaan vir Piet_j op *sy_i neus / sy_j neus / *sy_k neus.
 Jan hits for Piet on his nose
 “Jan hits Piet on the nose”

Unlike in (43) and (44), the pronouns in the examples in (45) can only be interpreted non-reflexively. In each case, the event which is described concerns a non-agent entity who is either not directly or only passively involved in the particular action.

- (45) a. Marie_i versprei stories agter *haar_i rug / haar_j rug.
 Marie spreads stories behind her back
 “Marie is spreading stories behind her back”
- b. Jan_i neem die besluit sonder *sy_i goedkeuring / sy_j goedkeuring.
 Jan takes the decision without his approval
 “Jan takes the decision without his approval”
- c. Marie_i het voor *haar_i oë / haar_j oë flou geval.
 Marie has before her eyes faint fallen
 “Marie fainted right before her eyes”

2.4 Summary

The objective of Chapter 2 was to provide a non-formalistic description of the traditional class of reflexive pronouns in Afrikaans and of the diverse constructions in which they can occur; these represent some of the facts which have to be accounted for by a proper syntactic theory of obligatory reflexivity.

Afrikaans reflexives come in two forms, namely morphologically simplex forms which are indistinguishable from personal pronouns in the accusative case form, and morphologically complex forms where the pronoun takes the suffix *-self*. The simplex form is standardly used in

two contexts: when the pronoun occurs (i) as the syntactic complement of an inherently reflexive verb and (ii) as the complement of an inherently reflexive preposition (where such verbs and prepositions were shown to belong to various semantic classes). The pronoun is interpreted as obligatorily reflexive in both these contexts, even though it has the same form as the corresponding personal pronoun displaying accusative case. However, in colloquial speech it is also common for the reflexive to take the *-self* form in the two contexts just mentioned. In such cases, the utterance can be spoken with the primary stress on the suffix *-self*, in contrast to the normal, non-emphatic sentence stress pattern where the verb receives the primary stress.

Aside from being used with inherently reflexive verbs and prepositions in colloquial speech, the morphologically complex form of the reflexive is standardly found with verbs and prepositions which are not inherently reflexive, but which are compatible with a reflexive reading. In the majority of such cases, the reflexive reading can only be expressed through the use of the suffix *-self*; that is to say, the pronoun cannot be interpreted reflexively without *-self*. However, there are some semantic classes of verbs and prepositions which, although not inherently reflexive, do allow a reflexive reading for the *simplex* form of the pronoun. Even so, in these cases, too, an obligatory reflexive reading is only possible with the complex *-self* form; the simplex form, by contrast, is ambiguous between the two readings. The semantic classes in question include verbs which describe typically self-directed actions (section 2.3.1), resultative and mental appraisal verbs (2.3.4), and prepositions which assign θ -roles such as agent, possessor and (physical or abstract) location (2.3.2).

In addition to the traditional class of reflexive pronouns, possessive pronouns can also be used reflexively; these pronouns, which display the genitive case form, do not occur with the suffix *-self*. As a rule, the possessive pronoun allows both a reflexive and a non-reflexive interpretation. However, two constructions were identified in section 2.3.5 where the pronoun receives an obligatory reflexive interpretation. The first is where the pronoun occurs in a whole-part genitive construction, for example where it is used to express a possessor relation involving a person and a body part (or a person and an internally caused activity/event). The second obligatory reflexive construction containing a possessive pronoun is where the verb denotes various types of action directed at a non-agent entity, including actions which entail a range of intentions or mental states on the part of the agent.

The above facts were illustrated with reference to various types of construction in which reflexives can occur: verbal object and double object constructions (section 2.3.1), prepositional object constructions (2.3.2), raising and control constructions (2.3.3), small clause constructions (2.3.4), and possessive constructions (2.3.5). In the course of discussing these constructions, it was shown that, besides the subject, the reflexive can also take as its antecedent an expression functioning as the direct object, the indirect object or as a prepositional object. Furthermore, it was shown that Afrikaans has a number of non-reflexive constructions as well, that is, constructions containing inherently non-reflexive verbs and prepositions which rule out a coreferential relationship between the pronoun and some other expression in the sentence.

The next chapter is devoted to the development of a minimalist analysis of obligatory reflexivity in Afrikaans. One of the objectives will be to determine whether the proposed analysis can provide an adequate account of the facts described in Chapter 2. To that end, a detailed analysis will be made of each of the above types of reflexive construction. In addition, attention will also be given to constructions where a reflexive reading of the pronoun is disallowed.

Chapter 3

A NOMINAL SHELL ANALYSIS OF OBLIGATORY REFLEXIVITY IN A MINIMALIST GRAMMAR OF AFRIKAANS

3.1 Introduction

This chapter has two main objectives. The first is to make explicit the assumptions and devices of a minimalist analysis of obligatory reflexivity in Afrikaans, one which may be referred to as the “nominal shell analysis (of obligatory reflexivity)” (NSA) for reasons that will become clear in section 3.2. The second main objective is to determine the merit of the NSA, specifically (i) whether it is empirically adequate in the sense that it can account for the relevant facts of Afrikaans and (ii) whether it is conceptually adequate in the sense that it incorporates theoretical devices which are either provided by or compatible with the basic assumptions and concepts of Minimalist Syntax. The rest of the chapter is organised as follows. The assumptions and devices of the NSA are explicated in section 3.2 with reference to the various obligatory reflexive constructions identified in Chapter 2. Taking as point of departure those constructions in which the reflexive pronoun occurs as the object complement of a verb, the different devices are introduced in the form of nine hypotheses in subsection 3.2.1. The other obligatory reflexive constructions identified in Chapter 2 are analysed in subsections 3.2.2 – 3.2.6. In each case, the focus is on whether the relevant facts can be adequately accounted for within the framework of the NSA. In the course of the discussion, attention will also be given to the analysis of constructions in which a pronoun either cannot or may (but need not) receive a reflexive interpretation. The main findings of the chapter are briefly summarised in section 3.3.

3.2 Assumptions and devices

3.2.1 Verbal object constructions

A basic assumption of the NSA is that the structural relationship between a reflexive pronoun and an antecedent expression is established by syntactic devices in a particular syntactic configuration. By contrast, the semantic interpretation of this relationship – specifically, interpreting the pronoun as coreferential with or referentially dependent on the antecedent – is determined by a device of the semantic component.¹ Focusing on the syntactic aspects, the NSA addresses the following general question: Which syntactic devices are required (i) for generating

the configuration containing a reflexive pronoun and its antecedent and (ii) for establishing the relevant structural relationship between these constituents? The question of the semantic interpretation of the structure containing the reflexive and its antecedent will however also be addressed briefly in the course of the discussion. The proposed analysis is “minimalist” in the sense that it is presented within the broad framework of assumptions and concepts of the minimalist approach to linguistic inquiry. A distinguishing feature of this approach is its emphasis on the methodological principle of Economy.² Hence, the aim is to develop an analysis in which the number of descriptive devices is restricted to the minimum, ideally to those which are conceptually necessary. The general devices of Minimalist Syntax that will be assumed in the analysis concern concepts such as ‘(semantically) interpretable and uninterpretable features’, ‘valued and unvalued features’, ‘phi (ϕ)-features’, ‘feature valuation and feature agreement’, ‘case and theta (θ)-role assignment’, ‘c-command’, ‘probe and goal’, and the operations External and Internal Merge. In addition, the analysis employs some devices that have been put forward in recent studies of word order and linearisation phenomena in various Germanic languages, including Afrikaans. Unless otherwise stated, these and related devices will be assumed without further discussion. The NSA furthermore incorporates several devices which specifically relate to the establishment of a structural relationship between a reflexive pronoun – or, more broadly, an anaphoric expression³ – and an appropriate antecedent, and the semantic interpretation of this relationship. These devices form part of the core hypotheses of the NSA, to which we now turn.

The first two hypotheses, labelled A and B below, are largely taken over from Heinat (2006b).⁴ Hypothesis A concerns the grammatical status of pronouns as “non-reflexive” or “reflexive”:

Hypothesis A

Non-reflexive and reflexive pronouns are syntactic compounds which are formed from the same category-neutral lexical root $\sqrt{\text{PRON}}$.⁵

According to this hypothesis, the difference between a non-reflexive and a reflexive pronoun is described in syntactic rather than lexical terms. The specific way in which this difference is established is stated in Hypothesis B:

Hypothesis B

1. A non-reflexive pronoun is derived by merging $\sqrt{\text{PRON}}$ with an N constituent that contains interpretable, valued ϕ -features and an uninterpretable, unvalued case feature.⁶

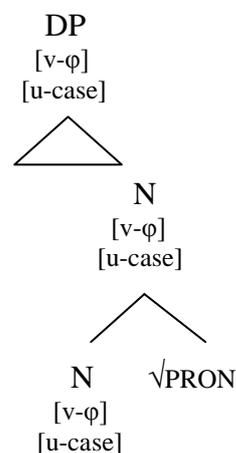
2. A reflexive pronoun is derived by merging $\sqrt{\text{PRON}}$ with a D constituent that contains interpretable, unvalued ϕ -features and an uninterpretable, unvalued case feature.

The distinction between non-reflexive and reflexive pronouns is therefore not determined by lexical features (e.g. [anaphor] and [pronominal], as in GB Binding theory) or by a feature that is bestowed on a pronoun in a particular syntactic configuration (e.g. [+coreferential], as in Zwart's (2002) analysis; see below), but rather by the category of the item with which $\sqrt{\text{PRON}}$ is merged. On the one hand, a non-reflexive pronoun is a derived N which is subsequently merged with a D to form a larger nominal phrase, a DP. On the other hand, a reflexive pronoun is a derived D representing both the minimal and the maximal projection of the phrase it heads (i.e. $D = DP$).

Hypotheses A and B can be made concrete with the aid of the sentences in (1) and (2). Sentence (1a) is an example of a non-reflexive construction in which the pronoun is used in a referentially independent way; as shown by the ungrammaticality of (1b), the pronoun cannot be interpreted as coreferential with the subject *die man*. Sentence (2a), by contrast, is an example of an obligatory reflexive construction with the pronoun taking as its antecedent the subject *die man*; in this case, the pronoun cannot be used on its own to identify some entity, as is clear from the ungrammaticality of (2b).⁷ In terms of Hypothesis B, the pronouns in (1a) and (2a) have the structure in (3a) and (3b), respectively.⁸

- | | | | |
|-----|---|-----|---|
| (1) | a. Die man _i haat hom _j .
the man hates him
"The man hates him" | (2) | a. Die man _i haat homself _i .
the man hates himself
"The man hates himself" |
| | b. *Die man _i haat hom _i . | | b. *Die man _i haat homself _j . |

- | | | | |
|-----|--------------------------|-----|----------------------|
| (3) | a. Non-reflexive pronoun | (3) | b. Reflexive pronoun |
|-----|--------------------------|-----|----------------------|



A consequence of Hypothesis B is that a reflexive pronoun, unlike a non-reflexive one, is dependent on an antecedent expression to supply it with ϕ -feature values. This raises two questions. The first concerns the respective positions occupied by a reflexive pronoun and its antecedent when they first enter the derivation and also the type of structural relationship between these positions. The second question concerns the way in which ϕ -feature valuation is effected.

The initial position of the reflexive pronoun in a sentence like (2a) seems relatively straightforward: the pronoun *homself* (or more precisely, the nominal expression containing this pronoun) is merged with the verb. However, the initial position of the pronoun's antecedent, the subject *die man* in (2a), is less obvious. There are at least three approaches that can be considered in this regard. One is that the antecedent is externally merged in the canonical position for subjects, that is, in the specifier position of a transitive light verb, [spec, ν].⁹ In terms of this approach, the structural relationship between the reflexive pronoun and its antecedent is one of c-command: the antecedent c-commands the reflexive.¹⁰ This is in essence the type of configuration which is assumed in the various analyses of reflexivity presented within the framework of GB Binding theory, and also in the minimalist analysis proposed by Heinat (2006b). As was noted in Chapter 1, however, such analyses are faced with several conceptual and empirical problems. This raises doubts about, amongst other issues, the merit of adopting the configuration just outlined.

The second approach, put forward by Zwart (2002), is to merge the antecedent and what he (2002: 275) calls “the generic variable referential element PRONOUN” in the sisterhood relation in (4), where the PRONOUN is the head of the nominal expression XP and the antecedent represents its specifier.¹¹ According to Zwart (2002:271), the antecedent moves away from the pronoun in the course of the derivation, “a movement necessitated by standard licensing requirements”.¹²

(4) [XP [antecedent] [PRONOUN]]

A core idea of Zwart's analysis is that a generic PRONOUN receives a “nonaccidental” anaphoric (e.g. reflexive) interpretation in the semantic component if and only if it is directly merged with an appropriate antecedent in the configuration in (4) (Zwart 2002:284). Another core idea is that

the PRONOUN in (4) acquires the feature [+coreferential] from the antecedent, which results in the PRONOUN receiving a specific morphological spellout in the phonological component, that of a reflexive pronoun (Zwart 2002:275, 285).

The idea that the PRONOUN in (4) acquires a [coreferential] feature in the course of the derivation is potentially problematic in several respects. Firstly, this feature looks suspiciously like a semantic property rather than a purely formal feature. From a minimalist perspective, the nearest that syntax would come to the concept ‘coreferential’ would arguably be by means of ϕ -features which share the same values and which are structurally linked in some way. Secondly, it seems that the sole purpose of bestowing the feature [+coreferential] on the PRONOUN is to ensure that the latter is morphologically spelled out as a reflexive pronoun. Since the PRONOUN acquires this feature¹³ from the antecedent, a nominal expression, the question arises whether it forms part of the general feature make-up of nominal expressions, or whether it is an “independent” feature selected from the Numeration just in case the antecedent happens to have been merged in the configuration in (4). On the one hand, the idea that grammatical features can be selected from the Numeration and added to constituents after they have been externally merged in a specific configuration, does not seem very plausible; it clearly violates the Inclusiveness Condition of Chomsky (1995:225). On the other hand, if [coreferential] is a general feature of nominal expressions (like case and ϕ -features, for example), it should also form part of the feature make-up of a non-reflexive pronoun; after all, such a pronoun can function as the antecedent of a reflexive pronoun, as in (5):

- (5) H_{y_i} haat homself_{*i*}.
he hates himself
“He hates himself”

Recall, however, that both non-reflexive and reflexive pronouns enter the derivation as generic PRONOUNS in Zwart’s analysis. If a non-reflexive pronoun, like *hy* in (5), contains the feature [+coreferential], this feature must therefore form part of the PRONOUN from which it is derived. By implication, then, the feature also forms part of the PRONOUN in (4) from which the reflexive pronoun is derived. This means that the PRONOUN in (4) already has the feature [+coreferential] and does not have to acquire it from the antecedent. Moreover, since the antecedent pronoun *hy*

in (5) would also have this feature, one would somehow have to ensure that it is not incorrectly spelled out as a reflexive pronoun.

A third potential problem with Zwart's analysis, related to the one just outlined, concerns the distinction between obligatory non-reflexive and obligatory reflexive constructions such as those illustrated in (6) and (7), respectively. In (6), the pronoun *hom* occurs as the complement of the inherently non-reflexive verb *vergesel* ("accompany"); as is clear from the ungrammaticality of (6b), *hom* cannot be interpreted as coreferential with the subject *die man*. In (7), by contrast, the pronoun occurs as the semantically inert complement of the inherently reflexive verb *misgis* ("misjudge"); in this case, *hom* obligatorily takes the subject *die man* as its antecedent.

- (6) a. Die man_i vergesel hom_j (op die uitstappie).
 the man accompanies him on the outing
 "The man is accompanying him (on the outing)"
 b. *Die man_i vergesel hom_i (op die uitstappie).
- (7) a. Die man_i misgis hom_i / homself_i.¹⁴
 the man misjudges him / himself
 "The man is mistaken"
 b. *Die man_i misgis hom_j.

If the distinction between obligatory non-reflexive and obligatory reflexive constructions is to be accounted for in syntactic terms, the grammar must provide some device to express the fact that a verb like *misgis* in (7a) has to take a reflexive pronoun as its complement, whereas a verb like *vergesel* in (6a) cannot. It is generally accepted that such idiosyncratic properties are expressed by means of selection restrictions which form part of a given item's lexical make-up. For example, a verb like *misgis* would have a selection feature that could informally be stated as "requires a reflexive expression as its syntactic complement". This implies that the (nominal expression containing the) pronoun *hom* in (7a) must somehow be identifiable as reflexive at the point where it is merged as the complement of *misgis*. Within Zwart's analysis, *hom* is semantically interpreted as a reflexive by virtue of occurring in the configuration in (4). However, under the conventional conception of selection restrictions, the verb does not have access to the internal structure of the XP containing *hom* as its head: it simply selects a particular

category as its complement with no obvious way of “knowing” whether this category contains a PRONOUN that has received a reflexive interpretation. It could of course be argued that the XP in (4) is marked, via feature percolation, as reflexive because of the feature [+coreferential] which is bestowed on its PRONOUN head by the antecedent. However, in view of the potential problematic aspects outlined above in connection with this feature, this does not seem to be an attractive option.

This brings us to the third approach regarding the initial position of the antecedent, the one which will be pursued in the NSA. Similar to the approach of Zwart (2002), it is claimed that the reflexive pronoun and its antecedent are externally merged in a local configuration, though not in the strict sisterhood sense illustrated in (4). Rather, the idea is that the merger of these two constituents is mediated by some sort of functional category X, with the reflexive merged as the complement and its antecedent as the specifier of this category. The resulting configuration is shown in (8).¹⁵

(8) [_{XP}² [antecedent] [_{XP}¹ X – reflexive pronoun]]

Two questions arise at this point. The first concerns the general category to which the head X in (8) belongs. Since the influential work of especially Abney (1987), it has been generally assumed in the literature that all nominal expressions are projections of the (overt or covert) functional category Determiner (D), with the D divided into various types (articles, quantifiers, demonstratives, pronouns, etc.), each with its specific c(onstituent)-selection feature.¹⁶ For instance, a definite nominal expression like *die man* would be analysed as a DP headed by a definite article which c-selects an NP as its complement. More recently, however, Chomsky (2006:17-18) proposed that all definite nominal expressions are *n**Ps headed by the functional category *n**, a so-called light noun:¹⁷

(9) ... for definite nominal phrases, the head is now *n** (analogous to *v**) with the complement [X (YP)]. In this case X = D. D inherits the features of *n**, so YP raises to its SPEC, and D raises to *n**, exactly parallel to *v**P. Therefore, the structure is a nominal phrase headed by *n**, not a determiner phrase headed by D, which is what we intuitively always wanted to say; and D is the “visible” head, just as V is the “visible” head of verbal phrases.

Besides capturing the parallelism between verbal and nominal phrases, the idea of a nominal shell n^*P also implies, in Chomsky's (2006:18) words, that "(b)oth DP and NP are nominal phrases, the natural result." Adopting this idea, it is claimed here that the X in (8) is a light noun which selects a reflexive pronoun as its complement; this pronoun, with the structure in (3b) above, is internally merged with the light noun in the course of the derivation. Recall from note 8 that the D in (3b) should not be understood as the locus of definiteness and specificity. (For the sake of simplicity, the labels n/nP and v/vP are henceforth used in place of n^*/n^*P and v^*/v^*P .)

This raises the second question, namely to which specific type of light noun the X belongs. It is commonly assumed that the general category of light verbs can be classified into various types, including causative, agentive and experiential light verbs.¹⁸ Hence, if n represents the nominal equivalent of a transitive light verb v , it could be expected that light nouns also come in different types, depending on the particular grammatical and semantic information which they add to the derivation. One such general type has been proposed by Zeller (2008) in his analysis of the relation between word order and subject-verb agreement in isiZulu and other languages of the Bantu family. In these languages, a subject marker (SM) which belongs to the same noun class as the subject is prefixed to the verb stem in subject-verb constructions. In verb-subject constructions, by contrast, "the verb is prefixed with a non-agreeing default marker from a locative noun class", an expletive element which is in complementary distribution with the SM (Zeller 2008:224).¹⁹ The two constructions are illustrated by the isiZulu examples in (10a,b) respectively, both containing an intransitive verb.²⁰

- (10) a. UJohn u-sebenz-il-e.
 John1a SM1a-work-DIS-PST
 "John worked" (Zeller 2008:228)
- b. Ku-sebenz-e uJohn.
 EXPL17-work-PST John1a
 "John worked" (Zeller 2008:229)

Zeller (2008:239) argues that the SM in Bantu is an "anti-focus marker", a pronominal clitic which is "the phonological realisation of an n^* -head with the feature $[-\text{Focus}]$." A subject expression is formed by merging this head with a DP complement; through feature agreement, the SM doubles the noun class features of the DP and in this way explicitly marks the subject as

[– Focus]. On Zeller’s analysis, the subject *nP* in a sentence like (10a), on the one hand, is raised from its initial position in [spec, *v*] to [spec, T], and the head of this phrase (that is, the SM *u-*) is incorporated into the T where it combines with the (raised) verb stem. In essence, then, subject-verb agreement involves clitic doubling; in Zeller’s (2008:227) words, the SM “doubles the subject DP whenever the latter has moved out of the *vP*.” In a sentence like (10b), on the other hand, the subject is claimed to contain an *n*-head with the feature [+ Focus]. As a consequence, the subject *nP* remains in [spec, *v*], clitic doubling does not take place and the subject-prefix slot of the verb stem is filled by a default marker, the expletive *ku-*. Support for the claim that the postverbal subject in (10b) is specified as [+ Focus] comes from the fact that it has what is often referred to in the literature as “presentational focus”: from an information structure perspective, it introduces a new referent into the discourse.²¹ This type of focus reading is not available for the preverbal subject in (10a). However, it is not only presentational focus that can be licensed by the [+ Focus] feature. Zeller (2008:250-1) states that “postverbal subjects are obligatorily marked as [+ Focus] and hence contrastively focused when another argument is realised inside the *vP*.”²² In the isiZulu example in (11), which contains both a subject and an object in postverbal position, the subject receives a contrastive focus reading:²³

- (11) Kumbe uJohn igolide.
 EXPL17-dig-PST John1a gold9
 “John dug (for) gold”

In short, the presence of an SM in subject-verb constructions in Bantu, and its absence in verb-subject constructions, can be accounted for in terms of a specific feature carried by the head of the subject *nP*: [– Focus] in the case of preverbal subjects and [+ Focus] in the case of postverbal subjects.

It is not the purpose of this discussion to determine the merit of Zeller’s (2008) account of subject-verb agreement in Bantu.²⁴ What is of relevance for the development of the NSA, however, is the idea that a light noun can form the locus of some sort of focus property. In Zeller’s framework this property is represented by the feature [Focus], which can have either a positive or a negative (i.e. “anti-focus”) value. The [+ Focus] feature furthermore configurationally licenses two different types of focus interpretations, namely presentational and contrastive focus. Adopting the above idea, it is proposed here that the head *n* in the configuration in (8) also

expresses a focus property of some sort. Obviously, though, the property in question cannot be contrastive focus in the case of an obligatory reflexive construction like the one illustrated in (7a), since this construction contains only one proper argument, the reflexive being semantically inert. Also, at least as far as the reflexives in (2a) and (7a) are concerned, the property is evidently not presentational in nature, since in these cases the reflexive does not introduce a new entity into the discourse. Rather, the type of focus that seems to be relevant in the configuration in (8) is one which may be called “identity focus”: the use of the reflexive draws attention to the relationship of referential identity between the subject and the syntactic object of the verb.²⁵ The idea, then, is that this function is formally expressed by means of an *n*-head containing a focus feature with the value “identity” (henceforth, [id-focus]). Moreover, it is proposed here that the identity focus *n*-head is the locus of the *-self* affix which is spelled out as part of the reflexive pronoun in sentences like (2a), where the merger of these two elements is effected by D-to-*n* raising in accordance with Chomsky’s proposal in (9). Being a nominal element, it seems reasonable to assume that the *n* also contains, at least, ϕ -features and a case feature, though these features are unvalued at the point where the *n* is merged into the structure.²⁶

The main ideas of the above discussion – that is, Chomsky’s (2006) ideas about a nominal shell *nP*, Zeller’s (2008) idea that the *n*-head can express a focus property, and the ideas put forward just now about the function and feature make-up of the *n* in the configuration in (8) – can be presented as follows in the form of four further hypotheses of the NSA:²⁷

Hypothesis C

A reflexive and its antecedent are externally merged within the same nominal shell *nP* as, respectively, the complement and the specifier of an identity focus light noun *n*.

Hypothesis D

The *n* in the configuration $[_{nP}^2$ [antecedent] $[_{nP}^1$ *n* - reflexive pronoun]] contains

- (i) the feature [id-focus], and
- (ii) a set of ϕ -features and a case feature, which have to be valued in the course of the derivation.

Hypothesis E

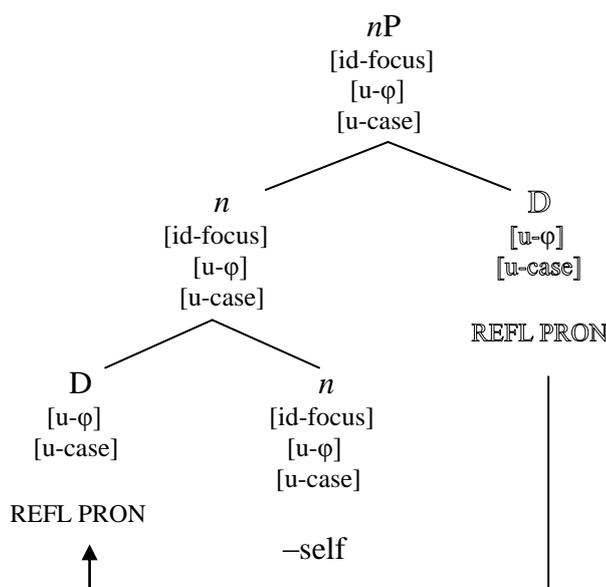
The identity focus *n* in the configuration in Hypothesis D is the locus of the affix *-self*.

Hypothesis F

The reflexive pronoun in the configuration in Hypothesis D undergoes D-to-*n* raising, that is, it is internally merged with the *n*.

As suggested above, the identity focus *n*-head expresses the notion that the reflexive in the configuration in Hypothesis D serves to *emphasise* the relationship of referential identity – or, as it is usually referred to, coreferentiality – between the reflexive and its antecedent. The question that needs to be addressed next, is exactly how this relationship is *established*. In this regard, consider again the obligatory reflexive construction in (2a) *Die man haat homself*, where the pronoun *hom* is analysed as a D with the structure in (3b). According to Hypotheses C–E, this pronoun is externally merged as the complement of a light noun which contains the features [id-focus], [u- ϕ], [u-case] as well as the affix *-self*; and according to Hypothesis F, the pronoun is subsequently merged with the *n*-head, creating an object that is eventually spelled out as *homself*. The resulting structure is given in (12). Since the ϕ -features of both the pronoun and the *n* are unvalued, no ϕ -feature valuation can take place in this configuration. (It is assumed here that D-to-*n* raising involves a copy-merge operation. This operation is indicated by means of a solid arrow in (12), and the copy left behind by means of outline font; these conventions will be used in all similar structures below. The notation REFL PRON is used to indicate that the item eventually spelled out as the reflexive pronoun *hom(self)* has not yet been supplied with the appropriate values for its case and ϕ -features.)

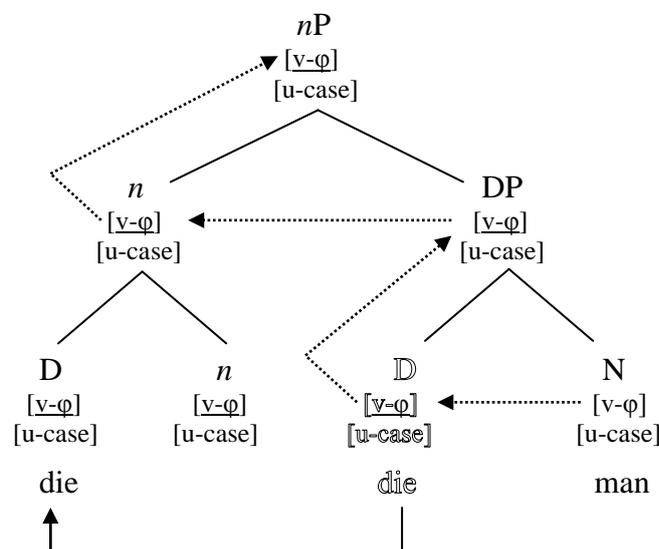
(12)



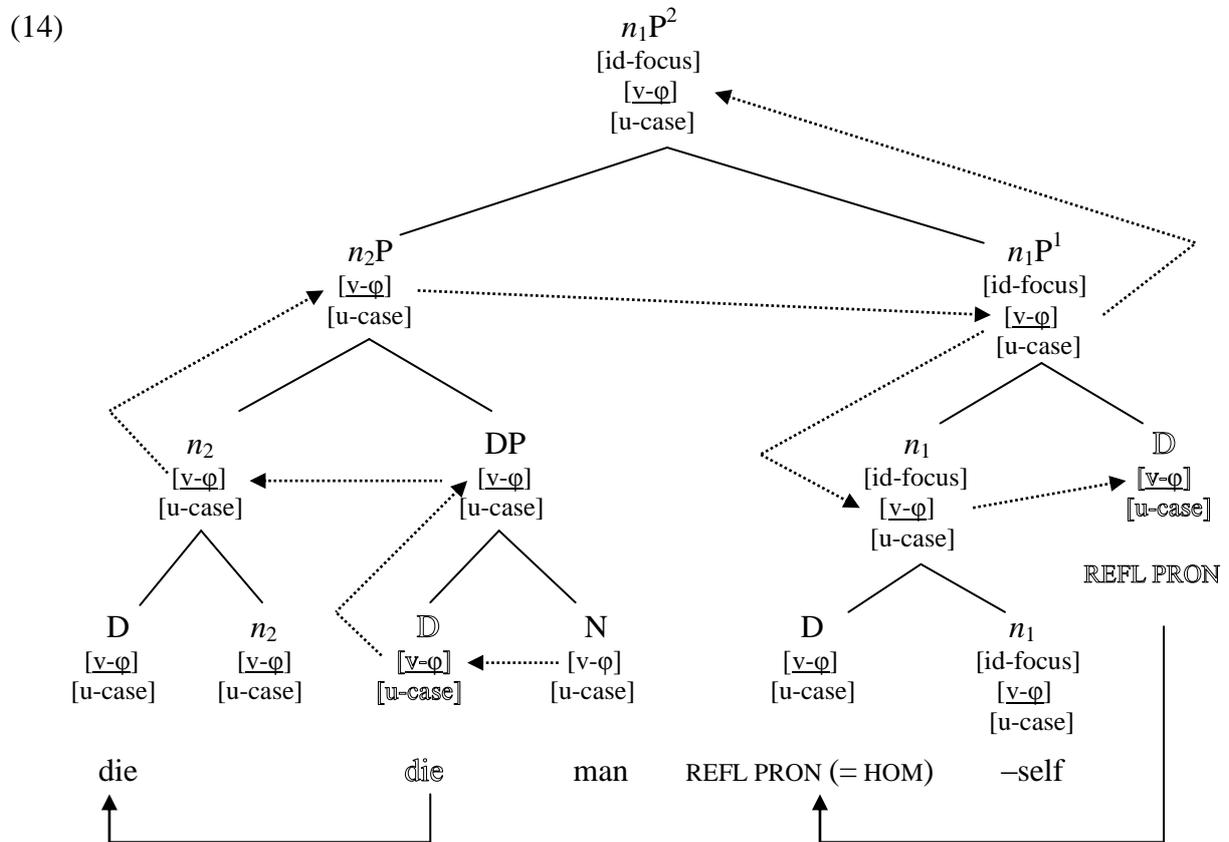
It could be objected that the operation illustrated in (12) is superfluous since the D apparently only “reemerges” with the *n*. Note, however, that this structure represents the canonical configuration for incorporation, where the features of the element that is incorporated (or “remerged”, in this case the D) form a subset of those of the incorporation host (here, the *n*); see Baker (1988) and Roberts (2010) for detailed discussion of various types and the theoretical underpinnings of incorporation phenomena.

Consider next the nominal expression *die man* functioning as the subject in (2a). In terms of the proposal quoted in (9), this expression is also analysed as an *nP*, with *die man* forming the DP complement of a light noun, and the noun *man* in turn forming the complement of the D *die*. In this case, the light noun initially contains at least the features [u- ϕ] and [u-case], but not [id-focus] since it is not selected to express a relationship of referential identity. Furthermore, both the D and the N initially contain an unvalued case feature as well as ϕ -features; in contrast to the D, however, the N enters the derivation with its ϕ -features already valued (here, 3-pers, sg-num, mas-gen). Note that merger of the D *die* and the N *man* results in a probe-goal configuration in which the N can supply the D with the relevant ϕ -feature values. Similarly, merger of the DP *die man* with the light noun brings about a configuration in which the ϕ -features of the *n* can be supplied with the values associated with this particular DP. The whole *nP* thus ends up having the ϕ -feature values initially provided by the N *man*. Given that the D is raised to the *n*-head, the structure of the *nP die man* can be represented as in (13). (Here and in similar structures below, feature valuation and percolation of feature values within a particular projection are indicated by means of dotted arrows; features that have been valued in the course of the derivation are underlined.)

(13)



In terms of Hypothesis C, the nP described in (13) is merged as the specifier of the identity focus n in (12). This sets up a probe-goal configuration in which the ϕ -features of the identity focus n (and via percolation, its projections as well) can be valued by the nP *die man*.²⁸ As a consequence, the reflexive pronoun, which is active because of its unvalued case and ϕ -features, can now acquire ϕ -feature values from the identity focus n , in effect the same values as that of the corresponding features of the nP *die man* (i.e. 3-pers, sg-num, mas-gen). In short, then, the ϕ -features of the reflexive pronoun are *indirectly* valued by the expression *die man*, with the identity focus n functioning as intermediary. The various merger and feature valuation operations are shown in (14). (For ease of reference, the different light nouns and their respective projections are distinguished by means of numeral subscripts.)



It is proposed here that the above structure, with ϕ -feature valuation effected in the manner indicated by the dotted arrows, represents the syntactic configuration that is required for establishing an obligatory coreferential relationship between a reflexive pronoun and an antecedent expression. In the case of the sentence in (2a), then, this means that *homself* is interpreted as obligatorily coreferential with *die man* at the point where the semantic component gets access to the structure in (14).²⁹ It must be emphasised that this interpretation follows solely

from the fact that the reflexive pronoun and *die man* occur in the particular configuration in (14) and have the same ϕ -features with the same values; specifically, the semantic device that is responsible for providing the coreferential (or anaphoric) interpretation has no way of “knowing” that the ϕ -features of the pronoun were (indirectly) valued by its antecedent in the course of the derivation.

The above proposals about ϕ -feature valuation and the semantic interpretation of the configuration described in (14) are captured by the following two hypotheses of the NSA:

Hypothesis G

In the configuration

$$[n_1P^2 [n_2P] [n_1P^1 [[D \text{ reflexive pronoun}] + n_1] [D \text{ reflexive pronoun}]]]$$

- (i) the n_2P values the ϕ -features of the n_1 and its projections, and as a consequence,
- (ii) the n_1 values the ϕ -features of the D.

Hypothesis H

The ϕ -valued D in the configuration in Hypothesis G is semantically interpreted as a (reflexive) anaphor and the n_2P as its antecedent; that is, the D is interpreted as obligatorily coreferential with the n_2P .

We now turn to the question of where the identity focus nP described in (14) is merged in the structure underlying the sentence in (2a). It was claimed at the beginning of this section that (the nominal expression containing) the reflexive pronoun *homself* is merged with the verb. According to Hypotheses C, E and F, the pronoun *hom* is initially merged as the complement of an identity focus n and is subsequently raised to this head where it combines with the affix *-self*; in other words, the reflexive forms part of an identity focus nP . Hence the above claim may be reformulated as follows: in a reflexive construction like the one in (2a), the verb – in this case *haat*, which is not inherently reflexive but which can be used with a reflexive reading – selects as its complement a nominal expression that is headed by an n with the feature [id-focus], that is, an identity focus nP with the structure in (14). Moreover, it is claimed that the selection of such an nP is obligatory in the case of inherently reflexive verbs, like *misgis* in (7a). By contrast, from a grammatical point of view, a non-reflexive construction is one in which the verb does not select an identity focus nP as its complement. This non-selection of the nP in question is determined by the lexical properties of the specific verb: either (i) the verb is inherently non-reflexive, like

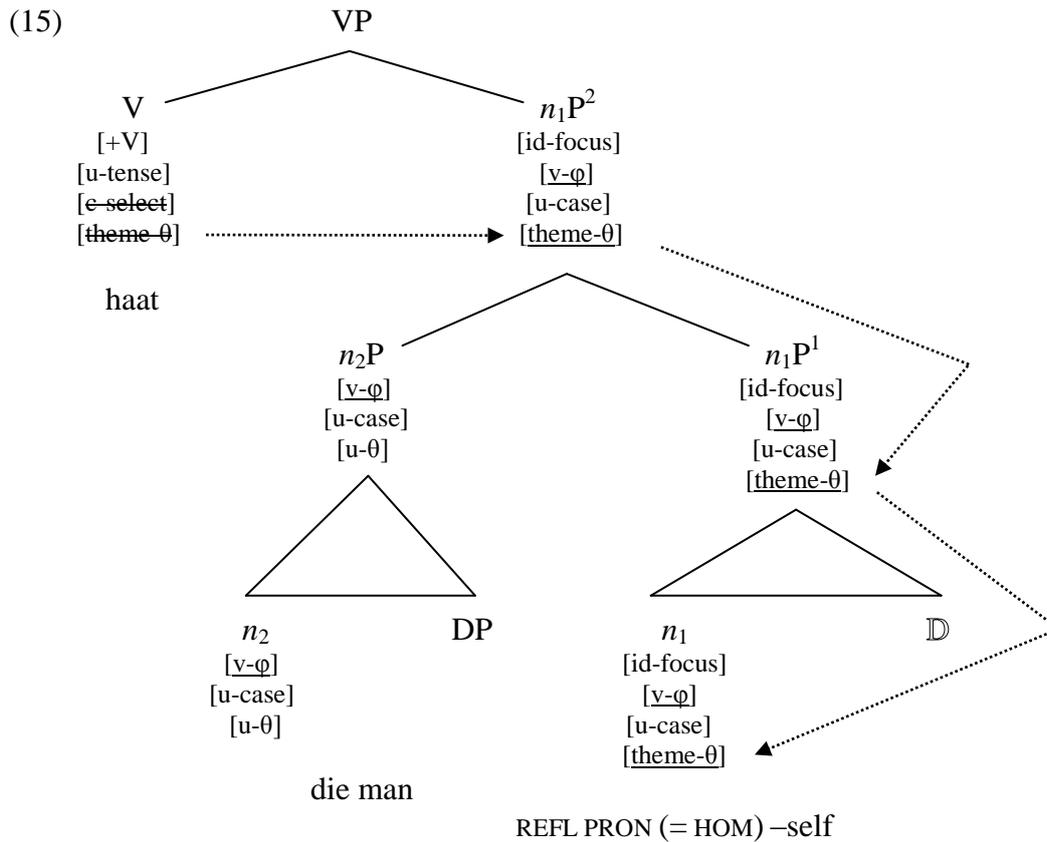
vergesel in (6a), or (ii) the verb also allows a non-reflexive reading, like *haat* in (1a). These claims can be expressed in the form of the following hypothesis (this version of the hypothesis will be generalised in section 3.2.2):

Hypothesis I (first version)

1. A reflexive construction is derived when an identity focus *nP* – as represented by the n_1P^2 in Hypothesis G – is selected as the syntactic complement of a verb, where the verb is either inherently reflexive or compatible with a reflexive reading.
2. A non-reflexive construction is derived when an identity focus *nP* is not selected as the syntactic complement of a verb, where the verb is either inherently non-reflexive or compatible with a non-reflexive reading.

In grammatical terms, then, a “reflexive construction” is defined as one in which the verb selects an identity focus *nP* as its complement (obligatorily in the case of inherently reflexive verbs like *misgis*). Conversely, a “non-reflexive construction” is grammatically defined as one in which the verb does not (or cannot, as in the case of inherently non-reflexive verbs like *vergesel*) select an identity focus *nP* as its complement.³⁰ It is assumed here – based on the proposals in e.g. Holmberg (2000), Julien (2002), Pesetsky & Torrego (2007) and Biberauer et al. (2009, 2011) – that the selection of a specific type of complement is formally expressed in the form of a constituent selection feature ([c-select]) of the particular head. For instance, an inherently reflexive verb like *misgis* would have a [c-select] feature to the effect that this verb requires an identity focus *nP* as its complement; this feature is deleted as part of the merger operation.³¹

Returning to the derivation of the sentence in (2a) *Die man haat homself*, the structure resulting from the merger of the verb *haat* and the identity focus *nP* in (14) can be represented as in (15) below. There are three points in connection with this structure that require comment. The first concerns the ordering of the verb and its complement. The account of word order and linearisation that is assumed in this study is largely based on the framework developed by, amongst others, Biberauer & Richards (2006), Biberauer & Roberts (2006), Biberauer et al. (2009) and Roberts (2010). In terms of this framework, the complement is merged to the right of the verb in Germanic varieties, including Afrikaans. The second point concerns the verbal or V-related features carried by the verb (as opposed to nominal or D-related features such as case, ϕ - and θ -features). These are taken to include a [+V] categorial feature, an unvalued tense feature ([u-tense]), and a [c-select] feature.



The third point in connection with (15) concerns the θ -roles carried by the nominal expressions in (2a). The expression *die man* represents the experiencer and *homsel* the theme. Focusing for the moment on *homsel*, it is a standardly held view that a lexical verb which selects a nominal expression as its complement is involved in the assignment of a θ -role to that expression. In the case of (2a), then, *haat* would enter into the process whereby the theme role is assigned to its *nP* complement, which has the reflexive *homsel* in head position. It is however not clear exactly how and by means of which formal devices this process is effected. One possibility – based on proposals by, amongst others, Fanselow (2001), Hornstein (1999), and Manzini & Roussou (2000) – would be along the following lines. Firstly, both the light noun *n* and the verb contain a θ -feature, interpretable but unvalued in the case of the *n* and uninterpretable but valued (e.g. [theme-θ]) in the case of the verb. Secondly, the verb supplies the relevant value to the θ -feature of its *nP* complement (and, via percolation, to every other instance of this feature on the projection line of the identity focus *n*). Thirdly, the verb's θ -feature, being uninterpretable, is deleted in the process of valuing the corresponding feature of the *nP*.³² Furthermore, on this account, the θ -feature of the identity focus *n* and its two projections in (15) – i.e. n_1P^1 and n_1P^2 – becomes syntactically “inert” after it has been valued, which means that this feature is not visible for

further syntactic operations. By contrast, the θ -feature of the nominal expression in the specifier position of the n_1P^2 – which does not form part of the projection line of the identity focus n_1 – remains visible for agreement purposes since it is still unvalued. The discrepancy between the “activeness” of the θ -feature associated with the n_1P^2 in (15) and that of the subject n_2P *die man* in the specifier position of the identity focus n immediately explains why there is no A-over-A-type complication in this case.³³ In short, the verb *haat* θ -values the structurally closest goal in its c-command domain, that is, the n_1P^2 , thereby rendering this nP inert from a θ -valuation perspective. This means that (the unvalued θ -feature of) the subject n_2P constitutes the closest goal for any subsequent θ -probe.

The next step in the derivation of (2a) is to merge the VP in (15) with a light verb that carries the V-related features [+V], [c-select] and [u-tense]. This creates the structural setting for several further operations, one being that the lexical verb is raised to the v .³⁴ The second has to do with the assignment of accusative case to the complement of the lexical verb *haat*, that is, to the identity focus n_1P^2 in (15). It is widely assumed that structural case assignment is effected via feature agreement in a probe-goal configuration and, more specifically, that v represents a probe which determines accusative case-marking of a nominal expression in its c-command domain.³⁵ Being a probe implies that the v must contain at least one unvalued feature, which is taken to be [u- ϕ] (where “ ϕ ” stands for a cluster of features such as person, number and gender; see note 6). Given these assumptions, it is claimed here (i) that the ϕ -features of the v are valued by the ϕ -features of the identity focus nP in (15) and (ii) that the v carries an accusative case feature ([acc-case]) which serves to value the case feature of this nP . Since the two case features and the ϕ -features of the v are uninterpretable, they are deleted as part of the valuation process. Note that the nP headed by the identity focus n becomes inactive from a probe-goal perspective once its case feature has been valued, since it does not contain any other unvalued features; the nP *die man* in its specifier position is still active, however, because of its unvalued case and θ -features.

The third operation concerns the θ -marking of the expression *die man* in (2a). The commonly held view is that light verbs are involved in the assignment of a θ -role to a nominal expression that functions as the semantic subject of a sentence. Pursuing the ideas about θ -features put forward above, it could be claimed that – similar to a lexical verb such as *haat* in (15) – a light verb contains an uninterpretable, valued θ -feature and that this feature serves to value the corresponding feature of an nP in the c-command domain of the v . In the case of (2a), *die man*

functions as the subject of the sentence; in (15), it forms part of the identity focus n_1P^2 , and it moreover contains an unvalued θ -feature. The following is now proposed. The v probes the VP in (15) in search of an appropriate nominal expression to which it can assign the value of its θ -feature. Recall that the identity focus nP has already been θ -valued by the verb *haat*, whereas its specifier, the n_2P *die man*, still has an unvalued θ -feature. Hence the v provides the n_2P with a specific θ -value, in this case experiencer (represented as [exp- θ]).³⁶ Of course, if the VP that is probed by the v lacks a nominal expression that has not yet been θ -valued, the v would have to search for one outside of the structure which it c-commands, where such an expression would then be externally merged as a specifier of the v .³⁷ In the derivation of (2a), however, such external search is not called for; and in any case, here the lexical subarray feeding the derivation of the v -phase does not contain any other nominal constituent that could be externally merged into the specifier position of the vP .

The fourth operation following from the merger of a light verb with the VP in (15) concerns the fact that the subject and the object, in this order, precede the lexical verb in subject-initial clauses in Afrikaans, except in V2 constructions such as main clauses which lack an auxiliary verb and subordinate clauses which lack both an auxiliary verb and an overt complementiser. The subject-object-verb ordering is illustrated by the following examples:

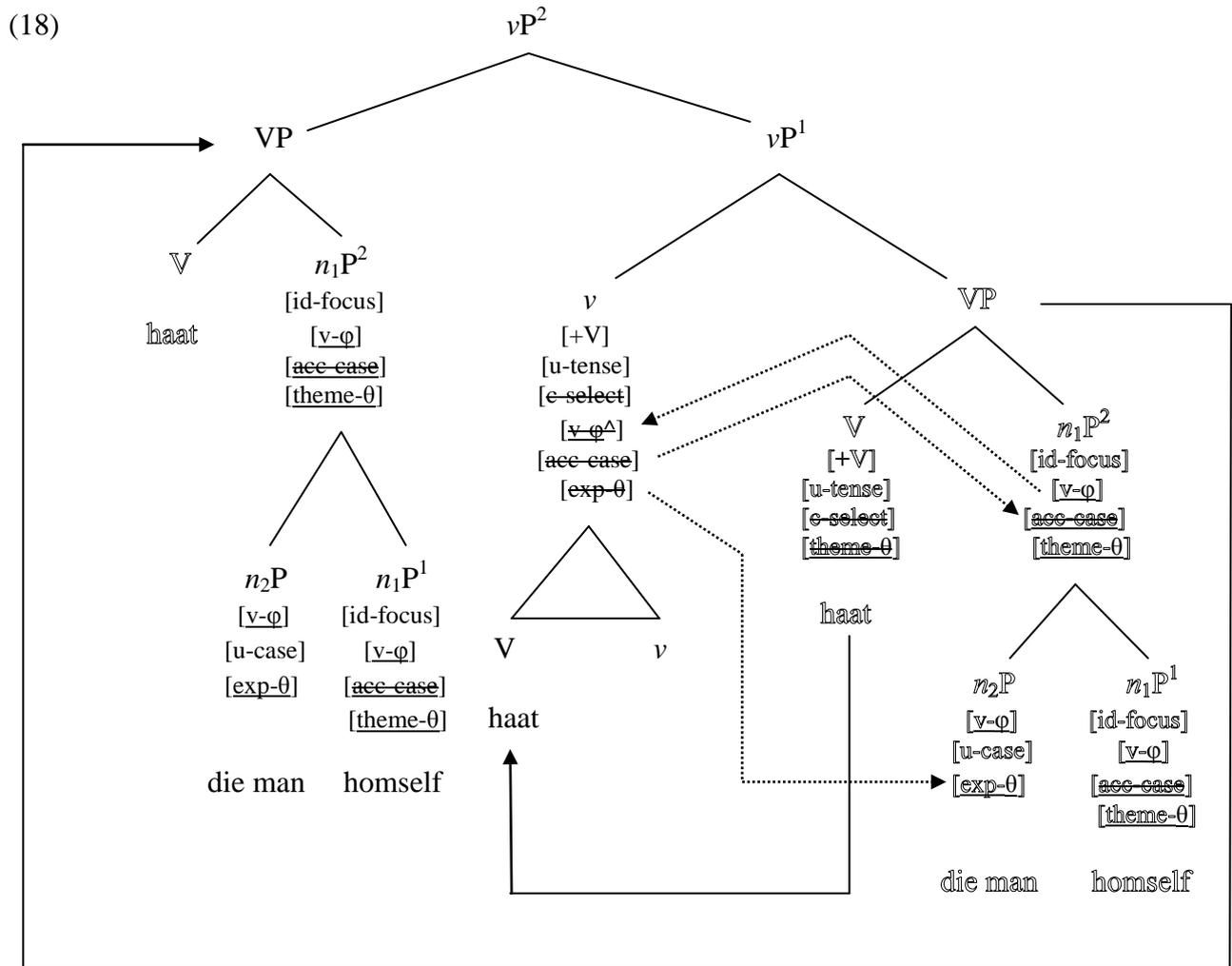
- (16) a. Die man het homself gehaat.
 the man has himself hated
 “The man hated himself”
- b. Ek weet dat die man homself haat.
 I know that the man himself hates
 “I know that the man hates himself”

In terms of the framework assumed here, the ordering in (16) is brought about by raising the VP into the specifier position of the vP ; moreover, this is taken to be a general option in Afrikaans, one which is also involved in the derivation of subject-initial V2 constructions.³⁸ In the case of (2a), then, raising of the VP into the specifier position of the vP will result in both the subject and the object preceding the verb *haat*, which at this stage occupies the v -head position.

An obvious question at this point is what triggers the VP raising operation. In accordance with the probe-goal approach to feature agreement and movement developed by numerous researchers since Chomsky (2000, 2001) and Pesetsky & Torrego (2001, 2004), it is assumed here that the raising operation in question is triggered by an Edge Feature (which may be thought of as a generalised EPP-feature) that is associated with the ϕ -features of the probe v .³⁹ Following Biberauer et al. (2008), such movement triggers may be formally represented by means of the diacritic \wedge which is appended to the relevant features. In the derivation under discussion, then, raising of the VP is an Agree-related operation, triggered by the movement diacritic associated with the light verb's ϕ -features, that is, $v [u-\phi^\wedge]$.⁴⁰ It must however be noted that, at least in the case of (2a), raising of the VP containing the identity focus nP in (15) and raising of this nP on its own will result in the same linear ordering of the subject *die man*, the object *homself* and the verb *haat*. In other words, in this case there does not seem to be a clear reason for preferring an analysis on which the VP is pied-piped along with the nP over one where the VP is left stranded, that is, where the nP is raised on its own. Although the pied-piping analysis will be adopted for the purposes of this study, both these options seem to be available in Afrikaans. Such an approach might well provide a basis for explaining various “leaking” phenomena, that is, cases where VP-related constituents can occur either to the left or to the right of the lexical verb. For example, it could then be argued that a sentence like (17a) is derived by pied-piping the VP along with the raised object, whereas (17b) is derived by raising only the object, resulting in the PP staying behind as a “leaked” constituent in the stranded VP.⁴¹

- (17) a. Hy het die pasiënt na 'n spesialis verwys.
 he has the patient to a specialist refer
 “He referred the patient to a specialist”
- b. Hy het die pasiënt verwys na 'n spesialis.
 he has the patient refer to a specialist
 “He referred the patient to a specialist”

The various operations brought about by the merger of the VP in (15) with an experiencer light verb are illustrated in (18).

