The syntax of verbal pseudo-coordination in English and Afrikaans

Published by
LOT
Trans 10
3512 JK Utrecht
the Netherlands

phone: +31 30 253 6006
fax: +31 30 253 6000
e-mail: lot@let.uu.nl
http://wwwlot.let.uu.nl/

Cover illustration: Bubble chamber in 1970: liquid hydrogen event
(Copyright © CERN; used with permission).

ISBN: 90-76864-81-0
NUR: 632

The syntax of verbal pseudo-coordination in English and Afrikaans

Proefschrift

Ter verkrijging van De graad van Doctor
aan de Universiteit Leiden,
Op gezag van de Rector Magnificus Dr.D.D. Breimer,
Hoogleraar in de faculteit der Wiskunde en Natuurwetenschappen en die der Geneeskunde,
Volgens besluit van het College van Promoties
Te verdedigen op
donderdag 3 november 2005 Klokke 16.15 uur

door

Mark Andrew de Vos

geboren op 11 april 1975 te Kwe-Kwe, Zimbabwe

Promotores:	Prof. Dr. J. E. C. V. Rooryck Prof. Dr S. Barbiers (Meertens Institute (KNAW)/ Utrecht University)
Manuscriptcommissie:	Dr J.B. den Besten Prof. Dr. L.L. Cheng Dr C.L.J.M. Cremers Prof. Dr H.G.W. du Plessis

Contents

List of Figures

List of Tables

Preface

Probably the four most important books I ever read during the preparation of this dissertation were *Against Method* (Feyerabend 1993), *The Structure of Scientific Revolutions* (Kuhn 1970), *The Statue Within* (Francois 1988) and *Het Ongrijpbare Neutrino* (Solomey 1997).

The first, I spied on the shelf of Thijs Ambachts during a night of rabble-rousing and persuaded him to let me read it. He was reluctant, claiming it was his favourite book. I can see why. The second I bought myself during a moment of epistemological desperation. The third, was leant to me by my friend, Ralf Schmauder, one weekend when I complained about being bored. It has been an inspiration to me both as an insight into how science and research groups operate and also as an ideal to be attained. The fourth, I got as a freebee when I filled in an online questionaire and became a favourite, staple, holiday read for the next four years. It has the twin qualities of being relatively lightweight and being able to put me to sleep even faster than the *Canterbury Tales*. I have taken that book everywhere from Terschelling to Kampen to Cinque Terre.

When a sample of material is bombarded, it may break up into smaller subatomic particles. These particles may be indirectly observed with a bubble chamber. This ingenious piece of apparatus consists of little more than a box of rarified gas with an electrical field across it. When a subatomic particle zips through the gas, it leaves a trail of vapour behind it. The particle is also attracted or repelled by the electrical field depending on its own relative charge, mass and speed. This means that positively charged particles will spiral towards the negatively charged plate and negatively charged particles cycle in towards the positively charged one. Neutral particles zip right through the chamber and are not deflected. The result is a cascade of sparkling lines and curves of gently gyrating geometry. Although some particles do not leave vapour trails, even these kinds of particles do sometimes decay into smaller particles which *are* visible in the bubble chamber. From what is visible, in a controlled environment, it is possible to infer the existence of another, invisible particle.

This is symbolic of the spirit of research carried out in this dissertation. When studying sentences, one is limited to seeing the visible linearization of an abstract system. And not all aspects of that system are equally visible. However, under the right conditions, it is possible to infer the existence of the unseen from the palpable. Although I support the use of a broad range of linguistic methodologies which can

and should complement each other, for reasons of rigour, the predominant methodology used in this dissertation is a fundamental scientific method requiring minimal pairs. Wherever possible, contrasts are made between two contexts differing only with respect to a single free variable, other variables being controlled. Where there is no contrast, there can be no true judgement of grammaticality.

The discovery of a multitude of subatomic particles in high-energy physics also bears certain similarities to the subject of verbal pseudo-coordination. When a putatively atomic, grammatical construct such as pseudo-coordination is placed into specific, controlled environments, one is able to distinguish that it may not necessarily be atomic at all, but a complex array of similar constructs with important differences. Thus pseudo-coordination can be broken up into a number of different types. At a syntactic level, the same method can break apart a specific construction, identifying its components and showing how they work together to create meanings. Finally, below head level, it is possible to observe the interactions of features – subatomic syntax. The fact that these complex interactions are derivative of incredibly simple basic components of grammar is both coincidental and humbling.

I would not have been able to come as far as I have without the support of my family, friends, mentors, colleagues and acquaintances of whom there are too many to mention and some of whom would prefer to remain beyond the pages of a book.

My language consultants, many of whom have become friends, deserve special thanks for their insight into language and putting up with my ceaseless questioning: Alec Badenoch, Theresa Biberauer, Hans du Plessis, Katie Hargreaves, Carola Mostert, Johan Oosthuizen, Ryan and Ylan Sutherland and Carien Wilsenach. I've also bothered my Dutch friends and colleagues for their intuitions and other advice at various times. Among these, I'd like to thank Crit Cremers, the late Jan Kooij, Hilke Reckman, Bianca Slobbe, Jeroen van Craenenbroeck and Marjo van Koppen.

In addition, the various administrators at the institute have often gone out of their way to help me and their cheerfulness and good humour have helped make my stay at the ULCL a pleasure: Jeroen van de Weijer, Gea Hakker, José Birker and Pink Meltzer.

To my various friends and colleagues at the institute and elsewhere, for creating a stimulating research environment, for nurturing me in it and for reading and commenting on various versions of this dissertation, I would like to thank Boban Arsenijević, Sjef Barbiers, Sylvia Blaho, Marika Butskhrikidze, Lisa Cheng, Onno Crasborn, Federico Damonte, Liesbeth de Clerck, Esterella de Roo, Hans den Besten, Jenny Doetjes, Noureddine Elouazizi, Thea Gagnidze, Rob Goedemans, Dafna Graf, Stella Grillia, Riny Huybrechts, Aniek IJbema, Els Kooij, Nancy Kula, Stephen Laker, Frank Landsbergen, Clara Levelt, Boya Li, Anikó Lipták, Judith Loewenthal, Lutz Maarten, Mika Poss, Hilke Reckman, Chris Reintges, San-Jik Rhee, Kristina Riedel, Johan Rooryck, Martin Salzmann, Erik Schoorlemmer, Joanna Sio, Bianca Slobbe, Ineke van der Meulen, Amir Tauber, Rada Trnavac, Assimakis Tseronis, Marina Tzakosta, Jeroen van Craenenbroeck, Jenneke van der Wal, Vincent van Heuven, Anna-Lena Wiklund, Ton van der Wouden, Marjo van Koppen, Erik-Jan van de Torre, Véronique van Gelderen, Luis Vicente, Leo Wong, all the AMP students, the anonymous person who popped the dissertation of Karin Robbers into my mailbox in the first week I was

at institute and, of course, Mops.

I am deeply indebted to my lovely housemate, Anikó, for her forbearance, indulging my tendency not to wash the dishes – even when she should not have – and for dragging me out to meet people when I was overcome by the impulse of hermithood.

I must extend my heartfelt appreciation to my friends and confidantes who have not already been mentioned: the Plantage boys, Ralf and Peter, Neil, Chris, Bauke, Richard, Troy, Ryan, Alex, Bianca, Friederike, Grazyna, Karyn, Lisa, Marigje, Neli, Patrycja, Rajesh, Rowena, Silke, Svetoslav, Thijs, Tjitske, Ulrike, Valerie and *Bryd one brere*.

I would like to specially thank, for their love, inspiration and lively discussions of posture verbs, Serina, Sheppy, Shinga, Gonda and Bullet (who all have infinitely recursive grammars).

Finally, a word of thanks to Renilde Vanden Broeck at the CERN Press Office for granting permission to use their material for the front cover of this dissertation and to Marjan van de Meer for her graphical expertise.

Chapter 1

Introduction

Coordination in natural language occurs in a wide range of constructions, not all of which share prototypical properties of logical, Boolean coordination. The diversity of sentence types in which coordination occurs has led to it being one of the most hotly debated, and yet relatively little understood, issues in linguistic science.

This dissertation explores verbal pseudo-coordinative structures in English and Afrikaans. It argues that the properties of these constructions are derived from (i) the status of the linking element as a true coordinator subject to the Coordinate Structure Constraint (CSC) and Law of Coordination of Likes (LCL) and (ii) the specific kind of syntactic context into which the coordinator is merged.

1.1 Coordination of verbal entities

The discussion of pseudo-coordination is made quite intricate by virtue of the fact that there are a number of different constructions that appear to coordinate verbal categories, although arguably not all of them do. I will list and briefly describe them here for reference purposes, since I will refer to them later in this dissertation.

(1) Caesar went across the Rubicon and he conquered Gaul [OCo]

(2) Caesar went to Gaul and devastated it [SceCo]

(3) Caesar saluted his legions before…
he went and addressed them [ConCo]

(4) Caesar's legions marched and marched for days [ReCo]

Example (1) is a case of Ordinary coordination (OCo), arguably coordinating IPs. The events referred to in each conjunct are distinct from each other. The temporal ordering of the conjuncts is irrelevant and is not necessarily reflected in the word-order of the conjuncts. The other three examples are various types of pseudo-coordination.

The pseudo-coordination illustrated in (2) exemplifies Scene-setting coordination (SceCo), where the predicate in the first conjunct seems to set the scene for the action denoted by the verb in the second conjunct to take place. The conjuncts are intrinsically, temporally ordered and always occur in a temporally-dependent sequence.[1] In this context, the coordinator seems to act like 'glue' creating an ordered set of events, effectively subordinating one event to the other. In addition, SceCo can be descriptively characterised as allowing a PP or particle within the verbal string in the first conjunct. This is an important distinguishing factor between SceCo and examples like those in (3) and will be shown to have syntactic effects.

Example (3) is a pseudo-coordinative construction, which I will refer to as Contiguous Co-ordination (ConCo): the verb string is contiguous as opposed to SceCo where it may be interrupted by a PP or particle. It has properties quite different to (2). According to Na and Huck (1992) it has a more 'idiomatic' interpretation and since the pseudo-coordinative verb *go* plays an aspectual role, the activity denoted by the pseudo-coordinative verb in the first conjunct cannot be considered an activity distinct from that denoted by the lexical verb in the second conjunct. The second conjunct is thus aspectually dependent on the first. The set of verbs that allow ConCo constructions are much more restricted than those that allow SceCo. Cardinal instances of ConCo listed in the literature typically include examples with verbs like *go* and *come*.

Example (4) is an example of augmentative coordination (Haspelmath 2005), which I will refer to as Reduplicative Coordination. This type of construction may also coordinate verbal categories and, like ConCo, appears to refer to a single (marching) event. However, this cannot be the entire explanation since this type of construction may also yield serial and repetitive readings. In addition, the construction is associated with pragmatic readings whereby the activity expressed is intensified in some sense.

Finally, there exist pseudo-coordinative constructions in Afrikaans, typically with posture verbs. Since Afrikaans is an OV language, the verbal arguments typically occur to the left of the verbal string, consisting of a posture verb (a so-called Indirect Linking Verb (ILV)), a coordinative marker and a lexical verb. The fact that these are pseudo-coordinative and restructuring constructions is amply illustrated by the fact that the object occurs to the left of the posture verb.

(5) *Jan sal die boeke sit en lees*
Jan will the books sit and read
'Jan will sit reading the books'

It will be argued that these Afrikaans constructions are quite different to pseudo-coordinative constructions in English. Afrikaans has overt verb movement in verb-second contexts whereas English does not. This reveals a surprising phenomenon: the pseudo-coordinative verb may either move individually (forming a Simplex Initial (SI)) or pied-pipe a coordinated lexical verb (to form a Complex Initial (CI)). This

[1] Example (2) is very likely a member of a much broader class of constructions (Postal (1998), Na and Huck (1992), Lakoff (1986), Schmerling (1975) and Goldsmith (1985)). However a unified treatment will not be attempted here since my primary concern is with ConCo.

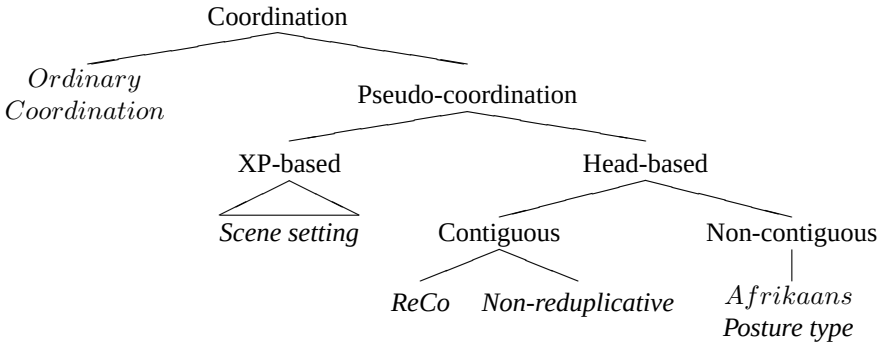
raises important questions for the nature of head movement and the analysis of verb second in those languages which have it.

(6) a. *Jan sit die boeke en lees*
Jan sit the books and read
'Jan sits reading the books'

b. *Jan sit en lees die boeke*
Jan sit and read the books
'Jan sits reading the books'

All these constructions in English and Afrikaans could be said to coordinate non-nominal categories, whether clauses or VPs or events or perhaps verbal heads. The diversity of construction types necessitates compiling a toolbox of tests with which to differentiate them. This requirement is all the more compelling because coordinative constructions may often be surface identical, rendering them effectively ambiguous between a number of different constructions. Without such differentiation, the postulation of generalizations becomes extremely difficult, and the negative effects of this are reflected in the literature on the topic. For this reason, a substantial part of this dissertation is devoted to exploring a number of tests to distinguish coordinative types and in creating a typology of variation within verbal coordination. The resulting typology of verbal coordination types is illustrated in figure 1.1.

Figure 1.1: A typology of pseudo-coordination in English and Afrikaans



This typology is illustrated for English and Afrikaans. English has been widely and intensively studied but nevertheless has a number of verb-coordination structures which are poorly understood. English is quite interesting among the West-Germanic tongues insofar as it has a number of types of verbal pseudo-coordination which are not generally shared by languages such as standard German and standard Dutch. Another language which also has interesting verb-coordination structures is Afrikaans. It is unique among the West-Germanic languages in having complex coordinated predicates with posture verbs which can undergo head-movement. There is no substantial analysis of these structures to date.

In addition to developing this typology, the dissertation also provides a syntactic analysis of English and Afrikaans pseudo-coordinative structures, demonstrating how many syntactic and semantic effects can be derived from the following strong assumption and general syntactic principles.

(7) Pseudo-coordination is always true coordination.

Of course, this means that the pseudo-coordinative characteristic that one verb is dependent on the other must be explained in some other fashion than stipulating that the coordinator is a subordinator. It is argued that this is a symptom of the syntactic contexts in which coordination occurs and not a function of the lexical specification of the coordinator itself. In other words, the dependency between the verbs follows from *what* is coordinated rather than whether the linking element is a subordinator or not. It will also be shown that the cross-linguistic variation between English and Afrikaans pseudo-coordinative types can be accounted for by the hypothesis in (7).

1.2 Coordination

There are three aspects of coordination in natural language that are important for discussion here: (i) the constraints on coordination and extraction from coordinate structures, (ii) the phrase structure associated with coordination and (iii) the lexical specification of coordination.

1.2.1 Constraints on coordination

There are two main constraints on coordination that will be important in the following discussion. These are the Coordinative Structure Constraint (CSC) and the Law of Coordination of Likes (LCL).

The Coordinate Structure Constraint

It has been known since Ross (1967) that coordinative structures are subject to the Coordinate Structure Constraint (CSC) and the Across-the-Board (ATB) exception to it.

(8) a. **CSC:** In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct (Ross 1967:89).

b. **ATB:** In a coordinate structure, the same constituent may be extracted from within all the conjuncts simultaneously (Ross 1967, Williams 1978).[2]

[2]The extracted constituent must perform the same general semantic function in both conjuncts e.g. it must be a deep subject in both or an object in both etc.

The CSC is actually a disjunctive definition and can be divided into two separate constraints (Grosu 1973): the CSC proper forbidding extraction from within a conjunct, and the Conjunct Constraint, preventing the moving of a conjunct itself.

Consider the following illustrations of the CSC. Examples (9b,c) contain coordinated clauses, from which an NP has been extracted from the first and second conjuncts respectively. The result is ungrammatical and is an example of a CSC violation. Example (9c) shows that when the same constituent is extracted from both conjuncts, the result is grammatical. This is an example of the ATB exception to the CSC.

(9) a. Ralf admired Kgomotso and Peter had the hots for Tjitske
b. *Who did Ralf admire t and Peter have the hots for Tjitske?
c. *Who did Ralf admire Kgomotso and Peter have the hots for t?
d. Who did Ralf admire t and Peter have the hots for t?

The status of these constraints and the ATB exception is one of the longest-standing puzzles in linguistics and has still not been satisfactorily explained (Progovac 1998a). This issue is not addressed in this dissertation and since the CSC has never been satisfactorily unified with syntactic islands more generally, the CSC is taken to be derivative of a deep property of coordination itself.[3]

In fact, exceptions to the CSC have been pointed out by Carden and Pesetsky (1977), Culicover and Jackendoff (1997), Goldsmith (1985), Lakoff (1986), Ross (1967), Zoerner (1995) etc. Among these apparent exceptions are verbal pseudo-coordinative constructions. While some, such as Lakoff (1986) argue that in the face of these exceptions, the CSC must be abandoned, it seems fair to say that many of the exceptions are fairly systematic and form classes of exceptions. Postal (1998) shows that some of these exceptions are not true coordination at all, while others admit some types of extraction but remain selective islands for extraction. This suggests that the CSC should remain as a meaningful generalization, while problematizing the apparent exceptions for further study.

The range of apparent exceptions to the CSC addressed by authors such as Lakoff (1986) and Postal (1998) is too broad to be productively tackled by this dissertation. However, in approaching a subset of these problematic data, I will argue against both these authors and claim that the CSC does not need to be weakened to allow certain types of extractions. On the contrary, the CSC can be maintained in a strong form and explain apparent violations of it in other terms.[4]

The Law of Coordination of Likes

Another constraint on coordination concerns what may be coordinated in the first place. Coordination markers, in English as in other languages, are notoriously promis-

[3] See Munn (1993) for an attempt to reduce the islandhood of coordinate structures to the islandhood of adjuncts.

[4] The examples that allow putative counter examples to the CSC all seem to share a characteristic of asymmetric coordination. In this dissertation, I will argue that pseudo-coordination is not necessarily asymmetric coordination, that consequently the CSC can be assumed to hold and that apparent violations of it must be explained in another fashion.

cuous with regard to the contexts in which they appear. In fact, just about any substantive category (N, V, P, A) can be coordinated, including others such as quantifiers, IPs, CPs, VPs etc.[5] However, it has long been known that a curious, yet important, lexical fact about this entity, is that in natural language it always coordinates 'like' constituents. This property is usually referred to as the Law of Coordination of Likes (LCL) in the literature (Williams 1978). The level of similarity may not be restricted to only syntactic features but also extends to semantic function or functional equivalence (Dik 1968, Haspelmath 2005, Munn 1993, Peterson 2004, Sag et al. 1985). There are also a number of well known exceptions to this generalization (Bayer 1996, Dik 1968, Progovac 1998a;b, Sag et al. 1985, Zoerner 1995). However, there does not seem to be consensus on either its status as a generalization, its particular analysis or whether it follows from more general principles (Progovac 1998a). Thus, in the absence of any better alternative, I will retain the LCL as a useful generalization.

1.2.2 Structure of coordination

Coordination always has at least two conjuncts. Dik (1968) traces this particular property back at least as far as Dionysius Thrax. Their relationship to each other and to the coordinator itself has been hotly debated.

Although coordination has often been treated as a 'flat' structure (Chomsky 1981, Gazdar et al. 1985, Ingria 1990, Jackendoff 1977, Pollard and Sag 1994, Pullum and Zwicky 1986, Sag et al. 1985), the case for asymmetry in coordinative structures has been explored by Munn (1993), Ross (1967), Zoerner (1995) and Johannessen (1998) amongst others.

The case for an asymmetric structure is made by the following contrasts from Progovac (1998a) citing Ross (1967).

(10) a. John left, and he didn't even say good-bye
b. John left. And he didn't even say good-bye
c. *John left and. He didn't even say good-bye

Similarly, it is possible to extrapose from the last conjunct but not from the first (Progovac 1998a:citing Munn (1993)).

(11) a. John read a book yesterday, and the newspapers
b. *John read the newspapers yesterday, the book and

Following Johannessen (1998), Kayne (1994), Progovac (1998a;b), Van Koppen (2005), Zoerner (1995), coordination has a specifier-complement structure, where the first conjunct is in the specifier of a Coordination Phrase headed by a coordinator

[5]By assuming that almost anything may be coordinated, I disagree with Kayne (1994) who claims that heads cannot be coordinated. Another approach that constrains the categories that may be coordinated is that of Bošković and Franks (2000) who argue that VPs cannot be coordinated. Nothing in the present analysis hinges on this, however.

AND. The second conjunct is the complement of AND. This is illustrated in (16).[6] This structure is supported by the fact that a pronoun can occur in the second conjunct and is not ruled out by Principle C. A flat structure would not predict the asymmetry.

(12) a. $John_i$ and his_i mother took a stroll along the embankment

b. *His_i mother and $John_i$ took a stroll along the embankment

Essentially the same point can be demonstrated with Principle A. Although the first example is not totally well-formed, it still contrasts with the second which is ungrammatical.

(13) a. ??Both $John's_i$ essay and pictures of $himself_i$ were distributed on the internet

b. *Both pictures of $himself_i$ and $John's_i$ essay were distributed on the internet

Note however that this contrast is rendered dubious by the fact that examples with anaphors are not readily generalizable. Consider the following ungrammatical example from Progovac (1998a).

(14) a. *Either $John_i$ or a picture of $himself_i$will suffice

b. Either $John_i$ or a picture of him_i will suffice.

Stronger evidence for a specifier-complement structure for coordinate structures comes from Van Koppen (2005) who uses complementizer agreement facts to drive home this point. In the following example from Bavarian, the complementizer agrees with either the first conjunct or with the mother coordinate phrase. Agreement with the second conjunct is not possible.

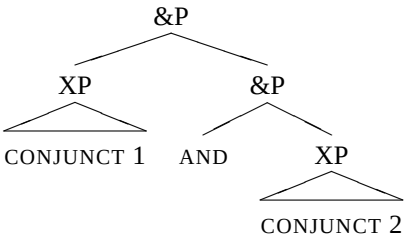
(15) a. *...daß-sd* *du* *und* *d'Maria* *an* *Hauptpreis* *gwunna* *hab-ds*
...that-2SG [you.SG and the Maria]2PL the first.prize won have-2PL

b. *...daß-ds* *du* *und* *d'Maria* *an* *Hauptpreis* *gwunna* *hab-ds*
...that-2PL [you.SG and the Maria]2PL the first.prize won have-2PL

'...that Maria and you have won the first prize' [Bavarian]

[6] Munn (1993) uses the term Boolean Phrase to refer to the &P. He assumes that both conjuncts are adjuncts to the Boolean Phrase. I will not make this specific assumption although nothing in my analysis hinges on this fact. Also, given the deep similarity between specifiers and adjuncts (Kayne 1994), the two approaches may ultimately be able to be combined.

(16)



Of course, the label &P is actually a useful shorthand for a far more complex label: coordination phrases essentially behave as though the mother node, &P, has the same label as the conjuncts. Cremers (1993) argues that the coordinator itself is 'combinatorialy inert' and does not have a category of its own. Zoerner (1995) suggests that the features on all the conjuncts percolate up to the mother node.[7] Johannessen (1998) argues that the features of &P are inherited from the specifier (i.e. from the first conjunct) via spec-head agreement. This approach has a number of problems in terms of resolving gender (Corbett 1983) and agreement (Van Koppen 2005) on the respective conjuncts. Moreover, since spec-head agreement is no longer required in a syntactic system with AGREE, this approach can no longer be sustained.

From a more semantic point of view, conjunction has been treated as group forming (Lasersohn 1995), as intersection (Gazdar et al. 1985, Sag et al. 1985, Winter 1996) or as being ambiguous between intersection and union (Hoeksema 1983, Link 1984, Zoerner 1995). Other approaches make use of lattices (Daniels 2002, Levy and Pollard 2002). There is as yet, no consensus over this issue.

All these options face problems when considering coordination of unlike categories, so it is probably necessary to assume some version of the LCL, if only out of necessity. Moreover, a number of these approaches have problems in dealing with coordinated predicates.

(17) Ralf painted the house yellow and blue

Intersection and union fail because this does not entail that the house was painted either yellow, or blue or green (Cremers 1993). What it does mean is that the house has a set of properties, a subset of which are yellow and a subset of which are blue. Thus, the coordinator is an operator of some kind that creates a group, selected from the set of yellow things, and also from the set of blue things.[8] Given these issues, which have not been entirely resolved, I will assume that the mother node is a group of the labels of the conjuncts possibly mediated by rules of resolution in order to account for the well known interactions of agreement, gender and Case in coordinative contexts (Corbett 1983, Van Koppen 2005).

[7] See Cormack and Breheney (1994) for an analysis of (ordinary) coordination in operator-variable terms. They capture the 'non-projection' of the coordinator by claiming that all syntactic operators co-project in combination with the projection of the complement. Under their analysis the label of the mother of & would be V/&. In other words, operators like coordination are transparent for projection purposes. I do not address this option here.

[8] This intuitive notion is compatible with coordination always being group-forming (Lasersohn 1995), but where the operation is crucially constrained by the LCL. Thus, given two coordinated conjuncts, A and B, the mother node contains the group {A,{B}} where A and B are subject to the LCL.

The lexical specification of coordination

The 'meaning' of coordination has been a subject of some fierce debate over the years with intense discussion over whether it is Boolean or not. Since this dissertation focusses on coordination below the level of the head, it is not directly relevant to this debate, although it does bear on the discussion indirectly. Consequently, it is not my intention to become too deeply engrossed in this issue and an attempt is made to keep the assumptions about the nature of coordination as uncontentious as possible.

So, momentarily setting aside the 'meaning' of coordination, there are other matters concerning the lexical specification of coordination which are important for the discussion in this dissertation. The lexical specification of coordination has already been alluded to insofar as it is suggested that the CSC derives from a deep property of coordination itself. Similarly, the LCL has not been reduced to any deeper principle. In the absence of better alternatives, I will retain the LCL and CSC useful generalizations, and assume that they are universal properties that are a function of a deep property of coordination itself.

1.2.3 Conclusion

In conclusion, the following basic properties of coordination with *and* are assumed.

i. AND is a head with conjuncts as its specifier and complement,
ii. AND is an operator taking (at least) two conjuncts
iii. which coordinates 'Like' entities (Law of Coordination of Likes (Williams 1978)) and,
iv. is subject to the Coordinate Structure Constraint, with the exception of Across The Board movement (Ross 1967).

In the present context, it is taken as a fundamental hypothesis that coordination in pseudo-coordinative contexts is always real coordination (as opposed to a subordinative marker) and has these properties.

1.3 Theoretical background

The theoretical background informing this dissertation is that of the Minimalist Programme (e.g. Chomsky (1993; 1995b) and subsequent works) although many of the arguments will be interpretable to those working in other frameworks. I make several sets of assumptions relating to the operations assumed to exist in Narrow Syntax and to phrase structure.

1.3.1 Operations of Narrow Syntax

There are only three primitive operations in Narrow Syntax, namely MERGE, MOVE and AGREE. MERGE is the primitive structure-building operation, creating binary sets of the form {A, B}. MERGE is incremental and bottom up. MOVE is directly related to

MERGE and can be seen as 'Internal MERGE', where a syntactic element which is already present in the structure is remerged at a higher point in the structure. AGREE is a mechanism of feature valuation, where uninterpretable features 'probe' for a 'goal' in their complement which can provide them with a specific value. The domain of AGREE is assumed to be local, presumably restricted by phases (Chomsky 1999; 2001), Multiple Spell out (Uriagereka 1999) or similar.

The effect of taking this severely restricted set of operations seriously is that the system of Narrow Syntax cannot be unnecessarily enriched with additional operations. Consequently, in this dissertation, an analysis is proposed that is 'Minimal' in the sense that it does not propose additional mechanisms. All triggers for operations are assumed to be lexical: whether individual features or properties of lexical heads which drive operations. This will be essential in the analysis proposed in this dissertation since I will argue that it is the unique properties of coordinative heads which are at the heart of pseudo-coordination.

1.3.2 Phrase structure

The structures in this dissertation use the traditional labels of CP, TP, vP, VP etc. In addition, the structures have deliberately been kept simple; there is no need for recourse to a highly articulated set of functional projections either in the functional or the verbal layer. This is not to say that such functional projections do not exist, merely that they are not necessary to explain the pseudo-coordinative properties under discussion here.

Nevertheless, these simple representations belie the fact that I assume a labelling system such as the 'bare phrase structure' system proposed by Chomsky (1995a). In this system, the label of a particular node is indistinguishable from the content of the head which projects it. Thus, the nodes between heads (XP and X-bar) are not necessarily distinct from the heads themselves and all adjunction is to heads. To illustrate this, consider the following example where X is a head.

(18) **X**

Adjunction of a Y to the head X, yields the phrase marker (19) where Y projects.[9]

(19)

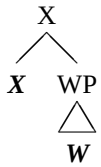

However, adjunction of a head Y to the head X, could also yield the phrase marker (20) where X projects. In both (19) and (20), the extension condition has been met.

(20)


[9] Carnie (1995) points out that this structure is, in fact, ambiguous between head and phrasal status. The distinction must be stipulated.

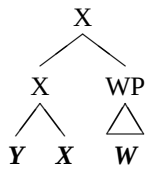
Now consider the following scenario, where the head X is taken to be the head of a phrase projecting itself.[10] A complement, WP, is added for context but will play no further role.

(21)



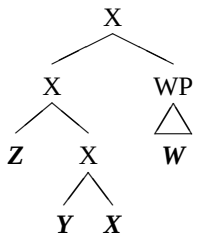
Adjunction of a head Y to the head X yields the following structure where X still projects its phrase.

(22)



This is the basic mechanism utilized by head movement, although there is no stipulation that *only* head movement can produce these structures.[11] Nothing in principle prevents an additional head Z from being merged to the complex head X yielding the phrase marker in (23) where X projects by the same mechanism that yielded (20).[12]

(23)



The implication of this type of phrase structure is that at least some types of complex heads are built using the tools of Narrow Syntax. This is not really novel view, given that head-movement standardly uses this mechanism.

[10] In the parlance of Bare Phrase Structure, XP may be represented as X^{MAX}. For convenience, I will retain use of XP to denote a projection of X.

[11] It is well known that head movement results in a problem for Government of the trace of the head. However, if this structure is base-generated then this well known problem dissipates. Admittedly, the issue of whether head movement complies with the Extension Condition remains, but see Harley (2003; 2004), Matushansky (2002; 2005a;b), Richards (1997) for alternative visions of the extension condition and potential solutions to this problem. Within a Bare Phrase Structure system, the following solution presents itself. If it is indeed the case that the label of X and X itself are non-distinct, then adjunction to X is effectively adjunction to all segments of X and thus the extension condition is satisfied in this context too.

[12] Note that this structure is incompatible with the LCA (Kayne 1994) since two morphological heads may mutually c-command each other. This structure is also not compatible with the spirit of the 'tucking in' approach (Richards 1997) which was extended to heads by Collins (2002) because head-adjunction is always to the highest head node, and not to the original projecting head itself.

1.3.3 Aspect and *Aktionsart*

Another possible point of confusion relates to aspect and *Aktionsart*. Although these are often referred to collectively as aspect, it is important to distinguish them. By the term '*Aktionsart*', I refer to situation aspect (Smith 1997), an inherent property of verbs whereby they are specified as being bounded or unbounded. This reduces to the Vendlerian distinction between states, activities, achievements and accomplishments.

(24) Karyn resembled Liv Tyler [State]

(25) Friederike won a race [Achievement]

(26) Neil drove Marjan back home safely [Accomplishment]

(27) Svetoslav trudged through the snow for hours? [Activity]

Every event may have a starting point, *initium*, a process, *cursus* or an ending point, *finis* (Dowty 1979, Tenny 1987, Vendler 1957, Verkuyl 1972; 1993). This is what Johanson (1996) calls the 'Internal Phase Structure' which reduces to the distinction between telic and atelic predicates. The *cursus* can be represented as a phase φ, a non-punctual stretch of time corresponding to Vendler's [+PROCESS], and the *finis* can be represented as a *telos* τ, a point of punctual change corresponding to Vendler's [+DEFINITE]. The resultant classification is basically that of Vendler (1957). φ can be subdivided into subparts whereas τ, being punctual, cannot be subdivided any further. States, having no apparent internal structure, cannot be subdivided either.

Table 1.1: Vendler Classes

Asp. Class	Vendler Class	Notation
States	-PROCESS,-DEFINITE	$[-]$
Achievements	-PROCESS,+DEFINITE	$[\tau]$
Accomplishments	+PROCESS,+DEFINITE	$[\varphi, \tau]$
Activities	+PROCESS,-DEFINITE	$[\varphi]$

It is important to note that the *Aktionsart* of the verb is generally lexically specified and is not a property of clauses. It is simply a lexical fact that some verbs such as 'wander' are activities whereas other verbs such as 'shoot' are punctual. This is not to deny that there are interactions between the lexical *Aktionsart* of a verb and other entities within the clause, such as the direct object. Thus, an unbounded activity verb can be provided with an endpoint by an appropriate DP. In this dissertation, it will also be shown that the *Aktionsart* of one verb can interact with that of another.

This should be contrasted with viewpoint aspect, which, although it has commonalities with *Aktionsart*, is an external view of an event as to whether it is starting, progressing, completed etc. regardless of its Vendlerian class (Comrie 1976). Henceforth, when the term 'aspect' is used, it refers to viewpoint aspect.

1.3.4 Antisymmetry, Dutch and Afrikaans

Following the insights of Kayne (1994), the traditional head-final analysis of Dutch was reformulated in head-initial terms by Zwart (1994; 1997). Dutch and Afrikaans share many of the same characteristics with respect to headedness and consequently, the broad generalization of Zwart (1994; 1997) can be applied to Afrikaans: it is head-initial (Vriends 1998). Many of the arguments put forward by Zwart actually do not rest on the LCA itself but follow from more general notions of headedness. Thus, Afrikaans has clause-initial complementizers, an overwhelming tendency to use prepositions and canonical 1-2-3 word order where verbal clusters are concerned. All these facts point to Afrikaans being head-initial. The only factors arguing for a head-final analysis are some postpositions commonly associated with R-words (e.g. *waarmee, daarom* etc.), as well as 2-1 word order between the past-tense auxiliary and lexical verb (e.g. *gelees het* 'PST-read AUX).[13] The overwhelming evidence points to Afrikaans being a head-initial language independently of whether the LCA is assumed or not. Given this, a head-initial analysis of Afrikaans will be assumed although the structure of the low VP area follows the OV system proposed by Barbiers (2000). This model easily captures the fact that Afrikaans has preverbal objects *within* verbal clusters, a fact that will be discussed in more detail in the second part of this dissertation.

Nevertheless, some broad antisymmetric notions are taken for granted and are fully compatible with head-initial structures. These include the ban on rightward movement and on right-adjunction. However, contrary to what is suggested by Kayne (1994), it is assumed that coordination can occur below head level. While Kayne's argument is no doubt correct for syntactic structures, the fact remains that morphological structures must be represented somehow; traditional morphological structures are incompatible with the LCA. Whatever solution is found to this problem can also be applied to coordination below head level. Thus, if one assumes a framework such as that of Ackema (1995) or Carnie (1995; 2000), then structure below head-level follows syntactic structure. All this suggests that coordination below head level is indeed possible and is governed by whatever principles of linearization are applied to morphological structures independently.

1.4 Structure of the dissertation

The dissertation is divided into two parts, one dealing with English verbal pseudo-coordination and the other dealing with pseudo-coordinative structures in Afrikaans. The first part is largely concerned with developing a set of tests to identify pseudo-coordinative construction types and in outlining a typology of pseudo-coordinative structures based on those found in English. The second part applies these tests to Afrikaans hendiadys-type constructions with posture verbs, showing how they fit into the proposed typology and also accounting for some problematic verb-second effects in Afrikaans.

[13] See Biberauer (2003; 2004) for an interesting analysis in terms of remnant movement.

1.4.1 Part I:

Chapter (2) compares a number of coordinative types with respect to a number of tests. Ordinary, garden-variety coordination is used to establish a base-line for coordinative behaviour. The tests show that there are actually a number of different pseudo-coordinative constructions, each with slightly different properties.

In chapter (3), the tests developed in chapter (2) are applied to a different type of construction: reduplicative coordination (ReCo). It will be shown that ReCo constructions pattern very similarly to a subtype of pseudo-coordination. This comparison will yield important clues to the analysis of pseudo-coordination more generally.

In chapter (4), an analysis of a subtype of pseudo-coordination is developed. It is argued that contrary to the conclusions of others, pseudo-coordination is not an instance of subordination, but is instead a particular type of syntactic compounding at or below the level of the head and using coordination. This is corroborated by a demonstration that *Aktionsart* features must also be coordinated in a similar way.

1.4.2 Part II:

The second part of the dissertation extends the conclusions arrived at in the first part, through a discussion of Afrikaans pseudo-coordinative constructions. Afrikaans is important in this regard because (i) it has not been as widely studied as other languages with pseudo-coordination and (ii) it exhibits 'quirky' verb-second effects, namely complex initials, which raise important questions for the theory.

Chapter (5) contains a general introduction to the verbal system of Afrikaans, including various kinds of functional verbs in Afrikaans. It is shown that Afrikaans verbs are not inflected for person, number or tense. Pseudo-coordinative complex initials are introduced and explored.

Chapter (6) explores how pseudo-coordinative complex initials (and their simplex initial counterparts) behave with respect to general tests for pseudo-coordination. It is demonstrated that there are no semantic or syntactic differences in the ways that complex initials and simplex initials behave with respect to these tests. This suggests that they are derived from a common base. It is also determined that pseudo-coordinative constructions of this type behave identically to pseudo-coordinative *try* constructions in English. This corroborates the typology developed in the English sections of the dissertation.

Chapter (7) develops an analysis of pseudo-coordinative complex initials. It is shown that complex initials are complex heads derived in the syntax. The properties of this derivation are crucially dependent on the fact that a coordinative marker is merged: it is the properties of individual lexical items that drive the derivation. It is also argued that the Afrikaans quirky verb-second effects follow from a strict interpretation of the Coordinate Structure Constraint and Law of Coordination of Likes as applied to features *below* the level of the head. Finally, the appendix to chapter (7) briefly outlines an analysis of complex initials with certain aspectual verbs (Direct linking verbs) which do not appear to be pseudo-coordinative in nature. This class of verbs is argued to be non-heterogeneous and, once the exceptional cases are con-

trolled for, the remainder of verbs in the class behave identically to ILVs when tests for pseudo-coordination are applied. This suggests that direct linking verbs have a 'hidden' pseudo-coordinative character.

Part I

English pseudo-coordination

Chapter 2

Distinguishing pseudo-coordinative structures

In chapter (1), several types of verbal coordination were listed (examples (1) to (4) on page 1). Some of these are repeated here as (1) to (3).

(1) Caesar went across the Rubicon and he conquered Gaul [OCo]

(2) Caesar went to Gaul and devastated it [SceCo]

(3) Caesar saluted his legions before…
he went and addressed them [ConCo]

Example (1) is an instance of ordinary coordination (OCo). Examples (2) and (3) are instances of asymmetric coordination, also known generally as pseudo-coordination or subordinating coordination (Quirk et al. 1985). They have been labelled as 'V1 and V2' (Shopen 1971), 'go & V' (Carden and Pesetsky 1977), and 'go & get' (Pullum 1990). More descriptively, they have also been called 'non-logical coordination' (Lakoff 1986, Schmerling 1975) and 'asymmetrical coordination' (Na and Huck 1992, Schmerling 1975) in the sense that one conjunct is semantically more central than the other. Schmerling (1975) claims that this type of coordination is VP coordination and that it describes two closely related events.[1]

Although asymmetric coordination has been recognised as a non-unitary phenomenon (Schmerling 1975), almost all studies have treated ConCo as being the same as SceCo. An exception to this is Na and Huck (1992) who briefly characterise this construction, which they call 'idiomatic, non-logical coordination' as being 'less context

[1] Schmerling (1975) explicitly denies that all asymmetric coordination has a temporal relation holding between the conjuncts. The distinction she makes is captured by the system of Lakoff (1986). According to Lakoff (1986), Type A asymmetrical coordination expresses a natural course of events; Type B expresses a course of events counter to natural expectation; and Type C expresses a cause-effect relation. While it is certainly true that asymmetric coordination in general may exhibit these different types, it seems to me that SceCo almost always is of Lakoff's Type A.

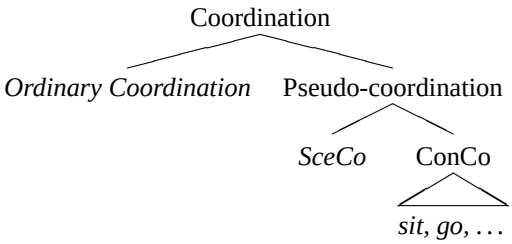
dependent' (Na and Huck 1992:271) in the sense that the event denoted by the pseudo-coordinative verb is not distinct from that denoted by the lexical verb (as it was for (1 and (2)). They do not offer any further distinguishing tests to bolster their intuition.

One of the aims of this chapter is to make an explicit distinction between examples (2) and (3). Thus, the goals of this chapter are to:

i. compare the properties of OCo, SceCo and ConCo,
ii. demonstrate that pseudo-coordinative constructions (SceCo and ConCo)) are distinct from OCo,
iii. demonstrate that SceCo and ConCo constructions are different from each other and
iv. provide a number of tests that can be applied to distinguish these constructions.

The result of these tests will be a typology of coordinative and pseudo-coordinative structures illustrated by the tree 2.1.

Figure 2.1: First approximation of pseudo-coordination in English



2.1 Tests for OCo, SceCo and ConCo

This section compares garden-variety OCo with two types of pseudo-coordination. The first of these is ConCo proper (3) and the second is a construction that superficially looks like ConCo with a PP in the verbal string, namely SceCo (2). That both these types have been taken to be pseudo-coordination is evident from the literature. What this chapter will show, however, is that not only does pseudo-coordination generally differ from OCo, but also that SceCo differs from ConCo. By making these differences explicit and by providing a variety of tests to systematically distinguish them, I hope to more precisely circumscribe these phenomena, reducing some of the confusion in the literature and hopefully paving the way to a comprehensive analysis.

2.1.1 Violation of the Coordinate Structure Constraint

The first difference between these coordinative types, and the one most frequently alluded to in the literature is the fact that they differ with respect to their extraction properties. As is well known, OCo are strong islands (Ross 1967). Nothing can be extracted from them unless extraction proceeds in an across-the-board (ATB) fashion

(Ross 1967). Informally, ATB extraction is the phenomenon where the same element is extracted from both conjuncts simultaneously.

(4) a. John both planned an article and he wrote a book
b. *Who t both planned an article and he wrote a book?
c. *Who did John both plan an article and t wrote a book?
d. *What did John plan t and he wrote a book?
e. *What did John plan an article and he wrote t?
f. What did John both plan t and write t?

(4a) is the basic sentence. (4b-e) show that subjects and objects cannot be extracted from either conjunct. (4f) shows that extraction can only occur from OCo provided that it is across-the-board (Ross 1967).

This paradigm can be repeated with an intransitive verb in the first conjunct. This is potentially important because (i) pseudo-coordinative structures typically have an unaccusative verb in the first conjunct (e.g. *go*, *come*, *sit* etc.) and (ii) Cormack and Breheney (1994) suggest that unaccusativity/ergativity licenses extraction from OCo.

(5) a. Citizen Kane died and he left a mysterious legacy
b. Who died and left an amazing legacy?
c. *What legacy did Citizen Kane die and leave?

Example (5a) is the basic sentence. (5b) shows that the subject may be extracted in ATB fashion from both conjuncts. (5c) shows that the unaccusativity of the first verb does not license non-ATB extraction of the object. The paradigm is quite similar to that of extraction from transitive structures (4). For the sake of completeness, it can also be shown that an unergative verb in the first conjunct does not license non-ATB extraction.

(6) a. Sir Aguecheek talked and he bored everybody to tears
b. Who talked and bored everybody to tears?
c. *Who did Sir Aguecheek talk and bore to tears?

This may be compared to the paradigm for unaccusative verbs (5). There is no distinction to be found between them. Thus, contrary to what is suggested by Cormack and Breheney (1994), ergativity does not license extraction from OCo. Thus, OCo are strong islands for extraction (Ross 1967). This is a very robust test for coordinate structures and consequently I use it fairly systematically in this chapter to distinguish OCo from other, non-canonical coordinative structures.

ConCo

One of the most salient properties of ConCo constructions is that they allow for systematic violations of the CSC constraint.

(7) a. John went and read a book on the bus
b. What did John go and read on the bus?
c. Who went and read a book on the bus?

(8) a. John sat and read a book on the bus
b. What did John sit and read on the bus?
c. Who sat and read a book on the bus?

Although these types of examples are deemed violations of the CSC by Ross (1967) himself, it might be suggested that argument extraction in these cases is actually ATB extraction; in other words, that the extracted WH-element is coindexed with two different gaps. This would essentially mean that there is no real difference between OCo and ConCo. However, this is demonstrably false. First of all, one would expect a difference between unergative and unaccusative verbs. It has already been shown that such a distinction does not exist ((5) and (6)). Another argument comes from examples of extraction from the complement of the benefactive preposition *for*.

(9) a. John pumped water for the soldier and Mary bought a present for the soldier.
b. *Who did John pump water and Mary buy a present for?
c. Who did John pump water for and Mary buy a present for?

Example (9b) strands a preposition in the second conjunct of an OCo construction. The ungrammaticality of (9b) can be derived from the fact that extraction has occurred from both conjuncts, but the preposition has only been stranded in one. (9c) shows that if ATB occurs, then the preposition must be stranded in both conjuncts. Thus preposition stranding can be a diagnostic of ATB movement. Let us now look at ConCo constructions in this regard.

(10) a. Who did John go and pump water for?
b. *Who did John go for and pump water?
c. *Who did John go for and pump water for?

(11) a. Who did John sit and pump water for?
b. *Who did John sit for and pump water?
c. *Who did John sit for and pump water for?
‘John sat (for a portrait) for X and also pumped water for X’

If preposition stranding marks the extraction site, then in (10a) and (11a), extraction occurred only from within the second conjunct. The fact that this is grammatical implies that extraction did not proceed in ATB fashion. Examples (10b) and (11b) demonstrate that extraction from the complement of the pseudo-coordinative verb, within the verbal string, is impossible. Finally, (10c) and (11c) strand prepositions in both conjuncts; this would be what ATB would look like if it had indeed occurred. They are both ungrammatical on a pseudo-coordinative reading. In other words, the coordinated verbs cannot be interpreted as single predicates. Where some type of interpretation is possible at all (e.g. (11c)), it is an ATB reading but not a pseudo-coordinative one, as the transliteration implies. The fact that these examples are ungrammatical is evidence that ATB did not take place in ConCo contexts. Thus, extraction from ConCo constructions does indeed violate the CSC. ConCo constructions are thus not islands at all

This is supported by the fact that a variety of adjuncts can be extracted from ConCo. Adjuncts of different types are usually deemed to be merged in the structure at different points, whether arranged according to semantic constraints (Ernst 2002) or a functional hierarchy (Cinque 1999). Those adjuncts attached relatively 'high' in the functional structure, such as reason adjuncts, can be collectively called 'high' adjuncts. Those that attach lower, such as manner adverbs, are known as 'low' adjuncts.

(12) I wonder why John went and pumped water? [High reason]

(13) I wonder how John went and pumped water? [Bare 'how']

(14) I wonder how often John went and pumped water? [Frequentative]

(15) I wonder how carefully John went and pumped water? [Low manner]

Extraction of adjuncts is always grammatical with ConCo. Reason adjuncts (12) are merged 'high' and may even be base generated in Spec CP (Culicover 1991, Reinhart 1981), allowing them to escape from some weak islands. In this regard, consider the negation island below.

(16) a. *How carefully didn't John fix the car?

b. Why didn't John fix the car?

For these reasons, these types of adjunct extractions should be treated with caution. While grammaticality of extracted reason adjuncts would not necessarily indicate that a constituent is not an island, ungrammatical results could be a significant indicator of islandhood.

Frequentative adjuncts adjoin to events and are thus higher than PredP (Ernst 2002:446). In the functional hierarchy of Cinque (1999), frequentatives are merged in the high mid-range of the hierarchy. Manner adjuncts are among the lowest-merged adjuncts, being merged either at *v*P or VP level (cf. Ernst (2002), who uses the terms PredP and VP respectively to refer to adjunction sites within L-syntax). For this reason they are particularly useful in ascertaining the potential islandhood of VP conjunction.

Thus the fact that examples (13) and (15) are grammatical is particularly telling. This more fine-grained approach to extraction of adjuncts will prove important in later sections of this chapter.

In conclusion then, ConCo constructions are not islands for extraction at all. This characteristic will be used repeatedly in many of the examples to follow in this thesis, in order to distinguish ConCo from OCo.

SceCo

SceCo constructions allow arguments to be extracted. In this respect, they pattern with ConCo. The following examples show that extraction of arguments from SceCo is unproblematic.

(17) What did John go off and read?

(18) What did John go to town and buy?

(19) What did John finally sit down and read?

(20) What did John sit at home and read?

Similarly, DPs can be extracted from the complement of benefactive *for*, stranding the preposition.

(21) a. John went to town and pumped water for the soldier
b. Who did John go to town and pump water for?
c. *Who did John go to town for and pump water?
d. *Who did John go to town for and pump water for?
'John both went to town for X and also pumped water for X'

As demonstrated in section (2.1.1), the stranding of the preposition marks the extraction site. Thus example (21b) shows that extraction can occur from the second conjunct: SceCo like ConCo allows systematic violations of the CSC. Example (21c) shows that this kind of extraction cannot occur from the first conjunct within the verb string.[2] Example (21d) shows that although ATB extraction is possible on an OCo reading, ATB is impossible with a pseudo-coordinative reading.

[2]Examples like (21c) seem to imply that the first conjunct is an island for extraction. This would be supported by the findings of a number of studies claiming that extraction is possible from one conjunct but not another depending on semantic primacy (see *inter alia* Culicover and Jackendoff 1997, Goldsmith 1985, Höhle 1991, Na and Huck 1992). They argued that extraction is not possible from a semantically subordinate conjunct. Na and Huck (1992) quote the following examples as being ungrammatical and therefore support for their generalization. My own judgements are that these examples are well-formed.

(1) ?By which route did he go and buy liquor at the store

(2) In which chair can I sit and listen to him?

(3) Where has Carla gone and told the story this time?

In fact, all these examples can be construed as ConCo constructions and are predicted to be grammatical by the tests developed in this chapter.

The ability to extract arguments without incurring a CSC violation shows that SceCo has something in common with ConCo. However, it doesn't seem possible to extract all types of adjuncts from SceCo: they are selective islands. Manner adverbs seem not to be extractable from the second conjunct although they extract freely from the first. Thus, care must be taken to ensure that they scope only over the second conjunct.

(22) a. How did you go and pay the proprietor? [ConCo]
   i. By credit card
   b. How did you go to town and pay the proprietor? [SceCo]
   i. By bus
   ii. *By credit card

In the ConCo construction (22a), the answer indicates that the manner WH scopes over the manner of *paying*. It is not really possible to find a good interpretation for the case in which the adverbial would scope over the manner of *going* because this would then, by definition, be a SceCo construction. What is important however, is that the reading available for the (a) example is ill-formed for (22b).

(23) a. What did John go to town and read?
   b. *How carefully did John go to town and read the book?
   c. *How thoroughly did John go to town and read the book

The same logic applies to all the following examples.

(24) a. I wonder how fast John went and read the notes I gave him?
   i. It only took him an hour to finish them all
   b. I wonder how fast John went to town and read the notes I gave him
   i. *It only took him an hour to finish them all
   ii. He managed to go to town and start reading within an hour, but he still hasn't finished

(25) a. I wonder how often John went and sang the national anthem at the football match yesterday?
   i. He got drunk and sang it three times in a row!
   b. I wonder how often John went to the stadium and sang the national anthem yesterday?
   i. *He got drunk and sang it three times in a row!
   ii. He arrived a the stadium three times because there were three different matches being played

In the following examples ((26), (27)and (28)), I have chosen extractees that are inherently difficult to associate with the pseudo-coordinative verb. In other words, they must necessarily scope over the lexical verb and not the first. As expected, the relative ungrammaticality of the SceCo examples follows from the fact that SceCo are selective islands.

(26) a. John goes and looks busy every time his boss arrives [ConCo]
   i. Just how busy does John go and look every time his boss arrives?
   b. John goes to work and looks busy every time his boss arrives [SceCo]
   i. *Just how busy does John go to work and look every time his boss arrives?

(27) a. John goes and behaves badly every time his mother in law visits [ConCo]
   i. Just how badly does John go and behave every time his mother in law visits
   b. John goes to the bar and behaves badly every time his mother in law visits [SceCo]
   i. *Just how badly does John go to the bar and behave every time his mother in law visits?

Consider the following scenario where boxers actively try and weigh as little as possible and may even engage in various nefarious activities to ensure that they do.

(28) a. A referee complaining that boxers tend to weigh as little as possible on weigh-in: “You’ll find that your typical boxer mysteriously goes and weighs half as much on weighing in”.
   i. On weighing day, can you guess just how much does your average boxer can go and weigh? [ConCo]
   ii. ??On weighing day, how much does your average boxer go into the ring and weigh? [SceCo]

In summary, all these data show that SceCo constructions are selective islands in the sense that arguments can be extracted but that low adjuncts cannot.[3]

2.1.2 XPs in the verbal string

On the basis of the extraction facts, it is possible to identify two types of pseudo-coordinative structure, ConCo and SceCo. A salient difference between them is that the former has a contiguous verb string whereas the latter may have a PP or particle before the coordinator. This section explores whether XPs can occur inside the verbal string more generally.

[3]Wiklund (2005) shows that Swedish pseudo-coordinative structures with PPs within the verbal string do not show selective island effects. However, she also quotes examples that demonstrate that Swedish may allow extraction from within adjuncts independently. It is also suggested that the selective islandhood of English SceCo is not sufficient to warrant its classification as a different construction from ConCo. Note however, that there are additional tests which can distinguish ConCo and SceCo independently of extraction.

OCo

First consider the distribution of XPs in OCo constructions.

(29) a. *John* $\uparrow_A$ <u>*sang*</u> $\uparrow_B$ <u>*and*</u> $\uparrow_C$ <u>*danced*</u>

b. John sang ≺regularly≻ and ≺regularly≻ danced before the president

c. John sang ≺in 2004≻ and, ≺in 2004≻, danced before the president

Example (29a) is the OCo base example. The verbal string has been underlined and two potential positions for XPs are shown by the arrows. (29b,c) show that adverbials and PPs can occur immediately to the left or right of the coordinator in positions B or C. Note that due to a general prohibition on PPs before the verb in English, the PP takes on a parenthetical function in Position C.

ConCo

ConCo constructions, do not allow XPs in Position C. In the following examples, WH-extraction is used to force a ConCo reading.

(30) a. John went and, in 2004, carefully read a biography

b. What did John go and (*in 2004) read?

c. How carefully did John go and (*in 2004) read the biography?

d. What did John go and (*regularly/*never) read

The first example (30a) is the base example with a PP and adverbial in Position C. The PP takes on a parenthetical intonation. It is grammatical because it is actually an OCo construction as subsequent non-ATB extractions demonstrate (30c,d). Extraction forces a ConCo reading. However, when extraction is performed in the presence of an XP in postion B, the result is ungrammatical. Even allowing for the parenthetical nature of PPs in this position, there is a clear distinction. Given that extraction from ConCo is well-formed in the absence of an XP in Position C, it is clear that ConCo cannot have an XP in this position. (30d) shows that a preverbal adverb may also not occur in this position. The inability of an adverb to occur in Position C is especially important because PPs do not usually occur preverbally in English and their ungrammaticality in Position C might be excluded on these grounds. However the same reasoning does not apply to adverbs. The same results hold for ConCo constructions with *sit*.

(31) a. The hermit sat and, in 2004, read a biography

b. What did the hermit sit and (*in 2004) read?

c. How carefully did the hermit sit and (*in 2004) read the biography?

d. What did the hermit sit and (*regularly/*never) read?

Concerning Postion B, at first glance it seems that a PP, particle or adverbial can occur in Postion B of ConCo constructions. However, a glance at the selective-island data in section (2.1.1) will show that ConCo cannot have XPs in this position, whereas SceCo can; the presence of any XP in Postion B is indicative of a selective island and thus is symptomatic of SceCo constructions and not of ConCo.[4] The generalization is thus that ConCo cannot have any XPs anywhere within the verbal string, hence the name: contiguous coordination.

SceCo

Even though SceCo constructions can have some XPs in Postion B , there are limitations on what kinds of material can occur there.

(32) a. What did the hermit go off and buy? [Directional/affective]
b. What did the hermit go to town and buy? [Directional/goal]
c. What did the hermit go (*last week) and buy? [Temporal]
d. What did the hermit go (*with dignity) and buy? [Manner]
e. What did the hermit sit at home and read? [Location]

The generalization seems to be that only verbal particles associated with the first verb can occur in Position B. PPs that establish a location, goal or final position of the subject can occur in Postion B . Temporal or manner PPs are ungrammatical in Postion B.

One of the defining features of SceCo constructions is that it is possible to have an XP in Postion B . However, even in SceCo constructions, no XPs can occur within the verbal string in Position C.

(33) a. John went to town and, in 2004, bought a book
b. What did John go to town and (*in 2004) buy?
c. What did John go to town and (?regularly/*never) buy?

Example (33a) is the base example and is actually an instance of OCo. WH extraction is used to filter out OCo readings; (33b,c) show that extraction is impossible in the presence of an XP in the second conjunct. The same can be demonstrated with preverbal adverbs (33c). This indicates that SceCo does not allow an XP in Position C. The same results hold for SceCo with particle verbs.

(34) a. John went off and, in 2004, bought a book
b. What did John go off and (*in 2004) buy?
c. What did John go off and (?regularly/*never) buy?

[4] More precisely, the presence of an XP in Postion B could also indicate that one is dealing with an OCo or a SceCo construction. In the examples at hand, however, the presence of non-ATB extraction excludes the possibility of OCo constructions.

The choice of *never* as a negative adverbial in (34c) is deliberate. In the literature, it has been reported that pseudo-coordinative constructions can be modified with *not* (Pullum 1990). The following examples show that (i) this effect is still not perfectly grammatical and (ii) only occurs in WH contexts and is completely ungrammatical in the absence of WH movement. This means that the base version of the sentence is ungrammatical anyway and so there is no minimal contrast. For this reason, these data are treated as being suspicious.

(35) a. ??What did John go and not eat

b. John went and (*not) ate

c. John did ≺not≻ go and ≺*not≻ eat

In addition, these data cannot disprove the generalization that XPs cannot occur in Position C in ConCo/SceCo contexts since in English *not* is not an XP but a head, as is evident from the fact that it triggers *do*-support (Chomsky 1995b). The tests in the literature are thus inconclusive about this matter. In contrast, *never* does not trigger *do*-supportand is thus a true XP.

In conclusion, in both ConCo and SceCo, it is not possible to have any XP in Position C, within the verbal string between the coordinator and the lexical verb.[5] Concerning Postion B , it is possible for some PPs, verbal particles and adverbs to occur in Postion B in SceCo constructions. For ConCo, Postion B cannot host any XP-like material.

2.1.3 Restrictions on matrix subjects

Examples (36a-d) demonstrate that certain predicates can only co-occur with certain types of subjects: intransitive *gather* requires a plural subject; *preach* does not.

(36) a. *The man gathered

b. The congregation gathered

c. The missionary preached

d. #The congregation preached

Using these facts, it is possible to construct examples of OCo where it is clear that each conjunct places restrictions on its own subject.

(37) a. The missionary preached and the congregation gathered

b. *The missionary gathered and the congregation preached

In OCo constructions such as (37), the matrix subject is entirely determined by the predicate in the first conjunct; the subject of the second conjunct is determined by the predicate of the second conjunct.

[5]The explanations for ungrammaticality might be different for ConCo and SceCo. This does not affect the generalization made here and remains for future research to tease apart.

ConCo

The situation is very different for ConCo constructions. Here, it is the lexical verb that determines the subject of the entire clause. Example (38a) shows that weather verbs can have expletive subjects whereas a motion verb like *go* cannot have a weather-type expletive (38b). The grammaticality of the ConCo construction (38c) indicates that it is the lexical verb which determines the subject of the clause. In other words, the pseudo-coordinative verb is seemingly invisible with respect to the selectional restriction of the verb and its subject.[6]

(38) a. It rained
b. *It went
c. It went and rained

The same phenomenon occurs with inanimate subjects. Whereas *grow* can occur with an inanimate subject (39a), a verb like *go* is incompatible with an inanimate subject (39b). The grammaticality of the corresponding ConCo construction (39c) shows that it is the lexical verb that selects the appropriate subject.

(39) a. The tree grew tall and strong
b. *The tree went
c. The tree went and grew tall and strong

More evidence that the ConCo predicate does not affect the selectional relationship between the subject and the lexical verb comes from Stahlke (1970) (also cited by Pullum (1990)). ConCo can undergo transitivity alternations.

(40) a. John went and broke the bottle [ConCo]
b. The bottle went and broke

SceCo

When the same tests are applied to SceCo constructions, it transpires that in this respect SceCo is quite different to ConCo.

(41) a. It rained
b. *It went out over the English Channel
c. It went and rained out over the English Channel [ConCo]
d. *It went out over the English Channel and rained [SceCo]

[6] Shopen (1971) also notes that *come* and *go* do not require agentive subjects in these types of constructions.

The pair (41a,b) show that there is a restriction on verbs which co-occur with weather expletives and inanimate subjects. (41c) demonstrates that the lexical verb determines the subject of the clause in ConCo constructions. (41d) is a SceCo construction and is ungrammatical. The same paradigm can be illustrated by SceCo with particle verbs.

(42) a. The tree grew tall and strong
b. *The tree went off/on the ridge
c. The tree went and grew tall and strong on the ridge [ConCo]
d. *The tree went off and grew tall and strong [SceCo]
e. *The tree went on the ridge and grew tall and strong[7] [SceCo]

These show that the pseudo-coordinative verb of a SceCo construction determines the nature of the subject. Thus, ConCo and SceCo behave differently to each other with respect to the selectional relationship between the verb and its subject.

It is also the case that SceCo constructions cannot engage in transitivity alternations. This makes them different to ConCo predicates which do so readily (cf. (40)).[8]

(43) a. John went to town and broke the bottle [SceCo]
b. *The bottle went to town and broke

Perhaps related to this, is the fact that SceCo constructions seem to require animate subjects. All examples until this point have demonstrated this. However, consider the following sentence which superficially resembles a SceCo construction.

(44) a. The book went on sale and made its author proud
b. *Who did the book go on sale and make proud?

Example (44a), at first glance, appears to be a standard SceCo construction, albeit with an inanimate subject. However, this example is demonstrably not SceCo. (44b) shows that non-ATB argument extraction leads to ungrammaticality. Thus the example is actually an instance of OCo and shows that true SceCo constructions must have animate subjects.

These data indicate that in ConCo the pseudo-coordinative predicate does not impose any restrictions on the subject of the clause. This is compatible with the notion

[7] This example has a marginal OCo reading, where *go* means *is located*. This is not the reading I am interested in.

[8] Curiously, however, neither ConCo nor SceCo can be passivised.

(1) a. You've gone and broken the bottle again! [Participles]
b. *The bottle was gone and broken by the kids again [Passive]

(2) a. You've gone to town and broken the bottle again! [Participles]
b. *The bottle was gone to town and broken by the kids again [Passive]

This is discussed more fully in sections (4.1.3) and (4.2.9).

that ConCo verbs either do not asssign a theta role, or assign one that is always consistent with that of the lexical verb. SceCo constructions are quite different in this regard: they require animate subjects and affect the kinds of alternations in which the lexical predicate can engage in.

2.1.4 Semantic bleaching

The absence of restrictions placed on the subject by the pseudo-coorordinative verb of a ConCo construction, discussed in section (2.1.3), can be related to the apparent 'semantic bleaching' of the pseudo-coordinative verb.[9] I intend the term 'semantic bleaching' as a theory-neutral, descriptive term to denote a process whereby parts of the lexical semantics of a verb are deaccented. In OCo, the full lexical meanings of both verbs are always accessible. However, in ConCo the first conjunct (*go, sit* etc.) may be semantically bleached.

(45) a. John walked and read the constitution
'John physically walked and read the constitution at the same time'

b. John went and read the constitution!
'John actually read the constitution'

In example (45b) the first conjunct (*went*) is bleached insofar as it does not require a literal, motion interpretation as in example (45a) (*walked*). Furthermore, (45b) is felicitous even in contexts where no physical movement is required; for instance, in a context where the reader of the constitution is bed-ridden and reads the constitution while lying in bed. In this context it appears that *go* is aspectual; it relates to prospective aspect: the period of the event that relates to the preparatory phase of the event, the 'run-up' to the event (cf. Moens and Steedman 1988). For many speakers, pseudo-coordinative *go* has a counter-expectational interpretation. The counter-expectational focus is due to the fact that somebody bothered to initiate a constitution-reading event at all – not whether the reading event was completed, or whether it took a long time or not.[10] Thus, *go* places focus on the initiation stage of the event. This is not particularly surprising given that *go* has a PROSPECTIVE feature independently of ConCo contexts. Consider the denotation of *go* in the following sentence.

(46) a. John is going to die
'John is about to die'

[9] I use the term 'semantic bleaching' here rather than 'grammaticalization' simply because the second implies a historical process whereas the first is hopefully more theory neutral. Nevertheless, this is not to deny that grammaticalization of *go* may play a role; I leave this for future research. Furthermore, grammaticalization may not be the only process at work in 'bleaching' the verb. 'Bleaching' could also correspond to other processes such as movement to the functional domain (see Ijbema 2002). This question, too, I leave open.

[10] Stefanowitsch (1999) analyses *go* as contributing a motion schema which is incorporated into the main event by blending. According to him, failure to adhere to the established path yields counter-expectationality. It is not clear to me, however, what kind of content a motion schema has in a ConCo construction where *go* has no deictic content e.g. *It went and rained*.

b. John will die

In example (46a) it seems that *go* refers to a prospective event. In other words, *go* refers to the stage preparatory to death and places focus on it. For instance, it is entirely compatible with a reading where John has already started to die. (46b) is entirely neutral in this respect.[11]

Naturally, since *go* relates to the initiation of the event, the presence of an animate subject easily triggers a reading whereby the animate subject is the agent for the initiation of the event. However, this does not necessarily have to be the case. Even the expletive subject of weather verbs can occur in an ConCo construction (47) despite the fact that an expletive subject is incapable of movement; a literal, motion interpretation is impossible: *go* is semantically bleached.

(47) It could go and rain today

The verb *sit* seems to retain more of its lexical meaning than *go*, although there are still examples of bleaching.[12] Generally, it seems that *sit* implies extended duration (Koops 2004). This is, of course, consistent with the durative interpretations associated with ConCo more generally. However, it also seems to me that *sit* implies a particular lack of dynamism, or static manner, in the way the activity is carried out.

(48) These helicopters are piloted with “a computer control panel" which enables them to “fly and sit and hover," Fischel tells MassNews. “I didn’t believe it until I saw it myself," he says
(http://www.massnews.com/2002_editions/12_Dec/122302_mn_uss_constell.shtml (14.07.2004))

The speaker is describing helicopters. The ConCo predicate is underlined; it is part of an OCo construction with *fly*. In this context, *sit* specifies a ‘static’ nature of the activity in the sense that *hover* implies that the helicopter is in a fairly fixed position, even though its rotors etc. are moving. It is also the case that in this context, *sit* cannot be interpreted to show a physical location of the helicopter *upon/in* something else. Thus *sit* does not have the semantics of posture. Instead it implies the static nature of the activity.[13]

[11] Theresa Biberauer (p.c.) drew my attention to a similar construction in South African English. In SAE, there is apparent overgeneralization of the ‘*busy* V+ing’ construction. This is actually very similar to pseudo-coordination in its semantics since (i) it focusses on the part of the event before the *telos* and placing focus on the activity part of the predicate and (ii) is relatively bleached. To British ears it may imply intentionality on the part of the subject, but in SAE this is not always the case.

(1) John is busy dying
‘John is dying’

[12] Kuteva (1999) notes that in many languages which use posture verbs as aspectual markers of durativity, the subject does not necessarily have to be in a particular posture. The problem for an approach such as that of Kuteva (1999) is that the ability of the English PCo construction to occur with an inanimate subject suggests a high degree of grammaticalization when, in fact, posture verbs and *go* have not even been grammaticalized into auxiliaries in English.

[13] It might be said that aspectual usage of *sit* and other verbs is a case of metaphoric extension of a lexical verb with non-bleached semantics. I think it very plausible that metaphoric extension is at work, but

(49) Big companies (Fortune 500) hire contractors to come in and do something or set the foundation. The employees sit and age
(http://discuss.fogcreek.com/joelonsoftware/default.asp?cmd=show&ixPost=60168 (14.07.2004))

Example (49) concerns employees who are not physically sitting insofar as they are administering a company. Also note that a contractor could potentially take months to complete a project; this time period is consistent with aging, but not with sitting. Clearly, *sit* does not have all of its lexical semantics activated in this context and instead denotes durative aspect consistent with the static nature of the activity.

(50) %Martha didn't go out; she sat and washed the dishes instead
'Martha stayed (at home) and washed the dishes rather than go out'

(51) John left his computer to sit and scan all its disks before he turned it off
'John's computer engaged in an activity of a static nature of scanning disks'

For the relevant speakers, example (50) does not necessarily imply that Martha was physically sitting when she was washing the dishes. However, she was involved in an activity with a static nature in the sense that although she was washing the dishes, her location in the kitchen was static. Similarly, a computer cannot literally 'sit' although it can nevertheless be an active agent as example (51) shows.

(52) In Konitsa we finally had some sun during the day and we had a new moon (no moon at all) at night, which let all the stars sit and shine in the expansive heavens, surrounded by the mountains as the clouds came and went
(http://www.bikeabout.org/journal/notes_104.htm (14.07.2004))

Since it is physically impossible for a star to maintain a body posture, this example also illustrates the fact that ConCo with *sit* do not always activate the entire lexical semantics of the verb. In this context, the verb *sit* implies that the star remains static at a certain physical location.

I would like to suggest two things here. Firstly, the 'bleaching' evident here is not a property of specific constructions but of lexical items. It seems to me that verbs like *go* and *sit* display a range of semantic interpretations regardless of whether they occur in ConCo constructions or not.

(53) a. John went from Canada to India
b. John went over to the bar
c. John went ballistic

I do not think that metaphoric extension necessarily implies that the verb is actually activating its entire lexical semantics. Quite the contrary: I suspect that metaphoric extension implies that the lexical semantics of the verb is 'adjusted' with some components of the lexical semantics being overridden. This corresponds to bleaching/deaccenting in my view. I would rather turn the issue on its head and query why it is that these particular verbs and not others undergo metaphoric extension: precisely because these verbs already are semantically bleached.

In (53a), *go* has a meaning involving John's physical movement from one location to India, presumably of his own volition. In this context, it is very unlikely that John actually walked. In contrast, the context of (53b) makes it much more likely that John walked over to the bar, but not necessarily e.g. if he were in a wheelchair. Finally, (53c) has a meaning which implies no physical movement of any kind, but merely a change from one state into another. What is clear in all these examples is that *go* can have a bleached semantics independently of whether it occurs in ConCo construction or not.

The second thing I would like to point out is that there is an interaction between the subject and the lexical semantics of the verb. Consider what happens when the previous example (53) is reproduced with an inanimate subject.

(54) a. The letter went to India

b. ?The letter went over to the bar

c. The letter went mouldy

In these examples, the volitional-motion reading corresponding to *walking* is absent. (54a) retains the notion of a physical change of location, although the sentient, volitional interpretation associated with (53a) is lost. (54b), although grammatical, has a rather strange reading. It might be felicitous in a context where a letter is being passed hand-to-hand around a pub; eventually it is placed on the bar. The example can only be interpreted as a change of location, without volition. Finally, (54c) has a change of state reading, just as its counterpart (53c) does. Apparently, it is the animacy of the subject that may activate (i) the volitional reading and (ii) the physical *walking* reading.[14] Essentially the same point can be demonstrated with the verb *sit* where it has a purely locative interpretation.

(55) The plant sat on the windowsill

(56) The drink sat on the bar for hours before somebody drank it

(57) a. John sits at the mouth of the Mississippi (fishing)

b. New Orleans sits at the mouth of the Mississippi

The minimal pair in (57) demonstrate that the verb *sit* can be interpreted as either a verb of physical posture or as a static verb indicating location. In (57a), it is most likely that John is physically sitting, whereas in (57b), the salient reading is that New Orleans is located at the mouth of the Mississippi.

In summary, the restrictions on the subject and the degree to which the verb is bleached are in an interdependent relationship. This can be used to distinguish ConCo

[14]This may be taken as evidence that the 'semantic bleaching' alluded to earlier is not, in fact, an artifact of a diachronic process or even a synchronic explanation such as movement of the affected verb to the functional domain. Instead, what seems to be taking place is that a verb like *go* has a core interpretation along the lines of CHANGE. The addition of a suitable goal/location activates the meaning CHANGE OF LOCATION and similarly, the addition of an animate subject activates the meaning VOLITIONAL CHANGE OF LOCATION BY WALKING. I leave this issue open to future research.

and OCo constructions, provided the caveats I have mentioned are taken into consideration. This may be contrasted with OCo constructions (as well as constructions like (53), (54) and (57)) where the (in)animacy of the subject necessarily determines the interpretation of the verb. In addition, the degree of bleaching is not a function of the construction itself (ConCo) but of lexical items. The degree of bleaching of a ConCo construction is determined by the degree of bleaching of a lexical item such as *sit* or *go* independently of its occurence in a pseudo-coordinative context.

SceCo

SceCo constructions react differently with respect to semantic bleaching.

(58) a. John went to town and read the constitution

b. What did John go to town and read?

(59) a. John went off and read the constitution?

b. What did John go off and read?

In contrast to the equivalent ConCo construction (45b), examples (58) and (59) can only be interpreted with a literal, motion reading. In other words, unlike (45b), these examples are not felicitous when said about a bed-bound patient who has started reading the constitution to pass the time. Furthermore, the inability of inanimate subjects to occur in SceCo constructions (see (41) and (42)) corroborates this point.

More evidence that ConCo and SceCo are not the same construction comes from the fact that ConCo admits aspectual readings far more readily than SceCo does.

(60) a. It's not worth using an iron post to prop up that tree; it'll just go and rust in the rain. [ConCo]

b. *It's not worth using an iron post to prop up that tree; it'll just go off and rust in the rain. [SceCo]

(60a) is a ConCo construction and is compatible with an aspectual use of *go* and the motion reading of *go* is not available. However, in (60b), the motion reading of *go* is obligatorily present and this leads to ungrammaticality.

In summary, in ConCo constructions, the degree of 'bleaching' is dependent on whether an animate or inanimate subject is used. In other words, an animate subject triggers a literal posture/motion interpretation; an inanimate subject triggers an aspectual interpretation. What is clear from these examples is that in SceCo constructions, the animacy of the subject does not have this effect: a literal (motion, posture) reading is always present. Exactly the same point is illustrated by examples (41) and (42). Thus, there is a clear selectional relationship between a SceCo predicate and its subject and SceCo contexts only permit the full lexical meanings of the relevant verbs. These data indicate that ConCo and SceCo are different types of pseudo-coordinative structures.

2.1.5 VP-deletion

OCo allows various ellipsis phenomena such as the deletion of a VP, gapping, sluicing etc. In particular, it is possible to partially delete some of the verbs in a clause. For instance, in (61b) only the lexical verb *kiss* has been elided, leaving the remainder of the verbs behind. I refer to this as partial VP-deletion.[15]

(61) John has wanted to kiss Mary ...

a. ... and Peter has too

b. ... and Peter has wanted to too

ConCo

It is not possible to partially elide ConCo constructions in this way.

(62) a. The tree went and grew well on the ridge and the flower did too
→ 'The flower also grew well on the ridge'

b. The tree went and grew well on the ridge and the flower went too
↛ 'The flower also grew well on the ridge'
→ 'The (magic) flower physically changed location to the ridge'

As demonstrated in section (2.1.3), the use of an inanimate subject ensures that we are dealing with a ConCo construction. Example (62a) shows that the entire VP can be elided in the second conjunct. However, in (62b), what appears to be partial deletion of the VP (namely, elision of the lexical verb but not the first) yields ungrammaticality on the required reading.[16] The only possible reading for (62b) is that the flower is magic and is thereby attributed an animate status which allows the flower to change its physical location to the ridge.

It is also possible to test partial VP-deletion by attempting to keep the aspectual use of the pseudo-coordinative verb constant (as opposed to the movement interpretation).

(63) a. Mary will go and get pregnant and Sarah will too
→ 'Sarah will also get pregnant'

b. Mary will go and get pregnant and Sarah will go too
↛ 'Sarah will also get pregnant'
→ 'Sarah will leave but not necessarily get pregnant'

[15] The choice of *want* is deliberate. It has been claimed that pseudo-coordination might be similar to infinitival subordination. The tests in this section show that English pseudo-coordination does not pattern like infinitives with respect to elision.

[16] Actually (62b) is not VP-ellipsis at all. This serves to emphasize my main point: VP-ellipsis is not possible in ConCo contexts.

Example (63a) is an ordinary VP-deletion clause. It does not necessarily imply that either Mary or Sarah will be involved in any physical motion of *going*. Rather, *go* lends a counter-expectational flavour. (63b) is very different and has a rather strange interpretation. The motion reading of *go* is highlighted and thus it is necessary that Mary go to some location in order to become pregnant while Sarah will also leave, but not necessarily in order to get pregnant. What is clear here is that partial VP-deletion is not possible with ConCo constructions.

Finally, it is difficult to test partial VP-deletion using extraction to force ConCo readings because extraction from coordinate structures is not possible on independent grounds. However, it is possible to use a *such that* construction for this purpose.

(64) a. What will John go and read such that Peter will too?
‘ John will read something such that Peter will also read it’

b. What will John go and read such that Peter will go too?
‘John will leave to read something such that Peter will leave’

Example (64a) has an aspectual interpretation where neither John nor Peter have to physically *go* anywhere. However, when *go* is left unelided as in (64b) then *go* gets a physical motion interpretation. This demonstrates that partial VP-deletion is not possible with ConCo.

SceCo

SceCo predicates are not always elided when a VP is deleted. They differ, in this respect, from ConCo predicates which must always be.

(65) a. John goes to town and watches movies, and Mary does too
→ ‘Mary also goes to town and watches movies’

b. What did John go to town and watch such that Mary did too?
→ ‘Mary also goes to town and watches movies’

Example (65a,b) are SceCo constructions coordinated with another in such a way that the VP is elided. In order to ensure that we are indeed dealing with a pseudo-coordinative structure, an argument is extracted, although to do so one must resort to *such that* constructions. Both examples imply that Mary also went and watched movies.

(66) a. John goes to town and watches movies, and Mary goes too
→ ‘Mary also goes to town and watches movies’

b. What did John go to town and watch such that Mary went too?
→ ‘Mary also goes to town and watches movies’

Examples (66a,b) illustrate what appears to be partial VP-deletion using extraction to force SceCo interpretations. The meaning remains the same. Thus partial VP-deletion is indeed possible in SceCo contexts.

To summarize, OCo licenses VP-ellipsis and this can also be seen at work in SceCo constructions. However, no such deletion can occur in ConCo contexs.

2.1.6 Coordinator substitution

Since coordination is a class of constructions, it is possible to substitute one coordinator for another in OCo contexts and retain grammaticality (at the expense of a semantic change).

(67) a. John ate some cake and drank some tea
b. John ate some cake or drank some tea

Coordinator substitution is not possible with ConCo as the following examples using extraction of arguments and adjuncts indicate.[17]

(68) a. Who did John go and talk to?
b. *Who did John go or talk to?

(69) a. How often did John go and talk to Peter?
b. *How often did John go or talk to Peter?

SceCo constructions pattern after their ConCo counterparts in this regard. The coordinating particle cannot be substituted for another.

(70) a. What did John go off and read?
b. *What did John go off or read?

(71) a. What did John go to town and read?
b. *What did John go to town or read?

2.1.7 Semantic subordination

In OCo, the two conjuncts are independent propositions. It is not the case that the first conjunct is necessarily semantically dependent on the second or *vice versa*.

(72) John walked and John danced

Thus in (72) the truth conditions needed to interpret the second conjunct, namely that John danced, are independent of the first conjunct, namely whether John walked or not. Similarly, there is no temporal dependency between the two conjuncts: the dancing could precede the walking or *vice versa*. This is directly evident in the fact that OCo allows one to reorder the conjuncts (74).[18]

[17] This test was also used by Schmerling (1975) to distinguish symmetrical from asymmetrical coordination.

[18] Of course this is not always the case. It is quite possible for OCo conjuncts to be causally and temporally related as shown by the following example.

(73) John fell down the stairs and he broke his leg

My point is merely that such a temporal relation is not necessarily obligatory in OCo as it is in SceCo.

(74) a. John both walked and danced
b. John both danced and walked

The situation is very different in SceCo constructions.[19] There is always a semantic dependency between the first and second conjuncts. Since the first conjunct sets the scene for the activity in the second to take place, the conjuncts cannot be interchanged.

(75) a. What did John go to town and buy?
b. *What did John buy and go to town?

Similarly, in ConCo contexts, the lexical verb is intrinsically related to the pseudo-coordinative verb. In ConCo, the first verb seems to play an aspectual role.

(76) a. John could sit and run programmes on his computer all day
b. *John could sit and run to school

In example (76a) *sit* denotes an activity of a static nature which is fully compatible with the notion of working on a computer. However, the same static-natured activity is not compatible with dynamic predicates. Thus, the choice of lexical verb is restricted by the properties of the pseudo-coordinative verb.[20] Consequently, it is also not possible to invert the order of the conjuncts without also changing the meaning. The non-posture reading of *sit* is absent in (77b).

(77) a. How carefully did John sit and read the lecture notes I gave him?
b. *How carefully did John read the lecture notes I gave him and sit?

The point can also be made using an inanimate subject which is incompatible with a posture reading of *sit*.

(78) a. The tree just sat and grew on the ridge for as long as I can remember
b. *The tree just grew on the ridge and sat for as long as I can remember

Similarly, the non-motion reading of *go* is absent in (79b): it is only interpretable as OCo.

(79) a. John went and read the book that I gave him
'John read the book that I gave him'
b. John read the book that I gave him and went
'*John read the book that I gave him'
'John read the book that I gave him and he also went away'

[19] In Schmerling (1975), ellipsis is used to distinguish symmetrical from asymmetrical coordination. She allowed each conjunct to stand on its own to see if it could be interpreted elliptically. See also Na and Huck (1992) for a similar approach to determine the 'semantic primacy' of each conjunct.

[20] I will deal with the nature of these restrictions more fully in sections (4.3) and (4.4).

The same point is illustrated more forcibly using a weather verb. Here, since a weather verb expletive is incompatible with a movement reading of *go*, inversion of the conjuncts yields ungrammaticality (80b).

(80) a. It went and rained out over the channel
b. *It rained out over the channel and went

Thus, ConCo and SceCo constructions do not allow their conjuncts to be inverted because the pseudo-coordinative verb in the first conjunct is semantically subordinate to the lexical verb in the second. The same is not always true of OCo.

2.1.8 Distributivity

OCo can support *both* modification of the coordinated verbs. Since *both* is a distributive operator over two separate events, it is not at odds with OCo where two independent propositions are coordinated.

(81) John both ate some cake and drank some tea

ConCo constructions, however, do not permit modification by *both*.[21]

(82) a. John both went and read the book
b. *What did John both go and read?
c. *How carefully did John both go and read the book?

Example (82a) is an OCo construction that superficially looks like ConCo. However, examples (82b,c) show, that when extraction is used to force a ConCo reading, then modification by *both* is not possible.

Like their ConCo counterparts, SceCo cannot be modified by the operator *both* either.

(83) a. What did John (*both) go off and read?
b. What did John (*both) go to town and read?

(84) a. What did John (*both) sit down and read?
b. What did John (*both) sit at home and read?

In summary, ConCo and SceCo differ from OCo with regard to distributivity.

[21] Schmerling (1975) used this test to distinguish symmetrical from asymmetrical coordination.

2.1.9 Quantifier raising

Given that OCo are strong islands, it is not surprising that quantifier raising, giving rise to wide-scope interpretations, also cannot occur – unless of course quantifier raising occurs in an ATB fashion (Ruys 1993).

(85) a. A policeman serenaded every widow
'Some policeman serenaded all the widows' [NS]
'For each of the widows, there was some policeman or other who serenaded her' [WS]
b. A policeman both went to town and (he) serenaded every widow
'Some policeman went to town and also serenaded all the widows' [NS]
'*Some policeman or other went to town and for each of the widows, there was some policeman or other who serenaded her' [WS]

Example (85a) has two interpretations corresponding to narrow and wide scope of the quantifier respectively. The more interesting example is (85b) which is an OCo construction, having only a single interpretation which corresponds to the 'narrow scope' reading. In other words, the quantifier scope is restricted to the second conjunct and cannot scope over the subject of the first conjunct. This is not too surprising given that LF movement of the quantifier out of the second conjunct would have been a violation of the CSC. Now consider the following ConCo examples.

(86) a. A policeman went and serenaded every widow
'Some policeman serenaded all the widows' [NS]
'For each of the widows, there was some policeman or other who serenaded her' [WS]
b. A policeman sat and serenaded every widow
'Some policeman serenaded all the widows' [NS]
'For each of the widows, there was some policeman or other who serenaded her' [WS]

Examples (86a,b) are interpretable as ConCo constructions. Importantly, both narrow and wide-scope readings are available, indicating that the quantifier has raised at LF without incurring a CSC violation. This supports the findings of section (2.1.1) which demonstrated that extraction out of pseudo-coordinative structures is possible whereas it is not from OCo.

Interestingly, it appears that like OCo, SceCo are islands for quantifier raising. In other words, it is not possible to get a wide-scope reading.

(87) a. A policeman went to town and kissed every widow
'Some policeman went to town and that same policeman kissed each widow' [NS]
*'For each widow, there was some policeman or other who kissed her' [WS]

b. A policeman went off and kissed every widow

'Some policeman went away and that same policeman kissed each widow' [NS]

'*For each widow, there was some policeman or other who kissed her' [WS]

This property makes SceCo similar to OCo when it comes to quantifier raising. However, it is also possible that this property follows from the fact that SceCo are selective islands.[22] However, ConCo contexts freely allow quantifier raising.

2.1.10 Restrictions on verbs

OCo can productively occur with almost any verb; it is not restricted to a particular subclass of verbs. ConCo is very restricted with regard to which verbs it can combine with. ConCo verbs in English are typically *go*, *sit* and *come*.[23]

(88) a. John went and he also behaved badly

b. John departed and he also behaved badly

(89) a. Did you notice how badly John went and behaved?

b. *Did you notice how badly John departed and behaved?

In (88), I ensure an OCo reading by including a subject in the second conjunct and a ConCo reading in (89) by extracting an adjunct from the second conjunct. What is clear is that the OCo examples in (88) admit a wider range of verbs than do the ConCo examples (89) insofar as *departed* is allowed in OCo but not ConCo.[24]

SceCo constructions can combine with a much wider range of first verbs than can ConCo constructions. For instance, a verb like *wander* can occur in a SceCo construction but not a ConCo one.[25]

(90) a. The children wandered and carefully ate mushrooms in the forest

b. *What did the children wander and eat in the forest? [ConCo]

[22] The wide-scope reading is also much degraded in negative islands.

(1) A man doesn't love every woman

'There is a man who does not love every woman'

'*For every woman, there is a man who does not love her'

[23] Pullum (1990) also includes *run*. Some authors (e.g. Carden and Pesetsky (1977), Stefanowitsch (1999)) regard *try* as ConCo. However, Pullum (1990) rightly points out that these constructions exhibit properties different to ConCo.

[24] In Scandinavian, the class of verbs which can be first conjuncts is similar but larger, but nevertheless a closed class (see *inter alia* Josefsson 1991, Wiklund 1996).

[25] cf. Newman and Rice (2001) for discussion of manner of motion verbs in the context of posture verbs. However, they do not distinguish OCo, SceCo and ConCo.

Example (90a) is an instance of OCo. When extraction is used to force a ConCo reading, the result is ungrammatical. This indicates that *wander* cannot be used as a ConCo verb. It is ungrammatical because ConCo is restricted to verbs like *sit*, *go*, and *come*. The verb *wander* is simply not a verb that enters into the ConCo construction. Given this, the grammaticality of the following examples comes as a surprise.

(91) a. The children wandered off and ate mushrooms very carefully in the forest

b. What did the children wander off and eat in the forest? [SceCo]

c. *How carefully did the children wander off and eat mushrooms in the forest?

Example (91a) is the base example of SceCo using *wander* as the SceCo verb. Evidence that this is indeed a SceCo construction comes from the grammaticality of (91b) which allows extraction of an argument and the ungrammaticality of (91c) which demonstrates that adjuncts may not be extracted from within the second conjunct.[26] The class of SceCo verbs thus appears to be broader than that of ConCo, systematically excluding transitive verbs selecting DP objects, but including many manner of motion verbs in addition to *go* and posture verbs.[27]

I conclude then, that OCo can productively coordinate any verbs. ConCo can only occur in a very few cases and SceCo can occur with many more verbs than can ConCo, but is still restricted to fewer than OCo.

2.1.11 The 'sameness' condition

Garden-variety coordination typically conjoins elements of the same sort. This has traditionally been known as the Law of Coordination of Likes (LCL) (Williams 1978). However, this does not normally apply to verbal inflection: in the following OCo examples, the verbs in each conjunct can have different tense specifications etc.

(92) a. John went to a party yesterday and the dancers will kiss Susan tomorrow

b. John will go to a party tomorrow and the dancers kissed Susan yesterday

[26] It is still possible for the adjunct to scope over the matrix verb (i.e. *wander*) but this would yield incongruous readings in this case because *wander* implies a lack of care and thus, to ask a question like (91c) is rather strange.

[27] The following list of additional examples is not exhaustive. A proper characterization of the class of SceCo verbs remains for future research.

(1) Who did the superheroes fly off and beat up after that?

(2) What did grandpa totter off and do after that?

(3) What did the idiot bugger off and do after that?

(4) What did the bunny hop away and do after that?

(5) Who did the police march off to town and arrest?

(6) Who did the sniper stand lazily and observe?

(7) Who did the sniper lie lazily and observe?

Example (92a) illustrates an OCo construction with a past-tense verb in the first conjunct and a future-tense modal in the second followed by an infinitival lexical verb. (92b) demonstrates, by inverting the conjunct order, that sequence-of-tense effects are not necessarily operative. Clearly, there is no requirement that the verbs in each conjunct should match each other with respect to their morphological marking.

However, in this respect, pseudo-coordinative constructions are different from OCo. Both verbs in a pseudo-coordinative verbal string must have exactly the same morphological specification. Pullum (1990) notes that 'both verbs must represent the same form of the paradigm' and quotes Stahlke (1970) as claiming that the two verbs must share tense, aspect and modality. This generalization holds true, although Pullum (1990) shows that there is some systematic variability from speaker to speaker about the exact instantiation of this generalization in different speaker grammars.[28] That both verbs of a pseudo-coordinative construction must have the same morphological specification is illustrated in (93) for PAST and (94) for participle morphology.[29]

(93) a. I wonder how John went and behaved?
b. *I wonder how John went and behaves?
c. *I wonder how John goes and behaved?

(94) a. I wonder how John has gone and behaved?
b. *John has gone and behaves
c. *I wonder how John will go and behaved

The same holds for SceCo: the morphological marking on each verb must be identical. This is shown in (95) for PAST and (96) for participle morphology.

(95) a. I wonder who John went to the party and kissed?
b. *I wonder who John went to the party and kisses?
c. *I wonder who John goes to the party and kissed?

(96) a. I wonder who John has gone to the party and kissed?
b. *I wonder who John has gone to the party and kisses?
c. *I wonder who John will go to the party and kissed

The same effect is demonstrated with SceCo verbs with particles.

(97) a. I wonder who John went off and kissed?
b. *I wonder who John went off and kisses?

[28] Pullum (1990) also argues that pseudo-coordinative conative *try* is not subject to this restriction, and appears to differ to ConCo with *sit* and *go* in a number of respects (see also Pullum 1990). I shall deal with *try* more fully in chapter (3).

[29] In the case of PRES.3SG it is obvious that both verbs should be inflected because both verbs share the same subject.

c. *I wonder who John goes off and kissed?

(98) a. I wonder who John has gone off and kissed?

b. *I wonder who John has gone off and kisses?

c. *I wonder who John will go off and kissed

Since I shall be referring to this property repeatedly, I define it informally here.[30]

(99) **Morphological 'Sameness' Condition (MSC):** Both verbs of a pseudo-coordinative construction must have the same type of morphological marking i.e. both verbs must be either bare or morphologically marked with present, past, participle or similar.