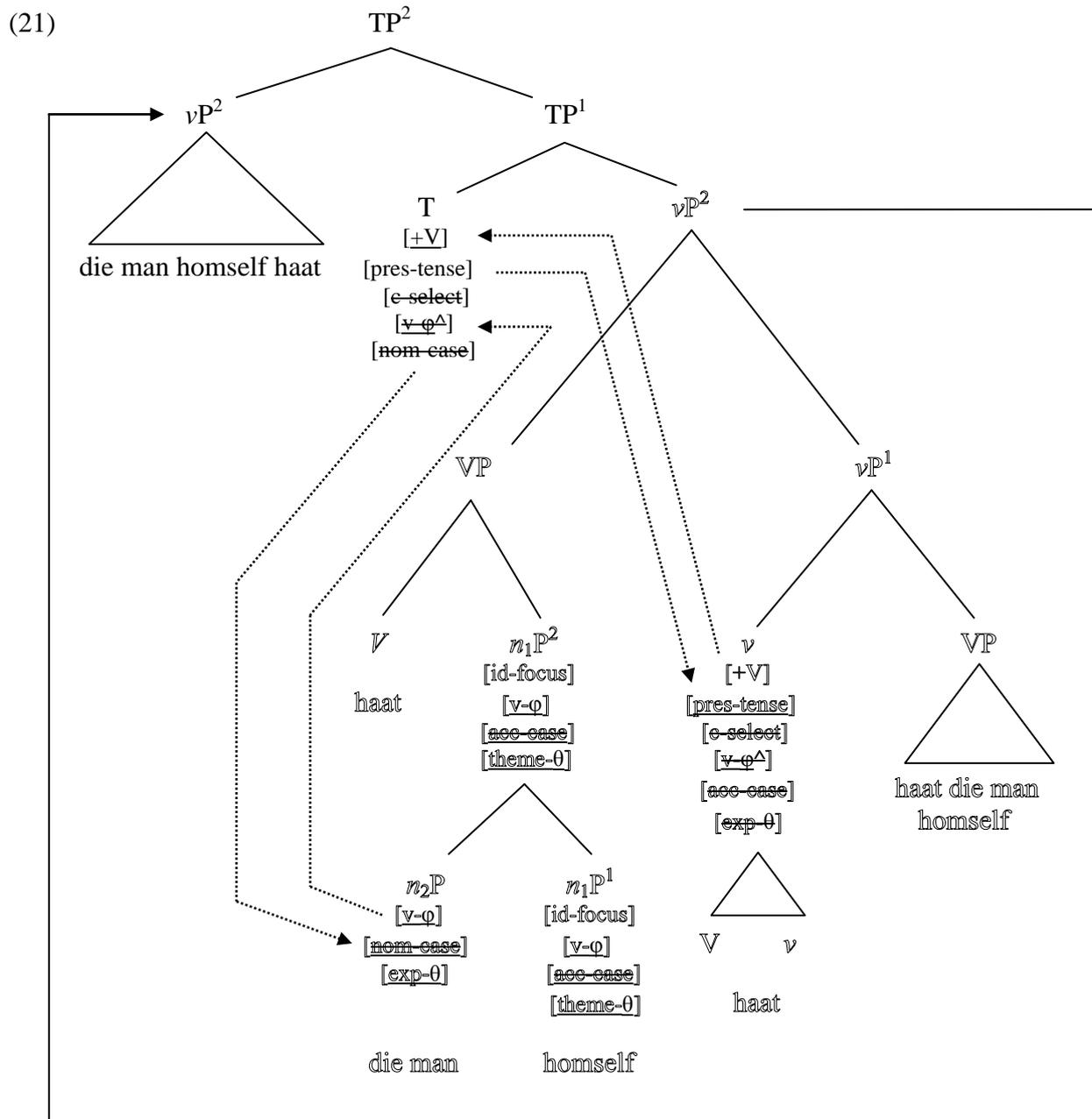


Continuing with the derivation of (2a), the vP in (18) is merged with a T-head containing the V-related features [c-select], unvalued [V], and valued [tense]. By entering into a probe-goal relation with the v/V , the T acquires a positive value for its categorial feature ([+V]) and at the same time supplies a value for the tense feature of the v/V , in this case present ([pres-tense]). In the analysis proposed here, the T also has two types of D-related features, one being unvalued ϕ -features. As regards the other type of D-related feature, the standard view is that finite T enters into the assignment of nominative case, v and that this is effected by means of feature agreement. Similar to the above analysis of accusative case assignment, the T is therefore assumed to have a nominative case feature ([nom-case]). These D-related features enter into an agreement relationship with the corresponding features of a nominal goal in the T's c-command domain. As noted above, the nP headed by the identity focus n cannot enter into any agreement relations because all its features have been valued at this stage. However, the n_2P forming part of the raised VP in (18), that is, the subject *die man*, is an active goal because of its unvalued case feature (although

it might well contain other unvalued features as well; see below). Hence the T supplies the *nP* *die man* with the nominative case value and concurrently acquires ϕ -values from the ϕ -features carried by this *nP*. Furthermore, in terms of the account of word order and linearisation assumed here, the T's ϕ -features – like those of the *v* in (18) – are associated with a movement trigger which causes the *nP die man* to raise into the specifier position of the TP. As in the case of object raising, this operation is taken to involve pied-piping of both of the phrases containing the expression *die man* – that is, the *nP* headed by the identity focus *n* and the *vP* dominating this *nP* – resulting in the whole *vP* being raised. In other words, the subject is not raised on its own and neither is the verb independently raised to the T head. However, similar to what was suggested in connection with object raising, it is possible that there are at least two options available as regards raising of the subject: (i) either the *vP* is pied-piped along with the subject (as is claimed here to be the case in standard varieties of Afrikaans), or (ii) the subject is raised on its own to the specifier position of the TP, with the *v/V* independently raised to the T-head. The second option could well provide an account for the fact that, in colloquial Afrikaans and also in some non-standard varieties such as Kaaps, the finite verb can occur between the subject and the object in subordinate clauses with an overt complementiser, as illustrated in (19b) and (20b) below. In such cases, it could then be argued that the object forms part of the stranded VP. This possibility will however not be examined further here (cf. Biberauer 2003, 2009; Biberauer & Richards 2006 for discussion).

- (19) a. Ek weet dat hy die boek gelees het.
 I know that he the book read has
 ‘‘I know he read the book’’
- b. Ek weet dat hy het die boek gelees. (non-standard)
- (20) a. Ek weet dat die man homself haat.
 I know that the man himself hates
 ‘‘I know that the man hates himself’’
- b. Ek weet dat die man haat homself. (non-standard)

The effects of the various operations resulting from the merger of the T with the *vP* in (18) are shown in (21).



The final stage in the derivation of (2a) starts with the merger of the TP² in (21) with a C-head.⁴² In order to derive the surface V2 order of (2a) from the subject-object-verb order displayed in (21), two movement operations have to take place: (i) the subject *die man* must raise to the specifier position of the CP, and (ii) the finite verb *haat* must raise to the C; at this stage, the subject (i.e. n₂P) and the verb (i.e. v/V) both form part of the vP² in [spec, T].⁴³ In the framework adopted here, subject raising and v/V raising are triggered by two movement diacritics, one associated with a D-related feature of the C and the other with a V-related feature. It is not clear, however, exactly which features are carried by the C and with which features the movement

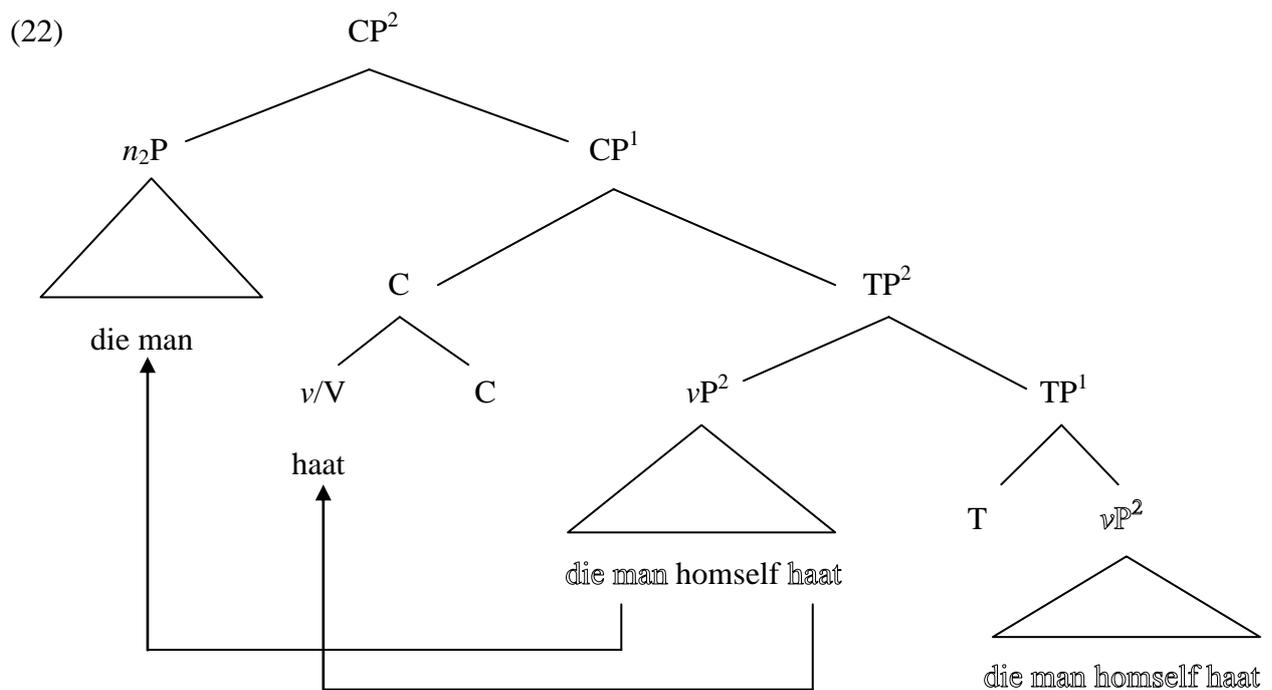
diacritics are associated. Some possibilities are outlined below, but because of the speculative nature of the discussion no firm conclusions will be drawn.

Consider first the subject raising operation. For this to take place, the n_2P *die man* in (21) must have an unvalued feature to ensure that it is active for probe-goal purposes, and the C must likewise have an unvalued D-related feature – with a movement diacritic – which can be valued by the n_2P and which can trigger subject raising. Note however that the n_2P , as represented in (21), does not contain an unvalued feature, which suggests that it is not active. Moreover, it is not clear which D-related feature of the C could enter into a probe-goal relation with a corresponding feature of the subject. There are various possible ways of overcoming these potential problems. One possibility is that both the C and the subject n_2P have a discourse-related feature, unvalued and bearing a movement diacritic in the case of the C, and valued in the case of the subject. Since it is plausible that the subject *die man* represents the topic of the sentence in (2a), it could be claimed on the basis of the proposals put forward by Aboh (2010) that the n_2P has the feature [topic-disc(ourse)] which serves to value the [u-disc] feature of the C.⁴⁴ This still leaves the problem of the n_2P being an inactive goal, however. In this regard, it could be argued that the n_2P is visible from a probe-goal perspective simply by virtue of forming part of some other visible goal, in this case the raised vP^2 in (21) (an issue to which we return below). Alternatively, it could be argued that the T-head – contrary to what was assumed above – does not in fact carry the nominative case feature in Afrikaans, but that this feature is actually contained in the C-head.⁴⁵ This would mean that the subject n_2P will still have an unvalued case feature at the stage where it is raised along with the vP^2 into the specifier position of the TP, making it an active goal that can be case-valued by the C. These and other possibilities will not be examined further here. Rather, it is simply assumed for the purposes of the present study (i) that subject raising is brought about by a movement diacritic associated with an unvalued discourse-related feature of the C and (ii) that the subject is somehow visible as a goal for the C probe.

Consider next the v/V raising operation. For this to take place, the C must have an unvalued V-related feature with a movement diacritic. A likely candidate would be the categorial feature [V]. Note that the T in (21) is inactive, since all its features have been valued either in the formation of the lexical array (e.g. [pres-tense] and [nom-case], if T is taken as the locus of this case feature; see above), or by means of feature agreement (e.g. ϕ -valuation by the subject n^2P and [V] valuation by the v/V , both prior to vP raising). Hence the T cannot serve to value the

[u-V] feature of the C. This leaves the v/V , which however also seems to be inactive from a probe-goal perspective. A possible solution – similar to the one suggested above in connection with the locus of nominative case – would be to regard the C as the locus of the valued tense feature in Afrikaans, rather than the T as was previously assumed.⁴⁶ This would mean that the v/V in the raised vP in (21) is still unvalued for tense, making it an active goal. As a consequence, the [pres-tense] feature of the C could value the tense feature of the v/V and the v/V could value the [u-V] feature of the C, with the movement diacritic associated with the C's V feature triggering v/V raising. The obvious question, of course, is why the whole vP^2 in (21) is not pied-piped along with the v/V , resulting in the vP being raised to a second specifier position of the CP. Although this could conceivably be a parameterised option (perhaps involved in the derivation of some OVS orders), it will be assumed here that Agree-driven raising which is related to categorial features only targets a head, since it is the head that defines the categorial status of a particular projection. In the case of (2a), then, it is the raised head v/V which specifies the verbal nature of the C.⁴⁷ As in the case of subject raising, however, these ideas are simply presented as possibilities that require further investigation.

The structure resulting from the merger of the TP^2 in (21) with a C is illustrated in broad outline in (22). For the sake of simplicity, and in view of the speculative nature of the above discussion, the various features and valuation operations which could be involved in the derivation are not indicated.



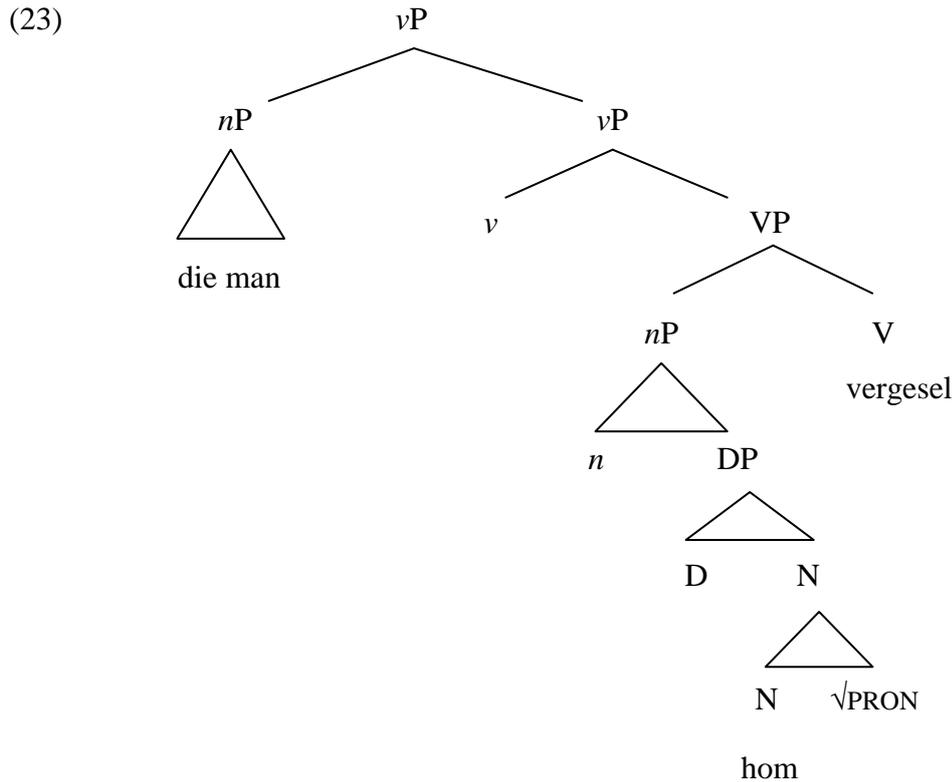
Let us now briefly examine the three other types of construction referred to at the beginning of this section, namely those illustrated by the sentences in (1a), (6a) and (7a). Consider first the reflexive sentence in (7a) *Die man misgis hom*. There are three salient differences between this sentence and the reflexive sentence in (2a) *Die man haat homself*. The first is that *misgis* in (7a) is an inherently reflexive verb, which means that it is semantically intransitive in the sense that it lacks a complement functioning as an argument, yet at the same time syntactically transitive in that it obligatorily selects a reflexive as its complement (see section 2.3.1). This is in contrast to *haat* in (2a) which is not only semantically transitive, but which is also compatible with both a reflexive and a non-reflexive interpretation of its pronominal complement, as shown in (1a). Even so, in terms of Hypothesis I, an inherently reflexive verb and one which is not inherently reflexive but which is used with a reflexive reading, both select an identity focus *nP* as their syntactic complement. The derivation of (7a) therefore proceeds in essentially the same manner as that proposed above for (2a).

The second difference concerns the morphological form of the reflexive pronoun. As was pointed out in section 2.3.1, the reflexive is standardly used without the suffix *-self* when it is selected by an inherently reflexive verb, although *-self* forms are commonly found with such verbs in everyday speech and also in written texts.⁴⁸ By contrast, with a verb like *haat* the reflexive reading is only possible when the morphologically complex form of the pronoun is used, as shown by the difference in grammaticality between (1a,b). According to Hypothesis E, the identity focus *n*-head is the locus of the affix *-self*. However, in a sentence like (7a) the *n* is not required to carry this affix, most likely because the meaning of the inherently reflexive verb *misgis* makes it superfluous to emphasise the coreferential relationship between the subject and the verb's complement by means of an overt identity focus marker. Conversely, such a marker is required in the case of a sentence like (2a) because the meaning of *haat* allows both a reflexive and a non-reflexive reading; in other words, here the affix *-self* serves to emphasise the fact that the verb is used in a reflexive construction.

The third difference concerns the θ -roles which are assigned to the various nominal expressions in (7a) and (2a). In (2a) the subject *die man* and the reflexive *homself* represent the experiencer and the theme, respectively. In (7a) *die man* is also interpreted as the experiencer, but here the reflexive *hom* is – in the terminology of Büring (2005:22) – “semantically inert” in the sense that it lacks a specific θ -role, that is, it does not function as a distinct argument. It was suggested

above that a nominal expression carries an unvalued θ -feature and that this feature is valued by an appropriate head in a probe-goal configuration. For instance, in (2a) the experiencer light verb values the θ -feature of the subject *nP*, whereas the lexical verb *haat* supplies the theme value for the object *nP* headed by the identity focus *n*. Pursuing this idea, the θ -feature of the subject *die man* in (7a) is likewise assigned the experiencer value by the light verb. However, being semantically inert, the object *homself* in this construction is apparently not assigned a θ -value by the inherently reflexive verb *misgis*. One would therefore expect the derivation to crash since the object is left with an interpretable but unvalued θ -feature. This is not the case, however. Maintaining the idea that the object does indeed have an unvalued θ -feature when it is merged with the lexical verb, a possible solution is to postulate that an inherently reflexive verb has the property of assigning a *null* value to the θ -feature of its syntactic complement ([null- θ]), thereby grammatically marking the nominal expression as semantically inert. This would mean that the object *homself* in (7a) is in fact θ -valued, albeit in a “vacuous” manner. On this approach, then, an inherently reflexive verb could be defined in grammatical terms as one which (i) obligatorily selects an identity focus *nP* as its complement and (ii) assigns a null value to the θ -feature of this *nP*. Similarly, a semantically inert nominal expression could be grammatically defined as one which has been assigned a null θ -value.

Consider next the sentence in (6a) *Die man vergesel hom (op die uitstappie)*. As stated in section 2.3.1, *vergesel* is an inherently non-reflexive verb: it belongs to a subclass of semantically transitive verbs which can select a pronominal expression as its complement, but which disallows a reflexive interpretation for this expression, as shown by the difference in grammaticality between (6a,b).⁴⁹ In terms of Hypothesis I, *vergesel* in (6a) therefore lacks the ability to select an identity focus *nP* as its syntactic complement. This entails that the object *hom* and the subject *die man* do not form part of the same nominal shell, the one represented by the n_1P^2 in Hypothesis G. Rather, as outlined in (23) below, the verb *vergesel* selects (an *nP* containing) a non-reflexive pronoun (that is, *hom*, with the structure in (3a)), whereas *die man* is externally merged into the canonical position for subjects, namely a specifier position of the light verb.⁵⁰ In accordance with Hypothesis H, *hom* in (6a) therefore cannot be interpreted as a (reflexive) anaphor taking *die man* as its antecedent.



This brings us to the non-reflexive sentence in (1a) *Die man haat hom*. It was noted above that the verb *haat* is compatible with both a reflexive and a non-reflexive interpretation of its pronominal complement, but that the reflexive interpretation is only possible when the pronoun occurs with the suffix *-self*, as in (2a). In other words, with the subclass of semantically transitive verbs to which *haat* belongs, the morphologically simplex form of the pronoun indicates that the verb is used with a non-reflexive reading. According to Hypothesis I, the fact that *haat* is used non-reflexively in (1a) means that it does not select an identity focus *nP* as its syntactic complement. This entails that the object *hom* and the subject *die man* are not externally merged as, respectively, the complement and the specifier of an identity focus *n*-head. Rather, as in the derivation of (6a), the verb *haat* in (1a) selects (an *nP* containing) the non-reflexive pronoun *hom* (that is, a pronoun with the structure in (3a)), whereas the subject *die man* is externally merged as a specifier of the light verb. In short, then, *die man* and *hom* do not form part of the identity focus configuration described in Hypothesis G. It is therefore correctly predicted in terms of Hypothesis H that *hom* in (1a) cannot be interpreted as coreferential with the subject *die man*.

Two other verbal object complement constructions require comment at this juncture. The first of these is illustrated by the following sentences:

- (24) a. Die man_i skeer homself_i (elke oggend).
 the man shaves himself every morning
 “The man shaves himself (every morning)”
- b. Die man_i skeer hom_i (elke oggend).
- c. Die man_i skeer hom_j (elke oggend).

The verb *skeer* in (24) is similar to *haat* in that, although not inherently reflexive, it allows a reflexive interpretation for its pronominal complement. With *haat* the reflexive interpretation is only possible, and is in fact obligatory, when the pronoun occurs with the suffix *-self*. With a verb like *skeer* the reflexive interpretation is also obligatory when the complex form of the pronoun is used. It could thus be argued that *skeer*, like *haat*, selects an identity focus *nP* as its complement in those cases where it is used with an obligatory reflexive reading, that is, when *skeer* occurs with the *-self* form of the pronoun as in (24a). However, with *skeer* the reflexive interpretation is also an option with the simplex form of the pronoun, as shown in (24b). In other words, a sentence such as *Die man skeer hom* is ambiguous between a reflexive and a non-reflexive interpretation of the pronoun. Notice, though, that there are no linguistic considerations which could provide a basis for establishing a reflexive interpretation in this case: (24b) does not contain the identity focus marker *-self* and the verb does not express an inherently reflexive meaning. From a grammatical perspective, then, a sentence like (24b) cannot be defined as “reflexive” in the sense that the verb selects an identity focus *nP* as its complement. Rather, it seems likely that the subject *die man* and the pronoun *hom* are externally merged as, respectively, the specifier of the light verb and the complement of the lexical verb, similar to the structure in (23). This does not imply, however, that a coreferential relationship is necessarily ruled out between the subject and the pronoun; after all, the expressions *die man* and *hom* have the same ϕ -feature values, although these values have been independently acquired from the lexical array. What is instead claimed here is that such a relationship cannot be established on purely *grammatical* grounds, that is, in terms of Hypotheses G and H. Following Sperber & Wilson (1995:10), it could plausibly be argued that the option of interpreting the pronoun as reflexive or non-reflexive is brought about by “an interaction between linguistic structure and non-linguistic information, only the former being dealt with by the grammar.” On this approach, a sentence such as (24b) is therefore not “grammatically reflexive” in the sense of Hypothesis I, but rather “pragmatically reflexive” in the sense that non-linguistic information is crucially involved in establishing the coreferential relationship between the subject and the pronoun. Since

such a relationship does not obtain in the case of (24c), this sentence is non-reflexive on both grammatical and pragmatic grounds.

The second of the constructions requiring discussion concerns sentences such as the one in (7a) above, repeated here for convenience:

- (7) a. Die man_i misgis hom_i / homself_i.
 the man misjudges him
 “The man is mistaken”

Afrikaans does not overtly distinguish between strong and weak pronouns in the sense of Cardinaletti & Starke (1999). However, there is evidence that this distinction is real, as seen in the domain of inherently reflexive verbs such as *misgis* in (7a). The complement selected by verbs of this type is in some sense a “dummy”: the only choice is (i) a pronominal, which (ii) has to be coreferential with the agent argument, and which (iii) bears a null θ -role that renders it “semantically inert”. An important observation about the pronominal complement of an inherently reflexive verb is that it cannot receive primary stress, as shown in (25) (see Chapter 2, note 5).

- (25) Die man misgis hom / *HOM.

As described in section 2.3.1, the pronominal complement of an inherently reflexive verb is also subject to restrictions relating to coordination, fronting and right-node raising. Taken together, these characteristics render it plausible that the pronominal complement in question is a weak pronoun. Further evidence supporting this proposal comes from Cinque’s (1993) syntax prosody mapping analysis in terms of which the object within the VP receives default stress. Strikingly, however, the pronominal object of an inherently reflexive verb may not be stressed. If, as proposed above, the pronominal complement of such verbs is in fact a weak pronoun, these facts follow straightforwardly. Returning to the alternation between morphologically simplex and morphologically complex forms of the pronoun in the structure at hand, as illustrated in (7a), it is claimed here that the complex *-self* forms in Afrikaans can only contain strong pronouns, a claim which receives support from the diachronic development of complex reflexives in West Germanic languages (Keenan 2009). It follows, therefore, that the form *homself* in (7a) is

necessarily a spell-out of a strong pronoun plus the identity focus head (the locus of *–self*). In other words, Afrikaans does not contain a distinct form consisting of a weak pronoun plus *–self*. As a result, speakers of Afrikaans appear to be employing two forms when expressing obligatory reflexivity in structures containing an inherently reflexive verb: (i) the more conservative option of a weak pronoun without *–self*, and (ii) the more colloquial option (likely influenced by English; cf. Ponelis 1979) of a strong pronoun plus *–self*.

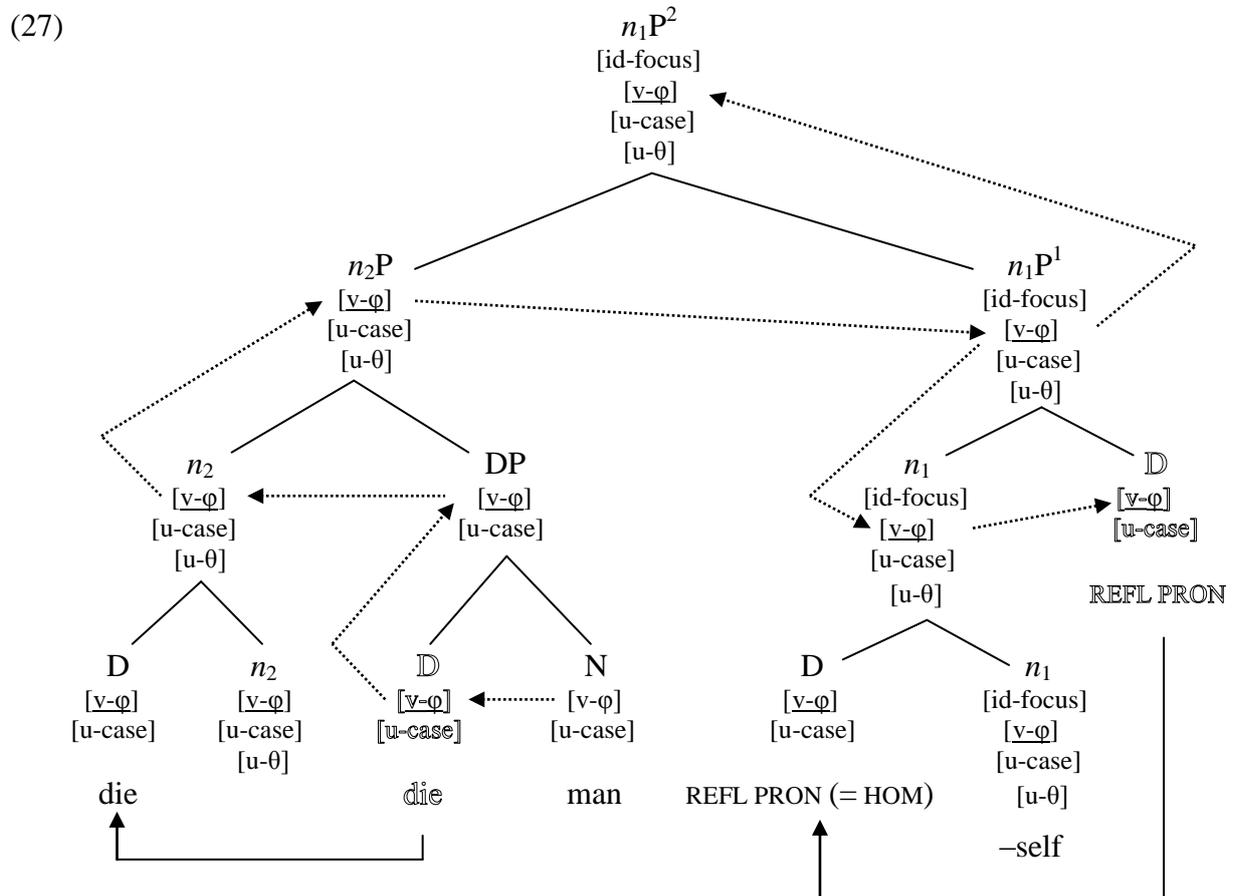
This subsection served to introduce the main assumptions and devices of the proposed nominal shell analysis of obligatory reflexivity in Afrikaans (NSA). The various devices have been presented in the form of nine hypotheses which relate to (i) the establishment of a structural relationship between a reflexive pronoun and an appropriate antecedent, and (ii) the semantic interpretation of such a relationship. The proposed devices were explicated with reference to several reflexive (as well as non-reflexive) constructions identified in Chapter 2, specifically those in which the pronoun occurs as the object complement of a verb. The remaining subsections of 3.2 deal with various other reflexive constructions that were identified in Chapter 2. Before proceeding, however, it should be emphasised that the proposals about, amongst others, grammatical features, case assignment, θ -role assignment and Agree-related movement which have been incorporated into the analyses in section 3.2.1 (and which are also adopted below) are not presented as core hypotheses of the NSA, but simply as working hypotheses about the course of syntactic derivations in Afrikaans; a discussion of their potential flaws and merits falls outside the scope of this study.

3.2.2 Prepositional object constructions

This section deals with several constructions identified in section 2.3.2 in which the reflexive occurs as the object complement of a preposition. To start, consider the examples in (26). As shown by the ungrammaticality of (26b), *homself* obligatorily enters into a coreferential relationship with the subject of the sentence.

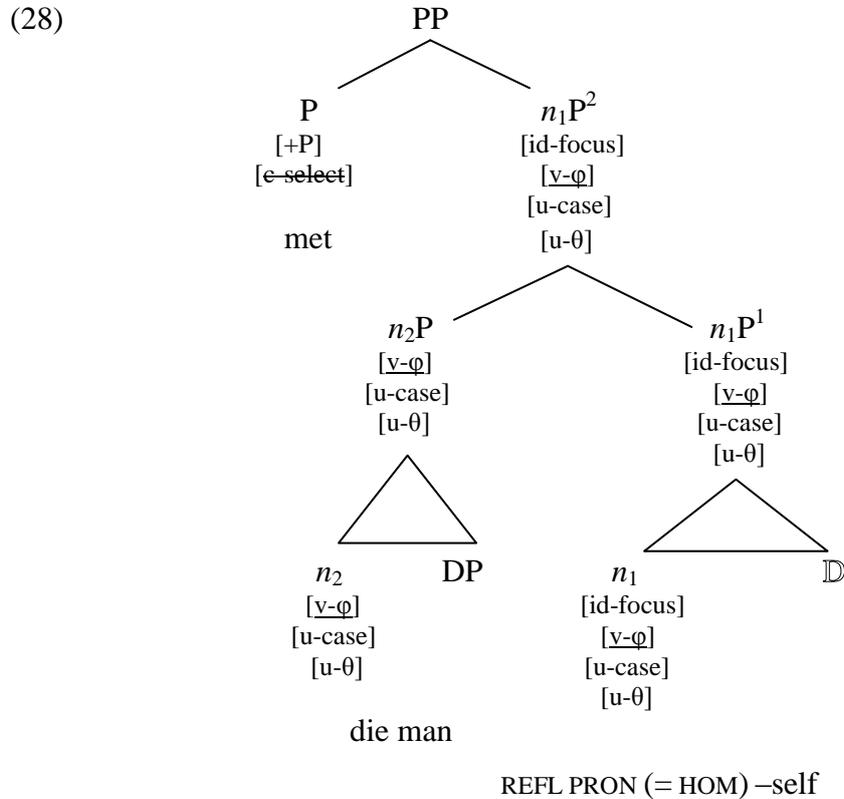
- (26) a. Die man_i praat met homself_i.
 the man talks with himself
 ‘‘The man is talking to himself’’
- b. *Die man_i praat met homself_j.

The construction in (26a) is derived as follows within the framework developed in section 3.2.1. First, in terms of Hypotheses A-G *homself* and *die man* are merged into the nominal shell structure in (27) below. Except for the addition of θ -features, this structure is identical to the one in (14) that was proposed for constructions in which the reflexive occurs as the complement of a verb. (As before, solid and dotted arrows are used to indicate raising and feature valuation and percolation operations, respectively; features that have been valued in the course of the derivation are underlined.) As stated in Hypothesis H, the D that is merged with the identity focus n_1 in the configuration in (27) is semantically interpreted as a (reflexive) anaphor that is obligatorily coreferential with the n_2 P, its antecedent.



The next step in the derivation of (26a) involves merging the n_1P^2 in (27) as the complement of the P *met*. Following Oosthuizen (2000), Biberauer (2008), Den Dikken (2010) and De Vos (2009), amongst others, it is assumed that the nominal expression is merged to the right of the P,⁵¹ the P is furthermore taken to contain at least the categorial feature [+P] and a [c-select]

feature. The result of the merger is represented in (28) below. Note that the case and θ -features of the two n Ps in (28) are still unvalued at this stage.

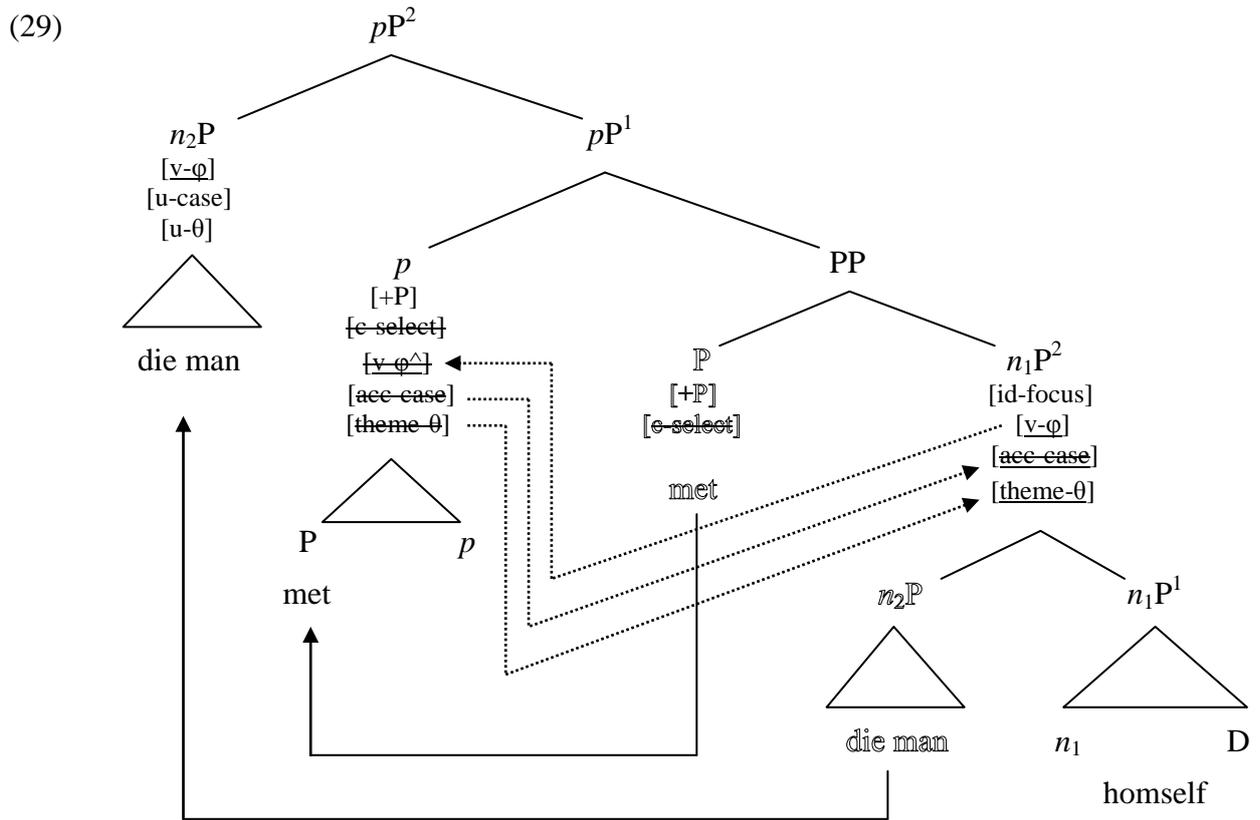


Several analyses of functional projections within adpositional expressions have been proposed in the literature, especially with regard to circumpositional and postpositional expressions.⁵² For the purposes of this study, however, attention will be restricted to prepositional expressions containing a single P , as in (26a). Taking as point of departure the analysis proposed for Afrikaans by Oosthuizen (2000), it is assumed here that a PP is merged as the complement of a light preposition p , with merger taking place to the right of the p .⁵³ As in the case of light verbs and light nouns, light prepositions are taken to belong to various types, such as locative p , directional p , theme p , agentive p , etc. It is furthermore assumed that light ps , similar to light vs , are involved in the assignment of θ -roles and case (specifically, accusative case in languages like Afrikaans, Dutch and English).⁵⁴ Apart from a [c -select] feature and the categorial feature [+ P], it therefore seems plausible that the p associated with the (head of the) PP *met* *homself* in (26a) also contains the features [$theme$ - θ] and [acc -case]. The fact that these features are valued, however, means that the p will be inactive from a probe-goal perspective. This clearly cannot be the case if the p has to value the case and θ -features of a nominal expression in its c -command domain. One way

of overcoming this potential problem is to posit an unvalued feature of some sort as part of the p 's make-up. De Vos (2009:10-11) gives a theoretical argument in favour of such a feature, which he simply refers to as [F], as well as some suggestive empirical evidence relating to morphological alternations found with a small subset of adpositions in Afrikaans. Such a feature is also implied in the Agree-based movement analyses of postpositional and circumpositional constructions proposed by, amongst others, Biberauer (2008) and Biberauer et al. (2008). Accordingly, as a working hypothesis, it is assumed here that the p has an unvalued feature that enters into a probe-goal relation with a corresponding feature in its c-command domain. In line with the proposals by Harley & Ritter (2002), this feature could be taken to be a type of ϕ -feature, a possibility that is mentioned by De Vos (2009:11, fn. 11) and that would provide further support for the apparent parallelism between the categories p and v (hence, between the adpositional and clausal domains, as advocated by Den Dikken (2010)). Taking the idea of such a parallelism further, it could be suggested (i) that the ϕ -features of the p , like that of the v , have a movement diacritic associated with them,⁵⁵ and (ii) that the P is raised to the p , similar to the operations V-to- v and D-to- n employed in the previous section (see also the remarks in (9)).

The various assumptions and suggestions made above about the merger of a PP with a light p and about the feature make-up of such a p are incorporated into the structure in (29) below. As indicated by the dotted arrows, the case and θ -features of the n_1 P headed by the reflexive *homself* are valued by the corresponding features of the probe p , and at the same time this n P provides the p with the applicable ϕ -values.⁵⁶ In order to derive the surface word order displayed in (26a) – where the subject *die man* occurs to the left and the reflexive to the right of the preposition *met* – the subject n^2 P is raised into the specifier position of the p P. We return to this operation shortly. Note that the n_2 P, which initially forms the specifier of the identity focus n_1 P, remains unvalued with regard to case and θ -role since it does not form part of the projection line of the n_1 -head.

Raising of the n_2 P *die man* into the specifier position of the p P in (29) is potentially problematic in at least two respects. First, since it is the n_1 P² that enters into a ϕ -agreement relation with the p , one would expect this n P to be the one that is raised, rather than the n_2 P in its specifier position. And in fact, as shown in (30a), raising of the n_1 P² as a whole is indeed possible, at least in colloquial speech and some non-standard varieties of Afrikaans. Note also that the preposition in (30a) takes the form *mee*, the morphological alternant of *met*. In the construction at hand, such



a change is obligatory for all items belonging to the small subset of adpositions which display morphological alternation, as shown also by the example in (30b).

- (30) a. Die man het homself mee / *met gepraat. (non-standard)
 the man has himself with talked
 “The man talked to himself”
- b. Die man het homself voor / *vir gestem. (non-standard)
 the man has himself for voted
 “The man voted for himself”

As regards the second problem posed by (29), it is not at all clear why the n_2P on its own would be attracted to the specifier position of the pP , since this nP does not seem to enter into any agreement relation with the p -head. One possibility could be that raising that is triggered by the movement diacritic appended to the p 's ϕ -features can affect any (maximal) phrase in the p 's c-command domain which has ϕ -features that exactly match those carried by the goal, in this case the n_1P^2 . In more general terms, where movement is triggered by a diacritic that is associated with a feature F of the probe, it could be claimed that the target for raising is an

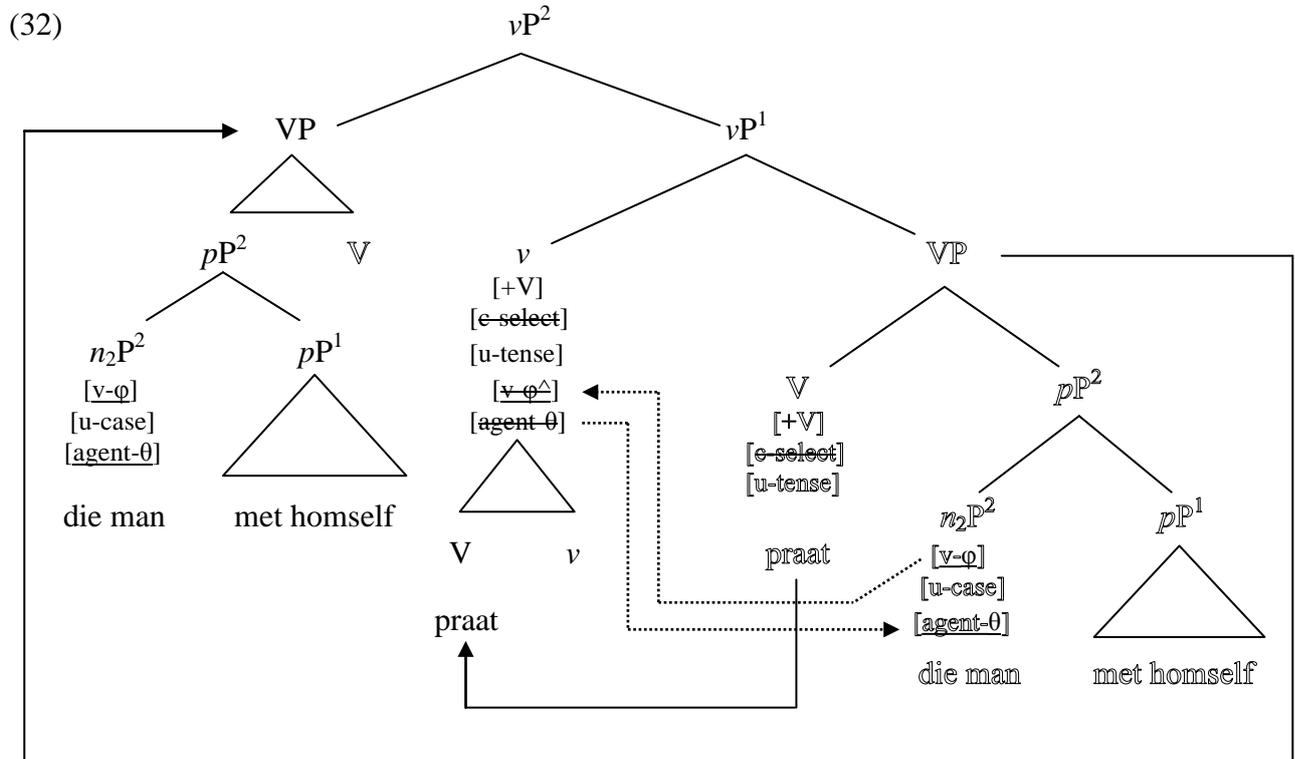
identical F rather than a particular constituent, and that movement simply involves pied-piping the containing constituent along with the F. Recall that, in terms of Hypothesis G, the n_2P in (29) served to value the φ -features of the n_1 -head and its projections. This means that the φ -features of the n_2P are identical to that of the n_1P^2 . Accordingly, in terms of the above claim, raising could affect either the n_2P (which would account for the word order in (26a)) or the n_1P^2 (which would account for the word order in sentences like those in (30)).

Another possible explanation as regards raising of the subject n_2P *die man* in (29) – which does not necessarily rule out the one just outlined – could be that the p carries a further unvalued feature, specifically one with a movement diacritic, which is valued by the n_2P . A likely candidate in this regard would be a discourse-related feature. It was suggested in section 3.2.1 that the subject in a sentence like (2a) *Die man haat homself* contains the feature [topic-disc], and that this feature serves to value the corresponding feature of the C. Raising of the subject into [spec, C] is then triggered by the movement diacritic associated with the C's feature (see the discussion relating to the structure in (22)). In line with this approach, the subject n_2P *die man* in (26a) would also have a [topic-disc] feature which can supply a value for the corresponding feature of the p , with subsequent raising of the n_2P triggered by the relevant movement diacritic. On the one hand, this would account for the surface word order in (26a), with the subject preceding the prepositional expression *met homself*. On the other hand, pied-piping of the n_1P^2 in (29) would account for the word order illustrated in (30), where both the subject and the reflexive occur to the left of the preposition.

It remains to be clarified whether there is any merit to either of the above explanations of what qualifies as a target for raising into [spec, p], and what the consequences of the general ideas underlying them would be for similar raising operations, for example VP-to-[spec, v] and vP -to-[spec, T]. As a working hypothesis, it will be assumed here that the subject nP in sentences like (26a) contains a [topic-disc] feature, an issue to which we return below.

The structure in (29) is subsequently merged as the complement of the verb *praat*, which has the categorial feature [+V] and a [c-select] feature. The resulting VP is in turn merged with a light verb carrying the features [+V], [c-select], [u-tense] and [agent- θ], as well as unvalued φ -features that carry a movement diacritic, similar to what was assumed in section 3.2.1 for the experiencer light verb associated with the verb *haat* (see the structure in (18)). Feature-valuation is as

indicated by the dotted arrows. As shown in (32), merger of the v and the VP results in a configuration where two raising operations can apply, namely V-to- v and raising of the VP into [spec, v].



The remaining steps in the derivation of (26a) involve essentially the same operations which were proposed in section 3.2.1 for the derivation of the obligatory reflexive construction in (2a) (see the discussion of the structures in (21) and (22)). These steps are briefly summarised in (33) and (34) below.

- (33) a. The vP^2 in (32) is merged as the complement of a T containing the features [u-V], [c-select], [pres-tense], [u- ϕ^{\wedge}] and [nom-case]. The T enters into two distinct agreement relationships. On the one hand, it values the tense feature of the v/V , and in turn the v/V supplies the T with a positive value for its categorial feature. On the other hand, the T values the case feature of the n_2P^2 *die man* (which forms part of the raised VP in the specifier position of the vP), and in turn this nP values the ϕ -features of the T.

- b. The movement diacritic associated with the T's ϕ -features triggers raising of the vP^2 into the specifier position of the TP, resulting in the extended projection TP^2 .
- (34) a. The TP^2 is merged as the complement of a C-head.
- b. The subject n_2P^2 *die man* (which forms part of the raised vP^2 in [spec, T]) is raised into the specifier position of the CP. It was suggested in section 3.2.1 that this operation is triggered by a movement diacritic associated with an unvalued discourse-related feature of the C, and that this feature is valued by the corresponding feature [topic-disc] carried by the n_2P^2 .⁵⁷
- c. The finite verb *praat* is moved out of the vP^2 and merged with the C. In terms of the linearisation framework that has been adopted above, v/V -to-C raising is triggered by a movement diacritic that is appended to some or other V-related feature of the C.

Next, compare the sentence in (26a) with its *self*-less counterpart in (35a). Whereas *homsel* in (26a) is obligatorily interpreted as a reflexive anaphor that takes its reference from the subject *die man*, such an interpretation is not possible for the pronoun *hom* in (35a).

- (35) a. Die man_i praat met hom_j.
 the man talks with him
 “The man is talking to him”
- b. *Die man_i praat met hom_i.

In terms of Hypothesis H, the fact that *hom* cannot be assigned a reflexive interpretation in (35a) implies that the configuration represented in (27) does not form part of this construction. In other words, the pronoun is not merged as the complement of an identity focus *n*-head and neither is the subject *die man* merged as the specifier of such a head. Rather, *hom* (or more accurately, the nominal expression containing this non-reflexive pronoun) is merged as the complement of the preposition *met*, whereas *die man* is merged in [spec, v], the canonical position for subjects. The derivation of (35a) then proceeds along essentially the same steps as those proposed for the non-reflexive verbal object construction in (1a).

It should be clear from this brief discussion that the preposition *met* – when it is used to convey the notion of theme – can, but need not, select an identity focus *nP* as its complement, which

means that it is compatible with a reflexive as well as a non-reflexive reading of its pronominal object. In this respect, then, *met* is similar to a verb such as *haat* (see the examples in (1) and (2) above).

In the analysis of verbal object constructions in section 3.2.1, it was claimed that an obligatory reflexive sentence – such as those in (2a) and (7a) – is derived when the verb selects as its object complement an identity focus *nP* with the structure in (14) (repeated above as (27)). By contrast, an obligatory non-reflexive sentence – such as the one in (6a) – is derived when the verb fails to select such an *nP*. These claims were expressed in the form of Hypothesis I. Clearly, based on the above discussion, similar claims can be made with regard to prepositional object constructions. On the one hand, an obligatory reflexive construction is derived when the preposition selects an identity focus *nP* as its object, as in (26a). On the other hand, an obligatory non-reflexive construction is derived when the preposition fails to select such an *nP*, as in (35a). In order to accommodate these claims about prepositional object constructions, Hypothesis I therefore has to be reformulated as follows:

Hypothesis I (second version)

1. A reflexive construction is derived when an identity focus *nP* – as represented by the n_1P^2 in Hypothesis G – is selected as the syntactic complement of a verb or a preposition, where the verb/preposition is either inherently reflexive or compatible with a reflexive reading.
2. A non-reflexive construction is derived when an identity focus *nP* is not selected as the syntactic complement of a verb or a preposition, where the verb/preposition is either inherently non-reflexive or compatible with a non-reflexive reading.