This essentially reduces to the following condition.

(100) In a pseudo-coordinative construction, on each verb, those formal features with a morphological expression must be matched.

What this means is that for a feature such as PRES.3SG which has a morphological expression in English, the same feature must occur on both verbs of a pseudo-coordinative construction. This can be seen simply as an expression of the LCL applied to the feature bundles of the verbs themselves.

The fact that the 'sameness' condition applies to the morphology in ConCo constructions marks them as being different to garden-variety coordination. Importantly, however, I do not want this phenomenon to mask the deeper semantic similarities which OCo *and* and pseudo-coordinative *and* share. There is a similarity between OCo and pseudo-coordination: both require parallelism between their conjuncts. Whereas for OCo, the 'sameness' condition applies to semantic and/or categorial type (Munn 1993), for pseudo-coordination, it applies to morphological features. I take this to be a deep similarity between the coordinators of OCo and pseudo-coordination. I will discuss this more fully in chapters (4) and (7).

2.1.12 Counter-expectational readings

OCo constructions do not affect the declarative 'force' of their conjuncts. Thus coordinated declaratives remain declaratives and do not gain additional focus, surprise or counter-expectational readings as a consequence of coordination.

ConCo constructions, however, are different. Consider the following example, originally from Ross (1967) and cited by Schmerling (1975).

(101) She's gone and ruined her dress now

[30] Note that this is very different to the 'Bare Stem Condition' of Carden and Pesetsky (1977). They claim that ConCo verbs can only occur in their bare form. However, as pointed out by Pullum (1990), while this may be true of *try* (see section (3.1.1)), it certainly is not true of ConCo verbs such as *sit*, and *go* as any of the (a) examples in this section show.

Schmerling (1975) claims that this kind of sentence conveys a:

> 'mild sense of condemnation on the part of the speaker.... One senses that the speaker is trying to convey the notion, "It was her fault"'(Schmerling 1975:218).

ConCo constructions with *go* very often have an 'unexpected event' (counter-expectational) interpretation.[31] Carden and Pesetsky (1977) claim that pseudo-coordinations (they do not distinguish ConCo and SceCo) are actually divided into two subtypes: *go* ConCo with a counter-expectational reading and other ConCo that do not.[32] However, Pullum (1990) claims that Carden and Pesetsky (1977) are wrong in treating counter-expectational ConCo differently from ConCo. Pullum (1990) provides the following sentences to show that ConCo do not all necessarily imply an 'unexpected event' reading.

(102) I expect you to go and not do anything wrong for a week

(103) What sort of bad stuff do you expect me to go and not do for a week?

(104) ??How carefully do you expect me to go and not do anything wrong for a week?

The problem with these examples is that they all include *not* between the coordinator and the lexical verb, which could indicate that these are not examples of ConCo at all but of SceCo. The degraded status of (104) confirms this possibility. Thus, these examples are not conclusive. For our present purposes however, it is sufficient to note that the mere possibility of a surprise reading for ConCo but not for OCo implies that they are not the same construction.

[31] This is especially productive with ConCo with *go*. However, Postal (1998) refers to a wider range of reputedly CSC-violating phenomena that also admit a counter expectational meaning.

[32] They cite the fact that counter-expectational readings are not necessarily unique to ConCo as evidence for this. For example, the following two sentences are close paraphrases of each other (Carden and Pesetsky 1977:89).

(1) He went and hit me

(2) He up and hit me

There does, however, seem to be evidence that ConCo and the prepositional variants above, are not necessarily the same construction. *Up and V* constructions have very different morphological requirements to ConCo.

(3) a. He up and went

b. He upped and went

c. *He upped and go

d. *He up and go

Example (32a) shows that it is not obligatory for both conjuncts to have the same morphological marking. It is possible to have a bare preposition followed by a finite verb (32a), or for both prePostion B nd verb to be marked for tense. The same is not true for ConCo (cf. (99)). Thus *up and V* and ConCo constructions are less related than they initially seem.

SceCo are compatible with surprise readings, but do not necessarily seem to require such readings. Importantly, whereas ConCo with *go* very naturally lends itself to a counter-expectational interpretation, SceCo constructions typically require an additional item to force counter-expectational readings.

(105) a. The Pope went to the rally and addressed the crowd
b. To our amazement, the Pope went to the rally and addressed the crowd
c. Who did the Pope go to the rally and address?

Example (105a) is totally unmarked: there is no counter-expectational reading to be had from it. (105b) has a counter-expectational reading, but this is obviously contributed not by the SceCo construction itself, but by the topicalized element. Similarly, (105c) does not have a counter-expectational reading.

Putting aside counter-expectational focus, it is important to note that verbs of body posture cross-linguistically often have the ability to imply pejorative affect: passivity, prolonged inactivity, idleness, apathy etc. These follow from the general properties of core posture verbs such as like *sit*, *stand* and *lie* (Koops 2004, Kuteva 1999, Newman 2002, Newman and Rice 2001) and not from the specific syntactic environment into which these verbs are merged.

I conclude, then that ConCo, SceCo and OCo, do not have counter-expectational semantics as an inherent property of the constructions themselves, but that their underlying semantics does allow such readings to occur. I thus take counter-expectational semantics to be parasitic on the deeper semantics of these constructions as well as on factors such as the animacy of the subject etc.

2.1.13 Phonological cues

Pseudo-coordinative contexts also have phonological cues which distinguish them from OCo. These include reduction of the coordinator, phrasing effects and focus.

Reduction of the coordinator

In OCo, the coordinator may be reduced slightly to [ən].[33] However further reduction to syllabic [n̩] is not possible (Carden and Pesetsky 1977).

(106) a. John will go and he will catch Harry
b. John will go [ən] he will catch Harry
c. *John will go [n̩] he will catch Harry

Carden and Pesetsky (1977) argue that in pseudo-coordinative contexts, the coordinator may be reduced to syllabic [n̩]. This does not occur in OCo. In my variety, the contrast remains clear between OCo [ən] and the syllabic [n̩] found in pseudo-coordination. The following examples are based on Carden and Pesetsky (1977).[34]

[33] In my variety, namely South African English.

[34] Carden and Pesetsky (1977), unfortunately, base their examples on conative *try* which is too idiosyncratic a verb to be able to generalize the results.

(107) a. Who will John go and catch?
b. Who will John go [ən] catch?
c. Who will John go [n̩] catch?

There are two main problems with these results. Firstly, it is not clear whether this test can distinguish ConCo from SceCo. Secondly, it seems that reduction of the coordinator can also occur in some non-pseudo-coordinative contexts. Each of these will be dealt with in turn.

Unlike ConCo whose pseudo-coordinating particle may be reduced to a syllabic [n̩], SceCo do not seem to license reduction of this kind as productively.

(108) a. What did John go to Paris and buy?
b. What did John go to Paris [ən] buy?
c. *What did John go to Paris [n̩] buy?

However, these data should be taken with a pinch of salt. Reduction could be phonetically motivated. In these examples, the coordinator is not placed in the same phonetic environment as in a pseudo-coordination construction. To do so, one must place the coordinator after a stressed syllable, with the same characteristics as the pseudo-coordinative verb. In the following examples I use PPs which place the coordinator in the same phonetic environment as in ConCo; extraction is used to ensure a pseudo-coordinative reading. It seems to me that the ability to reduce the coordinator to syllabic [n̩] is enhanced.[35]

(109) a. John went [n̩] met a carpet dealer
b. John will go to Tashkent [n̩] meet a carpet dealer
c. ??Who will John go to Tashkent [n̩] meet?

(110) a. John will try [n̩] meet a carpet dealer
b. John will go to Dubai [n̩] meet a carpet dealer
c. Who will John go to Dubai [n̩] meet?

If these data are correct, then reduction of the coordinator can take place in all pseudo-coordinative contexts and is perhaps rather a function of phonological context than syntactic environment.

There is still other evidence that suggests that similar reduction occurs in other coordinative situations too.

(111) a. Caesar both planned and/[n̩] prosecuted the campaign [RNR]
b. Caesar both planned AND prosecuted the campaign

[35]The lack of a test with pseudo-coordinative *go* is because of the difficulty in finding words that could function as suitable goals, ending in stressed ‘o’.

In example (111a) a distributor is used to ensure an OCo reading and the object occurs in the right field: a classic instance of Right Node Raising (RNR). Reduction of the coordinator seems quite acceptable in this context. What (111b) shows, however is that the coordinator can be focussed, which can never happen in pseudo-coordinative contexts. The same data can be reproduced in OCo ATB contexts.

(112) a. What did Caesar both plan and/?[n̩] prosecute? [ATB]
b. What did Caesar both plan AND prosecute?

What these data seem to show is that reduction can occur in other coordination contexts too. Thus, reduction may not be structurally triggered at all and consequently, this test should be regarded as being unreliable.

Phrasing effects

Carden and Pesetsky (1977) point out that in addition to phonological reduction, there also appear to be phrasing effects. In OCo, there may be a pause after the first conjunct. This is not evident in ConCo contexts. In other words ConCo predicates appear to be a single phonological domain (with respect to reduction and phrasing) in a way that OCo are not.

(113) a. John will go . . . and (he will) catch Harry
b. John will go and catch Harry
c. *Who will John go . . . and catch?

Focus

Finally, ConCo and OCo differ with respect to focus. In the following ConCo example, focus can only be placed on the lexical verb. It is not possible to felicitously focus either the pseudo-coordinative verb or the coordinator itself.

(114) a. It went and RAINED
b. *It WENT and rained
c. *It went AND rained

In contrast, OCo has a different distribution of focus.

(115) a. John went to town and he actually BOUGHT something
b. John actually WENT to town and he bought something
c. John both went to town AND he bought something

Finally, it is difficult to test SceCo constructions because, in order to rule out OCo readings, it is necessary to extract an object which usually requires focus on the moved constituent. This prevents focus from being applied to any other constituent. However, with the use of focussing adverbials, it is possible to see that SceCo has a similar distribution of focus to ConCo.

(116) a. What did John actually go to town and buy – instead of stealing it?
b. ??What did John actually go to town and buy – not stay at home?
c. *What did John actually go town and buy?

Given the caveats mentioned above, one must construe *actually* as scoping over the underlined verb. It can be seen that to the extent that these judgements are shared by the relevant speakers, SceCo has a similar pattern of focus distribution as ConCo. In particular, the coordinator itself can be focussed in OCo contexts, but never in pseudo-coordinative ones.

These tests show that the phonological reduction of the coordinator is not necessarily a reliable test of pseudo-coordination. However, the focus differences between ConCo and SceCo on the one hand and OCo on the other are quite clear.

2.2 Findings

The findings of this chapter are presented below. Table (2.1) clearly indicates that both ConCo and SceCo differ from OCo significantly. They also differ from each other.

The table demonstrates very clearly that pseudo-coordinative structures (SceCo and ConCo) share many characteristics that distinguish them from OCo. These include the ability to extract arguments in non-ATB contexts, the non-occurrence of XPs and subjects in the second conjunct, the semantic subordination of one conjunct to another, inability to change conjunct order or to substitute on coordinator with another, the incompatibility with distributive elements and the fact that pseudo-coordination is restricted to a subset of verbs. This leads me to conclude, along with many others that English pseudo-coordinative structures are not instances of OCo.

The data in the table also illustrate the fact that there are many differences between ConCo and SceCo; they are not exemplars of the same construction. Among these differences are crucial ones such as (selective) islandhood and the related quantifier raising facts, semantic bleaching, the selectional relationship between the subject and the verb, the differing ability to undergo transitvity alternations and partial VP-ellipsis. All these distinguishing factors demonstrate that ConCo and SceCo should be classified as different constructions.

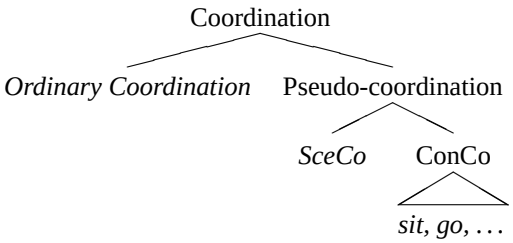
I take these tests as ample evidence for the typology of coordinative structures in figure 2.2 on page 53.

This study has focussed on distinguishing ConCo from SceCo primarily because the two constructions can look superficially similar, leading to confusion. For this reason, most of the SceCo examples I have used have been with verbs like *go* and *sit* which also occur in ConCo contexts. However, I would like to emphasize that SceCo can occur with a much wider range of predicates than can ConCo and that the SceCo construction might ultimately be unifiable with a much broader range of 'asymmetric' coordinative constructions (for example see Carden and Pesetsky (1977), Goldsmith (1985), Lakoff (1986), Na and Huck (1992), Pullum (1990), Schmerling (1975) and Postal (1998) for an overview of some of these structures). Such a project, however,

Property	Section	OCo	SceCo	ConCo
Syntactic tests				
Non-ATB argument extraction	(2.1.1)	No	✓	✓
Non-ATB adjunct extraction	(2.1.1)	No	No	✓
XPs in Postion B	(2.1.2)	✓	✓(Some)	No
XPs in Position C	(2.1.2)	✓	No	No
Partial VP-ellipsis	(2.1.5)	✓	✓	No
Coordinator substitution	(2.1.6)	✓	No	No
Semantic tests				
Subject restricted by Verb A	(2.1.3)	✓	✓	No
Semantic bleaching of Verb A	(2.1.4)	No	No	✓
Semantic subordination	(2.1.7)	No	✓	✓
Distributivity	(2.1.8)	✓	No	No
Wide-scope reading ofquantifier	(2.1.9	No	No	✓
Restrictions on possible Verb A	(2.1.10)	No	✓	✓
Inherent counter-expectational reading	(2.1.12)	No	No	No (*go*)
Morphological and phonological tests				
Morphological Sameness	(2.1.11)	No	✓	✓
Focus on Verb A	(2.1.13)	✓	No (?)	No
Focus on coordinator	(2.1.13)	✓	No (?)	No

Table 2.1: Summary of tests for OCo, SceCo and ConCo

Figure 2.2: Three basic pseudo-coordinative types in English



lies beyond the purview of this thesis. However, in the following chapter I will attempt to address this issue to a limited extent. In an attempt to consolidate and expand the typology developed in this chapter, I will apply the tests to pseudo-coordinative constructions with conative *try* and reduplicative coordination.

Chapter 3

Pseudo-coordinative *try* and reduplicative coordination

I have demonstrated that pseudo-coordination is a diverse phenomenon. However, there are two questions that spring to mind when confronted with the typology developed this far. The first question is whether or not there are other types of pseudo-coordination in addition to ConCo and SceCo. The second question is whether there is any additional motivation for the existence of any particular pseudo-coordinative type like, say, ConCo.

With respect to the first question, I will attempt to expand the proposed typology to include pseudo-coordinations with conative *try*. These exhibit interesting characteristics that distinguish them from the ConCo and SceCo constructions discussed in chapter (2). In the following chapter I will discuss these characteristics in order to place pseudo-coordinative *try* more accurately in the typology being developed.

Concerning the second question, I will discuss data which have hitherto not been discussed under the rubric of pseudo-coordination. This new data is of a reduplicative nature. The properties of these will also be discussed because they are particularly interesting with respect to ConCo. In exploring these new data, the existing typology will be consolidated.

3.1 The putative uniqueness of *try*

We are now in a position to explore a less canonical example of pseudo-coordination, namely pseudo-coordination with conative *try*.

(1) a. John will try and kiss Mary at the party tonight
b. Who will John try and kiss at the party tonight?

There are two main reasons why I would like to deal with conative *try* separately. Firstly, it seems different to other pseudo-coordinative structures in a number of respects. For instance, one immediate difference between structures with conative *try*

and other ConCo constructions is that conative *try* constructions can be paraphrased as infinitives.[1] In contrast, ConCo constructions can only be paraphrased with a purpose-adjunct reading.

(2) a. John will try and eat an apple [Conative *try*]
b. John will try to eat an apple
'*John will try, in order to eat an apple'

(3) a. John will go and eat an apple [ConCo]
b. John will go to eat an apple
'John will go, in order to eat an apple'

(4) a. John will sit and eat an apple [ConCo]
b. John will sit to eat an apple
'John will sit, in order to eat an apple'

Secondly, despite their atypicality, examples with *try* have informed a number of studies (e.g. Carden and Pesetsky (1977)) adding to the confusion between ConCo and SceCo and leading to incorrect generalizations. For these reasons I consider it vitally important to establish the place of conative *try* in the typology I have developed. To this end, I will apply the tests developed in the first part of this chapter. I will show that conative *try* constructions differ from ConCo constructions with *sit* and *go* in most respects.

3.1.1 Morphological conditions

Another salient and curious difference between conative *try* and ConCo and SceCo is that it cannot tolerate any inflection (Carden and Pesetsky 1977, Schmerling 1975). Only the bare forms of the verbs can occur in this construction. The same is not true of other ConCo verbs like *sit* and *go*.[2] The following examples illustrate this with respect to bare verbs, present tense, past tense and participle morphology.

(5) a. John will try and eat an apple [Conative *try*]
b. John will go and eat an apple [ConCo]
c. John will sit and eat an apple

(6) a. *John tries and eats an apple [Conative *try*]
b. John goes and eats an apple [ConCo]
c. John sits and eats an apple

[1] This idea is expressed as far back as Gleitman (1965).

[2] Pullum (1990) notes that *try and V* constructions act like bare aspectual *come* and *go* (Jaeggli and Hyams 1993) in being subject to a morphological condition prohibiting inflection on these forms.

(7) a. *John tried and ate an apple [Conative *try*]
b. John went and ate an apple [ConCo]
c. John sat and ate an apple

(8) a. *John has tried and eaten an apple [Conative *try*]
b. John has gone and eaten an apple [ConCo]
c. John has sat and eaten an apple

(9) a. John and Mary try and eat apples [Conative *try*]
b. John and Mary go and eat apples [ConCo]
c. John and Mary sit and eat apples

Thus conative *try* differs from SceCo and ConCo with respect to the morphology condition. Note that because *try* cannot be inflected, I will use either a plural subject or a modal verb in most of the examples in this chapter.

3.1.2 Extraction

It is possible to extract both arguments and adjuncts from conative *try* constructions. Thus conative *try* has properties identical to ConCo with respect to extraction (see section (2.1.1)).

(10) Who do you think will try and kill the Pope?

(11) Who will they try and kill?

(12) How much will they try and pay the assassin?

(13) How badly did they try and behave?

3.1.3 XPs in the verbal string

XPs cannot occur in Position B within the verbal string and somewhat marginally in Position C. This contrasts with the contiguous nature of ConCo (section (2.1.2)).

(14) a. Bafana-Bafana tried and, in 2001, won the African cup
b. *What do they try and, in 2001, win?

(15) a. What do they carefully/regularly/never try and eat?
b. *What do they try carefully/regularly/never and eat?
c. What do they try and ?carefully/regularly/never eat?

3.1.4 Restrictions on subjects

Conative *try* constructions seem to require an obligatorily sentient subject. Consequently, it is incompatible with the expletive subject of weather verbs and with non-sentient objects such as trees (unless one imputes consciousness to them). This makes *try* seem rather more like a SceCo verb (section 2.1.3).

(16) John will try and become a pilot

(17) *I wonder if it will try and rain today

(18) *The acorn will try and become an oak

3.1.5 Semantic bleaching

There does not seem to be much semantic bleaching of *try per se*. For instance, there does not seem to be any significant semantic difference between pseudo-coordination with conative *try* and the corresponding infinitival construction. The following example is (2) repeated for convenience.

(19) a. John will try and eat an apple [Conative *try*]
b. John will try to eat an apple

Moreover, conative *try* does not seem to exhibit bleaching independently of pseudo-coordinative constructions; in fact, it is not at all clear to me what a 'bleached' semantics of *try* would correspond to. Given the lack of semantic bleaching, conative *try* seems quite similar to SceCo.

Paradoxically, however, conative *try* contexts are intrinsically different from SceCo; SceCo implies a sequence of events, where the pseudo-coordinative verb denotes an event that sets the scene for the main activity to take place. Where conative *try* is used, however, the *trying* event must necessarily be cotemporaneous with the main activity. In this respect constructions with conative *try* are like ConCo constructions.

3.1.6 VP deletion

In VP deletion contexts with conative *try*, it is not necessary that *try* obligatorily be deleted with the rest of the VP. This sets *try* apart from ConCo constructions and makes it similar to a SceCo predicate (section (2.1.5)).

(20) a. They will try to kill mosquitos and Mary will too
→ 'Mary will also try to kill mosquitos'
b. They will try and kill mosquitos and Mary will try too
→ 'Mary will also try to kill mosquitos'

3.1.7 Coordinator substitution

The coordinator cannot be substituted by another in conative *try* constructions. This is a characteristic shared by all pseudo-coordinative structures (section 2.1.6) and indicates that conative *try* constructions are not a special case of OCo.

(21) a. John will try and kill mosquitos
b. *John will try or kill mosquitos

3.1.8 Semantic subordination

In conative *try* constructions, as for ConCo and SceCo, the activity denoted by the first predicate (*try*) is semantically subordinate to the main activity denoted by the lexical verb, in the sense of Na and Huck (1992). This is reflected in the fact that the conjuncts of a conative *try* construction cannot be reordered. This is a common property of all pseudo-coordinative constructions (section (2.1.7)).

(22) a. John will try and kill mosquitos
b. *John will kill and try mosquitos
c. *John will kill mosquitos and try

3.1.9 Distributivity

Conative *try* constructions do not allow *both* modification. This shows that there is a semantic dependency between the verbs since the distributor requires to verbs denoting independent events (section (2.1.8)). This too shows that conative *try* constructions are not instances of OCo.

(23) a. *John will both try and kill mosquitos
b. *What will John both try and kill?

3.1.10 Quantifier raising

Conative *try* constructions allow quantifier raising, thereby yielding both wide and narrow scope readings. This is not surprising since conative *try* is not a selective island. This property is also common to ConCo constructions (section (2.1.9)).

(24) A policeman will try and kiss every widow
'Some policeman will attempt to kiss every widow' [NS]
'For every widow, some policeman or other will attempt to kiss her' [WS]

3.1.11 Counter-expectational readings

Instances of conative *try* do not seem to yield any particular counter-expectational readings. Thus (25) appears to be completely neutral in this regard. In this respect, conative *try* constructions pattern with SceCo (section (2.1.12)).

(25) John will try and eat an apple

3.1.12 Phonological cues

The coordinator may reduce to syllabic [n̩] in ConCo constructions with *try* (Carden and Pesetsky 1977). WH extraction is used to force a pseudo-coordinative reading.

(26) a. John will try and he will catch Harry
b. John will try [ən] he will catch Harry
c. *John will try [n̩] he will catch Harry

(27) a. Who will John try and catch?
b. Who will John try [ən] catch?
c. Who will John try [n̩] catch?

Once again, as I mentioned in section (2.1.13), these facts may have a phonetic explanation. Thus, until more is known, these facts should be treated cautiously.

With respect to focus, constructions with pseudo-coordinative *try* behave slightly differently to other pseudo-coordinative constructions. It is indeed possible to focus the first verb, namely *try*. It remains impossible to focus the coordinator.

(28) a. Why don't you at least try and EAT something?
b. Why don't you at least TRY and eat something?
c. *Why don't you at least try AND eat something?

3.1.13 Findings

The findings of this section are summarized in table 3.1 on the facing page.

Firstly, it is very clear that conative *try* constructions do not pattern with OCo but are a pseudo-coordinative structure of some sort. This is indicated by, among other things, extraction in non-ATB contexts, quantifier raising, the ban on XPs and subjects in the verbal string, coordinator substitution, the inability to change the order of the conjuncts and the incompatibility with distributors.

Secondly, although conative *try* does have certain characteristics in common with ConCo (namely extraction of adjuncts and quantifiers and phonological reduction), other tests preclude the possibility that conative *try* constructions are ConCo structures. ConCo exhibits properties of constituenthood (partial VP-deletion test, XP-in-cluster test etc.), a fact exploited in my analysis in chapter (4). Since conative *try*

Table 3.1: Summary of tests including *try*

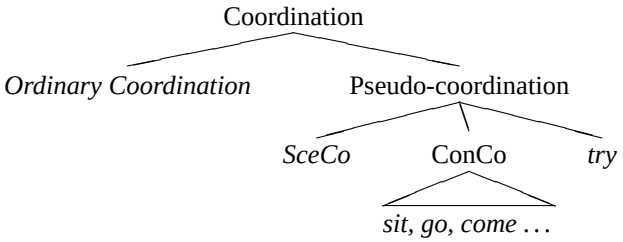
Property	Section	OCo	SceCo	*try*	ConCo
Syntactic tests					
Non-ATB argument extraction	(3.1.2)	No	✓	✓	✓
Non-ATB adjunct extraction	(3.1.2)	No	No	✓	✓
XPs in Position B	(3.1.3)	✓	No	No	No
XPs in Position C	(3.1.3)	✓	✓(Some)	Some (?)	No
Partial VP-ellipsis	(3.1.6)	✓	✓	✓	No
Coordinator substitution	(3.1.7)	✓	No	No	No
Semantic tests					
Subject restricted by Verb A	(3.1.4)	✓	✓	✓	No
Semantic bleaching of Verb A	(3.1.5)	No	No	No	✓
Semantic subordination	(3.1.8)	No	✓	✓	✓
Distributivity	(3.1.9)	✓	No	No	No
Wide-scope reading of quantifier	(3.1.10)	No	No	✓	✓
Restrictions on possible Verb A		No	✓	✓	✓
Inherent counter-expectational reading	(3.1.11)	No	No	No	✓(*go*)
Morphological and Phonological tests					
Morphological Sameness	(3.1.1)	No	✓	N.A.	✓
Focus on Verb A	(3.1.12)	✓	No (?)	✓	No
Focus on coordinator	(3.1.12)	✓	No (?)	No	No

structures readily allow partial VP-deletion, they cannot form a constituent with the lexical predicate. Finally, whereas ConCo predicates exhibit semantic bleaching and do not affect the selectional relationship between the verb and the subject, conative *try* does not appear to be bleached at all and strongly selects for an animate, sentient subject. Thus, it cannot be analysed as a typical ConCo construction.

Thirdly, there are important characteristics that make conative *try* quite similar to SceCo. I have already alluded to some of these. They include the lack of semantic bleaching, the selectional relationship between the verb and its subject and partial VP-ellipsis. On the other hand, the ability to extract adjuncts and quantifiers freely, not to mention the peculiar morphological constraints on the conative *try* construction make me reluctant to classify it as SceCo. These data lead me to conclude that conative *try* is yet another type of pseudo-coordination which is distinct from both SceCo and ConCo.

At this point, we have identified at least four different types of verbal coordination: OCo, SceCo, ConCo and pseudo-coordinative *try*. These are schematized in figure 3.1.

Figure 3.1: Pseudo-coordination, including *try*



3.2 Reduplicative coordination constructions

At this point, having developed tests to distinguish ConCo from superficially similar constructions like SceCo, we are now in a position to explore another *V and V* construction which may shed some light on ConCo. With this in mind, let us step back from ConCo of the *go, sit* type and consider Reduplicative coordination (ReCo).[3]

(29) He begins reading about dinosaurs and tigers, and he reads and reads until the library closes
(http://www.whitehouse.gov/news/releases/2003/05/20030520-17.html (12.10.2004))

(30) My friend Jim Stoltz walks and walks and walks in the wilderness
(http://www.walkinjim.com/wwbookart_book.html (14.10.2004))

(31) Starsky pulls his revolver from his shoulder holster and shoots and shoots at Huggy Bear (http://www.g21.net/cc14.html (01.07.2005))

[3]It has also been called Augmentative conjunction Haspelmath (2005).

ReCo constructions typically reduplicate activity verbs, example (31) notwithstanding.[4] However, example (31) does raise a pertinent question: does durativity license iterativity or *vice versa*. This question requires the sketching of the relationship between ReCo and pluractionality.

There are many similarities between ReCo and pluractionality – so-called plural marking on verbs. Many languages have verbal affixes which are:

> frequently reduplicative, most often derivational rather than inflectional, and expressing a broad range of notions typically including action by more than one individual, temporally iterated action and spatially scattered action (Lasersohn 1995:238).

Among the meanings associated with pluractionality are repetitiveness, repeated occasions or events, conation, persistent consequences, habitual agency, distributed quality, inchoativity, cumulative result, intensity, plurality of sites of action, duration, continuity, distribution, celerativity/retardativity, augmentation, diminution as well as perfectivity, causativity and plurality of subject or object noun phrases (Cusic 1981:74–75).

This enumeration of properties bears many similarities, not only with ReCo, but also with ConCo more generally. However, a central question is which of these readings is primary because the answer relates directly to the types of analyses that can be proposed. Whereas Cusic (1981) and others have regarded pluractionality as having a fundamental meaning of combining different events (i.e. iterativity), I want to approach ReCo in English from the opposite direction. I will regard it as coordinating, not discrete events, but substages of the same event.[5] From this basic meaning, the iterative readings more typical of pluractionality can be easily derived by the analysis I will propose. There are empirical reasons for this approach which are reviewed in the following section.

3.2.1 Empirical reasons to favour durativity over iterativity

To answer the question of whether ReCo constructions are primarily durative or iterative, consider the following minimal pair.

(32) a. John looked up and looked up at the sky but never saw a comet

[4] ReCo can also occur with non-verbal material as the following examples show. Crucially, it is durative aspect that licenses reduplication in these contexts. They are discussed more fully in section (4.5).

(1) The balloon went up and up

(2) The plane flew around and around the airfield

(3) Merlin slept for years and years

(4) John slept (*about/*in/for) hours and hours

(5) Eternity lasts for ever and ever

[5] Needless to say, I am not making a general claim about pluractionality in all languages. My claim holds for the ReCo constructions under discussion. However, whether the claim can be extended to other pluractional-marking languages is an interesting one, worthy of more exploration.

b. *John looked up and looked up from his work

Examples (32a,b) are a minimal pair. Since the reduplicated predicates are syntactically identical, the grammaticality distinction between them must be derived from semantics and not from a purely syntactic explanation. Thus, it is the semantics of the constructions that license reduplication.[6] To *look up from work* is an activity that is easily repeated as demonstrated by example (33a), the particle predicate itself cannot be reduplicated (33b).

(33) a. John looked up from his work repeatedly

b. *John looked up and looked up from his work

If ReCo were inherently iterative in its semantics, then examples like (33b) would be predicted to be grammatical. The fact that (33b) is ungrammatical shows that mere iterative potential is not sufficient to license reduplication.

However, ReCo does have durative, atelicity as an inherent part of its semantics. For this reason it is only possible to reduplicate durative predicates. Thus *look up at the sky* (32a) can be construed duratively whereas *look up from work* (32b) cannot; only the former can be reduplicated. Thus, it is the ability to be interpreted duratively, rather than iteratively that is a good predictor of the grammaticality of ReCo constructions.

This is not to say that iterative readings never occur in ReCo contexts; they do. However, an iterative reading is parasitic on durativity and can only be licensed in circumstances where a durative reading is pragmatically unlikely, as occurs with punctual events. In effect then, an iterative or serial reading is a strategy by which a punctual event can be construed as durative. For instance, in (34), the plurality of the subject licenses a serial reading, while the singular subject in (35) licenses an iterative reading.

(34) The police shot and shot at the protesters

(35) John shot and shot at the rabbit

And yet there is still another reading associated with ReCo constructions: intensiveness. Whenever ReCo occurs it typically means not only that a particular activity is durative, but that it is done to a large, excessive or intensive degree. Thus the *shoot and shoot* examples above differ from ordinary progressives insofar as the former but not the latter imply that the shooting was somehow excessive.

(36) The police shot and shot at the protesters

(37) The police were shooting at the protesters

[6] This is supported by the fact that durative aspect licenses doubling of DPs more generally, whereas bounded events do not.

(1) a. John read (the book) for days and days

b. *John read the book in days and days

In summary, then, ReCo constructions have as primary meanings, durativity and intensiveness. The serial reading, when it exists, is parasitic on these two meanings.

This gives us an explanation for why certain particle verbs can be reduplicated while others simply cannot. The following events, although potentially durative, simply cannot be carried out in an 'intensive' manner.

(38) a. ??John climbed up and climbed up the mountain
b. ??John climbed up the mountain intensively

(39) a. *John went off and went off into the sunset
b. *John went off intensively

(40) a. *John put down and put down the book
b. *John put down the book intensively

(41) a. *John looked up and looked up from his work
b. *John looked up from his work intensively

(42) a. *John walked away and walked away
b. *John walked away intensively

In contrast, the activities denoted by the following particle verbs *can* be done in an 'intensive' manner and they can also be reduplicated.

(43) a. I can't believe it! Just because Mary was a professor, John just sucked up and sucked up and sucked up
b. John sucked up intensively

(44) a. John read up and read up for weeks on the lawsuit
b. John read up intensively

(45) a. ??John danced around and danced around until he was exhausted
b. John danced around intensively

(46) a. John looked up and looked up at the stars but never saw a comet
b. John looked up at the stars intensively but never saw a comet

There are also some particle verbs whose grammaticality in ReCo contexts increases markedly when an 'intensive' reading is given by the context.

(47) a. ??John called up and called up Mary
b. The stalker called up and called up Mary until she was a nervous wreck

There is one apparent exception to this observation.

(48) a. ?I can't believe it! The government just puts off and puts off making any decisions on the pension crisis

b. *The government put off making the decision intensively

A predicate like *put off* is punctual and thus not compatible with a durative reading. For this reason an iterative reading is licensed. However, an adverb like 'intensively' also cannot typically modify a non-durative predicate. Consider the following example with *shoot*.

(49) *John shot the rabbit intensively

This accounts for the ungrammaticality of (48b). Thus this example is not a counter example at all.

To conclude, ReCo constructions denote durativity and intensiveness and consequently only predicates (including particle verbs) which are compatible with both durativity and intensiveness may be reduplicated. In some cases, where a punctual activity like *shoot* is involved, then a serial reading is parasitic on the durative readings.

Having discussed some general properties of ReCo, it is now possible to place it in its pseudo-coordinative context by systematically applying the tests developed in chapter (2). In this chapter I will demonstrate that

i. ReCo is a pseudo-coordinative structure, i.e. that ReCo is not OCo and

ii. ReCo shares many properties of ConCo.

Because ReCo has not been analysed as pseudo-coordination before, I will first focus on demonstrating that ReCo is not OCo. To this end, I will not necessarily retain the tests in the order in which they were introduced in chapter (2). Tests that indicate that ReCo is not an instance of OCo include the inability to substitute one coordinator with another, the incompatibility of ReCo and distributive markers like *both*, the fact that ReCo conforms to the Morphological Sameness Condition (99), the possibility of non-ATB extraction and quantifier raising, and also the inability of a subject (or indeed any XP) to occur in the second conjunct.

Other tests show that ReCo patterns with ConCo. These tests include the absolute ban on XPs within the verbal string, the incompatibility of ReCo with partial VP-deletion, semantic bleaching, and the fact that ReCo constructions allow quantifier raising.

3.2.2 Coordinator substitution

A classic test for pseudo-coordination is whether or not the coordinator can be replaced by another (section (2.1.6)). Whereas OCo allows such substitution, pseudo-coordination does not. The following examples can be compared with examples (29), (30) and (31). They demonstrate unequivocally that ReCo structures do not allow coordinator substitution and are thus indeed pseudo-coordinative structures.

(50) a. *He read or read or read in the library
b. *My friend walked or walked or walked in the wilderness
c. *He shot or shot at Huggy Bear

3.2.3 Distributivity

In OCo structures, distributive markers such as *both* can occur. This is not possible in pseudo-coordinative contexts (2.1.8). *Both* modification is also blocked in ReCo constructions, exactly like their SceCo and ConCo counterparts. Thus ReCo is not OCo.

(51) a. John both reads and writes books
b. *John both reads and reads all day long

3.2.4 The 'Sameness' Condition

Another important characteristic of pseudo-coordination is that each of the predicates is subject to the Morphological Sameness Condition (99) on page 46. This condition also applies to ReCo. This is illustrated in (52) for PAST and (53) for participle morphology.

(52) a. John sang and sang
b. *John sang and sings
c. *John sings and sang

(53) a. John has sung and sung
b. *John has sung and sings
c. *John will sing and have sung[7]

3.2.5 Extraction

ReCo constructions can have arguments extracted from them. Thus, just like ConCo and SceCo, they constitute exceptions to the CSC.

(54) a. Who was the guy who sang and sang all night?
b. What was the song that John sang and sang all night?

[7] This example is ungrammatical on a ReCo reading, but is still grammatical on a OCo reading.

It should be noted that ReCo examples can sometimes be a little clumsy. For instance, while an objectless ReCo construction is perfectly grammatical its counterpart with a direct object is sometimes less well-formed, but not outright ungrammatical.[8]

(55) a. John read and read
'John read (a book) but didn't finish it' [Durative, unbounded]
*'John read a book twice' [Bounded]
b. John read and read a book
%'John read a book but didn't finish it' [Durative, unbounded]
'John read a book twice' [Bounded]

Often, but not always, a ReCo construction with a definite object has a natural interpretation as a bounded predicate. For some speakers, this is most naturally interpreted iteratively (see also Rothstein 2004). The effect is ameliorated somewhat with indefinite objects. The reason for this is that verbs and direct objects are together construed as telic. Thus, the use of an object (and by corollary the extraction of an object) is relatively marked. Nevertheless, extractions of objects are grammatical as shown by examples like (54).

It might be suggested that (54) is merely ATB extraction: in other words the subject is coindexed with two extraction sites, one in each conjunct. This would reduce ReCo to OCo. As has been demonstrated in section (2.1.1), ATB extractions cannot occur from pseudo-coordinative constructions. Consider the following examples illustrating extraction of benefactives.

(56) a. The peasant kept trying to pump and pump and pump a glass of water for the soldier
b. What did the peasant keep trying to pump and pump and pump for the soldier?
c. Who did the peasant keep trying to pump and pump and pump a glass of water for?
d. *Who did the peasant keep trying to pump for and pump for and pump for a glass of water for?

Imagine a context in which a troop of soldiers walk through a rural village. A soldier might ask a peasant to pump some water from the well in order to drink it. Example (56a) is the basic example. (56b,c) show that both the direct and beneficiary objects can be extracted, the latter optionally stranding the preposition. The stranding of the preposition in final position marks the extraction site and thus (56d) illustrates that ATB extraction is not possible.

In conclusion, extraction of arguments from ReCo is possible without recourse to ATB movement. Such extractions constitute exceptions to the CSC and are indicative that ReCo is a pseudo-coordinative structure.

[8] Some speakers are able to distinguish a slightly clumsy durative reading, even with a definite, direct object. For other speakers, a direct object always implies boundedness of the predicate and thus immediately triggers a serial reading.

Adjunct extraction

With respect to adjunct extraction, there are somewhat mixed results as a result of the semantics of ReCo. Although low, manner adjuncts can be extracted, occasionally the result is somewhat degraded, although still grammatical.

(57) I know how well John can argue and argue

(58) ?I wonder how quickly John worked and worked at his project?

(59) ??I wonder how carefully John worked and worked at his project

The explanation for this lies in the semantics of ReCo constructions: they encode a manner component indicating intensity of the activity. For this reason it is simply pleonastic and incongruous to ask, in the previous examples, how *quickly*, or how *carefully* the action was carried out. The very nature of the ReCo construction denotes that the *arguing* or *working* actions were done 'intensively' which could subsume speed and carefulness. In contrast, note that it is possible to extract low manner adjuncts which have nothing to do with 'intensiveness' (57). What this means, of course, is that extraction of low adjuncts is indeed possible, but is often blocked for independent reasons.

In summary, extraction of higher adjuncts and arguments is possible. Thus, although ReCo constructions may appear to be selective islands (like SceCo), the cause of the islandhood does not seem to be necessarily related to whatever causes islandhood in SceCo. In ReCo, it seems to be an 'intensiveness', manner component which causes islandhood. The case is not as clear for SceCo, where the first verb sets the scene for the activity depicted in the second to take place. In other words, the first verb does not necessarily suggest a manner component in SceCo contexts. If this is true then the similarity with SceCo could be illusory. In short, the extraction facts argue that ReCo patterns with ConCo.

3.2.6 Quantifier raising

In the cases of ConCo and SceCo constructions, quantifier raising tests corroborated their status as non-islands and selective islands respectively (section (2.1.9)). Thus, wide-scope readings are freely available for ConCo but not for SceCo. Interestingly, quantifier raising tests suggest that ReCo contexts are not islands since wide scope readings are possible.

(60) a. A policeman serenaded and serenaded $every_i$ widow until $they_i$ were all sick of his voice

'The same policeman serenaded each of the widows' [NS]

b. A policeman serenaded and serenaded $every_i$ widow until she_i was sick of his voice

'For each widow, there was some policeman or other who serenaded her' [WS]

In (60a,b) the adjunct (*until*...) has been added to assist in the interpretation. There is a tendency for definite direct objects to cause noise in the grammaticality judgements since the object interacts with aspect to create a telic interpretation which is not a possible interpretation of ReCo. Nevertheless, the availability of both wide and narrow-scope readings seems clear. The implication of this is that ReCo constructions allow LF raising of the quantifier without incurring a CSC violation. This shows (i) that ReCo constructions are not OCo and (ii) affirms their non-island status. In this respect ReCo constructions pattern with ConCo.

3.2.7 XPs in the verbal string

It has been demonstrated that ConCo constructions do not permit an XP to intervene inside the verbal string. This is also true of ReCo contexts.

(61) a. John walked and walked across the desert for three days
b. *John walked across the desert and walked for three days
c. *John walked and across the desert walked for three days

Adverbs cannot intervene in ReCo verbal strings.

(62) a. John often/regularly/carefully/never ate and ate all day
b. *John ate often/regularly/carefully/never and ate all day
c. *John ate and often/regularly/carefully/never ate all day

Example (62a) is an unmarked example where the adverb precedes both verbs in the ReCo verbal string. The strong ungrammaticality of (62b,c) on a ReCo reading clearly shows that adverbs cannot occur inside the verbal string.[9]

In summary, XPs cannot intervene within a ReCo verbal string, because it seems that ReCo constructions are constituents of some kind. In this respect they are pattern with ConCo constructions.[10]

3.2.8 Semantic bleaching

In previous sections, I linked the selectional properties of the second verb to semantic 'bleaching'. In other words, in ConCo constructions where the second verb selected the subject, then the first verb became more 'bleached' and took on a more aspectual role. The same kind of bleaching does not occur in ReCo constructions. Verbs retain their lexical semantics. However, this is not to say that the verbs do not play an aspectual role; they clearly do. ReCo constructions are durative and imply intensity of activity. Thus, like ConCo they have an aspectual interpretation.

[9] (62b,c) are grammatical under an OCo reading, although they would be distinctly odd from a semantic point of view.

[10] As shown in section (3.2), verbal particles can occur in Position B in a restricted fashion. This does not refute the generalization that XPs cannot intervene in Position B because it is not clear that English verbal particles are always independent XPs rather than being incorporated into the verb (Farrell 2005). This will be discussed more generally in section (4.2.2).

3.2.9 VP ellipsis

The inability to elide part of the VP is a property of ConCo constructions (2.1.5). In the case of ReCo constructions, the VP must be elided as a unit; it is not possible to elide only part of the VP. However, since both verbs are identical, an ellipsis structure actually looks identical to a simplex form. This means that the VP-ellipsis test needs to be approached in a subtle way. The test I have developed relies on the unbounded *Aktionsart* of ReCo constructions.

(63) a. Mary worked and worked at the project
→ 'Mary worked at the project intensively'

b. John worked and worked at the project...
...and Mary worked ~~and worked~~ at it too
↛ 'Mary worked intensively'

Example (63a) is the basic ReCo example. Note that the characteristic intensive, durative reading is available. Example (63b) exhibits partial VP-deletion in a ReCo context. The supposed ellipsis site is marked by ∅. Note that the second conjunct is identical to a simplex (non-ReCo) clause and is thus not ill-formed. Importantly, however (63b) does not have the intensive action reading associated with (63a). What this means is that the purportedly elided constituent in (63b) cannot be a ReCo complement. In fact, the reading of the second conjunct is only compatible with a non-elision structure. Consequently, the 'elision' example is ungrammatical on a ReCo interpretation. Thus, partial VP-deletion cannot occur in ReCo contexts.[11]

3.2.10 Restrictions on subjects

A major difference between ConCo and SceCo constructions is that the former do not place any restrictions on the selectional relationship between the subject and the lexical verb. In effect, the pseudo-coordinative verb is invisible to selectional requirements in ConCo but not in SceCo (section (2.1.3)).

Similarly, ReCo constructions do not have any restrictions with respect to their subjects. For instance, they admit weather-verb expletives and inanimate subjects. Thus it seems, like for ConCo, that the subject-selectional properties of the predicate are not affected (2.1.3).

(64) a. It rained all night
b. It rained and rained all night

(65) a. The tree stood on the ridge for more than 80 years
b. The tree stood and stood on the ridge for more than 80 years

[11] This ellipsis test also confirms the results of section (3.2.8); the presence of the second verb contributes towards an aspectual meaning.

Of course, this is not particularly surprising since all the predicates in a ReCo construction are identical. Thus, unlike ConCo and SceCo where there is a non-local relationship between the lexical verb and the subject, in ReCo, the subject is always in a local relationship to the first verb, which appears to be lexical. For this reason, one needs to differentiate whether it is the first verb of the ReCo construction that selects the subject (in which case ReCo would pattern with SceCo) or whether it is the second verb that selects the subject (in which case ReCo would pattern with ConCo). Unfortunately, given that both verbs are identical it is not possible to tell directly which of these options is the correct one.[12]

3.2.11 Restrictions on which verbs can occur in ReCo constructions

ReCo constructions are very productive. However, there are restrictions on which verbs can enter into this construction.

(66) *John did and did something [Light verb]

(67) *John will and will do something [Modal]

(68) *John has and has done something [Auxiliary]

(69) *John resembled and resembled his father [States]

(70) *John won and won the race [Achievements]

(71) *John ate and ate 46 hamburgers in only 2 hours [Accomplishments]

(72) John walked and walked for hours [Activities]

(73) John shot and shot at the rabbit
'John repeatedly shot at the rabbit' [Serial Achievement]

Two generalizations can be made from these data. Light verbs like *do* as well as modals and auxiliaries cannot occur in ReCo constructions. In other words, ReCo constructions are limited to lexical verbs. The second generalization is that only activity verbs can occur in these constructions, although some endpoint implying verbs can occur in ReCo constructions with serial or repetitive readings, i.e. they are construed as activities. The main point I am trying to make is that there is (i) a definable class of verbs entering into ReCo constructions (activity verbs) and (ii) there is a definable class of verbs which do not participate in this construction (modals, light verbs, states, achievements and accomplishments). This is also a property of pseudo-coordinative constructions generally (section 2.1.10).

[12]However, given that with respect to the semantic bleaching and VP-ellipsis tests ReCo patterns with ConCo, it is perhaps reasonable to assume that it is the second verb that selects the subject in ReCo constructions and that they thus pattern with ConCo.

3.2.12 Counter-expectational readings

Pejorative and/or surprise readings do not seem to be characteristic of these constructions, although they are not incompatible with them.

(74) a. To our amazement, John studied and studied for three days
b. As we had arranged, John studied and studied for three days

In these examples the counter-expectational force comes entirely from the topicalized elements. To my ear, an out-of-the-blue ReCo construction is very neutral with respect to this kind of reading. Thus, ReCo constructions do not have inherent counter-expectational readings associated with them. In this respect, they pattern with ConCo more generally, but not ConCo with *go* (section (2.1.12)).

3.2.13 Phonological cues

ReCo constructions permit the coordinating particle to be reduced to syllabic [n̩]. This is a general characteristic of pseudo-coordinative constructions (section (2.1.13)).

(75) a. What did he read and read all day?
b. What did he read [ən] he read all day
c. What did he read [n̩] read all day?

As was the case for ConCo, the first verb cannot be focussed in isolation. However, unlike ConCo, it is possible for both verbs to bear equal focus. This is probably because, unlike ConCo constructions, ReCo contexts do not require that the first verb be grammaticalized and functional; it is clearly a lexical verb with a lexical stress pattern. Importantly, however, the coordinator itself cannot be focussed. This is a general property of pseudo-coordination.

(76) a. What did John read and READ all day?
b. *What did he READ and read all day?
c. *What did John read AND read all day?
d. What did John READ and READ all day?

These data demonstrate that ReCo are indeed pseudo-coordinative in nature and also support the intuition in section (2.1.13) that the inability of ConCo predicates to be stressed is a function of the fact that they are functional, grammaticalized elements.

Property	Section	OCo	SceCo	ConCo	ReCo	*try*
Syntactic tests						
Non-ATB argument extraction	(3.2.5)	No	✓	✓	✓	✓
Non-ATB adjunct extraction	(3.2.5)	No	No	✓	✓	✓
XPs in Position B	(3.2.7)	✓	✓(Some)	No	No	No
XPs in Position C	(3.2.7)	✓	No	No	No	Some (?)
Partial VP-Ellipsis	(3.2.9)	✓	✓	No	No	✓
Coordinator Substitution	(3.2.2)	✓	No	No	No	No
Semantic tests						
Subject restricted by Verb A	(3.2.10)	✓	✓	No	N.A.	✓
Semantic bleaching of Verb A	(3.2.8)	No	No	✓	N.A.	No
Semantic subordination	No	✓	✓	✓	N.A.[i]	✓
Distributivity	(3.2.3)	✓	No	No	No	No
Wide-scope reading of quantifier	(3.2.6	No	No	✓	✓	✓
Restrictions on possible Verb A	(3.2.11)	No	✓	✓	✓	N.A.
Inherent counter-expectational reading	(3.2.12)	No	No	✓(*go*)	No	No
Morphological and Phonological tests						
Morphological Sameness	(3.2.4)	No	✓	✓	✓	N.A.
Focus on Verb A	(3.2.13)	✓	No (?)	No	No	✓
Focus on coordinator	(3.2.13)	✓	No	No	No	No

Table 3.2: Properties of pseudo-coordinative types

[i] Semantic subordination in ReCo contexts cannot be tested. Since both verbs are the same, the commutativity of conjuncts is not at issue.

3.2.14 Findings

In this section I have systematically subjected ReCo constructions to the battery of tests developed in previous sections. The results of these are tabulated in figure 3.2 on the preceding page.

Firstly, it is clear that ReCo is not OCo. This is indicated by the ability to extract arguments, quantifiers and some adjuncts, the restrictions on subjects, the inability of other XPs to occur in the second conjunct, the incompatibility with distributive elements, the Morphological Sameness Condition, phonological reduction and the fact that only a subclass of verbs can be coordinated in this way.

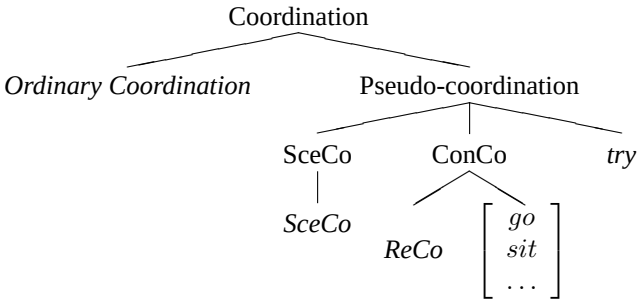
Secondly, I would like to make the case that ReCo is a type of ConCo. The only way in which ReCo patterns with SceCo is the inability to extract manner adjuncts. However, the results of this test are undermined by the fact that quantifiers can freely raise yielding wide-scope readings. Furthermore, there is the possibility that the islandhood of ReCo and SceCo are not, in fact, triggered by the same factors, making the similarity superficial only. The remaining tests show that ReCo patterns after ConCo. These include the ban on subjects and XPs within the verbal string, the semantic bleaching effects, the inability to partially elide the VP and the wide-scope readings associated with quantifiers.

3.3 Conclusion

In summary, ReCo is an instance of ConCo. This lends some credence to the typology which as been developed insofar as ReCo constructions provide independent proof of the existence of a structure with the properties of ConCo. It is also important because some of the properties of ReCo may illuminate the mechanics of ConCo. This possibility is explored in the following chapters.

With respect to pseudo-coordinative *try*, I have argued that it constitutes a separate type of pseudo-coordination from ReCo, ConCo and SceCo. Diagram 3.2 illustrates the resulting tableau of coordinative types explored in previous chapters.

Figure 3.2: Pseudo-coordination in English



Chapter 4

Solutions and derivations

In previous chapters, I have disambiguated various pseudo-coordinative structures. Importantly, I have argued that ConCo with predicates like *go* and *sit* subsumes ReCo. Now, an analysis of ConCo (subsuming ReCo) can be approached. In this chapter, I will first discount analyses of ConCo along the lines of subordination. Thereafter, I will suggest my own analysis in terms of complex predicates and garden-variety coordination at (sub)-head level.

4.1 Approaches to pseudo-coordination

Over the years three broad approaches to pseudo-coordinative phenomena can be distinguished.

i. Pseudo-coordination is true coordination;
ii. Pseudo-coordination is *v*P/VP subordination typical of modal and auxiliary configurations;
iii. Pseudo-coordination is clausal subordination, on a par with infinitival or raising constructions.

Analyses belonging to the first group consider the coordinative morpheme to mark coordination of XPs. Cormack and Breheney (1994), Josefsson (1991) and Lakoff (1986) all fall into this category. For them the primary problem is how to explain the asymmetry between the conjuncts and the systematic exceptions to the CSC.

Approaches which are part of the second group regard the coordinator as a subordinating element very different to logical coordination. Whether explicitly or tacitly, coordinator is treated as a functional, subordinative head, while the pseudo-coordinative verb is equivalent to either a modal or auxiliary, or even a hybrid category between lexical and functional verbs. Hargreaves (2004), for instance, suggests that *try and* is a single head merged into a functional head while a pseudo-coordinative verb like *go* is a light verb heading its own *v*P-shell. Another subordination analysis is suggested by Cardinaletti and Giusti (2001) who claim that motion verbs (in Marsalese) are 'semi-lexical' because they are lexical verbs which are merged in functional pro-

jections. Carden and Pesetsky (1977), Gleitman (1965), Goldsmith (1985), Pullum (1990), Quirk et al. (1985), Schmerling (1975) and probably Na and Huck (1992) also fall into this category.[1]

The third group analyse pseudo-coordinations as being akin to infinitival constructions. This body of research essentially also treats the coordinator as a subordinator fundamentally different to logical coordination. The similarity between pseudo-coordination and infinitives is pointed out by Gleitman (1965) but is more fully developed by Wiklund (1996; 2005). Johannessen (1998) sides with the analysis of Wiklund (1996). Lødrup (2002), working in the framework of LFG suggests that Norwegian pseudo-coordinations are a non-uniform phenomenon and correspond to what I take to be control and raising constructions.

I argue that ConCo cannot be analysed as any of these. Concerning the first approach, the tests in chapter (2) all show that OCo is not applicable. The problems associated with the second, modal-auxiliary approach are empirical in nature and stem from the fact that ConCo verbs do not seem to behave like other modals or auxiliaries, but form a class of their own. The objections to the biclausal approach are of a theoretical character and revolve around the fact that the licensing of the subject of the embedded clause is not trivial. In fact, I will argue in this section that it is simply not possible to license a subject in the embedded clause of a ConCo construction.[2]

4.1.1 Coordinative approaches

Approaches to pseudo-coordination in terms of *v*P coordination face several problems. Although coordinative accounts of ConCo all attempt to explain away the CSC violations Cormack and Breheney (1994), Josefsson (1991), Lakoff (1986) these effects remain problematic.

Lakoff (1986), for instance, argues that the CSC should be completely discarded as a generalization because of examples where it does not hold. This seems to be throwing the baby out with the bath water since Lakoff (1986) does not provide an explanation for those cases where the CSC does seem to hold. In addition, these classes of exceptions to the CSC seem fairly restricted.

(1) How many classes can you teach and still complete your dissertation on time?

(2) This is a hormone that many athletes take and grow immensely strong

These classes of exceptions prove rather difficult to define. Postal (1998) argues that not all the exceptions which Lakoff (1986) gives are true coordination and that

[1] Some research has attempted to make a link between bare aspectual *go* (and similar verbs) and pseudo-coordination.

(1) a. Why don't you go and jump in the lake? [Pseudo-coordination]
b. Why don't you go jump in the lake? [Bare aspectual]

Thus Carden and Pesetsky (1977) claim that bare aspectual constructions are derived from corresponding pseudo-coordinative constructions. However Jaeggli and Hyams (1993), Pullum (1990), Shopen (1971) and Wulff (2005) all deny there is a link.

[2] I focus here on ConCo. The same arguments extend to SceCo.

they do not necessarily contravene the CSC. Furthermore, neither Lakoff (1986) nor Postal (1998) define these exceptions, let alone provide any analysis for them. In addition, it is important to note that these examples are quite strongly ungrammatical in other languages like Dutch (Barbiers, p.c.). It is probably inadvisable to discard the universality of the CSC on the basis of a subset of the extraction facts of English.

Other approaches based on coordination relate the ability to extract to the argument structure of the predicates involved. For instance, Cormack and Breheney (1994) suggest it is the unaccusative character of pseudo-coordinative predicates that licenses extraction.

> 'There is ample evidence from other languages that ergativity is what is crucial in allowing the extractions in examples such as (80)' (Cormack and Breheney 1994)[Their (80) is reproduced as (3) below]

(3) What did John go and buy t_{WH}?

This approach has to explain (i) why SceCo constructions are selective islands and (ii) the lack of contrast between ATB-violating extraction in unaccusatives and unergatives more generally (cf. the lack of a contrast between the unaccusative and unergative examples (5) and (6) on page 21).

These accounts also cannot explain why the verbal string does not admit XPs, especially low adjuncts.[3] It should be perfectly acceptable to adjoin low, manner adjuncts at VP level, for instance. In addition the partial-VP-ellipsis effects, semantic subordination, non-commutativity, restrictions on the subject of the first conjunct and the inability to cooccur with distributors do not follow naturally from such accounts. The coordination of *v*Ps would also seem to imply that two, independent events are coordinated, assuming that there is an eventive head loosely corresponding to little *v* (Harley 1995, Travis 1994; 2000).[4] This is not in accordance with the facts of ConCo in English where the pseudo-coordinative verb does not denote an independent event. Finally, it has been claimed by Bošković and Franks (2000) that *v*P coordination does not exist in English.

(4) Ellen partially solved the problem and wrote up her findings (Bošković and Franks 2000:117)

This example is consistent with an interpretation where the manner adverb scopes over only the first predicate. In other words, Ellen partially solved the problem, *not* that she partially wrote up her findings. If *v*P or VP coordination were indeed possible, then the adverb in (4) would indeed be able to scope over both conjuncts. The fact that it cannot implies that there is neither *v*P nor VP coordination. For these reasons ConCo cannot be a *v*P-coordination structure.

[3] In fact, the framework of Cormack and Breheney (1994) explicitly allows XP-like material such as PPs to be placed within a head.

[4] I take this to be the same head that Kratzer (1993; 1996) named VoiceP.

4.1.2 Subordination: auxiliaries and modals

Pollock (1994), Pullum (1990), Jaeggli and Hyams (1993) and Carden and Pesetsky (1977) argue that bare aspectual verbs behave differently to modals. These arguments can also be applied to ConCo *go* and *sit*. The differences include the fact that modals and auxiliaries behave differently to ConCo predicates with respect to verb-raising to T, subject-auxiliary inversion, subjunctives, free modal co-occurrence, ellipsis, and VP preposing.

Raising to T

Modals and auxiliaries can raise across negation to T (5a,b) whereas ConCo verbs cannot (5c,d).[5]

(5) a. I will not speak to her [Mod]
b. I have not spoken to her [Aux]
c. *I go not and speak to her [ConCo]
d. *I sit not and speak to her

The same data may be repeated with emphatic particles (Jaeggli and Hyams 1993:319) or indeed, with any adverbial.[6]

(6) a. *I go seldom/always/usually/also and speak to my supervisor every week [ConCo]
b. *I sit seldom/always/usually/also and speak to my supervisor every week
c. I will seldom/always/usually/also speak to my supervisor every week [Mod]
d. I have seldom/always/usually/also spoken to my supervisor every week [Aux]

The pseudo-coordinative verb may not raise across an adverbial as a modal or auxiliary would: they remain in situ. Thus they are not the same class of verb. Moreover, this kind of data supports the conclusion reached in chapters (2) and (3) that the ConCo verbal string exhibits characteristics of constituency.

[5]Rajesh Bhatt (p.c.) has pointed out that not all modals raise. For example *have to* does not raise to T in all varieties of English.

(1) a. I don't have to raise
b. %I haven't to raise

However, this is also subject to dialectal variation as the following lines from *The death of a hired man* by Robert Frost indicate.

> I should have called it
> Something you somehow haven't to deserve (Frost 1915)'

[6]I find the *so/too* examples quoted in Jaeggli and Hyams (1993) strange to my ear.

Subject-auxiliary inversion

Modals and auxiliaries can undergo subject-auxiliary inversion (7a,b) but ConCo verbs cannot (7c,d).

(7) a. *Go you speak to her? [ConCo]
b. *Sit you speak to her?
c. Will you speak to her? [Mod]
d. Have you spoken to her? [Aux]

Once again it appears that *go* and *sit* do not behave like auxiliaries or modals.

Subjunctives

ConCo verbs are compatible with subjunctives. Modals and auxiliaries are not (examples adapted from Jaeggli and Hyams (1993:318)).[7]

(8) a. I requested that he go and consider his options that night [ConCo]
b. ?I requested that he sit and watch TV
c. ??I requested that he can be there by 3pm [Mod]
d. *I requested that he has been there by 3pm [Aux]

Ellipsis

Modals and ConCo verbs also differ with respect to partial VP-deletion. Modals need not be deleted in VP-ellipsis contexts.

(9) a. John can study every subject that Sarah can?
b. John can go and study every subject that …
Sarah can (*go) ~~and study~~…?

Example (9a) is an ordinary example of VP-deletion and demonstrates that a modal need not be deleted when the VP is. However, section (2.1.5) showed that ConCo verbs must obligatorily be deleted; partial VP-ellipsis is not possible. Example (9b) demonstrates this once more. It is sharply ungrammatical if the ConCo verb is not deleted along with the rest of the VP. Note that I have used adjunct extraction to force a ConCo reading as opposed to a SceCo one.

[7] I have tried to make (a,b) as non-deictic as possible to ensure a strict ConCo reading.

VP preposing

In English, lexical verbs can be topicalized.

(10) John wanted to join the army and join it he did

Similarly, a constituent containing the ConCo verbal string can be topicalized. However, modals and auxiliaries cannot be topicalized in this way (examples adapted from (Jaeggli and Hyams 1993:318)).

(11) a. Mary wanted to go and join the army,
and go and join it she did [ConCo]

b. John wanted to sit and watch a movie,
and sit and watch it he did

c. *Mary said that she would write a novel,
and would write it she did [Mod]

d. *Mary said that she has written a novel,
and has written it she did [Aux]

These examples show that ConCo verbs differ from modals and auxiliaries with respect to topicalization. In fact, there is an added twist; modals and auxiliaries *must* be stranded when a verb is fronted as in (11d). This follows in a straight forward way from the fact that modals are merged outside the *v*P. ConCo verbs cannot be stranded in this way. This suggests that unlike modals, ConCo predicates are within the *v*P.

(12) a. Mary said that she could go and write a novel,
and go and write it she eventually would [Mod]

b. Mary said that she could go and write a novel,
and gone and written it she has [Aux]

c. *Mary said that she could go and write a novel,
and written it she has gone and [ConCo]

Free modal co-occurrence

ConCo verbs can freely co-occur with modals; modals cannot freely co-occur with other modals. This suggests that pseudo-coordinative ConCo predicates and modals are different classes of verbs (examples adapted from Jaeggli and Hyams (1993:318)).

(13) a. I must go and watch this movie [ConCo]

b. I must sit and watch a movie

c. *I must can watch this movie [Mod]

Not too much weight should be placed on this test because the restriction on co-occurrence of modals could well be related to the defective paradigm of modals. Since ConCo predicates do not have defective paradigms, they may not be subject to this restriction.

Summary

In this section I have underscored the research of among others Pollock (1994), Pullum (1990), Jaeggli and Hyams (1993) and Carden and Pesetsky (1977) in demonstrating that pseudo-coordinative predicates (and particularly ConCo predicates), are neither modals nor auxiliaries. ConCo verbs display none of the characteristics of modals or auxiliaries in English. Assuming that auxiliaries and modals head distinct projections in a Cinque-like functional hierarchy, in a monoclausal configuration, ConCo verbs cannot be easily analysed in the same way without stipulating the differences in behaviour.

4.1.3 Subordination: licensing a subject

The third family of approaches to pseudo-coordination attempts to draw a parallel with clausal subordination such as that found in infinitivals and raising constructions as has been suggested by Wiklund (1996; 2005) and Lødrup (2002) for Mainland Scandinavian and Haslinger and Van Koppen (2003) for Dutch.[8] Such an analysis implies that the embedded clause must have some manner of subject. I will argue in this section, that such a subject is not easily licensed given current theoretical assumptions about the nature of empty categories (De Vos 2004a). Assuming a biclausal structure, the coordinator could either be a type of subordinating complementizer, as represented in (14a), or it could be an overt reflect of T as represented in (14b). This is not crucial to the problem I present below. In the representations that follow, I assume that the coordinator is a reflex of T simply because that is assumed by (Wiklund 1996:45).

(14) a. $[_{CP1}\ John_i$ will go $[_{CP2}$ and $\mathbf{e}_i$ take Mary on a date]]
b. $[_{CP1}\ John_i$ will go $[_{CP2}\ \mathbf{e}_i$ and take Mary on a date]]

The central problem concerns the nature of the empty subject represented by **e** in (14a,b). Current theory provides four candidates for the position:[9]

i. *pro*,
ii. PRO,
iii. a trace of DP movement (where the first verb is analysed as a non-theta-marking, raising verb analogous to *seem*), and
iv. a trace of DP movement as a result of ATB extraction.

pro

One possibility is that the empty position is *pro*. This possibility is illustrated in (15).

[8] The actual size of the complement is independent of this argument. While infinitivals might be CPs or TPs, the complement of a perception verb could be much smaller. However, they face similar problems with licensing subjects.

[9] One other option might be to consider the structure to be conjunction reduction: a biclausal structure with arguments deleted under identity. This approach is a non-starter for the reasons discussed exhaustively in chapter (2).

(15) $John_i$ will go **pro**$_i$ and take Mary on a date

However, English is not a pro-drop language and it would seem counterintuitive to postulate the existence of a category that never seems to occur independently in other contexts. Thus we can rule out *pro* as the subject of the embedded verb.

PRO

By analogy with infinitivals one might suggest that the empty position is PRO.

(16) $John_i$ *will go* $[_{CP}$ $[_{TP}$ ***PRO***$_i$ *and take Mary on a date*]]

However, the fact that the embedded verb can also have person/number (17) and tense (18) inflection shows that it is not an infinitive.[10]

(17) John sits and sends e-mails all day instead of working

(18) John sat and sent e-mails all day instead of working

If this is true, then the embedded clause is unable to license PRO since PRO must be ungoverned and Tense is a governor.

A further argument against an analysis analogous to infinitivals is that there is a truth conditional distinction between ConCo verbs like *go* with *to* and *and*.

(19) a. John went and ate → John ate
b. John went to eat ↛ John ate

(20) a. How carefully did John go and eat → John ate
b. How carefully did John go to eat ↛ John ate

Example (19) contrasts a ConCo construction with an infinitival construction. There is a truth-conditional difference between them. (19a) has as an entailment that John eats. However, this is not an entailment of (19b). The same data are repeated with adjunct WH-extraction to ensure that a ConCo reading is available. Note that in (20a) the adjunct scopes over the lexical verb as opposed to (20b) where it only has matrix scope. This is additional evidence that (20a,b) are not equivalent.

Raising

Having excluded the binding options for the subject position, what of the possibility that the empty position is a trace left by movement? There seem to be two possible options: raising and ATB extraction.

[10] Wiklund (1996; 2005) suggests that the embedded lexical verb is actually an infinitive but that morphology has been 'shared' with the pseudo-coordinative verb.

A raising analysis would entail that the subject could not get nominative case in the embedded clause because infinitives do not assign nominative case.[11] As a result, the subject DP must raise into the matrix clause. This process is illustrated in (21a) for a typical raising verb like *seem*. If a raised DP was indeed the antecedent of the empty subject in a ConCo construction, then the configuration would look like that in (21b).

(21) a. $John_i$ seems t_i to be sick

b. $John_i$ will go and t_i take Mary on a date

That the subject of the embedded verb is a trace of a raised DP is extremely unlikely given that raising occurs when a DP cannot get case in the lower clause. However, having demonstrated that the embedded verb is not an infinitive ((19), (17) and (18)), and thus perfectly able to assign nominative case, there is no rationale for a raising analysis. Moreover, the proposed structure is simply unworkable with respect to checking of ϕ features on *both* verbs. Assume for a moment that English verbs have their ϕ features checked by AGREE. T would probe the goal, namely the pseudo-coordinative verb, and check its features. There is no possible way for T to probe past the pseudo-coordinative verb to check the features of the embedded verb.[12] Note that the same argument applies against the use of an infinitival structure.[13]

Another argument against a raising analysis is that ConCo verbs and raising verbs have different distributional properties. A true raising verb like *seem* is compatible with an expletive *there* in subject position (22a). This is not true for *go* and *sit*.[14]

(22) a. There seemed to be a man lounging on my doorstep [Raising]

b. A man went and lounged on my doorstep [ConCo]

c. *There went and lounged a man on my doorstep

d. *There went a man and lounged on my doorstep

[11] Lødrup (2002) proposes a 'structure sharing' analysis of Norwegian pseudo-coordination constructions within the framework of LFG. I take this to be similar to a raising analysis in the GB framework.

[12] The same intuition can be expressed in a model where English verbs are subject to affix lowering. In fact, the problem is even more acute. Suppose that an affix on T must lower to the pseudo-coordinative verb. This is not problematic. However, in order to affix-mark the embedded verb, the affix must also move past the pseudo-coordinative verb and the coordinative marker, thus violating the HMC twice, before reaching the embedded verb. This situation is simply not allowed by a raising structure.

[13] It might be suggested that the embedded clause has its own TP which would serve to check features on the verb. Putting aside the problem of how to ensure strict identity between matrix T and the embedded T, there is a much deeper problem. If the embedded clause had a TP which could check T features and assign case, then the empty subject position in the embedded clause would remain a problem. It could not be filled by PRO or *pro* for the reasons already discussed, and there would be no rationale for the DP to raise. It would also not explain the absence of constructions with tensed modals in the so-called embedded clause.

(1) a. John could work and work all day

b. *John could work and could work all day

[14] Wiklund (p.c.) points out that in Swedish pseudo-coordination expletives are possible (see also Josefsson 1991).

(23) a. There seemed to be a man lounging on my doorstep [Raising]
b. A man sat and lounged on my doorstep [ConCo]
c. *There sat and lounged a man on my doorstep
d. *There sat a man and lounged on my doorstep

Another distributional difference is that whereas the complement of a raising construction can be passivised, passivising a ConCo complement is not possible. The following examples demonstrate that raising constructions have passive counterparts.

(24) a. The warders seemed to watch the convict continuously [Raising]
b. The convict seemed to be watched continuously by the warders

(25) a. The warders are likely to watch the convict continuously [Raising]
b. The convict is likely to be watched continuously by the warders

In the following ConCo examples the lexical verb alone is passivised. The (a) examples are grammatical OCo constructions where the lexical verb in the second conjunct is passivised. In the (b) examples, pseudo-coordinative contexts are assured by extraction. The result is strongly ungrammatical.

(26) a. The convict sat and was watched continuously by the warders
b. *Who sat the convict and was watched by?
c. *Who did the convict sit and was watched by?

(27) a. The convict went and was watched continuously by the warders
b. *Who went the convict and was watched by?
c. *Who did the convict go and was watched by?

Examples are given both with and without *do*-support. In passive questions, the auxiliary moves to C. Since pseudo-coordinative predicates do not raise to C, it is unsurprising that the (b) examples are ungrammatical. The ungrammaticality of the (b) examples is also not surprising given that the heads in a ConCo verb string must be contiguous. In fact, the lack of contiguity means that the (b) examples are, by definition, not ConCo. However, it should still be possible for *do*-support to solve this problem as in the following pseudo-passive example.

(28) Who did the convict get killed by?

Given the possibility of *do*-support the ungrammaticality of the (c) examples is surprising. The point remains that the lexical verb cannot be passivised.[15]

Somewhat more surprising is the fact that even if a passive auxiliary scopes over both the pseudo-coordinative and the lexical verb, and both of them have passive morphology, the result is still ungrammatical.

[15]The intuition is that both verbs must be passivised, but since *go* cannot be passivised for independent reasons, the derivation cannot converge.

(29) a. The warders have sat and watched the convict continuously [ConCo]

b. *The convict was sat and watched continuously by the warders

(30) a. The warders have gone and watched the convict continuously [ConCo]

b. *The convict was gone and watched continuously by the warders

These examples stand in stark contrast with examples with past participles, which also require auxiliaries.

(31) a. Who have the warders gone and watched all day?

b. Who have the warders sat and watched all day?

These data clearly indicate that ConCo constructions cannot be passivised and thus do not pattern like raising constructions. Consequently, the empty subject cannot be a trace left by a raised DP.[16]

ATB

The final possibility is that, by analogy with OCo (32a), the subject position of the embedded verb is a trace left by ATB extraction. This possibility is illustrated in (32b).

(32) a. $John_{ATB}$ both t_{ATB} ate the cake and t_{ATB} drank the tea

b. $John_{ATB}$ will t_{ATB} go and t_{ATB} take Mary on a date

The most obvious problem with the structure in (32) is that it implies that ConCo constructions involve OCo. This, I have already demonstrated to be false (chapter (2)). Thus a paradox arises; the empty subject position in the second conjunct is not a trace of ATB movement.

In conclusion, I have shown that there is apparently no possible way to license an empty subject position in the second conjunct of ConCo. This militates against a biclausal analysis which requires the existence of such a subject position. In the following section, I pursue a monoclausal analysis.

[16] Also note that even though passive and participle morphology are often surface-identical in English, it is not possible to combine passive and participle morphology in ConCo constructions. Thus the following examples, which combine the two are ungrammatical. This shows that it is actually the underlying morphological feature-specification that is relevant and not mere surface-form. In short, the MSC is actually sensitive to the feature-composition of ConCo predicates and not merely their morphological and phonological shape.

(1) *Who had John gone.PART and was watched.PASS by?

(2) *Who had John sat.PART and was watched.PASS by?

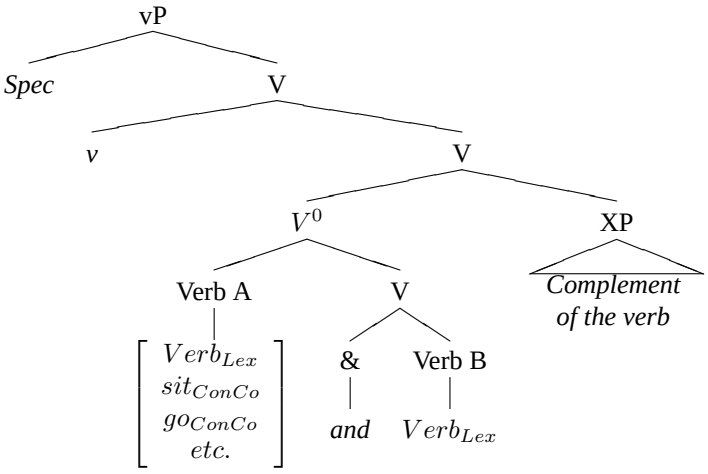
4.2 A complex-predicate analysis

Having explored the properties of ConCo (*go*, *sit*, etc. and ReCo) in chapters (2) and (3), one reaches the conclusion that these constructions are closely related. For instance, they share extraction properties and all display characteristics of constituenthood insofar as XPs cannot break up the verbal string and partial VP-ellipsis cannot apply. The question then arises as to what exactly these peculiar structures are. A subordination analysis has already been excluded. There are two broad components to the analysis I will follow.

i. In terms of structure, the verbal string of a ConCo construction is a complex head derived in the syntax itself i.e. not an item stored in the lexicon.
ii. Semantically, the coordinator is an instance of garden-variety coordination.

The proposed structure is illustrated below. The ConCo predicate (*go*, *sit* etc.) and the lexical verb are coordinated at head level (De Vos 2004a).[17] With respect to ReCo constructions, the same lexical verb is coordinated. The projection of &P is a combination of the features of its conjuncts as per my basic assumptions about coordination described in section (1.2).

(33)



It is central to this analysis that the complex predicate head is not a lexical compound specified in the lexicon but is formed by MERGE (of heads) in the (narrow) syntax itself. For ReCo constructions, a lexical verb is merged twice, namely in the positions of Verb A and Verb B. For ConCo with *go*, *sit* etc. Verb A is one of a finite, lexically specified set of verbs; Verb B is a lexical verb.

[17] The complex-predicate analysis also captures the intuitions of a number of researchers that ConCo form constituents of some kind (Koops 2004, Pollock 1994, Stefanowitsch 1999). Cormack and Breheney (1994) suggest that pseudo-coordination in general (they do not distinguish ConCo from SceCo) can be analysed as a single head. Note however, that their proposal is fundamentally different to the present one because they allow XP-like material (such as PPs) to occur within a syntactic head. Their proposal does not seem able to distinguish SceCo from ConCo for this reason.

There are a number of reasons why I propose that ConCo is derived by MERGE in the syntax rather than having ConCo verbal strings in the lexicon. Firstly, ConCo constructions clearly have morphological marking. Since lexical compounds generally do not have inflectional morphology within the terminal/word itself, the presence of morphological marking would militate against a lexical-compounding analysis.[18] Secondly, V-V compounds seem to be a fairly systematic gap in the Germanic languages.[19] I would not want to propose that *V and V* compounds are exempt. Finally, ConCo constructions are productive. In a related vein, I will demonstrate that the semantics of ConCo constructions are compositional and regular. The very productivity of the construction militates against it being stipulated in the lexicon. Nevertheless, this structure can immediately account for a number of characteristics of ConCo constructions. These are explored in the following sections.

4.2.1 Extraction properties

In sections (2.1.1) and (3.2.5) I showed that ConCo were not islands for extraction at all. The extraction facts follow from the fact that in structure (33) the complex predicate does not act as a blocking category, just as ordinary simplex predicates do not act as blocking categories. In other words, the ConCo structure does not contain the extraction site: the extraction site is not contained in any conjunct of the coordination. Consequently, extraction does not violate the CSC. Exactly the same logic applies to the wide scope reading obtained by quantifier raising ((2.1.9) and (3.2.6)). Since the quantifier is not located in any conjunct, quantifier raising is free to apply.

4.2.2 Constituenthood

The fact that no XPs such as adverbs, particles etc. can occur within the verbal string, as illustrated in sections (2.1.2) and (3.2.7), derives from the fact that the verbal string is a head. There are no possible XP positions (whether specifiers or XP adjunction sites) which could host an XP such as an adverb or particle.[20] Instead, XPs are hosted in their standard positions within the functional layers of the clause.[21]

More needs to be said about particle verb combinations in ReCo formations such as those in section (3.2). Example (44) from chapter (3) is repeated here.

(34) a. John read up and read up for weeks on the lawsuit

b. John read up intensively

The existence of these types of examples is puzzling if verbal particles are always independent XPs. However, there are reasons to think that they can also be incorpo-

[18] Possible exceptions include examples like *attorneys general*, although this is a prescriptive form. Most native speakers consistently choose *attorney generals* as the plural form.

[19] There are arguably some examples in Afrikaans e.g. *laat spaander* 'get going'.

[20] I take it for granted that XPs cannot adjoin to X^0s.

[21] The analysis proposed here works independently of whether one adopts a cartographic approach Cinque (1999) or a semantically-conditioned adjunction approach Ernst (2002).

rated into the verb. English often has an alternation between particle stranding (35a) and particle incorporation (35b).

(35) a. John turned the lights on

b. John turned on the lights

There are good reasons to analyse examples like (35b) with the verb and particle as being a single head-constituent (Den Dikken 1995, Farrell 2005, Guéron 1990, Haegeman and Guéron 1999, Johnson 1991, Pesetsky 1995).[22] In contrast, in (35a), the particle acts more like an independent XP. Only the stranded version can be modified by a degree adverbial. This follows easily if in (36b) the particle and verb are a single head.

(36) a. They messed the song all up

b. *They messed all up the song (Farrell 2005:100)

More evidence comes from the fact that two DP-PRT strings can be conjoined (37a); conjunction is not possible when the particle precedes the DP (37b). This also follows if one assumes that the (b) example has the particle and verb as a single head.

(37) a. She turned these lights on and those lights off

b. *She turned on these lights and off those lights (Farrell 2005:101)

The non-stranded order also serves as input to derivational morphology; the stranded order does not (where it is able to be tested). This supports the notion that the particle and verb are under the same head.[23]

(38) a. *You might want to re-plug the VCR in

b. You might want to re-plug-in the VCR

(39) This book is un-put-downable

Particle-verb combinations also can be nominalized. This also supports their status as being single heads.

(40) a. He was going to hold up the store (Farrell 2005:103)

b. He was arrested after the holdup

In summary, XPs may not occur in either Position B or C of ConCo or ReCo verbal strings. This is because the complex predicates are actually complex heads and there are no positions for XPs to adjoin to. It has also been shown that particle-verb combinations can be analysed as single heads in English.

[22] More specifically, Farrell (2005) argues that they are lexical compounds.

[23] Example (38a) is adapted from Farrell (2005:102).

4.2.3 Subject licensing

The fact that there is simply no subject position available within the complex predicate means that the PRO problem discussed in section (4.1.3) simply evaporates: there is no PRO/*pro* or similar empty category in the second conjunct because there is no clausal complementation relation between the two conjuncts.

With respect to the ability of the second verb in ConCo to determine the type of subject that is merged (sections (2.1.3) and (3.2.10)), it follows simply from the analysis of the verbal string as a coordinated complex head. Since the ConCo predicate is bleached and does not assign a lexical theta role, it cannot select the subject; it is the lexical theta role assigned by the lexical verb that is the determining factor in subject selection.

4.2.4 Partial VP-ellipsis

The structure also explains why partial VP-deletion (sections (2.1.5) and (3.2.9)) and VP-preposing (4.1.2) is not an option for ConCo. The verbal string, consisting of a ConCo predicate, a coordinator and a lexical verb are a single head: a constituent. Since partial deletion of terminal constituents is not possible in English, it is also not possible to partially delete a ConCo construction. Both first and second verbs must both be elided together.

4.2.5 Behaviour as lexical or functional verbs

It has been demonstrated that although ConCo predicates have been likened to auxiliaries and modals, they do not pattern like them. In fact, ConCo predicates behave very much like lexical verbs. The differences in the behaviour between modals and the pseudo-coordinative verb follow from this analysis (section 4.1.2). Since the first verb is merged as part of a complex predicate within the VP, it patterns with lexical verbs. Hence, it must be deleted when VP-deletion occurs and cannot raise to T or undergo subject-auxiliary inversion.

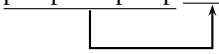
4.2.6 Bleaching

The way in which arguments are licensed in coordinate structures of this type has important implications for the degree of 'bleachedness' of a verb. Consider a ReCo construction, where two lexical verbs are coordinated at head level. Since both verbs are identical, they must both assign the same theta roles. However, since these verbs are coordinated, and there is only a single set of arguments, there is the potential for a violation of the theta criterion.[24] For instance, the same internal argument will be assigned theta roles by two verbs.

[24]It is possible that the theta criterion can be dispensed with (Brody 1993, Chomsky 1995b) being replaced by selection or some other mechanism. Under this view, since the pseudo-coordinative verb does not select a subject, it also does not assign a theta role (or its equivalent).

In a ReCo construction, both verbs are identical in their lexical specifications. Since both verbs must assign the same theta roles and engage in the same selectional operations, it is necessary that these functions are discharged, not by each individual verb, but by the complex predicate itself (Bobaljik and Wurmbrand 2004, Neeleman 1994, Steedman 1985). Each verb thus 'co-projects' its theta roles. This is only possible because of the coordination marker which allows its label to be a combination of the features of both conjuncts. Since both verbs assign the same theta role, there is no clash of roles. Thus, in the following example, the complex predicate as a whole selects the internal argument and assigns a role to it. The same logic applies to all other selectional and theta-operations of the predicate.

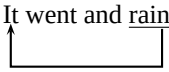
(41) The peasant tried to pump and pump water for the soldier



However, the situation is slightly different in ConCo constructions with *go* or *sit*. Here, the pseudo-coordinative verb and the lexical verb are not identical and potentially do not assign the same theta roles.[25] If it were the case that the pseudo-coordinative verb and the lexical verb assign fundamentally different roles to the external argument, role clash would cause the derivation to crash.

The problem is eliminated if the pseudo-coordinative verb is semantically bleached and does not assign a full lexical theta role or engage in selectional activities at all. In English, verbs like *sit* and *go* are bleached independently of ConCo contexts and are listed in the lexicon as such. Only then, can they be 'plugged' into a ConCo construction. It is still the complex predicate which selects arguments and assigns theta roles, however the selectional and theta-properties of the complex predicate are determined by the lexical verb. In the following example, *go* effectively does not assign a substantive theta role at all; it is the lexical verb that determines the selectional and theta-properties of the complex predicate.

(42) It went and rained



Thus, the theta criterion 'forces' a bleached interpretation of ConCo predicates in the cases of *sit* and *go*. Note however, that if the theta-roles and selectional requirements of both verbs be identical, then nothing prevents both verbs assigning full theta roles as described in the previous paragraph for ReCo. Thus, this mechanism does not preclude the possibility of a literal, posture reading for ConCo structures should the subject be consistent with such a reading. Importantly, however, in ReCo constructions, since both verbs in the complex predicate are identical, there is nothing that 'forces' a bleached interpretation. Semantic bleaching and the lack of it is thus derivative of the proposed syntactic structure where heads are coordinated to form a complex predicate. Incidentally, this explains why such a limited set of verbs can act as ConCo

[25] It might be pointed out that in OCo ATB contexts, the theta roles assigned to a subject need not be identical. I concede this point, but it is also true that in such cases a unique theta role is assigned in each separate subject position. That is quite different to the current case where a subject would receive two distinct theta roles in a single position, namely Spec *v*P. This would be a violation of UTAH.

predicates: only those verbs that are independently semantically bleached may occur as ConCo predicates.

4.2.7 Distributivity

The fact that *both* modification is not tolerated with ConCo constructions (sections (2.1.8) and (3.2.3)) is a result of the fact that the distributor, *both*, scopes over two distinct events (i.e. *v*Ps). I assume an eventive head to head EventP, a projection loosely corresponding to *v*P (Harley 1995, Kratzer 1993; 1996, Travis 1994; 2000).

In OCo contexts where two IPs are coordinated, *both* modification can thus take place. However, in structure (33), there is only a single event: the entire complex predicate is located within the VP under a single verbal label.[26] Consequently, *both* cannot be interpreted in this structure.

4.2.8 The Morphological Sameness Condition

This kind of structure also opens the way to an explanation of the MSC. The answer comes in two parts, one relating to ϕ-features and the second to other features.

The structure proposed here involves both the pseudo-coordinative verb and the lexical verb being governed by the same T head. In fact, the features of both verbs must be equidistant to T because the features of both conjuncts are visible on &P independently of ConCo contexts; this is a property of coordinate structures (Van Koppen 2005). Given this, the specification for tense, person etc. must trivially be identical on both verbs because T would probe the features on both verbs simultaneously.

Note that in this regard the biclausal proposal is unworkable. Under a subordinative, biclausal approach, the verbal features are most definitely not equidistant and affix lowering from T to the lexical verb would violate the HMC. The same intuition can be formalised in a probe-goal framework. Both verbs are merged into the structure with appropriate ϕ features and both verbs can have those features checked by the corresponding features on T. In a complementation configuration, the lexical verb would be much lower in the structure than the pseudo-coordinative verb. Given that both verbs have identical ϕ features (as seen by their inflection), the probe would not be able to 'see' past the pseudo-coordinative verb and consequently the features on the lexical verb would never be checked.[27] However, in the proposed structure, the probe

[26] In approaches such as that of Travis (2000) and Pylkkänen (2002), the complex predicate would be dominated by several heads of a split *v*P which would introduce arguments and serve to identify the entire complex predicate as being part of a single event. Also Ernst (2002) claims that *v*P (his PredP) and lower projections are the domain of L-syntax.

[27] One might consider that if ConCo were truly subordination, then a single Tense operator in the matrix clause might non-selectively bind a Tense variable in the embedded clause, yielding identity between the tenses of each clause. The problem with this is that it is likely that the embedded clause would probably have an independent Tense operator of its own which would act as an relativized minimality intervener. Also, this approach would not be able to explain the absence of modals and auxiliaries in pseudo-coordinative constructions.

(1) a. John could work and work all day

b. *John could work and could work all day

would simultaneously check all the features of the verbs on &P.

The second part of the MSC puzzle relates to formal features more generally. The MSC can also be formulated as a requirement that features in a complex predicate be matched with each other. When the MSC was first discussed in section (2.1.11), it appeared to be a fortuitous fact about pseudo-coordination. However, under the present approach, the pseudo-coordinative marker in a ReCo/ConCo construction can be analysed as a true coordinative morpheme. This means that it is subject to the basic assumptions about coordination outlined in chapter (1). This includes the fact that coordination is subject to the LCL. This means that the MSC is no longer a strange artifact of pseudo-coordination but has a principled explanation in the LCL.

This is important because it is not merely ϕ-features which are subject to the MSC, but also formal features more generally, including features like [PASS], [PART] etc. In short, the MSC applies to a variety of different types of features that make up the lexical specification of the verb.[28]

4.2.9 Passivisation

A similar kind of argument explains why ConCo constructions cannot be passivised. There is no restriction *per se* on promoting the deep object to subject position as is indicated by the fact that ConCo can occur in transitivity alternations (40 on page 30). The only difference between passives and transitivity alternations is the fact that the former utilize an auxiliary whereas the latter do not. This suggests that the reason ConCo constructions cannot be passivised lies with the nature of the auxiliary. What I want to suggest is that ConCo constructions cannot be passivised because ConCo predicates like *sit* and *go* cannot be passivised; they are incompatible with the passive auxiliary.

(43) a. John will go

b. *There will be went/gone by John

(44) a. John will sit

b. *There will be sit/sat by John

The MSC requires that both verbs in a pseudo-coordinative construction share exactly the same set of features. For the sake of argument, suppose there is a feature [PASS]. Yet, the fact that *sit* and *go* cannot be passivised means that they are incompatible with the auxiliary and with passive features. As a result the derivation crashes. The inability of ConCo constructions to passivise can thus be reduced to the MSC and thus the LCL.[29]

[28] In section (4.3) it is argued that pseudo-coordination also affects *Aktionsart* features and in chapter (7), it is shown that Afrikaans pseudo-coordination is sensitive to phonological features.

[29] It has been proposed (e.g. Musan (2001)) that a participle raises and incorporates into its auxiliary at LF. In a ConCo construction, this would result in the complex predicate, including *sit* or *go* incorporating into the auxiliary. Since *sit* and *go* are both compatible with participle auxiliaries, this is no problem. How-

4.2.10 Phonological effects

In section (2.1.13) I argued that phonological effects such as reduction of the coordinator are not indicative of ConCo status but are characteristic of all pseudo-coordinative constructions. Thus, these effects do not follow from the structure proposed here. However, as suggested in section (2.1.13), they are the result of the fact that pseudo-coordinative predicates, fulfilling a functional role, cannot be stressed. Consequently, stress is rightmost (i.e. on the lexical verb), the coordinator falls under the low-stress contour of the unstressable pseudo-coordinative predicate and may be reduced as a result.

4.2.11 Summary

In summary, the structure proposed in (33) accounts for a number of the ConCo facts previously discussed, and which are difficult to handle in other analyses. The following section takes a closer look at the internal structure of the verbal string and the processes that apply within it, arguing that it is garden-variety coordination.

4.3 The internal mechanics of the verbal string

Having proposed that ConCo constructions are complex predicate heads, I will now discuss the internal structure of these heads. Central questions relate to (i) what is the categorial status and function of the pseudo-coordinative marker *and* and (ii) how are the overall semantics of ConCo/ReCo derived. Pretheoretically, there are three, visible major components to a ConCo construction.

i. coordinator: *and*
ii. Verb A: *sit*, *go*, lexical verb (e.g. *read* etc.)
iii. Verb B: lexical verb (e.g. *read* etc.)

A specific question to ask is what roles do each of these elements play. Let us start with some discussion of what role the coordinator plays.

4.3.1 The role of the coordinator

In the pseudo-coordination literature, the main reason why the coordinative morpheme has been analysed as a semantically vacuous subordinator is in order to account for the apparently subordinative properties of pseudo-coordination. These include the ability to extract arguments in non-ATB fashion etc. In the current analysis of ConCo, most of these so-called subordinative properties follow directly from the structure and not from the nature of the coordinator.

In effect, this means that one is free to analyse the coordinative morpheme as true coordination. I take pseudo-coordinative *and* to be identical to garden-variety

ever, if this analysis is extended to passives, then since *sit* and *go* are incompatible with the passive auxiliary, then they cannot raise and incorporate without causing the derivation to crash. Consequently, passivisation cannot occur.

coordinative *and* subject to the assumptions listed in chapter (1). It is an operator coordinating (at least) two arguments of the same type, is subject to the LCL and the CSC. Informally, the meaning of *and* is basically "given X, give me more of the same kind": *and*(*x*,*x*).