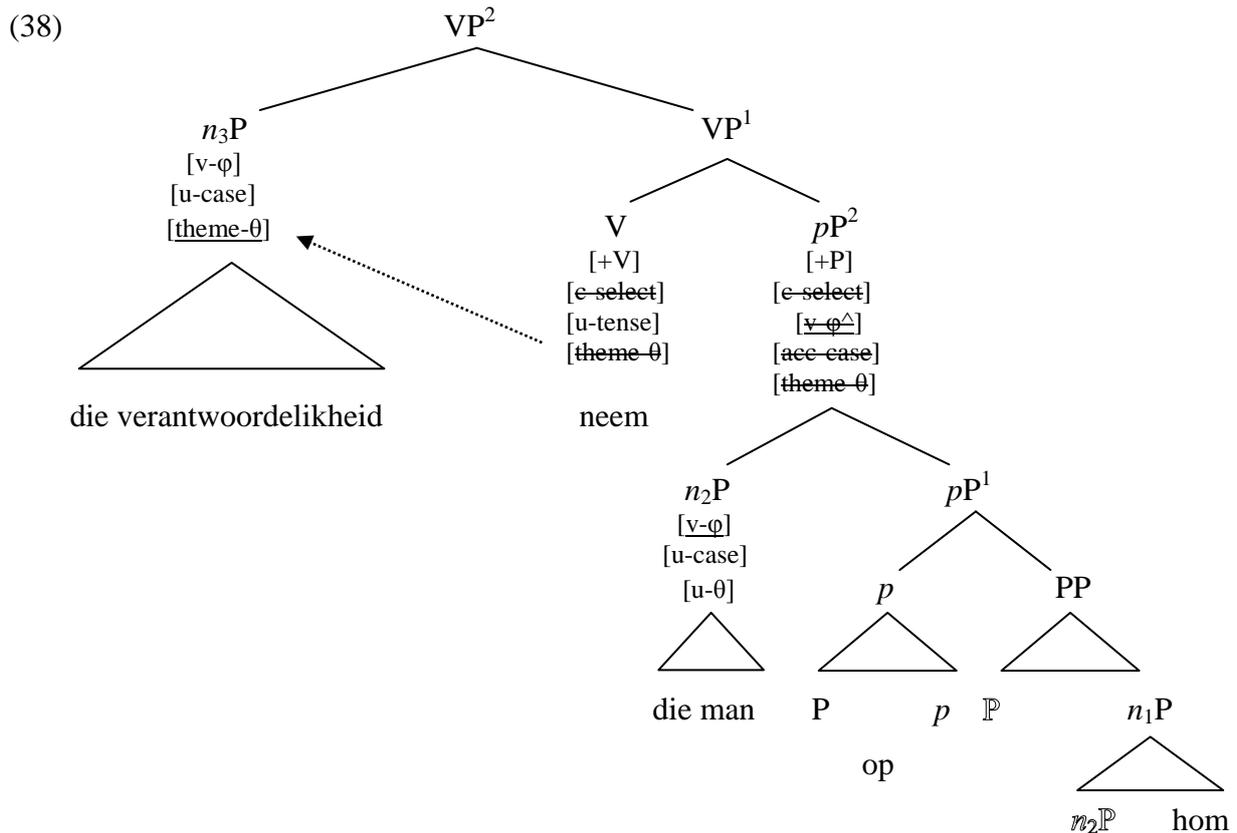
We now turn to two other types of prepositional object construction identified in Chapter 2, both alluded to in the revised version of Hypothesis I. The first involves inherently reflexive prepositions, that is, prepositions that only allow a reflexive reading of their pronominal object, similar to inherently reflexive verbs like *misgis* (see e.g. the sentences in (7)). Examples of such prepositions are *op* and *by*, specifically where they are used to indicate what was referred to in section 2.3.2 as “subject-associated (physical or abstract) location”. The inherently reflexive nature of these prepositions is illustrated in (36). Note that, when used in this specific way, *op* standardly selects the morphologically simplex form of the reflexive whereas *by* requires the complex *–self* form.

- (36) a. Die man_i glimlag by homself_i / *hom_i / *hom_j.
 the man smiles by himself / him
 “The man is smiling by himself”
- b. Die man_i neem die verantwoordelikheid op hom_i / *hom_j.
 the man takes the responsibility on him
 “The man is taking the responsibility”

The derivation of (36a) involves the same operations as those proposed for the construction in (26a). In the case of (36b), however, there are several potentially problematic aspects that require discussion. The verb *neem*, in contrast to the verbs in all the other constructions examined until now, selects two complements, namely the object complement *die verantwoordelikheid* and the prepositional complement *op hom*. As far as surface ordering is concerned, these expressions can occur in three different patterns. Abstracting away from the effects of subject raising and verb raising in the derivation of main clauses (as summarised in (34)), these patterns can be illustrated by means of the subordinate clauses in (37). (Although acceptable, the patterns in (37b,c) are not as common as the one in (37a), with (37c) appearing to be the least common.⁵⁸)

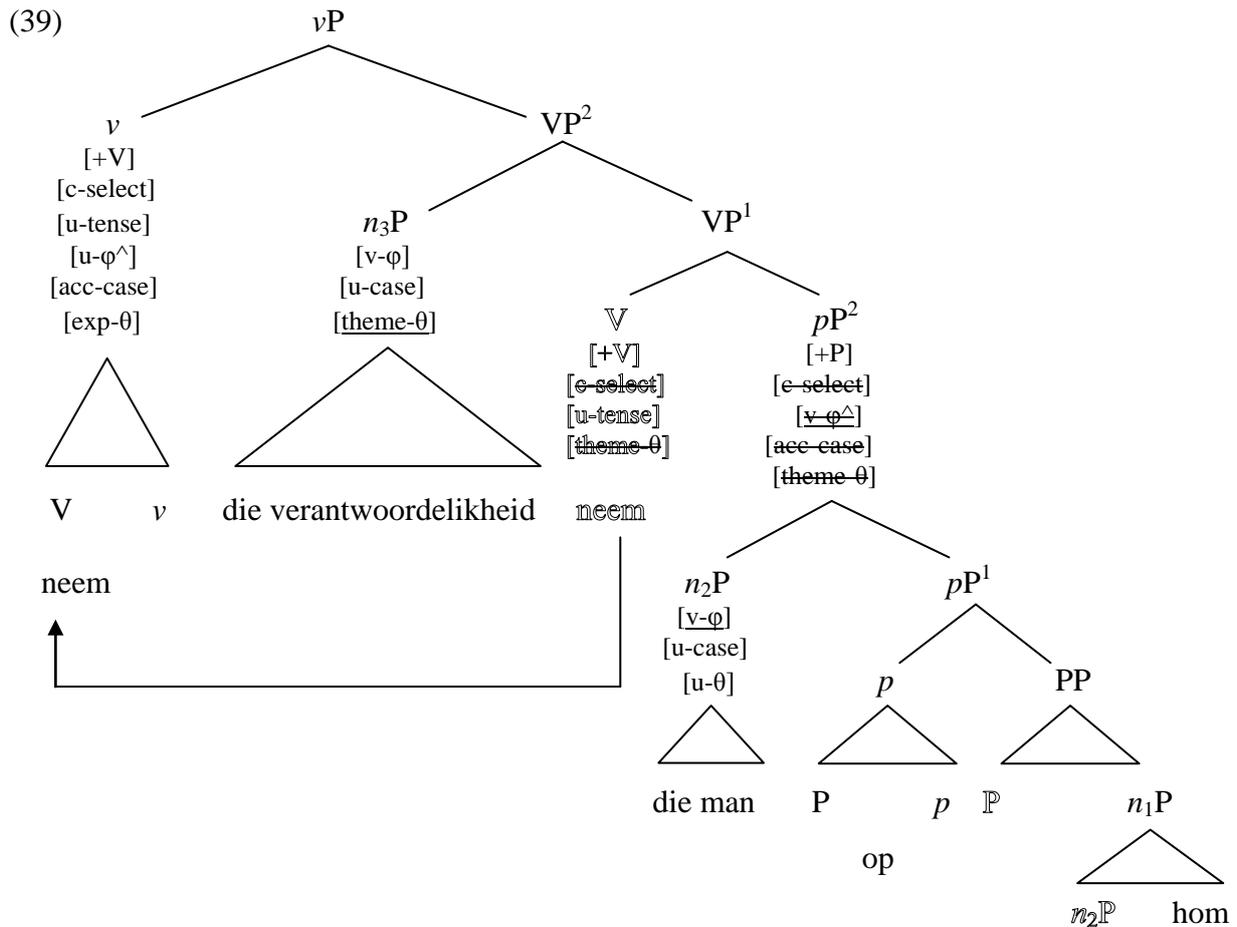
- (37) a. (dat) die man die verantwoordelikheid op hom neem. (subj–obj–PP compl–verb)
 that the man the responsibility on him takes
 “(that) the man is taking the responsibility”
- b. (dat) die man op hom die verantwoordelikheid neem. (subj–PP compl–obj–verb)
- c. (dat) die man die verantwoordelikheid neem op hom. (subj–obj–verb–PP compl)

In terms of the framework developed so far, the subject *die man* and the expression *op hom* form part of a *pP* with the structure in (29). This *pP* and the object *die verantwoordelikheid* are respectively merged as the complement and the specifier of the verb, as shown in (38) below. As indicated in this structure, the *V* values the θ -feature of the object *n*₃*P* *die verantwoordelikheid*. The question that arises is why it is this *nP* that is θ -valued, rather than the *n*₂*P* *die man*; after all, both these *nPs* occur within the *c*-command domain of the *V*. Note that the *V* is active from a probe-goal perspective because of its unvalued tense feature. However, none of the other categories in the *VP*² has a tense feature that could value that of the *V*. If probe-goal relations are defined in terms of features rather than categories, as is assumed here, this means that the *V*'s tense feature, and by implication the *V* itself, cannot enter into an agreement relation with an



appropriate goal in (38). But besides the V, the n_2P and the n_3P also carry unvalued features and are therefore also both active in probe-goal terms. On the one hand, though, the n_2P does not c-command the V; hence its θ -feature cannot locate the θ -feature of the V as a goal for valuation purposes. On the other hand, the n_3P does c-command the V, which means that a probe-goal relation can be established between the θ -features of these categories, resulting in θ -valuation of the n_3P .

The VP^2 in (38) is next merged with an experiencer light verb carrying the V-related features [+V], [c-select] and [u-tense], and the D-related features [exp- θ], [acc-case] and [u- $\phi^$]. The resulting structure is represented in (39), with only the effect of V-to- v raising indicated; the various feature valuation processes will be discussed below.



(39) provides the configuration for several feature valuation operations. Probing its c-command domain, the v gets its ϕ -features valued by the object nP *die verantwoordelijkheid* and at the same time provides this nP with a case value. The diacritic associated with the v 's ϕ -features furthermore triggers raising of the n_3P into [spec, v]. Following Biberauer et al. (2005, 2008), amongst others, it was assumed in section 3.2.1 that this operation involves pied-piping of the containing VP^2 , so that the resulting structure would be roughly along the lines in (40).

$$(40) \quad [{}_{vP}^2 [{}_{VP}^2 [{}_{n_3P} \text{ die verantwoordelijkheid}] [{}_{VP}^1 \text{ neem } [{}_{pP} [{}_{n_2P} \text{ die man}] \text{ op hom}]]] [{}_{vP}^1 \text{ neem-}v \\ [{}_{VP}^2 [{}_{n_3P} \text{ die verantwoordelijkheid}] [{}_{VP}^1 \text{ neem } [{}_{pP} [{}_{n_2P} \text{ die man}] \text{ op hom}]]]]]$$

This poses a problem, however, since in all three of the patterns in (37) the subject *die man* occurs to the left of the object *die verantwoordelijkheid*. Hence, if the VP^2 is raised into [spec, v], there must be some additional operation which raises the subject n_2P out of the VP into a position to the left of the object n_3P . Such an operation would involve either pied-piping of the containing pP^2 (to give the surface word order in (37b)) or stranding, that is, raising the n_2P on

its own (to give the surface word order in (37a)). Adopting this idea, three questions arise: (i) What triggers raising of the n_2P/pP in (39)?, (ii) Where is the raised n_2P/pP merged? and (iii) How is raising of the n_2P/pP ordered relative to raising of the VP^2 ? As regards question (i), in discussing the derivation of the sentence in (26a), it was suggested that the subject nP *die man* in (29) contains the feature [topic-disc], and that this feature serves to value the corresponding feature of the p . Raising of this nP into [spec, p] is taken to be triggered by a movement diacritic appended to the p 's discourse-related feature. Similarly, at a later stage of the derivation, the subject nP serves to value the discourse-related feature of the C, and is then raised into [spec, C] (see the summary in (34b) above). In short, it seems plausible that the subject *die man* in sentences like those in (26a) and (37) has the feature [topic-disc]. What is now suggested is that the v , like the p and the C, also carries an unvalued discourse-related feature with a movement diacritic.⁵⁹ Since the subject nP *die man* in (39) falls within the c-command domain of the v , it can enter into an agreement relationship with the v and supply it with the relevant discourse-related value; as a consequence, the movement diacritic triggers raising of the subject nP , either on its own or together with its containing pP .

Questions (ii) and (iii) above are clearly linked to one another. On the one hand, if raising of the VP^2 in (39) takes place *after* raising of the n_2P/pP , the VP^2 would end up in the second specifier position of the v . As a consequence, however, the object *die verantwoordelikheid* would then incorrectly occur to the left of the subject n_2P *die man*: *[*die verantwoordelikheid op hom*] [*die man*] *neem* (if the n_2P is raised on its own) or *[*die verantwoordelikheid*] [*die man op hom*] *neem* (if n_2P raising involves pied-piping of the pP). Suppose, on the other hand, that raising of the VP^2 takes place *before* raising of the n_2P/pP . For the subject n_2P *die man* to end up to the left of the object *die verantwoordelikheid*, as illustrated in (37), this nP would then have to be raised out of the VP^2 in [spec, v] into the second specifier position of the v , with optional pied-piping of the containing pP . Such an operation would bring about the correct word order patterns in (37a,b), but it does face the problem that prior raising of the VP^2 into the first specifier position of the v would result in the v no longer c-commanding the subject n_2P contained in the VP. The v would thus not be able to target the n_2P as a goal which can provide a value for its [u-disc[^]] feature. Without such valuation, however, the movement diacritic appended to the v 's feature cannot trigger raising of the n_2P/pP .⁶⁰

The problems outlined above can be overcome by means of the notion of ‘parallel operation’ put forward by Chomsky (2006:13-17) in connection with *wh*-movement. On this approach, which will be adopted here, two raising operations that target the same goal but that are triggered by valuation of distinct features proceed in parallel, independent of one another. In the case of (39), then, the movement diacritic associated with the *v*’s ϕ -features triggers raising of the VP into [spec, *v*]; and parallel to this operation, the diacritic appended to the *v*’s discourse-related feature triggers raising of the subject *n*₂P into the second specifier position of the *v*. Given that the *p*P² may be stranded or pied-piped along with the subject, the word order patterns in (37a,b) can thus be derived without the problem of requiring the *v* to probe into the VP in its (first) specifier position. On this analysis, the sentences in (37a,b) would therefore have roughly the structures in (41) and (42), respectively.

(41) [_{VP}³ [_{n2P} die man] [_{VP}² [_{VP}² [_{n3P} die verantwoordelikheid] [_{VP}¹ [_{pP} [_{n2P} die man] op hom] neem]] [_{vP}¹ neem-*v* [_{VP}² [_{n3P} die verantwoordelikheid] [_{VP}¹ neem [_{pP} [_{n2P} die man] op hom]]]]]]]]

(42) [_{VP}³ [_{pP} [_{n2P} die man] op hom] [_{VP}² [_{VP}² [_{n3P} die verantwoordelikheid] [_{VP}¹ neem [_{pP} [_{n2P} die man] op hom]]] [_{vP}¹ neem-*v* [_{VP}² [_{n3P} die verantwoordelikheid] [_{VP}¹ neem [_{pP} [_{n2P} die man] op hom]]]]]]]]

This still leaves the pattern in (37c). In this case, the fact that the expression *op hom* occurs to the right of the verb indicates that it is still inside the VP, which implies that VP raising has not taken place. Hence, to account for the surface subject–object–verb ordering, the following two parallel operations have to take place, triggered by the movement diacritics carried by the *v*’s ϕ -features and discourse-related feature. On the one hand, the object *n*₃P in (39) is raised on its own into [spec, *v*], leaving the *p*P² stranded in the VP². On the other hand, the *n*₂P *die man* is raised into the second specifier position of the *v*P, leaving the expression *op hom* stranded in final position. The derived structure would be roughly as follows:

(43) [_{VP}³ [_{n2P} die man] [_{VP}² [_{n3P} die verantwoordelikheid] [_{vP}¹ neem-*v* [_{VP}² [_{n3P} die verantwoordelikheid] [_{VP}¹ neem [_{pP} [_{n2P} die man] op hom]]]]]]]]

Let us now return to the sentence in (36b) *Die man neem die verantwoordelikheid op hom*, which prompted the discussion of the word order patterns shown in (37). In terms of the above proposals, the νP in the structure underlying (36b) would be identical to the νP^3 in (41). The next steps in the derivation of this sentence involve essentially the same operations as those outlined in (33) and (34), including merger of the νP^3 with the T, raising this νP into [spec, T], merger of the TP with the C, raising the subject nP *die man* into [spec, C], and ν/V -to-C raising. Suppose, however, that the νP^3 takes the form in (42). The operations just mentioned will then result in the surface order displayed by the sentence in (44), a less common variant of (36b).

- (44) Die man neem op hom die verantwoordelikheid.
 the man takes on him the responsibility
 “The man is taking the responsibility”

In the derivation of the νP^3 in (42), raising of the subject nP *die man* – triggered by the diacritic carried by the ν 's discourse-related feature – involves pied-piping of the pP which contains this nP , thus resulting in *die man* and the expression *op hom* both ending up in the (second) specifier position of the νP . This configuration is preserved when the νP^3 is later on raised into [spec, T]. The subject nP *die man* is subsequently raised into [spec, C], an operation that is presumably triggered by the movement diacritic associated with the C's discourse-related feature. But in this case, pied-piping of the containing pP is disallowed, as shown by the ungrammaticality of the example in (45) below. This brings up the question why pied-piping is an option for raising into [spec, ν], but not for raising into [spec, C]. A more general question is whether an account can be given of when pied-piping is an option or not, one that goes beyond mere stipulation. These questions fall outside the scope of the present study, and will not be examined further here.

- (45) *Die man op hom neem die verantwoordelikheid.
 the man on him takes the responsibility

Having examined constructions containing inherently reflexive prepositions (like those in (36)), we now turn to constructions with inherently non-reflexive prepositions, that is, prepositions that do not allow a reflexive reading of their pronominal object, similar to inherently non-reflexive verbs like *vergesel* (see e.g. the sentences in (6)). For example, as shown in (46), the prepositions *agter* and *met* are incompatible with a reflexive reading of the pronoun when they are used to express non-subject-associated location (see the discussion of the examples in (23) in Chapter 2).

- (46) a. Die man_i stap agter *homself_i / *hom_i / hom_j.
 the man walks behind himself / him
 “The man is walking behind him”
- b. Die man_i stuur die pakkie (saam) met *homself_i / *hom_i / hom_j.⁶¹
 the man sends the parcel together with himself / him
 “The man is sending the parcel with him”

In terms of the revised version of Hypothesis I, the prepositions *agter* and *met* in (46) both lack the ability to select an identity focus *nP* as their object, that is, an *nP* displaying the configuration in Hypothesis G. This means that the prepositional object *hom* and the subject *die man* do not co-occur in such an *nP* at any stage in the derivation of (46a,b). It is therefore correctly predicted in terms of Hypothesis H that, from a grammatical point of view, the pronoun in these sentences cannot be interpreted as coreferential with the subject *die man*. On this analysis, the *vPs* underlying (46a,b) would have roughly the structures in (47) and (48), respectively. In both cases, the preposition selects (an *nP* containing) the non-reflexive pronoun *hom* (with the structure in (3a)), whereas the subject *die man* is externally merged into [spec, *v*]. The remaining steps in the respective derivations are essentially the same as those summarised in (33) and (34).

(47) [_{vP}² [_{nP} die man] [_{vP}¹ [_{VP} stap [_{pP} agter hom]]] stap-*v* [_{VP} stap [_{pP} agter hom]]]]

(48) [_{vP}² [_{nP} die man] [_{vP}¹ [_{VP}² [_{nP} die pakkie] [_{VP}¹ stuur [_{pP} (saam) met hom]]]]] stuur-*v*
 [_{VP}² [_{nP} die pakkie] [_{VP}¹ stuur [_{pP} (saam) met hom]]]]]]

The constructions which have been dealt with up to now in this section belong to two broad types: the pronominal complement of the preposition receives either an obligatory reflexive interpretation (as in (26a), (36a,b)) or an obligatory non-reflexive interpretation (as in (35a), (46a,b)). Consider by contrast the sentences in (49). The prepositions *vir* in (49a) and *langs* in (49b) encode the notions of goal and location, respectively. These sentences are ambiguous between a reflexive and a non-reflexive interpretation of the pronoun.

- (49) a. Die man_i bestel vir hom_i / hom_j koffie.
 The man orders for him coffee
 “The man orders coffee for himself / him”

- b. Die man_i sit die boek langs hom_i / hom_j.
 the man puts the book beside him
 “The man puts the book next to him”

The sentences in (49) are similar to those in (24b) and (25b) in that they lack linguistic information which could provide a basis for establishing a coreferential relationship between the pronoun *hom* and the subject *die man*. More specifically, the pronoun is used without the identity focus marker *-self* (as is standard in these cases) and neither of the prepositions (or verbs) expresses an inherently reflexive meaning. From a grammatical point of view, then, these sentences cannot be characterised as “reflexive”. In other words, stated in terms of Hypothesis H and the revised Hypothesis I, the prepositions in (49) do not select an identity focus *nP* as their syntactic complement. Rather, as in the structure in (48), the subject is externally merged as a specifier of the light verb, and (the *nP* containing) the non-reflexive pronoun is selected as the complement of the preposition. The respective derivations then proceed along the lines described in (33) and (34). This does not imply, however, that a coreferential relationship between the pronoun and the subject in (49a,b) is completely ruled out. As was pointed out in section 3.2.1, it is quite possible that such a relationship can be established on the basis of non-linguistic information because the subject and the pronoun have the same ϕ -features with the same values in these sentences. Given such information, the sentences in (49) could thus be interpreted as pragmatically reflexive, a phenomenon which requires an account that goes beyond strictly grammatical considerations.

In the constructions examined so far, the prepositional expression containing the pronominal object occurs as the syntactic complement of a verb. Such an expression can however also occur as the complement of a nominal head. For example, in (50a) the prepositional expression functions as the complement of the N *dinge* and in (50b) as the complement of the D *almal*, with the preposition in each case encoding the notion of patient. In both sentences, the morphologically complex form of the pronoun is required for a reflexive reading.

- (50) a. Die man_i vertel interessante dinge van homself_i / *hom_i / hom_j.
 the man tells interesting things of himself / him
 “The man is telling interesting things about himself / him”

- b. Die man_i blameer almal behalwe homself_i / *hom_i / hom_j.
 the man blames all except himself / him
 “The man blames everyone but himself / him”

In terms of Hypotheses G and H, the reflexive sentences in (50) both contain an identity focus *nP* with the structure in (27). This *nP* is merged with a P (*van* in the case of (50a) and *behalwe* in the case of (50b)), and the resulting PP is merged with a light *p*. The ensuing movement and feature valuation operations eventually give rise to a *pP* with the same structure as that proposed for the *pP* in (26a), that is, the structure in (29). In (50a), on the one hand, the *pP* is merged as the complement of the N *dinge*; subsequent mergers involving the NP, the adjective *interessante*, an overt D and a light noun result in an *nP* showing the structure roughly represented in (51). In (50b), on the other hand, the *pP* containing the identity focus *nP* is merged as the complement of the D *almal*, which in turn is merged with a light noun; the structure of the resulting *nP* is roughly as in (52).

(51) [_{n3P} interessante dinge [_{pP} [_{n2P} die man] [_{PP} van [_{n1P} die man homself]]]]

(52) [_{n3P} almal [_{pP} [_{n2P} die man] [_{PP} behalwe [_{n1P} die man homself]]]]

The subsequent steps in the derivation of the two reflexive sentences in (50) proceed by means of the same operations. These operations can be summarised as follows with reference to (50a).

- (53) a. The verb *vertel* selects the *n3P* in (51) as its object complement, and provides this *nP* with a θ -value (in this case, theme).
 b. The VP which is formed in (a) is merged with an agentive light verb, and V-to-*v* raising takes place.
 c. The *v* enters into agreement relations with two nominal expressions in its c-command domain, namely the object *n3P* and the subject *n2P die man*, resulting in two parallel raising operations. On the one hand, the *v* gets its ϕ -features valued by the object *n3P* and in turn provides this *nP* with a case value. The diacritic associated with the *v*'s ϕ -features triggers raising of the *n3P*, with pied-piping resulting in the entire VP ending up in [spec, *v*]. On the other hand, adopting the suggestions made above in connection with the word order patterns in (37), the [topic-disc] feature of the subject *n2P die man* in (51) values the corresponding feature of the *v*. The movement

diacritic appended to the v 's feature triggers raising of the subject n_2P into the second specifier position of the vP ; in accordance with the surface order displayed in (50a), the subject *die man* thus occurs to the left of the object *interessante dinge*. Note moreover that pied-piping of the pP containing the n_2P *die man* in (51) results in a grammatical variant of (50a) in which the prepositional expression *van homself* also precedes the object: *Die man vertel van homself interessante dinge*.⁶²

- d. The remaining steps in the derivation of (50a) are essentially the same as those summarised in (33) and (34).

In all the constructions examined so far in this chapter, the reflexive pronoun takes as its antecedent the subject of the sentence. This is also the case in the (a)-sentence in (54) below, but not in (54b,c). In the (b)-sentence the reflexive enters into a coreferential relationship with a prepositional object, *die man*. The (c)-sentence, by contrast, is ambiguous in that the reflexive can take as its antecedent either the prepositional object *die man* or the subject *die seun*.

- (54) a. Die man_i praat met die meisie oor homself_i.
 the man talks with the girl about himself
 “The man is talking with the girl about himself”
- b. Die meisie praat met die man_i oor homself_i.
 the girl talks with the man about himself
 “The girl is talking with the man about himself”
- c. Die seun_i praat met die man_j oor homself_i / homself_j.
 the boy talks with the man about himself
 “The boy is talking with the man about himself”

In terms of Hypotheses A-G, the pronoun in (54b) and the nominal expression *die man* are merged as, respectively, the complement and the specifier of an identity focus light noun. The structure of the resulting nP is identical to the one proposed above for the sentence in (26a), with the ensuing raising and feature valuation operations as shown in (27). According to Hypothesis H, the pronoun in this configuration is interpreted as a reflexive anaphor that is obligatorily coreferential with the nominal expression *die man* in [spec, n]. The identity focus nP is then merged with the preposition *oor*, and the PP headed by *oor* is in turn merged with a light p . These two mergers bring about several raising and feature valuation operations, resulting in a pP with essentially the same structure as the one in (29). Suppose now that this pP is merged as the

complement of the verb *praat*, as shown in (55). Bear in mind that the n_2P *die man* in (55) is still unvalued with regard to θ -role and case.

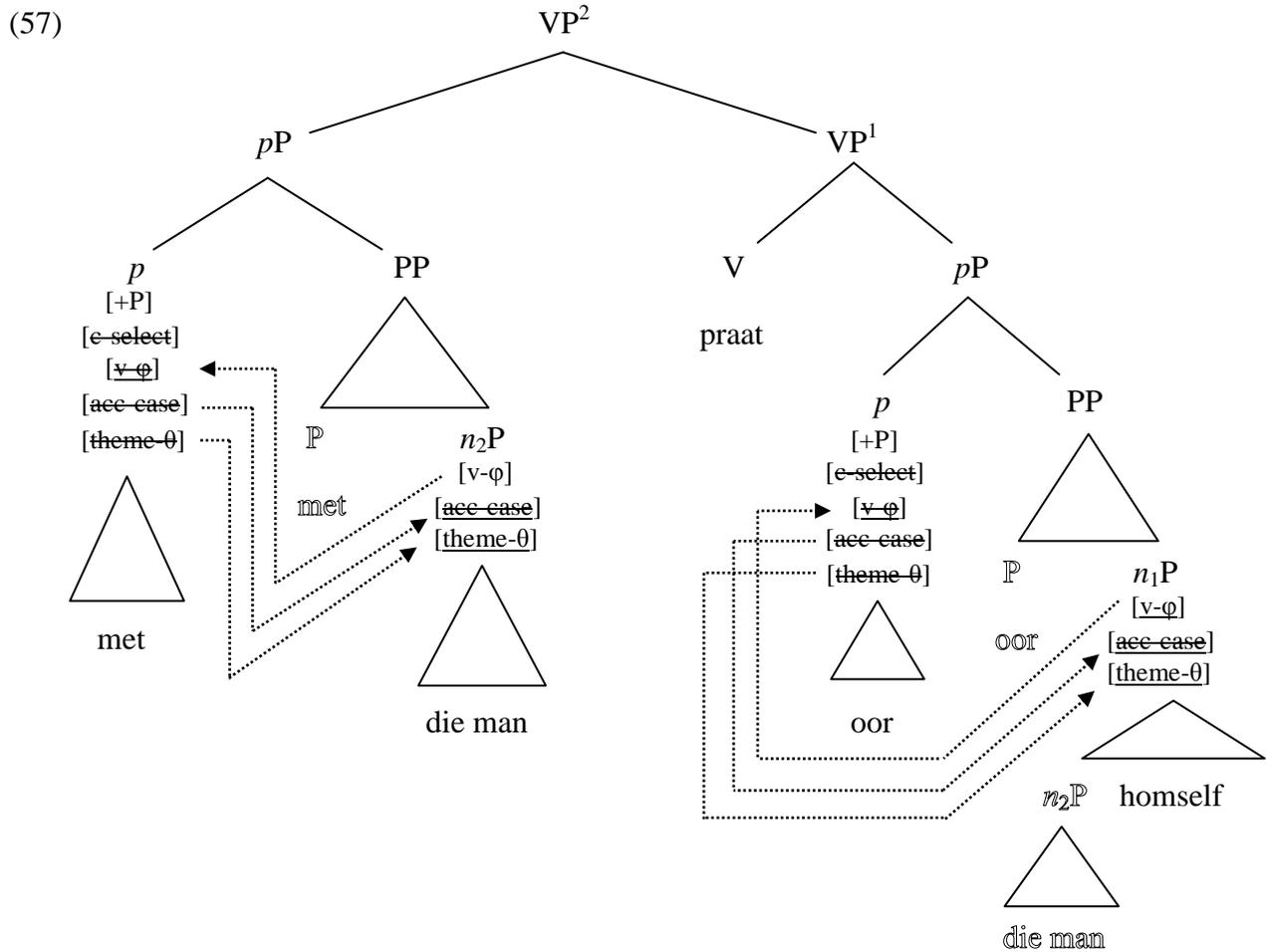
(55) $[_{VP} \text{praat} [_{pP}^2 [_{n_2P} \text{die man}] [_{pP}^1 \text{oor} [_{PP} \text{oor} [_{n_1P} [_{n_2P} \text{die man}] \text{homself}]]]]]]]$

The question that now arises is how the n_2P in (55) ends up in its surface position as the object of the preposition *met*. A plausible answer is that the preposition does not select an “independent” nP as its complement, that is, an nP which has been constructed from elements in the lexical subarray feeding the derivation, but which has not yet been merged into some other structure; rather, the preposition targets the n_2P that has already been externally merged into the specifier position of the identity focus n_1P in (55). As far as could be ascertained, such a “sideward” merger operation involving the selection of a phrase from one structure and its subsequent merger into another independent structure is not ruled out by any general principle.⁶³ What needs to be clarified, though, is whether the n_2P is extracted from the identity focus n_1P or the containing pP^2 in (55) and, if from the latter, whether extraction takes place before or after the pP is merged with the verb. If the n_2P enters into an agreement relationship with the p – a possibility that was put forward in connection with the nP raising operation in (29) – extraction would have to be from the pP . However, if such a relationship does not obtain, extraction could presumably also be from the n_1P . As regards the question of whether extraction takes place before or after the pP^2 in (55) is merged with the verb, consider the sentence in (56).

(56) Die meisie praat oor homself_i met die man_i.
 the girl talks about himself with the man
 “The girl is talking with the man about himself”

Although less common than its variant in (54b), and for many speakers only marginally acceptable, (56) shows that the prepositional expression *met die man* can surface to the right of the expression containing the reflexive. This suggests that (the pP containing) the expression headed by *met* must have been merged with the verb before the pP^2 in (55) was merged into the VP. But merger of *met die man* with the verb is clearly only possible after this expression had been formed via merger of *met* and *die man*. In short, in terms of the proposed analysis, the word order displayed in (56) can be accounted for if extraction of *die man* out of the identity focus nP and its subsequent merger with *met* precede any merger operations involving the verb.

Returning to the derivation of the sentence in (54b), the structure in (55) is expanded by merging the *pP met die man* into the specifier position of the VP. The resulting structure is given in simplified form in (57). As indicated by the arrows, the n_1P^2 containing the reflexive in its head position is assigned case and θ -values by the *p* associated with *oor*, and in turn this *nP* serves to value the ϕ -features of the *p*. Similarly, the n_2P *die man* gets its case and θ -values from the *p* associated with *met* and concurrently provides values for the *p*'s ϕ -features.



The VP^2 is next merged with an agentive light verb, followed by V-to-*v* raising and Agree-driven raising of the VP into [spec, *v*].⁶⁴ The subject *die meisie* is subsequently merged into the (second) specifier position of the vP , where it receives a θ -value from the *v* (and likely also serves to value a discourse-related feature of the *v*; see the discussion in connection with the word order patterns in (40)-(42)). The remaining steps in the derivation are essentially as outlined in (33) and (34).

We end this section with a brief look at the example in (54c). The use of the identity focus marker *-self* is a clear grammatical indication that the pronoun represents a reflexive anaphor. In fact, a reflexive reading is not possible when the simplex form is used:

- (58) Die seun_i praat met die man_j oor *hom_i / *hom_j / hom_k.
 the boy talks with the man about him
 “The boy is talking with the man about him”

However, as was noted above, the reflexive in (54c) can take either the prepositional object *die man* or the subject *die seun* as its antecedent. In other words, in terms of Hypotheses G and H, the identity focus *nP* containing the reflexive can have either *die man* or *die seun* in its specifier position, as roughly indicated in (59) and (60) respectively. In both cases this *nP* forms part of a PP which is in turn merged with a light *p*, giving rise to P-to-*p* raising and raising of the antecedent into [spec, *p*]. On the reading where the reflexive takes the subject as its antecedent, the subsequent steps in the derivation are essentially the same as those described above for the sentence in (26a).

- (59) [_{*pP*}² [_{*n2P*} die man] [_{*pP*}¹ oor [_{PP} oor [_{*n1P*} [_{*n2P*} die man] homself]]]]]

- (60) [_{*pP*}² [_{*n2P*} die seun] [_{*pP*}¹ oor [_{PP} oor [_{*n1P*} [_{*n2P*} die seun] homself]]]]]

Although (54c) is obligatorily reflexive from a grammatical point of view, it does not contain any linguistic information which could provide a basis for choosing between the structures in (59) and (60) – and by implication, between the two interpretations of the reflexive *homself* – in a particular communication context. Such a choice can only be made on the basis of non-linguistic information. In short, then, the sentence in (54c) can be characterised as “reflexive” from both a grammatical and a pragmatic perspective. Incidentally, as illustrated in (61), the *pP* containing the reflexive can also occur to the left of the expression headed by *met*; in this case, the derivation would be similar to that proposed above for the sentence in (57).

- (61) Die seun_i praat oor homself_i / homself_j met die man_j.
 the boy talks about himself with the man
 “The boy is talking with the man about himself”

3.2.3 Double object constructions

A double object construction is traditionally characterised as a construction containing a so-called ditransitive verb, that is, a verb which selects two arguments, a direct object and an indirect object. Furthermore, both objects appear as nominal expressions, with the indirect object preceding the direct object. These characteristics are illustrated by the examples in (62) in which the verb *gun* (“grant, allow”) selects the indirect object *die werkers* (“the workers”) and the direct object *’n vakansie* (“a vacation”) as its arguments; these objects represent, respectively, the goal⁶⁵ and the theme of the sentence.⁶⁶

- (62) a. Die man gun die werkers ’n vakansie.
 The man grants the workers a vacation
 “The man thinks the workers deserve a vacation”
 b. *Die man gun ’n vakansie die werkers.

The verb *gun* in (62) requires both a direct and an indirect object, as shown by the ungrammaticality of the sentences in (63a,b). This is in contrast to a verb such as *gee* (“give”) which can be used ditransitively, as in (64a), but also as an ordinary transitive verb, that is, with a single (direct) object argument, as in (64b).

- (63) a. *Die man gun ’n vakansie.
 b. *Die man gun die werkers.
- (64) a. Hy gee die meisie duur geskenke.
 he gives the girl expensive presents
 “He gives the girl expensive presents”
 b. Hy gee duur geskenke.

Besides appearing as a regular nominal expression, the indirect object can also be preceded by the item *vir* (“for”) in Afrikaans double object constructions, as illustrated by the following examples:⁶⁷

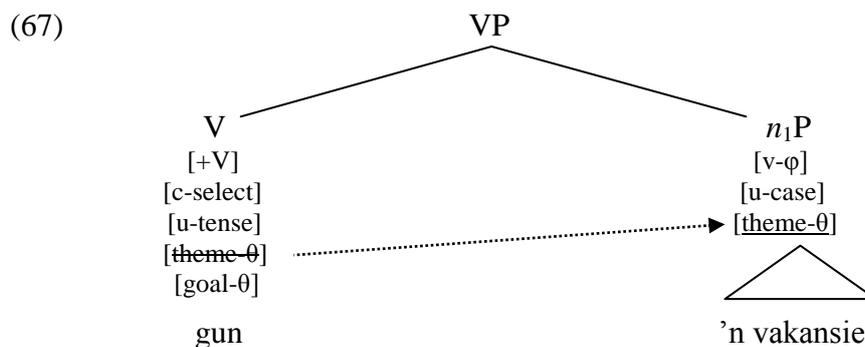
- (65) a. Die man gun (vir) die werkers ’n vakansie.
 the man grants for the workers a vacation
 “The man thinks the workers deserve a vacation”

- b. Hy gee (vir) die meisie duur geskenke.
 he gives for the girl expensive presents
 “He gives the girl expensive presents”

Consider against this background the sentence in (66a) in which the reflexive pronoun *homself* functions as the indirect object argument of the verb *gun*. As shown by the ungrammaticality of (66b), the pronoun obligatorily takes the subject *die man* as its antecedent.

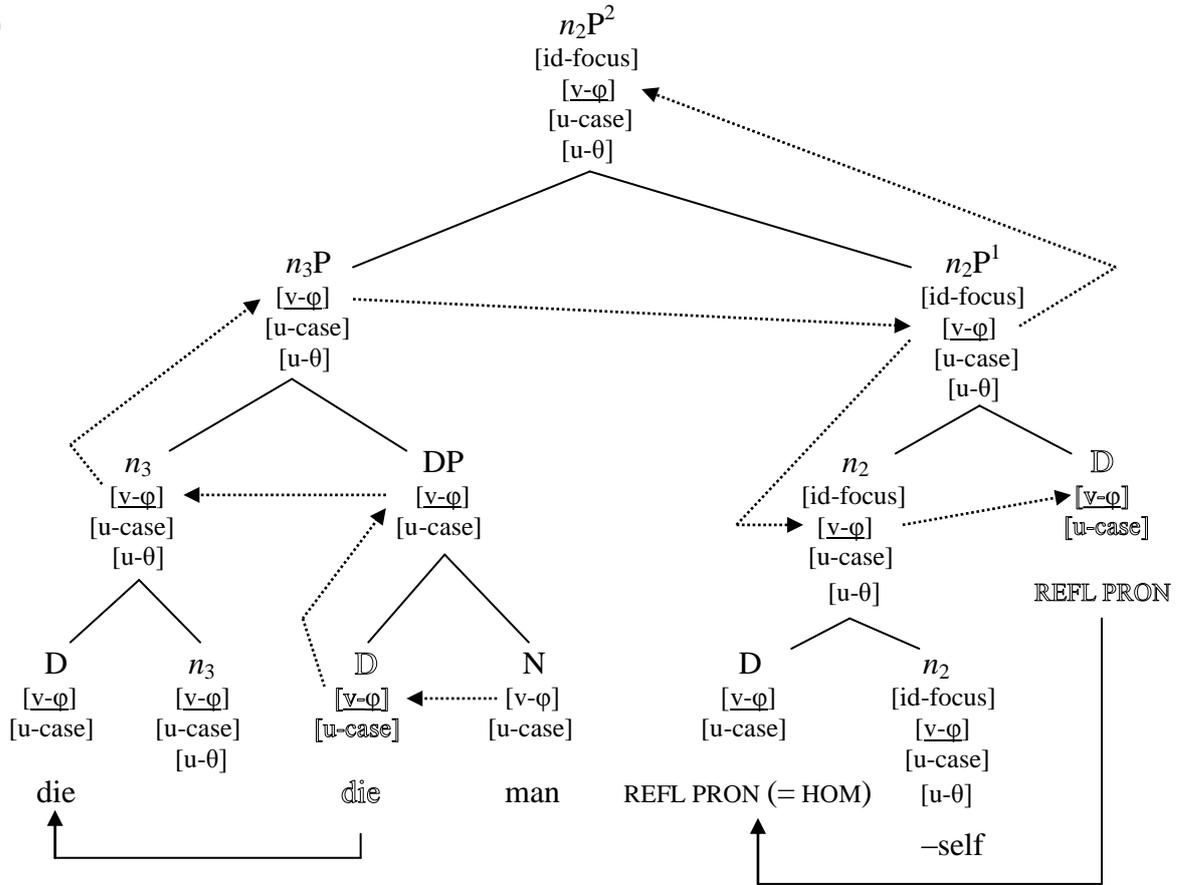
- (66) a. Die man_i gun homself_i ’n vakansie.
 the man grants himself a vacation
 “The man allows himself a vacation”
 b. *Die man_i gun homself_j ’n vakansie.

The construction in (66a) is derived as follows within the framework that was put forward in section 3.2.1. Firstly, the direct object *n*P *’n vakansie* is merged with the verb *gun*, yielding the (simplified) structure in (67). In view of its ditransitive nature, it seems plausible that *gun* has two θ -features, [theme- θ] and [goal- θ]; the former serves to value the corresponding feature of the direct object, represented as *n*₁P in (67).



Consider next the indirect object in (66a). In terms of Hypotheses A-G, the reflexive pronoun *homself* is merged together with the subject *die man* into the nominal shell structure in (27), repeated with minor adjustments as (68) below. According to Hypothesis H, the D which is merged with the identity focus *n*₂ in (68) is semantically interpreted as a (reflexive) anaphor that is obligatorily coreferential with the *n*₃P *die man*. This is in accordance with the facts in (66).

(68)

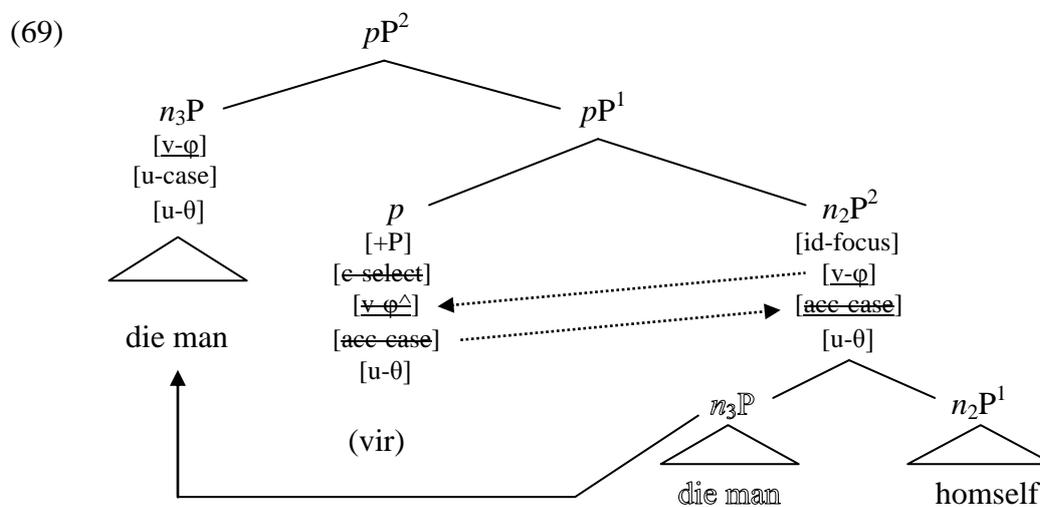


There are two important issues in connection with the identity focus n_2P in (68) that need to be addressed at this point. The first concerns the valuation of the n_2P 's θ -feature. It is standardly assumed in the literature that a lexical verb supplies a specific θ -role to the nominal complement that it selects. In the double object construction in (66a), the ditransitive verb *gun* selects not only the direct object *'n vakansie*, but also the indirect object *homself*. It seems likely, therefore, that the verb is responsible for supplying the indirect object n_2P in (68) with the relevant θ -value, in this case *goal*. We return to this operation below. The second issue concerns the accusative case-marking of the n_2P in (68). In the framework set out in the previous sections, the assignment of accusative case involves two functional categories: (i) a light verb v , which values the case feature of the direct object of a lexical verb, and (ii) a light preposition p , which values the case feature of a prepositional object. Hence, in the double object construction in (66a), the case feature of the direct object nP *'n vakansie* would be valued by the corresponding feature of the v that is associated with the verb *gun*, with the v at the same time acquiring its ϕ -values from this nP . Recall that the case-valuation operation results in the deletion of the v 's uninterpretable case feature, which means that the indirect object *die werkers* would remain unvalued for case.⁶⁸ A possible solution to this problem relates to the fact that the indirect object in Afrikaans double object constructions can also appear with the item *vir*, as was illustrated in (65). More

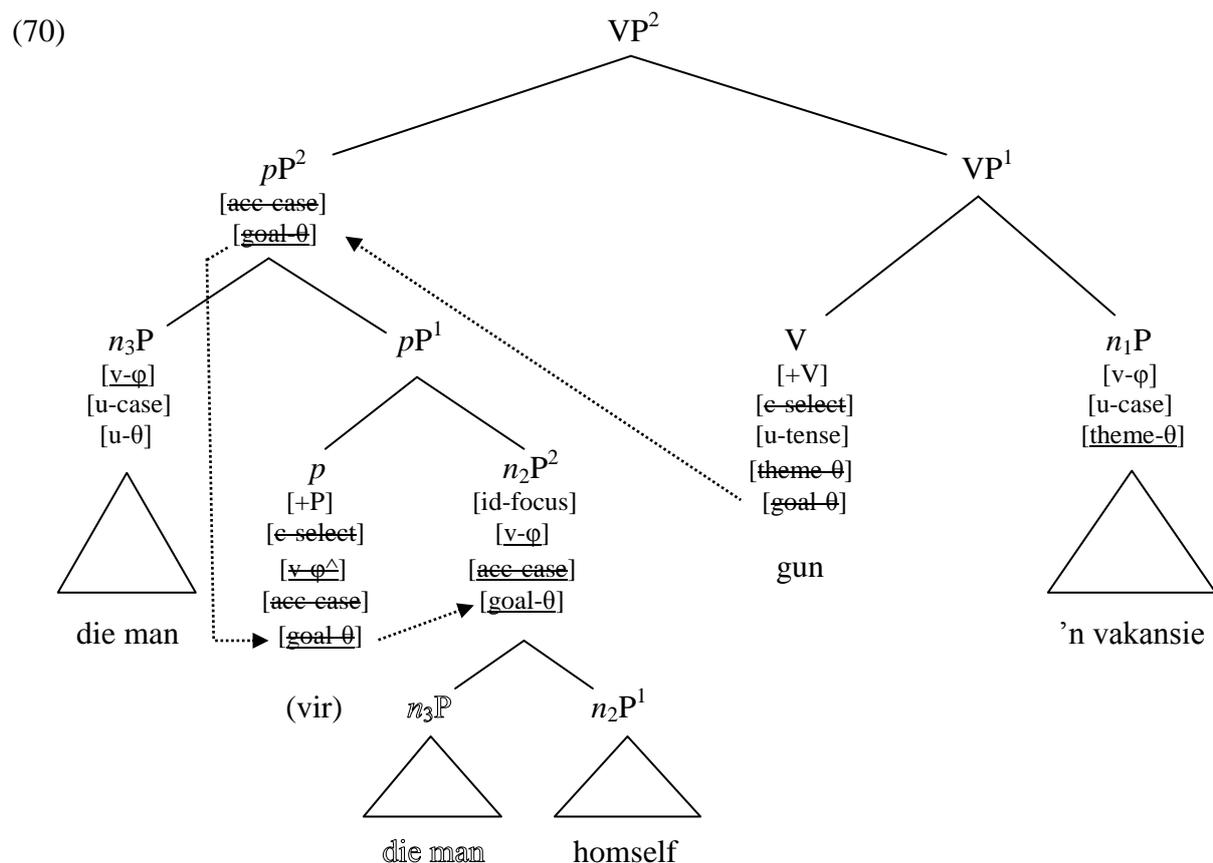
specifically, it could be suggested that this item represents the overt realisation of a light preposition, which would explain why it can be omitted in double object constructions without loss of lexical meaning;⁶⁹ as a light preposition, *vir* (and its null counterpart as well) would moreover be associated with the feature [acc-case].⁷⁰ Adopting this suggestion as a working hypothesis, the identity focus n_2P^2 in (68) is accordingly taken to merge with a p that values this nP 's case feature as accusative and that can, but need not, be spelled out as *vir*.⁷¹

Clearly, though, the light p that is hypothesised to be involved in the case-marking of the indirect object in (66a) is “defective” in the sense that it takes an nP as its complement, rather than a PP .⁷² One way of expressing this property involves the proposal in section 3.2.2 that, in addition to a valued case feature, a light preposition p also has a θ -feature. Since the value of this feature is closely associated with the particular lexical preposition heading the PP complement of the p , the non-selection of such a PP – as proposed in the case of (66a) – could be taken as an indication that the θ -feature of the p is unvalued. Hence, although the p 's θ -feature can be identified (and presumably stays identified) for valuation purposes at the point of merger, the p cannot assign a specific θ -value to its nP complement.

The various assumptions and suggestions about the merger of the identity focus n_2P in (68) with a light p are incorporated into the structure in (69). In line with the proposal made in section 3.2.2 (see the discussion in connection with (29)), the subject n_3P in (68) is raised into the specifier position of the pP . At this stage, the θ -features of the pP and the two nPs are all unvalued; the subject n_3P is also still unvalued for case since it does not form part of the projection line of the identity focus n_2 -head.



The pP^2 in (69) is subsequently merged with the VP in (67).⁷³ The resulting structure, shown in (70) below, provides the configuration in which the pP can acquire the goal value from the verb and simultaneously supply this value to the n_2P 's θ -feature. In short, then, the verb *indirectly* θ -values the n_2P . The subject n_3P , not being part of the projection “spine” of either the p or the identity focus n_2 , remains unvalued for both case and θ -role. (For expository convenience, the various features associated with the p in (70) – and, by implication, with its projections pP^1 and pP^2 – are not shown under the pP^1 and only partially under the pP^2 .)



Next, the VP^2 in (70) is merged with an experiencer light verb, followed by V-to- v raising. This sets up a configuration in which the v can enter into agreement relations with two distinct nominal expressions in its c-command domain. On the one hand, the v can value the case feature of the direct object n_1P 'n vakansie as accusative and in turn get its ϕ -features valued by this nP . Because of the diacritic associated with the v 's ϕ -features, the latter operation triggers raising of the n_1P , with pied-piping resulting in the VP as a whole being merged into $[spec, v]$ (see the discussion of (18) in section 3.2.1). On the other hand, the v can supply the experiencer value to the θ -feature of the subject n_3P die man, the only nominal expression in (70) that still lacks a θ -role. Furthermore, in the discussion of the word order patterns in (37), it was suggested that the

subject contains a discourse-related feature, [topic-disc], which serves to value a corresponding feature on the v , with the latter carrying a movement diacritic. Adopting this suggestion for the derivation of (66a) as well, the subject n_3P *die man* in (70) is raised into the second specifier position of the vP . In line with the approach taken in the previous section, raising of the subject n_3P takes place parallel to raising of the VP^2 . The effects of the various raising operations just outlined are shown in the simplified structure in (71); the subsequent operations are summarised in (72).

(71) [vP^3 [n_3P *die man*] [vP^2 [VP^2 *die man (vir) homself 'n vakansie*] [vP^1 *gun* [VP^2 *die man (vir) homself gun 'n vakansie*]]]]]

- (72) a. The vP^3 is merged as the complement of a T with the features [u-V], [c-select], [pres-tense], [u- ϕ ^] and [nom-case]. The T enters into two agreement relations. On the one hand, it values the tense feature of the v/V , and the v/V in turn supplies the T with a positive value for its categorial feature. On the other hand, the T values the case feature of the n_3P *die man* in the specifier position under the vP^3 , and this nP values the ϕ -features of the T.
- b. The movement diacritic associated with the T's ϕ -features triggers raising of the vP^3 into the specifier position of the TP, resulting in the extended projection TP^2 .

The remaining steps in the derivation of (66a) proceed by means of essentially the same operations as those summarised in (34) above: (i) the TP^2 is merged as the complement of a C-head, (ii) the subject n_3P *die man* (which forms part of the raised vP^3 in [spec, T]) is raised into the specifier position of the CP, and (iii) the finite verb *gun* is moved out of the vP^3 and merged with the C.