Thus, the differences between ConCo and OCo flow from the different syntactic structures that the coordinative marker is merged in. The major distinction between OCo and ConCo is structural. In OCo coordination contexts, the entities in the domain of coordination are XPs; *and* projects an entire &P of its own and has its conjuncts in specifier and complement positions (Progovac 1998a;b). Where ConCo is concerned, *and* is merged below the V^0 level. However, since *and* is merged below the level of the head, it is a pertinent question to ask exactly what entities are being coordinated. Since coordination is below the level of the head, the entities being coordinated must also be below the level of the head, in short, a subset of the feature bundle of the head itself.

4.3.2 Coordinating feature bundles

I have already demonstrated that the MSC has access to various features within the complex predicate. Also, in describing the meaning of ConCo in section (2.1.4), I alluded to the fact that ConCo verbs place focus upon various substages of the event, and that in the case of ReCo, endpoints in the *Aktionsart* of the verb could be deaccented (section 3.2.8). I would like to develop this idea further and I propose, therefore, that *and* selects semantic entities *within* the argument structure of the predicate itself. This includes substages of the event.[30] I tentatively define substages as follows.[31]

(45) For every Event E instantiated by a predicate, let S be a substage of E if S is a subset of E.

Thus, in a complex predicate, *and* operates over ordered substages. There is a clear link between substages and *Aktionsart*. Every event may have a starting point, *initium*, a process, *cursus* or an ending point, *finis* (Dowty 1979, Tenny 1987, Vendler 1957, Verkuyl 1972; 1993). This is what Johanson (1996) calls the 'Internal Phase Structure' which reduces to the distinction between telic and atelic predicates. The *cursus* can be represented as a phase φ, (a non-punctual stretch of time) and the *finis* can be represented as a *telos* τ. To the extent that both the phase and the *telos* are subsets of the event, they are also substages. Note however, that a phase can itself be subdivided into substages, but that a *telos* cannot be further subdivided. This is the structure over which *and* operates.[32] In what follows, I will take these *Aktionsarten* to

[30] In a Distributed Morphology approach (Marantz 2000, Marantz and Halle 1993) ConCo would effectively be coordination of roots which do not yet have categorial labels. At this stage such roots might serve as loose labels of activities. Moreover, this coordination occurs before any event variable (such as $Event^0$ or v^0) is merged. From this it follows naturally that the coordinator would operate over internal substages of events.

[31] I will assume that the ordering of the substages is a property of *and*: when possible consecutive interpretations of coordinated events are triggered. I do not know what triggers these interpretations, but it may be related to encyclopedic knowledge or the pragmatics interface (Bickel 1997, Schmerling 1975).

[32] The manner in which ConCo interacts with *Aktionsart* is explored more fully in section (4.4).

be lexically determined and therefore listed as part of the lexical specification of the verb.[33]

(46) *and* $\rightarrow$ $\{$ $Substage^1$ $\ldots$ $Substage^n\}_{Event}$
φ $\ldots$ τ
cursus $\ldots$ *finis*

Given these assumptions, consider the following example.

(47) John read and read all afternoon

When considering an example like (47), there is only a single reading event extending over the entire afternoon. Note that there is no implication that the reading event eventually culminated in the finishing of the book, in other words, it is durative and imperfective. Whatever explanation we choose must account for the fact that there is only a single, durative reading event and not two or more.

Durativity implies that the event is phasal (φ): subdivided into substages. Thus it appears that ConCo *and* operates over a set of ordered substages.

(48) and $\rightarrow$ $\{$ $Substage^1$, $Substage^2$, $\ldots$ $Substage^n$ $\}_{Read}$

Inherent in this structure is the notion that the event is durative; non-durative events cannot be subdivided. Thus, for this construction, the definition of *and*(*x*,*x*) applies where *x* is relativized to substages of an event as in (49).

(49) *and*$\{$ $Substage^i$, $Substage^n$ $\}_\epsilon$: where *i* to *n* are ordered substages of an event ϵ and where *and* operates over the ordered substages of the event.

The effect of this definition is that *and* serves to spotlight various aspects of the internal structure of the event. This can be seen in examples with inherently non-durative predicates.

(50) John shot and shot at the rabbit
'John shot at the rabbit repeatedly'

The verb *shoot* is a punctual predicate, arguably having a simple internal structure consisting only of τ. It is very similar to (47) except for the fact that (50) is quantized whereas (47) is not. What this example shows is that in ReCo contexts, a non-durative predicate is forced to take on a durative interpretation i.e. the shooting took place over an extended period of time. However, since *shoot* is a punctual event that is inherently non-durative, the only way of creating a durative event is to imply repeated shooting.

Thus, I suggest that the specific contribution of *and* is that in addition to (i) forcing a durative interpretation and eliminating non-durative readings, it also (ii) spotlights the substages which it operates over.

[33] In some approaches to argument structure, *Aktionsarten* are introduced by aspectual or quantificational projections within an expanded *v*P-shell (Borer 2003; 2004, Ramchand 2005). This is, in spirit, similar to the assertion of Verkuyl (1972; 1993) who argues that the Vendlerian *Aktionsart*en are actually properties of VPs. In other words, in these approaches, what has traditionally been thought of structure internal to verbs is translated into the syntax itself (see also Hale and Keyser 1993). My proposal does not espouse this view but follows an approach similar to Rothstein (2004) and more traditional approaches, holding *Aktionsart*en to be a property of lexical items.

4.3.3 The functions of the respective verbs

In this light, the role of the lexical, second verb seems fairly straightforward: it determines the particular activity set from which substages are selected.

(51) $\{Substage^1, Substage^2, \ldots Substage^n\}_{Read}$

The more difficult question concerns the precise nature of the first verb. Each type of ConCo predicate serves to spotlight the internal structure of the event in a different way. Consider the meanings of ConCo and ReCo constructions discussed in chapters (2) and (3) respectively.

i. ReCo: durativity, focus on the activity itself (intensification)
ii. ConCo *go*: durativity, focus on the preparatory stage of the activity
iii. ConCo *sit*: durativity, focus on manner: static nature of the activity

Each verb typically provides a certain 'flavour' of durativity to the ConCo construction. It seems that the first verb, in providing this flavour spotlights or places focus on the denotation of the set of substages. In ConCo, *go* restricts focus to those substages which are the preparatory stage to the main activity itself. By the same token, for ConCo constructions with *sit*, which I assume to have a lexically specified STATIC NATURE feature, the focus is placed on the manner component of the event. ReCo constructions are more complex but abide by the same logic. The first verb determines the part of the event that is spotlighted. However, to the extent that the first and second verbs are identical, the part of the event that is spotlighted is, in effect, the event itself. This means that focus will be on the activity itself, hence the intensification reading with ReCo.

Summary

To summarize, the contribution of each component of a ConCo/ReCo construction is as follows.

i. Verb B: denotes the main type of activity
ii. Verb A: provides the 'flavour' that determines which substages of the main event are brought into focus
iii. Coordinator:
    a. a garden-variety coordinator that operates over an event's substages (all of which must be of the same kind in accordance with the LCL),
    b. spotlighting various substages of the main event by means of the 'flavour' provided by the pseudo-coordinative verb,
    c. and by virtue of operating over multiple substages, it forces a durative interpretation. In the absence of phasal substages (as in *shoot and shoot*), the coordinator operates over discrete point (τ) events, giving serial or repetitive readings.

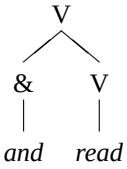
4.3.4 Deriving ConCo

For the sake of explanatory completeness and to demonstrate how the analysis works, I will briefly go through a sample derivation for the following sentence.

(52) Somebody went and read the constitution

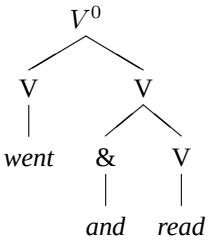
First, the lexical verb *read* would be merged with *and* which is lexically specified as a two-place operator that takes constituents of the same kind as its arguments. The result is a complex head projecting & which requires the merging of another category identical to the first in order to be saturated.

(53)



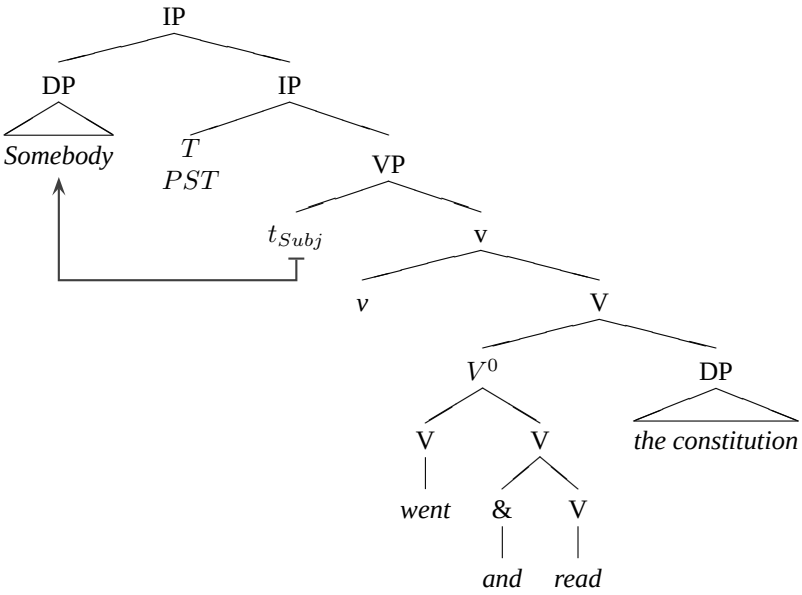
Now the first verb is merged. Both *go* and *sit* are possible candidates, as is the same verb, in this case *read*, depending on which of these occur in the numeration. Let us assume that *go* is in the numeration. The result is a complex coordinated predicate head with the label & and upon which are visible the features of the conjuncts.

(54)



The derivation proceeds with merging of internal and external arguments in the usual way, eventually leading to the well-formed structure (52), whose structure is illustrated in (55).

(55)



Since *and* operates over (φ) substages of the *reading* event, this event is interpreted as being complex and thus inherently durative. Furthermore, since *go* spotlights the preparatory stage of the event, this is reflected in the semantics, particularly in counter-expectational connotations associated with this type of construction.

Pejorative and counter-expectational readings

This analysis, making use of focussing substages of events, places us in a position where we are able to begin to explain the counter-expectational (surprise, annoyance and pejorative) connotations which are characteristic of pseudo-coordination with *go*.

(56) a. Mary got pregnant
'Mary became pregnant'
b. Mary went and got pregnant
'Mary played an active role in at least some stage of becoming pregnant'

Example (56a) is a neutral declarative sentence. However, (56b) has a distinct pejorative connotation. It could imply that Mary got pregnant deliberately, leading to the possible annoyance of the speaker.

First note that this construction is ambiguous between SceCo and ConCo. Both constructions potentially have pejorative, counter-expectational connotations although the sources for these are different.[34] I have claimed that *go* spotlights the preparatory

[34]The intuition is that in ConCo constructions, counter-expectationality follows from the focus on the run-up to the event. However, in a SceCo construction, meanings such as passivity and prolonged inactivity,

stage of the action. What a ConCo sentence like (56b) means, then, is that extra focus is placed on the preparatory substage prior to the getting-pregnant substage. By placing focus on this component of the event, the hearer is alerted to the possibility that the preparatory stage is unexpected; that Mary may have played an active role in becoming pregnant. The surprise, annoyance and pejorative readings are thus parasitic on the focussing role of ConCo.

This makes a prediction. For predicates which are socially neutral with respect to social acceptability (e.g. *read*) the negative connotation should be absent. There should be no pejorative reading for a ConCo construction when compared to its non-ConCo counterpart. This appears to be the case. Whereas (56b) can be followed by a nasty (sexist) retort, this would be completely out of place following (57b).

(57) a. Mary read a book

b. Mary went and read a book

Although a pejorative reading is absent in this context, the focus on the preparatory stage is still present. Thus, (57b) is still perfectly compatible with a counter-expectational or surprise reading, should a suitable context be found, for instance, if Mary never reads, then such a sentence would focus on the preparatory stage of reading, stressing its unexpected nature and yielding a surprisal reading. The same explanation applies to sentences like the following one.

(58) Somebody went and read the constitution!

This example is felicitous even when the subject is a bed-bound patient who is incapable of *going*. In this example, the pseudo-coordinative verb focusses on the preparatory stage to the constitution-reading event, showing that it is unexpected. This provides a volitional flavour which leads to a counter-expectational reading.

Finally, this approach also makes the prediction that ConCo with verbs other than *go* will not have the same counter-expectational flavour. Of course, if a verb like *sit* is used in a ConCo construction, then focus is placed on the static nature of the activity. This may lead to a sense of passivity which may have pejorative (but not counter-expectatonal) connotations. This is in accordance with speaker intuitions.

4.4 Aspect and *Aktionsart*

In the previous sections I proposed that ConCo is an instance of garden-variety coordination below the head level where *and*, instead of having two arguments of the same categorial status, has two arguments of the same 'substage' kind. I also proposed that the semantic entity which is coordinated by ConCo *and* is a substage in the *Aktionsart* of the predicate. In this section I will explore this notion further to show that ConCo is sensitive to *Aktionsart* quite generally.

idleness and apathy (often associated with verbs like *sit*, *stand* and *lie*) follow from cross-linguistic properties of the posture verbs involved (Koops 2004, Kuteva 1999, Newman 2002, Newman and Rice 2001) and *not* from the specific syntactic environment characteristic of SceCo.

4.4.1 Different flavours of durativity

Firstly, painting with a broad brush, we could generalize and say that ConCo constructions all seem to denote durative aspect. This follows from the proposed analysis. I will show that the semantics of ConCo is rather more complex than merely being aspectually durative. Clearly, aspect plays a central role in ConCo structures. However, the meanings of these constructions are seemingly ephemeral and difficult to pin down. In my opinion, a large part of the confusion lies in the fact that constructions like (59) and (60) are structurally ambiguous between at least three different structures.

(59) John went and read a book

(60) John sat and read a book

These examples could have a structure consistent with any of the following:

i. OCo,
ii. SceCo,
iii. or ConCo.

However, since I have distinguished these constructions at length, we are now finally in a position to explore what ConCo constructions actually mean. I have already shown that different types of ConCo predicates have different kinds of durative meanings.

i. ReCo: durativity, focus on the activity itself (intensification)
ii. ConCo *go*: durativity, focus on the preparatory stage of the activity
iii. ConCo *sit*: durativity, focus on manner: static nature of the activity

However, this is not the entire story. I demonstrate that ConCo constructions form a complex system of aspect and *Aktionsart*.

4.4.2 The interaction between ConCo predicates and aspectual classes

Although all ConCo can be characterized as being aspectually durative, they exhibit different *Aktionsart* properties. In fact, ConCo with *go*, *sit* and ReCo predicates are progressively more restrictive with regard to which type of *Aktionsarten* they can combine with. Specifically, I will show that ReCo constructions can combine only with activities (they are inherently durative). ConCo using *sit* can combine with activities and accomplishments, while ConCo using *go* have the widest range of possible meanings, being compatible with activities, achievements and accomplishments. Secondly, I will show that these aspectual-Aktionsart properties follow from the nature of *and* as garden-variety coordination operating over *Aktionsart* substages of events.

***Go*:** A ConCo predicate like *go* cannot combine with states. This is the ConCo predicate least restricted in its distribution.[35]

[35] Wulff (2005) explores the *Aktionsart* properties of pseudo-coordination with *go* and comes to the same conclusion. She argues that the instances when pseudo-coordinative *go* does occur with states, then they are actually interpreted as activities. Interestingly, she shows that bare aspectual *go* does not select the same type of *Aktionsarten* that pseudo-coordinative *go* does with the same statistical regularity. In *go-V*

(61) *Who did John go and resemble?

(62) *John went and was mortal

(63) *John goes and loves potatoes [States]

(64) Which mountain did John go and summit?

(65) Which board-game did John go and win? [Achievements]

(66) Who did John go and drive back home safely? [Accomplishments]

(67) Which board-game did John go and play for hours? [Activities]

***Sit*:** ConCo *sit* is more restricted in what *Aktionsarten* it can combine with. It can combine with neither states nor achievements.

(68) *Who did John sit and resemble?

(69) *John sat and was mortal

(70) *John sat and loved potatoes [States]

(71) *Which mountain did John sit and summit?

(72) *?Which board-game did John sit and win? [Achievements]

(73) What did John sit and eat 43 of in only 30 minutes? [Accomplishments]

(74) Which board-game did John sit and play for hours? [Activities]

There does not seem to be a telic/atelic distinction. This is unsurprising since both accomplishments and achievements are telic, and both *go* and *sit* may combine with accomplishments.

(75) a. John went and read a book in an hour
b. John went and read a book for an hour

(76) a. John sat and read a book in an hour
b. John sat and read a book for an hour [No (a)telic distinction]

constructions, achievement verbs occur less frequently than for the corresponding *go-and-V* constructions (Wulff 2005).

ReCo: ReCo constructions also have a durative aspectual reading. However, they are much more restricted with regard to which *Aktionsarten* they combine with. In fact, they may only combine with activities.[36] Given that they can combine with neither achievements nor accomplishments, they are inherently atelic (although their inability to combine with states suggests that another factor is also at play).

(77) *John resembled and resembled his father [States]

(78) *John won and won the race [Achievements]

(79) *John ate and ate 46 hamburgers in only 2 hours [Accomplishments]

(80) John walked and walked for hours [Activities]

It should be noted that ReCo constructions are not necessarily incompatible *per se* with telic predicates, merely that they always force an atelic or serial reading on them. This is especially clear with a verb like *drown*, which has as its natural end point, the death, by drowning, of the subject. This is exemplified by the following example.

(81) And he just drowned and drowned and I saw his head go under
(http://www.abc.net.au/austory/transcripts/s418748.htm (14.07.2004))

But note that the entailments of *drown and drown* are very different to those of *drown*. Whereas *drown* entails that the subject necessarily dies by drowning, *drown and drown* (i) does not entail that death follows immediately after the first substage of the drowning event or (ii) at all.

(82) a. John drowned $\rightarrow$ John died

b. John drowned and drowned $\not\rightarrow$ John died

Thus the only possible reading for (81) is that drowning is a durative event and that each 'drown' is actually a sub-part of the larger drowning event. It is not even necessary that the subject eventually dies in this example, in contrast to normal usage of this verb. Thus for (81) it would be perfectly felicitous to continue the dialogue in the following way.

(83) ...but suddenly a lifeguard put an arm around him and lifted him to safety[37]

Thus, it seems to be the case that ReCo constructions can deaccent a portion of the *Aktionsart* of a verb (in this case the endpoint/telos (τ)) in order to obtain a durative reading. Now consider the following example with the verb *die*.

(84) Chaos Warriors died, and died, and died
(http://www.eldaronline.com/fluff/fiction_astandunited.shtml (14.10.2004))

[36] Or with accomplishments and achievements which are construed as activities with the aid of a plural subject etc. licensing serial readings or iterative interpretations.

[37] In the story on the website where this example originated, the subject died.

In the case of a predicate like *die*, a serial reading is more natural, especially in a war-game, battlefield context where 'deaths' are quick, being determined by the fall of the dice. Note that given the nature of the game, death is punctual, not a gradual event. Thus, no internal stages of dying can be selected and contrasted by *and* to yield a durative reading. Only a serial reading is available. Once again, a portion of the lexical semantics of the verb has been deaccented. In this case, the *telos* (τ) has been favoured at the expense of the non-punctual portions of the dying event.

Summary

Although ConCo and ReCo constructions can be characterized as durative, they have different *Aktionsart* properties. When tabulated (table 4.1), there is a gradual increase in the restrictiveness of the *Aktionsart* categories with which each can be combined. This is potentially important because it allows us to characterize precisely the semantic contribution of each construction.

Table 4.1: Vendler classes and pseudo-coordination

	State	Achievement	Accomplishment	Activity
go	*	✓	✓	✓
sit	*	*	✓	✓
verb & verb	*	*	*	✓

4.4.3 Pseudo-coordination and the internal structure of events

In fact, the semantics of the ReCo and ConCo constructions are totally predictable and compositional. In this section, I will demonstrate that the *Aktionsarten* of different ConCo constructions follow from the fact that AND coordinates two arguments of the same type. I assume the following breakdown of aspectual classes based on Vendler (1957), where φ is a phase (a non-punctual stretch of time), corresponding to Vendler's [+PROCESS] and τ is a *telos* corresponding to Vendler's [+DEFINITE]. φ can be subdivided into substages. τ, being punctual, cannot be subdivided any further. States, having no apparent internal structure, also cannot be subdivided.

Table 4.2: Vendler classes (repeated from page 12)

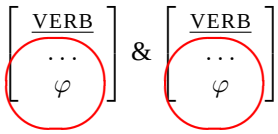
Asp. Class	Vendler Class	Notation
States	-PROCESS,-DEFINITE	$[-]$
Achievements	-PROCESS,+DEFINITE	$[\tau]$
Accomplishments	+PROCESS,+DEFINITE	$[\varphi, \tau]$
Activities	+PROCESS,-DEFINITE	$[\varphi]$

Furthermore, as I have argued, (49) holds. In other words, *and* is a two-place operator that (i) coordinates (at least) two entities of the same semantic sort and (ii) that

the entities in question are substages of events (i.e. either φ or τ). I choose to represent this state of affairs by the following schematic.[38]

(85) *and* → *Verb* *Verb*
$AND_{i,j}$ $[\varphi_i]$ $[\varphi_j]$

What this means is that the operator *and* coordinates identical elements, namely φ, in both its arguments. This relationship is indicated by the subscript. This can also be illustrated graphically. Assume that each verb is associated with a feature bundle with various features omitted for simplicity in this representation. These features might also include those relating to *Aktionsart* such as φ and τ. The circle informally indicates the scope of coordination.

(86) 

Sit: Let us assume that the lexical verb *sit* is $[\varphi]$ since it denotes an activity of *sitting*. This is indicated by the fact that *sit* is an atelic predicate.

(87) John sat (*in/for) 10 minutes

Thus, in a ConCo construction with an activity, *and* coordinates two substages of the event. In this case, since both *sit* and *play* are φ, this is the substage that the is coordinated, yielding the following representation.

(88) *and* → *sit* *play*
$AND_{i,j}$ $[\varphi_i]$ $[\varphi_j]$

Now, let us consider a ConCo construction with an accomplishment. The coordination must be over entities of the same sort. Since the only feature which both verbs have in common is φ, this is coordinated. The representation looks like this.[39]

(89) John sat and ate 43 hamburgers in only 30 minutes?

(90) *and* → *sit* *eat*
$AND_{i,j}$ $[\varphi_i]$ $[\varphi_j, \tau_k]$

Finally, *sit* cannot occur with an achievement (τ). The representation looks like this.

(91) a. *?John will sit and win the scrabble game
b. *and* → *sit* *win*
AND $[\varphi_i]$ $[\tau_j]$

Since there is no substage which both *sit* and *win* have in common, the LCL is not satisfied and the derivation crashes.

[38] The linear representation is for the sake of convenience, and should not be taken to have any empirical import.

[39] Example (90) implies that the τ is outside the scope of coordination. This is made clearer and exploited in chapter (7).

Go: *go* can co-occur with activities, achievements and accomplishments. This correlates with the fact that *go* appears to be more grammaticalized than *sit* and is characteristically underspecified for aspectual category *independently of ConCo*.

(92) a. John went to India for good/for 10 days $[\varphi]$

b. John went across the sea to India in 10 days $[\varphi, \tau]$

c. John went ballistic $[\tau]$

Thus, *go* may have a starting point but be unbounded it as in (92a) (note the presence of a *for* PP as opposed to an *in* PP). It could be a bounded activity that nevertheless takes time to occur (92b). However, it could also be a punctual change of state as in (92c).

It seems that *go* is completely underspecified with regard to its aspectual structure. This effectively means that *go* can freely select any *Aktionsart*, whether activities, achievements or accomplishments.[40]

(93) a. Which board-game did John go and play for hours?

b. *and* → *go* *read* [Activities]
$AND_{i,j}$ $[\varphi_i]$ $[\varphi_j]$

(94) a. Which board-game did John go and win?

b. *and* → *go* *win* [Achievements]
$AND_{i,j}$ $[\tau_i]$ $[\tau_j]$

(95) a. Who did John go and drive back home safely in two hours?

b. *and* → *go* *drive* [Accomplishments]
$AND_{i,j}$ $[\varphi_i]$ $[\varphi_j,\tau_k]$

(96) a. Who did John go and drive back home safely in two hours?

b. *and* → *go* *drive* [Accomplishments]
$AND_{i,k}$ $[\tau_i]$ $[\varphi_j,\tau_k]$

In each of these examples, a substage in the pseudo-coordinative verb must match a substage of the same sort in the lexical verb. Note that in (95) and (96) the grammar is faced with a choice: either φ or τ in the second verb may be coordinated depending on whether *go* is regarded as φ or τ. This choice may be determined by context, encyclopedic knowledge and the pragmatics interface (Bickel 1997).

[40] It might also be the case that *go* is specified as being $[\varphi,\tau]$ which would achieve the same empirical coverage. However, it seems to me that a specification of *go* as $[\tau]$ is needed independently to account for examples like (92c).

ReCo: ReCo constructions seem to have the most complex semantics of all, since their aspectual-Aktionsart selectional properties differ from predicate to predicate. For activity predicates like *walk*, having the specification $[\varphi]$ means they can freely be coordinated with other activity predicates.

(97) a. John walked and walked for hours

b.

and	→	*walk*	*walk*
$AND_{i,j}$		$[\varphi_i]$	$[\varphi_j]$

When accomplishments are coordinated, since both conjuncts contain both φ and τ, nothing, in principle, prevents both these features from being coordinated. Such a predicate is *drown* which involves a durative activity of drowning, followed by an endpoint.

(98) a. The Titanic's passengers just drowned and drowned and nobody could save them

b.

and	→	*drown*	*drown*
$AND_{(i,j),(k,l)}$		$[\varphi_i,\tau_j]$	$[\varphi_k,\tau_l]$

In this example, each drowning sub-event occurs over a period of time (φ) and has a (fatal) endpoint in each case (τ).

However, there is much more to be said about accomplishments and Reco. A very curious effect occurs when two accomplishment predicates are coordinated. Depending on pragmatic variables as well as factors such as the number of the subject, a choice exists as to what can be coordinated. The coordination of both φ and τ was demonstrated in (98). However, it is also possible to coordinate only a single pair of these features. I will show that either φ or τ can be selected, the exact strategy being independently determined by the pragmatics interface.[41] The following representation corresponds to example (81) discussed at length earlier.

(99) a. And he just drowned and drowned and I saw his head go under

b.

and	→	*drown*	*drown*
$AND_{i,k}$		$[\varphi_i,\tau_j]$	$[\varphi_k,\tau_l]$

In this representation, *and* coordinates φ in both verbs, yielding a durative interpretation. Since neither τ is coordinated, no endpoint is implied. In other words, (i) it is only a single event of drowning that is being described and not two (ii) the drowning event need not culminate in the death of the victim.

However, it is equally possible for τ to be coordinated in each case. Consider the example of *die and die* (84). The verb *die*, like *drown*, is a durative predicate followed by an endpoint: $[\varphi, \tau]$. Example (84) has the following representation.[42]

[41] Bickel (1997) proposes that in mismatch contexts, the pragmatic component can insert or deaccent a *telos* or phase in accordance with Gricean maxims.

[42] In the following example, the number of the object is sufficient to trigger an atelic and a telic, serial reading.

(100) a. Chaos Warriors died, and died, and died

b. *and* → *die* *die*
$AND_{j,l}$ [φ_i,τ_j] [φ_k,τ_l]

The fact that two endpoints are coordinated, forces a serial reading on the construction. Similarly when two achievement verbs occur in a ReCo combination, a serial reading occurs.

(101) a. John shot and shot at the rabbit
'John shot at the rabbit repeatedly'

b. *and* → *shot* *shot*
$AND_{i,j}$ [τ_i] [τ_j]

It seems reasonable to suggest that factors such as the number of the subject, not to mention pragmatics influences, determine the appropriate choice of whether to coordinate φ, τ or both. Thus, a serial reading is more natural with *die and die* given the war-game context; a durative reading is most appropriate with *drown and drown* although a plural subject can also license the serial reading in this context.[43] What is systematically excluded by the LCL, however, is that unlike features are coordinated in this way.

In conclusion, it has been shown that ReCo and ConCo constructions interact with the *Aktionsart* or aspectual class of the predicates involved. On the one hand, this provides an example of how, in ConCo/ReCo contexts, coordination, subject to the LCL, applies to individual features within the feature bundles of the predicates (i.e. below head level). On the other hand, it shows that the durative/iterative interpretations of ConCo/ReCo are determined by the underlying *Aktionsart* of the predicates.

4.4.4 Accounting for some outstanding issues

There remain some aspects of ConCo that I have not yet explained, namely the inability to change the order of conjuncts and to substitute the coordinator. In fact, these

(1) a. John unloaded the truck/s
→ the trucks were fully unloaded [bounded]

b. John unloaded and unloaded the truck but it remained as full as ever
↛ the truck was fully unloaded [unbounded]

c. John unloaded and unloaded the trucks, but more trucks kept coming
→ each truck was fully unloaded [bounded, serial]

[43] One open question is how a deaccented endpoint is actually interpreted. The question is parallel to that of the interpretation of endpoints in interrupted progressive achievements.

(1) John was dying but miraculously recovered

Although *die* has an endpoint, in this example, it is deaccented and effectively neutralized.

phenomena are not properties of ConCo alone but of pseudo-coordination more generally. Consequently, they probably do not follow directly from the structure I have proposed.[44]

4.5 Extending the analysis: particles and nominals

The conjunction of heads can also be extended to reduplicated particles in English.

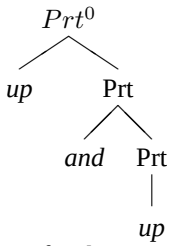
(102) The plane looped around and around

(103) The plane looped over and over

(104) The plane climbed up and up and up

(105) The plane dived down and down and down

Let's assume that the previous analysis can be applied in its entirety to the reduplicated examples above. Then, the following complex-head structure underlies the reduplicated string.



As for the previous analysis, assume that *and* is an operator selecting substages of an event. This is shown in the following schematic.

(106) $AND_{i,j} \rightarrow up_i\ up_j$

Essentially what this means is that given an unbounded process (φ) during which a plane goes *up*, two substages of that process, namely *up* and *up* can be selected by the coordinative operator. This yields exactly the same semantics as for ReCo constructions with verbs.

Furthermore, note that when the preposition inherently implies an end point (τ) such as *around*, then the operator selects endpoints, yielding plurality and a serial reading. This too is directly comparable to similar examples such as (84).[45]

[44]The inability to change order of conjuncts may be related to headedness within compounds. Given the Right-hand-head rule, the lexical verb will always be the head of the complex predicate, determining projection, theta-assignment etc. Were order of verbs to be inverted, this would no longer be the case. In fact, it would not be a possible outcome since I have argued that the creation of complex predicates requires a non-theta-assigning head in non-head position.

The inability to substitute coordinators might also simply follow from the semantics of the coordinator. For instance, a disjunctive operator such as *or* would yield radically different semantics even if it were to converge; in short, it would no longer be pseudo-coordination. Note that a subordinative account would not be able to account for this since the 'coordinator' is assumed to be a grammaticalized subordinative element with very little, if any, semantic content.

[45]The analysis may also extend to particles which obtain an adverbial meaning when reduplicated.

(107) The plane flew around and around the airfield

Finally, it is also possible to account for reduplicated nominals in this way. Generally nominals do not reduplicate as the following examples show.

(108) *John and John went to town

This is partly because a referential expression such as *John* cannot easily be divided into 'substages'. However, in certain contexts, when the noun is plural and when it denotes a durative, unbounded temporal expression, then reduplication becomes possible.

(109) Merlin slept (*about/*in/for) years and years

(110) John slept (*about/*in/for) hours and hours

In this section, I have briefly outlined how the analysis of complex predicates can easily be extended to a number of non-verbal reduplicative contexts.

4.6 Conclusion

I have proposed a two-part analysis. Firstly, ConCo is analysed as a complex predicate formed in the syntax. This immediately accounts for a number of the properties of ConCo. Secondly, ConCo is analysed as garden-variety coordination over substages of events. This also accounts for a number of the characteristics of ConCo.

By way of conclusion, I will return to examples (1), (2) and (3) with which I started the discussion in chapter (2). They are repeated here for convenience.

(111) Caesar went across the Rubicon and he conquered Gaul [OCo]

(112) Caesar went to Gaul and devastated it [SceCo]

(113) Caesar saluted his legions before…
he went and addressed them [ConCo]

The differences between these constructions have been explored in the previous chapters. (111) is an example of OCo which probably coordinates IPs. More importantly, I have extensively argued for an explicit distinction between SceCo (112) and ConCo (113).

In SceCo constructions, we are probably dealing with coordination of VPs where the coordination marker acts as a kind of 'glue' which creates a single ordered set

(1) John was wet through and through
'John was totally wet'

In example (45), there are a number of interesting similarities to ReCo constructions, namely the intensification implied and also the fact that the construction refers only to a single event. In other words, John was wet through only once, not twice. This means that the same analysis can be applied to it.

of events from two smaller events. It thus appears that the verb in the first conjunct denotes an event that sets the scene for the activity denoted by the verb in the second conjunct to take place.

In ConCo constructions we are dealing with coordination of verbal heads, which reduces to coordination of substages of events. The pseudo-coordinative verb in the first conjunct lexicalises a manner component in the internal event structure. The coordination marker is identical to coordination in other contexts. The analysis, captures the curious syntactic phenomena associated with ConCo while simultaneously retaining the coordination marker as an instance of garden variety coordination. Essentially, we can have our cake and eat it.

I have also explored in much more detail the complex interrelationship between aspect and *Aktionsart*. I have shown that although ConCo and ReCo constructions are aspectually durative, they differ substantially with respect to which *Aktionsarten* they may combine with. I have also demonstrated that these effects follow simply from the analysis that *and* is identical to garden-variety coordination: a coordinator that must coordinate (at least) two substages of an event. Moreover, I have demonstrated, that not only can we account for the productive ConCo and ReCo constructions in this way, but that the analysis also accounts for the apparently idiosyncratic ability of ReCo constructions to occur with accomplishment predicates like *drown* and *die*. In short, whether ReCo is interpreted as being durative or iterative is entirely predictable, based on the *Aktionsart* of the predicates themselves. In addition, it was demonstrated the ConCo constructions work in essentially the same manner.[46]

The complex predicate analysis also offers several theoretical advantages over analyses which depend on biclausal (infinitival) complementation. Biclausal analyses require that the lexical entry for ConCo *and* be fundamentally different to garden-variety *and*; in essence ConCo *and* is regarded as some manner of infinitival marker. The complex predicate analysis, instead, emphasises the similarities between garden-variety coordination *and* and ConCo *and*.

This chapter also made the following general, theoretical points.

i. Complex head compounds can be formed in narrow syntax by MERGE
ii. Complex head compounds are compositional
iii. Coordination can occur at (sub-)head level and retains essential properties of true coordination
iv. Coordination can apply to subparts of the verbal feature bundle, in particular, to features expressing *Aktionsart*en

In the following chapters, these insights will be applied to data from Afrikaans.

[46]The relative simplicity of the analysis proposed here can be contrasted with the system, proposed for pluractional verbs by Cusic (1981), which required four different parameters to obtain the correct interpretations for pluractionality. In fact, just one of those parameters (distributivity) had four different settings and another (connectedness) had three (Lasersohn 1995:253)!

Part II

Afrikaans pseudo-coordination

Chapter 5

An overview of Afrikaans verbal phenomena

In the first part of this dissertation, pseudo-coordination in English was explored and a typology of pseudo-coordination developed. It was proposed that coordination may apply to features of heads. In the following chapters, this approach is expanded and deepened through an exploration of Afrikaans pseudo-coordinative structures of the following kind.

(1) a. *Jan sal die boeke sit en lees*
Jan will the books sit and read
'Jan will sit reading the books'

b. *Jan sit die boeke en lees*
Jan sit the books and read
'Jan sits reading the books'

c. *Jan sit en lees die boeke*
Jan sit and read the books
'Jan sits reading the books'

It is immediately apparent that Afrikaans pseudo-coordinations are slightly different to English ConCo constructions. The underlined pseudo-coordinative verbal string is not contiguous and may be broken up by verb-second (1b) as well as by certain XPs when the verbal string is *in situ*. There is also the curious phenomenon where a pseudo-coordinative verbal string appears to occur in the second position of the clause, a position usually reserved for single verbs (1c).

Several questions spring to mind, among them, (i) where do Afrikaans pseudo-coordinative constructions fit into the proposed typology (ii) what is the best way to represent this type of pseudo-coordinative construction and (iii) how can the pseudo-coordinative verb-second effect be accounted for. However, before these questions can be answered, it is necessary to outline some important background assumptions about Afrikaans and how it should be approached.

5.1 Selected characteristics of the Afrikaans verbal system

In this section I will give a brief overview of some characteristics of Afrikaans verbal syntax which may be relevant to subsequent discussion. It will be demonstrated that Afrikaans has no overt verbal morphology on lexical verbs, although the remnants of a present/past distinction are still visible on some modals and copulas. Then, verb-second in Afrikaans will be introduced as well as a peculiar property of Afrikaans, namely the occurrence of a complex predicate string in the second position of root clauses.

5.1.1 Classes of verbs and verbal complements

The Afrikaans verbal system represents one of the most dramatic differences between Afrikaans and European Germanic varieties (Du Plessis 1990:74). The language has developed a complex system of functional verbs. Principal among these are indirect linking verbs (ILVs)and direct linking verbs (DLVs).[1] Other verbal classes include auxiliaries, modals, verbs taking *te*-complements. Since I will refer to these classes repeatedly, I provide a brief, non-exhaustive overview here and outline a few of the ways in which they differ to similar verbs in other OV verb-second languages like Dutch and German. Additional properties of these classes will be discussed when they become relevant.

Auxiliaries: Afrikaans auxiliaries include those based on HAVE and BE. There is no simple, preterite past tense except with some modals. Afrikaans usually expresses the past tense with a complex tense form using the past auxiliary *het* 'have.AUX.PST' combined with a participle which is ambiguous between perfective and imperfective aspect (De Vos 2003b, Van der Kleij 1999). Afrikaans also does not have auxiliary switch triggered by unaccusatives as in Dutch. The only Afrikaans verb which obligatorily takes BE as an auxiliary is *wees* 'be'.[2]

Modals: Some typical Afrikaans modals are listed in the table. The imperfect forms of these modals are *kon*, *mog*, *moes*, *sou* and *wou* respectively. Note that *mog* is archaic and very infrequently used. In addition, verbs such as *behoort* 'ought to', *durf* 'dare to', and *hoef* '(not) to need to (NPI)', also occasionally play a modal role (Donaldson 1993:247). The verb *gaan* 'will (lit. 'go')' also acts as a future modal when it occurs in the second position.[3]

Direct Linking Verbs: Functional verbs selecting bare verbal complements are called

[1]. The term skakelwerkwoord was first used by Ponelis (1968).

[2]The past copula *was* 'be.pst' is increasingly used in Afrikaans past passives, but is regarded as an anglicism (Donaldson 1993:241). The imperfect form of the auxiliary *het* is *had* 'be.pst' but this is archaic and very seldom heard in ordinary contexts.

[3]When *gaan* 'go' appears elsewhere in the clause it seems to lose much of its future interpretation. This will be discussed in section (7.A.1).

Table 5.1: Afrikaans verbal classes

Auxiliaries	Modals	DLVs	ILVs	*te* selectors
het 'have.AUX' *is* 'be.AUX.PASS'	*kan* 'be able' *moet* 'must' *mag* 'may' *sal* 'will' *wil* 'want' *gaan* 'will'	*loop* 'walk' *kom* 'come' *begin* 'begin' *laat* 'CAUS' *bly* 'stay' *gaan* 'go' *help* 'help' *leer* 'learn' *probeer* 'try'	*loop* 'walk' *sit* 'sit' *lê* 'lie down' *staan* 'stand'	*behoort* 'ought' *durf* 'to dare' *begin* 'begin' *blyk* 'appear' *skyn* 'seem'

Direct Linking Verbs (DLVs).[4] The class includes a variety of different verbal types and is probably not a homogeneous class (De Villiers 1951, De Vos 2001). Some DLVs are grammaticalized and occur in IPP constructions (De Villiers 1951, Ponelis 1979). Given the non-homogeneous nature of the class of DLVs, it is particularly important to use unambiguous, core members of this class (i.e. *kom* 'to come' and *bly* 'to stay/to continue doing') when pursuing generalizations.

Indirect Linking Verbs: Functional verbs selecting a verbal complement headed by a pseudo-coordinative marker, *en* 'and', are called Indirect Linking Verbs (ILVs). They encode progressivity and may also have pejorative, hendiadys-type interpretations. They are not purely aspectual as they do seem to retain some of their lexical meaning (Ponelis (1979:241), Donaldson (1993:220)). They denote a manner component of the activity and consequently must be cotemporaneous with the activity denoted by the lexical verb.

Verbs selecting *te*-Complements: Some functional verbs select a verbal complement headed by an infinitival marker *te* 'to'. These verbs usually cannot select a CP complement with the infinitival complementizer, *om*, in C^0. The class is not homogeneous and can be divided into two types selecting AgrOP and TP complements respectively (Robbers 1997). Some verbs are ambiguous between both classes.

Needless to say, this list and description are not comprehensive and there is also dialectal variation concerning which verbs fall into which class. In particular, verbs like *gaan* 'go/will', *laat* 'allow/CAUS' and *begin* 'begin' are ambiguous between several classes. These different classes of verbs can be ranked in a functional hierarchy of functional heads (De Vos 2001). The general hierarchy is as follows.[5]

(2) Aux $\gg$ Mod $\gg$ DLV $\gg$ ILV $\gg$ *en* $\gg$ LexV

Within each class there also exists a hierarchy of verbs, although some variation exists in the class of DLVs with respect to some of the less prototypical members. The data motivating the relative rankings of DLVs are too numerous to reproduce here, but see De Vos (2001). The entire hierarchy is as follows.

(3) Type-A verbs $\gg$ Type-B verbs $\gg$ $Modal_{necessity} \gg modal_{ability} \gg \ldots \gg gaan_{future} \gg beter_{obligative} \gg$ perception verbs $\gg gaan_{ingressive} \gg ophou_{terminative} \gg laat_{permissive} \gg aanhou_{durative}$ /$bly_{durative} \gg help_I \gg$ probeer $\gg laat_{causative} \gg begin_{inchoativeI} \gg$ kom $\gg loop_{andative}$ /leer $\gg help_{II} \gg loop_{ILV}$ /$kom_{ILV} \gg sit_{ILV}$ /$l\hat{e}_{ILV} \gg$ Lexical Verbs

[4] They are called 'Direct' because they directly select a verbal complement without the need of a 'subordinative' marker like *te* 'to' or *en* 'and'.

[5] Van Niekerk (1995) explores a similar system based on a fuzzy gradient of relative 'auxiliaryness'.

5.1.2 Verbal inflection

With the exception of the past-tense prefix and the remnants of imperfective marking on some modals, Afrikaans does not mark verbs for person, number, tense and –what Ponelis (1993) calls– 'inflectional class' (i.e. regular vs irregular paradigms).[6] This is demonstrated by the following paradigm: the form of the verb remains invariant regardless of which pronoun is used. The same applies to modals.

(4) a. *Ek* *eet*
I.1SG eat

b. *Jy* *eet*
you.2SG eat

c. *Hy/sy/dit* *eet*
he/she/it.3SG eat

d. *Ons* *eet*
we.1PL eat

e. *Julle* *eet*
you.2PL eat

f. *Hulle* *eet*
they.3PL eat

g. *U* *eet*
You.HON eat

Afrikaans does exhibit a present/past distinction on modals and the copula. The present/past distinction on the past auxiliary *het* 'AUX.have' is archaic, and on the passive auxiliary *is* 'be.pass' such a distinction is an anglicism.[7]

(5) a. *Ek* *is/was*
I.1SG be.PRES/be.PST

b. *Ek* *het/??had* *'n* *boek*
I have/have.PST a book

c. *Ek* *sal/sou*
I will/will.PST

d. *Ek* *kan/kon*
I can/can.PST

e. *Ek* *wil/wou*
I want/want.PST

[6] Donaldson (1993:239) claims that only the verbs *hê* 'have.INF' and *wees* 'be.INF' have distinct finite and non-finite forms.

[7] In these glosses I take the present-tense form to actually be underspecified and that the past-tense form of the verb is specified for past tense. The exception is the verb BE *is* 'be.PRES', which also has an infinitival form *om te wees* 'to be'.

f. *Ek* *moet/moes*
I must/must.PST

Note that for (5b), the imperfective form *had* is archaic, as is the imperfective form of *mag* 'may', namely *mog* (Donaldson 1993).

The past-tense forms of modals can also occur, within a clause, in the scope of another past-tense modal. This is known as preterite assimilation: the assimilation of modals to a preterite context (Ponelis 1979:270).

(6) *Ek het nooit kon dink sy sou dit wees nie*
I AUX.have never can.PST think she would.PST it be NEG
'I would never have thought that she would have been it' (De Villiers 1968:29)

(7) *Hulle sou wou help*
they shall.PST want.PST help
'They would want to help' (Ponelis 1993:440)

(8) *Picasso sou kon lekker bly in Hartenbos se hand*
Picasso shall.PST can.PST nice stay in Hartenbos POSS hand
'Picasso would have been able to live nicely in the hand of Hartenbos' (Kombuis 2002)

Preterite assimilation probably should not be regarded as a distinct tense, but merely as a morphological variant of the modal.[8] Preterite assimilation is most common with modals following *sou* 'shall.PST'. Instances with verbs like *moet* 'must', *kan* 'can' and *behoort* 'ought to' are much more sporadic although they do exist (De Villiers 1968:29).

Abstracting away from the remnants of imperfective marking on modals, Afrikaans uses periphrastic methods of expressing tense. For instance, the past tense, which is ambiguous between perfective and imperfective readings, uses the past auxiliary *het* 'AUX.have' and a past participle prefix *ge-* on the verb (De Vos 2003b, Van der Kleij 1999). I argue in De Vos (2003b) that the Afrikaans participle marker is in fact a kind of tense marker (marking the Reference Time, Event Time relationship: [R,E]) while the auxiliary expresses the relation between Reference Time and Situation Time: [R-S].

(9) a. *Ek* *het* *geëet*
I.1SG have PST-eat

b. *Jy* *het* *geëet*
you.2SG have PST-eat

c. *Hy/sy/dit* *het* *geëet*
he/she/it.3SG have PST-eat

[8]For instance, 'infinitival' equivalents are usually possible, although marked and are usually characteristic of very formal style (De Villiers 1968, Ponelis 1979). In addition, there are even some (marked) examples of 'past' modals in *om te* infinitives. This is evidence that the so-called 'past' forms of modals are merely morphological variants (De Villiers 1968:30).

d. *Ons* *het* *geëet*
we.1PL have PST-eat

e. *Julle* *het* *geëet*
you.2PL have PST-eat

f. *Hulle* *het* *geëet*
they.3PL have PST-eat

g. *U* *het* *geëet*
you.HON have PST-eat

This section presented a brief introduction to the Afrikaans verbal system. Afrikaans verbs have no inflectional marking for tense, person or agreement. Although some modals do display what is seemingly tense marking, whether it is truly a reflection of tense is brought into question by phenomena like preterite assimilation. Furthermore, Afrikaans has developed a complex set of functional verbs which express aspect. The existence of this flexible array of functional verbs combined with the lack of overt inflectional morphology on verbs will play an important role in determining the options available to the Afrikaans grammatical system.

5.2 Verb second in Germanic and Afrikaans

In the Afrikaans sections of this dissertation, I will be discussing verb movement to T in Afrikaans. For this reason, I provide a brief overview of my assumptions regarding verb movement here.

Afrikaans, like other North Germanic and West Germanic tongues (excluding modern English) exhibits verb-second in root clauses. This phenomenon is characterized by the finite verb being located in the second position of root clauses with some other XP preceding it. Typically, the pattern exhibits a matrix/embedded alternation, although Icelandic, Yiddish and Faroese are well known exceptions to this rule.

Usually, this has been analysed as V-I-C movement with an XP in Spec CP (Den Besten 1989). More recently, Zwart (1997) has argued that, in Dutch matrix clauses, the subject is not in Spec CP but in Spec TP with the verb heading T. Similar data are not so apparent in Afrikaans in the absence of the pronominal clitics on which this argument is based. However, this does not affect the argument I make in this dissertation, since I will be focussing on verb movement to T.

In embedded clauses, in the particular analysis that Zwart (1997) employs, the formal features of finite verbs raise to T and C. However, since C is already lexicalised by a complementizer, there is no need for the lexico-phonological features of the verb to raise to C. Consequently, at Spell out the lexico-phonological features of the finite verb are spelled out *in situ* although the formal features have raised. Nevertheless, their formal features migrate to T. In traditional terms, one might say that the verb does not move to T or C in embedded clauses.[9]

[9]The analysis of Zwart (1997) presupposes that narrow syntactic operations may operate on features within feature bundles. This is a property that is explored in this dissertation.

I will assume that Zwart's analysis is basically correct insofar as verb-second is analysed as feature movement. I will ignore, for the moment, the assumption characteristic of early Minimalist theory that verbs raise to check morphological features (Chomsky 1995b, Solà 1996). Obviously, since Afrikaans does not have any verbal inflection to speak of it would be incorrect to claim that Afrikaans finite verbs raise to satisfy morphological criteria. The question of whether verbs subsequently raise from T to C in root clauses, does not concern me directly, since I will focus almost exclusively on V-to-T movement in Afrikaans.

5.2.1 Verb second in Afrikaans

Verb second in Afrikaans has similarities and differences to verb-movement in Dutch and German. In the standard language, Afrikaans displays a matrix/embedded asymmetry in much the same way as do Dutch, German and the majority of the other verb-second languages of continental Europe and mainland Scandinavia. That is, the matrix, finite verb moves from V, through T (to C) in matrix clauses but remains *in situ* in embedded clauses.

(10) a. *Jan maak elke dag potjiekos*
Jan make every day potjiekos
'Jan makes potjiekos every day'[10]

b. *. . . dat Jan elke dag potjiekos maak*
that Jan every day potjiekos make
'. . . that Jan makes potjiekos everyday'

In this respect, Afrikaans verbal syntax looks rather like verb-second syntax in Dutch and German. Accordingly, my approach to verb-second phenomena is essentially identical to analyses of verb-second in these languages. Following standard assumptions the finite verb moves to T and thereafter to C, resulting in the verb appearing in the 'second position' in the clause.

(11) a. *Jan eet altyd appels*
Jan eet always apples
'Jan always eats apples'

b. *Jan wil nie appels eet nie*
Jan want not apples eet neg.AGR
'Jan doesn't want to eat apples'

Thus in example (11a), the finite lexical verb is in the second position of the sentence. It thus occurs to the left of adverbs. In (11b), a modal is in second position with

[10]Note that *potjiekos*, is a hugely popular, South African cuisine based on cooking in a three-legged, cast-iron pot over an open fire. Life is too short not to try it.

the lexical verb occurring to the right of adverbs. This is the *in situ* position for the lexical verb.[11]

Afrikaans also exhibits verb-second in embedded clauses, especially in informal registers and some dialects (Biberauer 2002; 2003; 2004). Although this does not necessarily negate the matrix/embedded asymmetry it sounds a cautionary note when comparing word orders. Thus, the usage of an embedded clause is not always sufficient to guarantee a base-generated word order as is the case for Dutch. Consequently, I often use adverbs and modal constructions to disambiguate structures. By using an adverb, embedded verb-second can be distinguished from the *in situ* order.

5.2.2 Complex initials

A curious feature about Afrikaans that distinguishes it from other West-Germanic languages is its capacity to form 'complex initials' (CIs). A complex initial is a construction in which more than one verb appears in the verb-second position. In other words, a complex predicate appears to have been formed. I will continue to use complex initial in this paper as a descriptive, analysis-neutral term for this phenomenon, since the term has been used at least ever since Ponelis (1993). However, I will use 'quirky verb second' to describe the derivation which I propose underlies it. The following examples are adapted from Ponelis (1993:326).

(12) a. *Sy kom vandag die boek lees*
she come today the book read
'She will read the book today'

b. *Sy kom lees vandag die boek*
She come read today the book
'She will read the book today'

In example (12a) the finite verb *kom*, a future modal, has moved to the second position. This is the paradigm expected based on verb-second phenomena in other Germanic verb-second languages. The state of affairs unique to Afrikaans is illustrated by (12b): in the second position, namely between the subject and the adverb, there are two verbs and not merely one as would have been expected. This example suggests not only that the formation of complex initials is possible, but that it occurs with direct linking verbs. However, it is when complex initials are formed with pseudo-coordinative predicate strings that deeply troubling questions are raised for the contemporary syntactic toolbox. Consider the following examples of complex initials formed with pseudo-coordinative verbal strings.

(13) a. *Hy sal die heeldag na die wolke lê en kyk*
he will the whole day at the clouds lie and look
'He'll lie looking at the clouds the entire day'

[11] Note that Afrikaans is a negative concord language with the negative-concord marker typically occurring in sentence final position.

b. *Hy lê die heeldag na die wolke ~~lê~~ en kyk*
he lie the whole day at the clouds and look
'He lies looking at the clouds the whole day long' (Robbers 1997:65)

c. *Hy lê en kyk die heeldag na die wolke ~~lê~~ ~~en~~ ~~kyk~~*
he lie and look the whole day at the clouds
'He lies looking at the clouds the whole day long' (Robbers 1997:65)

Example (13a) illustrates a typical instance of pseudo-coordination utilizing an ILV in Afrikaans. The underlined modal verb is in the second position and is on the left hand side of an adverbial phrase. The pseudo-coordinative verbal string is in a clause-final, *in situ* position. Note that the order of the pseudo-coordinative verbal string reflects the base-generated order: ILV $\gg$ LexV.

Example (13b) illustrates that the ILV can raise to second position in isolation stranding the remainder of the verbal string *in situ*. This is not a particularly surprising state of affairs given that any other West-Germanic verb-second language would behave in a similar way. The example demonstrates that the ILV is indeed the highest verb in the verbal string.

It is example (13c) that is puzzling. In this example, the entire pseudo-coordinative verbal string has moved to the second position to the left of an adverbial phrase. What is more, the pseudo-coordinative particle itself has been pied-piped into second position. I have used strikeout fonts to illustrate the original position of the verbal string as a theory-neutral device; at this point one is uncertain whether the verbal string is moved by remnant-movement (in which case there would only be a single trace, t_{VP}) or whether various head movements have derived the construction (in which case there may be more traces: t_{ILV}, $t_{LexVerb}$ etc). The exact nature of the representation will ultimately depend on what kind of analysis is chosen. In the following sections I will discuss the properties of these constructions.

Verbs entering into complex initial constructions

Complex initials typically include combinations of a lexical verb and either a DLV (14a), an ILV (14b) or both (14c) (Ponelis 1993:327).[12]

(14) a. *Gaan lees sy die boek?*
go read she the book
'Is she going to read the book?'(Ponelis 1993:326) [DLV+LexV]

b. *Sit en lees sy die boek?*
sit and read she the book
'Is she sitting and reading the book? /Is she busy reading the book'(Ponelis 1993:326) [ILV+LexV]

c. *Kom staan en lees hy die boeke?*
come stand and read he the books
'Does he come and read the books?' [DLV+ILV+LexV]

[12] Not all DLVs can occur in CI constructions (see chapter (7.A)).

Auxiliaries and modals do not enter into complex initials in combination with lexical verbs. The following examples below are from Ponelis (1993:326).[13]

(15) a. **Sy het gelees vandag die boek*
She AUX PST-read today the book
'She read the book today'(Ponelis 1993:326)

b. **Het gelees sy vandag die boek?*
Aux PST-read she today the book
'Did she read the book today?'(Ponelis 1993:326)

(16) a. *Sy moet die kinders help*
she must the children help
'She must help the children' (Robbers 1997:174)

b. **Sy moet help die kinders*
she must help the children
'She must help the children' (Robbers 1997:174)

In the (a) examples an auxiliary and a modal occur in the second position. However, it is not possible to create a CI in second position with a combination of an auxiliary or modal, and a lexical verb as the (b) examples demonstrate.

It has also been claimed by Robbers (1997) that CIs cannot occur if both verbs are modals.

(17) a. *Sy sal die kinders moet help*
she will the children must help
'She will have to help the children' (Robbers 1997:174)

b. *Sy sal moet die kinders help

(18) a. *Sy sou die boek moes gelees het*
she would the book must.PST PRT-read AUX.have
'She would have had to read the book' (Robbers 1997:174)

b. *Sy sou moes die boek gelees het

While these data do reflect common usage, it is still possible to have a verbal string that superficially looks like a complex initial with both verbs being modals.[14]

(19) *Sy sal moet die kinders help*
she will must the children help
'She will have to help the children'

[13]Den Besten (2002) treats the ILVs and DLVs as auxiliaries and seen from this perspective it might be claimed that auxiliaries do occur in CIs. What is clear, in any event is that HAVE and BE auxiliaries do not occur in CIs. Whether DLVs and ILVs are auxiliaries or not is a debate that I do not wish to engage in here.

[14]Thanks to Prof. Hans du Plessis (p.c.) for these examples.

(20) *Hy sal kan die bal skop*
he will can the ball kick
'He will be able to kick the ball'

(21) *Hulle sal wil die kinders leer*
they will want the children teach
'They will want to teach the children'

(22) *Sy sou moes die boek gelees het*
she will.PST must.PST the book PST-read AUX.have
'She had to have read the book'

(23) *Hulle sou wou die olifante sien*
they will.PST want.PST the elephants see
'They would have wanted to see the elephants'

However, when the same examples are placed in a question context they become ungrammatical. This demonstrates that they are not true complex initials. Thus the generalization stands that modals may not occur in complex initials.

(24) a. **Waarom sal moet sy die kinders help?*
why will must she the children help
'Why will she have to help the children?'

b. **Waarom sal kan hy die bal skop?*
why will can he the ball kick
'Why will he be able to kick the ball?'

The only way modals can occur in anything resembling a complex initial, is if they are coordinated with an overt coordinator. The coordinated complex predicate can occur in the second position, even in question contexts.

(25) a. *Jan kan en moet vandag skooltoe gaan!*
Jan can and must school-to go
'John can and must go to school today!'

b. *Kan en moet Jan skooltoe gaan?*
can and must Jan school-to go
'Can and must Jan go to school?'

It should be noted, however, that this kind of complex predicate does not exhibit the CI/SI alternation and is thus not the same as the ILV construction.

Optionality

A cardinal feature of complex initials is that they appear to be completely optional with posture verbs: if a verb can appear in a complex initial, it can also appear in a simplex initial.[15] As examples (12) and (13) show, there do not appear to be significant

[15] With the exception of CIs with DLV *loop* 'walk' (Du Plessis 1990) and some fossilised verbs. See the appendix to chapter (7).

semantic differences between the complex initial and simplex initial versions of the examples. The point is also demonstrated by the following pair.

(26) a. *Die heelagter laat die bal val*
the full-back let.CAUS the ball fall
'The full-back dropped the ball' (Van Niekerk 1995:150)

b. *Die heelagter laat val die bal*
the full-back let.CAUS fall the ball
'The full-back dropped the ball' (Van Niekerk 1995:150)

The optionality and overwhelming productivity of CIs shows that these constructions cannot all be analyzed as involving 'fossilized' complex predicates listed in the lexicon as single lexical items. However, there are a few instances of CIs which probably are fossilized. These are briefly discussed here. For instance *laat spaander*/*laat waai* 'run away, race away' (perhaps more equivalent to 'let's get out of here!') is a common collocation. In fact, *spaander* is a cranberry morpheme that does not appear independently.

(27) *Hy sal dan laat spaander na waar Charlie buite voor die*
he will then run out to where Charlie outside in front of the
ingang met luierende enjin wag
entrance with idling engine wait
'He will then run out to where Charlie is waiting outside the entrance with a running engine' (http://www.litnet.co.za/fiksie/hsteyn.asp (15.01.2004))

(28) *Goeie ding dat ons laat spaander het*
good thing that we run out AUX.have
'Good thing that we got out of there'
(http://www.litnet.co.za/fiksie/hanru04.asp (15.01.2004))

The fossilized *laat spaander* cannot enter into alternations between complex and simplex initials. This differentiates fossilized complex initials from their syntactic counterparts which do allow such alternations optionally.

(29) **Hy laat na waar Charlie buite wag spaander*
he let.CAUS to where Charlie outside wait V
'He runs out to where Charlie is waiting outside'

Although a few fossilized complex predicates like *laat spaander* do exist in Afrikaans, they are, predictably, neither numerous nor productive. This contrasts with the majority of CI constructions, which are very productive, optionally occur in SI contexts and are consequently not fossilized.

Generally, Minimalist syntactic theory does not handle optionality easily. There are at least two approaches to it: (i) deny that true optionality exists and attempt to show that the two variants exhibit syntactic of semantic differences of some kind or

(ii) accept that optionality exists but attempt to derive it from two equivalent notions of economy. I explore both these options in this dissertation. In chapter (6) I will explore the structural properties of these two variants and, to preempt my findings somewhat, will conclude that there is indeed true optionality. I will explore the second option in chapter (7).

Limitations on the number of verbs in a complex initial

Ponelis (1993) claims that there is a limit on the number of verbs in a complex initial. The following types of complex initial are found according to Ponelis (1993). Only one DLV and a lexical verb *or* an ILV and a lexical verb *or* a DLV, an ILV and a lexical verb can form a complex initial (Ponelis 1993).

i. An ILV selects a lexical verb as its complement: ILV ≫ LexV (30)
ii. A DLV selects a lexical verb as its complement: DLV ≫ LexV (31)
iii. A DLV selects an ILV as its complement: DLV ≫ ILV ≫ LexV (32)
iv. *A DLV selects a DLV as its complement: DLV ≫ DLV ≫ LexV (33)
v. *An ILV selects an ILV as its complement: ILV ≫ ILV ≫ LexV (34)

(30) *lê en slaap hulle?*
lie and sleep they
'Are they lying asleep?'

(31) *Kom slaap hulle?*
come sleep they
'Will they come and sleep?'

(32) *Gaan lê en slaap hulle?*
go lie and sleep they?
'Are they going to lie and sleep?' (Ponelis 1993:327)

(33) **Gaan laat bou hulle die sentrum?*
go let build they the centre
'Will they go and get the centre built?' (Ponelis 1993:327)

(34) **Sit en lê en slaap hulle?*
sit and lie and sleep they
'Are they lying asleep?'

In the first example, an ILV selects a lexical verb as its complement in a complex initial construction. In the second example, a DLV selects a lexical verb as its complement. The third example shows that a DLV selects an ILV complement with a lexical verb in a complex initial context. The fourth, ungrammatical, example illustrates two DLVs forming a complex initial. It is also worth noting that two ILVs cannot form a complex initial either. If this is true, then the generalization seems to be that there can only be one verb of each type in a complex initial, namely a DLV, and ILV and a lexical verb. Example (33) is grammatical on an OCo reading corresponding to *they*

are going somewhere in order to have the centre built. Note that the subject, i.e. *hulle* is not shared by all the verbs for this reading.

Complex initials and the domain of extraction

Complex initials are strictly clause bound. It is not possible to move a verb from an embedded clause to form part of a complex initial in the matrix clause.

(35) a. *Wie hoop Jan om goed te leer ken?*
who hope Jan C.INF well to learn know
'Who does Jan hope to get to know better'

b. **Wie hoop leer ken Jan om goed te?*
who hope learn know Jan C.INF well to

Example (35a) is an infinitival clause from which extraction is possible on independent grounds.[16] (35b) has a complex initial composed of the finite verb from the matrix clause and the verbal string from the embedded clause. The result is strongly ungrammatical. The same effect can be seen with a finite complement.

(36) a. *Jan weet iemand gaan sterf*
Jan know somebody go die
'Jan knows that somebody is going to die'

b. **Jan weet gaan sterf iemand*
Jan know go die somebody

The embedded verb cannot be part of a complex initial.

(37) a. *Jan het die koppie hoor val*
Jan AUX.have the cup hear fall
'Jan heard the cup fall'

b. *Jan hoor die koppie val*
Jan hear the cup fall
'Jan hears the cup fall'

c. *Jan hoor val die koppie

Example (37a) shows that a perception verb may form a verbal string with a verb in its complement. (37b) shows that a simplex initial may be formed by moving the perception verb to the second position. (37c) shows that it is impossible to create a complex initial with a perception verb and the embedded verb. These data shows that complex initial formation is strictly clause-bound.

CI formation also cannot extract a verb out of an island. Examples (38) and (39) show the impossibility of non-ATB extraction from a coordinate structure island and a complex NP island respectively.

[16] In Afrikaans, unlike Dutch, most infinitival clauses are of the *om te* type and do not have the purpose reading characteristic of Dutch *om te* clauses.

(38) a. *Jan skryf briewe en lees boeke*
Jan write letters and read books
'Jan writes letters and reads books'

b. **Jan skryf lees briewe en* t_{lees} *boeke*
Jan write read letters and t books

(39) a. *Jan skop die man [wie hom bekyk]*
Jan kick the man who him look-at
'Jan kicks the man who is looking at him'

b. **Jan skop bekyk die man [wie hom* t_{bekyk}*]*
Jan kick look-at the man who him t

Even in cases where WH movement from an embedded clause is possible, multiple verb movement is not possible.

(40) *Wat dink Bush dat Blair sê* t_{WH}*?*
What think Bush that Blair say t
'What does Bush think that Blair is saying?'

(41) **Wat dink sê Bush dat Blair* t_{WH} t_{se}*?*
What think think Bush that Blair t t

The fact that CIs respect general constraints on movement strongly suggest that they are derived by movement.

5.3 Accounts of complex initials

There are not many accounts of complex initials in the literature. Ponelis (1993), Roberge (1994) and Den Besten (2002: citing Den Besten (1988)) outline the possible antecedents of the construction and possible influences upon it.

Khoisan speakers were virtually assimilated into the early Cape colony and in addition, the Orange River varieties of Afrikaans came into contact with Khoisan speakers. Since various Khoisan languages do appear to have strings of verbs acting as single constituents (Collins 2002, Den Besten 1988; 2002), it is reasonable to suppose that the development of Afrikaans was triggered by the existence of a verbal compounding rule in these languages. However, Den Besten (2002) cautions that these constructions might not be verbal compounding but might be analyzable as VP topicalization (cf. Den Besten and Webelhuth 1990).[17] Thus, Khoisan influence might not necessarily be the only reason for the development of complex initials in Afrikaans. The question of Netherlandic vs. Khoisan origins for complex initials is also taken up by Ponelis (1993) who suggests that both may have played a role. Ponelis notes that

[17] But see Collins (2002) for a different approach to verbal compounding in ǂHoan in terms of head movement.

Khoisan is 'rich' in VV compounds. However, he also notes that 'the low level of lexicalization of complex initials does not accord well with extensive Khoisan influence on this subsystem' (Ponelis 1993:330).

There are some possible antecedents for Afrikaans complex initials in (early and dialectal) Dutch, in clause-initial imperative contexts.

(42) *Loopt haelt dan …die spijse*
go get then …the food
'Go then and the food' (Ponelis 1993:330)

(43) *Gaet souckt een ander medecijn*
go find a other medicine
'Go and find another remedy'(Ponelis 1993:330)

(44) *Ga geeftze nu de Vorst*
go give-her now the Earl
'Go and give her/it to the king now' (Ponelis 1993:330)

(45) *Loopt blaast de Lampen uyt*
walk blow the lamps out
'Go and blow out the lamps' (Ponelis 1993:330)

These have survived in some modern Dutch dialects. The following data are from the Syntactic Atlas of the Dutch Dialects (SAND 2005).[18]

(46) *Goan haalt e keer n pintje*
go get a time a beer
'Just go and get a beer!' [Brugge: West-Vlaanderen]

(47) *Gaan haalt die bestellinge maar ne keer*
go get that order just a time
'Just go and get that order!' [Eeklo: Oost-Vlaanderen]

In addition, there are examples of hendiadys-like constructions in Middle Dutch (Le Roux 1923, Robbers 1997, Roberge 1994).

(48) *Een waterlantsche Trijn sat eens ajuyn en schelde*
a from-Waterland Trijn sat once onions and peeled
'A Trijn from Waterland was once peeling onions' ((Robbers 1997:65)
originally from the 17th century author, Cats (Weynen 1965)) [Middle Dutch]

This example is actually exceptional in the Middle Dutch corpus. Middle Dutch more commonly has constructions of the following type (see also Ijbema 2003).

[18]The glosses are not entirely straight forward. *goan/gaan* 'go' may be an infinitive, while *haalt* 'fetch' presumably is second person plural.

(49) *hi lach ende sliep*
he lay and-AFF slept
'He lay sleeping' (Hoekstra 1999) [Middle Dutch]

There is also a pseudo-coordinative structure in Frisian called *imperativus pro infinitivo* (IPI) (Hoekstra 1997) which may have served as a possible antecedent, although this construction does not form complex initials.[19]

(50) *de plysje soe by him komme en helje him op*
the police would by him come-INF and pick.IMP him up
'The police would come by and pick him up' [Coordinative type]
(Hoekstra 1997:97)

(51) *ik ried jimme oan en drink net te folle kofje*
I advise you.PL on.PRT and drink.IMP not too much coffee
'I advise you not to drink too much coffee' [Subordinative type]
(Hoekstra 1997:98)

All these data indicate that there were certainly no shortage of possible Netherlandic antecedents for the Afrikaans construction.

Ponelis (1993) also suggests that the loss of verbal inflection during the early development of Afrikaans meant that finite and non-finite verb forms were no longer distinguishable.

> a finite verb is marked, by concord inflection, for combining directly with the subject, and the lack of this marking in non-finite verbs just as clearly indicates their lack of a direct link with the subject and bars them from occurring in finite position as part of a complex initial, as in Standard Dutch (Ponelis 1993:329).

Consequently, a lack of inflection meant that verb second could apply to both finite and non-finite verbs.

Another facilitating factor for complex-initial development was lexicalization (Ponelis 1993:328). Several complex initials are lexicalized and rarely occur as simplex initials. These include *gaan haal* 'fetch', *laat blyk* 'indicate', *laat geld* 'exercise (authority)', *laat kom* 'summon', *laat spaander* 'get going' and *laat staan* 'leave'. There are several problems with such an explanation however. It seems to me a chicken-or-egg explanation: did lexicalization precede complex-initial development, or did complex-initials

[19] Standard Dutch has a construction very similar to the Afrikaans posture verb construction, which utilizes the posture verbs *liggen* 'lie', *staan* 'stand', *zitten* 'sit' and more marginally verbs like *lopen* 'walk' and *hangen* 'hang' (Hoekstra 1999). However, the Dutch construction has an infinitival marker *te* selecting a verbal infinitival complement. The posture verb does not necessarily retain a lexical meaning but tends to denote durative aspect. Hoekstra (1999) claims that those varieties that lack a literal posture interpretation of the verb all have the following three characteristics (i) 1-2-3 word order in the verbal cluster (ii) IPP effects and (iii) no obligatory marking with *te* in aspectual infinitives.

gradually become lexicalized? The latter seems to me the most natural explanation (informally speaking), particularly when lexicalized VV compounds are particularly rare in Germanic.[20] Furthermore, Ponelis (1993) notes that although all 10 instances of *gaan haal* in a 300 000 word corpus were complex initials, the simplex initial variant (52b) is not ungrammatical (or even marked).

(52) a. *Gaan haal hy die kinders?*
go get he the children
'Will he fetch the children' (Ponelis 1993:329)

b. *Gaan hy die kinders haal?*
go he the children get
'Will he fetch the children' (Ponelis 1993:330)

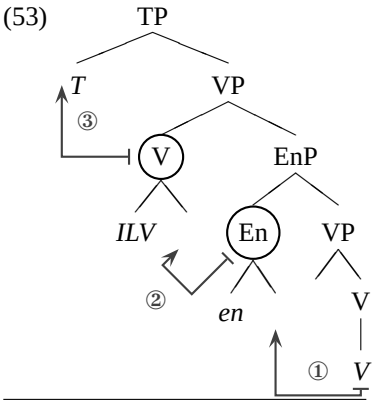
Finally, the lexicalization hypothesis does not explain the productivity of complex initials in Afrikaans.

Approaches to complex initials to date all suggest incorporation of the lexical verb into the linking verb (Den Besten 2002, Ponelis 1993, Robbers 1997). However, at least Ponelis (1993) and Robbers (1997) do not provide any analysis beyond suggesting that incorporation occurs. For instance, Robbers (1997) provides the following explanation.

> The embedded verbs [can] optionally accompany the linking verb under verb second. . . this is the result of incorporation of the main verb into the linking verb (Robbers 1997:172).

The specific case of ILVs are not discussed to any extent. However, it seems that Robbers (1997) espouses a stacked VP structure with a functional projection to host the coordinative particle. The following diagram is based on (Robbers 1997:179).

(53)



[20] Ponelis (1993) himself notes this saying:

> complex initials may be considered incipient compound verbs of a type well known in the languages of the world but uncommon though not completely unattested in Germanic, cf. the fixed verbal expressions in English: *let fly*, *let go*, and *make do* (Ponelis 1993:329).

I find it particularly interesting, that English examples are cited, and not Dutch ones which is unexpected given that Dutch is the most closely related language to Afrikaans.

This suggests that complex initials are formed by optional incorporation/right-adjunction of the lexical verb, first into the functional subordinating element which is the *en*, and then subsequently into the ILV. Finally, the entire incorporated complex raises to T. By referring to complex initial-formation as 'lexical' incorporation, Robbers attempts to distinguish it from 'syntactic' incorporation as evidenced in verb-raising contexts, which also allow excorporation in verb second contexts.[21] The problem with this approach is that it leaves important questions unanswered including the implementation of optionality, counter-cyclice right adjunction, the fact that CIs seem to be dependent on verb-second movement, and the semantic contribution of the coordinator and excorporation. In the following sections, I shall develop my own analysis of ILVs which will include a discussion of CIs.

5.4 Conclusion

In this section, I have provided a brief outline of the Afrikaans verbal system and some assumptions about its workings. It has been shown that Afrikaans verbs are not inflected for tense, person or number, although the remnants of tense-marking are still visible on some modals. Some assumptions about verb second have also been sketched. I have broadly adopted the analysis of verb second of Zwart (1997). I have also introduced a unique pseudo-coordinative structure in Afrikaans known as a complex initial. This section has demonstrated the following facts. Complex initials are a case of a complex predicate occurring in verb-second position. This construction appears to place a complex predicate into a position reserved exclusively for heads (second position) and is optional. The movement involved behaves like local, head movement. This construction potentially has great implications for analyses of verb movement as well as pseudo-coordination.

These constructions pose a number of intriguing questions for syntactic analysis including some of the following ones.

a. How do complex initials with ILVs relate to verbal pseudo-coordination more generally i.e. where do they fit into the typology developed in chapters one to three?
b. What is the nature of the moved, verbal constituent and how is it derived?
c. How does the underlying representation derive the meanings of complex initials, as well as the apparent optionality in the paradigm?
d. What are the implications of this construction for the nature of coordination generally?

The properties of complex initials formed with posture verbs (ILVs) will be explored in the coming chapters.

[21] She also notes that within the VO analysis of Dutch and Afrikaans, no distinction need be made between these two types of incorporation since verb-raising does not occur overtly in the VO analysis.

Chapter 6

Afrikaans pseudo-coordination

This chapter explores how Afrikaans pseudo-coordinative constructions with indirect linking verbs relate to the typology of English pseudo-coordinative constructions. Each of the tests developed to distinguish English pseudo-coordinative types are applied to Afrikaans data. It will be argued that Afrikaans pseudo-coordinations with ILVs are comparable to neither SceCo nor ConCo but have more in common with pseudo-coordinations with *try*. A secondary goal of this chapter will be to show that there is no significant syntactic or semantic distinction between complex and simplex initials. Each of the tests yield the same results, regardless of whether the construction is a complex or a simplex initial.

6.1 Tests for Afrikaans pseudo-coordination with ILVs

In chapter (2), a variety of tests were utilized to distinguish various subtypes of pseudo-coordination in English. The same tests are applied here to ascertain the nature of Afrikaans pseudo-coordination with ILVs.

6.1.1 Violation of the Coordinate Structure Constraint

It is possible to extract arguments, in non-ATB fashion, from one conjunct of an ILV construction. This is illustrated with respect to objects (1). Note that there is no difference between complex initials and simplex initials in this respect.

(1) a. *Wat sit Jan waarskynlik en eet t?*
what sit Jan probably and eat t
'What is Jan probably sitting and eating?'

b. *Wat sit en eet Jan waarskynlik t?*
what sit and eat Jan probably t
'What is Jan probably sitting and eating?'

With respect to extraction of adjuncts, it is possible to extract a variety of adjuncts from both complex initial and simplex initial constructions. However, as shown in chapters (2) and (3), high adjuncts are not necessarily a good diagnostic tool in this regard. For this reason, it is also important to test whether low manner adjuncts can be extracted. It is also possible to construe low manner adjuncts that can only be interpreted as scoping over the embedded, lexical verb.

(2) a. *Hoe loop Jan die rekening en betaal?*
how walk Jan the bill and pay
'How does Jan go and pay the bill?'

i. *Hy betaal met sy kreditkaart*
he pay with his credit card
'He pays it with his credit card'

b. *Hoe loop en betaal Jan die rekening?*
how walk and pay Jan the bill
'How does Jan go and pay the bill?'

i. *Hy betaal met sy kreditkaart*
he pay with his credit card
'He pays it with his credit card'

Example (2) shows a manner adjunct extracted in a SI context. The most plausible answer is when the WH-phrase modifies the embedded verb, namely *betaal*. This would not be a possible reading if these constructions were ordinary coordination.[1] The only plausible answer is expressed in (2ai) where the adjunct is interpreted as scoping over the lexical verb. The question could not be construed as querying the manner of Jan's walking. The same effect occurs in a CI context (2b).

(3) a. *Hoe vinnig sit Jan die boek en lees?*
how quickly sit Jan the book and read
'How quickly is Jan reading the book (while sitting)?'

i. *Hy lees baie vinnig*
he read very quickly
'He's reading very quickly'

b. *Hoe vinnig sit en lees Jan die boek?*
how quickly sit and read Jan the book
'How quickly is Jan reading the book (while sitting)?'

[1] With additional focus, a reading can also be construed where the WH-word modifies the ILV itself. For instance, it is also possible to answer example (2) with the answer *Hy het met sy voete loop betaal* meaning 'He went on foot to pay the bill' (Prof. Hans du Plessis, (p.c.)). This type of reading also shows that these constructions cannot be ordinary coordination since extraction from within the first conjunct would also apparently violate the CSC. What this kind of reading *does* show, however, is that ILV-type constructions are different to English ConCo constructions where such readings are more difficult to obtain. In Afrikaans, these readings show that the ILV is not as bleached as in English ConCo contexts.

i. *Hy lees baie vinnig*
he read very quickly
'He's reading very quickly'

The same effect is illustrated in (3a) where a manner adverb can only be interpreted as modifying the lexical verb. It is not a felicitous answer to interpret the adjunct as scoping over the ILV. Moreover, the effect is identical for CIs (3b).[2,3]

In conclusion, arguments and adjuncts can be extracted from ILV constructions regardless of whether they are complex initials or simplex initials. Thus, neither of these constructions are islands of any kind.

6.1.2 XPs in the verbal string

In chapters (2) and (3) on English, it was shown that ConCo/ReCo constructions do not allow any XP material within the verbal string. The same tests applied to ILV verbal clusters show that a limited range of XP material can occur within the verbal string. Consider example (4).

(4) *Hy* ***sal*** *die heeldag na die wolke lê en kyk*
He will the whole day at the clouds lie and look
'He'll lie looking up a the clouds all day'

Given the underlined verbal string in its *in situ* position, there are, pretheoretically, three positions where an XP might be expected. These are marked by the arrows in (5).

(5) *lê* *en* *kyk*
$\uparrow_A$ $\uparrow_B$ $\uparrow_C$

Position A is essentially outside the verbal string and it is expected that any XP associated with Spec *v*P (or any higher position belonging to the Mittelveld) might occur here. Positions B and C are within the verbal cluster.

Distribution of adverbs

First consider the distribution of adverbs in the verbal string. Example (6a) illustrates that a variety of adverbs can occur in Position A i.e. preceding the entire verbal string. This is completely unexceptional as it is the unmarked position for adverbs in the sentence. The sequence of adverbs are arranged in order from left to right in approximately the same sequence as they would be in the Cinque hierarchy (Cinque 1999),

[2]This is not to deny that the ILVs contribute a lexical flavour that is consistent with literal interpretations of these verbs. However, these questions are typically not construed as querying the manner of sitting, walking etc. At least, my informants, when pressed about whether the question word could modify the posture verb would apparently interpret the question verb as modifying *both* the ILV and the lexical verb. I did not encounter situations where a question was interpreted as solely modifying the ILV.

[3]Example (3) can also be answered using an ILV *hy sal baie vinnig sit en lees* but where the adverb can only plausibly scope over the lexical verb (Prof. Hans du Plessis, (p.c.)).

although I do not assume such a hierarchy as a syntactic primitive (see also Nilsen 2003) but assume an approach like that of Ernst (2002). Note that *sorgvuldig* 'carefully' and *morsig* 'messily' are manner adverbs which can adjoin to either *v*P (PredP in the system of Ernst (2002)) and to VP. Other adverbs like *herhaaldelik* must necessarily take complete events in their scope and must thus be adjoined at least at *v*P level, if not higher.

(6) a. *Wat gaan Jan ✓waarskynlik/ ✓altyd/ ✓herhaaldelik/ ✓vinnig/*
What go Jan probably always repeatedly quickly
✓sorgvuldig/ ✓morsig sit en eet?
carefully messily sit and eat
'What is Jan probably/ always/ repeatedly/ quickly/ carefully/ messily going to be eating?' [Ordinary Adverb positions]

b. **Wat gaan Jan sit waarskynlik/ altyd/ herhaaldelik/ vinnig/*
What go Jan sit probably always repeatedly quickly
sorgvuldig/ morsig en eet
carefully messily and eat
'What is Jan probably/ always/ repeatedly/ quickly/ carefully/ messily going to be eating?' [*Adverbs in A]

c. *Wat gaan Jan sit en *waarskynlik/ *altyd/ *herhaaldelik/*
What go Jan sit and probably always repeatedly
?vinnig/ ✓sorgvuldig/ ✓morsig eet?
quickly carefully messily eat
'What is Jan probably/ always/ repeatedly/ quickly/ carefully/ messily going to be eating?' [Low adverbs in B]

The options for Position B are illustrated by (6b). No adverbs may be adjoined in Position B. This is the same as for English ConCo/ReCo constructions.

The options for Position C are particularly illuminating (6c). In this position, all higher adverbs are excluded. It is especially important that *herhaaldelik* 'repeatedly' cannot occur in Position C because this adverb must always take a complete event in its scope. The fact that this option is ungrammatical shows Position C must lie below *v*P. Crucially, however, manner adverbs like *sorgvuldig* 'carefully' and *morsig* 'messily' (and somewhat less well-formed, *vinnig* 'quickly') can occur in Position C. Since these adverbs may adjoin to either VP or *v*P (PredP), combined with the inability of *herhaaldelik* 'repeatedly' to occur here, it may be deduced that Position C is consistent with VP adjunction.

What this means is that Afrikaans ILV constructions cannot be analyzed on a par with ConCo/ReCo constructions, but must be another type of pseudo-coordination.

Distribution of objects

Consider the distribution of objects in the verbal string. Example (7a) shows that Position A can be filled by an object. This is the unmarked position for objects in

Afrikaans. This is very similar to the position for objects in Dutch and I presume it to be no different: Spec AgrOP. However, in addition to this unmarked position, Afrikaans also allows a subset of objects to occur in a 'low' Position C which I take to be the *in situ* position for objects: Spec VP (7b). Note that particles can also occur in this position. Finally, (7c) shows that objects may not occur in Position B.

(7) a. *Daar sal altyd iemand boeke sit en lees*
there will always somebody books sit and read
'There will always be somebody busy reading books'
[Object in A]

b. *Daar sal altyd iemand sit en* ***boeke*** *lees*
there will always somebody sit and books read
'There will always be somebody busy reading books'
[Object in C]

c. *Daar sal altyd iemand sit **boeke** en lees [Object in B]

Before proceeding, I would like to note that there are interesting constraints on the kinds of objects that can occur in the 'low' position. Generally, objects in this position are bare plurals, mass or generic nouns conforming to the 'one-word' limitation (Donaldson 1993). The constraints on this position are very similar to those governing the occurrence of phrasal material in DLV clusters (Robbers 1997). Nevertheless, it is probably not the case that the object is incorporated in this position since it never is pied-piped to the verb-second position when the lexical verb undergoes verb second. Example (8a) shows a CI with the object left *in situ*. Example (8b) shows that the object may not be pied piped as part of verb second movement. This shows that the object is not incorporated into the lexical verb when it is in the 'low' position.[4]

(8) a. *Waarom sit en lees Jan boeke?*
why sit and read Jan books
'Why is Jan reading books?'

b. *Waarom sit en **boeke** lees Jan?

Distribution of subjects

Example (7a) also shows that when an expletive is in Spec TP, then the subject, in this case an indefinite DP, can remain in Spec *v*P which corresponds to Position A. This is mirrored by (9a) which essentially shows the same thing.[5] It is, however, not possible for the subject to occur in either Position B (9b) or Position C (9c).

(9) a. *?Wat sal daar altyd* ***iemand*** *sit en lees?*
what will there always somebody sit and read
'What will there always be somebody reading?'
[Subject in A]

[4]The same data and argument can be duplicated with separable particles.

[5]The slight ill-formedness of this example is somewhat unexpected and I do not account for it.

b. **Daar sal altyd sit* ***iemand*** *en boeke lees*
there will always sit somebody and books read
'There will always be somebody busy reading books'
[*Subject in B]

c. **Wat sal daar altyd sit en* ***iemand*** *lees?*
what will there always sit and somebody read
'What will there always be somebody reading?'
[*Subject in C]

Distribution of separable particles

Although particles can also distribute in a similar way to objects, there are some important differences in their distribution.

(10) a. *Waarom sal Jan die beeste sit en* ***weg*** *jaag*
Why will Jan the cattle sit and away.PRT chase
'Why will Jan keep chasing away the cattle'

b. *Waarom sit en jaag Jan die beeste* ***weg***
why sit and chase Jan the cattle away.PRT
'Why will Jan keep chasing away the cattle'

c. *Waarom sit en* ≺****weg***≻ *jaag Jan die beeste* ≺***weg***≻
Why sit and chase Jan the cattle away.PRT
'Why does Jan keep chasing away the cows'

The first example (10a) shows the basic position of the particle within the verbal string. In this example, the particle occurs in Position C between the coordinator and the lexical verb. Examples (10b,c) show that when a CI is formed, then the particle cannot be pied piped into the second position but must be stranded sentence finally. These data are parallel to those with objects (8a,b). Where the distribution of particles differs to that of objects concerns Position A. Whereas objects can occur in Positions A (Spec AgrO) and C (Spec VP) but not Position B, separable particles cannot occur in Position A or Position B but can only occur in Position C.

(11) a. *Waarom sal Jan die beeste* ≺****weg***≻ *sit* ≺****weg***≻ *en*
Why will Jan the cattle sit and
≺***weg***≻ *jaag*
away.PRT chase
'Why will Jan keep chasing away the cattle'

b. *Waarom sal Jan die beeste* ≺***weg***≻ *laat* ≺***weg***≻ *gaan?*
why will Jan the cattle let away.PRT go
'Why will Jan let the cattle go away?'

In the ILV construction (11a), the separable particle can occur in its base position, Position C, but cannot occur in Position B or Position A. This is surprising, because in DLV constructions, the particle is generally able to scramble to the left of the DLV quite freely (11b). In ILV constructions, this distribution is identical to that of objects and low adverbs. However, where particles differ from objects and adverbs is that they cannot scramble across the ILV to Position A.[6,7]

Summary

In this section, evidence based on the distribution of adverbs, objects, subjects and separable particles shows that Afrikaans ILV constructions are not akin to English ConCo/ReCo constructions. The findings of this section are summarized in table 6.1.

Table 6.1: Distributions of subject, objects, particles and adverbs

Position	A	B	C
Subjects	✓	No	No
Higher Adverbs	✓	No	No
Low Adverbs	✓	No	✓
Bare Objects	✓	No	✓
Separable Particles	No	No	✓

Position A corresponds to positions in the functional structure. Subjects, objects and adverbs can occur here, but particles may not. Position B does not allow any XP material within it at all. Thus the ILV and the coordinator are always strictly adjacent and act, to all intents and purposes, like a constituent in this respect. Position C is illustrative. On the one hand, the fact that any XP material at all can occur here shows that Afrikaans ILV constructions do not pattern like English ConCo/ReCo. However, XPs that can occur here are limited to some types of objects, verbal particles and low, manner adjuncts. This position corresponds to VP. The implication of this is that the ILV and coordinator are located above the VP layer, but still lie beneath AgrO.

6.1.3 Restrictions on matrix subjects

ILVs place restrictions on the types of subjects they can cooccur with. Weather verbs such as *reën* ‘rain’ select for weather subjects (12a) and verbs like *sit* ‘sit’, obviously,

[6]In this, ILV constructions contrast with DLV constructions which generally do allow a separable particle to scramble across the DLV (see also Bennis 1992, Evers 2001).

[7]These data are essential in showing that a remnant movement-analysis is not available. In a remnant-movement analysis, the entire *v*P, having first been evacuated of all non-verbal material, would be moved to a specifier of TP and thence to CP to simulate verb-second (Müller 2002; 2004). Such an analysis would mean that remnant movement could not pied-pipe non-verbal material, which contradicts known properties of remnant movement in West-Germanic in general (Den Besten and Webelhuth 1990) and Afrikaans in particular (see Biberauer 2004). However, this example shows that particles cannot be evacuated from the *v*P shell in the first place. This leads to the ‘Particle Paradox’ where there is no constituent that includes the particle for the purposes of the *in situ* verbal string and yet still excludes the particle for the purposes of verb-second movement (De Vos 2004b).

do not (12b). Likewise, it is ungrammatical to use a weather-verb subject in an ILV construction, whether that is a simplex initial (12c) or (12d). These examples are only grammatical on a reading where the weather is construed as an animate object i.e. it is only grammatical when the subject *dit* 'it' is construed, not as a weather-verb selected by *reën* 'rain', but as an animate subject selected by *sit* 'sit'. This is consistent with the notion that it is the ILV which is responsible for selecting the subject and not the embedded (weather) predicate. Thus Afrikaans ILV constructions differ in this respect to English ConCo constructions.

(12) a. *Dit reën*
it rain
'It's raining'

b. **Dit sit*
it sit
'It's sitting (in the weather-subject sense)'

c. **Dit sit vandag alweer en reën*
it sit today again and rain
'Its raining again today'

d. **Dit sit en reën alweer vandag*
it sit and rain again today
'Its raining again today'

In the literature (Roberge 1994), it has been reported that the ILV *staan* 'stand' is the most highly grammaticalized of the ILV class and frequently can be used in a purely aspectual sense. For this reason, I subjected this verb to the weather-verb test.

(13) a. *Dit reën*
it rain
'It's raining'

b. **Dit staan*
it stand
'It's standing (in the weather-subject sense)'

c. *%Dit staan vandag alweer en reën*
it stand today again and rain
'Its raining again today'

d. *%Dit staan en reën alweer vandag*
it stand and rain again today
'Its raining again today'

The results were surprising. One informant rejected examples (13c) and (13d) outright and another informant gave these examples a single question mark. A third informant claimed 'It's difficult; it's not ungrammatical, but it's also not totally grammati-

cal'.[8] It seems fair to say that although *staan* may be more grammaticalized than other ILVs, it still tends to select an animate subject. Nevertheless, this should be treated with some caution since when *staan* is placed in the scope of another verb, such as a past auxiliary, a weather reading becomes more acceptable (Prof. Hans du Plessis, (p.c.)).[9]

(14) *Dit het alweer gaan staan en reën*
it AUX.have again go stand and rain
'It went and rained again'

(15) *Dit het wragtig toe weer staan en reën!*
it AUX.have EMPH then again stand and rain
'It really began to rain down heavily again!'

The same results are mirrored by a test for animacy. A verb like *groei* 'grow' can select an inanimate subject such as *boom* 'tree' (16a) whereas a verb like *loop* 'walk/go' cannot (16b). In a pseudo-coordinative context where *loop* 'walk/go' is an ILV, ungrammaticality results in both simplex initial and complex initial contexts ((16c) and (16d)). This is because it is the ILV which selects the subject and not the lexical verb. This is evidence that ILV constructions cannot be analysed as ConCo constructions are in English.

(16) a. *Die boom groei mos*
the tree grow EMPH
'The tree is (actually) growing!'

b. **Die boom loop*
the tree go
'The tree goes'

c. **Die boom loop mos en groei*
the tree walk EMPH and grow
'The tree is (actually) growing!'

d. **Die boom loop en groei mos*
the tree walk and grow EMPH
'The tree is (actually) growing!'