In the double object construction in (66a), the reflexive functions as the indirect object argument of the verb. As illustrated in (73a), the reflexive can also function as the direct object argument in such constructions, although it must be noted that many speakers find sentences of this type only marginally acceptable; also, there seems to be a strong preference for the use of *vir* along with the indirect object in such cases. The reflexive in (73a) is obligatorily coreferential with the subject of the sentence, as shown by the ungrammaticality of (73b). In contrast, in (73c) the reflexive is obligatorily coreferential with the indirect object, whereas in (73d) it can take either the subject or the indirect object as its antecedent.

The direct object n_1P^2 in (74) and the pP containing the indirect object nP *die blinde meisie* – the latter the complement of a light- p that can be spelled out as *vir* – are subsequently merged in, respectively, the first and the second complement position of the verb *beskryf*. This yields the structure in (75) in which the verb supplies the theme value to the θ -feature of the n_1P^2 as well as the goal value to the uninterpretable θ -feature of the p/pP . As a consequence, besides marking the indirect object n_3P as accusative, the θ -valued light- p can now also mark this nP as the goal of the sentence.

(75) $[_{VP}^2 [_{pP} (vir) [_{n_3P} die\ blinde\ meisie]] [_{VP}^1 beskryf [_{n_1P}^2 [_{n_2P} die\ man] homself]]]$

Adopting the proposals put forward in connection with (66a), the remaining steps in the derivation of (73a) can be summarised as follows:

- (76) a. The VP^2 in (75) is merged with an agentive light- v , followed by V-to- v raising.
 b. The v/V gets its ϕ -features valued by the direct object n_1P^2 and concurrently assigns accusative case to this nP ; the VP^2 is raised into $[spec, v]$, a pied-piping operation that is triggered by the movement diacritic associated with the v 's ϕ -features.
 c. The v/V assigns the agent value to the θ -feature of the subject n_2P *die man*.
 d. The subject n_2P 's $[topic-disc]$ feature provides a value for the matching feature on the v ; the diacritic appended to the v 's feature triggers raising of the subject n_2P into the second specifier position of the vP , an operation that takes place parallel to raising of the VP^2 .
- (77) a. The extended vP resulting from the raising operations in (76b,d) is merged with a T, giving rise to the various feature valuation operations outlined in (72a).
 b. The vP is raised into the specifier position of the TP, a pied-piping operation that is triggered by the movement diacritic appended to the T's ϕ -features.
 c. The extended TP is merged with a C, followed by V-to-C raising and raising of the subject n_3P *die man* into the specifier position of the CP.

Consider next the sentence in (73c). In terms of the NSA, the reflexive *haarself* and the expression *die blinde meisie* are initially merged as, respectively, the complement and the specifier of an identity focus n -head. The N *meisie* serves as the source of the ϕ -values for the various categories comprising the identity focus nP . It is therefore predicted on the basis of

Hypotheses G and H that *haarself*, which functions as the direct object, obligatorily takes *die blinde meisie* as its antecedent; this prediction is correct. The indirect object is constructed by merging a light-*p* with a nominal expression. However, unlike in the case of (66a) and (73a), the expression which is selected by the *p* is not one that has only at this stage been formed from elements in the lexical subarray feeding the derivation; rather, the *p* selects as its complement the *nP* *die blinde meisie* that has already been merged into the specifier position of the identity focus *nP* containing the reflexive *haarself*.⁷⁴ The latter *nP* and the indirect object *pP* are subsequently merged with the verb, yielding the simplified structure in (78). The verb in this structure values the θ -feature of the direct object *n*₁*P* as theme and that of the *p* as goal, and the *p* in turn supplies the indirect object *n*₂*P* with the accusative case value as well as with the goal θ -value that it acquired from the verb.

(78) [_{VP}² [_{pP} [_p (vir)] [_n₂*P* die blinde meisie]] [_{VP}¹ beskryf [_n₁*P* [_n₂*P* die blinde meisie] haarself]]]

The *VP*² in (78) is next merged with an agentive light verb, followed by V-to-*v* raising. The ensuing operations can be summarised as follows:

- (79) a. The *v/V* supplies the direct object *n*₁*P* *haarself* with the accusative case value and concurrently acquires its ϕ -values from this *nP*; the movement diacritic linked to the *v*'s ϕ -features triggers raising of the *n*₁*P*, with pied-piping resulting in the *VP*² as a whole being merged into [*spec*, *v*].
- b. The subject *nP* *die man* is externally merged into the second specifier position of the *vP*, where it receives the agent θ -value from the *v/V* (and likely also provides the topic value for the discourse-related feature of the *v*). The remaining steps in the derivation are essentially the same as those summarised in (77).

To end this section, consider the sentence in (73d) *Die man beskryf (vir) die blinde seun homself*. Here the reflexive can take either the subject *die man* or the indirect object *die blinde seun* as its antecedent. Hence, in terms of Hypotheses G and H, the identity focus *nP* containing the reflexive can have either the *nP* *die man* or the *nP* *die blinde seun* in its specifier position. If, on the one hand, it is the *nP* *die man* which initially forms part of the identity focus *nP*, as shown in (80), the derivation would involve basically the same steps as those proposed for the sentence in (73a). On the other hand, if it is the *nP* *die blinde seun* which is initially merged in [*spec*, *n*], the

derivation would be along the lines proposed for (73c); in this case the *nP* would subsequently be extracted from the identity focus *nP* and re-merged with a light-*p*, as indicated in (81).

(80) $[_{VP}^2 [_{pP} (vir) [_{n3P} die\ blinde\ seun]] [_{VP}^1 beskryf [_{n1P}^2 [_{n2P} die\ man] homself]]]$

(81) $[_{VP}^2 [_{pP} (vir) [_{n2P} die\ blinde\ seun]] [_{VP}^1 beskryf [_{n1P}^2 [_{n2P} die\ blinde\ seun] homself]]]$

(73d) is similar to the prepositional object construction in (54c) in that it is obligatorily reflexive from a grammatical point of view, but lacks linguistic information which could provide a basis for choosing between the two interpretations of the reflexive in a particular communication context, that is, the interpretations associated with the structures in (80) and (81), respectively. As noted in the previous section, this choice can only be made on the basis of non-linguistic information, which means that the sentence in (73d), like the one in (54c), has the characteristic of being “reflexive” from both a grammatical and a pragmatic perspective.

3.2.4 Infinitival constructions

This section deals with constructions where a reflexive pronoun that forms part of an infinitival complement clause enters, either directly or indirectly, into a coreferential relationship with some expression in the matrix clause. The discussion focuses on two types of construction, namely those that are conventionally referred to as “raising constructions” and “control constructions”. These two types are examined in sections 3.2.4.1 and 3.2.4.2, respectively.

3.2.4.1 Raising constructions

Consider the sentence in (82a) in which the infinitival clause forms the complement of the raising verb *skyn* (“seem”). The reflexive *homself* functions as the direct object argument of the verb *haat*, taking as its antecedent the expression *die man*. The latter, even though it appears in the initial position in the matrix clause, represents the subject argument of the infinitival clause. As illustrated in (82b), *homself* cannot be interpreted non-reflexively, whereas this is the only interpretation that is possible for the simplex form of the pronoun.

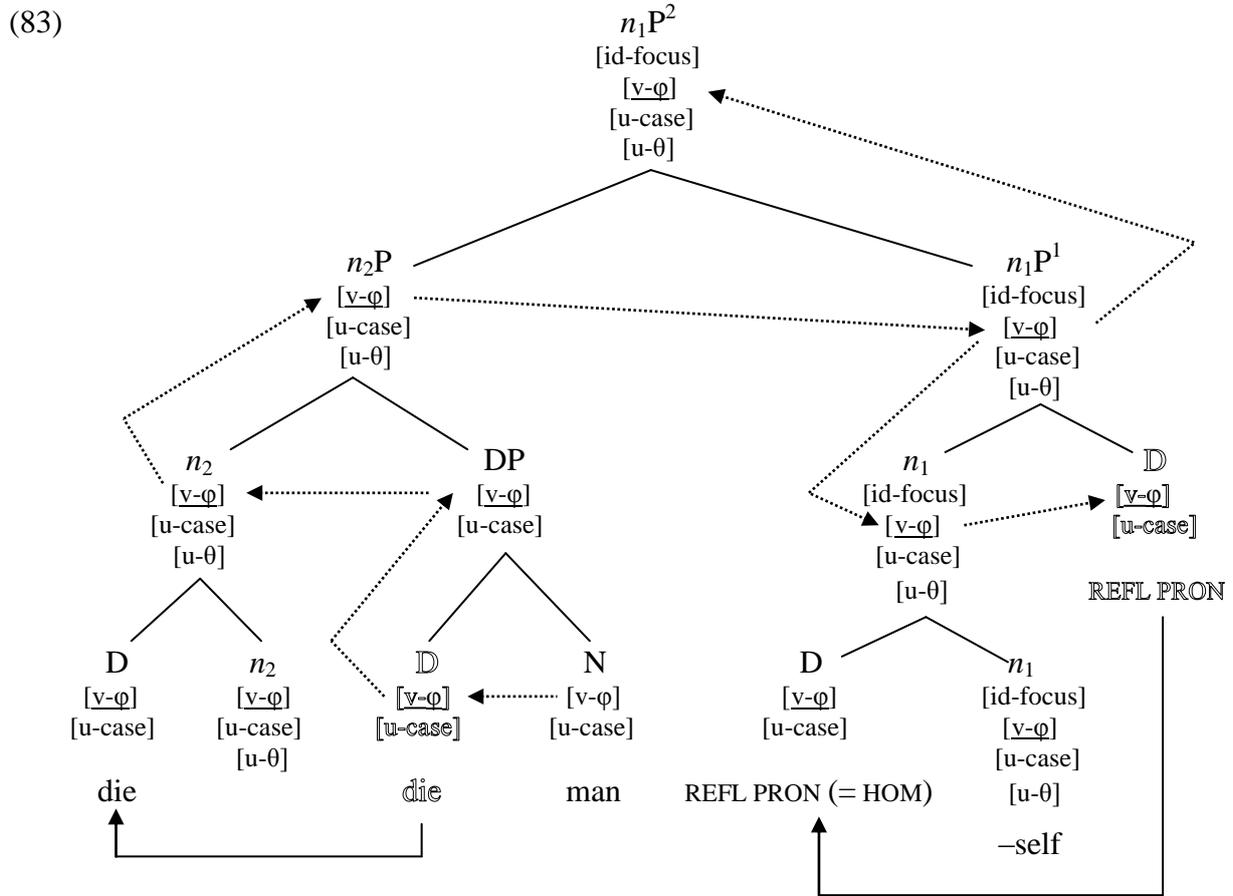
(82) a. Die man_i skyn homself_i te haat.

the man seems himself to hate

“The man seems to hate himself”

b. Die man_i skyn *homself_j / *hom_i / hom_j te haat.

The sentence in (82a) is derived as follows within the framework put forward in the preceding sections. Firstly, the reflexive pronoun *homself* is merged together with the subject *die man* into the nominal shell structure in (27), repeated here as (83). The ensuing raising operations and the various feature valuation and percolation operations are indicated by means of solid and dotted arrows, respectively; as before, features that have acquired their values in the course of the derivation are underlined>.



In terms of Hypothesis H, and in accordance with the facts in (82), the D which is merged with the identity focus n_1 in (83) is interpreted as an anaphor that is obligatorily coreferential with the n_2P *die man*, its antecedent. The next two steps in the derivation of (82a) are outlined below.

(84) The n_1P^2 in (83) is merged with the verb *haat*, from which it acquires the theme θ -value.

(85) a. The VP which is formed in (84) is merged with an experiencer light verb giving rise to V-to-*v* raising.

- b. The v gets its ϕ -features valued by the object n_1P and in turn values this nP 's case feature as accusative. The movement diacritic associated with the v 's ϕ -features triggers raising of the n_1P , with pied-piping resulting in the entire VP ending up in [spec, v].
- c. Following the suggestion made in section 3.2.2, the subject n_2P *die man* in (83) is taken to contain a [topic-disc] feature which serves to value the corresponding feature of the v . The movement diacritic associated with the v 's feature triggers raising of the subject n_2P into the second specifier position of the vP ; this operation takes place parallel to raising of the VP into the first specifier position of the vP .

The vP resulting from the operations in (85) is subsequently merged with a non-finite T containing the V-related features [infin-tense], [c-select] and [u-V]. The tense feature serves to value the corresponding feature of the v/V , with the latter concurrently providing a value for the T's [u-V] feature. Two questions arise at this point: (i) What is the structural position of the infinitive marker *te* ("to") in (82a)? and (ii) Does the T contain any N-related features? As regards question (i), it is generally assumed in the literature on English syntax that the infinitive marker *to* occurs under the T, most likely as the overt realisation of the [infin-tense] feature. Such an analysis cannot be adopted for Afrikaans, however. For one thing, unlike most varieties of English, Afrikaans does not allow "split infinitives"; that is, it is not possible for a constituent to occur between *te* and the non-finite verb, as illustrated in (86). For another, if the vP complement of the non-finite T were raised into [spec, T] (an operation to which we return shortly), the verb would incorrectly end up to the left of *te* should the latter be spelled out under the T, as shown in (87).

- (86) a. Die man skyn *te gedurig kla / gedurig te kla.
the man seems to constantly complain / constantly to complain
"The man seems to constantly complain / to complain constantly"
- b. Hy het belowe om haar *te ten minste bel / ten minste te bel.
he has promise COMP her to at least phone / at least to phone"
"He promised to at least phone her / at least to phone her"
- (87) a. Die man skyn *[die werk verstaan] te / [die werk] te verstaan.
the man seems the work understand to / the work to understand
"The man seems to understand the work"

- b. Hy het probeer om *[die boek lees] te / [die boek] te lees.
 he has try COMP the book read to / the book to read
 “He tried to read the book”

In view of these facts, it seems plausible to analyse the infinitive marker *te* as an affix on the verb that is tense-marked by the T. More precisely, it is claimed that the verb’s tense feature, valued as infinitive by the T, is spelled out as a verbal prefix in the form of *te*. This would explain the fact that the infinitive marker occurs to the immediate left of the verb and that it cannot be structurally separated from the verb. Such an analysis does not necessarily imply, however, that the TE+v/V expression (where TE is used as a convenient shorthand for the [infin-tense] feature that is eventually spelled out as *te*) remains inside the vP complement of the non-finite T. In fact, it is claimed here that this verbal expression is raised to the T as part of the tense valuation operation, possibly triggered by a movement diacritic carried by the T’s [infin-tense] feature. Some evidence in support of this claim will be presented below.

This brings us to question (ii) above regarding the N-related features of the non-finite T. It was claimed in section 3.2.1 that a finite T contains two N-related features, namely [nom-case] and a set of unvalued ϕ -features (e.g. person, number, gender) which is associated with a movement diacritic. These features enter into an agreement relationship with the corresponding features of a nominal expression in the T’s c-command domain, specifically, the subject *nP* in a specifier position of the vP. The movement diacritic triggers raising of the subject *nP*, with pied-piping resulting in the vP that contains this *nP* being merged in [spec, T]. In the case of a non-finite T, by contrast, the standard view is that it lacks a case feature, which explains why the subject *n₂P* in (83) has to raise into the matrix clause at a later stage of the derivation. In addition, it is postulated here that a non-finite T is defective in the sense that contains only one ϕ -feature, namely [u-num(ber)^], instead of a complete set of ϕ -features.⁷⁵ This number feature is valued by the subject *nP* in the vP’s specifier position and as a consequence the movement diacritic triggers raising of the *nP* into [spec, T], with the containing vP pied-piped along.

Returning to the merger of the non-finite T and the vP described in (85), the feature valuation and raising operations proposed above will result in a TP with roughly the structure in (88). (For the sake of simplicity, (88) contains only those features of the v/V that are involved in these

subsequent studies). Secondly, as an unaccusative verb the *r-v* most likely lacks a case feature as well; after all, *skyn* does not select an internal nominal argument that has to be case-valued. Thirdly, assuming that the ability to assign case is linked to the presence of a complete set of ϕ -features, the *r-v*'s non-participation in case valuation suggests that it lacks such a complete set. Rather, similar to what was proposed above for the non-finite T (which also fails to assign case), it is claimed here that an *r-v* contains only one ϕ -feature, [u-num[^]].⁷⁶ In the case of (82a), this feature is valued by the subject *n*₂P *die man* that forms part of the raised *v*P³ in (88): the *n*P falls inside the c-command domain of the *r-v*, and it is active from a probe-goal perspective because of its unvalued case feature. The diacritic appended to the *v*'s number feature moreover triggers raising of the *n*₂P into [spec, *r-v*], with the containing *v*P³ pied-piped along. The resulting structure is roughly along the lines in (89).

(89) [_{r-v}P² [_vP³ *die man* homself] [_{r-v}P¹ *skyn* [_{VP} *skyn* [_{TP}² [_vP³ *die man* homself] TE haat]]]]

The remaining steps in the derivation of (82a) can be briefly summarised as follows:

- (90) a. The *r-v*P² in (89) is merged with a T containing the features [u-V], [c-select], [pres-tense], [u- ϕ [^]] and [nom-case]. The T provides the nominative case value to the *n*₂P *die man* in the specifier position under the *v*P³, and this *n*P values the ϕ -features of the T. In addition, the T values the tense feature of the *r-v*/V *skyn*, and the *r-v*/V in turn supplies the T with a positive value for its categorial feature.
- b. The movement diacritic associated with the T's ϕ -features induces raising of the *r-v*P² into the specifier position of the TP, resulting in the extended projection TP².
- c. The TP² is merged with a C giving rise to V-to-C raising and raising of the subject *n*₂P *die man* into [spec, C].

To end this subsection, let us briefly consider the structural position of the non-finite verb in (82a). It was claimed above that the *v*/V TE+*haat* in (88) is raised out of the *v*P³ and merged with the non-finite T. This explains why TE+*haat* is not affected by any of the subsequent *v*P raising operations, that is, *v*P-to-[spec, T] as in (88), *v*P-to-[spec, *r-v*] as in (89), and *v*P-to-[spec, T] as described in (90b). If raising of a *v*/V to the non-finite T is not incorporated into the analysis of Afrikaans infinitival clauses, the *v*/V TE+*haat* would stay part of the *v*P³ throughout the derivation; that is, the *v*/V would be moved along with the rest of the *v*P³ each time *v*P raising takes

place. Abstracting away from the effects of subject and verb raising in the derivation of main clauses, such an analysis would result in the ungrammatical sentence in (91b), with *te haat* incorrectly occurring to the left of the raising verb. By contrast, the grammatical word order shown in (91a) follows straightforwardly from an analysis which incorporates raising of a *v/V* to a non-finite T. It remains to be clarified, however, whether such an operation can be justified on independent grounds.⁷⁷

- (91) a. (dat) die man homself skyn te haat.
 that the man himself seems to hate
 “(that) the man seems to hate himself”
 b. *(dat) die man homself te haat skyn.

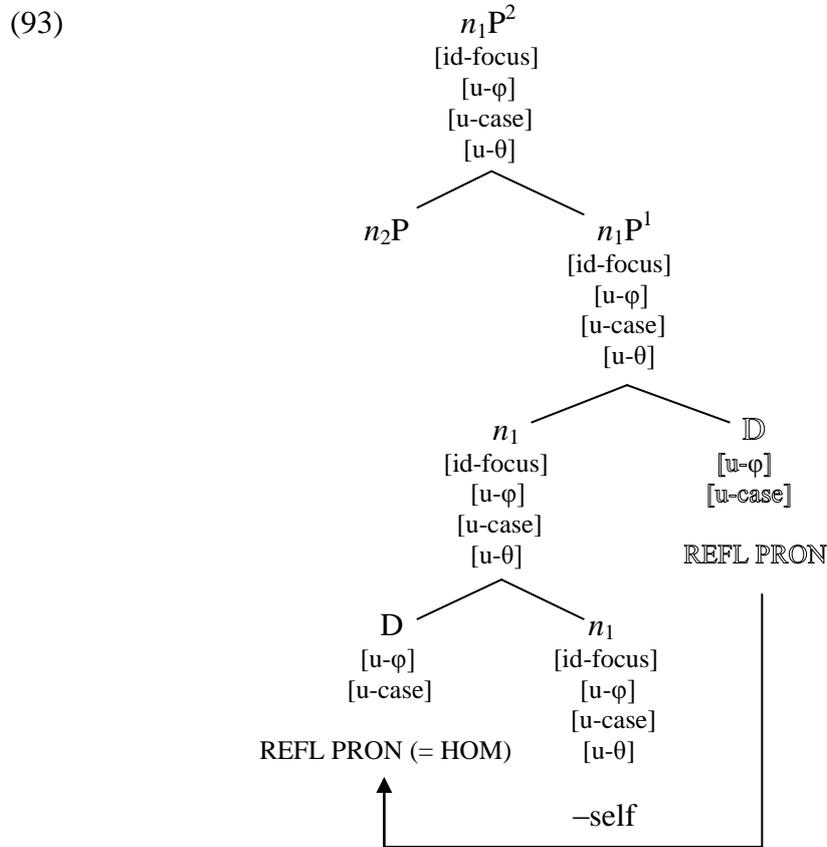
3.2.4.2 Control constructions

In the sentence in (92a) below, the reflexive *homself* occurs inside the infinitival complement of the subject control verb *weier* (“refuse”). The reflexive functions as the object argument of the verb *identifiseer* (“identify”), taking as its antecedent the PRO subject of the infinitival clause. PRO is in turn interpreted as coreferential with (or in conventional terms, semantically controlled by) the subject of the matrix clause, *die man*. This implies that the reflexive *indirectly* enters into a coreferential relationship with the matrix clause subject. As shown in (92b), *homself* cannot be interpreted non-reflexively, whereas the simplex form allows both a reflexive and a non-reflexive interpretation.

- (92) a. Die man_i weier om PRO_i homself_i te identifiseer.
 the man refuses COMP himself to identify
 “The man refuses to identify himself”
 b. Die man_i weier om PRO_i *homself_j / hom_i / hom_j te identifiseer.

In the framework developed so far, the obligatory coreferential relationship between *homself* and PRO and between PRO and *die man* in (92a) suggests an analysis where each relationship is established by means of a distinct identity focus nominal shell. The first, represented in (93) below, contains the reflexive as the complement of the identity focus light noun *n₁*; we return

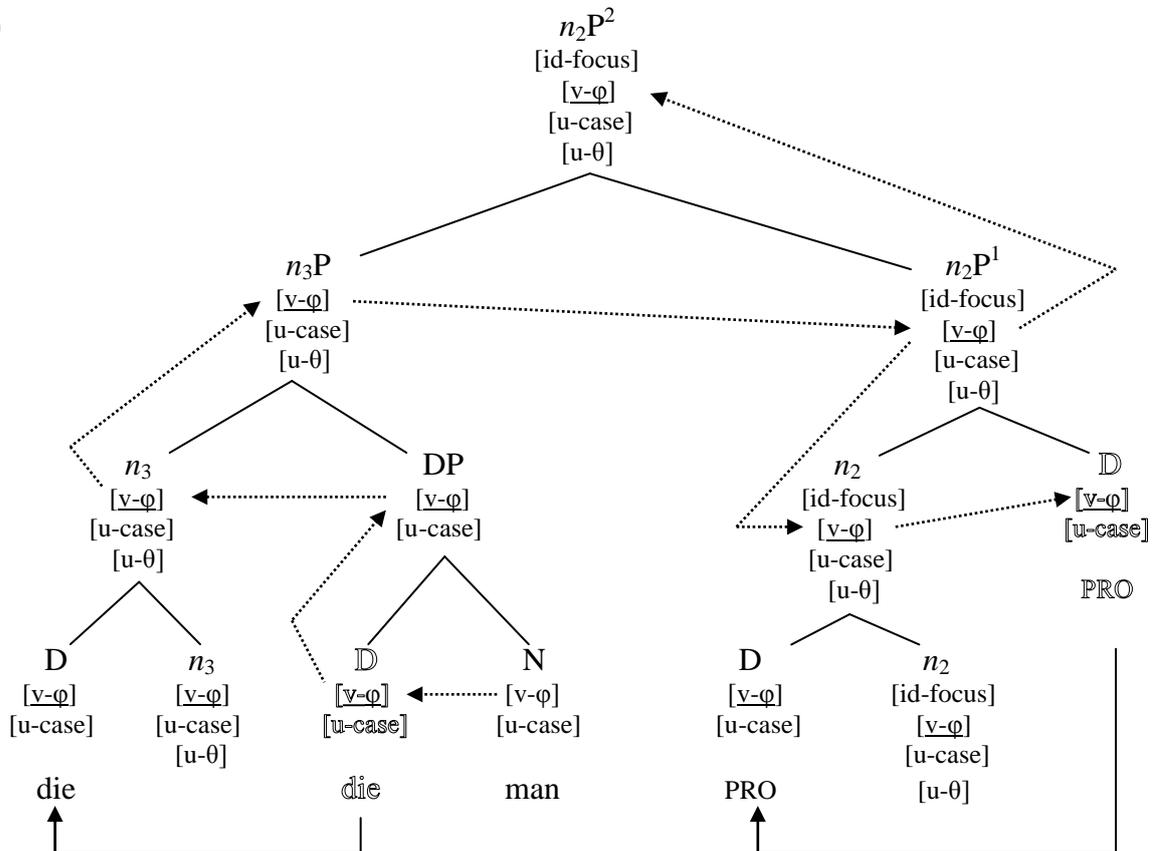
shortly to the n_2P in the specifier position of the n_1 . As indicated, D-to- n raising has taken place in (93).



As regards the second nominal shell, it is claimed here that PRO represents a non-overt anaphor that is merged, together with its antecedent (or controller) *die man*, into essentially the same type of shell structure employed in the case of reflexive pronouns.⁷⁸ Generalising the analysis of obligatory reflexivity put forward in section 3.2.1, PRO is accordingly analysed as a D with unvalued case and ϕ -features; it is furthermore merged as the complement of a light noun that carries the features [u- ϕ], [u-case] and [u- θ], as well as a valued focus feature. As a working hypothesis, it is assumed that the latter expresses the notion of ‘identity focus’, as in the case of reflexives. Adopting these ideas, the nominal shell containing PRO and its antecedent may be represented as in (94). The various raising and feature valuation operations shown in (94) are the same as those proposed for the shell structure containing a reflexive pronoun and its antecedent (see e.g. the discussion of (83) above). The important point is that the subject n_3P *die man* values the ϕ -features of the n_2 and its projections, with the n_2 consequently valuing the ϕ -features of PRO. In terms of (the generalised) Hypothesis H, it is therefore correctly predicted that PRO is

interpreted as obligatorily coreferential with the n_3P *die man*. Note that raising of the PRO to the identity focus n (which is taken to be the locus of *-self*) does not result in the affix eventually being spelled out on the PRO, presumably because affixes require an overtly realised syntactic host. However, this raises the question why the derivation still converges. A plausible answer in the context of the NSA is to classify control verbs as a subclass of inherently reflexive verbs. As pointed out in section 2.3.1, with such verbs the reflexive pronoun is standardly used without the affix *-self*. On this approach, then, there would be at least two types of inherently reflexive verbs: (i) those that are defective in the sense that they do not assign a θ -role, and (ii) those (i.e. control verbs) that do not assign case (see the discussion below).

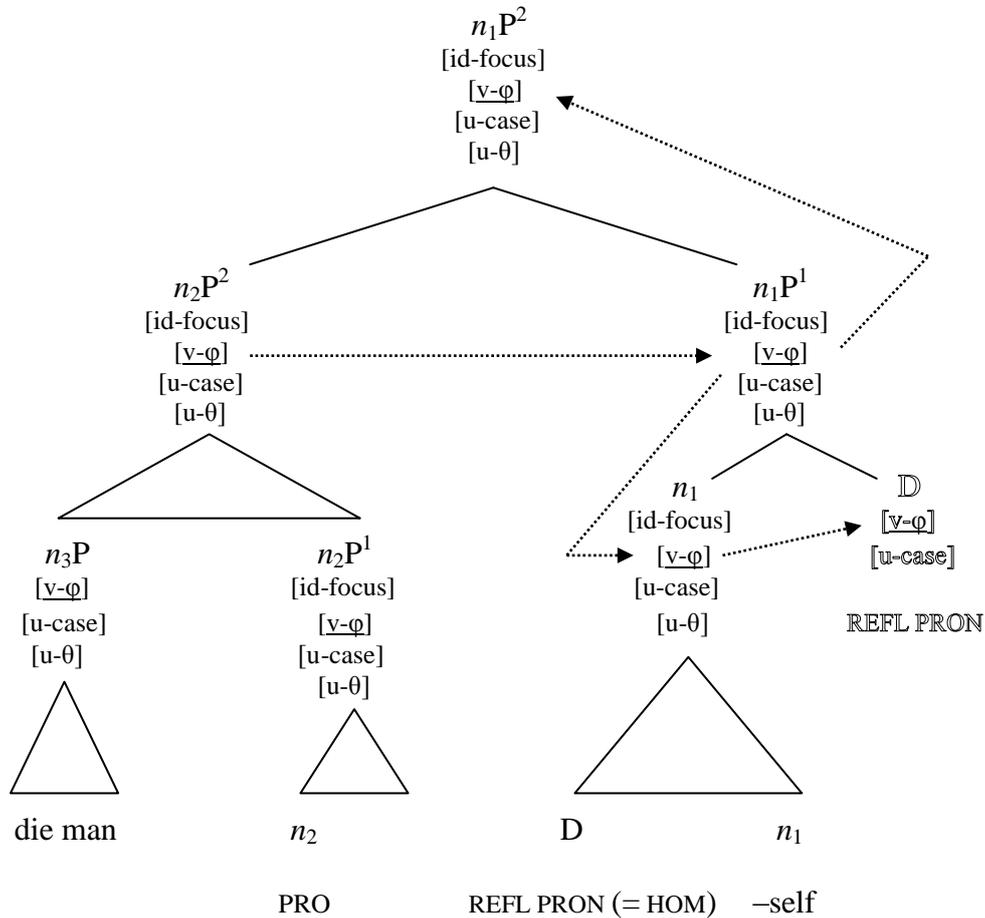
(94)



Having dealt with the coreferential relationship between PRO and *die man* in (92a), the next task is to establish the same type of relationship between the reflexive *homself* and PRO. This is done by merging the n_2P^2 in (94) into the specifier position under the n_1P^2 in (93), as shown in simplified form in (95) below. According to Hypothesis G, the n_2P in (95) values the ϕ -features of the n_1 and its projections, and the n_1 in turn values the ϕ -features of the reflexive pronoun. It is

therefore correctly predicted in terms of Hypothesis H that *homself* in (95) is obligatorily coreferential with the n_2 P containing PRO in its head position.

(95)



Proceeding with the derivation, the n_1 P² in (95) is merged with the verb *identifiseer*, from which it acquires the theme θ -value. The VP is subsequently merged with a light verb, bringing about a configuration in which several (parallel) feature valuation and raising operations can take place. Firstly, the verb is raised to the v . Secondly, the v gets its ϕ -features valued by the n_1 P² and in turn values the n P's case feature as accusative. The movement diacritic that is associated with the v 's ϕ -features triggers raising of the n_1 P² into the specifier position of the v P, with the containing VP pied-piped along. Thirdly, the v provides the agent θ -value to the n_2 P² headed by PRO. Fourthly, although not indicated in (94) and (95), the n_3 P *die man* is taken to contain a [topic-disc] feature which values the corresponding discourse-related feature carried by the v (see the discussion in connection with (40) in section 3.2.2); the diacritic appended to the v 's feature triggers raising of *die man* into the second specifier position of the v P. The resulting

structure may be represented as in (96). At this point, the n_2P and the n_3P are both still unvalued for case, and the latter also lacks a θ -value.

- (96) $[_{vP}^3 [_{n3P} \text{ die man}] [_{vP}^2 [_{VP} [_{n3P} \text{ die man}] [_{n2P} \text{ PRO} [_{n1P} \text{ homself}]]]] [_{vP}^1 \text{ identifiseer}]]$
 $[_{VP} \text{ identifiseer} [_{n3P} \text{ die man}] [_{n2P} \text{ PRO} [_{n1P} \text{ homself}]]]]]$

The next step is to merge the vP^3 in (96) with a non-finite T. It was stated in section 3.2.4.1 that a non-finite T carries only one ϕ -feature, $[u\text{-num}^\wedge]$, instead of a complete set and, most likely as a consequence, also lacks a case feature.⁷⁹ In the structure at hand, the T's number feature is valued as singular by the n_2P headed by the n_2/PRO , which results in the n_2P being raised along with the containing vP^3 into $[spec, T]$. Parallel to these operations, the T receives a value for its categorial feature from the v/V *identifiseer* and concurrently provides the latter's tense feature with the infinitive value. In line with the analysis of Afrikaans infinitival clauses put forward in the previous subsection, the v/V is raised to the T and its valued tense feature is spelled out in the form of the prefix *te*. The structure generated by the various valuation and raising operations is roughly as follows:

- (97) $[_{TP}^2 [_{vP}^3 [_{n3P} \text{ die man}] [_{vP}^2 [_{VP} [_{n1P} [_{n2P} \text{ PRO}] \text{ homself}]]]]] [_{TP}^1 \text{ TE+identifiseer} [_{vP}^3 [_{n3P} \text{ die man}]]$
 $[_{vP}^2 [_{VP} [_{n1P} [_{n2P} \text{ PRO}] \text{ homself}]]] [_{vP}^1 \text{ TE+identifiseer}]]]$

The TP^2 in (97) is next merged with the non-finite C *om*. Following Chomsky & Lasnik (1993), Rizzi (1997) and Martin (2001), amongst others, it is assumed that this C assigns null case to the n_2P containing PRO in its head position.⁸⁰ It is furthermore assumed here that the C *om* has an additional feature $[u\text{-F}^\wedge]$ which is valued by a corresponding feature of the subject n_3P *die man*, resulting in the n_3P being raised into $[spec, C]$, as shown in (98). We will return to this assumption below. The fact that the n_3P has not yet acquired a case and a θ -value means that it is the only nominal expression in the infinitival clause that is still active from a feature valuation perspective.

- (98) $[_{CP}^2 [_{n3P} \text{ die man}] [_{CP}^1 \text{ om} [_{TP}^2 [_{vP}^3 [_{n3P} \text{ die man}]] [_{vP}^2 [_{VP} [_{n1P} [_{n2P} \text{ PRO}] \text{ homself}]]]]] [_{TP}^1$
 $\text{TE+identifiseer} [_{vP}^3 [_{n3P} \text{ die man}]] [_{vP}^2 [_{VP} [_{n1P} [_{n2P} \text{ PRO}] \text{ homself}]]] [_{vP}^1 \text{ TE+identifiseer}]]]]]$

The subsequent steps in the derivation of (92a) are briefly outlined in (99)-(101).

- (99) The CP in (98) is merged with the subject control verb *weier*, and the resulting VP is merged with the light verb that is associated with *weier* (c-*v*, for short), which gives rise to V-to-*v* raising. Note that the subject control verb does not select an internal nominal argument that needs to be case- and θ -valued. (On object control verbs, see the discussion surrounding (105) below.) On the one hand, this means that *weier* lacks a θ -feature.⁸¹ On the other hand, the absence of an internal argument that has to be case-valued suggests that the c-*v* lacks a case feature. Given the apparent link between case and ϕ -valuation, the c-*v*'s non-participation in case-valuation suggests that it is ϕ -defective as well; as in the case of the light *v* associated with raising verbs, it is assumed that the light verb associated with control verbs only has a [u-num[^]] feature.
- (100) The c-*v* values the θ -feature of the *n*₃P *die man* in the specifier position of the CP² in (98), with the *n*P in turn valuing the number feature of the c-*v*. As a consequence of number valuation, the movement diacritic on the c-*v*'s feature triggers raising of the *n*₃P into the specifier position of the c-*v*P.
- (101) The c-*v*P formed by means of the various operations in (99) and (100) is merged with a T carrying the features [u-V], [c-select], [pres-tense], [u- ϕ [^]] and [nom-case]. The subject *n*₃P *die man* in the specifier position of the c-*v*P gets its nominative case value from the T and in turn values the T's ϕ -features. The remaining feature valuation and raising operations are essentially the same as those described in (90).

It was assumed above that the non-finite C *om* in (92a) has a feature [u-F[^]] which is valued by the *n*₃P *die man*, and that the movement diacritic appended to the C's feature triggers raising of the *n*₃P into [spec, C]. Suppose however that the grammar does not provide for such a raising operation, so that the *n*₃P stays part of the *v*P in the specifier position of the infinitival TP, as in (97). Subsequent valuation of the c-*v*'s [u-num[^]] feature by the *n*₃P *die man* would then result in either the *n*₃P on its own or the whole of the containing *v*P being raised into [spec, c-*v*]. But recall that, up to now, all instances of raising linked to ϕ -valuation have involved pied-piping. Apparently, then, restricting ϕ -related raising to the *n*₃P in the case at hand would amount to an *ad hoc* stipulation. Conversely, pied-piping of the *v*P containing the *n*₃P would result in the word order illustrated in (102), yielding the ungrammatical sentences in (103).

(102) [_{C-VP} [_{VP} die man PRO homself] weier [_{VP} [_{CP} om [_{TP} [_{VP} die man PRO homself] TE-identifiseer]] weier]]

- (103) a. *Die man weier homself om te identifiseer.
 the man refuses himself COMP to identify
 b. *(dat) die man homself weier om te identifiseer.

In short, then it seems plausible that the non-finite C *om* contains a movement diacritic which triggers raising of the n_3P *die man* into [spec, C], as illustrated in (98). It is not at all clear, though, with which feature F such a diacritic could be associated. One possibility is that F is a discourse-related feature that is valued by the n_3P 's [topic-disc] feature. Another possibility is that it is some or other feature that the C shares with the non-finite T, perhaps [u-num[^]]. A third possibility is that the C *om* carries a “free-standing” movement diacritic of the sort discussed by Biberauer & Roberts (2006:63, n. 21) and Biberauer (2010). These possibilities will not be explored further here. It is also not clear whether the raising operation in question can be justified on independent grounds. Potential support for the idea that an expression can be raised into the specifier position of the C *om* comes from the coordination test, a standard constituency diagnostic which holds that two or more expressions can only be coordinated if they belong to the same constituent type. Consider the following example in this regard:

- (104) Ek vind dit ontstellend [om die geld te verloor] en [vir hom om geblameer te word].
 I find it upsetting COMP the money to lose and for him COMP blamed to be
 “I find it upsetting [to lose the money] and [for him to be blamed]”

Since *om* introduces an infinitival clause, that is, a CP, the fact that *om die geld te verloor* in (104) can be coordinated with *vir hom om geblameer te word* suggests that the latter expression also represents a CP, with *vir hom* occupying the [spec, C] position. It should be noted, though, that the coordination test on its own is not an entirely reliable diagnostic, so it remains uncertain whether this is a valid conclusion. Still, as a working hypothesis, it will be assumed here that the grammar does provide for the possibility that an expression can be raised into the specifier position of the non-finite C *om*.

Let us now briefly consider a control construction in which the PRO subject of the infinitival clause takes as its antecedent the direct object of the matrix clause, rather than the subject as in (92a). In (105), for example, PRO is interpreted as coreferential with *die man*, which functions as the direct object of the control verb *oorreed* (“persuade”). The reflexive *homself* obligatorily takes PRO (and therefore, indirectly, the direct object *die man*) as its antecedent in (105a); by contrast, with the simplex form of the pronoun the sentence is ambiguous between a reflexive and a non-reflexive reading, as shown in (105b).

- (105) a. Sy oorreed die man_i om PRO_i homself_i te identifiseer.
 she persuades the man COMP himself to identify
 “She persuades the man to identify himself”
- b. Sy oorreed die man_i om PRO_i *homself_j / hom_i / hom_j te identifiseer.

Within the framework developed so far, the infinitival clause in (105a) is derived in exactly the same manner as the one in (92a), with both clauses displaying the CP structure in (98). In the case of (105a), this CP is merged with the object control verb *oorreed*, a transitive verb with the feature [theme-θ] that serves to value the corresponding feature of the object *n*₃P *die man* in [spec, C]. The VP headed by *oorreed* is subsequently merged with a light verb, *c-v*, giving rise to V-to-*c-v* raising. Being associated with a transitive verb, the *c-v* contains an [acc-case] feature and a complete set of φ-features, [u-φ[^]]. The case feature provides a value for the *n*₃P *die man*, and this *n*P in turn serves to φ-value the *c-v*. The movement diacritic associated with the *c-v*’s φ-features moreover triggers raising of the *n*₃P into [spec, *c-v*]. The *n*P *sy* is subsequently selected from the lexical subarray that feeds the derivation and merged into the second specifier position of the *c-v*, where it acquires the agent θ-value. The *c-v*P resulting from these operations is roughly as in (106). Because of its unvalued case feature, the subject *n*P *sy* is the only active nominal expression in this structure.

- (106) [_{c-v}P³ [_n4P *sy*] [_{c-v}P² [_n3P *die man*] [_{c-v}P¹ *oorreed* [_{VP} [_{CP}² [_n3P *die man*] [_{CP}¹ om [_{TP} [_{VP}3 *die man* PRO *homself*] te+identifiseer]]] *oorreed*]]]]

The *c-v*P³ in (106) is next merged with a finite T, which supplies the *n*₄P *sy* with the nominative case value. The ensuing feature valuation and raising operations are essentially the same as those described in (90).⁸²

In all the control constructions examined in this section, the reflexive surfaces as part of the infinitival complement of the control verb, that is, to the right of the *om*. With at least two types of control verbs, however, it is also possible for the reflexive to occur outside of the infinitival clause. Consider the examples in (107) and (108) in this regard. The conative verb *probeer* (“try”) in (107) and the aspectual verb *begin* (“begin, start”) in (108) both select an infinitival complement clause which can, but need not, contain the non-finite *om* and the infinitive marker *te*, with *te* obligatory if *om* is present (and not standardly used without *om*). If *om* is present, as in the (a) sentences, the direct object of the infinitival clause (represented by the reflexive *homself* in these examples) occurs inside of the infinitival clause. As shown in the (b) sentences, if *om* is not present, the object *homself* forms part of the higher clause, preceding both the control verb and its infinitival complement.

- (107) a. (dat) die man probeer om homself te identifiseer / *homself probeer om te identifiseer.
 (that) the man tries COMP himself to identify / himself tries COMP to identify
 “(that) the man tries to identify himself”
- b. (dat) die man homself probeer identifiseer / *probeer homself identifiseer.
 (that) the man himself tries identify / tries himself identify
 “(that) the man tries to identify himself”
- (108) a. (dat) die man begin om homself aan te trek / *homself begin om aan te trek.
 (that) the man begins COMP himself on to pull / himself begins COMP on to pull
 “(that) the man is starting to dress himself”
- b. (dat) die man homself begin aantrek / *begin homself aantrek.
 (that) the man himself begins on-pull / begins himself on-pull
 “(that) the man is starting to dress himself”

The grammatical word order displayed in the (b) sentences can be accounted for as follows with reference to (107b) (*dat*) *die man homself probeer identifiseer*. In terms of the analysis of control constructions set out above, the TP of the infinitival clause in (107b) is derived in essentially the same manner as the corresponding TP in (92a) and (105a), the only difference being that the valued tense feature of the *v/V* *identifiseer* is not spelled out in the form of the prefix *te* (although it can be spelled out in some varieties; see note 30 to Chapter 2). Note that the PRO subject of the infinitival clause has to be valued for null case. It was claimed above that this

value is supplied by the non-finite C, which usually takes the form *om*. Hence, since *om* is absent from (107b), it seems plausible that the embedded TP of this construction is merged with an inherently null non-finite C (symbolised as \emptyset) which serves as the source of PRO's case value.⁸³

The resulting structure is roughly as follows:

(109) [_{CP} \emptyset [_{TP}² [_{VP}³ [_{n₃P} die man] [_{VP}² PRO homself]]] [_{TP}¹ identifiseer [_{VP}³ [_{n₃P} die man] [_{VP}² PRO homself] [_{VP}¹ identifiseer]]]]]

It was assumed above that, besides [null-case], the non-finite C *om* also has a [u-F[^]] feature which is valued by an *nP* in the c-command domain of the C. As shown in (98), valuation results in raising of the relevant *nP* into [spec, C]. In the absence of evidence to the contrary, the null non-finite C \emptyset is taken to lack such a feature (or perhaps a free-standing movement diacritic), which means that the *n₃P* in (109) remains inside of the *vP*³. The CP is subsequently merged with the subject control verb *probeer* which, like *weier* in (92a) above, does not select an internal nominal argument and is thus without a θ -feature. This leaves the *n₃P* *die man* still unvalued for case and θ -role. The VP headed by *probeer* is next merged with an agentive light verb, *c-v*. Being associated with an intransitive lexical verb, the *c-v* lacks a case feature and carries only one ϕ -feature, [u-num[^]], similar to the *c-v* associated with *weier*. Valuation of the *c-v*'s number feature by the *n₃P* *die man* in (109) triggers raising of this *nP* into [spec, *c-v*], with the *vP*³ pied-piped along; and in a parallel operation the *c-v* supplies the *n₃P* with the agent θ -value. The *c-vP* resulting from these merger and raising operations has roughly the following form:

(110) [_{c-vP}² [_{VP}³ [_{n₃P} die man] PRO homself] [_{c-vP}¹ probeer-*c-v* [_{VP} [_{CP} \emptyset [_{TP}² [_{VP}³ [_{n₃P} die man] PRO homself] [_{TP}¹ identifiseer]]] probeer]]]

Subsequent merger of the *c-vP*² in (110) with a finite T sets up a probe-goal configuration in which the T enters into two agreement relationships. On the one hand, the T gets its categorial feature valued by the *c-v/V* *probeer* and concurrently supplies the verb with a tense value. On the other hand, the T case-values the subject *n₃P* *die man* as nominative and in turn acquires values for its [u- ϕ [^]] features from this *nP*. As a consequence of ϕ -valuation, the *n₃P* is raised, together with the containing *vP*³, into the specifier position of the T, yielding the grammatical word order in (107b) (*dat*) *die man homself probeer identifiseer*. The corresponding main clause word order *Die man probeer homself identifiseer* is derived by means of the feature valuation and raising

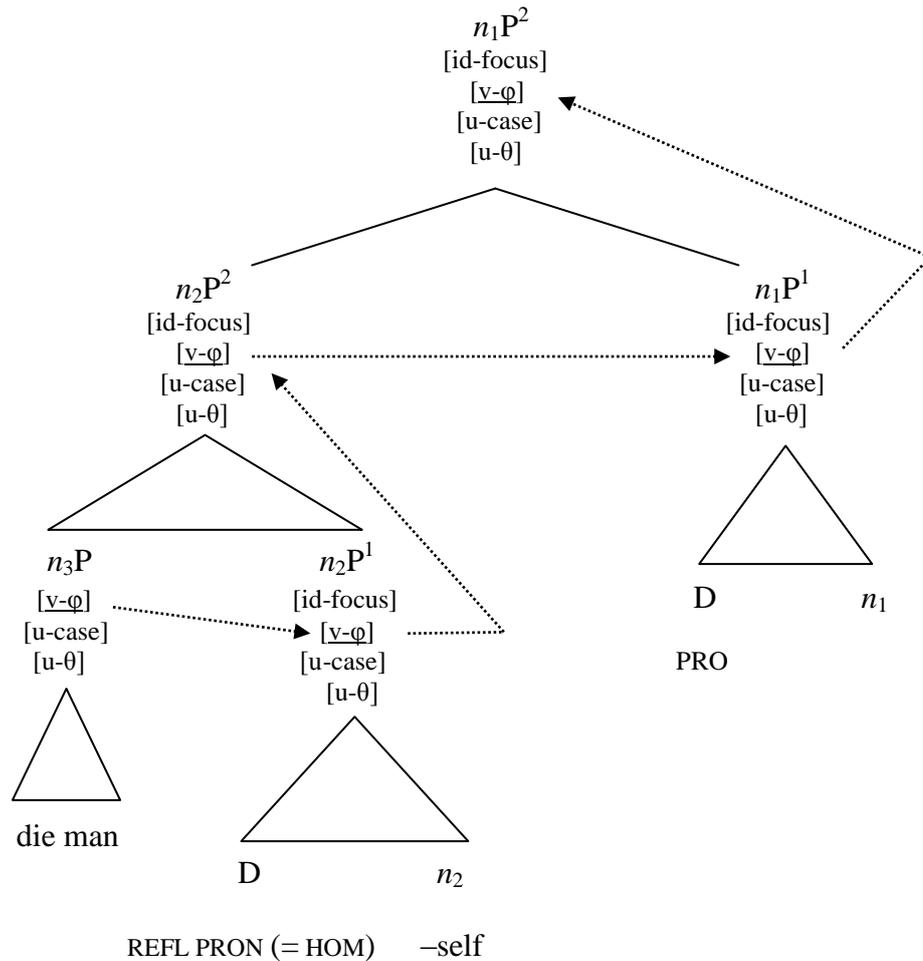
operations described in (90). Incidentally, it was claimed above that the null non-finite C \emptyset lacks a movement diacritic, either a free-standing one or one that is associated with some feature F. If this were not the case, the n_3P in (109) would be raised out of the vP^3 into [spec, C] and, eventually, into the specifier position of the matrix clause TP. This would yield the ungrammatical word order in (107b) **(dat) die man probeer homself identifiseer*, with the reflexive surfacing as part of the infinitival clause.

In the control constructions in (92a), (105a), (107) and (108), the reflexive functions as the object argument of the non-finite verb in the infinitival clause. In (111a), by contrast, the reflexive *homself* seems to function as the object argument of the perception verb *hoor* (“hear”) in the matrix clause; at the same time, though, *homself* is also semantically associated with the subject of the infinitival clause, most likely PRO. Both *homself* and PRO obligatorily take their reference from the matrix clause subject, *die man*.⁸⁴ As is clear from (111b,c), the simplex form of the pronoun cannot be interpreted reflexively, and the infinitival clause cannot occur with the non-finite C *om* and/or the infinitive marker *te*.

- (111) a. Die man_i hoor homself_i PRO_i lag.
 the man hears himself laugh
 “The man hears himself laugh”
 b. Die man_i hoor *homself_j / *hom_i / hom_j lag.
 c. *Die man hoor homself om te lag / om lag / te lag.

The referential dependencies illustrated in (111a) can be accounted for by merging PRO, *homself* and *die man* into three separate nominal shells, two of which are headed by an identity focus light noun. The structure containing these shells is represented in simplified form in (112) below. This structure and the accompanying ϕ -valuation operations are basically the same as in (95), the only difference being that *homself* and PRO occupy the head position of n_1P and n_2P , respectively, in (95), whereas (112) displays the reverse ordering. In terms of (the generalised) Hypotheses G and H, it is correctly predicted that PRO and *homself* are coreferential with *die man*.

(112)



Parallel to the formation of the n_1P^2 in (112), the intransitive verb *lag* is merged with an agentive light verb, giving rise to V-to-v raising. Being intransitive, *lag* does not have a θ -feature and the v associated with it accordingly lacks a case feature and a (complete) set of ϕ -features. The n_1P^2 in (112) is next merged into [spec, v], where it receives the agent θ -value. The resulting vP is then merged with a non-finite T which values the tense feature of the v/V *lag*; as was argued above, the latter is raised to the T. The T is defective in the sense that it lacks a case feature and a complete set of ϕ -features, carrying only the feature [u-num $^\wedge$]. The T's number feature is valued by the n_1P^2 in the specifier position of the vP , triggering raising of this nP and its containing vP into [spec, T].

Subsequent merger of the TP with the null non-finite C \emptyset yields the structure in (113), with the C providing the null case value to the n_1P^2 containing PRO in its head position. The other two nPs in (113) are still unvalued for case and θ -role.