Supporting evidence comes from the fact that inanimate subjects can occur precisely in contexts where the ILV is compatible with them. Thus while *loop* 'walk/go' is incompatible with a tree growing, *staan* 'stand' is.[10]

[8] It was suggested by Prof. Hans du Plessis (p.c.) that in these examples and also in (17), the ILVs *staan* 'stand' and *loop* 'walk' could take on a counter-expectational meaning i.e. something akin to *wragtig*! 'Can you believe it!'.

[9] It is also the case that in Orange River Afrikaans, *staan* can occur with a weather subject (Prof. Hans du Plessis, (p.c.)), although the coordinator is almost always missing with the result that *staan* becomes ambiguous between an ILV and a DLV. See chapter (7.A) for a discussion.

[10] An informant seemed to slightly prefer (17c) over (17d), although neither is ungrammatical. Informants also preferred the ILV *staan* 'stand' as opposed to *sit* 'sit' in this context. Prof. Hans du Plessis (p.c.) suggests that in (17), the ILV has a counter-expectational function.

(17) a. *Die boom groei mos*
the tree grow EMPH
'The tree is (actually) growing!'

b. *ie boom staan op die plaas*
the tree stand on the farm
'The tree is on the farm'

c. *Die boom staan mos en groei*
the tree stand EMPH and grow
'The tree is (actually) growing!'

d. *Die boom staan en groei mos*
the tree stand and grow EMPH
'The tree is (actually) growing!'

What these data show is that the ILV selects the subject of the clause and it is not the lexical verb which primarily selects the subject.[11] This is very similar to the behaviour of SceCo predicates in English.

6.1.4 Semantic bleaching

The previous section demonstrated that ILVs do not combine with weather verbs (12) or subjects ((16) and (17)) which are inappropriate with their semantics. There is also no real difference between simplex initials and complex initials.[12] This leads to the conclusion that there is more lexical content to ILVs than with ConCo predicates in English. Thus, ILVs are not completely bleached of their lexical meaning as ConCo predicates can be. This is consistent with the suggestion by Donaldson (1993) that ILVs must occur with lexical verbs which can conceivably be carried out in the position denoted by the posture verb. However, this is not to say that ILVs must always be interpreted as denoting physical body postures; this depends entirely on the nature of the subject. Posture verbs are used quite generally in languages like Afrikaans, Dutch and German as verbs of location. However, exactly which posture verb is used, depends on a variety of complex interactions between the relative verticality of an entity, whether it is construed as having a base, its animacy etc. (Lemmens 2002). For instance, a verb like *staan* 'stand' may be used as a lexical verb without implying body posture if the inanimate subject is consistent with that reading.

(18) *Die kers staan op die tafel*
the candle stand on the table

[11] It should be noted that in (16c) and (17), the ILV has undergone verb second movement (underlined) across an adverbial.

[12] It sometimes seems to be the case that when a verb like *loop* is used in a DLV function (i.e. without an overt coordinator), then it may take on more bleached interpretations than the equivalent ILV. In the literature, the presence/absence of the coordinator has been treated as 'optional' with corresponding confusion between the DLV and ILV uses of the verb. It will be shown in chapter (7) that the presence/absence of the coordinator is *not* arbitrary and does indeed have syntactic reflexes. Consequently, the DLV and ILV uses of verbs should be treated as distinct.

'The candle is on the table'

However, when a human subject is used, then the posture reading is usually triggered.

(19) *Die man staan op die tafel*
the man stand on the table
'The man is standing on the table

So posture verbs can cooccur with a variety of subjects and meanings in Afrikaans. These are general properties of posture verbs, and these properties are retained in the ILV usage of these verbs. In other words, the ILV retains the same semantics that it would have as a lexical verb; non-posture-related interpretations are licensed in the same contexts as they would be for the equivalent lexical verb.

6.1.5 VP-deletion

Tests based on VP-ellipsis appear to be of limited value in determining the structure of the ILV verbal string because of a general difficulty in deleting VPs in Afrikaans.

(20) a. *Jan sal 'n bier drink en Piet sal ook ~~'n bier drink~~*
Jan will a beer drink and Piet will also
'Jan will drink a beer and Piet will too'

b. **Jan sal 'n bier drink en Piet sal 'n bier ook ~~drink~~*
Jan will a beer drink and Piet will a beer also
'Jan will drink a beer and Piet will too'

Example (20a) demonstrates an ellipsis construction in Afrikaans in which the lexical verb and the object have been deleted. The fact that the object is elided means that it is not *v*P deletion so much as AgrOP deletion that is occurring here. Ungrammaticality results if only the lexical verb (and hence *v*P) is elided (20). Thus, Afrikaans does not seem to exhibit *v*P deletion and consequently its application to pseudo-coordinative contexts is of somewhat limited value. For instance, the unmarked position of objects is to the left of the ILV in, what I assume to be, AgrOP. Thus, deletion of AgrOP will necessarily elide the ILV verbal string and it is predicted that partial deletion of the verbal string will be ungrammatical. This is indeed true.

(21) a. *Jan sal 'n bier sit en drink en Piet sal ook*
Jan will a beer sit and drink and Piet will also
~~'n bier sit en drink~~

'Jan will drink a beer and Piet will too'

b. **Jan sal bier sit en drink en Piet sal ook 'n bier sit*
Jan will beer sit and drink and Piet will also a beer sit
~~en drink~~

'Jan will drink a beer and Piet will too'

Elision of AgrOP thus ensures that the entire ILV verbal string is deleted; partial deletion is not licensed. Thus, the only information which we can garner about ILV verbal strings in this way is that they are located below AgrOP.[13]

6.1.6 Coordinator substitution

A standard test for pseudo-coordination is whether the coordinator can be substituted with another. This yields strong ungrammaticality indicating that ILV constructions are indeed a type of pseudo-coordination.

(22) *Wat sit Jan en/*of lees?*
What sit Jan and/or read
'What is John sitting and/*or reading?'

6.1.7 Distributivity

Pseudo-coordination, insofar as it deals with only a single, complex event, does not tolerate markers of distributivity which, by definition, require two events. Thus a distributive marker is grammatical when combined with OCo (23a), which can also be seen to be OCo by the fact that the participle prefix *ge-* occurs twice. Use of a distributor is strongly ungrammatical in ILV contexts (23b,c). In these examples, there is no reading corresponding to that of (23a). These data demonstrate that ILV constructions are indeed pseudo-coordinative. The effects are identical for both SIs and CIs.

(23) a. *Jan het gesit en gedans ook*
Jan AUX.have PST-sit and PST-dans also
'Jan both sat and danced'

b. **Wat sit Jan en lees ook?*
what sit Jan and read also
'What is John (*both) sitting and reading?'

c. **Wat sit en lees Jan ook?*
what sit and read Jan also
'What is John (*both) sitting and reading?'

The same effect can be illustrated with past-participle prefixes. As shown in (23a), these prefixes act in a distributive way. Afrikaans exhibits some variability with IPP effects insofar as IPP is the less-preferred strategy for ILV constructions.[14] When the participle-marker is present, it is always on the ILV (24a), never on both verbs (24b).[15]

[13] This test is also irrelevant to CIs because, by definition, it only applies to verbs *in situ*; CIs are, by definition, not *in situ*.

[14] See De Vos (2003b) for an overview of IPP patterns in Afrikaans and a discussion of the temporal system as it relates to the participle prefix. See De Vos (2003a) for a discussion of how it relates to other verbal prefixes.

[15] Obviously this test does not apply to CIs since there is always an auxiliary in clause-second position.

(24) a. *Wat het Jan gesit en lees?*
what AUX.have Jan PST-sit and read
'What did John sit and read?'

b. **Wat het Jan gesit en gelees?*
what AUX.have Jan PST-sit and PST-read
'What did John sit and read?'

On the other hand, although explicit distributive markers cannot occur in this construction, it is quite possible to interpret ILV constructions as involving activities occurring at the same time: i.e. John is sitting and he is singing at the same time.

(25) *Wat sit Jan en sing?*
what sit Jan and sing
'What is John busy singing (while sitting)?'

Thus example (25) shows that it is possible to interpret Jan as sitting while he is singing. This follows from the fact that the ILV retains some lexical content. What these data show is that ILV constructions are complex events which contain, at most, one *v*P.

6.1.8 Quantifier raising

Afrikaans allows quantifier raising, much as English does. Thus (26) is ambiguous between a wide and narrow scope reading.

(26) *'n Polisieman soen elke weduwee*
a policeman kiss every widow
'A policeman kisses every widow' [NS]
'For every widow there is some policeman or other who kisses her [WS]

ILV constructions are no different in this regard. Thus example (27a) is a simplex initial and is ambiguous as is (27b), a complex initial.

(27) a. *'n Polisieman sit elke weduwee en soen*
a policeman sit every widow and kiss
'A policeman kisses every widow (while sitting)' [NS]
'For every widow, there is some policeman or other who kisses her' [WS]

b. *'n Polisieman sit en soen elke weduwee*
a policeman sit and kiss every widow
'A policeman kisses every widow (while sitting)' [NS]
'For every widow, there is some policeman or other who kisses her' [WS]

Thus, unsurprisingly, the quantifier raising facts mirror the extraction ones. The pseudo-coordinative marker does not prevent the quantifier from raising, giving rise to wide-scope readings. This is evidence that ILV constructions are indeed pseudo-coordinative. In fact, they pattern after ConCo with respect to quantifier raising. In addition, these examples show that there is no difference between simplex initial and complex initial structures in this respect.

6.1.9 Restrictions on verbs

It is self-evident that ILV constructions are restricted with respect to what pseudo-coordinative predicates are involved. ILVs can only be *sit* 'sit', *lê* 'lie', *loop* 'walk/go' and *staan* 'stand'. See section (5.2.2) for an overview of the verbs in this class. In this respect, ILV constructions pattern with English pseudo-coordination more generally, which also restricts pseudo-coordination to a relatively small number of verbs.[16]

6.1.10 Semantic subordination

It is a characteristic of pseudo-coordination in general that, one conjunct being subordinate to the other, it is not possible to reverse the order of conjuncts. In this respect, Afrikaans ILV constructions are no different. Example (28) illustrates that conjunct orders may be changed in OCo contexts.

(28) a. *Jan sit en hy lees*
Jan sit and he read
'Jan sits and he reads'

b. *Jan lees en hy sit*
Jan read and he sit
'Jan reads and he sits'

However, the order of conjuncts may not be reversed in ILV constructions. (29a) shows a grammatical ILV construction with a simplex initial. (29b) illustrates its counterpart with reversed conjunct order.

(29) a. *Wat <u>sit</u> Jan en lees*
what sit Jan and read
'What is Jan reading?'

b. **Wat <u>lees</u> Jan en sit*
What read Jan and sit

The same point can be made for complex initial constructions. This illustrates that simplex initials and complex initials do not differ in this regard.

[16] SceCo is the exception here, apparently utilizing a much larger class of verbs than do ConCo and pseudo-coordination with *try*.

(30) a. *Wat sit en lees Jan?*
what sit and read Jan
'What is Jan reading?'

b. **Wat lees en sit Jan?*
what read and sit Jan

6.1.11 The 'sameness' condition

In chapters (2) and (3) it was pointed out that in English ConCo and SceCo contexts the morphology condition (99) on page 46 holds. This is repeated here as (31).

(31) **Morphological 'Sameness' Condition (MSC):** Both verbs of a pseudo-coordinative construction must have the same type of morphological marking i.e. both verbs must be either bare or morphologically marked with present, past, participle or similar.

The MSC appears to be trivially true for Afrikaans because there are no morphological reflexes of grammatical features on Afrikaans verbs. However, when the participle prefix *ge-* is used, it can optionally appear either on the ILV or not at all. This can be interpreted as a prefix *ge-* taking the entire pseudo-coordinative complex as its complement: [*ge-* [*lê en slaap*]]. The following examples are all based on Donaldson (1993:225-226).

(32) *Hy het ≺ge-≻lê en ≺*ge-≻ slaap.*
he have PST-lie and sleep.
'He lay sleeping'

(33) *Hy het ≺ge-≻staan en ≺*ge-≻ praat.*
he have PST-stand and talk.
'He stood talking'

(34) *Hy het ≺ge-≻sit en ≺*ge-≻ skryf*
He have PST-sit and write
'He sat writing'

(35) *Hy het ≺ge-≻loop en ≺*ge-≻ fluit*
He have PST-walk and whistle
'He walked whistling'

While these data are interesting, it is not clear that they count as true exceptions to the MSC. In section (5.1.2) the participle prefix was discussed. It appears optionally in ILV contexts (Donaldson 1993:225–226); it does not appear at all on verbs beginning with inseparable prefixes in Standard Afrikaans and is absent entirely in IPP contexts. Furthermore, in some varieties of Afrikaans, it appears to change location, appearing either on the lexical verb or on a linking verb (De Vos 2003b) thus acting more like an

independent functional head (cf. the approach of Julien (2000) to prefixes.). Thus, the prefix does not behave as a typical piece of inflectional morphology would. For these reasons, I do not think that Afrikaans is a counter example to the MSC. At worst, Afrikaans is neutral with respect to the MSC and at best it respects it vacuously.

6.1.12 Phonological reduction

As for English pseudo-coordinative constructions, the coordinator in Afrikaans ILV constructions cannot be stressed.

(36) *Wat sit jy en/*EN eet*
what sit you and eat
'What are you eating?'

(37) *Wat sit en/*EN eet jy?*
what sit and eat you?
'What are you eating?'

This shows that ILV constructions are not instances of ordinary coordination and also implies that the coordinator is a functional element of some kind, on the assumption that functional elements are more resistant to stress than lexical elements.

It is still possible to focus the ILV in these structures, although the context is a little strained.[17]

(38) a. *Waarom SIT jy nie en eet nie?*
what sit you neg NEG and eat neg NEG
'What aren't you SITTING and eating?'

b. *Wat SIT en eet jy nie?*
what sit and eat you neg?
'What aren't you SITTING and eating?'

This pattern of stress where the pseudo-coordinative verb is able to bear stress is very different to that of ConCo/ReCo. However, it is identical to English pseudo-coordination with *try*.

(39) Why don't you at least TRY and eat?

With respect to phonological reduction, as in English pseudo-coordinative contexts, the coordinator in Afrikaans can be reduced to a syllabic [n̩] in both SI and CI contexts.[18]

[17] Use of an auxiliary or modal improves the context, but makes it impossible to test CIs.

[18] There are also many instances where the coordinator is completely absent i.e. posture verbs are used as DLVs. While this may be relevant to the discussion of phonological reduction, the presence/absence of an overt coordinator does seem to have syntactic import. Thus, I prefer to keep the DLV and ILV usages of posture verbs separate for the time being.

(40) a. *Wat* *sit* *Jan* *[en]/[n̩]* *lees?*
what sit Jan and read
'What is Jan reading?'

b. *Wat* *sit* *[en]/[n̩]* *lees* *Jan?*
what sit and read Jan
'What is Jan reading?'

6.1.13 Summary and findings

In the previous sections, tests originally developed to distinguish English pseudo-coordinative types have been applied to Afrikaans ILV constructions with a mind to determining their place in the pseudo-coordinative typology developed in part one as well as their underlying structure. The results of these tests are tabulated in 6.2.

Table 6.2: Comparisons of ILV constructions

Property		ILV-SI	ILV-CI
Syntactic tests			
Non-ATB argument extraction	(6.1.1)	✓	✓
Non-ATB adjunct extraction	(6.1.1)	✓	✓
XPs in Position B	(6.1.2)	No	No
XPs in Position C	(6.1.2)	✓	No
Overt subject in verbal string	(6.1.2)	No	No
Partial VP-Ellipsis	(6.1.5)	N.A.	N.A.
Coordinator Substitution	(6.1.6)	No	No
Semantic tests			
Subject restricted by Verb A	(6.1.3)	✓	✓
Semantic bleaching of Verb A	(6.1.4)	No	No
Semantic subordination	(6.1.10)	✓	✓
Both modification	(6.1.7)	No	No
Wide-scope reading of Quantifier	(6.1.8)	✓	✓
Restrictions on possible Verb A	(6.1.9)	✓	✓
Morphological and phonological tests			
MSC	(6.1.11)	N.A.	N.A.
Focus AND	(6.1.12)	No	No
Focus Verb A	(6.1.12)	✓	✓

This table shows clearly that there is no difference in either the syntactic or semantic behaviour of complex versus simplex initials. The only exceptions to this are that a CI is a strict, head-like constituent and is absolutely impermeable to any non-verbal material, whereas when the verbal string is *in situ* it is clearly not a constituent. Thus the only differences between SIs and CIs relate to their constituency. This leads to the inescapable conclusion that both SIs and CIs are derived from the same base structure.

Table 6.3 compares Afrikaans ILV constructions with pseudo-coordinative types in English.

Table 6.3: Pseudo-coordinative properties in English and Afrikaans

Property		OCo	SceCo	ConCo	*try*	ILV
Syntactic tests						
Non-ATB argument extraction	(6.1.1)	No	✓	✓	✓	✓
Non-ATB adjunct extraction	(6.1.1)	No	No	✓	✓	✓
XPs in Position B	(6.1.2)	✓	Some	No	No	No
XPs in Position C	(6.1.2)	✓	No	No	Some	Some[i]
Overt subject in verbal string	(6.1.2)	✓	–	–	No	No
Partial VP-ellipsis	(6.1.5)		✓	✓	No	N.A.
Coordinator substitution	(6.1.6)	✓	No	No	No	No
Semantic tests						
Subject restricted by Verb A	(6.1.3)	✓	✓	No	✓	✓
Semantic bleaching of Verb A	(6.1.4)	No	No	✓	No	No
Semantic subordination	(6.1.10)	No	✓	✓	✓	✓
Distributivity	(6.1.7)	✓	No	No	No	No
Wide-scope reading of quantifier	(6.1.8)	No	No	✓	✓	✓
Restrictions on possible Verb A	(6.1.9)	No	✓	✓	✓	✓
Morphological and phonological tests						
MSC	(6.1.11)	No	✓	✓	No Morph.	N.A.
Focus AND	(6.1.12)	✓	No	No	No	No
Focus Verb A	(6.1.12)	✓	No (?)	No	✓	✓

[i]Low adverbs and some types of objects can occur in Position C when the verbal string is in its *in situ* position. When the verbal string is in verb-second position, nothing can occur within it.

It should be noted that ILVs are definitely pseudo-coordinative as shown by the fact that extraction can occur from one conjunct, that a subject within the verbal string is not licensed, the coordinator cannot be substituted with another, the order of conjuncts cannot be reversed, distributive readings are disallowed and the MSC appears to be respected vacuously.

Afrikaans ILVs differ from SceCo constructions in that they allow extraction of adjuncts, license limited types of objects within the verbal string and are compatible with wide-scope readings for quantifiers.

Afrikaans ILVs differ from ConCo constructions because they do not exhibit semantic bleaching of the pseudo-coordinative predicate and the ILV selects the subject. As has been discussed in chapter (7) it the structure of ConCo predicates (that is, a complex predicate head) forces semantic bleaching of the pseudo-coordinative predicate and ensures that the lexical verb selects the subject. These facts alone are sufficient to demonstrate that ILVs are not ConCo constructions. Nevertheless, sight should not be lost of the fact that ILVs are also pseudo-coordinative and thus have many characteristics in common with ConCo.

In fact, Afrikaans ILVs appear to behave similarly to English constructions using pseudo-coordinative *try*. In addition to general pseudo-coordinative properties, they both lack some characteristics of constituent-hood. Thus, some adverbs can marginally occur between *try* and the lexical verb, and in Afrikaans *in situ* strings, some objects can occur in this position. Moreover, *try* constructions can be partially elided which shows that they are not a constituent. This test is inapplicable to Afrikaans which lacks *v*P deletion, but the argumentation is the same: the verbal strings are not constituents in either case.[19] In both English and Afrikaans constructions, the pseudo-coordinative verb is not semantically bleached but retains its lexical meaning and consequently places selectional restrictions on the subject. This requirement for agentivity is in accordance with the lexical selectional requirements for these verbs. It is also the case that, in both these constructions, focus can be placed on the pseudo-coordinative verb. This is quite different to ConCo constructions in English where such focus is not felicitous. Finally, in one particular respect, namely the MSC, the similarity between English and Afrikaans constructions is extremely interesting. There is a remarkable correspondence between the ban on all inflection in pseudo-coordinative *try* constructions and the fact that Afrikaans has no verbal inflection.

It comes as a welcome result that pseudo-coordination with *try*, which until now has been an exceptional fact about English *try*, can be seen to be a productive type of pseudo-coordination. I will call this type of pseudo-coordination Non-contiguous pseudo-coordination to express the fact that, in contrast to ConCo, the verbal string is not contiguous, at least in the *in situ* position. Thus, the Afrikaans data support the typology of pseudo-coordinative constructions developed in chapters (2) and (3). The current version of the typology is illustrated in figure 6.1 on the following page.

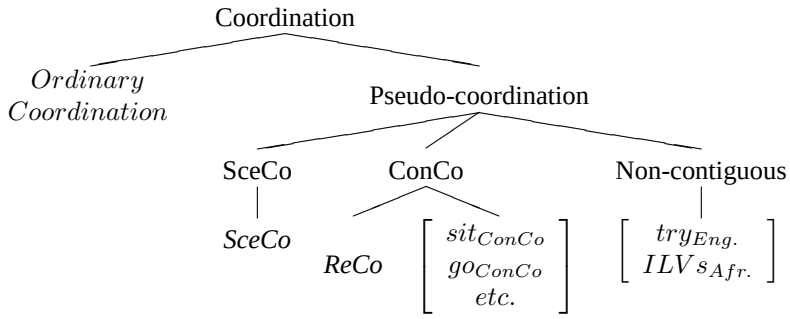
In addition, the properties of ILV and *try* constructions can be used to illuminate their respective properties. The following chapter will outline an analysis of pseudo-coordination with Afrikaans ILVs and DLVs.

6.2 Conclusion

This chapter had two aims. The first was to show that there was no difference between simplex initials and complex initials with respect to their semantic and syntactic properties. The fact that these two phenomena exhibit identical properties can only mean

[19] Note the that the same point is still valid, even if one adopts the view that the object, supposedly in Spec AgrOP, is actually in a specifier of *v*P. In either case, deletion of the projection housing the object (whether AgrOP or *v*P) will delete the entire pseudo-coordinative string.

Figure 6.1: Pseudo-coordination in English and Afrikaans



that they are derived from the same base. The fact makes their explanation particularly difficult given the current syntactic toolbox.

The second aim of this chapter was to explore the nature of ILV constructions and to determine where they fitted into the typology developed in previous chapters. It has been demonstrated that ILV constructions are indeed pseudo-coordinative. The tests developed in previous chapters also leave no doubt that ILV constructions pattern similarly to English pseudo-coordination with *try*. This supports the earlier claim that pseudo-coordinative *try* is a solitary exemplar of a different type of pseudo-coordination. This finding also means that an analysis of ILVs and pseudo-coordinative *try* will have to be sought which is both different to the analysis of ConCo and yet which retains the similarities with ConCo. This is the topic of the following chapter.

Chapter 7

Quirky verb movement and subatomic structure

In chapter (6), I outlined the properties of Afrikaans pseudo-coordination with ILVs. These constructions raise some interesting problems for syntactic theory. They force a reevaluation of how verb second might operate, place optionality on the agenda and raise the spectre of counter-cyclic operations within the grammar.

7.1 The nature of the problem

As discussed in chapters (5) and (6), Afrikaans ILV constructions occur when a closed class of posture verbs (i.e. *sit*, *staan*, *loop* and *lê*) are followed by a pseudo-coordinative particle and a lexical verb.

(1) a. *Hy* ***sal*** *die heeldag na die wolke lê en kyk*
He will the whole day at the clouds lie and look
'He'll lie looking up a the clouds all day'

b. *Hy* ***lê*** *die heeldag na die wolke ~~lê~~ en kyk*
he lie the whole day at the clouds and look
'He lies looking at the clouds the entire day'

c. *Hy* ***lê en kyk*** *die heeldag na die wolke ~~lê en kyk~~*
he lie and look the whole day at the clouds
'He lies looking at the clouds the entire day' (Robbers 1997:65)

The first example (1a) shows the *in situ* position of the pseudo-coordinative verbal string. I assume that Afrikaans, like Dutch, does not have short V-*v* movement (Barbiers 2000) and that the verbs constituting the verbal string in (6a) are in their base positions. The second example (1b) shows that ILV constructions interact with verb-second in the usual way: in the absence of a higher verb, the ILV itself undergoes

verb second. The third example (1c) is curious and unprecedented in the Germanic verb-second languages: what looks like a complex, coordinated predicate has moved to the second position.[1] As shown in chapter (6), there is no distinction between a CI and an SI as regards their behaviour in a number of syntactic and semantic tests. I will call this the CI/SI alternation. There are a number of problems posed by the CI/SI alternation with pseudo-coordinative posture verbs in Afrikaans. Questions are raised concerning the status and category of the pseudo-coordinative particle in Afrikaans as well as the structure attributed to ILV constructions and how ILV constructions relate to the ConCo/ReCo types of complex predicates which have already been motivated in chapters (2) through (4).

7.1.1 The nature and status of the pseudo-coordinative particle

The Afrikaans ILV construction contrasts with its Dutch counterpart in that the Afrikaans construction uses a coordinative marker whereas the Dutch construction uses a subordinative construction.[2]

(2) a. *Jan sit die boek en lees*
Jan sit the book and read
'Jan was reading the book' [AFR]

b. *Jan zat het boek te lezen*
Jan sit.3SG the book to read.INF
'Jan was reading the book' [DUT]

There is absolutely no reason to doubt that the Dutch construction is indeed a run-of-the-mill infinitival construction. However, the Afrikaans posture construction does not behave as its Dutch counterpart does as is evident from the discussion in chapter (6). There is thus, no real reason to assume that the Afrikaans construction has a structure comparable to a Dutch infinitival sentence.

One of the themes unifying this dissertation has been the assumption that coordination is always coordinative despite appearances. The discussion of English pseudo-coordination has demonstrated that this assumption yields interesting results. Thus, it is taken as axiomatic that the coordinative marker in Afrikaans ILV pseudo-coordinations is indeed coordination.

a. AND is a two-place operator,
b. where AND and its arguments are in a specifier-complement relationship of the following kind: $[_{\alpha}$ V [AND [V]]] (where α is an XP for coordination of XPs

[1] This construction (a CI) is not unique to ILVs but can also occur with a subset of Afrikaans verbs that also undergo 'verb raising' (Evers 1976), namely DLVs. In addition, note that the order of verbs in final position is the same as the order of verbs in the verb-second position, namely 1-2. Assuming the Mirror Principle (Baker 1985), this appears to rule out a head-movement analysis where the lexical verb head-moves to T/C via cyclic left-adjunction to higher heads. Nevertheless, I will argue for a head-movement analysis that retains Baker's insights.

[2] Middle Dutch originally used a construction similar to pseudo-coordination. However, this was supplanted by the infinitival posture construction during the sixteenth century (Kuteva 1999).

(Dougherty 1970, Progovac 1998a;b) and where α is a head when heads or features of heads are coordinated (chapters (3) and (4)).

c. Coordination is subject to the Law of Coordination of Likes (Williams (1978) and chapter (4)) and
d. to the Coordinate Structure Constraint (Ross (1967) and chapter (4).

The advantage of a system based on this axiom is obvious insofar as it leads to a substantial reduction in the complexity in the lexical representation of coordination. It also offers the hope of a solution that allows coordination to always be compositional.[3]

7.1.2 Placing ILVs in the ReCo/ConCo context

The second set of problems raised by Afrikaans ILV constructions relates to phrase structure. Essentially, all the evidence shows that when a CI is in second position, it is a complex head. The existence of complex, coordinated heads is discussed in previous chapters on ConCo/ReCo. Moreover, complex ReCo heads can also undergo verb second in Dutch, so the Afrikaans CI constructions are not exceptional in this regard.

(3) a. *Jan leest en leest ieder dag*
Jan read.3SG and read.3SG every day
'Jan reads and reads every day' [DUT]

b. *Jan lees en lees elke dag*
Jan read and read every day
'Jan reads and reads every day' [AFR]

Before continuing, it is worthwhile to note that in Dutch and Afrikaans, the complex-head status of ReCo predicates is corroborated by the fact that they occur in the second position. This position is reserved exclusively for heads. Furthermore, ReCo predicates display a matrix-embedded positional asymmetry with respect to their position in the clause. In short, they have the same distribution as verbal heads.

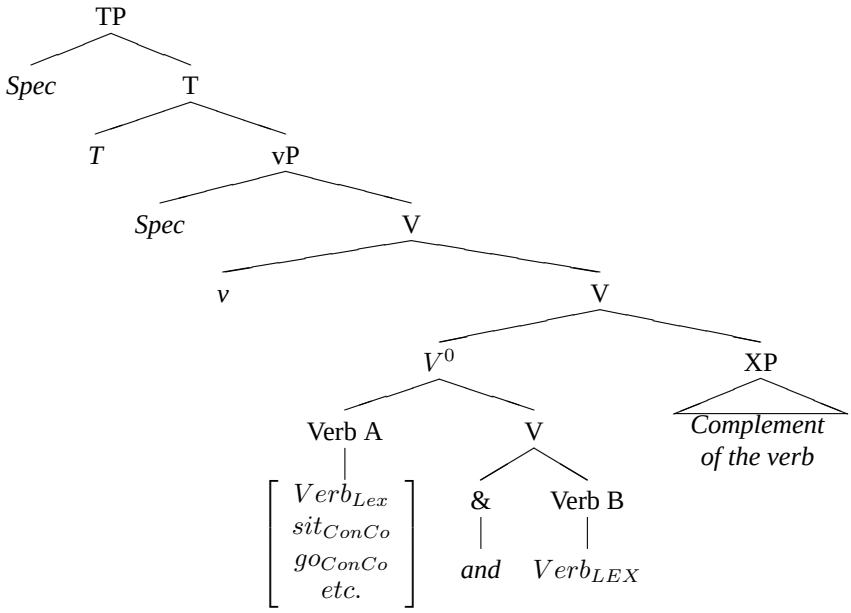
(4) a. *Waarom <u>lees</u> <u>en</u> <u>lees</u> Jan altyd?*
why read and read Jan always
'Why does Jan always read and read?'

b. *...dat Jan altyd lees en lees*
...that Jan always read and read
'...that Jan always reads and reads'

The proposed structure for English ConCo/ReCo constructions is illustrated here and I assume it can be generalized to Afrikaans ReCo constructions too.

[3]The assumption that pseudo-coordination is always real coordination precludes an analysis where the ILV, coordinator and lexical verb all head their own projections in a subordinative structure: $[_{vP}$ ILV $[_{enP}$ en $[_{VP}$ V]]]. This structure would simply not satisfy the structural requirements that coordination have two arguments.

(5)



Afrikaans has ReCo constructions that behave very similarly to their Dutch counterparts. Thus structure (5) is sufficient for examples like those in (3). However, the evidence presented in chapter (6) showed that ConCo/ReCo and ILV constructions are quite clearly different. Another argument that shows that a ConCo/ReCo structure is inappropriate for Afrikaans ILV constructions is given here. Whereas in ILV constructions, the first coordinated verb can undergo verb-second in isolation (7a), this is impossible in ReCo contexts (7b) since it would seemingly involve extraction from within a coordination structure.

(6) a. *Waarom sing en sing Jan die hele dag?*
why sing and sing Jan the whole day?
'Why does Jan sing and sing all day?'

b. *Waarom sit en sing Jan die hele dag?*
why sit and sing Jan the whole day
'Why does Jan sing all day?'

(7) a. *Waarom sit Jan die hele dag ~~sit~~ en sing?*
why sit Jan the whole day and sing
'Why does Jan sing all day?'

b. **Waarom sing Jan die hele dag ~~sing~~ en sing ?*
why sing Jan the whole day and sing
'Why does Jan sing and sing all day?'

This contrast clearly means that ConCo/ReCo and ILV constructions cannot be analysed in the same way. At an intuitive level, it would seem that ConCo/ReCo constructions differ from ILV constructions insofar as the former modify *Aktionsart* whereas ILV constructions modify aspect. This would mean that ConCo/ReCo constructions are creatures of the 'deep' VP level whereas ILV constructions are part of the menagerie of more 'functional' projections. This intuition will be made more explicit during this chapter.

7.2 A proposed structure for ILV constructions

In this section, I will argue for a particular structure underlying Afrikaans ILV constructions. I assume that verbs are lexically specified with the following types of categories.

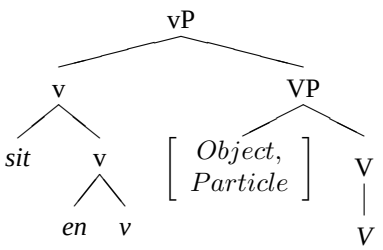
Table 7.1: Specifications of verbs

Type of verb	Assumed Specification
Big V	+LEX
Little *v*	+ASP
Posture verb	+ASP
DLV	+ASP
Modals	+MOD

Thus, lexical verbs are specified as [+LEX], a property that is independently necessary to distinguish them from auxiliaries, modals and light verbs of all types. Little *v* lacks a [+LEX] feature as it is essentially a light verb. In addition, it has an aspectual feature. This is consistent with a variety of views, including the notion that accusative case (assigned by *v* is actually aspectual in nature (Svenonius 2002, Verkuyl 1993), not to mention the fact that *v* has frequently been associated with causativity. Finally, I assume modals to be specified as being different to lexical verbs with a [+MOD] feature.[4]

(8) a. *Hy* ***sal*** *die heeldag na die wolke lê en kyk*
He will the whole day at the clouds lie and look
'He'll lie looking up a the clouds all day'

b.



[4]Presumably, the features [+LEX] and [+MOD] are a convenient shorthand for more fundamental featural differences between lexical verbs and modals.

In an example like (8a), the underlined verbal string is in its *in situ* position. I propose that the *v*P-shell structure underlying this kind of ILV construction is that illustrated in (8b).

The lexical verb is generated in big V and has an object as is sister resulting in OV order as discussed by Barbiers (2000). I will also assume, that separable verbal particles are generated in a specifier of the lexical verb, although presumably not the same one occupied by the object.[5] The little *v* c-commands VP as is usual. Little *v* assigns accusative case to the object and a theta role to the subject.

I take the coordinator and the ILV to be heads adjoined to little *v* forming a complex predicate head with the form: $[_{v^0}$ ILV [en [*v*]]]. This structure is actually quite similar to that proposed for ConCo/ReCo and is entirely consistent with my basic assumptions about coordination. I take the coordinative marker to be a real coordination lexeme. Given that both the ILV and *v* have [V] features and are specified as [ASP], the Law of Coordination of Likes is satisfied at a feature level.[6] [,7]

The broader question is why verbs like *sit* and other ILVs can be specified as being aspectual. The answer is probably that certain fundamental posture verbs etc. are more 'primitive' and lend themselves naturally to having their function extended from a lexical meaning to a purely grammatical one. This is lent credence by the fact that these verbs tend to grammaticalize cross-linguistically (Kuteva 1999).

7.2.1 Evidence from the distribution of adverbs, objects, subjects and separable particles

In addition to the fact that structure (8) adequately takes into consideration the most basic assumptions about coordination and the structure of the *v*P shell, there is also a variety of syntactic evidence for this proposed structure. This evidence comes from the distribution of adverbs, subjects, objects and particles. As described in section (6.1.2), for an *in situ* ILV verb string, there are three logical possibilities where one might find XP material.

(9) $\underset{\uparrow_A}{\quad}$ *lê* $\underset{\uparrow_B}{\quad}$ *en* $\underset{\uparrow_C}{\quad}$ *kyk*

According to the structure proposed in (8b), Position A corresponds to Spec *v*P and anything higher than that, corresponding to a variety of positions in the Mittelveld. Consequently, one would expect adverbials of all kinds, subjects and objects to occur in positions before the verbal string. Position B would be internal to the complex,

[5] Nothing in the analysis hinges on this. It would also be possible to postulate a unique projection for separable particles. All that is important in my analysis is that the particle occurs in a position between the lexical verb and the coordinative marker. I assume that Afrikaans separable particles are XPs, or more precisely, a P head within a small-clause XP (Den Dikken 1995, Guéron 1990), as opposed to non-separable particles which are incorporated.

[6] In this respect, the ILV construction utilizes the same mechanism as ConCo/ReCo, where coordination of features is at stake.

[7] There may be varieties where the posture verb is coordinated with the lexical verb itself. See discussion in the appendix (7.A.1).

coordinated head, and thus no XP material could ever occur in this position. Position C corresponds to Spec VP and so one would expect to find *in situ* objects, verbal particles and very low manner adjuncts in this position. These predictions are confirmed by the distributional data discussed in section (2.1.2). A summary of which type of XP can occur where is summarized in table (6.1), repeated here as (7.2).

Table 7.2: Distributions of subject, objects, particles and adverbs (repeated from page 141)

Position	A	B	C
Subjects	✓	No	No
Higher Adverbs	✓	No	No
Low Adverbs	✓	No	✓
Bare Objects	✓	No	✓
Separable Particles	No	No	✓

7.2.2 Evidence from other properties of ILV constructions

In chapter (6) a number of properties of pseudo-coordinative ILV constructions in Afrikaans were discussed. These properties distinguished Afrikaans ILV constructions from other types of pseudo-coordination such as ConCo and ReCo. A number of these properties follow from, or are consistent with the structure proposed in (8).

ILV constructions are not islands for extraction (section 6.1.1). Since the scope of the coordinator encompasses only an ILV and *v*, no arguments or adjuncts are contained within the conjuncts. Thus extraction may proceed freely in apparently non-ATB fashion without violating the CSC. The same argumentation applies to quantifier raising discussed in section (6.1.8): quantifier raising may apply freely without inducing a CSC violation.

The *v*P-ellipsis facts for Afrikaans are also explained by this structure. I argued in section (6.1.5) that Afrikaans did not have *v*P ellipsis, but rather AgrOP ellipsis. Since AgrOP dominates *v*P, it is not surprising that the lexical verb cannot be elided without the ILV also being elided: they must both necessarily lie within the elided constituent.[8]

It has also been shown that the ILV is semantically subordinate to the lexical verb and that this coincides with the lack of commutativity in this construction (section 6.1.10). The semantic subordination effect is expected since the ILV acts as a light verb in the proposed structure while the lexical verb is the main verb. In complex-initial contexts, the lack of commutativity – the inability of the ILV and the lexical verb to invert their order – follows from the fact the ILV is subordinate to the lexical verb. In the base-generated order, when the ILV is coordinated with *v* and the lexical verb is *in situ*, the lack of commutativity follows from the fact that the ILV and lexical verb are not actually coordinated in their base positions.

[8] I assume AgrOP to dominate *v*P in Afrikaans/Dutch, although it has been said to be within the *v*P shell in languages like English (Lasnik 2002).

The structure in (8) is also consistent with the semantic-bleaching, and subject-selection facts pertaining to the ILV (sections (6.1.4) and (6.1.3)). The proposed structure, although different from ConCo constructions, predicts similar effects to the ConCo structure. I argued in section (2.1.4) for English that the ConCo/ReCo structure forced one of the verbal conjuncts to be semantically bleached. However, in the ILV structure, bleaching is not forced to occur because the lexical verb is not coordinated with the ILV. However, this does not mean that the ILV is never bleached; the structure does not preclude a bleached verb from being merged in a position adjoined to *v*. Thus, ILV constructions may have both bleached and non-bleached readings.

With respect to subject selection, since the ILV is coordinated with *v*, it is expected that it will co-select a subject with *v*. Thus, the subject of an ILV construction should be consistent both with a subject that is selected by the lexical verb (mediated by *v*) as well as with a subject that is selected by the posture verb. It is expected that the subject will always be consistent with the selectional properties of the posture verb.

A discussion of the properties of ILVs concerning focus (section (6.1.12)), the MSC (section (6.1.11)) and distributivity (section 6.1.7) is deferred until section (7.6).

7.2.3 Summary

In this section, evidence based on the distribution of adverbs, objects, subjects and separable particles converges to support the proposed structure. In addition, the structure explains why ILV constructions are not islands for extraction of objects and is consistent with the facts of AgrOP/*v*P ellipsis and semantic bleaching of the first verb.

7.3 Subatomic CSC

Having argued for the base structure underpinning Afrikaans ILV constructions, I will now turn to the issue of how this structure is derived and how it interacts with verb-second to form SI and CI structures.

First of all, it is an empirical fact that ILV constructions allow the ILV to be extracted from a seemingly coordinative structure (10b), given my assumption that pseudo-coordination is always coordination. This contrasts with ReCo/ConCo constructions where extraction of a head out of a coordinated complex predicate is totally ungrammatical (11b). The complex coordinated predicate is marked with square brackets.

(10) a. *Waarom [loop en eet] Jan piesangs t?*
Why walk and eet Jan bananas
'Why does Jan eat bananas?' [Quirky verb-second]

b. *Waarom loop Jan piesangs [t en v] eet?*
Why walk Jan bananas and eet
'Why does Jan eat bananas?' [Optional extraction]

(11) a. *Waarom [loop en loop] Jan oor die duine t?*
why walk and walk Jan over the dunes
'Why does John walk and walk over the dunes?' [ReCo]

b. *Waarom loop Jan oor die duine [t en *v*] loop

This contrast raises some issues. Firstly, it confirms that ILV constructions and ReCo/ConCo constructions are fundamentally different in nature. This issue has been solved by the fact that I have assigned two different structures to these constructions. Whereas ConCo/ReCo is coordination of two lexical verbs, ILV constructions involve coordination of an ILV to *v*.

The second issue is that they behave differently with respect to the Coordinate Structure Constraint (Ross 1967). It seems to be the case that the optionality of simplex versus complex initials entails a CSC violation. There are three approaches possible here. The first would be to weaken the assumption that coordination is always coordination: *en* might be regarded as a subordinative element, thus evading the problem of extraction from a coordinate structure. However, this would raise a host of other questions. A second approach might be to challenge the validity of the CSC such as was done by Lakoff (1986). However, this approach also raises more questions than it resolves. Rather, it seems to me, a better strategy to retain the CSC intact as I have done throughout this dissertation. I make the following strong assumptions.

a. The CSC always holds (with the exception of ATB-extraction)

b. The LCL always holds

The original versions of the CSC and LCL have been assumed to apply to categories. However, there is actually no reason why this should be so. Categories themselves have been assumed to be feature-based since Chomsky (1970). Moreover, within the Minimalist Programme, features drive computation. Consequently, I will appeal to a version of the LCL that applies to features. In other words, the LCL is not held to apply solely to categories but also, at a 'subatomic' level, to features within feature bundles.

(12) a. **Subatomic LCL:** Coordination always coordinates 'like' entities. Where 'entity' is a feature or set of features.

b. **Corollary:** A feature (or set of features) may only be coordinated with another feature (of set of features) of the same type, which are made available by the syntactic structure being coordinated.

Formulating the LCL this way has implications for the CSC. Extraction from within the scope of coordination is disallowed, but crucially, the scope of coordination is determined by the entities being coordinated in accordance with the Subatomic LCL.

(13) a. **Subatomic CSC:** Extraction from within any coordinated entity is disallowed. Where 'entity' is a feature or set of features.[9]

b. **Corollary:** Extraction out of a coordination is disallowed if that coordination operates over the coordinated entities themselves. Extraction is allowed if coordination does not scope over the extracted entity.

This entails that extraction out of a coordinated head is allowed if that coordination operates over features below the level of the head itself. This should be seen as a strong version of the CSC merely applied to features. Consider this visualization of what is going on.

(14)
$$\left[\begin{array}{c} \underline{A} \\ \text{PHON} \\ \text{CAT} \\ \phi \\ \text{AKT} \end{array}\right] \;\&\; \left[\begin{array}{c} \underline{B} \\ \text{PHON} \\ \text{CAT} \\ \phi \\ \text{AKT} \end{array}\right]$$

There are two feature bundles A and B with identical features. A and B are coordinated heads. Features might plausibly include phonological features, categorial features, phi-features and *Aktionsart* features (as discussed in chapter (3)). Since AND is always coordination of 'likes' (LCL) and since the features in both bundles are identical (even if not identical in the value of their features), coordination scopes over all the features which are identical in both bundles. The scope of the coordination in each conjunct is illustrated by the ovals.[10] Given this configuration which is merely the LCL at feature level, one can uncontroversially say that the CSC (interpreted as coordination over features) would disallow extraction of a subset of features (say, PHON features) out of only one conjunct.[11]

Now consider the other possibility. Suppose that one feature bundle was a subset of the other. Then, under the view of the LCL that has been proposed, coordination would be of all 'like' elements in both conjuncts. This would result in a situation where not all features are under the scope of coordination.

(15)
$$\left[\begin{array}{c} \underline{A} \\ \text{PHON} \\ \text{CAT} \\ \phi \\ \text{AKT} \end{array}\right] \;\&\; \left[\begin{array}{c} \underline{B} \\ \\ \text{CAT} \\ \phi \\ \text{AKT} \end{array}\right]$$

[9] The second part of the CSC, namely the Conjunct Constraint is presumably affected in the same way: extraction of any single conjunct of a coordinated entity in its entirety is disallowed.

[10] Whether coordination reduces to an AND operator binding variables denoting sets of features, or whether coordination reduces to set unification is not relevant at the moment.

[11] ATB movement may remain possible.

In this example, feature bundle B lacks phonological features whereas bundle A has them. Consequently, the phonological features cannot form part of the coordination. They thus remain outside the scope of coordination. Given the proposal that the CSC be applied to features, this configuration would, in principle, allow the PHON feature of the first feature bundle to be extracted in non-ATB fashion without incurring a CSC violation. In the following sections, I will show how these abstract formulations are instantiated in data from Afrikaans.[12]

7.4 Deriving head-movement properties of ReCo/ConCo from the CSC

This view of the CSC and LCL explains why, in ReCo constructions, where the sets of features in both conjuncts are identical, it is not possible to extract the first verb (7b). ReCo constructions conform to the schema in (14) and thus extraction from one conjunct is a violation of the CSC.

(16) $\begin{bmatrix} \underline{\text{LOOP}} \\ \text{PHON} \\ \text{CAT} \\ \phi \\ \text{AKT} \end{bmatrix}$ & $\begin{bmatrix} \underline{\text{LOOP}} \\ \text{PHON} \\ \text{CAT} \\ \phi \\ \text{AKT} \end{bmatrix}$

The same explanation applies to ConCo structures. ConCo constructions also conform to the schema in (14), although the exact values of the phonological and *Aktionsart* features may not be identical, it is the presence of these features, and not their specific values, that blocks extraction.[13]

(17) $\begin{bmatrix} \underline{\text{GO}} \\ \text{PHON} \\ \text{CAT} \\ \phi \\ \text{AKT} \end{bmatrix}$ & $\begin{bmatrix} \underline{\text{READ}} \\ \text{PHON} \\ \text{CAT} \\ \phi \\ \text{AKT} \end{bmatrix}$

Similarly, the same explanation applies to coordination of modal verbs. In these cases, coordination scopes over the categories of the modal verbs themselves, not over a subset of the properties of each modal verb.