- (113) $[\text{CP } \emptyset [\text{TP}^2 [\text{vP}^2 [\text{n1P}^2 [\text{n2P}^2 [\text{n3P} \text{ die man}] [\text{n2P}^1 \text{ homself}]]] [\text{n1P}^1 \text{ PRO}]]]] [\text{TP}^1 \text{ lag} [\text{vP}^2 [\text{n1P}^2 [\text{n2P}^2 [\text{n3P} \text{ die man}] [\text{n2P}^1 \text{ homself}]]] [\text{n1P}^1 \text{ PRO}]]] [\text{vP}^1 \text{ lag}]]]]]$

The CP in (113) is now merged as the complement of the perception verb *hoor*. This verb has the theme value to assign to a nominal expression in its c-command domain, in this case the n2P^1 with *homself* in its head position. Next, the VP headed by *hoor* is merged with an experiencer light verb, c-v, giving rise to V-to-c-v raising. Being associated with a transitive lexical verb, the c-v contains the features [acc-case] and [u- ϕ ^]. The accusative case value is assigned to the n2P^1 , and the latter provides the relevant ϕ -values to the c-v. Triggered by the diacritic appended to the c-v's ϕ -features, the n2P^1 is raised into the specifier position of the c-vP, with the whole of the containing vP^2 in (113) pied-piped along. Concurrent with these operations, the c-v assigns the experiencer θ -value to the n3P *die man*.⁸⁵ The resulting structure is roughly as follows:

- (114) $[\text{c-vP}^2 [\text{vP}^2 [\text{n1P}^2 [\text{n2P}^2 [\text{n3P} \text{ die man}] [\text{n2P}^1 \text{ homself}]]] [\text{n1P}^1 \text{ PRO}]]] [\text{c-vP}^1 \text{ hoor-c-v} [\text{VP} [\text{CP } \emptyset [\text{TP}^2 [\text{vP}^2 [\text{n1P}^2 [\text{n2P}^2 [\text{n3P} \text{ die man}] [\text{n2P}^1 \text{ homself}]]] [\text{n1P}^1 \text{ PRO}]]] [\text{TP}^1 \text{ lag}]]] \text{ hoor}]]]$

Merger of the c-vP^2 in (114) with a finite T creates a configuration in which the T provides the n3P *die man* with the nominative case value and in turn gets its [u- ϕ ^] features valued by this nP . The latter operation brings about raising of the n3P , with pied-piping resulting in the entire vP^2 ending up in [spec, T]. The subsequent steps in the derivation of (111a) are essentially the same as those described in (90).

This concludes the analysis of obligatory reflexivity in Afrikaans control constructions. It was claimed in the course of the discussion that the anaphoric nature of a semantically controlled PRO, that is, a PRO which takes its reference from a nominal expression in the matrix clause, can be accounted for by means of the same devices that have been proposed in connection with obligatory reflexivity. Should this prove to be tenable generalisation, it would of course provide independent support for the NSA.

3.2.5 Small clause constructions

In the sentence in (115a), the reflexive pronoun *hom* forms part of a small clause (SC), that is, a clause which contains a subject and a non-verbal predicate, but which lacks a complementiser and an element expressing tense (i.e. an auxiliary verb, the infinitive marker *te* or some other

tense-related item). The reflexive functions as the subject of the SC, the entity to which some attribute is ascribed; this attribute is described by the predicate, in this case the adjective *hees* (“hoarse”), and results from the activity denoted by the verb. The difference in grammaticality between the (a) and (b) sentences shows that the pronoun obligatorily takes its reference from the subject of the matrix clause.

- (115) a. Die man_i skree hom_i hees.
 the man shouts him hoarse
 “The man is shouting himself hoarse”
 b. *Die man_i skree hom_j hees.

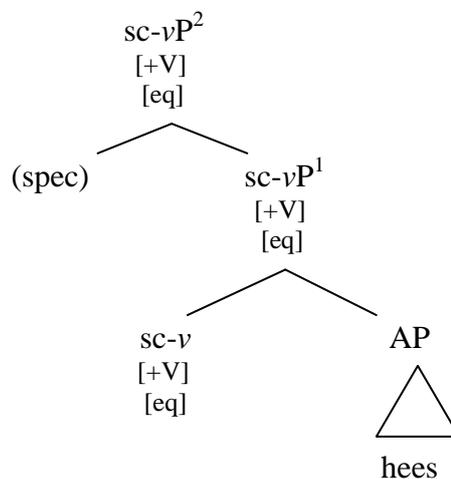
As illustrated by (115a) and also the examples in section 2.3.4, it is a common property of the reflexive-containing SC constructions to be discussed in this section that they always give a “resultative” reading. It was furthermore noted in that section that the reflexive standardly takes the morphologically simplex form in this type of construction, although the *-self* form is also commonly used.

Various types of SCs have been identified in the literature, and several proposals have been made about the internal structure of such constructions.⁸⁶ The prevailing view seems to be that an SC is an asymmetric structure which is headed by some or other functional category F, with the predicate forming the complement and the subject forming the specifier of F. This approach will be followed here. It is not clear, however, to which particular category F belongs. For Adger & Ramchand (2003) and Citko (2008), for example, F is a predicational head π , whereas Den Dikken (2006) takes it to be a relator head. Neither of these proposals will be adopted here. Rather, in line with the minimalist goal of restricting descriptive devices to the minimum (which presumably relates to functional categories as well), it is claimed that SCs are ν P structures. As argued previously in this chapter, the ν -head is taken to exist in various guises (see e.g. the discussion of raising ν and control ν in section 3.2.4 above). In relation to SCs specifically, it is assumed here that the kind of ν is determined by the particular interpretative type of the SC in which it occurs. For instance, based on the typology of SCs put forward by Higgins (1973), it could be argued that the set of light verbs associated with SCs includes a predicational ν , a specificational ν , an identity/equative ν and an identificational ν .⁸⁷ From a semantic perspective, Higgins’s verbal notions ‘identity’ and ‘equative’ seem to be the same as the ‘identity’ notion

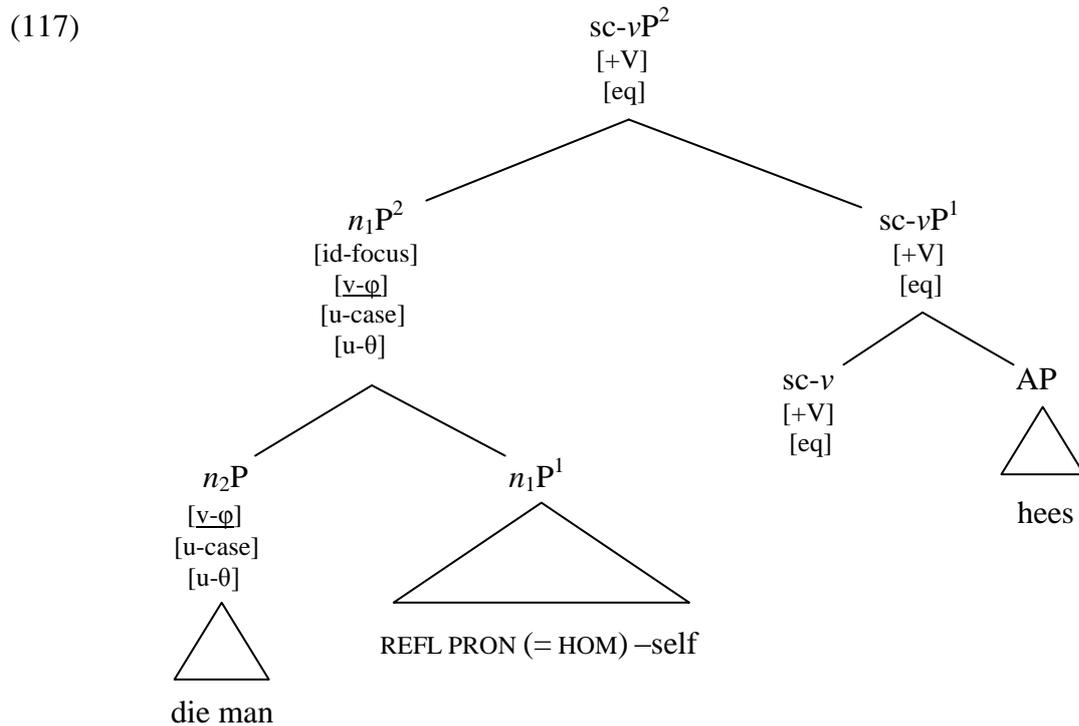
associated with reflexivity. This suggests that it might be productive to regard the identity/equative light verb involved in the SCs under discussion in this section as, in some respects, parallel to the identity focus light noun that is claimed to head the nominal shell containing a reflexive pronoun and its antecedent. The precise feature specification of the identity/equative light verb associated with SCs (*sc-v*, for short) is however left as a topic for future research.

Adopting the above ideas, the SC in (115a) is taken to be a *vP* headed by an equative light verb, with the AP *hees* representing the complement of this *v*. The *sc-v* is therefore “defective” in the sense that it does not select a VP complement headed by a lexical verb.⁸⁸ Not being associated with a lexical verb implies that the *sc-v* does not have a θ -feature, (a complete set of) ϕ -features and a case feature; moreover, in view of the tense-less nature of the SC, it seems plausible that the *v* also lacks a tense feature. In short, then, the *sc-v* is a highly “stripped down” category, arguably containing only the features [+V] and what will here informally be called [eq(uative)]⁸⁹, with the former giving the SC its “clause-like” character.⁹⁰ The structure resulting from the merger of the *sc-v* and the AP is represented in simplified form in (116).⁹¹ The question as to which expression occupies the specifier position of the *sc-vP* is addressed immediately below.

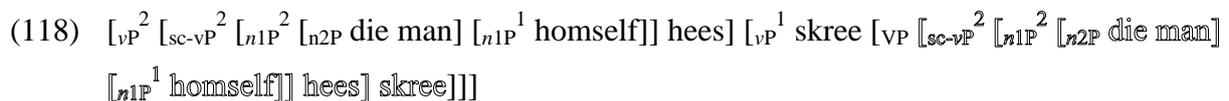
(116)



In terms of the NSA, the coreferential relationship between the reflexive pronoun *hom* and the subject *die man* in (115a) is accounted for by merging them into the nominal shell n_1P^2 in (83), with ϕ -valuation as indicated by the dotted arrows in that structure. This *nP* is then merged into the specifier position in (116), yielding the simplified structure in (117).



The sc-vP in (117) is merged with the verb *skree*, which is taken to have a [theme-θ] feature.⁹² This feature serves to θ-value the n₁P² which contains the reflexive *hom* in its head position. The VP is subsequently merged with a light verb bearing the N-features [u-φ[^]], [acc-case] and [agent-θ]. This gives rise to several raising and feature valuation operations, one being V-to-v raising. The v furthermore gets its φ-features valued by the n₁P² and at the same time supplies this nP with the accusative case value; triggered by the diacritic appended to the v's φ-features, the n₁P² is raised into [spec, v], with the containing sc-vP² pied-piped along. And parallel to these φ- and case-related operations, the n₂P *die man* acquires its agent θ-value from the light verb. The resulting structure is roughly along the lines in (118). Because of its unvalued case feature, the n₂P in (118) is the only active nominal expression at this stage.



The next step is to merge the vP² in (118) with a finite T, which supplies the n₂P *die man* with the nominative case value. This nP in turn values the [u-φ[^]] features of the T, and the movement diacritic triggers raising of the n₂P and its containing vP² into [spec, T]. The ensuing operations are essentially the same as those described in (34), eventually resulting in the v/V *skree* being raised to C and the subject *die man* ending up in [spec, C].

3.2.6 Possessive constructions

This section deals with constructions where an item belonging to the traditional category of possessive pronouns is used in a reflexive-like manner in the sense that it takes its reference from some other expression in the sentence. To start, consider the examples in (119). As shown by the ungrammaticality of (119b), the pronoun *sy* obligatorily enters into a coreferential relationship with the subject of the sentence.

- (119) a. Die man_i knip sy_i oë.
 the man blinks his eyes
 ‘‘The man is blinking his eyes’’
 b. *Die man_i knip sy_j oë.

In terms of the analysis developed in the previous sections, the coreferential relationship between the possessive pronoun *sy* and the subject *die man* in (119a) is accounted for by merging them as, respectively, the complement and the specifier of an identity focus light noun, as indicated in (120) below. It is claimed here that a possessive pronoun such as *sy* initially has the same underlying structure as that proposed for reflexive pronouns, that is to say, the one in (3b) above, which means that it carries the features [u- ϕ] and [u-case]. As in the case of reflexive pronouns, this pronoun (i) gets its ϕ -features valued by the nominal expression in the specifier position of the identity focus *nP* (indirectly, via the *n*-head) and (ii) undergoes raising to the *n*. At this point, then, the item which is eventually interpreted as a possessive pronoun, and which surfaces in the genitive case form as *sy* in (119a), is indistinguishable from its reflexive counterpart, which is spelled out as *hom* or *homself* in sentences such as (2a) and (7a) above.

It was stated in section 3.2.1 that the grammatical status of a pronoun – specifically, whether it represents a reflexive or a non-reflexive pronoun – is not determined by lexical features, but by the category of the constituent with which the lexical root $\sqrt{\text{PRON}}$ is merged in the course of the derivation: D in the case of a reflexive pronoun and N in the case of a non-reflexive pronoun.⁹³ Adopting essentially the same approach, it is claimed that the grammatical status of a possessive pronoun is likewise not determined by lexical features; rather, such a pronoun is syntactically derived by means of a merger operation involving a specific functional head. In more concrete terms, it is proposed that the possessive nature of a pronoun such as *sy* in (119a) is established by merging the identity focus *nP* containing this pronoun in its head position (as discussed above) with a possessor light noun (henceforth, pos-*n*), followed by raising of the identity focus *n* to the

The second issue, related to the first, concerns the raising of the n_1 to the pos- n in (120). As was argued in section 3.2.1 (see the discussion in connection with the structure in (12)), the n_1 is formed via incorporation of the structure in (3b) into the identity focus n . If raising of the n_1 in (120) into the pos- n is a further instance of incorporation, the n_1 must contain a subset of the features present on the pos- n . It is proposed here that the “extra” feature on the pos- n is an unvalued quantity feature that acquires its value from the possessor nominal expression merged into the specifier position of the pos- n P. In the case of (121), the relevant value would be individual, as supplied by the n_2 P *die man*. Note that [quantity] and [number] are distinct formal features, with the former facilitating finer discrimination between the singular vs. plural values of the [number] attribute (cf. Harley & Ritter 2002). It should therefore be clear that the purpose of the pos- n is to introduce a “delimiting” phrase into the structure. Some examples illustrating the range of quantity values that can be introduced, partly as a consequence of the presence of a pos- n , are given in (122).⁹⁵

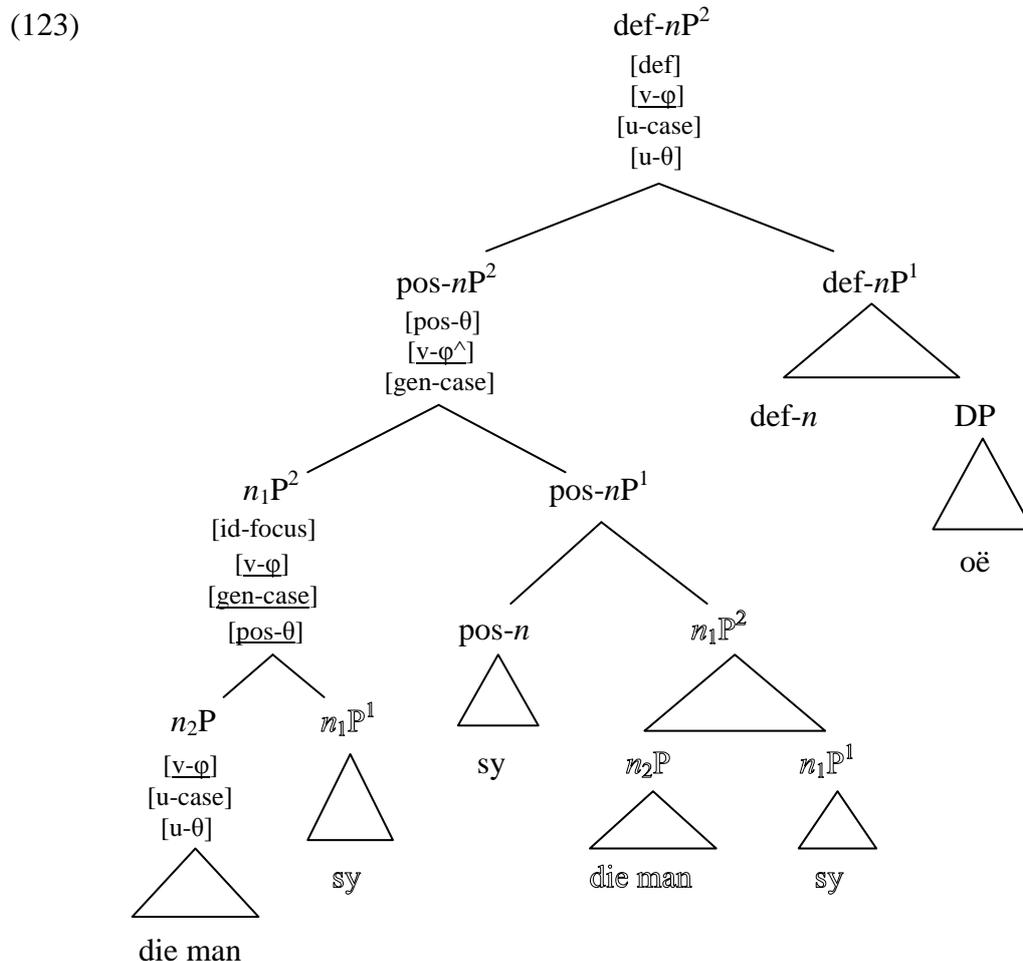
- (122) a. *die man se boeke* (singular quantity)
the man POSS books
- b. *die mans se boeke* (plural quantity)
the men POSS books
- c. *al die mans se boeke* (plural > 2 quantity)
all the men POSS books
- d. *albei mans se boeke* (plural = 2 quantity)
both men POSS books
- e. *elkeen se boeke* (plural \geq 2 quantity)
each-one POSS books

Note that the pos- n is not the locus of definiteness and specificity. As such, the structurally closest nominal head D – i.e. *die* of the n_2 P *die man* in (120) – cannot be incorporated into the pos- n . By contrast, the identity focus n_1 is a featural subset of the pos- n , which explains why it is possible for the n_1 to be incorporated into the pos- n .

The third issue in connection with the structure in (120) concerns the fact that the affix *-self* is not spelled out on the possessive pronoun *sy*. It was pointed out in section 2.3.5 that possessive pronouns in Afrikaans never occur with this suffix. This can be accounted for as follows. As has

been established above, the case feature of the identity focus n_1 in (120) is valued as genitive. The descriptive generalisation for Afrikaans, however, is that *-self* can only be spelled out where the case feature is valued as accusative, clearly a phonological matter.

Consider next the N *oë* in (119a) which, like the N *man*, contains an unvalued case feature as well as valued ϕ -features (here, 3-pers, pl-num). This N is merged with a D containing, at least, the features [u-case] and [u- ϕ], with the latter acquiring its values from the N *oë*. In line with Chomsky's (2006:17-18) proposals quoted in (9) above, the resulting DP is merged as the complement of a definite light noun (*def-n*, for short), giving rise to D-to-*n* raising. It is assumed for the purposes of the present discussion that the *def-n*, like the n_2 in (120), carries the features [u- θ], [u-case] and [u- ϕ], with the latter valued by the DP. The *pos-nP*² in (121) is subsequently merged into the specifier position of the *def-nP*, yielding the simplified structure in (123) below. (For ease of presentation, the various features are only given under the relevant maximal projections.)



It could be claimed that (123) represents the syntactic configuration that is required for establishing the possessor-possessee relationship between the possessive pronoun *sy* (and, in terms of the above analysis, its antecedent *die man*) and the nominal expression *oë*. The merit of this claim, and the nature of the semantic device which is responsible for providing the specific interpretation, will however not be examined further here.

The $\text{def-}n\text{P}^2$ in (123) is next merged with the verb *knip*, which supplies it with the theme θ -value. The resulting VP is then merged with an agentive light verb, setting off several feature valuation and raising operations. Firstly, the verb is raised to the v . Secondly, the v provides the agent θ -value to the $n_2\text{P}$ *die man*. Thirdly, in a parallel operation, the v gets its $[\text{u-}\phi^\wedge]$ features valued by the $\text{def-}n\text{P}^2$ containing the expression *oë* and concurrently case-values this $n\text{P}$ as accusative. Triggered by the movement diacritic associated with the v 's ϕ -features, the $\text{def-}n\text{P}^2$ is raised into $[\text{spec}, v]$, with the containing VP pied-piped along. This yields the simplified structure in (124). Note that the $n_2\text{P}$ *die man* is still unvalued for case at this point.

$$(124) \quad [_{v\text{P}}^2 [_{\text{VP}} \text{knip} [_{\text{def-}n\text{P}}^2 [_{\text{pos-}n\text{P}}^2 [_{n_1\text{P}}^2 [_{n_2\text{P}} \text{die man}] \text{sy}] [_{\text{pos-}n\text{P}}^1 \text{sy}] [_{\text{def-}n\text{P}}^1 \text{oë}]]] [_{v\text{P}}^1 \text{knip} [_{\text{VP}} \text{knip} [_{\text{def-}n\text{P}}^2 [_{\text{pos-}n\text{P}}^2 [_{n_1\text{P}}^2 [_{n_2\text{P}} \text{die man}] \text{sy}] [_{\text{pos-}n\text{P}}^1 \text{sy}] [_{\text{def-}n\text{P}}^1 \text{oë}]]]]]]]$$

The remaining steps in the derivation of (119a) may be briefly summarised as follows:

- (125) a. The $v\text{P}^2$ in (124) is merged with a T containing the features $[\text{u-V}]$, $[\text{c-select}]$, $[\text{pres-tense}]$, $[\text{u-}\phi^\wedge]$ and $[\text{nom-case}]$. The T provides the nominative case value to the $n_2\text{P}$ *die man* in the specifier position under the $v\text{P}^2$, and this $n\text{P}$ values the ϕ -features of the T. In addition, the T acquires a positive value for its categorial feature from the v/V *knip* and in turn values the tense feature of the v/V .
- b. The $v\text{P}^2$ is raised into $[\text{spec}, \text{T}]$, a pied-piping operation that is triggered by the movement diacritic appended to the T's ϕ -features.
- c. The TP derived in (b) is merged with a C, followed by v/V -to-C raising and raising of the subject $n_2\text{P}$ *die man* into the specifier position of the CP.

In contrast to (119a), the sentence in (126a) below is ambiguous in that the possessive pronoun *sy* can take its reference either from the subject *die man* or from some other entity not mentioned in the sentence. This ambiguity can be resolved through the use of the item *eie* ("own"), as in (126b).⁹⁶ In this case, *eie* represents some sort of focus marker – expressing contrastive focus or

perhaps possessor focus – that serves to emphasise or intensify the possessive pronoun, similar to the affix *-self* which is used with reflexive pronouns (see e.g. the sentences in (24) and (25) above). When used with *eie*, the pronoun is obligatorily coreferential with the subject, as shown by the ungrammaticality of (126c). Also, as is clear from the ungrammaticality of (126d), *eie* has to occur to the immediate right of the possessive pronoun.

- (126) a. Die man_i skryf sy_i / sy_j biografie.
 the man writes his biography
 “The man is writing his biography”
- b. Die man_i skryf sy_i eie biografie (nie sy pa s’n nie).
 the man writes his own biography not his father POSS NEG
 “The man is writing his own biography (not his father’s)”
- c. *Die man_i skryf sy_j eie biografie.
- d. *Die man skryf eie sy biografie.

In terms of the analysis of possessive pronouns set out above, the first two steps in the derivation of *sy eie biografie* in (126b) are exactly the same as those proposed in the case of (119a). The first is to merge the PRON which is eventually spelled out as *sy* as the complement of an identity focus light noun, and the *nP die man* as the specifier of this *n*. The second step is to merge the identity focus *nP* with a possessor light noun. The resulting structure takes the form in (120), with the various raising and feature valuation operations as indicated by the arrows. Pursuing the idea that *eie* in (126b) represents a functional item – specifically, a light noun – that serves to express contrastive focus, the next step is to merge the *pos-nP* in (120) with an *n* containing the feature [con(tractive)-focus]. Suppose furthermore that this *n* (*con-n*, for short) also contains the features [u-φ[^]], [u-θ] and [u-case]. As a result of the merger operation, these features are valued by the *pos-nP* and, triggered by the φ-related movement diacritic carried by the *con-n*, this *nP* is then raised into [spec, *con-n*]. The ensuing structure may be represented roughly as follows:

$$(127) \quad [{}_{\text{con-nP}} [{}_{\text{pos-nP}}^2 [{}_{n1P}^2 [{}_{n2P} \text{ die man}]]] [{}_{\text{pos-nP}}^1 \text{ sy}]] \text{ eie } [{}_{\text{pos-nP}}^2 [{}_{n1P}^2 [{}_{n2P} \text{ die man}]] \text{ sy}] [{}_{\text{pos-nP}}^1 \text{ sy}]]$$

The *con-nP* in (127) is next merged into the specifier position of a *def-nP*, where the *def-n* takes the DP *biografie* as its complement. In other words, the resulting structure is as in (123), except that the *con-nP* takes the place of the *pos-nP*² in [spec, *def-n*]. The subsequent steps in the derivation of (126b) are essentially the same as those proposed for (119a).

It should be noted here that, besides serving to express a contrast between possessor entities, the item *eie* can also be used to distinguish between possessee entities. In (128a), for example, *eie* is functionally similar to the adjective *aangenome* (“adopted”) in that it is used to describe a property of *kinders* (“children”).⁹⁷ If *eie* is analysed as an adjective in this case, it would then not project into a con-*n*P as in (127), but would rather form part of the DP containing the N *kinders*. Support for such an analysis comes from the fact that *eie* can be coordinated with the adjective *aangenome*, as shown in (128b). This use of *eie* will not be examined further here.

- (128) a. Die man het nie eie kinders nie (net aangename kinders).
 the man has not own children NEG just adopted children
 “The man does not have children of his own, only adopted children”
- b. Die man het sy [eie en aangename] kinders ewe lief.
 the man has his own and adopted children equally love
 “The man loves his own and his adopted children in equal measure”

It should be clear from the above discussion that Afrikaans has at least two distinct forms *eie*, namely the substantive adjectival form illustrated in (128) and the more functional focus-related form illustrated in (126b).

The possessive pronoun enters into a coreferential relationship with the subject of the sentence in both (119a) and (126b). However, as pointed out in section 2.3.5, the possessive pronoun can also take its reference from a non-subject expression. In (129a), for example, *sy* is obligatorily coreferential with the direct object *die man*, as shown by the ungrammaticality of (129b).

- (129) a. Hy_i moker die man_j op sy_j neus.
 he punches the man on his nose
 “He punches the man on his nose”
- b. *Hy_i moker die man_j op sy_i / sy_k neus.

The initial steps in the derivation of (129a) are exactly the same as those proposed for (119a): the items *die*, *man*, *sy*, and *neus* are merged into the def-*n*P² structure in (123) (repeated here in labelled bracket form as (130), with *neus* occurring in place of the N *oë*). In terms of the analysis presented above, the possessive pronoun *sy* is interpreted as obligatorily coreferential with the

expression *die man*. In this structure, the n_2P *die man* and the $def-nP$ containing the N *neus* are both unvalued for case and θ -role.

$$(130) \quad [_{def-nP}^2 [_{pos-nP}^2 [_{n_1P}^2 [_{n_2P} \text{ die man}] [_{n_1P}^1 \text{ sy}]]] [_{pos-nP}^1 \text{ sy}]] [_{def-nP}^1 \text{ neus}]$$

The $def-nP^2$ in (130) is next merged with the P *op*. In line with the proposals made in section 3.2.2 (see the discussion surrounding (28) and (29)), the resulting PP is merged with a light *p* containing the N-related features [$loc(ation)-\theta$], [$acc-case$] and [$u-\phi^{\wedge}$]. This sets up a configuration in which several raising and feature valuation operations can take place, the first being P-to-*p* raising. Secondly, the *p* provides the $def-nP^2$ in (130) with the relevant case and θ -values, and concurrently gets its ϕ -features valued by this nP . Thirdly, the n_2P *die man* is raised into the specifier position of the pP , yielding the simplified structure in (131). Because of its unvalued case and θ -features, the n_2P is the only nominal expression still active at this point.

$$(131) \quad [_{pP}^2 [_{n_2P} \text{ die man}] [_{pP}^1 \text{ op} [_{PP} \circ [_{def-nP}^2 [_{pos-nP}^2 [_{n_1P}^2 [_{n_2P} \text{ die man}] [_{n_1P}^1 \text{ sy}]]] [_{pos-nP}^1 \text{ sy}]]] [_{def-nP}^1 \text{ neus}]]]]$$

The transitive verb *moker* in (129a) contains the features [$+V$], [$u-tense$] and [$theme-\theta$]. The fact that it takes the prepositional complement *op sy neus* in addition to the direct object argument *die man* suggests that the V contains two [$c-select$] features. At this stage, the expressions *op sy neus* and *die man* both form part of the pP^2 in (131). Suppose now that the pP is merged as the complement of the V. This would place the n_2P *die man* within the c -command domain of the V, which means that the n_2P can be θ -valued as theme. Note that the V's object-related [$c-select$] feature still has to be checked. This is done by merging a nominal expression into the specifier position of the VP. In the case at hand, though, the expression that is selected is not an nP that has only at this juncture been formed from the lexical subarray feeding the derivation; rather, the V selects the n_2P *die man* that occurs in the specifier position of the pP^2 in (131) (for similar derivations involving internal search, see sections 3.2.2 and 3.2.3). The resulting structure is roughly as follows:

$$(132) \quad [_{VP}^2 [_{n_2P} \text{ die man}] [_{VP}^1 \text{ moker} [_{pP}^2 [_{n_2P} \text{ die man}] [_{pP}^1 \text{ op} [_{PP} \circ [_{def-nP}^2 [_{pos-nP}^2 [_{n_1P}^2 [_{n_2P} \text{ die man}] [_{n_1P}^1 \text{ sy}]]] [_{pos-nP}^1 \text{ sy}]]] [_{def-nP}^1 \text{ neus}]]]]]]$$

The VP² is next merged with a light verb carrying the V-related features [+V] and [u-tense], as well as the D-related features [agent-θ], [acc-case] and [u-φ[^]]. This results, firstly, in V-to-*v* raising. Secondly, probing its c-command domain, the *v* gets its φ-features valued by the object *n*₂P *die man* and at the same time case-values this *n*P as accusative. The diacritic associated with the *v*'s φ-features furthermore triggers raising of the *n*₂P into [spec, *v*], with the containing VP² pied-piped along. Incidentally, raising of the *n*₂P on its own (that is, the “leaking option” discussed in sections 3.2.1 and 3.2.3) would also yield an acceptable word order, as illustrated by the subordinate clause in (133).

- (133) (dat) *hy die man moker op sy neus.*
 that he the man punches on his nose
 “(that) he punches the man on his nose”

Continuing with the derivation, the subject *n*P *hy* is merged into the second specifier position of the *v*P, where it is assigned the agent θ-value; and subsequent merger of the extended *v*P with a finite T results in the *n*P *hy* acquiring the nominative case value. The remaining steps in the derivation of (129a) are basically the same as those described above for the sentences in (119a) and (126b).

In the examples in (119a), (126b) and (129a), the possessive pronoun is interpreted as obligatorily coreferential with some expression in the sentence. This is in contrast to (126a) *Die man skryf sy biografie*, where the pronoun can take its reference either from the subject or from some other person not mentioned in the sentence. Similarly, the sentence in (134) is three-way ambiguous in that the pronoun can be interpreted as coreferential with the subject *die man*, the indirect object *die seun*, or some other unspecified person.

- (134) *Die man_i gee vir die seun_j sy_i / sy_j / sy_k boek.*
 the man gives for the boy his book
 “The man gives the boy his book”

The fact that the pronoun in (126a) and (134) is not obligatorily coreferential with a particular nominal expression implies, in terms of the identity focus analysis of possessive pronouns outlined above, that the item spelled out as *sy* does not enter the derivation as the complement of

an identity focus light noun. In other words, in these cases, *sy* represents a non-reflexive pronoun with the structure in (3a), which means that it is not dependent on an antecedent expression to supply it with ϕ -values. Hence, according to Hypotheses G and H, the possessive pronoun in (126a) and (134) does not represent an anaphor, at least not from a strictly grammatical point of view. Clearly, though, this does not preclude the possibility of establishing a coreferential relationship between the possessive pronoun and some nominal expression on the basis of non-linguistic information. For example, given such information, it could well be that the pronoun *sy* in (134) is interpreted as coreferential with, say, the subject *die man*; after all, these expressions have the same ϕ -feature values, even though they have been independently acquired from the lexical array. In view of the crucial role played by non-linguistic information, sentences such as (126a) and (134) could therefore be characterised as pragmatically reflexive (or pragmatically anaphoric).

3.3 Summary

Chapter 3 had two main objectives. The first was to develop a minimalist analysis of obligatory reflexivity in Afrikaans. The nominal shell analysis (NSA) takes as its point of departure the idea that two expressions which enter into an obligatory coreferential relationship are initially merged together in a particular nominal shell structure. The assumptions and devices of the NSA were introduced in section 3.2.1 in the form of nine hypotheses which relate to (i) the establishment of a structural relationship between a reflexive pronoun and an appropriate antecedent, and (ii) the semantic interpretation of such a relationship. It was argued that the nominal shell in question is headed by an identity focus light noun which takes the reflexive as its complement and the antecedent as its specifier. The antecedent values the ϕ -features of the reflexive, with the identity focus *n* serving as mediator.

The second main objective was to determine the empirical and conceptual adequacy of the NSA. As regards its empirical adequacy, it was shown that the proposed analysis can account for the facts of obligatory coreferentiality between a reflexive and its antecedent as reflected in the various constructions that were described in Chapter 2: verbal object constructions (section 3.2.1), prepositional object constructions (3.2.3), double object constructions (3.2.3), infinitival constructions (3.2.4), small clause constructions (3.2.5), and possessive constructions (3.2.6). In addition, it was argued in section 3.2.4.2 that the NSA can also account for the coreferential

relationship between PRO and its antecedent in subject and object control constructions. The ideas underlying this approach were furthermore extended in section 3.2.6 to two other types of construction, namely those involved in establishing a possessor reading and a contrastive focus reading.

Throughout the discussion, attention was also given to constructions in which a pronoun either cannot or may (but need not) receive a reflexive (or anaphoric) interpretation. In terms of the NSA, a coreferential relationship can only be established when the pronoun and an appropriate antecedent are merged together in a specific configuration, namely a nominal shell headed by an identity focus light noun. It therefore follows that sentences in which the pronoun cannot receive a reflexive interpretation will lack such a nominal shell. It was argued that the selection of an identity focus *nP* is determined by the lexical properties of verbs and prepositions: an inherently reflexive verb/preposition selects an identity focus *nP* as its complement, whereas an inherently non-reflexive verb/preposition does not. In cases where the pronoun can be interpreted both reflexively and non-reflexively, but where neither interpretation can be established on purely grammatical grounds (that is, where the pronoun occurs without the identity focus marker *-self*, or the relevant verb/preposition is not inherently (non-)reflexive), it was argued that the option of interpreting the pronoun as reflexive/non-reflexive is determined by non-linguistic information. A distinction was therefore made between *grammatically reflexive* sentences and *pragmatically reflexive* sentences, with only the former containing a nominal shell headed by an identity focus light noun. Relying as it does on the idea that reflexive interpretations may in some cases arise from pragmatic rather than syntactic considerations, the present proposal clearly lends itself to implementation in the diachronic domain, where a change in the division of labour between pragmatics and syntax is thought to play a key role in certain types of change (cf. e.g. Fischer 2007 for overview discussion and references). More specifically, it may facilitate insight into the well-documented, but only partially understood changes that took place in the history of English and other West Germanic languages, where *-self* forms, to differing extents, gradually replaced the personal pronouns which could initially be used both reflexively and non-reflexively (cf. Keenan 2009 for discussion and references).

Related to the above-mentioned fact that, in some contexts, Afrikaans allows a morphologically simplex pronoun to be interpreted both reflexively and non-reflexively, is the phenomenon that a pronoun can also occur without the suffix *-self* in certain obligatory reflexive constructions. This

phenomenon is found where the sentence contains an inherently reflexive verb/preposition. It was claimed in section 3.2.1 that this alternation between morphologically simplex and morphologically complex forms of the pronoun is related to the distinction between strong and weak pronouns (cf. Cardinaletti & Starke 1999). More specifically, it was posited that the complex *-self* forms in Afrikaans can only contain strong pronouns, which means that a form such as *homself* (“himself”) is necessarily a spell-out of a strong pronoun plus the identity focus *n*-head (the locus of *-self*). In other words, Afrikaans does not contain a distinct form consisting of a weak pronoun plus *-self*. Speakers of Afrikaans thus seem to be using two forms when expressing obligatory reflexivity in structures containing an inherently reflexive verb: (i) the more conservative option of a weak pronoun without *-self*, and (ii) the more colloquial option (likely influenced by English; cf. Ponelis 1979) of a strong pronoun plus *-self*.

As regards its conceptual adequacy, it was shown that the theoretical devices employed in the proposed analysis are either provided by or compatible with the basic assumptions and concepts of Minimalist Syntax. In particular, unlike previous analyses, no special features (such as the [anaphor] and [pronominal] features of GB Binding theory, the [reflexive] and [referential] features of Reinhart & Reuland’s (1993) analysis, or [coreferential] in Zwart’s (2002) analysis) are required for establishing a coreferential relationship between a reflexive and its antecedent. Rather, in terms of the NSA, such a relationship is established by means of ϕ -agreement in a probe-goal configuration, requiring no new mechanisms or features.

The main findings of the study are summarised below in Chapter 4, the concluding chapter. In that chapter we also briefly consider the possibility of extending the general ideas underlying the NSA to two seemingly unrelated phenomena in Afrikaans, as well as to the phenomenon of obligatory reflexivity in languages that are typologically very different from Afrikaans, namely those belonging to the Southern Bantu family.

Chapter 4

SUMMARY, EXTENSIONS AND CONCLUSION

4.1 Summary

This study focused on the phenomenon of obligatory reflexivity in Afrikaans, that is, on constructions where a pronoun can only be interpreted as referentially dependent on some other expression in the sentence. As noted in the Introduction, the manner in which this phenomenon is reflected in Afrikaans has not received any systematic attention in the literature. Hence, a first major aim was to address this empirical gap. Secondly, informed by the Afrikaans data, the study aimed to develop a minimalist analysis which is able to provide a conceptually adequate account for the facts, and which is amenable to extension beyond Afrikaans.

Chapter 2 provided a largely non-formalistic description of the various reflexive pronouns in Afrikaans and the diverse constructions in which they can occur; these represent some of the facts which have to be accounted for by a proper syntactic theory of (obligatory) reflexivity.

Afrikaans reflexive pronouns come in two forms: morphologically simplex forms which are indistinguishable from personal pronouns displaying the accusative case form, and morphologically complex forms which occur with the suffix *-self*. This suffix is taken to be a (heavily bleached) focus marker.¹ In addition to the traditional class of reflexive pronouns, it was shown that possessive pronouns can also be used reflexively; however, these pronouns, which display the genitive case form, do not occur with the suffix *-self*.

The simplex form of the reflexive is standardly used in contexts where the pronoun occurs as the complement of an inherently reflexive verb or preposition. In these contexts, the pronoun receives an obligatory reflexive interpretation, even though it has the same form as the corresponding personal pronoun in the accusative case form. However, in everyday speech and also in written texts, the reflexive is increasingly used with the suffix *-self* in these contexts. In such cases, the utterance can be spoken with the primary stress on *-self*, in contrast to the normal, non-emphatic sentence stress pattern where the verb receives the primary stress.

Besides its colloquial use with inherently reflexive verbs/prepositions, the complex form of the reflexive is found with verbs and prepositions which, although not inherently reflexive, are compatible with a reflexive reading. As a rule, the (obligatory) reflexive reading can only be expressed by means of the *-self* form when used with such verbs/prepositions; in other words, the pronoun cannot be interpreted reflexively without *-self*. However, contrary to this general rule, several semantic classes of verbs and prepositions were identified which, although not inherently reflexive, do allow the *simplex* form of the pronoun to receive a reflexive reading, although not obligatorily so; in these cases, too, the obligatory reflexive reading is only possible with the complex *-self* form, which means that the simplex form is ambiguous between the two readings. The semantic classes in question include verbs which describe typically self-directed actions (section 2.3.1), resultative and mental appraisal verbs (2.3.4), and prepositions which assign θ -roles such as agent, possessor and (physical or abstract) location (2.3.2). Clearly, the fact that the simplex form of the pronoun can receive both a reflexive and a non-reflexive interpretation with verbs/prepositions from these semantic classes is contrary to the fifth generalisation mentioned in section 2 of Chapter 1; according to that generalisation, the interpretation of an anaphor differs systematically from that of a pronominal in a given domain in the sense that the anaphor must take its reference from an antecedent in that domain whereas the pronominal cannot.

Like the verbs/prepositions from the semantic classes just mentioned, possessive pronouns also allow both a reflexive and a non-reflexive interpretation. However, as was shown in section 2.3.5, Afrikaans contains two types of possessive construction where the pronoun receives an obligatory reflexive interpretation. The first is where the pronoun occurs in a whole-part genitive construction, for example where it is used to express a possessor relation involving a person and a body part (or a person and an internally caused activity/event). The second obligatory reflexive reading of a possessive pronoun is where the verb denotes various types of action directed at a non-agent entity, including actions which entail a range of intentions or mental states on the part of the agent.

The various facts about Afrikaans reflexive pronouns (and reflexively-used possessive pronouns) were illustrated with reference to several types of construction in which these elements can occur: verbal object and double object constructions (section 2.3.1), prepositional object constructions (2.3.2), raising and control constructions (2.3.3), small clause constructions (2.3.4),

and possessive constructions (2.3.5). It was shown in the course of the discussion that the reflexive can take as its antecedent an expression functioning as the subject, direct object, indirect object or as a prepositional object. It was also shown that Afrikaans has a number of non-reflexive constructions; these are constructions containing inherently non-reflexive verbs and prepositions (belonging to various semantic classes) which disallow a coreferential relationship between the pronoun and some other expression in the sentence.

Particularly interesting among the facts discussed in Chapter 2 is the alternation between the morphologically simplex and complex forms of reflexive pronouns in constructions containing an inherently reflexive verb or preposition. Also striking is the fact that Afrikaans allows constructions where the simplex form can be used with both a reflexive and a non-reflexive reading in the same domain, a phenomenon that is also found with possessive pronouns. The challenge of developing an analysis that can provide an account for such facts, as well as a grammar of the diverse constructions in which reflexives can occur, was taken up in Chapter 3.

Chapter 3 was devoted to the development of an analysis of obligatory reflexivity in Afrikaans within, on the one hand, the general framework of Minimalist Syntax and, on the other hand, the specific framework of proposals about word order and linearisation phenomena in Germanic languages worked out in Holmberg (2000), Julien (2002), Biberauer (2003), Biberauer & Richards (2006), Biberauer & Roberts (2006), Biberauer et al. (2009, 2011) and Roberts (2010). Chapter 3 had two main objectives. The first was to make explicit the assumptions and devices of the nominal shell analysis (NSA). The second objective was to determine (i) whether the NSA is empirically adequate in the sense that it can account for the relevant facts of Afrikaans as described in Chapter 2, and (ii) whether it is conceptually adequate in the sense that it employs theoretical devices which are either provided by or compatible with the basic assumptions and concepts of Minimalist Syntax.

The basic idea underlying the NSA is that two expressions which enter into an obligatory coreferential relationship are initially merged together into the same constituent. Given that the suffix *-self* serves to draw attention to the coreferential relationship between a reflexive pronoun and its antecedent (and historically served to emphasise such a relationship; cf. note 25 to Chapter 3), it was argued that these two expressions form part of a nominal shell structure which is headed by an identity focus light noun; this *n* carries unvalued case, ϕ - and θ -features, and

forms the locus of *–self*. It was argued that the identity focus *n* belongs to a natural class of identificational (or quantificational) elements which also includes a contrastive focus *n* and a possessor focus *n*.

In the proposed nominal shell structure, the *n* takes the reflexive pronoun as its complement, with such a pronoun being analysed as a syntactic compound that is derived by merging a category-neutral lexical root $\sqrt{\text{PRON}}$ with a D constituent containing unvalued case and ϕ -features. In other words, a reflexive pronoun is defined in syntactic terms and not in terms of special lexical features. The reflexive is subsequently raised to the identity focus *n*, where it is spelled out as part of the compound *n* that is derived in this manner. The antecedent expression is next merged as the specifier of the compound light noun, resulting in a configuration where the antecedent can value the ϕ -features of the reflexive, with the *n* serving as mediator. In this configuration, the ϕ -valued pronoun is semantically interpreted as an anaphor and the nominal expression in the specifier position of the *n*P as its antecedent; that is, the pronoun is interpreted as obligatorily coreferential with this nominal expression.

The assumptions and devices of the NSA were explicated in section 3.2.1 with reference to verbal object constructions, the most frequently discussed of the obligatory reflexive constructions that were described in Chapter 2. The different devices of the NSA were introduced in the course of that section in the form of nine hypotheses. It was shown in the rest of Chapter 3 that an analysis which incorporates these hypotheses can provide an adequate account not only of verbal object constructions, but also of the various other reflexive constructions described in Chapter 2: prepositional object constructions (section 3.2.2), double object constructions (3.2.3), raising constructions (3.2.4.1), control constructions (3.2.4.2), small clause constructions (3.2.5), and possessive constructions (3.2.6). It was also argued in section 3.2.4.2 that the NSA can provide an adequate account for the coreferential relationship between PRO and its antecedent in subject and object control constructions. The ideas underlying this approach were furthermore extended in section 3.2.6 to two other types of construction, namely those involved in establishing a possessor reading and a contrastive focus reading; it was argued that these types of construction also contain a nominal shell structure, respectively headed by a possessor light noun and a contrastive focus light noun.

As noted above, Afrikaans allows alternation between the morphologically simplex and complex forms of reflexive pronouns in constructions containing an inherently reflexive verb/preposition. It was argued in section 3.2.1 that this alternation can be explained in terms of the distinction between strong and weak pronouns (Cardinaletti & Starke 1999). It was posited that the complex *-self* forms can only contain strong pronouns; a form such as *homself* (“himself”) is therefore necessarily a spell-out of a strong pronoun plus the identity focus *n*-head (the locus of *-self*). In other words, Afrikaans does not contain a distinct form comprising a weak pronoun plus *-self*. Speakers of Afrikaans thus seem to be using two forms when expressing obligatory reflexivity in structures containing an inherently reflexive verb/preposition: (i) the more conservative option of a weak pronoun without *-self*, and (ii) the more colloquial option of a strong pronoun plus *-self*.

Another striking fact referred to above is that Afrikaans contains constructions where the simplex form of the pronoun (and the possessive pronoun as well) allows both a reflexive and a non-reflexive interpretation in the same domain, but where neither interpretation can be established on purely grammatical grounds. In such cases, however, the reflexive reading is not obligatory (unlike with the complex *-self* form, where it is). It was argued that the option of interpreting the pronoun as reflexive/non-reflexive in such constructions is determined by non-linguistic information. A distinction was therefore made between *grammatically reflexive* sentences and *pragmatically reflexive* sentences, with only the former containing a nominal shell headed by an identity focus light noun. This proposal clearly lends itself to implementation in the diachronic domain, where a change in the division of labour between syntax and pragmatics seems to play a key role in certain types of change (cf. Fischer 2007). More specifically, the proposal could well facilitate insight into the well-documented, but only partially understood changes that took place in the history of West Germanic languages, where *-self* forms, to differing extents, gradually replaced the personal pronouns which could originally be used both reflexively and non-reflexively (cf. Keenan 2009).

4.2 Extensions

4.2.1 Introduction

The basic idea underlying the nominal shell analysis of reflexive constructions that was proposed in Chapter 3 is that two expressions which enter into an obligatory coreferential relationship are initially merged as, respectively, the complement and the specifier of a functional category X.

This idea was extended in section 3.2.6 to two other types of construction, namely those involved in establishing a possessor reading and a contrastive focus reading. In this section, we briefly consider two further types of construction in Afrikaans which seem amenable to such a nominal shell approach, namely floating quantifier constructions (section 4.2.2) and expletive *daar* (“there”) constructions (section 4.2.3). In addition, in section 4.2.4, brief attention is given to the possibility of extending the NSA to languages of the Southern Bantu family, where the reflexive element surfaces as a verbal affix.

4.2.2 Floating quantifier constructions

The sentences below all contain the item *almal* (“all”).² In (1a) and (1b) *almal* represents a pronominal expression functioning as the subject and the direct object argument, respectively.³ In both cases, *almal* independently refers to three or more entities that have been identified in the communication context.⁴ In (2a), by contrast, *almal* does not represent an argument. In this case, it is used as a so-called universal floating (or “postposed” or “stranded”) quantifier: it specifies a set of entities containing three or more members, but does not have any independent reference. Rather, as a floating quantifier, *almal* in (2a) takes its reference from the subject *die mans*. As shown by the ungrammaticality of (2b), *almal* cannot be interpreted as referring to any entities other than those picked out by the expression *die mans*; in other words, in (2a) the quantifier is interpreted as obligatorily coreferential with the subject.⁵

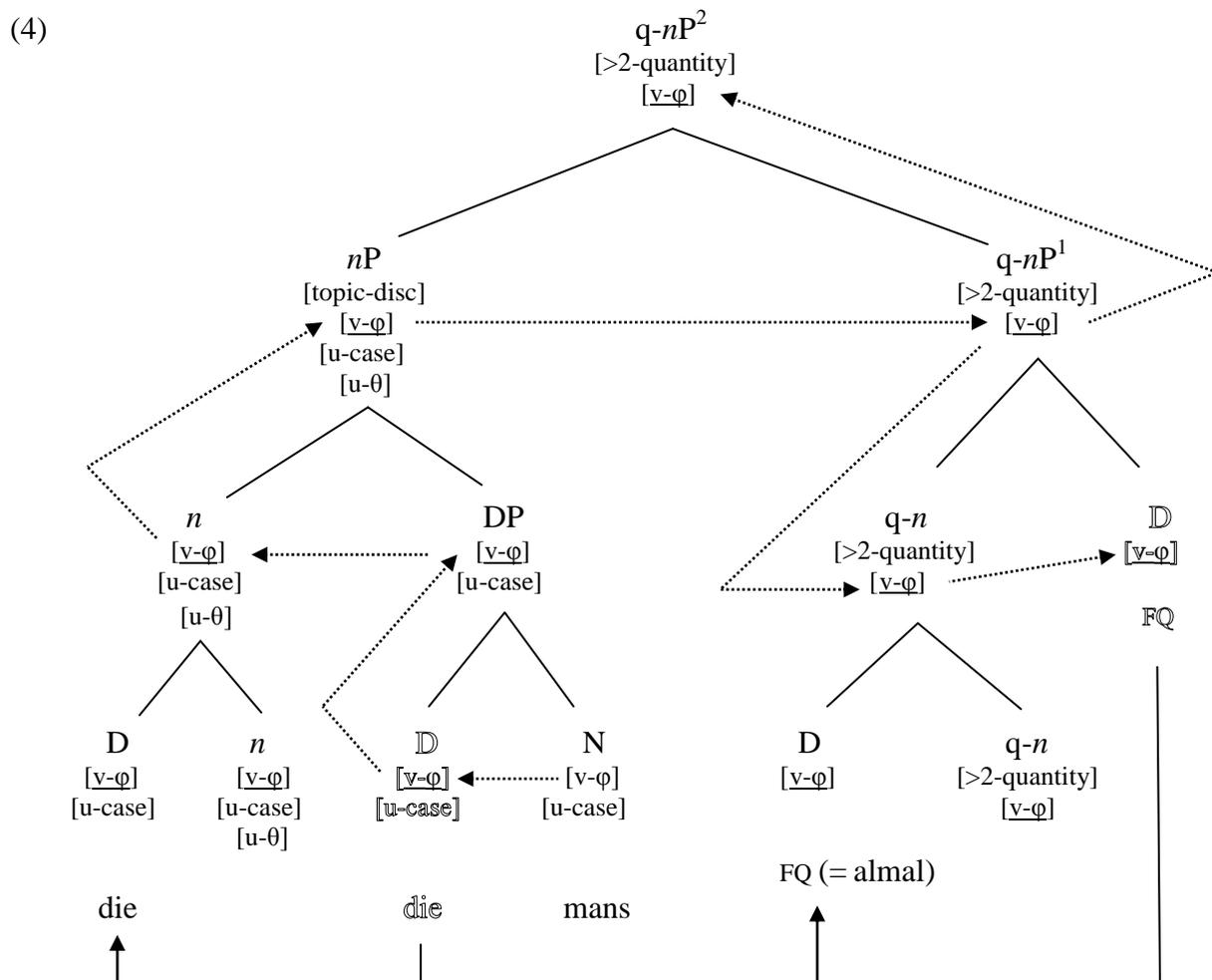
- (1) a. Almal bewonder die meisie.
 all admire the girl
 “Everyone admires the girl”
 b. Die man bewonder almal.
 the man admires all
 “The man admires everyone”
- (2) a. Die mans_i bewonder almal_i die meisies.
 the men admire all the girls
 “The men all admire the girl”
 b. *Die mans_i bewonder almal_j / almal_k die meisies_j.⁶

In terms of the idea referred to in the introductory section, the floating quantifier in (2a) is merged as the complement of a functional category X and its antecedent, *die mans*, as the specifier of the X, as informally shown in (3).

(3) [_{XP} antecedent [X floating quantifier]]

Similar to the analysis proposed in section 3.2.1 for the derivation of reflexive pronouns, a floating quantifier such as *almal* in (2a) is taken to be a pronominal element that is syntactically derived by first merging a D constituent with a category-neutral lexical root $\sqrt{\text{PRON}}$, and then incorporating the pronominal into the X. Two issues require clarification at this point. The first concerns the category of the head X in (3). It was argued in section 3.2.1 that the corresponding category associated with obligatory reflexive constructions is an identity focus light noun. Such an analysis is not feasible for the X in (3). After all, unlike a reflexive pronoun, a floating quantifier (FQ) such as *almal* does not serve to assert a coreferential relationship between two expressions; rather, the function of the FQ is to specify the quantity of entities from a particular set for which the proposition holds true. In view of this function, it is posited here that the X in (3) represents a “quantity focus light noun” (q-*n*, for short). It could of course be objected that the introduction of such a q-*n* as a distinct functional head is without a principled basis and simply leads to a proliferation of light nouns. Consider in this regard, however, the three light nouns that were introduced in Chapter 3. The identity focus light noun (section 3.2.1) and the contrastive focus light noun con-*n* (section 3.2.6) were both posited as focus heads. Stated informally, the identity focus light noun occurs in constructions where attention is drawn to the relationship of referential identity, whereas the con-*n* serves to identify one entity from a set of (explicitly stated or contextually implied) alternatives. The possessor light noun pos-*n* (also introduced in section 3.2.6) could be argued to have a similar function: it is used to assert the identity of the entity representing the possessor in a possessor-possessee relationship. From this perspective, then, the identity focus *n*, the con-*n* and the pos-*n* are conceptually linked: they all belong to a class of focus-related light nouns. This clearly also holds for the q-*n* posited above: as stated, it is used in constructions where the quantity of a set of entities is brought into focus. In short, the four light nouns under discussion are claimed to be different types of focus heads, which likely belong to the broader natural class of identificational (or perhaps quantificational) elements.⁷

The second issue requiring clarification concerns the feature make-up of the *q-n* and the element that forms its complement in the configuration in (3). In terms of the analysis proposed here, this element (which may conveniently be called “ALMAL” with reference to (2a)) is incorporated into the *q-n* where it is eventually spelled out as an FQ. As was pointed out above, *almal* does not represent an argument in (2a), which means that neither the *q-n* nor ALMAL contains a θ -feature; these two categories are also assumed to lack case features.⁸ As regards φ -features, it was argued in Chapter 3 that a coreferential relationship is established between two expressions α and β in a specific structural configuration when the φ -features of α are valued by those of β , with valuation being mediated by a functional category (cf. Hypotheses G and H). Since the FQ in (2a) is interpreted as coreferential with the subject *die mans*, it follows that both the *q-n* and its complement ALMAL must have φ -features that are valued by the subject (indirectly in the case of ALMAL). In addition, the *q-n* is taken to have a valued quantity feature, here [>2 -quantity]; the features of ALMAL accordingly form a subset of those carried by the *q-n*, a prerequisite for incorporation. Against this background, the nominal shell containing the FQ *almal* and its antecedent *die mans* in (2a) may be represented as in (4).⁹



Adapting Hypotheses G and H in the relevant respects, this structure would then represent the structural configuration for establishing a coreferential relationship between an FC and its antecedent. (Following the conventions used in Chapter 3, movement and feature valuation operations are indicated by means of solid and dotted arrows, respectively, and features that have been valued in the course of the derivation are underlined.)

Having described the manner in which the coreferential relationship between *almal* and *die mans* is established, the various steps in the derivation of (2a) can be briefly outlined as follows.

- (5) a. The direct object *nP die meisies* is merged as the complement of the V *bewonder*, with the V valuing the *nP*'s θ -feature as theme:

$[_{VP} \text{ bewonder } [_{nP} \text{ die meisies}]]$

- b. The VP in (5a) is merged with an experiencer light verb, followed by V-to-*v* raising. The *v* values the case feature of the object *nP die meisies* as accusative and in turn gets its $[u-\phi^{\wedge}]$ features valued by this *nP*. The movement diacritic associated with the *v*'s ϕ -features induces raising of the *nP* into the specifier position of the *vP*, with the containing VP pied-piped along:

$[_{vP}^2 [_{VP} [_{nP} \text{ die meisies}]] [_{vP}^1 \text{ bewonder } [_{VP} \text{ bewonder } [_{nP} \text{ die meisies}]]]]]$

- c. The *q-nP* in (4) is merged into the second specifier position of the *vP*, as indicated below. The *v* contains an $[\text{exp}-\theta]$ feature which serves to value the θ -feature of the *nP die mans* occurring in $[\text{spec}, \text{q}-n]$. Note that the issue of a potential violation of the A-over-A principle does not arise here: as was claimed above, the *q-n* (and therefore the *q-nP* as well) lacks a θ -feature, hence the *v* cannot enter into a θ -relationship with the *q-nP*.¹⁰ This means that the *nP die mans* is the only available goal for θ -valuation.

$[_{vP}^3 [_{q-nP}^2 [_{nP} \text{ die mans}]] [_{q-nP}^1 \text{ almal}]] [_{vP}^2 [_{VP} [_{nP} \text{ die meisies}]] [_{vP}^1 \text{ bewonder } [_{VP} \text{ bewonder } [_{nP} \text{ die meisies}]]]]]]]$

- (6) a. The *vP*³ in (5c) is merged with a finite T carrying the features $[u-V]$, $[\text{pres-tense}]$, $[\text{nom-case}]$ and $[u-\phi^{\wedge}]$:

$[_{TP} \text{ T } [_{vP}^3 [_{q-nP}^2 [_{nP} \text{ die mans}]] [_{q-nP}^1 \text{ almal}]] [_{vP}^2 [_{VP} [_{nP} \text{ die meisies}]] [_{vP}^1 \text{ bewonder } [_{VP} \dots]]]]]]]$

- b. The T enters into two agreement relationships. On the one hand, it values the tense feature of the v/V , and in turn the v/V supplies the T with a positive value for its categorial feature. On the other hand, the T values the case feature of the nP *die mans* in the second specifier position of the vP^3 , and in turn this nP values the ϕ -features of the T. The movement diacritic associated with the T's ϕ -features triggers raising of the vP^3 into [spec, T], resulting in the extended projection TP^2 :

$$[TP^2 [vP^3 [q-nP^2 [nP \text{ die mans}] [q-nP^1 \text{ almal}]] [vP^2 [VP [nP \text{ die meisies}]] [vP^1 \text{ bewonder}]]] [TP^1 T [vP^3 \dots]]]$$

- (7) a. The TP^2 in (6b) is merged as the complement of a C-head.
 b. The v/V *bewonder* is moved out of the vP^3 and merged with the C. In terms of the linearisation framework that was adopted in Chapter 3, this operation is induced by a movement diacritic associated with some or other V-related feature of the C.
 c. The subject nP *die mans* (which forms part of the raised vP^3 in [spec, T]) is raised into the specifier position of the CP. In line with the proposals that were tentatively put forward in section 3.2.1, it is assumed that this operation is triggered by a movement diacritic that is associated with an unvalued discourse-related feature of the C, and that this feature is valued by the [topic-disc] feature carried by the nP *die mans*. The structure resulting from the above operations is roughly as follows:

$$[CP^2 [nP \text{ die mans}] [CP^1 \text{ bewonder} [TP^2 [vP^3 [q-nP^2 [nP \text{ die mans}]] [q-nP^1 \text{ almal}]] [vP^2 \text{ die meisies bewonder}]] [TP^1 T [vP^3 \dots]]]]]$$

In colloquial Afrikaans, the FQ can also occur together with the subject in sentence-initial position, as illustrated in (8a) below. To account for this fact, it could be argued that there are two options available as regards raising of the subject: (i) either the subject nP is raised on its own as shown in (7c), thus yielding the sentence in (2a), or (ii) the containing $q-nP^2$ in (6b) is pied-piped along with the subject as shown in (8b), thus yielding the sentence in (8a).¹¹

- (8) a. Die mans almal bewonder die meisies.
 the men all admire the girls
 "The men all admire the girls"
 b. $[CP^2 [q-nP^2 [nP \text{ die mans}] [q-nP^1 \text{ almal}]] [CP^1 \text{ bewonder} [TP^2 [vP^3 [q-nP^2 [nP \text{ die mans}]] [q-nP^1 \text{ almal}]] [vP^2 \text{ die meisies bewonder}]] [TP^1 T [vP^3 \dots]]]]]$

Compare next the sentence in (2a) with the one in (9a) below. Both sentences contain a quantifier that specifies the quantity of a set of entities as being more than two. In (2a), the FQ *almal* occurs to the right of the subject *die man*, whereas in (9a) the quantifier *al* precedes the subject.¹² Besides taking a different (though clearly related) form, the quantifier *al* differs from the FQ *almal* in at least three respects: (i) it cannot be used as a pronominal expression with independent reference (cf. (9b,c)), (ii) it cannot occur in a postnominal position (cf. (9d)), and (iii) it does not enter into a relationship of referential identity with a nominal expression; in other words, in (9a) *al* is not used to co-refer to the entities picked out by *die mans*.¹³ In view of these differences, it is claimed that the pronominal element *al* represents a lexical (universal) quantifier (Q), that is, a “pure” operator element which simply functions to specify the quantity of the entities referred to by the nominal expression with which it occurs. This is in contrast to the FQ *almal* in (2a), which was argued above to be a pronominal quantifier that is formed in the course of the derivation through incorporation of a D constituent into the quantity focus head q-*n*.

- (9) a. Al die mans bewonder die meisies.
 all the men admire the girls
 “All the men admire the girls”
 b. *Al bewonder die meisie.
 c. *Die mans bewonder al.
 d. *Die mans bewonder al die meisie.¹⁴

The distinction between a pronominal Q and a postnominal FQ is less transparent with the universal quantifiers *albei* and *beide* (“both”), which both serve to specify a set of entities consisting of exactly two members.¹⁵ As illustrated in (10a,b), these quantifiers do not display different forms when they are used postnominally and pronominally. The only difference between the FQ *albei/beide* and the Q *albei/beide* lies in the fact that the FQ requires a plural noun that is accompanied by a definite determiner such as *die* or *daardie* (“those”), whereas the Q can occur with a plural noun lacking such a determiner, as shown in the (c) and (d) sentences.

- (10) a. Albei/beide die mans bewonder die meisie.
 both the men admire the girl
 “Both men admire the girl”
 b. Die mans bewonder albei/beide die meisie.

- c. Die mans / *Mans bewonder albei/beide die meisie.
- d. Albei/beide (die) mans bewonder die meisie.

In light of the co-occurrence facts illustrated in (10c,d), the sentence in (11) is ambiguous in that the quantifier *albei/beide* can be interpreted either as a pronominal Q that quantifies the set of entities referred to by the object *die meisies*, or as an FQ that quantifies the set of entities referred to by the subject *die mans*.¹⁶

- (11) Die mans bewonder albei/beide die meisies.
 the men admire both the girls
 “The men both admire the girls / admire both the girls”

According to the analysis outlined above, an FQ is a pronominal element that is coreferentially linked to its antecedent in the configuration in (4). Note, however, that there are no linguistic considerations which could provide a basis for establishing an obligatory coreferential relationship between *albei/beide* and the subject *die mans* in (11). Thus, from a strictly grammatical perspective, this sentence cannot be defined as a coreferential (or anaphoric) construction. Of course, this does not rule out the possibility of *albei/beide* being coreferential with the subject; these expressions are after all compatible in terms of ϕ -feature values. For referential identity to be established, however, it would be necessary to appeal to non-linguistic information, which means that (11) represents a “pragmatically anaphoric expression”.

On the face of it, the analysis put forward above seems to provide a plausible account of the coreferential relationship between a floating quantifier and its antecedent in sentences such as (2a). It remains to be clarified, however, whether such an analysis can account for the full range of constructions in which floating quantifiers can occur. One potentially problematic fact that would have to be addressed is illustrated in (12).

- (12) Die mans_i bewonder haar almal_i.
 the men admire her all
 “The men all admire her”

As argued above, the coreferential relationship between the FQ *almal* and the subject *die mans* is established by merging them into the nominal shell structure in (4). The derivation of (12) then follows essentially the same steps as those outlined in (5), with the object *haar* (along with the containing VP) raised into [spec, ν] and the q-*nP* containing the subject and the FQ merged into the second specifier position of the ν P. But this poses the problem of how the FQ in (12) eventually ends up in a position to the right of the object. This problem is left as a topic for further research.

4.2.3 Expletive *daar* (“there”) constructions

Consider the sentence pair in (13). The (b) sentence represents an existential construction in which the surface subject position is occupied by the expletive pronoun *daar* (“there”); this pronoun is grammatically associated with the (semantic) subject *iemand* (“someone”).¹⁷

- (13) a. Iemand klop aan die deur.
 someone knocks on the door
 “Someone is knocking at the door”
- b. Daar klop iemand aan die deur.
 there knocks someone on the door
 “There is someone knocking at the door”

The expletive in (13b) is not an argument and does not refer to any entity on its own. It moreover does not acquire a referent through being associated with the indefinite pronoun *iemand*, which means that the relationship between *daar* and its associate cannot be characterised as one of coreference. What needs to be clarified, then, are (i) the type of relationship that obtains between these two elements and (ii) the configuration in which it is established.

It is proposed here that the expletive and its associate are initially merged into a nominal shell structure which is headed by a functional category X, similar to the light noun structures that have been put forward in Chapter 3 and in section 4.2.2 (i.e. the identity focus *nP*, the contrastive focus *nP*, the possessor *nP* and the quantity focus *nP*).¹⁸ This raises an issue that has received much attention in the literature, namely whether the expletive should be analysed, in structural terms, as the “argument” or as the “predicate” in existential constructions.¹⁹ Phrased in terms of

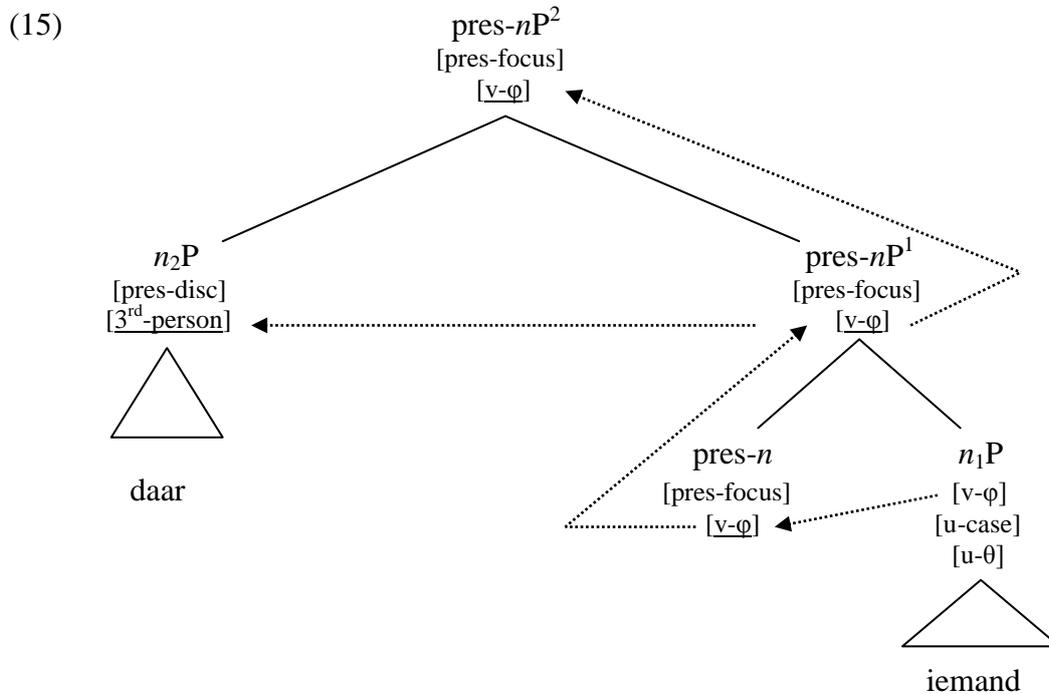
the proposed nominal shell analysis, the question is therefore whether the expletive represents the specifier or the complement of the functional head X. Within the context of this analysis, it is posited that the expletive *daar* in (13b) is merged as the specifier of the X and its associate as the complement of the X, as indicated in (14). In other words, the “argument” rather than the “predicate” view of the expletive is adopted here. We will return to this hypothesis below.

(14) [_{XP} expletive *daar* [X associate]]

This configuration raises two questions. The first concerns the category to which the X-head belongs. It is widely acknowledged in the literature on existential constructions that an expletive pronoun (e.g. Dutch *er*, English *there*, German *es*, Italian *ci* and its counterparts in many other languages) is primarily used in a presentational function; in other words, from an information structure perspective, the expletive is used to signal the introduction of a new referent into the discourse.²⁰ It seems plausible, therefore, to view the X in (14) as being a presentational focus light noun (*pres-n*) which belongs to the same general class of focus-related elements as the identity focus *n*, the *con-n*, the *pos-n* and the *q-n* that have been introduced in the course of this study. Adopting this view, the next question concerns the feature composition of the *pres-n* and the expletive *daar* in (14). Consider firstly the *pres-n*. As a working hypothesis, it is assumed that this element lacks both a case feature and a θ -feature; however, it does have a complete set of unvalued ϕ -features, which enters into an agreement relationship with the corresponding set carried by the associate expression in (14). As regards the expletive, it was stated above that *daar*, similar to a floating quantifier such as *almal* (cf. section 4.2.2), does not represent an argument in sentences like (13b), which means that it does not have a θ -feature. Following Chomsky (1995, 2000, 2001, 2004), it is assumed that the expletive also lacks a case feature. As regards ϕ -features, and in line with the proposals put forward by Chomsky (2001, 2004), the expletive *daar* is taken to be defective in the sense that it only has a person feature rather than a full set of ϕ -features (cf. also Richards 2007a). However, contrary to Chomsky’s claim that the expletive enters the derivation with this feature already valued as [3rd-person], it is posited here that the expletive is merged into (14) with its person feature unvalued. More specifically, it is claimed that the expletive’s feature is valued as [3rd-person] by the nominal complement of the *pres-n* (though indirectly, via the *pres-n*). In short, on this approach, the grammatical relationship between the expletive and its associate is established by means of ϕ -agreement in the configuration in (14), mediated by the functional head *pres-n*. Recall that this is essentially the same manner in which the grammatical relationship between a reflexive and its antecedent (section 3.2.1), a possessive pronoun and the possessor expression (section 3.2.6) and a floating

quantifier and its antecedent (section 4.2.2) is established. Finally, in view of its use as a presentational focus element, it seems plausible that the expletive *daar* also has the discourse-related feature [pres(entational)-disc]. As will be made clear below, this feature most likely enters into the eventual raising of the expletive into the specifier position of the CP in subject-initial clauses (cf. (18) below).

Adopting the above ideas about the nominal shell structure in (14), the presentational focus light noun *pres-n*, and the featural make-up of the expletive *daar*, the derivation of the nominal shell structure containing the expletive and its associate in (13b) can be briefly described as follows. Firstly, the indefinite pronoun *iemand* is merged as the complement of the *pres-n*. Following Chomsky (2006:17-18), the pronoun is assumed to form part of a nominal phrase headed by a light noun; this n_1P carries an unvalued case feature, an unvalued θ -feature and a set of valued ϕ -features. Next, the expletive *daar* is merged in the specifier position of the *pres-nP*; as in the case of *iemand*, it is assumed that *daar* is contained within a larger phrase headed by a light noun.²¹ The structure resulting from these two mergers takes the simplified form in (15). As indicated by the arrows, the n_1P values the ϕ -features of the *pres-n*, and the *pres-n* in turn values the person feature of the expletive n_2P ; in this way, then, an expletive-associate relationship is established between *daar* and *iemand*.



Against this background, the various steps in the derivation of (13b) can be outlined as follows.

- (16) a. The *nP die deur* in (13b) is merged with the P *aan*, and the resulting PP is merged as the complement of a locative light *p* with the features [acc-case], [loc-θ] and [u-φ[^]]. This gives rise to several operations: (i) the *p* values the case and θ-features of the *nP*; (ii) the *nP* values the φ-features of the *p*; and (iii) the movement diacritic carried by the *p*'s φ-features triggers raising of the *nP* into [spec, *p*], with the PP pied-piped along.²² The *pP* is subsequently merged as the complement of the V *klop*:

$$[_{VP} \text{ klop } [_{pP}^2 \text{ } [_{PP} \text{ aan die deur}] [_{pP}^1 \text{ } p \text{ } [_{PP} \text{ aan die deur}]]]]$$

- b. The VP in (16a) is merged with an agentive light verb, followed by V-to-*v* raising. Note that *klop* is an intransitive verb, which means that it lacks a θ-feature. It was argued in section 3.2.4.2 that the *v* which is associated with an intransitive verb lacks a case feature and, instead of a complete set of φ-features, only contains the feature [u-num[^]]. In line with these ideas, it is assumed that the light *v* associated with *klop* gets its number feature valued by entering into a probe-goal relation with the *n₁P die deur* that forms part of the *pP²* in (16a); from a feature-valuation perspective, this *nP* is the only active goal in the *v*'s c-command domain. The movement diacritic associated with the *v*'s number feature induces raising of the *n₁P* into [spec, *v*], with the whole of the containing VP pied-piped along:

$$[_{vP}^2 \text{ } [_{VP} \text{ } [_{pP}^2 \text{ } [_{PP} \text{ aan die deur}] [_{pP}^1 \text{ } p \text{ } [_{PP} \text{ aan die deur}]]]] \text{ } [_{vP}^1 \text{ } \text{klop-}v \text{ } [_{VP} \text{ klop } [_{pP}^2 \text{ } [_{PP} \text{ aan die deur}] [_{pP}^1 \text{ } p \text{ } [_{PP} \text{ aan die deur}]]]]]]]]$$

- c. The pres-*nP²* in (15) is merged into the second specifier position of the *vP* in (16b), as indicated below. The *v* has an [agent-θ] feature that serves to value the θ-feature of the *n₁P iemand* representing the complement of the pres-*n* in (15). As was claimed above, neither the expletive *n₂P daar* nor the pres-*nP* in (15) contains a θ-feature, hence the *v* cannot enter into a θ-relationship with either of these two phrases.²³ The *n₁P iemand* is thus the only available goal for θ-valuation within the *v*'s c-command domain.

$$[_{vP}^3 \text{ } [_{pres-nP}^2 \text{ } [_{n2P} \text{ daar}] \text{ } [_{pres-nP}^1 \text{ } \text{pres-}n \text{ } [_{n1P} \text{ iemand}]]]] \text{ } [_{vP}^2 \text{ } [_{VP} \text{ } [_{pP}^2 \text{ } [_{PP} \text{ aan die deur}] [_{pP}^1 \text{ } p \text{ } [_{PP} \text{ aan die deur}]]]] \text{ } [_{vP}^1 \text{ } \text{klop-}v \text{ } [_{VP} \text{ ...}]]]]]]$$

- (17) a. The vP^3 in (16c) is merged with a finite T carrying the features [u-V], [pres-tense], [nom-case] and [u- ϕ^{\wedge}]:

$$[_{TP} T [_{vP}^3 [_{pres-nP}^2 [_{n2P} daar] [_{pres-nP}^1 pres-n [_{n1P} iemand]]] [_{vP}^2 [_{VP} [_{pP}^2 aan die deur]] [_{vP}^1 klop-v [_{VP} \dots]]]]]$$

- b. The T enters into several agreement relations. Firstly, it values the tense feature of the v/V , and in turn the v/V supplies the T with a positive value for its categorial feature. Secondly, the T values the case feature of the n_1P *iemand* which forms part of the $pres-nP^2$ in the second specifier position of the vP^3 (recall that the $pres-nP$ and the n_2P *daar* in its specifier position both lack a case feature). Thirdly, the n_1P serves to value the ϕ -features of the T.²⁴ The movement diacritic associated with the T's ϕ -features induces raising of the vP^3 into [spec, T], yielding the following simplified structure:

$$[_{TP}^2 [_{vP}^3 [_{pres-nP}^2 [_{n2P} daar] [_{pres-nP}^1 pres-n [_{n1P} iemand]]] [_{vP}^2 aan die deur [_{vP}^1 klop-v]]] [_{TP}^1 T [_{vP}^3 \dots]]]$$

- (18) a. The TP^2 in (17b) is merged as the complement of a C-head.
- b. The v/V *klop* is moved out of the vP^3 and merged with the C. As discussed in section 3.2.1, this operation is likely triggered by a movement diacritic associated with some or other V-related feature of the C.
- c. The n_2P *daar* (which forms part of the vP^3 in [spec, T]) is raised into the specifier position of the CP. It was assumed in section 3.2.1 that this operation is triggered by a movement diacritic which is associated with an unvalued discourse-related feature of the C. In the construction at hand, this feature is valued by the [pres-disc] feature carried by the expletive *daar*. The structure resulting from the above operations is roughly as follows:

$$[_{CP}^2 [_{n2P} daar] [_{CP}^1 klop [_{TP}^2 [_{vP}^3 [_{pres-nP}^2 [_{n2P} daar] [_{pres-nP}^1 iemand]]] [_{vP}^2 aan die deur [_{vP}^1 klop-v]]] [_{TP}^1 T [_{vP}^3 \dots]]]]]$$

To end this section, consider again the issue of whether the expletive *daar* (and its counterparts in other languages) represents the “argument” or the “predicate” in existential constructions. Suppose, contrary to the hypothesis expressed in (14), that the expletive is analysed as the

“predicate” and its associate as the “argument”. On this approach, *daar* in (13b) would be merged as the complement and its associate *iemand* as the specifier of the functional head *pres-n*:

$$(19) \quad [_{pres-nP}^2 [_{n2P} iemand] [_{pres-nP}^1 pres-n [_{n1P} daar]]]$$

In terms of the analysis presented above, the $pres-nP^2$ in (19) is merged into the second specifier position of the agentive light verb. At this juncture, the n_2P *iemand* in [spec-*pres-n*] is the only nominal expression that is active from a feature-valuation perspective (cf. (16b) and (17b)). Entering into a probe-goal relation with the n_2P , the ν accordingly values the θ -feature of this nP as agent. The resulting structure is roughly as follows:

$$(20) \quad [_{\nu P}^3 [_{pres-nP}^2 [_{n2P} iemand] [_{pres-nP}^1 pres-n [_{n1P} daar]]] [_{\nu P}^2 [_{VP} [_{pP}^2 aan die deur]] [_{\nu P}^1 klop-\nu] [_{VP} \dots]]]$$

The next step entails merging the νP^3 in (20) with a finite T. Note that the n_2P *iemand* is still an active goal because of its [u-case] feature. Hence, probing its c-command domain, the T values the n_2P 's case feature as nominative and concurrently gets its [u- ϕ] features valued by this nP . The movement diacritic associated with the T's ϕ -features moreover triggers raising of the n_2P , a pied-piping operation that results in the whole of the containing νP^3 in (20) ending up in the specifier position of the TP. Subsequent merger of the TP with a C yields the following structure:

$$(21) \quad [_{CP} C [_{TP}^2 [_{\nu P}^3 [_{pres-nP}^2 [_{n2P} iemand] [_{pres-nP}^1 pres-n [_{n1P} daar]]] [_{\nu P}^2 aan die deur [_{\nu P}^1 klop-\nu]]] [_{TP}^1 T [_{\nu P}^3 [_{pres-nP}^2 [_{n2P} iemand] [_{pres-nP}^1 pres-n [_{n1P} daar]]] [_{\nu P}^2 aan die deur [_{\nu P}^1 klop-\nu]]]]]$$

A consequence of the analysis just outlined – that is, one employing the structure in (19) – is that the expletive occurs to the right of its associate, as shown in (21). Abstracting away from the effects of subject raising and verb raising in the derivation of main clauses (as summarised in (18)), this would however result in the ungrammatical sentence in (22), a problem not faced by an analysis employing the structure in (14).²⁵

$$(22) \quad *(\text{dat}) \text{ iemand daar aan die deur klop.}$$

that someone there at the door knocks

In short, then, the nominal shell analysis that has been put forward in this section argues in favour of treating the expletive as the “argument” and its associate as the “complement” in existential *daar*-constructions.

4.2.4 Reflexive incorporation in Southern Bantu

In this section, we consider the possibility of extending the nominal shell analysis of obligatory reflexivity that was developed in Chapter 3 to languages that are typologically very different from Afrikaans and the other languages of the Germanic family. The languages in question are those belonging to the Southern Bantu family.²⁶ One of the salient features of these languages is their rich system of agglutinating verbal morphology, with the verb complex containing several affixes (or markers) associated with, amongst others, subject and object agreement, tense-aspect, mood, negation, and a range of argument-introducing affixes such as the applicative and the causative. This can be illustrated with the following example from isiXhosa:²⁷

- (23) Abazali bayabahlamba abantwana.
 aba-zali ba-ya-ba-hlamb-a aba-ntwana
 2.parents 2.SM-ASP-2.OM-wash-FV 2.children
 “The parents are washing the children”

What is important for the present discussion is the fact that reflexivity is also expressed by means of a verbal affix in the Southern Bantu languages, rather than by means of an independent reflexive pronoun as in the Germanic languages (Afrikaans, Danish, Dutch, English, German, Icelandic, etc.). This is illustrated by the examples in (24a)-(26a). In each case, the reflexive (REFL) surfaces as an affix inside the verb complex (*-zi-* in isiXhosa, *-i-* in Sesotho sa Leboa, and *-di-* in Tshivenda), and obligatorily takes its reference from the subject of the sentence. The REFL is furthermore in complementary distribution with the object marker (OM). This is shown by the difference in grammaticality between the non-reflexive (b) sentences (which contain the OMs *-ba-*, *-mo-* and *-mu-*, respectively) and the (c) sentences where the REFL co-occurs with the OM. Clearly, then, the REFL and the OM occupy the same affix-slot in the verb complex.

- (24) a. Abazali bayazihlamba. (isiXhosa)
 aba-zali ba-ya-**zi**-hlamb-a
 2.parents 2.SM-ASP-REFL-wash-FV
 “The parents are washing themselves”

- b. Abazali bayabahlamba (abantwana).
 aba-zali ba-ya-**ba**-hlamb-a (aba-ntwana)
 2.parents 2.SM-ASP-OM-wash 2.children
 “The parents are washing them/the children”
- c. *Abazali bayabazihlamba.
 aba-zali ba-ya-**ba-zi**-hlamb-a
 2.parents 2.SM-ASP-2.OM-REFL-wash-FV
- (25) a. Mosadi o a ithuta. (Sesotho sa Leboa)²⁸
 mo-sadi o-a-**i**-rut-a
 1.woman 1.SM-ASP-REFL-teach-FV
 “The woman is teaching herself”
- b. Mosadi o a **mo** ruta (nwana).
 mo-sadi o-a-mo-rut-a (nw-ana)
 1.woman 1.SM-ASP-OM-teach-FV child
 “The woman is teaching him/the child”
- c. *Mosadi o a mo ithuta.
 mo-sadi o-a-**mo-i**-rut-a
 1.woman 1.SM-ASP-1.OM-REFL-teach-FV
- (26) a. Musadzi u khou dithusa. (Tshivenda)²⁹
 mu-sadzi u-khou-**di**-thusa
 1.woman 1.SM-ASP-REFL-help
 “The woman is helping herself”
- b. Musadzi u khou mu thusa (ńwana).
 mu-sadzi u-khou-**mu**-thusa (ńw-ana)
 1.woman 1.SM-ASP-1.OM-help child
 “The woman is helping him/the child”
- c. *Musadzi u khou mu dithusa.
 mu-sadzi u-khou-**mu-di**-thusa
 1.woman 1.SM-ASP-1.OM-REFL-help

Against this background, let us now explore the manner in which the relevant facts of reflexivity in Southern Bantu could be accounted for within the general framework of the nominal shell

analysis put forward in Chapter 3. For the purpose of this discussion, attention is restricted to the isiXhosa example in (24a); however, since the languages in question do not show significant grammatical differences as far as the expression of reflexivity is concerned, the findings are likely to hold for the other languages as well.

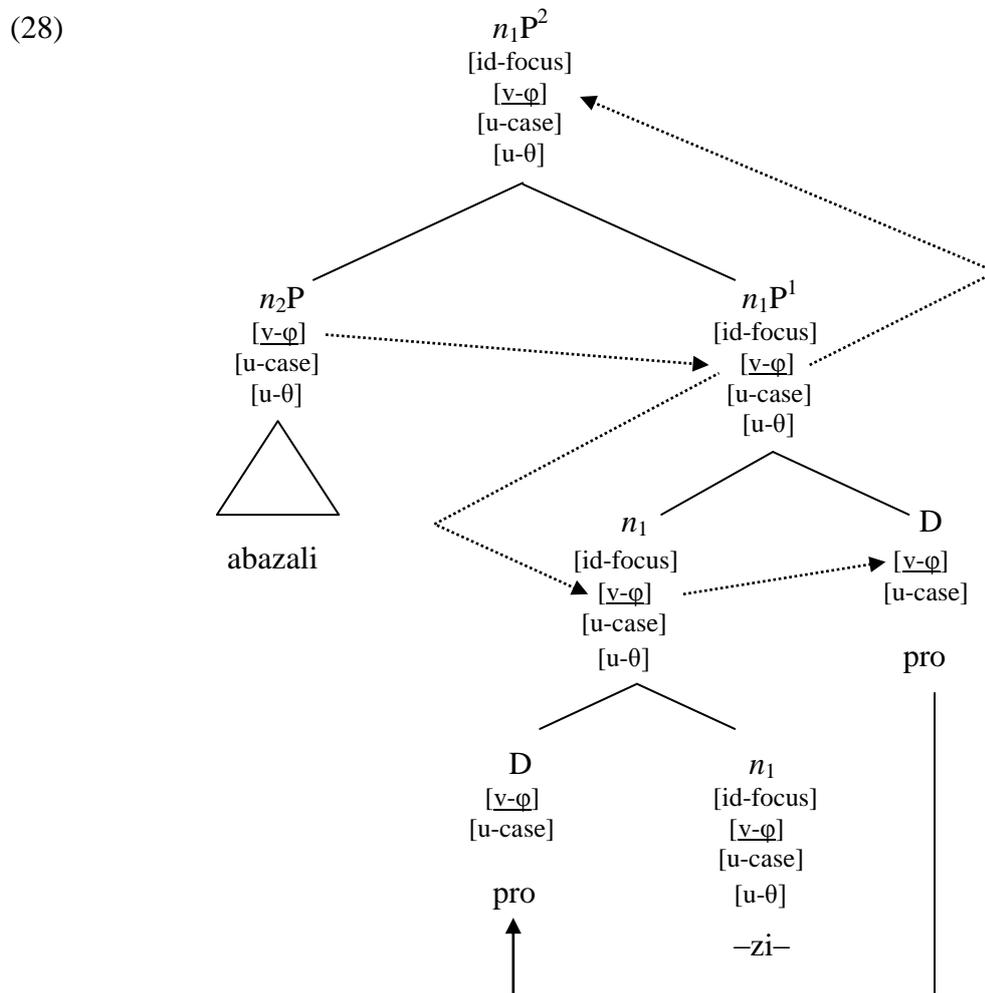
As noted, the reflexive *-zi-* in (24a) is obligatorily coreferential with the subject *abazali* (“the parents”). Hence, in terms of the NSA, the reflexive – or more precisely, the elements from which it is derived – is merged together with the subject in a nominal shell headed by an identity focus light noun. Several key claims were made in section 3.2.1 in connection with the internal structure of the identity focus *nP* in Afrikaans. The general ideas expressed by these claims are assumed for isiXhosa as well, and may be informally stated as follows:

- (27) a. The identity focus *n* selects a pronominal element with the structure [_D D √PRON] as its complement (cf. (3b) in section 3.2.1).
- b. Both the identity focus *n* and its pronominal complement contain the features [u-φ] and [u-case], and the *n* additionally carries the feature [u-θ].
- c. The pronominal element is raised to the identity focus *n*; the compound *n* that is derived in this manner is spelled out as the reflexive affix *-izi-* in isiXhosa (and as an independent reflexive pronoun in Afrikaans).
- d. The nominal expression representing the antecedent is merged as the specifier of the (derived) identity focus *n*;
- e. The antecedent values the φ-features of the reflexive, with the *n* serving as mediator.

One important difference between Afrikaans and isiXhosa relates to the type of complement selected by the identity focus *n*. As pointed out above, the reflexive is not spelled out as an independent pronoun in isiXhosa but surfaces as a REFL verbal affix. Like *-self* in Afrikaans, the REFL affix has an invariant form, *-zi-*, and does not display any case or φ-inflection. In view of its affixal nature, it is assumed that *-zi-* (again like *-self*) is located under the *n*. However, unlike in Afrikaans, it is claimed that the identity focus *n* in isiXhosa selects a covert pronominal element as its complement, one that is not phonologically realised as a pronoun; as a working hypothesis, this element is taken to be a pro.³⁰ A general prediction following from this claim is that languages in which reflexivity is expressed by means of a verbal affix (such as those

belonging to Southern Bantu) will have the property of allowing null objects. The accuracy of this prediction is left as a topic for further investigation.

Adopting the above claims, the subject *abazali* and the affix *-zi-* in (24a) would be merged into the structure in (28).³¹ In terms of (the generalised) Hypotheses G and H (cf. section 3.2.1), *-zi-* is correctly interpreted as being coreferential with the n_2P *abazali*. (As before, raising and feature valuation operations are indicated by means of solid and dotted arrows, respectively; features that acquired their values in the course of the derivation are underlined.)



The subsequent steps in the derivation of (24a) are briefly discussed below. It must however be emphasised that the aim of the discussion is not to present a detailed minimalist analysis of the relevant aspects of isiXhosa grammar, nor to make any firm claims in this regard. Such an enterprise falls entirely outside of the scope of the present study. Rather, the much more modest

aim is to present, in broad outline, some leading ideas that could merit further investigation in research on word order and linearisation phenomena in Southern Bantu.

The n_1P^2 in (28) is merged with the verb complex containing the stem *-hlamb-* (“wash”) ($[_{VC} \textit{hlamb}]$, for short). Two assumptions are made in this regard. Firstly, the verb stem carries the feature [theme- θ] which serves to value the corresponding feature of the n_1P^2 . Secondly, the various affix-slots associated with the $[_{VC} \textit{hlamb}]$ are “unfilled” at the point of merger.³² Using underscore, this can be informally represented as follows: [noun class $_$.SM $_$ - ASP $_$ - REFL $_$ - *hlamb* - FV $_$].

The VP is next merged with an agentive light verb containing the N-related features [agent- θ], [u- ϕ], and [acc-case]. This brings about a configuration in which several parallel operations can take place. Firstly, the $[_{VC} \textit{hlamb}]$ is raised to the v . Secondly, the v supplies the agent θ -value to the subject n_2P *abazali* in the specifier position of the identity focus n_1P^2 . Thirdly, the v gets its ϕ -features valued by the n_1P^2 and in turn supplies a value for this nP 's case feature. In addition to these operations, it is posited that the establishment of a ϕ -agreement relation between the v and the identity focus n_1P induces incorporation of the (derived) identity focus n containing the affix *-zi-* into the REFL-slot in the v/VC . The structure resulting from the various operations is given in (29), where the VC comprises the elements [noun class $_$.SM $_$ - ASP $_$ - *zi* - *hlamb* - FV $_$]. Because of its unvalued case feature, the subject n_2P is the only nominal expression that is still active at this point.

(29) $[_{vP}^1 [_v [_{VC} \textit{-zi-hlamb}]] [_{VP} [_{VC} \textit{hlamb}] [_{n_1P}^2 [_{n_2P} \textit{abazali}] [_{n_1P}^1 \textit{-zi-}]]]]]$

The vP^2 in (29) is next merged with a T that has the N-related features [nom-case] and [u- ϕ^{\wedge}]. As regards its V-related features, it is assumed that the T has the features [u-V], [pres-tense] and [v-aspect].³³ The T enters into two distinct agreement relationships. On the one hand, it values the tense and aspect features of the v/VC , and in turn the v/VC supplies the T with a positive value for its categorial feature. On the other hand, the T values the case feature of the n_2P *abazali* (which fills the specifier position of the identity focus n_1P^2 in the VP), and this nP in turn values the ϕ -features of the T. The movement diacritic associated with the T's ϕ -features furthermore triggers raising of the subject n_2P into the specifier position of the TP.³⁴

Two issues call for comment at this point, neither of which is crucial for the analysis of reflexivity outlined above. The first concerns the question of whether the *v*/VC in (29) undergoes raising to the T. Although *v*/VC raising is not required to ensure the correct word order in the construction at hand, the Bantu phenomena analysed in Zeller (2008) do seem to argue in favour of such an operation. This issue will be left open here. The second issue concerns the noun class 2 prefix *ba-* in (24a) that occupies the SM-slot in the VC. Given that the T enters into a ϕ -agreement relation with the *n*₂P *abazali*, as claimed above, it could be argued that the SM *ba-* is simply a spell-out of the T's valued ϕ -features. Another possibility, put forward by Zeller (2008), is that the SM is a light noun *n** that takes the subject DP as its complement. According to Zeller (2008:222), this *n** is “moved out of the subject *n**P and [is] incorporated into the functional head which hosts the verb. Therefore, the SM is attached to the verb stem and the verb shows overt agreement with the subject DP.” The merit of these two analyses of the SM will not be explored here. However, given the coreferential relationship between the SM and the subject, it seems plausible that the *n**-analysis of the SM can be “recast” as yet another instance of the particular nominal shell approach to anaphoric relationships that has been developed in this study.

4.3 Conclusion

Research within the broad framework of Minimalist Syntax has reached a point where we have the mechanisms to develop new analyses of (obligatory) reflexive constructions, both those constructions that have been extensively studied in the literature and those that have seldom or never been examined (or never been viewed as being “reflexive” or “coreferential” in some way). The present study is an attempt to develop such an analysis and to show its potential for providing interesting new perspectives on a wide range of constructions. It is hoped that the proposals that have been put forward can contribute in some way to current debates about reflexivity and related phenomena; one obvious phenomenon that comes to mind is the obligatory coreferential relationship between reciprocals and their antecedents, one of many topics that is left for further research.

Although the focus was on the facts of Afrikaans, a language that has received relatively little attention in the literature, it seems plausible that the basic ideas employed in the nominal shell analysis could profitably be extended to other languages as well, both those of the Germanic

family and those belonging to typologically very different families, such as Southern Bantu (cf. section 4.2.4). Clearly, though, much comparative research is required in this regard, including research within the diachronic domain.

Don't confront me with my failures

I had not forgotten them

– Jackson Browne, *These Days*

NOTES

Notes to Chapter 1

¹ Cf. e.g. Chomsky (2004:388-92) and Smith (1998; 1999:42-3, 166-7) for a discussion of the essential distinction between the idea just outlined and the alternative idea that a linguistic expression *by itself* refers to an entity or state of affairs outside of the mental states of the language user.

² These generalisations are loosely based on Chomsky (1981:188; 1995:94, 96, 211).

³ These examples serve only to illustrate the idea of a locality condition on the coreferential relationship between an anaphor and its antecedent. It is important to note that it is not necessarily a clause that counts as the relevant local domain.

⁴ It will be shown in Chapter 2 that Afrikaans allows constructions in which this generalisation does not hold; with verbs and prepositions belonging to specific semantic classes, a pronoun can in fact receive both a reflexive and a non-reflexive interpretation in the same domain.

⁵ Chomsky and Lasnik (1993, in Chomsky 1995) define ‘government’ and ‘governing category’ as in (i) and (ii), respectively.

- (i) α governs β if α c-commands β and there is no category γ that “protects” β from government by α . γ protects β in this sense if it is c-commanded by α and either [(a)] or [(b)] holds.
- a. γ is a *barrier* dominating β .
 - b. γ *intervenes* between α and β . (1995:79)

- (ii) The governing category (GC) of α is the minimal clause containing α and a governor of α . (1995:101)

⁶ For the empirical and conceptual problems faced by the various modules of GB theory, cf. e.g. Broekhuis & Den Dikken (1993); Bennis (1994, 1995); Chomsky (1995:ch. 2-4); Freidin (1997); and the numerous references cited in Hornstein et al. (2005).

⁷ As regards the value of [VAR], Hicks (2006:116) assumes that “it is simply an integer or an alphabetical index, x, y, or z”, adding that “(t)his is by no means ideal, since we ... must examine whether this is simply an index masquerading as a feature.” According to Hicks (2006:117), the [VAR]-feature carried by an r-expression or a pronoun “is simply an instruction to assign an integer [i.e. a value – JO] upon selection for the numeration.” Presumably, then, the [VAR]-feature carried by an anaphor would lack this property to ensure that the anaphor’s [VAR]-valuation is “postponed” to a later stage of the derivation. Hicks (2006:117, n. 13) admits that “the kind of approach proposed here for variable features might not be clear until further research into the nature of the numeration has been undertaken.”

It should also be noted here that Hicks’s analysis requires the introduction of a new grammatical constraint, the Maximise Structural Economy condition (MSE). Based on proposals by Citko (2006), this condition states that dependencies must be established via syntactic operations where possible (Hicks 2006:204). The MSE is required to rule out a coreferential relationship between the r-expression *John* and the pronoun *him* in a sentence such as (i) *John loves him*, where these two expressions enter the derivation with their [VAR]-features having been assigned identical values in the numeration. Since the syntactic operation Agree would bring about the same result if the pronoun entered the derivation with an unvalued [VAR]-feature, that is, as an anaphor, the MSE rules out the derivation of (i) as being less economical. The merit of the MSE as a general condition remains to be determined, however.

Notes to Chapter 2

¹ The qualification “traditional” is important here. A core assumption of the analysis of obligatory reflexivity proposed in Chapter 3 is that “reflexive (pronoun)” is not a basic lexical category, but that reflexive and non-reflexive pronouns are syntactically derived from the same lexical root pronoun $\sqrt{\text{PRON}}$; the difference between these two types of pronoun is thus described in syntactic rather than lexical terms (cf. e.g. Zwart 2002; Heinat 2006a,b). Ponelis (1979:86) also states that reflexives do not form a distinct class, but that they represent a particular *use* of personal pronouns in the accusative form. It will be illustrated below that possessive pronouns – i.e. pronouns with genitive case – can also be used as reflexives.

² The form *self* can also be used as a separate word, as in the examples in (i). As these examples show, *self* functions as an anaphor in such cases in that it must enter into a coreferential relationship with some other expression in the sentence. (For the sake of convenience, (non)coreferential relationships are indicated by (non)identical subscripts.)

- (i) a. Ek_i self_i het die meisie_j gesien.
I self has the girl seen
“I myself saw the girl”
b. Self_i het ek_i die meisie_j gesien.
c. Ek_i het self_i die meisie_j gesien.
d. Ek_i het die meisie_j self_i / self_j gesien.

The syntax and semantic interpretation of *self* and other similar expressions will not be examined in this study.

³ In some styles, vocative items which are integrated into sentence structure are used in place of reflexives, as shown in (i) below (cf. Ponelis 1979:37-40, 65, 229). Such items – which serve to express a range of feelings and relationships, e.g. endearment, friendship, family relation, politeness, respect, anger, scorn, etc. – include titles (*Mevrou* (“Madam”), *Dokter* (“Doctor”), *Professor*); names of people and pets (*Jan*, *Pluto*); and family terms (*pappa* (“daddy”), *tannie* (“aunt”), *oom* (“uncle”), *neef* (“nephew”). As illustrated in (ii), vocative items which are used reflexively can also occur with the suffix *-self*, although this does not seem to be common (cf. note 9 below).

- (i) a. Mamma_i het vir Mamma_i heeltemal misgis met die tyd.
Mommy has for Mommy completely misjudge with the time
“Mommy completely misjudged herself with the time”
b. Dokter_i sal vir Dokter_i ’n nuwe kar moet koop.
Doctor will for Doctor a new car must buy
“You should buy yourself a new car, Doctor”
(ii) a. Pa_i moenie vir Pa-self_i seermaak nie!
Dad must-not for Dad-self hurt NEG
“Dad, you mustn’t hurt yourself!”
b. Oom_i kon nog altyd vir Oom-self_i sorg.
uncle could still always for uncle-self care
“You have always been able to look after yourself, Uncle”

⁴ Buring (2005:22) states that inherently reflexive verbs “are semantically intransitive, but syntactically transitive, and show a – presumably uninterpreted – reflexive as the semantically ‘inert’ argument.” Some more examples of inherently reflexive verbs in Afrikaans are *afsloof* (“work like a slave, wear out”), *bevind* (“be, find oneself somewhere”), *beywer* (“endeavour, do one’s best”), *indink* (“imagine”), *misgis* (“misjudge”), *ooreet* (“overeat”), *skaam* (“be ashamed of”), *verbeel* (“fancy, imagine”), *verdiep* (“become absorbed in”), *vergaap* (“be amazed by”), *vergryp* (“commit an offence, outrage”), *verlustig* (“take delight in”), *verset* (“resist”) and *verspreek* (“speak incorrectly, make a slip of the tongue”); cf. Ponelis (1979:227-30) and also note 6.

⁵ Ponelis (1979:83, 88) ascribes the increasing use of the *-self* form of the reflexive, particularly in utterances with inherently reflexive verbs, to the influence of English. (Interestingly, a similar spread of the *-self* form is found in the diachrony of English; cf. e.g. Keenan (2009).) When utterances like those in (4) are spoken with the normal, non-emphatic sentence stress pattern, the verb standardly receives the primary stress (cf. *Jan verSET hom*). However, when the complex form of the reflexive is used, the utterance can apparently also be spoken with the

primary stress on *-self* (cf. *Jan verset homSELF*); generalising the claim made by Ponelis (1979:81-3) (cf. note 9 below), it is likely that *-self* is used in such cases to provide emphasis, specifically, to turn the pronoun into an emphatic form. If this is true, it would be contrary to Buring's (2005) claim that "semantically inert arguments, as found with inherently reflexive verbs, cannot bear emphasis" (p. 23) and show an "inability to be stressed" (p. 22, n. 20).

⁶ Afrikaans has a small subclass of inherently reflexive verbs which can be used without a syntactic complement. One of these verbs is illustrated in (i); others include *inmeng* ("interfere"), *manifesteer* ("manifest, present"), *ontpop* ("turn out to be, emerge") and *terugtrek* ("withdraw, retire from").

- (i) Jan_i het (hom_i) / *hom_j verslaap.
 Jan has him oversleep
 "Jan overslept (himself)"

⁷ Cf. Buring (2005:22, n. 20) for these characteristics of semantically inert reflexives. The term "right-node raising" refers to a syntactic operation associated with earlier versions of generative syntactic theory (cf. e.g. Postal 1974), and which serves to derive a coordinate structure like (ib) from the underlying structure in (ia). The conjoined clauses in (ia) have identical expressions as their rightmost constituent. Right-node raising involves making a copy of these expressions, adjoining this copy to the right of the coordinate structure, and deleting the two identical expressions (indicated by means of strikethrough in (ib)).

- (i) a. [[John bought the house] and [Mary renovated the house]]
 b. [[John bought ~~the house~~] and [Mary renovated ~~the house~~]] the house

For more recent analyses of right-node raising phenomena, cf. e.g. Abels (2004) and Bošković (2004).

⁸ Some more examples of this subclass of semantically transitive verbs are *keer* ("stop, control"), *moegmaak* and *vermoei* ("exhaust, tire, wear out") and *wegsteek* ("hide"); cf. Ponelis (1979:82-3, 87).

⁹ Ponelis (1979:81-3) claims that *-self* serves to strengthen ("versterk") the pronoun, that is, to bring about an emphatic form of the pronoun, in utterances where the verb is not inherently reflexive (like those in (7)-(10) below). Cf. Buring (2005:21-23) for the use of *-self* in English, and Reuland (2001) and Reuland & Everaert (2001:654-660) for a comprehensive discussion of the lexical and syntactic properties of morphologically simplex and complex reflexives in Dutch, English, German and Frisian. Heintz (2006a:89-91) provides several arguments against the proposal of, amongst others, Reinhart & Reuland (1993) that the English morpheme *self* (and the corresponding morpheme in e.g. Swedish and Old English) functions as a reflexivizer. Like Ponelis (1979:81-3) in the case of Afrikaans, Heintz (2006a:91) claims that "the 'self'-morpheme indicates emphasis and not reflexivity"; cf. also Buring (2005:23). Zwart (2002: 273) argues that "anaphors can be analyzed as pronouns with added focus markers", where *-self* represents such a focus marker. This idea is central to the analysis proposed in this study and will be worked out in detail in Chapter 3.

¹⁰ Other examples of this subclass of semantically transitive verbs in Afrikaans are *aanmeld* ("report"), *aantrek* ("dress"), *beweeg* and *roer* ("move, stir"), *losruk* ("wrench free"), *onttrek* ("withdraw, recuse"), *skrop* ("scrub"), *uittrek* ("undress"), and *was* ("wash").

According to Buring (2005:22), verbs of this subclass "in English and cross-linguistically, very often describe typically self-directed actions such as acts of grooming (cf. English *wash, shave*); typically other-directed actions such as seeing, beating, or killing are unlikely candidates to be expressed by (optionally) intransitive verbs, and require a transitive construction with a reflexive pronoun when used to describe a self-directed event." These remarks hold for Afrikaans as well; cf. the examples in (11) and (12).

¹¹ More examples of this subclass of semantically transitive verbs are *bewonder* ("admire"), *doodmaak* ("kill"), *herken* ("recognise"), *oortuig* ("convince"), *red* ("save"), *verkies* ("prefer") and *verwyder* ("remove").

¹² In utterances like those in (7)-(12) – i.e. where a pronominal complement is selected by a verb which is not inherently reflexive – the primary stress is placed on the pronoun when the utterance is spoken with the normal, non-emphatic sentence stress pattern (cf. *Jan_i haat homSELF_i*, *Jan_i haat HOM_j*). This is in contrast to the normal stress pattern which is standardly found with utterances containing an inherently reflexive verb (cf. note 5).

¹³ Some more examples of this subclass of verbs are *agterlaat* (“leave behind”), *agternasit* (“chase”), *agtervolg* (“pursue”), *inhaal* (“catch up”), *lei* (“lead”), *opvolg* (“succeed”) and *voorafgaan* (“precede”). As the examples show, these verbs are typically compounds with a preposition (or adverb) expressing direction as their first element.

¹⁴ This subclass includes several compound verbs with a directional preposition or adverb as their first element, e.g. *rondstamp* (“push around”), *terugstuur* (“send back”), *uitstuur* (“send out”) and *wegpluk* (“pull away”).

¹⁵ It was stated above that the two subclasses of verbs illustrated in (13) and (14) “normally” do not allow a reflexive interpretation for their pronominal complements. Given an appropriate context, however, such an interpretation would be feasible, for example where the speaker is using the pronominal complement to refer to one or another representation or depiction (a statue, painting, cardboard cut-out, etc.) of the entity already identified by the subject of the sentence. Such an interpretation would be pragmatically highly constrained, and evidently cannot be accounted for in exclusively grammatical terms. The general point is well stated by Sperber & Wilson (1995:9-13) who illustrate a wide range of aspects of interpretation which “involve an interaction between linguistic structure and non-linguistic information, only the former being dealt with by the grammar (p.10)”. Such interactions involving the interpretation of reflexives will not be dealt with in this study. For interesting proposals in this regard, cf. Culicover & Jackendoff (2005:ch. 10 & 11).

¹⁶ There does not seem to be consensus in the literature about the number of θ -roles, and about the labels and precise definitions of those that are commonly used in grammatical analyses. Based on introductory works such as Gruber (2001), Carnie (2002) and Radford (2009), the θ -roles referred to in the discussion below may be informally characterised as follows:

<i>Agent:</i>	entity instigating or intentionally performing an activity
<i>Experiencer:</i>	entity experiencing some mental/psychological state
<i>Patient/Theme:</i>	entity affected by an activity or state (e.g. being moved, experienced, perceived in some way)
<i>Goal/Recipient:</i>	entity towards which an activity is directed (e.g. the destination or receiver of something)
<i>Source:</i>	entity from which an activity takes place
<i>Location/Locative:</i>	place where an entity or state is situated or where an activity takes place
<i>Benefactive:</i>	entity benefitting from or (intentionally) advantaged by an activity
<i>Instrument:</i>	entity by means of which an activity is performed
<i>Possessor:</i>	entity possessing some other entity (where “possess” is loosely used to cover a wide range of abstract and concrete relations, including ownership, custody, kinship and whole-part – e.g. person-body part – relations)

¹⁷ One of the θ -roles which is sometimes identified in the literature is that of benefactive (or beneficiary) (cf. note 16). It is however not always clear exactly how to differentiate this role from that of goal; Haegeman (1984:50), e.g., characterises the expression *Jane* in the sentence *Galahad gave the detective story to Jane* as “BENEFACTIVE/GOAL”. Still, at least on intuitive grounds, it could be claimed that the role assigned to the indirect object argument in (15a) is actually benefactive (and, it could be suggested, something like “malefactive” in the case of (15b)).

¹⁸ Some more examples of ditransitive verbs, i.e. verbs occurring in the double object construction, are (*eer/skade aandoen* (“cause, do (honour/harm)”), *belowe* (“promise”), *gee* (“give, provide”), *leer* (“learn, teach”), *ontse* (“deny”), *toedien* (“administer”), *toe-eien* (“appropriate, assume”), *toeken* (“award”); cf. Ponelis (1979: 206-7). Note that if the form *self* in sentences like (15) is used as a separate word rather than as a suffix to the pronoun (cf. note 2), the pronoun – i.e. the indirect object argument – can only be interpreted non-reflexively. In such cases, *self* enters into a coreferential relationship with the subject of the sentence; however, if it occurs to the right of the pronoun, *self* can also be interpreted coreferentially with the pronoun. These facts are illustrated in (i) below; *self* carries primary stress in each case, as does *haar* in (ib) when it serves as antecedent for *self*.

- (i) a. Marie_i SELF_i het haar_j ’n guns bewys.
 Marie herself has her a favour proved
 “Marie herself did her a favour”
 b. Marie_i het haar_j SELF_i/ SELF_j ’n guns bewys.

¹⁹ Following what seems to be common practice in grammatical analyses, it is assumed in this study that the object argument of a preposition is assigned its particular θ -role by the preposition in question. It is possible, however, that the θ -role is actually assigned by the verb (or the verb in conjunction with the preposition), especially in those cases

where the containing PP functions as the complement of the verb rather than as an adjunct. Another possibility, in such cases, is that the θ -role is not assigned specifically to the object of the preposition, but to the PP as a whole. These possibilities will not be examined further here (though cf. section 3.2.2 below).

²⁰ Given Ponelis's (1979) claim about the increasing use of the *-self* form of the reflexive in Afrikaans (cf. note 5), it could be argued that the use of this form in examples like (17) should be ascribed to the influence of English (although, interestingly, the *-self* form seems to be unacceptable in the corresponding English examples in (17)). Alternatively, it could be the case that *-self* is used in these examples to provide emphasis (cf. note 9), especially since the utterances in question can be spoken with the primary stress on *-self* (cf. *Marie_i beweer die boek is deur haarSELF_i geskryf*, *Jan_i sê daardie moontlikheid is deur homSELF_i oorweeg*). Unless otherwise stated, these remarks about the use of the complex form of the reflexive also apply to the examples in (19)-(21) and those in note 21. Cf. also section 3.2.1 below.

²¹ In cases where the preposition appears to assign the benefactive θ -role (cf. notes 16 & 17) to its pronominal complement, as in (i) below, the pattern of acceptability is the same as that illustrated in (19).

- (i) Jan_i het vir hom_j / hom_j 'n toebroodjie gemaak.
 Jan has for him a sandwich made
 "Jan made a sandwich for himself / him"

The pattern of acceptability in (19) is also found with prepositions like *om* ("around"), *onder* ("under") and *oor* ("over"), as illustrated by the examples in (ii) below. In each case, the preposition assigns some sort of goal θ -role to its pronominal complement. Unlike in (19), however, the activities expressed by the verbs in (ii) do not seem to involve (physical or abstract) displacement of the theme, but rather a 3-dimensional change or "deformation".

- (ii) a. Marie_i het die mantel om (oor) haar_j / haar_j gedraai (getrek).
 Marie has the cloak around (over) her twisted (pulled)
 "Marie pulled the cloak around (over) her"
 b. Jan_i druk die laken onder hom_j / hom_j in.
 Jan pushes the sheet under him in
 "Jan tucks the sheet in under him"

²² The item *om* which co-occurs with the infinitive marker *te* in infinitival clauses is assumed to be a non-finite complementiser, as in Dutch; cf. e.g. De Villiers (1975:224-233), Walraven (1975), Ponelis (1979:247, 429-433), Broekhuis et al. (1995), Zwart (1997:109-116).

²³ It is not clear how the difference in acceptability patterns between (21) and (22) can be accounted for. One possibility is to simply view the choice of reflexive form (simplex vs. complex) as an intrinsic lexical property of the particular preposition. However, this would mean that a preposition like *in* would have two incompatible properties, as illustrated in (21a) and (22c). Another possibility is to view utterances like those in (22) as idiomatic expressions, where some parts are lexically invariant (e.g. the preposition and the *-self* form of the pronoun in (22a)) and other parts can be filled by various items from a restricted set (e.g. the verb slot in (22a), which can be filled by verbs expressing a range of emotions or mental states, such as *dink* ("think"), *wonder* ("wonder"), *brom* ("mutter"), *sug* ("sigh"), *droom* ("dream"), *vloek* ("curse"), *gril* ("shudder"), etc. For idiomatic constructions, cf. e.g. Hopper & Traugott (1993), Kay & Fillmore (1999) and Wee & Ying (2008).

²⁴ Notice that the acceptability pattern in (23) is the same as that found with the two subclasses of semantically transitive verbs illustrated in (13) and (14) (cf. also note 15). This pattern is also shown by the examples in (i) below. Here, the pronominal complement of the preposition expresses the thematic relation of accompaniment (cf. Gruber 1965:55-58), a relation which is associated with an entity accompanying another entity who is performing an activity or experiencing some sort of state. It is not clear, however, whether this relation represents a distinct θ -role of accompaniment, or whether it should be subsumed under some other θ -role (cf. also note 16).

- (i) a. Jan_i het saam met *homself_i / *hom_i / hom_j in die koor gesing.
 Jan has along with himself / him in the choir sang
 "Jan sang with him in the choir"
 b. Marie_i beplan die konferensie saam met *haarsel_i / *haar_i / haar_j.
 Marie plans the conference along with her
 "Marie is planning the conference together with her"

- c. Jan_i het die grappie saam met *homself_i / *hom_i / hom_j geniet.
 Jan has the joke along with him enjoyed
 “Jan enjoyed the joke along with him”
- d. Marie_i was saam met *haarself_i / *haar_i / haar_j op skool.
 Marie was together with her at school
 “Marie went to school with her”

As illustrated in (i), the preposition typically co-occurs with the item *saam* (“along”, “together (with)”) when accompaniment is expressed. Omitting *saam* often leads to ambiguity – e.g., without *saam*, (ic) also allows the interpretation that Jan enjoyed the joke which involved someone else, viz. the entity referred to by the pronoun. In traditional grammars, *saam* is usually classified as an adverb, and in more recent analyses as a postposition (cf. e.g. Oosthuizen 2000, Biberauer 2008, De Vos 2009).

²⁵ In cases like (23d), it could be argued that the θ -role in question is rather that of instrument (cf. note 16), if this role is taken to apply to animate entities as well.

²⁶ Cf. notes 9 & 20 for the use of the morphologically complex form of the reflexive in Afrikaans. When spoken with primary stress in examples like those in (24), the *-self* form likely functions to provide emphasis; this also holds for the examples in (25) and the one in (ib) in note 28.

²⁷ The preposition *van* in this example is intended to have a representational reading (“he is represented in the photo”), not an agentive reading (“the photo was taken by him”) or a possessional reading (“the photo belongs to him”).

²⁸ It is not clear how to account for the difference in acceptability patterns between (25) on the one hand, and (26) and (27) on the other hand. Apart from the few observations below, this issue will not be examined further in this study. As regards (26), it could perhaps be argued that the pronominal complement of the preposition is actually assigned the θ -role of benefactive (or “malefactive”, taking into account the meaning of the sentence). From a thematic point of view, then, the pattern in (26) would be unrelated to the one in (25), which involves the theme role. Alternatively, it could be argued that the sequence [*nominal expression* + *PP*] in (26) represents an idiomatic construction (cf. note 23), where (i) the preposition slot is lexically invariant in that it can only be filled by *behalwe* (or its more formal synonyms *buiten*, *benewens*, *naas* and *behoudens*, in order of relative obsolescence), (ii) the pronominal complement of the preposition must take the *-self* form if it is used reflexively, and (iii) the nominal slot can only be filled by a quantifier or a quantified expression (e.g. *almal* (“all”), *enigeen* (“anyone”), *niemand* (“no-one”), *g'n mens* (“no person”). Note that the prepositions in question all have a quantifier-like “exclusion” function, the only prepositions in Afrikaans with this function. As regards (27), it would seem that sentences of this type involve verbs expressing activities which may be described as “subject-originated”, i.e. (deliberate) activities having the subject as originator; some more examples are *bekend maak* (“make known”), *kwytraak* (“let drop”), *meedeel* (“say, state”), *noem* (“mention”), *terughou* (“keep back”), *vertel* (“tell”) and *uitlap* (“reveal”). Verbs like *agterkom* (“realise, discover”) and *hoor* and *verneem* (“hear, gather, understand”) – usually classified as perception verbs – can also be used in the construction illustrated in (27), as shown in (ia). Paradoxically, however, *hoor* is found in the construction in (25) as well, as shown in (ib), although many native speakers do not have firm intuitions in this case.

- (i) a. Jan_i het iets (interessante dinge) oor homself_i / *hom_i / hom_j agtergekome (gehoor, verneem).
 Jan has something (interesting things) about himself / him discovered (heard)
 “Jan discovered (heard) something (interesting things) about himself / him”
- b. Jan_i het 'n (die) opmerking oor hom_i / hom_j tydens teetyd gehoor (*agtergekome, *verneem).
 Jan has a (the) remark about him during tea-time heard
 “Jan heard a (the) remark about him during the tea-break”

²⁹ The prepositions *betreffende*, *insake*, *omtrent* and *rakende* (“about, concerning”), and their obsolete synonym *nopens*, can also occur in the construction illustrated in (27), though usually in more formal contexts.

³⁰ *Probeer* is a so-called conative verb, i.e. a verb which indicates the effort of an entity in performing an activity or getting into some state. One of the grammatical properties of *probeer* is that it selects a non-finite complement clause which can, but need not, contain the non-finite complementiser *om* and the infinitive marker *te* (“to”), with *te* obligatory if *om* is present (and not standardly used without *om*). These facts are illustrated in (i); cf. also note 22.

- (i) a. Jan probeer om PRO die werk te doen.
 Jan tries COMP the work to do
 “Jan tries to do the work”
 b. Jan probeer PRO die werk te doen.
 c. *Jan probeer om PRO die werk doen.
 d. Jan probeer PRO die werk doen.

Two other conative verbs in Afrikaans are *poog* (used in more formal contexts) and its obsolete synonym *trag*; the idiomatic expression *'n poging aanwend* (“make an attempt”) is also used to express conativity. Unlike *probeer*, these items do not select an infinitival complement of the type in (id).

³¹ Cf. e.g. Carnie (2002), Radford (2009) for accessible discussions of PRO, control structures and control theory. As far as could be ascertained, no generative studies have yet been done on control structures in Afrikaans. Cf. section 3.2.4.2 below.

³² The matrix verbs in (32) and (33) both concern a future activity of an entity: *belowe* (“promise”) in the (a) sentences indicates a commitment by the agent to perform such an activity, whereas *vra* (“ask”) in the (b) sentences indicates an attempt by the agent to somehow influence (manipulate, direct, control, etc.) a future activity of some other entity.

³³ It will be argued in section 3.2.4.2 that the pronoun in sentences like (34) and (35) actually represents the object argument of the matrix verb (in the sense that it receives its θ -role from this verb); at the same time, though, it is semantically associated with the PRO subject of the infinitival clause.

In (34) the matrix verbs *laat* (“let”) and *maak* (“make”) indicate the nature of the agent’s involvement in some activity or state, where (i) this involvement ranges over intentional acts or conscious attitudes of coercion, permission, acceptance and effectuation, and (ii) the relevant activity or state can be entered into by either the agent or some other entity. In (35), the infinitival clause forms the complement of the “passive” perception verbs *hoor* (“hear”) and *sien* (“see”), which denote the experience or state of using a particular sense (as opposed to “active” perception verbs like *luister* (“listen”) and *kyk* (“look”), which denote the activity of using the relevant sense; cf. note 35). Both types of matrix verb in (34) and (35) select a bare infinitival complement, that is, a non-finite clause which lacks the overt complementiser *om* and infinitive marker *te*. Also, with both verb types, the pronoun can function as the direct object or the indirect object of the infinitival complement, as shown in (i) and (ii), respectively; in these examples, the pattern of acceptability is the same as that illustrated in (33).

- (i) a. Jan_i laat Piet_j *homself_i / homself_j / hom_i / hom_j / hom_k inspuit.
 Jan lets Piet himself / him inject
 “Jan lets Piet inject himself / him”
 b. Marie_i hoor Susan_j *haarsel_i / haarsel_j / haar_i / haar_j / haar_k verdedig.
 Marie hears Susan herself / her defend
 “Marie hears Susan defending herself / her”
- (ii) a. Jan_i maak Piet_j (vir) *homself_i / homself_j / hom_i / hom_j / hom_k ’n gereg voorberei.
 Jan makes Piet (for) himself / him a meal prepare
 “Jan made Piet prepare himself / him a meal”
 b. Marie_i sien Susan_j (vir) *haarsel_i / haarsel_j / haar_i / haar_j / haar_k die rok koop.
 Marie sees Susan (for) herself / her the dress buy
 “Marie sees Susan buying herself / her the dress”

³⁴ An interesting property of *laat*, one not shared by *maak*, is that it can select a passive infinitival complement. This is illustrated by the examples in (i), where the pronoun functioning as the direct object argument occurs in the derived subject position. Note that the infinitival clause can optionally contain a *deur* (“by”)-phrase and, less commonly, the passive auxiliary *word* (“be”). In such cases the reflexive standardly takes the simplex form, which can be interpreted non-reflexively as well. (The *-self* form of the reflexive is also commonly used, possibly under the influence of English or to add emphasis; cf. notes 5 and 9.)

- (i) a. Jan_i laat hom_i / hom_j oortuig (word) (deur Piet).
 Jan lets him persuaded (be) (by Piet)
 Jan is letting himself / him be persuaded (by Piet)”
 b. Marie_i laat haar_i / haar_j nomineer (word) (deur Susan).
 Marie lets her nominated (be) (by Susan)
 “Marie is letting herself / her be nominated (by Susan)”

³⁵ As illustrated in (i), the pattern of acceptability in (35) is also found in sentences where the infinitival clause functions as the complement of an “active” perception verb (cf. note 33). It should be noted, though, that many native speakers do not have firm acceptability judgements about examples like these, the interpretation of which seems to be very dependent on the context.

- (i) a. Jan_i luister na homself_i / *hom_i / hom_j belofes maak.
 Jan listens to himself / him promises make
 “Jan listens to himself / hom making promises”
 b. Marie_i kyk na haarsel_i / *haar_i / haar_j oefeninge doen.
 Marie looks at herself / her exercises do
 “Marie looks at herself / her doing exercises”

³⁶ The expression “small clause” is used in the literature to refer to a variety of constructions which (i) typically contain a subject argument and a non-verbal predicate, and (ii) are “smaller” than finite and infinitival clauses in the sense that “they do not contain complementizers, auxiliary verbs, tense markers, or elements similar to the [English – JO] particle *to* preceding the verb in an infinitive” (Fromkin 2000:133). Several proposals have been made about the internal structure of different types of SCs, and the general assumption seems to be that each type is a projection of some or other functional category; cf. e.g. Williams (1983), Hoekstra (1988), Anderson et al. (1995), Bowers (1997, 2001), Adger and Ramchand (2003), Den Dikken (2006), Citko (2008).

³⁷ For resultative verbs and structures, cf. e.g. Williams (1980), Carrier & Randall (1992), Levin (1993), Wechsler (1997), McKoon & Macfarland (2000), Rappaport Hovav & Levin (2001), Goldberg & Jackendoff (2004), Williams (2008), and the references in note 36. The schematic form [*subject verb [subject XP]*] of the utterances in (36) is productively used in the formation of (at least partially) idiomatic expressions in Afrikaans, where (i) the two subject slots are open (although the SC subject must be a reflexive in some cases; cf. the examples in (39) and (40)), and (ii) the verb and XP slots are restricted in some or other way (with a possible selection relationship between the verb and the XP); cf. also notes 23 and 28. A proper account of the lexical-semantic, grammatical and pragmatic restrictions involving the verb and the XP falls outside the scope of this study, however.

³⁸ These remarks hold for the examples in (37)-(40) as well; cf. notes 5 and 9.

³⁹ Many native speakers seem to find utterances like those in (37) and (38) less acceptable when the simplex form of the pronoun is used with a reflexive interpretation, preferring the *-self* form in such cases.

⁴⁰ The verbs in (40) are all syntactically intransitive (although those in (a,b) can be used transitively in other contexts); and, unlike inherently reflexive verbs, they cannot take a reflexive on its own as an object complement (cf. *Jan_i het hom_i geskree, *Marie_i drink haar_i, etc.).

⁴¹ Rappaport Hovav & Levin (2001:790-1) draw the following distinction between verbs denoting *externally caused* activities or events and those denoting *internally caused* activities or events: “Externally caused verbs describe eventualities conceptualized as being brought about by an external cause with immediate control over the eventuality. Core members of this class are verbs of change of state (*break, close, thicken*). ... In contrast, internally caused verbs describe eventualities that are conceptualized as arising from inherent properties of the verb’s argument. These properties are ‘responsible’ for the eventuality denoted by an internally caused verb. Such verbs include *laugh, play, speak, walk, buzz*, and *glow*, as well as a few verbs of change of state, such as *bloom, rot*, and *deteriorate*.” Cf. also McKoon & Macfarland (2000).

⁴² Afrikaans possessive pronouns are traditionally divided into two subclasses (cf. Ponelis 1979:83-4). Those of the first subclass – given in (41) – are used attributively and occur in a prenominal position (i.e. before the possessee, as in *my boek* (“my book”). The pronouns of the second subclass – cf. (i) below – can occur in a postnominal predicate position (i.e. after the possessee, as in *Die boek is myne* (“The book is mine”), and can also be used independently (i.e. without some other expression representing the possessee, as in *Myne is gesteel* (“Mine was stolen”). As shown in (i), plural possessive pronouns of the second subclass obligatorily occur with the item *s’n* (historically, “his”) (though cf. note 43), which most likely also represents some sort of possessive element but which cannot be used on its own. As illustrated in (ii), *s’n* is standardly used in possessive constructions with full nominal expressions, proper nouns, interrogative pronouns and relative pronouns which occur in a postnominal predicate position or are used independently.

- (i) 1st SG : myne (“mine”)
 1st PL : ons s’n (“ours”)
 2nd SG : joune (“yours”); u s’n (formal)
 2nd PL : julle s’n (“yours”), u s’n (formal)
 3rd SG : syne (M/N, “his”/“its”); hare (F, “hers”)
 3rd PL : hulle s’n (“theirs”)
- (ii) a. Die boek is die meisie s’n / Marie s’n.
 The book is the girl his / Marie his
 “It is the girl’s book / Marie’s book”
 b. Wie s’n is dit? / Ek ken ’n meisie wie s’n gesteel is.
 who his is it / I know a girl who his stolen was
 “Whose is it? / I know a girl whose was stolen”

In sentences where the possessive pronoun is used independently, it can be interpreted both reflexively and non-reflexively, as illustrated in (iii); used as a reflexive, the pronoun in this example can take as its antecedent either the subject or the indirect object.

- (iii) *Talking about presents:*
 Jan_i het vir Piet_j syne_i / syne_j / syne_k gegee.
 Jan has for Piet his given
 “Jan gave Piet his”

⁴³ With one exception, Afrikaans possessive pronouns standardly do not have morphophonologically distinct genitive case forms and are indistinguishable from personal pronouns displaying accusative case (cf. the table in (1)). The exception is the 3rd person singular masculine/neuter pronoun which takes the genitive case form *sy* (“his”). In some non-standard varieties of Afrikaans, notably those spoken in the north-western parts of South Africa, the pronoun used in possessive constructions commonly occurs together with the particle *se*, most likely some sort of possessive marker (POSS), as in *my se ma* (“my mother”) and *hulle se kinders* (“their children”). (This use of a possessive pronoun together with *se* is also found in the conventionalised opening words of the Lord’s prayer, *Onse Vader* (“Our Father”).) In the non-standard varieties at hand, the 3rd person singular masculine/neuter pronoun usually takes the form *hom*, and also occurs with *se* (although, less commonly, *se* can be omitted), as in *hom (se) huis* (“his house”). The use of *se* is the standard way of expressing a possessor relation (cf. note 16) in possessive constructions involving full nominal expressions (*die meisie se ma* (“the girl’s mother”)), proper nouns (*Jan se huis* (“Jan’s house”)), interrogative pronouns (*Wie se kind is jy?* (“Whose child are you?")) and relative pronouns (*die mense wie se huis verkoop is* (“the people whose house was sold”). Cf. Den Besten (1978:28-38) and Oosthuizen & Waher (1994) for descriptions of Afrikaans possessive constructions within a generative framework, and Le Roux (1923), Ponielis (1979) and Van Schoor (1983) for non-generative descriptions. Cf. also Barbiers & Bennis (s.a.), Corver (2003) and Corver & Van Koppen (2009) for analyses of related facts in several Dutch dialects, and Ponielis (1979:126-9) and Quirk et al. (1985:321-2) for the various types of meaning that can be expressed by possessive pronouns in Afrikaans and English, respectively.

It was pointed out in note 3 that, in some styles, vocative items which are integrated into sentence structure are used in place of elements belonging to the traditional lexical category of reflexive pronouns. Similarly, such integrated vocative items can occur in place of possessive pronouns which are used reflexively. In such cases, the vocative item shows exactly the same characteristics regarding co-occurrence with the particles *se* and *s’n* as full nominal expressions and proper nouns which are used in possessive constructions (cf. above and note 42). These facts are illustrated in (i).

- (i) a. Mamma moet Mamma se hare was.
 Mommy must Mommy POSS hair wash
 “Mommy has to wash Mommy’s/her hair”
 b. Hierdie boek is Oom s’n.
 this book is Uncle yours
 “This is Uncle’s book”
 c. *Talking about birthdays:*
 Dokter s’n is Saterdag.
 doctor his is Saturday
 “Doctor’s is on Saturday”

⁴⁴ For an apparent exception to this general rule, cf. the example in (45a). Sentences of the types illustrated in (43) – and also in (44) – often contain constructions which are (partially) idiomatic or conventionalised, specifically where a particular verb (or verbs from a restricted set) selects a nominal complement with an open possessive pronoun slot and a lexically invariant noun (i.e. possessee) slot, as in (ia); where the nominal expression forms part of a PP, the preposition slot is also often restricted to a particular preposition, as in (ib). Cf. Ponelis (1979:229-30) for further examples, and also notes 23 and 28.

- (i) a. julle ore spits (“prick up your ears”)
 sy laaste asem uitblaas (“give his last breath”)
 haar bewussyn verloor/herwin (“lose/gain (her) consciousness”)
 b. agter hulle rug beledig/slegsê (“insult behind their backs”)
 uit sy maag uit lag (“laugh from his belly”)
 na haar asem snak (“gasp for (her) breath”)

⁴⁵ The item *eie* (“own”) is often used together with possessive pronouns, and also with the possessive marker *se* (cf. note 43). It is not clear to which category *eie* belongs and what its exact function(s) are. One possibility, worked out by Barbiers and Bennis (s.a.:2-3) for the analogous item *eigen* in some Dutch dialects, is to analyse it as a non-pronominal possessive marker – presumably a functional head – which takes a possessive pronoun as its specifier. Another possibility is to analyse it as an adjective which is used to indicate, amongst other things, a biological relationship (*my eie kinders*, *nie my stiefkinders nie* (“my own children, not my stepchildren”)), freedom from control (*sy eie kop volg* (“follow his own head”)), and exclusivity (*vir julle eie gebruik* (“for your own use”)). It should be noted in this regard that the form *eie* can also be used pronominally, as in *My eie (kinders) is al getroud* (“My own (children) are already married”) and *Sy doen dit uit haar eie (oortuiging) uit* (“She’s doing it out of her own (conviction)”). A third possibility, assumed by Ponelis (1979:127), is that *eie* is used to provide emphasis, specifically to strengthen or intensify the possessive pronoun (and also, presumably, the possessor expression occurring with the possessive marker *se*). (In this regard, then, Ponelis views *eie* as functionally similar to the suffix *-self*; cf. notes 5 and 9.) A fourth, related possibility could be that *eie* represents a contrastive focus marker (or conceivably a possessor focus marker), typically spoken with primary stress, as in *my EIE huis*, *nie iemand anders s’n nie* (“my OWN house, not someone else’s”). This possibility could perhaps explain the unacceptability of the examples in (i), where the possessee does not easily lend itself to a contrastive interpretation. However, it could also be argued that the italicised sequences in (i) are fixed idiomatic expressions with no slot for *eie*, whereas such an *eie* slot is required in, for example, (43d).

- (i) a. *Jan het *uit sy eie maag uit gelag*.
 Jan has out his own belly out laughed
 b. *Marie het die nuus *in haar eie hart bewaar*.
 Marie has the news in her own heart preserved
 c. *Jan het die huis *in sy eie gedagtes gesien*.
 Jan has the house in his own thoughts seen
 d. *Marie het vir Susan *agter haar eie rug beledig*.
 Marie het for Susan behind her own back insulted

The four possibilities referred to above will not be examined further here. There are, however, two further observations that may be worth mentioning. First, when used in a prenominal position, i.e. before the possessee, *eie* cannot be split from the possessive pronoun or the possessive marker *se*; in other words, the sequence [*possessive pronoun / se + eie*] forms an inseparable unit. Second, as was pointed out in note 42, possessive pronouns display distinctive forms when they are used in a postnominal predicate position or in sentences without an expression representing the possessee: SG pronouns take the ending *-ne* (*myne*, *joune*, *syne*) and PL pronouns combine with the element *s’n* (*ons s’n*, *julle s’n*, *hulle s’n*). *S’n* is likewise used with full nominal expressions, proper nouns, interrogative pronouns and relative pronouns in these constructions. However, as illustrated in (ii), when *eie* is used in the possessive constructions at hand, the possessive pronouns occur without *-ne* and *s’n*, and all the other possessive expressions have *se* in place of *s’n*.

- (ii) a. Die huis is sy eie / *syne eie.
 b. Ons eie / *ons s’n eie is ook gesteel.
 c. Die boek is die meisie se eie / *die meisie s’n eie.
 d. ³Wie se eie / *wie s’n eie is te koop?

⁴⁶ Where a sentence like (44b) contains a pronominal direct object argument, as in (i) below, the possessive pronoun is still interpreted coreferentially with the direct object. Note, however, that the direct object can be interpreted in two ways in this case: (a) reflexively, taking the subject as its antecedent, and (b) non-reflexively, independently referring to some other entity. If (a), the possessive pronoun is coreferential with the subject, and if (b), coreferential with the non-reflexive direct object.

- (i) a. Jan_i het hom_i in sy_i voet / *sy_j voet geskiet.
 b. Jan_i het hom_j in *sy_i voet / sy_j voet geskiet.

Notes to Chapter 3

¹ Besides semantic devices, pragmatic devices drawing on non-linguistic information can also play a role in establishing the interpretation of a reflexive pronoun (or the interpretation of a pronoun as reflexive or non-reflexive) in a given utterance. Evidently, such information is also necessary to determine the referents of expressions that (can) function as antecedents for reflexives. The role of non-linguistic information is briefly addressed towards the end of this section; cf. also note 15 to Chapter 2 and the references cited there.

² Cf. e.g. Chomsky (1995); Freidin (1997); Hornstein et al. (2005).

³ In Chapter 4, we will briefly consider the possibility of extending the proposed analysis in order to account for the coreferential relationship between an antecedent and other expressions that can (and in some cases must) receive an anaphoric interpretation.

⁴ In connection with Hypothesis B, cf. also Pesetsky & Torrego (2004, 2007).

⁵ Heinat's analysis of reflexive and non-reflexive pronouns as syntactic compounds is grounded in the framework of Distributed Morphology, as set out in e.g. Halle & Marantz (1993); cf. also Heinat (2006a:ch. 3; 2006b:21-28) and the references cited there. In an earlier analysis, Zwart (2002) also put forward the idea that these two types of pronoun are formed from the same root in the course of a syntactic derivation (cf. the discussion below in the text); Zwart (2002:275) refers to this root as "the generic variable referential element PRONOUN."

⁶ Unless otherwise stated, the expression "φ-features" refers to person, number and gender features.

⁷ Cf. section 2.3.1 for a discussion of the constructions illustrated in (1) and (2).

⁸ Following Kayne (1994), a projecting head is taken to be the leftmost sister at the point of merger. Hence the N and the D precede the $\sqrt{\text{PRON}}$ in (3). This is in contrast to the corresponding structures in Heinat (2005, 2006a,b) where the $\sqrt{\text{PRON}}$ precedes the N/D. A more substantive difference with Heinat's approach concerns the nature of what is labelled "D" in (3b). In the present study, this D is not understood as encoding the notions 'definiteness' and 'specificity' which are standardly associated with the category D in the generative literature (cf. Abney 1987; Bernstein 2001). The precise nature of the D in (3b) will not be examined here and is left as a topic for further research. Note that, in line with note 6, [v/u-φ] is used as a convenient shorthand for the features [v/u-person], [v/u-number] and [v/u-gender] in (3) and in subsequent structures.

⁹ Or in the specifier position of TP (or IP) in analyses that predate the Predicate-internal Subject Hypothesis; cf. e.g. Koopman & Sportiche (1991) and Hornstein et al. (2005).

¹⁰ Cf. section 3 of Chapter 1 for the standard definition of c-command.

¹¹ Cf. Kayne (2002) for an analysis along similar lines.

¹² Zwart (2002:284) states that the antecedent in the configuration in (4) “needs to move out of XP into a position in which it may acquire features indicating its argument structure status (‘thematic role’) and grammatical function (‘Case’).” As will become clear below, such operations are not posited in the proposed nominal shell analysis.

¹³ Or perhaps only its value, if one thinks of features as attribute:value pairs; this is however not a possibility that Zwart addresses.

¹⁴ As pointed out in section 2.3.1, the pronominal complement of inherently reflexive verbs like *misgis* is standardly used without the suffix *-self*. However, the morphologically complex form of the pronoun is commonly (and increasingly) found in everyday speech and also in written texts, a phenomenon which Ponelis (1979:83, 88) ascribes to the influence of English. We return at the end of this section to the alternation between the *-self* and the *-self-less* form of the pronoun in constructions containing an inherently reflexive verb.

¹⁵ The term “antecedent” is used in an informal way in (8) to refer to a nominal expression that could potentially enter into a coreferential relationship with the reflexive pronoun. In terms of the analysis proposed below, at this point of the derivation the expression in question has not yet been semantically identified as the antecedent of the reflexive pronoun, that is, in the technical sense, as the expression with which the reflexive is coreferentially linked.

¹⁶ Other pioneering works in this regard include Postal (1969); Brame (1981, 1982); Szabolcsi (1984); Kuroda (1988); Stowell (1989); Giorgi & Longobardi (1991); Marantz (1995); Longobardi (1999).

¹⁷ As regards the category v^* referred to in (9), Chomsky (2006:12) states that “verbal phrases are of the form v -VP, where v can be v^* , the functional category that heads verb phrases with full argument structure”; he (2005b:10) mentions “transitive and experiencer constructions” as examples of phrases with a v^* as head. In contrast, v forms the head of “unaccusatives and passives”, according to Chomsky (2006:12, 15). Cf. also Richards (2007b).

¹⁸ Cf. e.g. Kratzer (1996); Baker (2003); Folli & Harley (2004).

¹⁹ Following Baker (2003), Zeller (2008:224) states that “the expletive is required for purely morphological reasons; it fills the subject prefix-slot and must be attached to the verb stem at PF if no SM is present.”

²⁰ Zeller (2008: n. 1) provides the following glosses of the grammatical morphemes in (10): SM = subject marker, DIS = marker of the disjoint verb form, PST = (recent) past tense, and EXPL = expletive; the numbers mark specific noun classes in Bantu.

²¹ For presentational focus, cf. e.g. Breivik (1981); Prince (1988); Birner & Ward (1998); Ward & Birner (2001); Erteschik-Shir (2007); Hartmann (2008); Cruschina (2012); and the references in note 22.

²² Informally stated, contrastive focus is used to identify or emphasise one entity from a set of (explicitly stated or contextually implied) alternatives for which a proposition holds true. Cf. e.g. Rochemont (1986); Rochemont & Culicover (1990); É. Kiss (1998); Gundel (1999); Roberts (1998); Kenesei (2005) and the references in note 21.

²³ Example provided by Marianna Visser (p.c.).

²⁴ For an alternative account, cf. Halpert (2012).

²⁵ Ponelis (1979:81-83) and Heinat (2006a:91) state that the morphologically complex form of the pronoun indicates emphasis rather than reflexivity; cf. notes 5 and 9 to Chapter 2. Zwart (2002:273) likewise argues that *-self* represents a focus marker; for supporting evidence from English diachronic data, cf. Keenan (2009). Being a focus marker does not imply, however, that *-self* is actually used in present-day speech to express emphasis, unless, of course, it is spoken with primary stress. Rather, from a synchronic perspective, it is likely that *-self* represents a heavily bleached focus marker which originally served to emphasise the coreferential relationship between a reflexive and its antecedent. Note that this view does not affect the identity focus analysis proposed in the text, since identity focus does not need to be emphatic.

²⁶ The proposal in (9) suggests that the n could also serve to express definiteness; alternatively, it is possible that this property is expressed by a separate light noun. Cf. Chomsky (2006) for the idea that n forms the locus of the case feature of a nominal expression. The link between case and definiteness/specificity is particularly striking in

languages which display definiteness/specificity-driven differential object marking. In Turkish, for example, a non-specific object is unmarked for case, contrasting with a specific object which necessarily bears an accusative marking (cf. Öztürk 2008).

²⁷ As in the case of (6), the term “antecedent” is used in an informal way in Hypotheses C and D; cf. note 15.

²⁸ Cf. Chomsky (2000:122-6; 2001:3-6; 2004:113-114) for the concepts ‘probe’ and ‘goal’. It is assumed in this study that phrases containing an unvalued feature(s) can also function as probes, alongside heads. For arguments in support of this view, cf. Heinat (2006a:ch. 2) and the references cited there.

²⁹ There seem to be two ways in which the devices of the semantic component can “get access” to a particular syntactic structure. The conventional view in Minimalist Syntax is that chunks of syntactic structure are transferred to the semantic component at specific stages in the derivation, specifically at every stage where a so-called phase has been completed (Chomsky 2001, 2005b). Another possibility is that semantic devices simply come into play at any given point where a structure contains sufficient information to be semantically interpreted. This issue will be left open here.

³⁰ These grammatical definitions of “reflexive construction” and “non-reflexive construction” will be broadened in sections 3.2.2 – 3.2.6 below. At the end of the present section, attention will also be given to a construction that may be described as “pragmatically reflexive”.

³¹ Deleted features are henceforth indicated by means of strikethrough, as in (15).

³² In connection with θ -role assignment, cf. also Lee-Schoenfeld (2007) and Boeckx et al. (2010).

³³ Put simply, the A-over-A Condition (and its more recent incarnation, Minimality) states that in a structure such as [B [A₁ [A₂]]], where B can ambiguously enter into a grammatical relationship with either A₁ or A₂, the relationship must involve the higher, more inclusive element A₁. Cf. e.g. Chomsky (1964); Kayne (1994); Boeckx & Hornstein (2007); Hornstein (2009); Roberts (2010).

³⁴ Adopting the approach of Marantz (1997) and Chomsky (2004:122), Biberauer & Roberts (2006:282) characterise V-to-v raising as “a standard and possibly universal operation”. Cf. also Myler (2009).

³⁵ Cf. e.g. Hornstein et al. (2005); Chomsky (2006).

³⁶ Cf. the comments about the A-over-A condition above in the text and in note 33. Cf. e.g. Richards (2011) for the idea that a structure (specifically, a phase) is spelled out as soon as it can be, in other words, at the point where all the features contained in that structure have been valued.

³⁷ In terms of Rizzi’s (2008) proposals, the second option would correspond to “external search”, whereas the more conventional probing operation would instantiate “internal search”.

³⁸ Cf. e.g. Biberauer (2003, 2009); Biberauer & Roberts (2005); Biberauer et al. (2008); Biberauer et al. (2009); Biberauer & Roberts (2010); Roberts (2010).

³⁹ It remains to be clarified whether the movement diacritic is associated with one or more specific ϕ -features (i.e. person, number or gender), or with the cluster of ϕ -features. It will be proposed in section 3.2.4 that some light verbs and non-finite T are “defective” in the sense that they contain only one of the ϕ -features in question, namely number, and that the \wedge is associated with this single feature.

⁴⁰ For Agree, cf. Chomsky (2000, 2001). Biberauer & Roberts (2010:13) provide the following definition:

- (i) α Agrees with β where:
 - (a) α asymmetrically c-commands β
 - (b) there is no γ non-distinct in formal features from α such that γ c-commands β and α c-commands γ .

⁴¹ Cf. Biberauer (2003) for an analysis of such leaking phenomena in Afrikaans.

⁴² According to Rizzi's (1997) Split-CP hypothesis, the left-periphery is the locus of various inflectional and discourse-related features, each associated with a specific head (Force, Top(ic), Foc(us), Fin(iteness)). Cf. also Beninca' & Poletto (2004); Paoli (2006); and, for Afrikaans, Botha & Oosthuizen (2009). For the sake of simplicity, this expansion of the CP into several layers of functional heads will not be incorporated into the present discussion.

⁴³ Cf. e.g. Vikner (1995); Biberauer & Roberts (2006). For an early analysis involving movement of the subject into the CP domain, cf. Den Besten (1977).

⁴⁴ It is left open here whether such a discourse-related feature is linked to the ϕ -feature complex of the *n*-head or whether it defines a further structural layer inside the subject *n*P, that is, a projection headed by a distinct topic-*n*, analogous to the Top-head postulated by Rizzi (1997) within the extended CP domain.

⁴⁵ For the idea that the T receives its features from the C, cf. Chomsky (2004, 2005b). Ouali (2008) distinguishes Donate and Share as two types of feature transfer. Cf. also Biberauer & Roberts (2010).

⁴⁶ Cf. the references in note 43 in connection with C-to-T feature spreading. The idea of a T entering the derivation without a tense specification does seem rather counter-intuitive, however.

⁴⁷ Cf. e.g. Holmberg (1986) and Vikner (1995) for the idea that Cs are both verbal and nominal in nature.

⁴⁸ Cf. section 2.3.1, note 5.

⁴⁹ As noted in section 2.3.1, there are at least two subclasses of verbs where the reflexive interpretation is normally disallowed. The first comprises verbs which express movement of one entity relative to another (usually also moving), with the former remaining in a position before, after or alongside the latter or changing from one of those positions to another. The verbs of the second subclass express some sort of action by one entity on another, possibly involving physical contact, and causing the latter to move away from or towards the former.

⁵⁰ Various raising and agreement operations are involved in the derivation of the *v*P associated with (6a), including V-to-*v* raising, VP raising into the (first) specifier position under the *v*P, and several instances of feature-valuation. For ease of presentation, the effects of these operations are not indicated in (23).

⁵¹ This is a simplification, at least as far as surface order is concerned. Based on Biberauer & Folli (2004), De Vos (2009:2) notes that in Afrikaans "locative semantics correlates with prepositional, P-DP, orders while directed motion interpretations correlate with postpositional, (P)-DP-P, orders." Cf. also Biberauer (2008) and Biberauer et al. (2008); Koopman (1997) and Den Dikken (2010) provide a similar observation for Dutch.

⁵² Cf. e.g. Van Riemsdijk (1990); Koopman (1997); Biberauer (2008); Biberauer et al. (2008); Den Dikken (2010); De Vos (2009); Svenonius (2008).

⁵³ For an earlier analysis employing a light *p*, cf. Van Riemsdijk (1990).

⁵⁴ It is assumed in this study that the object argument of a preposition is assigned its particular θ -role by the preposition in question; cf. note 19 to Chapter 2 for alternative approaches.

⁵⁵ It is also possible that the *p* has a "free-standing" movement diacritic (or EPP feature) of the type discussed by Biberauer & Roberts (2006) and Biberauer (2010); for this view, cf. also Citko (2008).

⁵⁶ For ease of presentation, the percolation of the various feature values are not indicated in (29) and subsequent structures.

⁵⁷ Because of the tentative nature of the proposal about a [topic-disc] feature as part of the make-up of the subject *n*₂P¹ *die man*, this feature is not indicated in the structures in (27)-(29) and (32).

⁵⁸ It might well be that the different patterns in (37) correlate with subtle differences in meaning. This issue will not be examined here.

⁵⁹ This proposal is similar to the one put forward by Jayaseelan (2001), who posits a Topic phrase (as well as a Focus phrase) inside of the *v*P.

⁶⁰ Cf. also Ko (2005) for arguments against the idea that a constituent forming part of the specifier of a head H can be raised into a second specifier position of H.

⁶¹ The acceptability pattern illustrated in (46b) is also found with prepositional expressions conveying the notion of accompaniment (see note 24 to Chapter 2). In such cases, the preposition typically occurs with the item *saam*, which is usually classified as an adverb in traditional grammars. In more recent studies of postpositional and circumlocutional constructions, however, the item *saam* that is commonly used together with the preposition *met* or in place of its morphological alternant *mee* is analysed as a postposition (see e.g. Oosthuizen 2000; Biberauer 2008).

⁶² The possibility of a (very subtle) meaning difference between (50a) and this variant is left open here.

⁶³ Cf. Nunes (2001) for the idea of sideward movement, and Citko (2005, 2008) for various types of merge operations. Cf. also note 37.

⁶⁴ The ϕ -features carried by the *v* are presumably valued by an appropriate goal within the c-command domain of the *v*, and the movement diacritic associated with these features are taken to trigger raising of the goal, with the VP pied-piped along. It is not clear, however, which expression enters into a ϕ -relationship with the *v*. One possibility is that the goal is the *pP met die man*. However, being uninterpretable, the ϕ -features carried by this *pP* were deleted after valuation by the *n₂P* in (57), which would rule out the *met-pP* as a possible goal. Another possibility is that the *v* targets the *n₂P die man* as a goal for ϕ -valuation purposes. If this is the case, raising would then entail pied-piping of both the categories containing the *nP*, namely the *pP* and the VP. This second possibility will be assumed here as a working hypothesis, but its merit is left as a topic for further investigation.

⁶⁵ Or benefactive; cf. Chapter 2, note 16.

⁶⁶ Cf. Chapter 2, note 18 for more examples of ditransitive verbs in Afrikaans.

⁶⁷ The preposition *aan* (“to”) can also be used in place of *vir* in double object constructions, although they are not interchangeable in all contexts. For example, where the verb expresses some notion of direction and/or transfer, *vir* and *aan* are both possible, as in (ia) below; but when no clear direction/transfer is expressed, *aan* is disallowed, as indicated in (ib). The difference in grammaticality between the (a) and (b) sentences in (ii) shows that this restriction on the use of *aan* also holds for direct object-indirect object constructions. Cf. also Raidt (1976); Ponelis (1979).

- (i) a. Ek stuur (aan/vir) hom ’n boek.
I send to/for him a book
“I’m sending him a book”
b. Ek koop (*aan/vir) hom ’n boek.
I buy to/for him a book
- (ii) a. Ek stuur ’n boek aan/vir hom.
I send a book to/for him
“I’m sending a book to him”
b. Ek koop ’n boek *aan/vir hom.
I buy a book to/for him

⁶⁸ Unless, of course, it is argued that the light verb contains two case features. The idea that a functional category can contain two separate case features, in this instance both [acc-case], seems improbable, however.

⁶⁹ The idea that the indirect object in a double object construction is not (just) a nominal expression, is hardly new. Cf. e.g. Baker (1988) who posits a phrase headed by a null preposition; cf. also Kayne (1984); Den Dikken (1995, 2010); Harley & Ritter (2002).

⁷⁰ Languages which lose nominal inflection often develop some or other adpositional means for expressing a particular grammatical feature (Faarlund 2001). For example, loss of case inflection usually gives rise to a more rigid word order and/or the development of adpositional markers (Allen 1995; Ledgeway 2012). It could therefore well be that the light *p* represents an instance of “upward grammaticalisation” of the nominal expression’s case feature; cf. e.g. Roberts & Roussou (2003).

⁷¹ This suggestion seems to tie in with a similar proposal in the literature regarding the use of *vir* with direct objects in Afrikaans. This item can optionally precede the direct object without affecting the meaning, and seems to be the preferred option when the direct object is in the form of a pronoun or a proper noun; cf. the examples in (i). It has been proposed by Molnarfi (1997) that *vir* serves as an (accusative) case marker in such cases. See also Raidt (1969) and Ponelis (1979) for the various factors conditioning the use of the direct object *vir*, and Raidt (1976) for the historical development of *vir*.

- (i) a. Ek ken (*vir*) jou.
I know for you
‘I know you’
b. Hy nooi (*vir*) Susan na die partytjie toe.
he invites for Susan to the party to
‘He’s inviting Susan to the party’

Interestingly, *vir* can occur with *both* the indirect object and the direct object in a double object construction, as shown in (ii). This sentence is ambiguous between two readings: (a) taken as a double object construction, *Jan/hom* represents the indirect object, and (b) taken as a regular direct object-indirect object construction, *Susan/haar* represents the indirect object.

- (ii) Ek gun *vir* Jan/hom *vir* Susan/haar.
I grant for Jan/him for Susan/her
‘I think Jan/he deserves Susan/her’, or ‘I think Susan/she deserves Jan/him’

⁷² Cf. e.g. Aboh (2010) and the references in note 69 for analyses of “defective” prepositions.

⁷³ If the verb *gun* is taken to have only one [c-select] feature, the merger of the indirect object n_2P in (68) and the direct object n_1P in (67) with this verb would presumably have to take place concurrently. In other words, deletion of the [c-select] feature would have to wait until both mergers have taken place. Alternatively, it could be proposed that the verb contains two [c-select] features, one for each of its arguments, and that the relevant feature is deleted when the particular argument is merged into the verbal expression. This issue will not be discussed further here.

⁷⁴ For a similar operation, cf. the derivation of (54b) discussed in section 3.2.2.

⁷⁵ For the link between ϕ -features and case, and specifically the claim that case can only be valued by an element carrying a complete set of ϕ -features, cf. e.g. Chomsky (2001) and Citko (2008); for the defective nature of infinitival T, cf. Richards (2011).

⁷⁶ In English, at least, raising verbs are sensitive for number, as in *He seems to like her* vs. *They seem to like her*.

⁷⁷ One seemingly plausible approach to this issue might be to appeal to the so-called “defective goal” analysis of Roberts (2010). On such an analysis, what would need to be established is whether the v/V TE+*haat* constitutes a defective goal for the non-finite T. Support for the idea that TE+*haat* is in some sense defective can be drawn from a comparison of the behaviour of *om-te* vs. *bare-te* clauses.

⁷⁸ For similar approaches to PRO, cf. e.g. Manzini (1983); O’Neil (1995); Hornstein (1999).

⁷⁹ Cf. George & Kornfilt (1981) for the idea that there is a direct link between case assignment and the nature of the ϕ -features associated with a given head.

⁸⁰ Cf. also Watanabe (1993); Martin (2001); Hornstein et al. (2005) for the idea that PRO is assigned null case. For arguments against this approach, cf. e.g. Manzini & Roussou (2000); Cecchetto & Oniga (2004); Landau (2006); Roussou (2009).

⁸¹ Or more precisely, it lacks a θ -feature that could enter into an agreement relationship with a nominal complement. It is of course possible that *weier* has a proposition θ -value to assign to its infinitival complement; since this possibility does not bear on the present discussion, it will not be investigated further here.

⁸² Based on the foregoing discussion of the light verbs associated with subject and object control verbs and the discussion in section 3.2.4.1 of the light verb associated with raising verbs, the featural composition of these three light verbs can be contrasted as follows:

raising-<i>v</i>	subject control-<i>v</i>	object control-<i>v</i>
lacks a θ -feature	contains a θ -feature	contains a θ -feature
incomplete set of φ -features	incomplete set of φ -features	complete set of φ -features
lacks a case feature	lacks a case feature	contains a case feature

⁸³ Note that this claim is not compatible with the “reduced structure” restructuring analyses of such constructions proposed by e.g. Wurmbrand (2001, 2004). On such analyses, an infinitival clause without an overt C lacks a CP layer. This would raise the question of how the PRO is assigned (null) case. While this problem does not arise with the present proposal, a remaining complication that needs to be addressed concerns the “size effects” associated with restructuring complements (cf. Wurmbrand 2001, 2004; Hinterhölzl 2005).

⁸⁴ Cf. section 2.3.3 for further examples of this type of construction.

⁸⁵ To simplify the discussion, the possibility of discourse-related raising of the n_3P *die man* is not taken into account here.

⁸⁶ For references, cf. notes 36 and 37 to Chapter 2.

⁸⁷ For discussion and criticism of this typology, cf. Citko (2008).

⁸⁸ This is similar to the claim in section 3.2.3 that the light *p* associated with the indirect object in double object constructions fails to select a PP complement headed by a lexical P.

⁸⁹ The *sc-v* under discussion is one member of a class of predicational heads, one which is maximally stripped down in featural terms. It is worth noting that the heads employed in analyses of other predicational structures are featurally richer (cf. e.g. Citko 2008).

⁹⁰ Cf. Grimshaw (1991) for the idea that a clause has a verbal spine.

⁹¹ An account of the internal structure of APs falls outside the scope of this study and will not be attempted here. For recent proposals in this regard, cf. Cinque (2010) and the references cited there.

⁹² This is a potentially problematic assumption if one were to argue that *skree*, as used in (115a), is an intransitive verb. (That it can be used transitively is indicated by sentences such as *Hy skree haar naam/die bevel* (“He is shouting her name/the command”).) An alternative approach would be to analyse *skree* as an inherently reflexive verb in sentences like (115a) (cf. section 2.3.4 for similar examples); it was argued in section 3.2.1. that such verbs carry a θ -feature with a null value.

⁹³ Though cf. note 8 in connection with the nature of the D.

⁹⁴ The *pos-n* is most likely the locus of the possessive marker *se* which is standardly used with full nominal expressions, proper nouns, interrogative pronouns and relative pronouns to express a possessor relation; cf. the discussion in note 43 to Chapter 2. As pointed out in that note, *se* is also used with possessive pronouns in some non-standard varieties of Afrikaans, as in *my se ma* (“my mother”) and *hulle se kinders* (“their children”). This phenomenon follows straightforwardly from the claim that (the *n* containing) the PRON in a structure like (190) is raised to the *pos-n*.

⁹⁵ In (122c-e), the relevant quantity values are specified by the quantifier expressions *al*, *albei* and *elkeen*. Cf. the discussion of floating quantifier constructions in section 4.2.2 below.

⁹⁶ This does not imply that the use of *ei* necessarily brings about disambiguation. Consider for example the sentence in (i). Here, despite the occurrence of *ei*, it seems that the possessive pronoun *sy* can be interpreted as in (126a), i.e. as being either coreferential with the subject *die man* or taking its reference from some other entity identified in the discourse context. It must however be stressed that judgements are not at all firm in such cases, and

that there is a very strong preference for the coreferential interpretation. (Cf. note 45 to Chapter 2 for comments in connection with the item *eie*.)

- (i) Die man_i verf sy_i / [?]sy_j eie huis.
 the man paints his own house
 “The man paints his own house”

⁹⁷ It also seems possible for *eie* to be used as a determiner, specifically a quantifier of some sort, as in *Die man het sy eie, eerste en enigste motor verkoop* (“The man sold his own, first and only car”).

Notes to Chapter 4

¹ Cf. Ponelis (1979), Heinat (2006a,b), Zwart (2002), and the remarks in note 25 to Chapter 3. Cf. Keenan (2009) on the diachrony of the corresponding form in English.

² The remarks below also hold for *algar*, an obsolete variant of *almal*.

³ These are the salient interpretations when (1a,b) are spoken with the normal, non-emphatic sentence stress pattern. However, these sentences are in fact ambiguous: *almal* in (1a) and *die man* in (1b) can both be interpreted as the object if they receive the primary stress and the sentence is spoken with comma intonation (*ALMAL*, *bewonder die meisie*; *DIE MAN*, *bewonder almal*).

⁴ Other quantifier expressions which can be used in place of *almal* in sentences such as (1a,b) include *albei/altwee/beide* (“both”) and *elk(een)* (“each (one)”). Whereas *almal* refers to three or more entities, *albei/altwee/beide* each refers to exactly two and *elk(een)* to two or more entities. Cf. Oosthuizen (1988:section 2.3.3) for the lexical and syntactic properties of various quantifier expressions in Afrikaans.

⁵ Cf. e.g. Sportiche (1988), Bobaljik (2003), Boškovič (2004) and Cirillo (2009) for various approaches to the analysis of floating quantifier constructions. For an early analysis treating Afrikaans floating quantifiers as anaphors, cf. Oosthuizen (1988, 1989).

⁶ The form *almal* can also be used prenominal in some non-standard varieties of Afrikaans, that is, to the left of the expression with which it is associated semantically. In such varieties, a sentence like (2b) would be grammatical with *almal* interpreted as quantifying the set of entities referred to by the object *die meisies* (though not, analogous to (2b), as co-referring to the entities picked out by *die meisies*). Cf. also notes 13 and 16.

⁷ Cf. e.g. É. Kiss (1998), Kenesei (2005).

⁸ Note that, in contrast to what is being claimed here about the feature composition of the q-*n*, each of the light nouns that were introduced in Chapter 3 (i.e. the identity focus *n*, the pos-*n* and the con-*n*) contains a θ -feature and a case feature.

⁹ In order to account for the eventual raising of the subject into the specifier position of the CP in subject-initial main clauses, it was tentatively proposed in section 3.2.1 that the C contains an unvalued discourse-related feature which is valued by the corresponding feature [topic-disc] carried by the subject *nP*; the C’s feature is moreover associated with a movement diacritic which triggers raising of the subject *nP* into [spec, C]. These proposals have been employed throughout the discussion in Chapter 3, and are adopted here as well. As a working hypothesis, the *nP die mans* is accordingly represented in (4) as containing the feature [topic-disc]; however, the exact functional head with which this feature is associated remains to be clarified (cf. note 39 to Chapter 3). Cf. also the discussion in (7c) below.

¹⁰ This is in contrast to the identity focus *nP*, the pos-*nP* and the con-*nP* that were introduced in Chapter 3: each of these constituents contains a θ -feature that has to be valued in the course of the derivation.

¹¹ The second option is common in standard varieties, and also in written texts, when the subject takes the form of a pronoun, as shown in (ib). This phenomenon will not be examined further here; cf. Oosthuizen (1989) for the relevant data.

- (i) a. Hulle bewonder almal die meisies.
they admire all the girls
“They all admire the girls”
- b. Hulle almal bewonder die meisies.

¹² In addition to *al*, the universal quantifier *alle* can also be used in prenominal position (cf. (ia) below). The three properties of *al* mentioned further on in the text also hold for *alle*. However, *alle* (which can also be translated as “all”) differs from *al* in two, related respects. Firstly, it is used with a plural noun that occurs without a determiner or a numeral (cf. (ib)). Secondly, the nominal expression that is quantified by *alle* receives a non-specific, generic interpretation; in other words, this quantifier delineates a class of entities as a whole, not a set of two or more specific entities like *al*. Incidentally, when used in sentences with a generic reading, the FQ *almal* also requires a non-specific plural noun, as shown in (ic,d).

- (i) a. Alle politici is opportuniste.
“All politicians are opportunists”
- b. *Alle die/daardie/vyf politici is opportuniste.
all the/ those/ five politicians are opportunists
- c. Politici is almal opportuniste. (generic reading)
- d. Die/daardie politici is almal opportuniste. (non-generic reading)

¹³ These remarks also hold for the distributive universal quantifier *elke* (“each”), the prenominal equivalent of the FQ *elk(een)* (“each (one)”), as illustrated by the examples in (i) and (ii). A further difference between the use of *elke* and *elk(een)* (one not found with *al* and *almal*) is that the prenominal quantifier *elke* can only occur with a singular noun and cannot co-occur with a determiner (cf. (iia)); the FQ *elk(een)*, by contrast, requires a plural noun with a definite determiner (cf. (iib)).

- (i) Die mans bewonder elk(een) die meisie.
the men admire each one the girl
“The men each admire the girl”
- (ii) a. Elke man bewonder die meisie.
each man admires the girl
“Every man admires the girl”
- b. *Elke bewonder die meisie.
- c. *Die man bewonder elke.
- d. *Die man bewonder elke die meisie.
- (iii) a. *Elke mans / *elke die man / *elke ’n man bewonder die meisie.
each men / each the man / each a man admires the girl
- b. *’n Man / *die man / *mans bewonder elk(een) die meisie.
a man / the man / men admire each one the girl

It should be noted that the forms *almal* and *elkeen* can occur in prenominal position in some non-standard varieties, as in e.g. *Almal/elkeen die mans bewonder die meisie* (“All/each of the men admire/s the girl”). However, in such cases *almal* and *elkeen* (like *al* and *elke*) are not interpreted as being coreferentially linked to the expression that they serve to quantify, in other words, they are not used to co-refer to the entities picked out by *die mans*.

¹⁴ (8d) would be grammatical with the plural object *die meisies*, in which case *al* serves to quantify the set of girls, not the set of men. Incidentally, the form *al* can also be used as an adverb (“already”) in Afrikaans; (8d) would be grammatical on such a reading.

¹⁵ The remarks below also hold for *altwee*, clearly a compound of the Q *al* (“all”) and the numeral *twee* (“two”).

¹⁶ As mentioned in note 12, the forms *almal* and *elkeen* can be used in prenominal position in some non-standard varieties. Hence, similar to (11), a sentence like *Die mans bewonder almal/elkeen die meisies* would be ambiguous in such varieties (although there does seem to be a strong preference for interpreting *almal*, and even more so *elkeen*, as an FQ rather than as a prenominal Q in this type of sentence).

¹⁷ There is a rich literature on various aspects of existential constructions containing the expletive *there* and its counterparts in a wide variety of languages; cf. e.g. Lumsden (1988); Rochemont & Culicover (1990); Groat (1995); Vikner (1995); Koenenman & Neeleman (2001); Mikkelsen (2011); and the works cited in notes 18 and 19. For generative studies on aspects of the *daar*-construction in Afrikaans, cf. Richards & Biberauer (2005); Conradie (2007); De Bruin (2011); non-generative studies are found in Du Plessis (1977); Ponelis (1979, 1983); Barnes (1984).

¹⁸ A somewhat similar type of analysis is proposed by Kayne (2008); however, he takes the view that expletives are actually “instances of deictic elements originating within their associate” (p. 213).

¹⁹ On this issue, cf. e.g. Felser & Roup (2001); Hazout (2004); Richards & Biberauer (2005); Williams (2006); Hartmann (2008); Deal (2009).

²⁰ Cf. e.g. Breivik (1981); Prince (1988); Birner & Ward (1998); Ward & Birner (2001); Erteschik-Shir (2007); Hartmann (2008); Cruschina (2012).

²¹ For the purpose of the present discussion, we abstract away from the internal structure of the *nPs* containing the pronouns *iemand* and *daar*. Clearly, though, this is an issue that would need to be clarified in a more detailed analysis of expletive constructions; such an analysis falls outside the scope of this study.

²² These three operations are essentially the same as those argued for in the analysis of prepositional expressions in section 3.2.2. There is one important difference, however. It was claimed in that section that the P undergoes raising to the *p*. But employing such an operation in the derivation of an expression like *aan die deur* in (13b) would clearly result in an ungrammatical word order, with the prepositional object *die deur* ending up to the left of the *p/P aan*. It remains to be clarified whether this problem can be accounted for in a principled manner.

²³ As also mentioned in note 10 in connection with the *q-nP*, this is in contrast to the identity focus *nP*, the *pos-nP* and the *con-nP* that were introduced in Chapter 3, each of which enters the derivation with an unvalued θ -feature.

²⁴ It could be argued that the *pres-nP*'s [3^{rd} -person] feature (the only ϕ -feature carried by this *nP*) serves to value the corresponding feature from the set of ϕ -features carried by the T, and that the T's remaining ϕ -features are then valued by the *n₁P* *iemand*. This does not seem plausible, however, since the *pres-nP* itself does not contain any unvalued features at this stage, which means that it is inactive from a probe-goal perspective. By contrast, because of its unvalued case feature, the *n₁P* *iemand* is still an active goal when the T is merged with the vP^3 .

²⁵ Note that (22) is grammatical with a locative reading of *daar*.

²⁶ The Southern Bantu family comprises four subgroups: (i) the Nguni group – including isiXhosa, isiZulu, isiNdebele, SiSwati; (ii) the Sotho-Tswana group – including Sesotho sa Leboa (Northern Sotho), Sesotho (Southern Sotho), Setswana; (iii) the Tswa-Ronga group – Xitsonga (Shangaan), Ronga, Tswa; and (iv) the Venda group, with Tshivenda as the sole member. Cf. Herbert & Bailey (2002).

²⁷ The examples presented in this section have all been provided by Marianna Visser (p.c.). The abbreviations used in the glosses are as follows: numeral = noun class and agreement; SM = subject marker; ASP = aspect; OM = object marker; REFL = reflexive marker, FV = final vowel. For a descriptive grammar of isiXhosa, cf. Du Plessis & Visser (1992).

²⁸ Cf. Zerbian (2006) and Poulos & Louwrens (1994) for the relevant grammatical properties of Sesotho sa Leboa.

²⁹ Cf. Poulos (1990) for a descriptive grammar of Tshivenda.

³⁰ Cf. Visser (1984, 1986); Riedel (2009) in connection with null objects in Bantu. It is standardly assumed that *pro* is employed in null subject constructions in languages of the Bantu family; for this view, as well as for arguments against it, cf. Zeller (2008:229-230) and the references cited there.

³¹ In line with the view taken in section 3.2.1, the N forming part of the subject *n*P in (27) serves to value the ϕ -features of this *n*P. However, for the purpose of the present discussion we abstract away from the internal structure of the subject; cf. Zeller (2008) and Halpert (2012) for proposals in this regard.

³² The affix-slots could perhaps be viewed as representing a set of hierarchically ordered unvalued features (cf. Georgi & Müller 2010; Müller 2010). On this approach, valuation would then result either in the relevant feature receiving a specific spell-out in the phonological component, or in a particular element being incorporated into the VC (as suggested below in connection with the REFL-slot).

³³ We leave aside here several issues in connection with the T's V-features, including e.g. the exact nature and value of the aspect feature, the link (if any) between aspect and tense, and the inclusion of a mood feature (which is conceivably associated with the final vowel (FV) in the verb complex). Also not addressed here is the possibility that there is some sort of aspect-related category (and perhaps a mood-related category as well) located between the T and the *v*P (or inside the *v*P, above the *v*/VC). For the purpose of the present discussion, it is simply assumed that the *v*/VC carries unvalued aspect and tense features, and that these are valued by the T in a probe-goal configuration. In terms of the approach mentioned in note 32, the *v*/VC's valued features would then receive specific spell-outs in the relevant affix-slots of the VC in the phonological component.

³⁴ Note that the containing *v*P is not pied-piped along when the subject *n*₂P is raised. In terms of the approach to word order and linearisation that was adopted in Chapter 3, pied-piping of the *v*P into [spec, T] is associated with OV-languages; cf. e.g. Biberauer (2003, 2009); Biberauer & Richards (2006); Biberauer et al. (2009). Being VO-languages, it is assumed that this option is not available for isiXhosa and the other members of the Southern Bantu family.

REFERENCES

- Abels, K. 2004. Right node raising: Ellipsis or across the board movement? In K. Moulton & M. Wolf (eds.). *Proceedings of NELS*, 34. Amherst: GLSA University of Massachusetts (pp.45-59).
- Abney, S. 1987. The English noun phrase in its sentential aspect. Doctoral dissertation. MIT.
- Aboh, E. 2010. Information structuring begins with the Numeration. *Iberia*, 2(1):12-42.
- Adger, D. 2003. *Core syntax. A minimalist approach*. Oxford: Oxford University Press.
- Adger, D. & G. Ramchand. 2003. Predication and equation. *Linguistic Inquiry*, 34:325-360.
- Allen, C. 1995. Changes in case-marking in NP: From Old-English to Middle-English. In M. Amberber & H. de Hoop (eds.). *Competition and variation in natural languages*. Amsterdam: Elsevier.
- Anderson, S., M. Guasti & A. Cardinaletti (eds.). 1995. *Syntax and semantics*, 28: *Small clauses*. San Diego: Academic Press.
- Baker, M. 1988. *Incorporation. A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, M. 2003. Agreement, dislocation, and partial configurationality. In A. Carnie, H. Harley & M.-A. Willie (eds.). *Formal approaches to function in grammar: In honor of Eloise Jelinek*. Amsterdam: John Benjamins Publishing Company (pp.107-132).
- Baker, M. & R. Kramer. 2011. "Prepositions" as case morphemes inserted at PF in Amharic. To appear in D. Jaspers (ed.). *Case at the Interfaces*. Amsterdam: John Benjamins Publishing Company.
- Barbiers, S. & H. Bennis. s.a. *Reflexives in dialects of Dutch*. Ms. Syntactic Atlas of Dutch Dialects (SAND) project, Meertens Institute, Amsterdam.
- Barker, C. 1995. *Possessive descriptions*. Stanford: CSLI Publications.
- Barnes, L. 1984. *Daar- en there-konstruksies*. *SA Tydskrif vir Taalkunde*, 2(1) :1-28.
- Benincà, P. & C. Poletto. 2004. Topic, focus and V2: Defining the CP sublayers. In L. Rizzi (ed.). *The cartography of syntactic structures (Vol. 2). The structure of CP and IP*. New York: Oxford University Press.
- Bennis, H. 1994. Waar is het werkwoord? Deel I: het minimalistische kader. *Spektator* 23(3):171-190.
- Bennis, H. 1995. Waar is het werkwoord? Deel II: antisymmetrie. *Spektator* 24(2):130-146.

- Bernstein, J. 2001. The DP hypothesis: Identifying clausal properties in the nominal domain. In M. Baltin & C. Collins. *The Handbook of Contemporary Syntactic Theory*. Oxford, Blackwell Publishing (pp.536-561).
- Biberauer, T. 2003. *Verb Second (V2) in Afrikaans: A minimalist investigation of word-order variation*. Doctoral dissertation. University of Cambridge.
- Biberauer, T. 2008. Semi null-subject languages, expletives and expletive pro reconsidered. Cambridge. *Occasional Papers in Linguistics*, 4:1-45.
- Biberauer, T. 2009. How “well-behaved” is Afrikaans? V2 in Modern Spoken Afrikaans. In H. Den Besten, F. Hinskens & J. Koch (eds.). *Afrikaans. Ein Tryptichon*. Amsterdam: Voortgang (pp.76-208).
- Biberauer, T. & R. Folli. 2004. Goals of motion in Afrikaans. In O. Courzet, H. Demirdache & S. Wauquier-Gravelines (eds.). *Proceedings of Journées d’Etudes Linguistiques* (pp.19-26).
- Biberauer, T., A. Holmberg & I. Roberts. 2008. Disharmonic word-order systems and the Final-over-Final-Constraint (FOFC). In A. Bisetto & F. Barbieri (eds.). *Proceedings of XXXIII Incontro di Grammatica Generativa*. Available online at: http://amsacta.cib.unibo.it/archive/00002397/01/PROCEEDINGS_IGG33.pdf [2010 May 25]
- Biberauer, T., A. Holmberg & I. Roberts. 2009. Linearization and the architecture of grammar: a view from the Final-over-Final Constraint. In V. Moscati & E. Servidio (eds.). *StiL - Studies in Linguistics (Proceedings of XXXV Incontro di Grammatica Generativa)* (pp.78-91).
- Biberauer, T., A. Holmberg & I. Roberts. 2011. A syntactic universal and its consequences. To appear in *Linguistic Inquiry*.
- Biberauer, T. & M. Richards. 2006. True optionality: When the grammar doesn’t mind. In C. Boeckx (ed.). *Minimalist essays*. Amsterdam: John Benjamins Publishing Company (pp.35-67).
- Biberauer, T. & I. Roberts. 2005. Changing EPP-parameters in the history of English: Accounting for variation and change. *English Language and Linguistics*, 9(1):5-46.
- Biberauer, T. & I. Roberts. 2006. The loss of residual “head-final” orders and remnant fronting in Late Middle English. Causes and consequences. In J. Hartmann & L. Molnárfi (eds.). *Comparative studies in Germanic Syntax*. Amsterdam/Philadelphia: John Benjamins Publishing Company (pp.263-297).

- Biberauer, T. & I. Roberts. 2010. Subjects, tense and verb-movement. In T. Biberauer, A. Holmberg, I. Roberts & M. Sheehan (eds.). *Parametric variation: Null subjects in Minimalist Theory*. Cambridge: Cambridge University Press (pp.263-303).
- Birner, B. & G. Ward. 1998. A semantico-pragmatic taxonomy of English inversion. Paper presented at the LSA Annual Meeting, Washington, D.C.
- Bobaljik, J. 2003. Floating quantifiers: Handle with care. In L. Cheng & R. Sybesma (eds.) *2nd GLOT International State of the Article Book*. Berlin: Mouton de Gruyter (pp.107-48).
- Boeckx, C. 2003. *Islands and chains*. Amsterdam: John Benjamins Publishing Company.
- Boeckx, C. & N. Hornstein. 2007. On non-obligatory control. *Studies in Natural Language and Linguistic Theory*, 71:251-262.
- Boeckx, C., N. Hornstein & J. Nunes. 2010. *Control as movement*. Cambridge: Cambridge University Press.
- Bošković, Ž. 2004. Two notes on right node raising. *University of Connecticut Working Papers in Linguistics*, 12:13-24.
- Botha, M. & J. Oosthuizen. 2009. Die struktuur van die linker-sinsgrens in Afrikaans. *Stellenbosch Papers in Linguistics Plus (SPIL PLUS)*, 37:1-68.
- Bowers, J. 1997. A binary analysis of resultatives. In R. Blight & M. Moosally (eds.). *Texas Linguistic Forum*, 38: *The Syntax and Semantics of Predication*. Austin, TX: Department of Linguistics, University of Texas at Austin (pp.43-58).
- Bowers, J. 2001. Predication. In M. Baltin & C. Collins (eds.). *The handbook of contemporary syntactic theory*. Oxford: Blackwell Publishing (pp.299-333).
- Brame, M. 1981. The general theory of binding and fusion. *Linguistic Analysis*, 7(3):277-325.
- Brame, M. 1982. The head-selector theory of lexical specifications and the non-existence of coarse categories. *Linguistic Analysis*, 10(4):321-325.
- Breivik, L. 1981. On the interpretation of existential *there*. *Language*, 57:1-25.
- Broekhuis, H., H. den Besten, K. Hoekstra & J. Rutten. 1995. Infinitival complementation in Dutch: On remnant extraposition. *The Linguistic Review*, 12:93-122.
- Broekhuis, H. & M. den Dikken. 1993. Chomsky's minimalistische programma. *Tabu*, 23:219-52.
- Büring, D. 2005. *Binding theory*. Cambridge: Cambridge University Press.
- Burzio, L. 1986. *Italian Syntax*. Dordrecht: Reidel.

- Cardinaletti, A. & M. Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In H. van Riemsdijk (ed.). *Clitics in the languages of Europe*. Berlin: Mouton de Gruyter (pp.145-233).
- Carnie, A. 2002. *Syntax. A generative introduction*. Oxford: Blackwell Publishing.
- Carrier, J. & J. Randall. 1992. The argument structure and syntactic structure of resultatives. *Linguistic Inquiry*, 23(2):173-234.
- Cecchetto, C. 1999. A comparative analysis of left and right dislocation in Romance. *Studia Linguistica*, 53:40-67.
- Cecchetto, C. & R. Oniga. 2004. A challenge to null case theory. *Linguistic Inquiry*, 35(1):141-149.
- Chomsky, N. 1964. *Current issues in linguistic theory*. The Hague: Mouton.
- Chomsky, N. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, N. 1982. *Some concepts and consequences of the theory of government and binding*. Cambridge, Mass.: MIT Press.
- Chomsky, N. 1985. *Knowledge of language: It's nature, origin and use*. New York: Praeger.
- Chomsky, N. 1986. *Barriers*. Cambridge, Mass.: MIT Press.
- Chomsky, N. 1995. *The minimalist program*. Cambridge, Mass.: MIT Press.
- Chomsky, N. 2000. Minimalist inquiries: The framework. In R. Martin, D. Michaels & J. Uriagereka (eds.). *Step by step: Essays on minimalist syntax in honour of Howard Lasnik*. Cambridge, Mass.: MIT Press (pp.89-155).
- Chomsky, N. 2001. Derivation by phase. In M. Kenstowicz. (ed.). *Ken Hale. A life in language*. Cambridge, Mass.: MIT Press (pp.1-52).
- Chomsky, N. 2004. Beyond explanatory adequacy. In A. Belletti (ed.). *Structures and beyond. The cartography of syntactic structures (Vol. 3)*. Oxford: Oxford University Press (pp.104-131).
- Chomsky, N. 2005a. Three factors in language design. *Linguistic Inquiry*, 36:1-22.
- Chomsky, N. 2005b. On phases. Ms. Published in R. Freidin, C. Otero & M. Zubizureta (eds.). 2008. *Foundational Issues in Linguistic Theory*. Cambridge, Mass.: MIT Press (pp.133-166).
- Chomsky, N. 2006. Approaching UG from below. Ms. Published in U. Sauerland & H.-M. Gärtner (eds.). 2007. *Interfaces and Recursion = Language?* New York: Mouton de Gruyter (pp.1-29).

- Chomsky, N. & H. Lasnik. 1993. The theory of principles and parameters. In N. Chomsky. 1995. *The minimalist program*. Cambridge, Mass.: MIT Press (ch.1).
- Cinque, G. 1993. A null theory of phrase and compound stress. *Linguistic inquiry*, 24:239-297.
- Cinque, G. 2010. *The Syntax of adjectives: A comparative study*. Cambridge, Mass.: MIT Press.
- Cirillo, R. 2009. *The syntax of floating quantifiers. Stranding revisited*. Doctoral dissertation. University of Amsterdam. Doctoral dissertation series, 206. Utrecht:LOT.
- Citko, B. 2005. On the nature of merge: External merge, internal merge, and parallel merge. *Linguistic Inquiry*, 36(4):475-496.
- Citko, B. 2006. Missing labels. *Lingua*, 118:907-944.
- Citko, B. 2008. Small clauses reconsidered: not so small and not all alike. *Lingua*, 118:261-295.
- Conradie, S. 2007. The setting of the split-IP parameter in Afrikaans: evidence from transitive expletive constructions and object shift constructions. *Stellenbosch Papers in Linguistics Plus (SPIL PLUS)*, 35:53-86.
- Corver, N. 2003. A note on micro-dimensions of possession in Dutch and related languages. In J. Koster & H. van Riemsdijk (eds.). *Germania et alia. A linguistic Webschrift for Hans den Besten*. Available online at: <http://odur.let.rug.nl/~koster/DenBesten/contents> [2012 June 24]
- Corver, N. & M. van Koppen. 2009. *Ellipsis in Dutch possessive noun phrases: A micro-comparative approach*. Ms. Utrecht Institute of Linguistics OTS, Utrecht University.
- Culicover, P. & R. Jackendoff. 2005. *Simpler syntax*. Oxford: Oxford University Press.
- Cruschina, S. 2008. Discourse-related features and the syntax of peripheral positions. A comparative study of Sicilian and other Romance languages. Doctoral dissertation. University of Cambridge.
- Cruschina, S. 2012. Focus in existential sentences. In V. Bianchi & C. Chesi (eds.). *University of Manchester Internet Celebration for Luigi Rizzi's 60th Birthday* (pp.1-31). Available online at: <http://www.ciscl.unisi.it/gg60> [2012 September 10]
- Deal, A. 2009. The origin and content of expletives: evidence from “selection”. *Syntax* 12(4): 285-323.
- De Bruin, J. 2011. A Minimalist analysis of expletive *daar* (“there”) and *dit* (“it”) constructions in Afrikaans. Masters thesis. University of Stellenbosch.
- Den Besten, H. 1977. On the interaction of root transformations and lexical deletive rules. In H. Den Besten, H. 1978. Cases of possible syntactic interference in the development of

- Afrikaans. *Amsterdam Creole Studies II*. University of Amsterdam. Publicaties van Het Instituut voor Algemene Taalwetenschap, 20:5-56.
- Den Besten. 1989. *Studies in West-Germanic syntax*. Doctoral dissertation. University of Amsterdam. Amsterdam: Rodopi.
- Den Dikken, M. 1995. *On the Syntax of Verb-Particle, Triadic, and Causative Constructions*. New York: Oxford University Press.
- Den Dikken, M. 2006. *Realtors and linkers: The syntax of predication, predicate inversion and copulas*. Cambridge, Mass.: MIT Press.
- Den Dikken, M. 2010. On the functional structure of locative and directional PPs. In G. Cinque & L. Rizzi (eds.). *Mapping Spatial PPs: The Cartography of Syntactic Structures* (Vol. 6). Oxford: Oxford University Press (pp.74-126).
- De Villiers, M. 1975. *Die semantiek van Afrikaans*. Kaapstad: HAUM.
- De Vos, M. 2009. Afrikaans mixed adposition orders as a PF-linearization effect. Ms. Rhodes University, Grahamstown.
- Drubig, H. & W. Schaffar. 2001. Focus constructions. In M. Haspelmath, E. König, W. Oesterreicher & W. Raible (eds.). *Language Typology and Language Universals: An International Handbook* (Vol. 2). Berlin: Walter de Gruyter (pp.1079–1104).
- Du Plessis, H. 1977. Oor DAAR in Afrikaans. *Tydskrif vir Geesteswetenskappe*.
- Du Plessis, J. & M. Visser. 1992. *Xhosa syntax*. Bellville: Via Afrika.
- É. Kiss, K. 1998. Identification focus versus information focus. *Language*, 74:245-273.
- Erteschik-Shir, N. 2007. *Information structure: The syntax-discourse interface*. Oxford Surveys in Syntax & Morphology, 3. Oxford: Oxford University Press.
- Faarlund, J. (ed.). 2001. *Grammatical relations in change*. Amsterdam: John Benjamins Publishing Company.
- Fanselow, G. 2001. Features, θ -roles, and free constituent order. *Linguistic Inquiry*, 32(3):405-437.
- Felser, C. & L. Rupp. 2001. Expletives as arguments: Germanic existential sentences revisited. *Linguistische Berichte*, 187:289-324.
- Fischer, O. 2007. *Morphosyntactic change: functional and formal perspectives* (Oxford Surveys in Syntax and Morphology, 2). Oxford: Oxford University Press.
- Folli, R. & H. Harley. 2004. Flavors of *v*: Consuming results in Italian and English. In R. Slabakova & P. Kempchinsky (eds.). *Aspectual Inquiries*. Dordrecht: Kluwer (pp. 95-120).

- Folli, R. & H. Harley. 2007. Causation, obligation and argument structure: On the nature of little *v*. *Linguistic Inquiry*, 38:197-238.
- Freidin, R. 1997. Review article: The minimalist program. *Language*, 73(3):571-582.
- Fromkin, V. (ed.) 2000. *Linguistics. An introduction to linguistic theory*. Oxford: Blackwell.
- George, L. & J. Kornfilt. 1981. Finiteness and boundedness in Turkish. In F. Heny (ed.). *Binding and Filtering*. Cambridge, Mass.: MIT Press (pp.105-127).
- Giorgi, A. & G. Longobardi. 1991. *The syntax of noun phrases*. Cambridge: Cambridge University Press.
- Georgi, D. & G. Müller. 2010. Noun phrase structure by reprojection. *Syntax*, 13(1):1-36.
- Goldberg, A. & R. Jackendoff. 2004. The English resultative as a family of constructions. *Language*, 80:532-568.
- Grimshaw, J. 1991. *Extended projection*. Ms. Brandeis University.
- Groat, E. 1995. English expletives: a minimalist approach. *Linguistic Inquiry*, 26:354-365.
- Gruber, J. 1965. Studies in Lexical Relations. Doctoral dissertation. MIT. Published as *MIT Working Papers in Linguistics*, GRUB01.
- Gruber, J. 2001. Thematic relations in syntax. In M. Baltin & C. Collins (eds.). *The handbook of contemporary syntactic theory*. Oxford: Blackwell Publishing (pp.257-298).
- Gundel, J. 1999. On different kinds of focus. In P. Bosch & R. van der Sandt (eds.). *Focus: Linguistic, cognitive and computational perspectives*. Cambridge: Cambridge University Press.
- Gundel, J. & T. Fretheim. 2004. Topic and focus. In L. Horn & G. Ward (eds.). *The handbook of pragmatics*. Cambridge, Mass.: Basil Blackwell.
- Haegeman, L. 1994. *Introduction to government & binding theory* (2nd ed.). Oxford: Blackwell Publishing.
- Halle, M. & A. Marantz. 1993. Distributed morphology and the pieces of inflection. In K. Hale & S. Keyser (eds.). *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberge*. Cambridge, Mass.: MIT Press (pp.111-176).
- Halpert, C. 2012. Argument licensing and agreement in Zulu. Doctoral dissertation. MIT.
- Harley, H. & E. Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language*, 78:482-526.
- Hartmann, J. 2008. *Expletives in existentials: English there and German da*. LOT Dissertation Series, 181. Utrecht: LOT.

- Hazout, I. 2004. The syntax of existential constructions. *Linguistic Inquiry*, 35(3):393-430.
- Heinat, F. 2005. Reflexives in a phase based syntax. *Working Papers in Scandinavian Syntax*, 75, pp.37-54. Department of Scandinavian Languages, Lund University.
- Heinat, F. 2006a. Probes, pronouns, and binding in the minimalist program. Doctoral dissertation. Lund University.
- Heinat, F. 2006b. Probing phrases, pronouns, and binding. *The Department of English in Lund: Working Papers in Linguistics*, 6:19-37.
- Herbert, R. & R. Bailey. 2002. The Bantu languages: Sociohistorical perspectives. In R. Mesthrie (ed.). *Language in South Africa*. Cambridge: Cambridge University Press (pp.50-78).
- Hicks, G. 2006. The derivation of anaphoric relations. Doctoral dissertation. University of York.
- Higgins, R. 1973. *The Pseudo-cleft construction in English*. New York: Garland.
- Hinterhölzl, R. 2005. *Scrambling, remnant movement, and restructuring in West Germanic*. Oxford: Oxford University Press.
- Hoekstra, T. 1988. Small clause results. *Lingua*, 74:101-139.
- Holmberg, A. 1986. Word order and syntactic features in the Scandinavian languages and English. Doctoral dissertation. University of Stockholm.
- Holmberg, A. 2000. Deriving OV Order in Finnish. In P. Svenonius (ed.). *The Derivation of VO and OV*. Oxford: Oxford University Press (pp.123-152).
- Hopper, P. & E. Traugott. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- Hornstein, N. 1999. Movement and control. *Linguistic Inquiry*, 30(1):69-96.
- Hornstein, N. 2009. *A theory of syntax. Minimal operations and universal grammar*. Cambridge: Cambridge University Press.
- Hornstein, N., J. Nunes & K. Grohmann. 2005. *Understanding minimalism*. Cambridge: Cambridge University Press.
- Jackendoff, R. & P. Culicover. 2005. *Simpler syntax*. Oxford: Oxford University Press.
- Jayaseelan, K. 2001. IP-internal topic and focus phrases. *Studia Linguistica*, 55:39-75.
- Julien, M. 2002. Syntactic heads and word formation. *Studies in Linguistics (Proceedings of XXXV Incontro di Grammatica Generativa)*. New York: Oxford University Press (pp.78-91).
- Kay, P. & C. Fillmore. 1999. Grammatical constructions and linguistic generalizations: The *What's X Doing Y?* construction. *Language*, 75:1-33.

- Kayne, R. 1984. *Connectedness and binary branching*. Dordrecht: Foris.
- Kayne, R. 1994. *The asymmetry of syntax*. Cambridge, Mass.: MIT Press.
- Kayne, R. 2002. Pronouns and their antecedents. In S. Epstein & T. Seely (eds.). *Derivation and explanation in the minimalist program*. Oxford: Blackwell Publishing (pp.133-166).
- Kayne, R. 2008. Expletives, datives, and the tension between morphology and syntax. In T. Biberauer (ed.). *The limits of syntactic variation*. Amsterdam/Philadelphia: John Benjamins Publishing Company (pp.175-217).
- Keenan, E. 2009. Linguistic theory and the historical creation of English reflexives. In P. Crisma & G. Longobardi (eds.). *Historical Syntax and Linguistic Theory*. Oxford: Oxford University Press (pp.41-57).
- Kenesei, I. 2005. Focus as identification. In V. Molnaar & S. Winkler (eds.). *The architecture of focus*. Berlin:Mouton. Available online at: <http://www.nytud.hu/oszt/igazc/kenesei/publ/keneseifocusmay.pdf>. [2012 September 22]
- Ko, Heejong. 2005. Syntactic edges and linearization. Doctoral dissertation. MIT.
- Koenenman, O. & A. Neeleman. 2001. Predication, verb movement and the distribution of expletives. *Lingua*, 111:189-223.
- Koopman, H. 1997. *Prepositions, postpositions, circumpositions and particles: The structure of Dutch PPs*. Ms. UCLA. Available online at: <http://www.linguistics.ucla.edu/people/koopman/papers/pp.pdf> [2012 September 10]
- Koopman, H. 2010. The Dutch PP: prepositions, postpositions, circumpositions and particles. In G. Cinque & L. Rizzi (eds.). *Mapping Spatial PPs: The Cartography of Syntactic Structures* (Vol. 6). Oxford: Oxford University Press.
- Koopman, H. & D. Sportiche. 1991. The position of subjects. *Lingua*, 85:211-258.
- Kratzer, A. 1996. Severing the external argument from its verb. In J. Rooryck & L. Zaring (eds.). *Phrase structure and the lexicon*. Dordrecht: Kluwer (pp.109-137).
- Kuroda, S. 1988. Whether we agree or not: A comparative syntax of English and Japanese. *Linguisticae Investigationes*, 12(1):1-47.
- Landau, I. 2006. Chain resolution in Hebrew V(P)-fronting. *Syntax*, 9:32-65.
- Le Roux, J. 1923. *Oor die Afrikaanse sintaksis*. Amsterdam: Swets & Zeitlinger.
- Ledgeway, A. 2012. Philology and linguistics: When data meet theory. Two case studies II: The case of the *Placiti cassinesi*. *Transactions of the Philological Society*, 109(3):213-219.

- Lee-Schoenfeld, V. 2007. *Beyond coherence: The syntax of opacity in German*. Linguistics Today, 114. Amsterdam: John Benjamins Publishing Company.
- Levin, B. 1993. *English verb classes and alternations. A preliminary investigation*. Chicago: Chicago University Press.
- Longobardi, G. 1999. The structure of DPs: Some principles, parameters and problems. In M. Baltin & C. Collins (eds.). *Handbook of contemporary syntactic theory*. Oxford: Blackwell Publishing.
- Lumsden, M. 1988. *Existential Sentences: Their structure and meaning*. London: Croom Helm.
- Manzini, M. 1983. On Control and Control Theory. *Linguistic Inquiry*, 14:421-26.
- Manzini, M. & A. Rousseau. 2000. A minimalist theory of A-movement and control. *Lingua*, 110(6):409-447.
- Marantz, A. 1995. The minimalist program. In G. Webelhuth (ed.). *Government and Binding Theory and the Minimalist Program*. Oxford: Blackwell Publishing (pp.349-382).
- Marantz, A. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. In A. Dimitriadis, L. Siegel, C. Surek-Clark & A. Williams (eds.). *Penn Working Papers in Linguistics (Proceedings of the 21st Annual Penn Linguistics Colloquium)*, 4(2):201-225.
- Martin, R. 2001. Null case and the distribution of PRO. *Linguistic Inquiry*, 32:141-166.
- McKoon, G. & T. Macfarland. 2000. Externally and internally caused change of state verbs. *Language*, 76(4):833-858.
- Mikkelsen, L. 2006. *Copular clauses: Specification, predication and equation*. Amsterdam: John Benjamins Publishing Company .
- Mikkelsen, L. 2011. Existential sentences. In K. Von Heusinger, C. Maienborn & P. Portner (eds.). *Semantics: An International Handbook of Natural Language Meaning*. Berlin: De Gruyter (pp.1829-1848).
- Molnarfi, L. 1997. Preposisie of kasusmarkeerder? Oor die status van vir in Afrikaans. *Tydskrif vir Geesteswetenskappe*, 37(2):89-106.
- Müller, G. 2010. On deriving CED effects from the PIC. *Linguistic Inquiry*, 41(1):35-82.
- Myler, N. 2009. Form, function and explanantion at the syntax-morphology interface: Agreement, agglutination and post-syntactic operations. Extended version of Masters thesis. University of Cambridge.
- Narita, H. 2011. Phasing in Full Interpretation. Doctoral dissertation. University of Harvard.

- Nunes, J. 2001. Sideward movement. *Linguistic Inquiry*, 32(2):303-344.
- O'Neil, J. 1995. Out of control. *Proceedings of the North East Linguistics Society*, 25:361-371.
- Oosthuizen, J. 1988. Movement vs. binding. Two analyses of quantifier postposing phenomena in Afrikaans. Masters thesis. University of Stellenbosch.
- Oosthuizen, J. 1989. An interpretive analysis of quantifier postposing phenomena in Afrikaans. *Stellenbosch Papers in Linguistics (SPIL)*, 19:1-191.
- Oosthuizen, J. 2000. Prepositions left and right in Afrikaans. *Stellenbosch Papers in Linguistics (SPIL)*, 33:67-90.
- Oosthuizen, J. 2007. Verpligte koreferensie in Afrikaans: 'n minimalistiese verkenning. *Stellenbosch Papers in Linguistics PLUS (SPIL PLUS)*, 35:87-144.
- Oosthuizen, J. & H. Waher. 1994. On the syntax of the *se*-construction in Afrikaans. *Stellenbosch Papers in Linguistics (SPIL)*, 28:21-44.
- Ouali, A. 2008. On C-to-T Phi-feature transfer: The nature of agreement and anti-agreement in Berber. In R. D'Alessandro, G. Hrafnbjargarson & S. Fischer (eds.). *Agreement restrictions*. Berlin: Mouton de Gruyter (pp.159-180).
- Öztürk, B. 2008. Non-Configurationality: Free word order and argument drop in Turkish. In T. Biberauer (ed.). *The Limits of Syntactic Variation*. Amsterdam: John Benjamins Publishing Company (pp.411-440).
- Paoli, S. 2006. The fine structure of the left periphery: COMPs and subjects. Evidence from Romance. *Lingua*, 117(6):1057-1079.
- Pesetsky, D. & E. Torrego. 2001. T-to-C movement: Causes and consequences. In M. Kenstowicz (ed.). *Ken Hale. A life in language*. Cambridge, Mass.: MIT Press (pp.355-426).
- Pesetsky, D. and E. Torrego. 2004. Tense, case, and the nature of syntactic categories. In J. Guéron & J. Lecarme (eds.). *The syntax of time*. Cambridge, Mass.: MIT Press (pp.495-537).
- Pesetsky, D. & E. Torrego. 2007. The syntax of valuation and the interpretability of features. In S. Karimi, V. Samiiian & W. Wilkins (eds.). *Phrasal and clausal architecture: Syntactic derivation and interpretation*. Amsterdam: John Benjamins Publishing Company (pp. 262-294).
- Peters, S. & D. Westerståhl. 2006. *Quantifiers in language and logic*. Oxford: Oxford University Press.

- Ponelis, F. 1979. *Afrikaanse sintaksis*. Pretoria: J.L. van Schaik.
- Ponelis, F. 1993. An historical outline of Afrikaans R-structures. *South African Journal of Linguistics*, 11(3):105-109.
- Postal, P. 1969. On so-called “pronouns” in English. In D. Reibel & S. Schane (eds.). *Modern studies in English*. Englewood Cliffs: Prentice-Hall (pp.201-224).
- Postal, P. 1974. *On Raising: One rule of English grammar and its theoretical implications*. Cambridge, Mass.: MIT Press.
- Poulos, G. 1990. *Linguistic analysis of Venda*. Pretoria: Via Afrika.
- Poulos, G & L. Louwrens. 1994. *Linguistic analysis of Northern Sotho*. Pretoria: Via Afrika.
- Prince, E. 1988. The discourse functions of Yiddish expletive *es* + subject postposing. *Papers in Pragmatics*, 2:176-194.
- Quirk, R., S. Greenbaum, G. Leech & J. Svartvik. 1985. *A comprehensive grammar of the English language*. London: Longman.
- Radford, A. 2009. *Analysing English sentences. A minimalist approach*. Cambridge: Cambridge University Press.
- Raidt, E. 1969. Die gebruik van *vir* in objekskonstruksies. *Tydskrif vir Geesteswetenskappe*, 9:30-49.
- Raidt, E. 1976. Die herkoms van objekskonstruksies met *vir*. In *1875-1975 Studies oor die Afrikaanse taal*. Johannesburg: Perskor (pp.72-101).
- Rappaport Hovav, M. & B. Levin. 2001. An event structure account of English resultatives. *Language*, 77(4):766-797.
- Reinhart, T. & E. Reuland. 1993. Reflexivity. *Linguistic Inquiry*, 24(4):657-720.
- Reuland, E. 2001. Primitives of binding. *Linguistic Inquiry*, 32(3):439-492.
- Reuland, E. & M. Everaert. 2001. Deconstructing binding. In M. Baltin & C. Collins (eds.). *The handbook of contemporary syntactic theory*. Oxford: Blackwell Publishing (pp.634-669).
- Richards, M. 2007a. Object shift, phases, and transitive expletive constructions in Germanic. In P. Pica et al. (eds.). *Linguistic Variation Yearbook 6*. Amsterdam/New York: John Benjamins Publishing Company (pp. 139-159).
- Richards, M. 2007b. On feature inheritance: An argument from the Phase Impenetrability Condition. *Linguistic Inquiry*, 38:563-572.

- Richards, M. & T. Biberauer. 2005. Explaining *Expl*. In M. den Dikken & C. Tortora (eds.). *The Function of Function Words and Functional Categories*. Amsterdam/New York: John Benjamins Publishing Company.
- Riedel, K. 2009. The Syntax of Object Marking in Sambia. A comparative Bantu perspective. Doctoral dissertation. Leiden University.
- Rizzi, L. 1997. The fine structure of the left periphery. In L. Haegeman (ed.). *Elements of grammar*. Dordrecht: Kluwer (pp.281-337).
- Rizzi, L. 2008. On Delimiting Movement. Paper presented at Cambridge-Connecticut-Hyderabad-Nanzan-Tsingua-Hua Colloquium (Tsing-Hua, Taiwan).
- Rizzi, L. 2010. Core linguistic computations: How are they expressed in the mind/brain? *Journal of Neurolinguistics* [doi:10.1016/j.jneuroling.2009.12.005].
- Roberts, C. 1998. Focus, the flow of information, and universal grammar. In P. Culicover & L. McNally (eds.). *The limits of syntax*. San Diego: Academic Press (pp.109-160).
- Roberts, I. 2010. *Agreement and head movement. Clitics, incorporation, and defective goals*. Cambridge, Mass.: MIT Press.
- Roberts, I. & A. Roussou. 2003. *Syntactic change. A minimalist approach to grammaticalization*. Cambridge: Cambridge University Press.
- Rochemont, M. 1986. *Focus in generative grammar*. Amsterdam: John Benjamins Publishing Company.
- Rochemont, M. & P. Culicover. 1990. *English focus constructions and the theory of Grammar*. Cambridge: Cambridge University Press.
- Roussou, A. 2009. *In the mood for control*. Ms. Department of Philology, University of Patras.
- Smith, N. 1998. Does Chomsky exist? *Glott International*, 3(1):9.
- Smith, N. 1999. *Chomsky: Ideas and ideals*. Cambridge: Cambridge University Press.
- Sperber, D. & D. Wilson. 1995. *Relevance. Communication and cognition* (2nd ed.). Oxford: Blackwell Publishing.
- Sportiche, D. 1988. A theory of floating quantifiers and its corollaries for constituent structure. *Linguistic Inquiry*, 19:425-429.
- Stowell, T. 1989. Subjects, specifiers, and X-bar theory. In Baltin, M. & Kroch, A. (eds.). *Alternative conceptions of phrase structure*. Chicago, University of Chicago Press (pp. 232-262).
- Szabolcsi, A. 1984. The possessor that ran away from home. *The Linguistic Review*, 1:89- 102.

- Svenonius, P. 2008. Projections of P. In A. Asbury, J. Dotlacil, B. Gehrke & R. Nouwen (eds.). *Syntax and Semantics of Spatial P*. Amsterdam: John Benjamins Publishing Company (pp.63-84).
- Uriagereka, J. 1995. Aspects of the syntax of clitic placement in Western Romance. *Linguistic Inquiry*, 26:79-123.
- Van Riemsdijk, H. 1990. Functional prepositions. In H. Pinkster & I. Genee (eds.). *Unity in Diversity: Papers presented to Simon C. Dik on his 50th birthday*. Dordrecht:Foris (pp.229-241).
- Van Schoor, J. 1983. *Die grammatika van Standaard-Afrikaans*. Cape Town: Lex Patria.
- Vikner, S. 1995. *Verb movement and expletive subjects in the Germanic languages*. Oxford: Oxford University Press.
- Visser, M. 1984. Aspects of empty categories in Xhosa within the theory of Government and Binding. *South African Journal of African Languages*, 5(1):24-33.
- Visser, M. 1986. Cliticization and case theory in Xhosa. *South African Journal of African Languages*, 3:129-137.
- Walraven, T. 1975. The optional *om* in Dutch infinitive constructions. In A. Kraak (ed.). *Linguistics in The Netherlands 1972-1973*. Assen: Van Gorcum (pp.210-221).
- Ward, G. & B. Birner. 2001. Discourse and information structure. In D. Schiffrin, D. Tannen & H. Hamilton (eds.). *The Handbook of Discourse Analysis*. Oxford: Blackwell Publishing (pp.119-137).
- Watanabe, A. 1993. AGR-based case theory and its interaction with the A-bar system. Doctoral dissertation. MIT.
- Wechsler, S. 1997. Resultative predicates and control. *Texas Linguistics Forum*, 38: *The syntax and semantics of predication*. Department of Linguistics, University of Texas at Austin (pp.307-321).
- Wee, L. & T. Ying. 2008. That's so last year! Constructions in a socio-cultural context. *Journal of Pragmatics*, 40:2100-2113.
- Williams, A. 2008. Word order in resultatives. In C. Chang & H. Haynie (eds.). *Proceedings of the 26th West Coast Conference on Formal Linguistics*. Somerville, Mass.: Cascadilla Proceedings Project (pp.507-515).
- Williams, E. 1980. Predication. *Linguistic Inquiry*, 11:203-238.
- Williams, E. 1983. Against small clauses. *Linguistic Inquiry*, 14:287-308.

- Williams, E. 2006. The subject-predicate theory of *there*. *Linguistic Inquiry*, 36:648-651.
- Wurmbrand, S. 2001. *Infinitives: Restructuring and clause structure*. Berlin: Mouton de Gruyter.
- Wurmbrand, S. 2004. Two types of restructuring: Lexical vs. functional. *Lingua*, 114(8):991-1014.
- Zeller, J. 2008. The subject marker in Bantu as an antifocus marker. *Stellenbosch Papers in Linguistics (SPIL)*, 38:221-254.
- Zerbian, S. 2006. Inversion structure in Northern Sotho. *Southern African Linguistics and Applied Language Studies*, 24(3):361-376.
- Zwart, J.-W. 1997. *Morphosyntax of verb movement. A minimalist approach to the syntax of Dutch*. Dordrecht: Kluwer Academic Publishers.
- Zwart, J.-W. 2002. Issues relating to a derivational theory of binding. In S. Epstein & T. Seely (eds.). *Derivation and explanation in the minimalist program*. Oxford: Blackwell Publishing (pp.268-304).