[12] The danger is that this allows any categories sharing at least one feature to be coordinated. One possible limitation on the mechanism suggested here is that a coordinated feature set must always be a subset of the broader feature set and there may not be any mutually exclusive features.

[13] It will be demonstrated that Afrikaans also has structures similar to ConCo (see the appendix to chapter (7)). For the moment it is sufficient to note that a subpart of an English ConCo construction cannot be topicalized (section (4.1.2)).

(18) 

7.5 Deriving simplex and complex initials from the CSC

Until this point, I have shown purported CSC effects in ReCo/ConCo structures and with coordinated modals. However, these effects might also be explained by category coordination; the application of the CSC to features is not, strictly speaking, necessary to derive these kinds of effects.

For this reason, I will now turn my attention to Afrikaans ILV constructions which strongly suggest the veracity of the application of the CSC and LCL to features. Not only does Afrikaans allow extraction from coordinated heads, but there are also alternations that show precisely that this extraction is directly sensitive to the feature composition of the heads themselves.

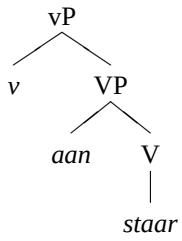
7.5.1 Deriving simplex initials

In this section, I will discuss how to derive a simple verb-second construction with a posture verb. In doing so I will give evidence for the structure in (15) that allows extraction.

(19) *Jan sit nou die wolke [t_{sit} en v] aanstaar*
Jan sit now the clouds and at.PRT-stare
'Jan is sitting and staring at the clouds'

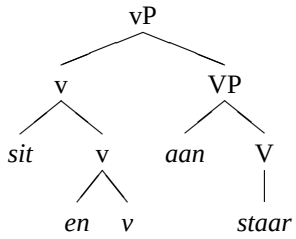
In this example, the ILV, namely *sit*, was originally coordinated with *v* but has undergone verb-second movement to T. In doing so, the ILV has moved from within a coordinate structure.[14] I propose that this type of extraction instantiates the configuration in (14) and is thus not a CSC violation at all. The derivation proceeds as follows.

a. Merge a *v*P shell in the usual way.



[14] Remember that this is optional; a CI is also possible.

b. Now adjoin the coordinator to the head *v*. Following this, the posture verb is adjoined to the complex *en+v*. The LCL ensures that only 'like' features are coordinated. This is the only way to satisfy the selectional requirements of coordination.



At this point, the structure that was proposed in (8) for Afrikaans ILV structures has been derived. The question still remains about how the verb in the first conjunct, namely *sit*, can be extracted to T. Consider carefully the feature composition of *sit* and little *v* respectively. Features they have in common include categorial V features and ϕ features.[15] Importantly however, *sit* has phonological features whereas little *v* does not. Thus the complex coordinated predicate instantiates the possibility illustrated in (15) represented here.

(20) $\left[\begin{array}{c}\underline{SIT}\\ \text{PHON}\\ \text{V}\\ \phi\end{array}\right]$ & $\left[\begin{array}{c}\underline{v}\\ \text{V}\\ \phi\end{array}\right]$

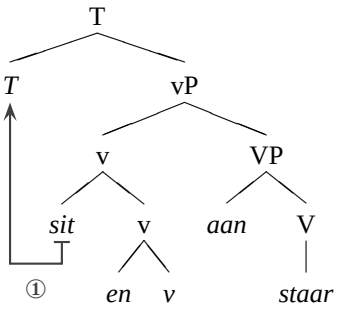
The phonological features of *sit* are not within the scope of coordination, under the interpretation of the Subatomic LCL (12) I have assumed. This means that when verb-second movement applies, the phonological features of *sit* can be moved to T and thereafter to C without any violation of the Subatomic CSC (13).[16,17]

[15] Presumably, *sit* has a complete set of ϕ features whereas little *v* has at least Case features. I do not know whether other ϕ features might be present on little *v* or whether they are on V. Nothing in this analysis hinges on this.

[16] In Zwart (1997), verb-second is movement of phonological features. A similar possibility is entertained by Chomsky (1999; 2001).

[17] ATB movement of a few other features could also be countenanced, but is unnecessary for our derivation. But note that ATB cannot apply to entire conjuncts, only subparts of conjuncts. This is evident from: **What did John eat t and t*

(21)



Thus, a strong interpretation of the CSC and LCL as they apply to features derives Afrikaans simplex initial constructions in a principled way.

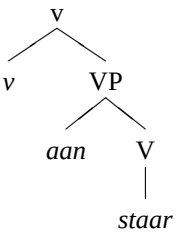
7.5.2 Derivation of CI constructions from the CSC

Strong evidence that the CSC definitely does apply to features comes from the fact that the ability to extract features of the first verb (as discussed in section (7.5.1)) is contingent on little *v* remaining phonologically empty. Consider the following example of a complex initial.

(22) *Jan* *sit* *en* staar *die* *wolke* ~~*sit en v*~~ *aan* ~~*staar*~~
Jan sit and stare the clouds t at.PRT t
'Jan is sitting and staring at the clouds'

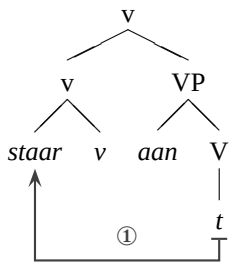
In a construction where the lexical verb is moved to second position, V must undergo short V-*v* movement when *v* is merged. V-*v* movement must always occur if the lexical verb is to undergo verb-second[18] This is corroborated by the fact that the particle has been stranded in clause-final position. This means that V has undergone short V-*v* movement across the particle. The derivation proceeds as follows.

a. Merge a *v*P shell in the usual way



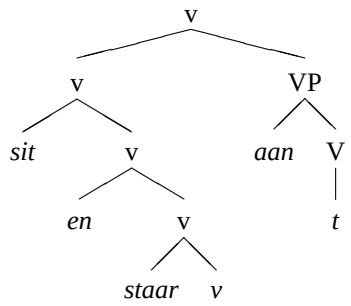
[18]If V remains *in situ*, then it will not be visible at the next phase and consequently will not be able to move to T. This requirement appears to involve a certain degree of 'look ahead' and is discussed in more detail in terms of the Contingency Problem: see (33) on page 173. However, for the present it is sufficient to note that this perplexing problem exists independently of the analysis proposed here.

b. Raise V to little *v*



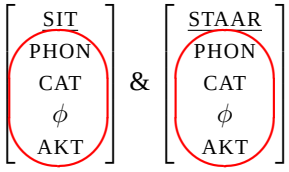
c. Now adjoin the posture verb and coordinator to little *v* as done before in section (7.5.1). Again, this is the only way to satisfy the selectional requirements of coordination.

(23)



At this point, the derivation is identical to the previous one, except that short V-*v* movement has occurred. Now consider the feature composition of the complex coordinated head. V is adjoined to *v* and the features of V are present on the mother of V.[19] This means that V effectively supplies little *v* with phonological features.[20] Thus, the feature composition of both conjuncts conforms to that in (14), represented here.

(24)



As discussed earlier, the interpretation of the Subatomic LCL (12) as applying to features means that coordination scopes over all the features in these conjuncts. This means it is not possible to extract the phonological features of the ILV in isolation as

[19] In the P&P theory, this a result of the Government Transparency Corollary (Baker 1985), necessary to allow the moved head to c-command its trace. In more recent work, it is derivative from a definition of c-command that allows left-branch constituents to 'see' higher than a single node (Kayne 1994).

[20] Presumably also with ϕ features which might be present on V. Thus at this point, *v* is also ϕ-complete. However, this is not important for the present analysis.

occurred during the derivation of the simplex initial (section (7.5.1)). To do so would be a violation of the Subatomic CSC (13).

(25) a. *Waarom sit Jan die wolke [t_{sit} en staar] aan t_{staar}

b. *Waarom sit en staar Jan die wolke aan*
Why sit and stare Jan the clouds at.PRT
'Why does Jan sit looking at the clouds?'

Example (25a) is ungrammatical if the posture verb is extracted from the complex coordinated head. Note that V-*v* movement strands the particle in final position. The only grammatical outcome would be if the entire coordinated complex predicate was pied piped to T and thence to C. Consequently, the only possibility is for the entire conjunct to be moved as part of verb-second movement.[21] This derives the fact that once V has undergone short V-*v* movement, the entire verbal complex must necessarily be pied-piped to T as part of verb-second.

7.5.3 Lists of possible and impossible derivations

The sentences I have been considering have several variables which provide at least ten logical possibilities. The first set of variables is whether the ILV, coordinator, *v* and V undergo verb second movement. The second set of variables is whether short V-*v* movement occurs. The following examples exhaust the possibilities of verb movement options with ILVs and particles. In addition, the analysis I propose has two main parts: the structure in (8) and my proposals for extraction from coordinated heads given my assumptions about the LCL and CSC. Given the complexity of the data, I would like to summarize how my analysis explains each possible derivation.

(26) a. *SUBJ [$_T$ sit OBJ [$_{vP}$ ~~sit~~ en staar v PRT ~~staar~~

b. SUBJ [$_T$ sit OBJ [$_{vP}$ ~~sit~~ en v PRT staar

The first example shows a simplex initial where the lexical verb has undergone V-*v* raising. This is excluded because V-*v* raising provides the second conjunct of the coordinated verbal cluster with phonological features. Thus, under my assumptions, there is no feature which is not under the scope of coordination which means that no part of the first conjunct can be extracted without inducing a CSC violation.

The second example is a grammatical simplex initial where V-*v* raising has not occurred. This means that the second conjunct of the coordinated head does not have phonological features. Thus, according to the LCL, the phonological features of the first conjunct, namely *sit*, must remain outside the scope of the coordination because there is simply no corresponding feature in the second conjunct with which they could be coordinated. This allows the phonological features of *sit* to undergo verb-second movement without violating the CSC.

[21] ATB of all features in both conjuncts is theoretically possible, but would then result in a stranded coordinator. This is independently ruled out in order to avoid derivations like: **What did John eat t and t* or **Waarom sit staar Jan [t en t] aan?*

(27) a. *SUBJ $[_T$ <u>sit en</u> OBJ $[_{vP}$ ~~sit en~~ staar *v* PRT ~~staar~~
b. *SUBJ $[_T$ <u>sit en</u> OBJ $[_{vP}$ ~~sit en~~ *v* PRT staar

In these examples, the string *sit en* has undergone verb second movement, stranding *v in situ*. This is ruled out by the fact that *sit en* are never a constituent to the exclusion of *v*. This follows from the structure proposed in (8).

(28) a. *SUBJ $[_T$ <u>sit en v</u> OBJ $[_{vP}$ ~~sit en~~ staar ~~v~~ PRT ~~staar~~
b. *SUBJ $[_T$ <u>sit en v</u> OBJ $[_{vP}$ ~~sit en v~~ PRT staar

In these examples, the verbal string *sit en v* has undergone verb second movement, where *v* is phonologically empty. The first configuration is ruled out because short V-*v* movement has applied, which means that the lexical verb is part of the coordinated head structure. Thus, there is no constituent which includes *sit en v* but which excludes V.

The second example, where short V-*v* movement has not applied is not ruled out specifically by my analysis. This is ruled out by an independent consideration often implicit in many analyses: the lexical identification of little *v*.

(29) **Lexical identification of Little *v*:** When little *v* is phonologically null, it must be locally identified by big *V*.

The intuition I seek to formalize here is the notion that little *v* and V are very closely related to each other and essentially work together as a team. Even though they are formally distinct projections, they operate, for all intents and purposes, as a single system. An example of this cooperation is that while V assigns a theta role to the object, it is *v* which assigns accusative case to that same object (Burzio's Generalization (Burzio 1986)). Furthermore, in all analyses of verb movement to T, it is assumed that the verb (V) raises to T, pied piping *v* with it as a function of head movement; there is never any mention of the possibility of *v* raising to T by itself.[22,23] In some systems (eg. Larson (1988), Surányi (2002) contra Chomsky (1995b)) this intuition is taken to an extreme: the teamwork effect is captured by a little *v* projection which is formed when V self-adjoins.[24] Following Chomsky (1995b), Cinque (1990), Rizzi (1990; 2002), I assume that identification is achieved through chain formation (antecedent government). In the case of or *v*, one can assume that V raises to *v* overtly in English, but covertly in Afrikaans and Dutch.[25] Covert movement of V to a *v* located in a complex head of the sort I have been discussing would still be possible

[22] Perhaps this could also be derived from a general ban on moving phonetically empty verbs in order to satisfy verb second.

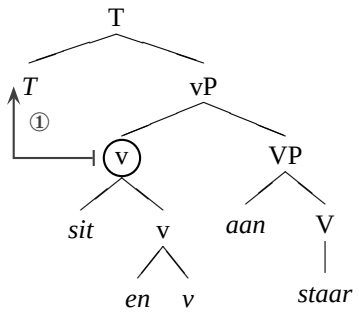
[23] It has been suggested to me that certain types of *do*-support might actually instantiate this possibility. This particular option is ruled out in English where *do*-support is in response to the HMC (e.g. a negation head). However, since the intervening head would block movement of *v* as well as of V, *do*-support in English cannot be movement of *v*. Also note that Afrikaans lacks *do*-support.

[24] I follow (Chomsky 1995a) in assuming that such self-adjunction is not a possibility in the current system. Note that my analysis provides strong evidence of the fact that *v* is non-identical to V because the only way to satisfy the LCL in the base structure is for the ILV to be coordinated to an empty head.

[25] If the identification component of the ECP is supplanted by AGREE, then presumably movement might not be necessary.

because the head of the chain would still c-command V (assuming relevant apparatus like the Government Transparency Corollary, or whatever takes its place in the Minimalist Programme.) Having proposed this condition, it is now quite easy to filter out the unwanted derivation. Assume that T has just been merged to an ILV construction, resulting in the following structure.

(30)



Because *v* is phonetically null, it must be locally identified by big V. If the entire complex predicate were to move to T, then while the copy of the *v* left by movement will certainly be locally identified by V, the moved constituent in T (and following verb-second, in C) will not be able to be locally identified by V. Thus, pied-piping of *v* to T will destroy the identification relation because V could not raise to *v* located in T without crossing the trace of *v* and thus causing a HMC violation.[26,27]

(31) a. SUBJ $[_T$ sit en staar v OBJ $[_{vP}$ ~~sit en staar v~~ PRT ~~staar~~

b. *SUBJ $[_T$ sit en PRT staar v OBJ $[_{vP}$ ~~sit en v~~ ~~PRT~~ ~~staar~~

The first example is grammatical and is a complex initial. The derivation is identical to that sketched in section (7.5.2). Short V-*v* movement of the lexical verb creates a complex, coordinated head replete with phonological features in both conjuncts. As a result of the Subatomic LCL, extraction of only *sit* would result in a CSC violation. The only possibility is for the entire coordinated head to move to T.[28]

The second example is ruled out by my structure in (8) which encodes the notion that particles are XPs and can consequently never be part of a complex head such as the one that undergoes verb-second in this context.

[26]Other formulations are possible. For instance, if one assumes that *v* is locally identified by V through the same mechanism that *pro* is licensed (Rizzi 1986), then *v* need only have features coindexed with V; while this could be achieved through head-movement, this need not be the case. I assume that the movement approach is slightly more constrained, which is why I have opted for this implementation of local identification.

[27]The proposal by Van Craenenbroeck (2004), that *pro* in particular, but possibly empty categories in general, could be identified by MERGE does not entail that the identifying element and the empty category must remain local throughout the derivation.

[28]This raises an interesting question. In a SI, only phonological features move to T. This implies that verb second is a PF operation. Yet in a CI, verb-second is not feature movement, but syntactic head-movement. This can only mean that verb second must still be in the syntax and is not only a PF operation. The solution to this paradox must be that it is a syntactic operation applying to features in general. It can apply to phonological features in the syntax, but it can also pied pipe additional features.

(32) a. *SUBJ $[_T$ MODAL OBJ $[_{vP}$ sit en staar v PRT ~~staar~~
b. SUBJ $[_T$ MODAL OBJ $[_{vP}$ sit en v PRT staar

The first example shows an ordinary verb-second configuration where the posture verb remains *in situ* and a modal is in second position. However, V-*v* raising has occurred. This is ungrammatical for independent reasons that have nothing to do with posture verbs or coordination. In verb-second, OV languages like Dutch, German and Afrikaans, it seems that V only ever undergoes short V-*v* movement if V subsequently undergoes verb-second movement. I call this the Contingency Problem.

(33) **The contingency problem:** Big V only ever raises to little *v* if verb-second of big V subsequently occurs.

In order to understand this kind of problem more fully, consider the following examples which all show the veracity of the generalization.

(34) a. *Jan sal die wolke v aanstaar*
Jan will the clouds v at.PRT-stare
'Jan will stare at the clouds'
b. *Jan sal die wolke staar aan t [Contingency problem]

Ungrammaticality results when a modal moves to second position and short V-*v* raising occurs, stranding the verbal particle in the process. When a modal moves to the second position, then the lexical verb cannot raise to *v*. The same can be illustrated in an embedded context.

(35) a. *dat Jan die wolke v aanstaar*
that Jan the clouds v at.PRT-stare
'that Jan stares at the clouds'
b. *dat Jan die wolke staar aan [The same in embedded context]

Even in an embedded context where all verbs remain *in situ*, it can be seen that ungrammaticality results when short V-*v* movement occurs. All this data supports the generalization that the lexical verb can only move to *v* if it subsequently also undergoes verb second movement. While this is undeniably a problem, I would like to point out that it is not a problem unique to ILV constructions but is a more general property of verb-second. [29]

[29] The problem can be made even more explicit. Note that it is not simply an option to claim that short V-*v* raising (movement to the phase edge) is in principle free, and that subsequent operations will cause the derivation to crash if V, having moved to the phase edge, does not proceed to undergo verb second. The problem is that nothing causes the derivation to crash since a modal verb can be merged after V-*v* movement has occurred, resulting in the modal moving to second position; the result is still ungrammatical.

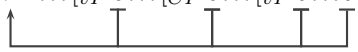
One solution might be to say that economy of movement is evaluated 'globally' at the end of the derivation. Thus, V-*v* movement, if it occurred without being licensed by subsequent movement to T would be uneconomical and the derivation would crash. The problem with this is that it requires global economy evaluations which would undermine the very basis for phases and cyclicity in the first place.

The other solution would be to encode some kind of look-ahead in the system. Although there are doubtless technical solutions to this, I leave them for future research. At the moment, I merely want to make the problem explicit.

In fact, the contingency problem might have implications for cyclic movement more generally. Thus, in an embedded WH question, the WH item must move, first to the edge of vP, then to the edge of the embedded clause, then to the edge of the matrix vP and finally to Spec CP of the matrix clause.

(36) a. Who did John say that Peter would take on a date?

b. $[_{CP}$ WH $\ldots [_{vP}$ t $\ldots [_{CP}$ t $\ldots [_{vP}$ t $\ldots$ t]]]]



Only the last of these movements is actually motivated by a WH-feature in Spec CP of the matrix clause. In addition, it is well known that the WH item cannot remain in an intermediate position, say Spec vP, in English.

(37) ≺who≻ did John ≺*who≻ say ≺*who≻ that Peter would ≺*who≻ take t_{WH} on a date

Thus it would appear the cyclic WH movement is also subject to a type of contingency condition: a moved constituent only moves to the edge of a phase if it subsequently undergoes further movement. This remains an issue to be solved by a general theory of movement.[30]

Returning to the example in (32b), this configuration is grammatical because V-*v* raising has not occurred and the contingency problem is bypassed.

The cases of ReCo and coordinated modals in Afrikaans are also explained by this analysis.

(38) a. *Waarom loop en loop Jan oor die duine?*
why walk and walk Jan over the dunes
'Why does John walk and walk over the dunes?' [ReCo]

b. *Waarom loop Jan oor die duine [t en loop]?

(39) a. *Jan [kan en moet] vandag skooltoe gaan!*
Jan can and must school-to go
'John can and must go to school today!' [Modals]

b. *Kan Jan [t en moet] vandag skooltoe gaan?

These examples clearly show that coordinated modals and ReCo contexts do not allow the first conjunct to be extracted. Under the approach to ReCo I have developed for English (see chapter (3)), ReCo involves coordination at sub-head level of identical features. Given the feature-based interpretation of the Subatomic LCL and Subatomic CSC, there would be no phonological feature outside the scope of coordination and consequently no possibility of extracting any feature from the first conjunct. The same logic applies to modals which are obviously category coordination.[31] Consequently, extraction from the first conjunct is impossible.

[30] It is not possible to solve the problem by suggesting that movement chains must be shown to have been feature-motivated at the end of the derivation. Doing so would reintroduce global economy conditions which are the very thing that a phase-based model would seek to avoid.

[31] The interpretation of coordinated modals is not that there is some subpart of the first modal which is coordinated with a subpart of the second; there are no semantic bleaching effects etc.

7.6 The other properties of ILV constructions

A number of the properties of ILV constructions brought up in chapter (6) have already been discussed in sections (7.2.1) and (7.2.2). In this section, the remaining properties discussed in chapter (6) are reviewed.

It appears to be possible to place focus on the ILV itself (section (6.1.12)) but not on the coordinative marker, leading to the ability to reduce the coordinative marker. This does not necessarily follow from the proposed structure, but would be consistent with it. In their base positions, the *ILV+en+v* constituent is a separate phonological word from the lexical verb. In the complex head *ILV+en+v*, the ILV is lexically specified for stress, whereas *v*, by definition, cannot carry stress; the coordinative marker, being a functional element does not have lexical stress. Thus, the carrier of primary lexical stress is the ILV. Since the lexical verb is not a constituent with the ILV in its base position, the lexical verb is part of a separate phonological word and is stressed accordingly. In the event of a complex initial being formed, the ILV and the lexical verb are part of a single head. The indications are that this complex head is part of a single phonological word and main lexical stress is resolved by the phonological component and is assigned to the lexical verb. During all of this, the coordinator is never stressed.

It is instructive to compare this state of affairs with that in ConCo contexts. Since ConCo predicates are always complex heads, it will always be the case that the main stress is assigned to the lexical verb and never to the coordinator or the pseudo-coordinative light verb. It is thus not possible to place focus on these two components in ConCo contexts.

Focussing effects are related to the lack of true distributive readings in ILV constructions (section 6.1.7). It is not possible to utilize a distributive marker such as *ook* 'also' because such markers require two separate events. In ILV constructions, there is only a single event (and only a single EventP/*v*P) and so distributive markers are disallowed. However, since the event is also a complex one, this is not to say that the ILV is devoid of all meaning. Clearly, it can impart a durative flavour to the construction where the subject carries out the activity denoted by the ILV concurrently with the activity denoted by the main lexical verb. This results in readings like *John was busy reading while sitting* etc.

The fact that coordinator substitution cannot occur in ILV constructions (section 6.1.6) is a general property of pseudo-coordinative constructions in general and does not follow from structure (8).

Afrikaans is, at best, neutral with respect to the MSC (section (6.1.11)) and so there is not much to discuss with respect to structure (8) and Afrikaans. The facts for English may be more interesting.

7.7 Conclusion

In this chapter, I have outlined an analysis of Afrikaans posture verb constructions and also shown how they interact with complex and simplex initials in Afrikaans. The

fact that traditional notions of the CSC and LCL patently fail in the case of Afrikaans posture verbs shows that these concepts are due for revision. However, it seems unnecessary to throw the baby out with the bathwater. In fact, I adopt a strong version of the CSC and LCL applied to features: the Subatomic CSC (13) and Subatomic LCL (12) respectively.

Afrikaans is unique insofar as it has complex initials which are a very useful test case for these reformulated conditions. This unique property of Afrikaans in allowing complex initials has been shown to be dependent on whether *v* has phonological features or not. This alternation provides direct evidence of the fact that the LCL and CSC apply to features.[32]

The advantage of this approach is that it retains the insights behind the CSC and LCL. These two properties of coordination are not formally weakened at all by the new definition. In fact, it has been shown that a more rigorous interpretation of these two conditions yields greater insight into a broader range of empirical results.

7.A Appendix: Complex initials and direct linking verbs

Complex initials are not a phenomenon restricted to pseudo-coordinative predicates. As mentioned in section (5.2.2), in some constructions, two or more verbs may be juxtaposed without any intervening coordinator or subordinator. This phenomenon is seen in Afrikaans CIs with DLVs (12) repeated here as (40b).

(40) a. *Sy kom vandag die boek lees*
she come today the book read
'She will read the book today'

b. *Sy kom lees vandag die boek*
She come read today the book
'She will read the book today'

I will argue that, notwithstanding the lack of an overt coordinator, DLV CIs in Afrikaans exhibit many properties of pseudo-coordinative constructions of the same type as Afrikaans ILV constructions with overt coordinators. Thus, it may ultimately be possible to unify the analysis of pseudo-coordinative predicates with analyses of 'bare' complex predicates more generally.

7.A.1 DLVs are not a homogeneous class

The hypothesis that ILVs and DLVs may have much in common needs to be qualified. The class of DLVs is not homogeneous and there are different types of DLVs. Only a subset of DLVs can thus occur both in CIs and SIs, and these are the focus of the following sections. In other words, a subset of DLVs exhibit some of the same distributional properties as ILVs.

[32] The very notion of operations being defined in terms of categories is unformulable in the current theory; categories themselves reduce to features in the familiar [±V,±N] schema (Chomsky 1970).

DLVs with CI/SI optionality

The following DLVs can occur in both CIs and SIs as shown by examples (41) to (46): *probeer* 'try', *begin* 'begin/start', *bly* 'keep on doing', *kom* 'come', *leer* 'learn'.

(41) a. *Waarom probeer lees Jan die boek?*
why try read Jan the book
'Why does Jan try and read the book?'

b. *Waarom probeer Jan die boek lees?*
Why try Jan the book read

(42) a. *Waarom begin lees Jan die boek?*
why begin read Jan the book
'Why does Jan begin to read the book?'

b. *Waarom begin Jan die boek (te) lees?*
why begin Jan the book (to) read

(43) a. *Waarom leer lees Jan die boek?*
why learn read Jan the book
'Why does Jan learn to read the book?'

b. *waarom leer Jan die boek (te) lees?*
why learn Jan the book (to) read

(44) a. *Waarom bly lees Jan die boek?*
why stay read Jan the book
'Why does Jan keep reading the book?'

b. *Waarom bly Jan die boek lees?*
why stay Jan the book read

(45) a. *Waarom kom eet Jan by ons?*
why come at Jan with us
'Why does Jan come and eat at our house?'

b. *Waarom kom Jan by ons eet?*
why come Jan with us eat

(46) a. *Die heelagter laat val die bal*
the full-back let.CAUSe fall the ball
'The full-back dropped the ball' (Van Niekerk 1995:150)

b. *Die heelagter laat die bal val*
the full-back let.CAUS the ball fall
'The full-back dropped the ball' (Van Niekerk 1995:150)

The following two examples also appear to allow CI/SI optionality, although native speaker judgements do differ about the grammaticality of the complex initials. There does nevertheless appear to be a contrast between the complex and simplex initials.

(47) a. *%Waarom help lees Jan Sanet die boek?*
why help read Jan Sanet the book?
'Why does Jan help Sanet read the book?'

b. *Waarom help Jan Sanet die boek lees?*
why help Jan Sanet the book read

(48) a. *%Waarom laat lees Jan Sanet die boek?*
why let-PERMISSIVE read Jan Sanet the book
'Why does Jan let Sanet read the book?'

b. *Waarom laat Jan Sanet die boek lees?*
why let-PERMISSIVE Jan Sanet the book read

In all the (a) examples, the DLV moves to the second position and pied pipes the lexical verb to form a CI. The (b) examples show that this is not mandatory; ordinary verb-second of only the DLV may also occur without any apparent change in meaning.

DLVs without CI/SI optionality

The following DLVs cannot optionally occur in either CI or SI constructions: *beter*, and fossilized *laat* (as in *laat spaander* 'Let's get going').[33] Some of these only occur in SI contexts; they are ungrammatical in CI constructions.

(49) a. **Waarom beter lees Jan die boek?*
why beter read Jan the book
'Why had Jan better read the book?'

b. *Waarom beter Jan die boek lees?*
why beter Jan die boek lees

There are also a number of other verbs that are more difficult to categorize. These include *gaan* 'will/go' which is ambiguous and discussed separately in section (7.A.1). In addition, DLVs like *basta* do not behave like prototypical verbs.

(50) *Basta nonsens loop praat!*
NEG nonsense walk speak
'Stop speaking nonsense!'

(51) a. *Jan moet nou basta nonsens praat!*
you must now NEG nonsense speak
'You must stop talking nonsense now!'

[33] cf. Causative *laat* in example (48).

b. **Waarom basta Jan nonsens praat?*
Why NEG Jan nonsense speak
'Why does Jan stop speaking nonsense?'

Example (50) illustrates a typical example of the use of the negative exhortative *basta*. This lexeme has been claimed to be a DLV as it can occur in verbal clusters (51a) (Donaldson 1993). However, it does not behave like a typical verb insofar as it does not undergo verb second (51b) (De Vos 2001).[34]

Egressive complex predicates

Some Afrikaans linking verbs must always occur in complex initials. This is true for the egressive DLVs, *loop* 'walk' (Du Plessis 1990:73) and, as I will argue, *gaan* 'go'.

(52) a. *Jan het die bokke loop skiet*
Jan AUX.have the buck walk shoot
'Jan went and shot the buck'

b. *Jan loop skiet die bokke*
Jan walk shoot the buck
'Jan goes and shoots the buck'

c. **Jan loop die bokke skiet*
Jan walk the buck shoot
'Jan goes and shoots the buck'

Example (52a) shows an auxiliary in the second position with a verbal cluster including the DLV *loop* 'walk'. (52b) shows that the verbal cluster can undergo verb second as a CI. Interestingly, however, DLV *loop* cannot undergo verb second independently forming a simplex initial (52c).[35] Note, however, that when an overt coordinator is used, then *loop* switches function and is considered an ILV and a SI becomes possible. Thus (53) should be contrasted with (52c).

(53) *Jan loop die bokke en skiet*
Jan walk the buck and shoot
'Jan goes and shoots buck'

The fact that obligatory CIs occur with DLV *loop* indicates that excorporation of one of the verbs is not always a viable option in Afrikaans and thus indicates the presence of structures that are akin to those of English ConCo/ReCo constructions,

[34]This lexeme is probably grammaticalized. Native speakers express an intuition that in these exhortative types of contexts, verbs like *basta* do not actually behave in a verbal function (Prof. Hans du Plessis, (p.c.)).

[35]The suggestion of Du Plessis (1990) is that *die skakelwerkwoorde dan geanaliseer word as deeltjies eerder as afsonderlike werkwoorde* (that linking verbs can be more readily analysed as verbal particles than as independent verbs [author's paraphrase]). However, this seems incorrect insofar as separable verbal particles are always stranded by verb movement.

namely a complex predicate that behaves, to all intents and purposes, as a single verb might.

DLV *loop* seems quite similar in its semantics to English ConCo *go*. It places emphasis on the 'run up' to an activity.[36] This claim is supported by notes in the literature. Thus, Robbers (1997:64) claims that DLV *loop* 'walk' is inchoative rather than progressive.[37] This is demonstrated by the following example.

(54) a. *Hoe vinnig sal Jan die boek loop lees?*
how quickly will Jan the book walk read
'How quickly will Jan read the book'

b. *Hoe vinnig loop lees Jan die boek?*
how quickly walk read Jan the book
'How quickly does Jan get down to reading the book'
'How quickly will Jan read the book'

The first example is the base structure showing that *loop* 'walk' can occur as a DLV in a verbal cluster (54a). Example (54b) shows both that a manner adjunct can be extracted in the context of a complex initial.[38] There are two possible readings, it appears. Not only can this be a question about the manner of John's reading, but it can also be a question about the prospective nature of the event. Thus it seems that DLV *loop* 'walk', like English ConCo *go*, contributes a prospective meaning to the construction.

Two facts about DLV *loop* 'walk' draw attention to its intrinsic nature. The first is that it patterns with ReCo in CI contexts: it obligatorily occurs in CIs. The second is that it has a prospective interpretation. Both these facts are consistent with DLV *loop* 'walk' being a ConCo construction, with the obvious implication that the coordinator must be phonetically empty.

The same effect can be shown with the DLV *gaan* 'go', although the effect is masked by modal *gaan* 'will'. It is a curious fact about Afrikaans that when *gaan* is in the second position it acts as a future modal, *gaan* 'will'. However, when it is not in second position, it acts as an egressive verb, *gaan* 'go'.

(55) a. *Wat wil Jan gaan eet?*
What want Jan go eat
'What does John want to (go and) eat?'

b. *Wat gaan eet Jan die heeltyd?*
What go eat Jan the whole time
'What does John (go and) eat the entire time?'
'*What will John eat the entire time?'

[36] This was pointed out to me independently by one of my informants. The term 'run up' is hers (Theresa Biberauer, (p.c.)).

[37] It is also worth noticing that for the other egressive DLV, *gaan* 'go', Donaldson gives an English translation which utilizes pseudo-coordination (Donaldson 1993:275).

[38] As demonstrated by example (52), a simplex initial with DLV *loop* is not possible.

c. *Wat gaan Jan die heeltyd eet?*
What go Jan the whole time eat
'*What does John (go and) eat the entire time?'
'What will John eat the entire time?'

Example (55a) shows an *in situ* verbal cluster with the egressive verb *gaan* 'go'. (55b) shows a CI where *gaan* 'go' is interpreted as an egressive verb. However, (55c) demonstrates that when *gaan* 'go' undergoes verb second independently, then it obtains a strong, future modal reading of a kind that is lacking in (55a,b). This means that modal *gaan* 'will' never occurs in CIs. This is consistent with the earlier findings that modals and auxiliaries never occur in CIs (section (5.2.2)). On the other hand, egressive *gaan* 'go' must always occur as a CI.[39] Thus, a CI with *gaan* will always have an egressive reading (55b) whereas a SI will always have a future, modal reading (55c).

There is independent evidence for the existence of at least two *gaan*s in Afrikaans. Consider the following examples from Velddrifse Vissertaal (VVT), where *gaan* may be doubled.

(56) *As dit môre mooiweer is, gaan ons gaan visvang*
If it tomorrow good weather is go us go fishing
'If there is good weather tomorrow we are going to go fishing' (Heiberg 1950:63:VVT)

(57) *Ons gaan vanaand gaan gool*
We go tonight go drink
'Tonight we are going to go drinking' (Heiberg 1950:64:VVT)

Thus, there may be two functional projections, both lexicalized by *gaan*. The tense projection can be filled by the future modal *gaan* 'will', while the lower, egressive functional head can be instantiated with either *gaan* 'go' or *loop* 'walk'. Furthermore, these lower egressive verbs form a ConCo predicate and cannot be excorporated from it.[40]

The use of posture verbs as DLVs

The previous section opened up the question of posture verbs being used as DLVs, that is, without an overt coordinator. It was shown that when *loop* is used without a coordinator, then it functions as a DLV in a ConCo-like construction. In other words, the presence or absence of the coordinator has syntactic effects.

Although I cannot provide a full account, a similar phenomenon may occur when other posture verbs are used without overt coordinators. In some varieties of Afrikaans,

[39] Support for this analysis comes from the fact that non-future *gaan* always occurs as a complex initial in spoken language, except in very formal Afrikaans (Ponelis 1979:245).

[40] It may be worthwhile to investigate whether Afrikaans 'pseudo-hendiadys' (De Stadler 1992:91-92) could also be classified as a ConCo-type construction. Pseudo-hendiadys refers to the optional insertion of a coordinating marker inside DLV clusters with verbs like *gaan* and *help* (De Stadler 1992:91-92).

notably Orange River Afrikaans, posture verbs are frequently used without an overt coordinator.

(58) a. *Wat sit kyk jy my so?*
what sit look you me so
'Why are you looking at me like that?' (Du Plessis, p.c.)

b. **Wat sit jy my so kyk?*
what sit you me so look

In contrast to ILV constructions with CI/SI optionality, when posture verbs are used as DLVs, then they become obligatory CIs. This parallels the contrast with egressive *loop* used in Standard Afrikaans. It is also clear from the glosses that the posture verb does not necessarily have a literal posture interpretation in this example: it is semantically bleached. This is what would be expected from a ConCo construction.

Summary

Table 7.3 on the facing page lists the properties of Afrikaans DLVs with respect to their behaviour in CI constructions. Of the DLVs listed in section (5.1.1), only some can occur in both SIs and CIs. Of these, several are ambiguous between different verb classes. For instance *laat* is ambiguous between causative and permissive; *kom*, in some varieties, may be ambiguous between DLV and a future-modal usage similar to what occurs with *gaan*. *probeer* and *begin* may also be ambiguous with verbs selecting *te*-complements.[41] It also seems that *beter* is not a canonical example of a direct linking verb, but seems more like an adverbial; in addition, in English it usually occurs in conjunction with an auxiliary. This verb is also not widely discussed in the literature. Thus, the clearest cases of optional DLV CIs occur with *kom* and *bly*.

This type of ambiguity is especially a problem with natural, freely occurring data. As a result, DLVs should always be treated with caution until it is clear which type of DLV is being used. For this reason, many of the examples in this dissertation use DLVs like *kom* and *bly* which are less ambiguous than others.

7.A.2 DLVs as pseudo-coordinative predicates

I am now in a position to postulate a possible analysis for those DLVs which exhibit the same distribution as ILVs i.e. those DLVs which can optionally occur in CI or SI contexts. Essentially, the same analysis as for ILVs can be used for these DLVs with the caveat that the coordinating morpheme is phonetically empty.[43] The following structure applies and the derivation proceeds exactly in the same way as for ILVs.

[41] In some Afrikaans dialects and Standard Dutch, these types of verbs can select *te*-complements.

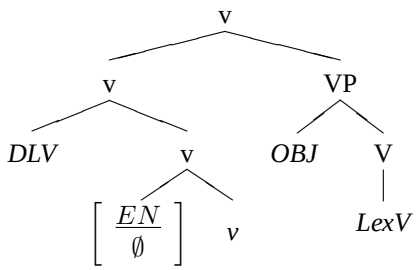
[42] ReCo constructions also have obligatory CIs but are not, strictly speaking, DLVs and are thus not included in this table.

[43] It remains unclear what, if anything, conditions the presence or absence of an overt coordinator.

Supposed DLVs that are actually modals			
gaan.FUT			Obligatory SI
kom.FUT(dialectal)			Obligatory SI
DLVs that are obligatory SIs			
help (?)			Obligatory SI
laat.PERMISSIVE (?)			Obligatory SI
DLVs that are obligatory CIs[42]			
gaan.EGR			Obligatory CI
loop.EGR			Obligatory CI
laat spaander (fossil.)			Obligatory CI
DLVs with CI/SI optionality			
	leer		CI/SI
	laat.CAUS		CI/SI
	kom		CI/SI
	bly		CI/SI
	probeer		CI/SI
	begin		CI/SI
	help (?)		Obligatory SI
	laat.PERMISSIVE (?)		Obligatory SI
DLVs not fitting these categories			
		beter	N.A.
		basta	N.A.

Table 7.3: Subclasses of DLVs

(59)



This type of analysis is motivated by several factors. Firstly, ILVs and DLVs have very similar syntactic properties as defined by the battery of tests developed in previous chapters. Thus, both ILVs and DLVs allow argument extraction, adjunct extraction, quantifier raising, single-event interpretation, varying degrees of semantic-bleaching, co-selection of a subject etc.[44]

Secondly, the DLVs with CI/SI optionality, all tend to be aspectual in nature and thus can very naturally be assumed to be able to coordinate with *v* which is also aspectual.

Thirdly, the difference between ILVs and DLVs is not always that large considering the fact that in some varieties, ILVs like *sit* may optionally occur without an overt coordinating marker, effectively making ILVs and DLVs ambiguous.

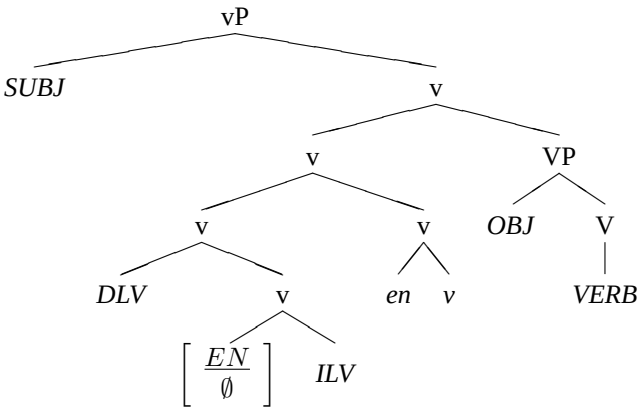
Combined DLV and ILV CIs

Given the proposed analysis, it can also be the case that multiple DLVs or ILVs can be coordinated to *v*.[45]

(60)

[44]Space concerns preclude listing all the data at this point. It is well-known from the Dutch and Afrikaans literature that extraction is possible etc. Word-order permutations are listed in De Vos (2001). The only area where ILVs and DLVs exhibit differences is that of semantic bleaching, where ILVs typically exhibit less bleaching than DLVs like *kom* – although *staan* is apparently more bleached than other DLVs. However, it should also be noted that the majority of DLVs with CI/SI optionality do not have significant bleaching effects at all: *probeer*, *begin*, *bly* etc.

[45]I leave open the possibility that *v* itself may be instantiated as a DLV or whether it is always bare of phonological features. In addition, nothing prevents the possibility that at least some types of DLVs might be merged as independent heads in the functional hierarchy, like modals or Dutch posture constructions, for instance.



This kind of analysis makes interesting predictions about partial fronting of verbal complexes. In this type of structure, the DLVs and ILVs form a complex, head constituent. Thus, one might expect that this constituent could undergo verb-second to form a CI while leaving the lexical verb *in situ*. This is indeed possible. Ponelis (1993) claims that 'a complex initial consisting of two or more linking verbs without a main verb is unusual but not unattested'(Ponelis 1993:328).

(61) *Nou gaan laat hulle die sentrum bou*
Now go let they the centre build
'Now they will have the centre built'(Ponelis 1993:328)

(62) *En hy kom staan jou en uittrap*
and he come stand you and scold
'And he just started scolding you' (Ponelis 1993:328)

(63) *...en wie kom kry jou ...daar lê?*
...and who come get you ...there lie
'And who will get you lying there ...?'(Ponelis 1993:328)

(64) *Julle loop staan nie die voëls en aanjaag ...nie*
you walk stand NEG the birds and on.PRT-chase ...NEG
'You are going to drive the birds ...' ((Matthee 1985:23) cited by (Robbers 1997:66))

Since there are phonological features in both conjuncts (of the conjunction within the first conjunct), one might expect that extraction of a verbal head from the first conjunct would be less well-formed.

(65) a. *Waarom sal Jan die boek loop staan en lees?*
why will Jan the book walk stand and read
'Why will Jan go and read the book?' [Base order]

b. *Waarom loop staan en lees Jan die boek?*
why walk stand and read Jan the book
'Why is Jan busy reading the book?' [CI]

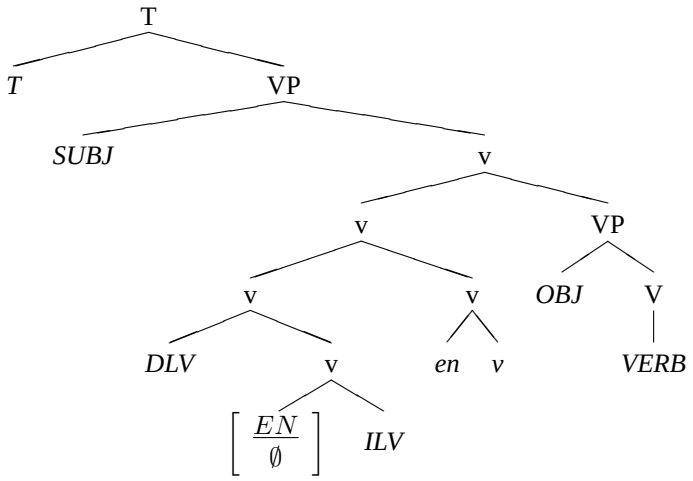
c. *??Waarom loop Jan die boek staan en lees?*
why walk Jan the book stand and read
'Why is Jan busy reading the book?' [SI]

d. *Waarom loop staan Jan die boek en lees?*
Why walk stand Jan the book and read
'Why is Jan busy reading the book?' [Partial CI]

Example (65a) has a modal in second position, demonstrating the *in situ* locations for a DLV and an ILV coordinated with a lexical verb. The structure is presumed to be identical to that in (60). It is possible for the entire set of verbs to be pied piped to second position as in (65b). This is completely expected if the lexical verb adjoins to *v* as claimed in chapter (7); there will be phonological material in both conjuncts and the entire coordinated head will thus be able to move to second position. The third example (65c) is extremely interesting as it shows that verb-second with only a single verb is, in fact, significantly less well-formed than either of the previous two examples (65a) or (65b). This follows from a situation where phonological material is in both conjuncts and consequently, the first verb cannot be excorporated from the complex head.[46]

Finally, example (65d) seems a little strange since it is more grammatical than (65c). The current analysis suggests that since the *v* would be empty in this case, the verbal features from the first (complex) conjunct could be moved to T.

(66)



[46]The only possibility for the first verb to undergo verb second would be if it were generated as an independent head in the functional hierarchy. This possibility is probably available to some verbs more than others e.g. *gaan* 'go'.

Thus, the proposed analysis of complex initials accommodates examples like (65c,d) and can make predictions about whether a verb (or verbs) can be excorporated from the complex head or not. These predications turn out to be well-founded.

Participle placement and complex predicates

The complex predicate approach to DLVs could also explain the curious distribution of past participle prefixes in Afrikaans. Afrikaans and dialectal present-perfect constructions exhibit a type of variation not present in the continental West-Germanic dialects. Three main patterns of participle marking are attested which are present to different degrees in different dialects. Table (7.4) illustrates distribution of the participle prefix *ge-* in a verbal cluster with (AUX) 2-3 (AUX) order.

Table 7.4: Participle marking in Afrikaans verbal clusters

(AUX$_1$)		$Verb_2$		$Verb_3$	(AUX$_1$)
(AUX$_1$)		$Verb_2$	*ge-*	$Verb_3$	(AUX$_1$)
(AUX$_1$)	*ge-*	$Verb_2$		$Verb_3$	(AUX$_1$)

$AUX_1\ V_2\ V_3$**:** With the V-V pattern typical of standard Afrikaans, each verb is realized as an infinitive (root). This is the IPP pattern found in all West-Germanic languages with 1-2-3 word order within the cluster and a participle prefix.[47]

(67) a. *...dat Jan die huis gebou het*
...that Jan the house PST-build AUX
'...that Jan built the house'

b. *...dat Jan die huis (*ge)-laat bou het*
...that Jan the house PST-let build AUX
'...that Jan built the house'

Example (67a) illustrates that Afrikaans verbs in the complement of the past auxiliary are marked with the participle prefix *ge-*. (67b) shows that when the lexical verb is separated from the past-auxiliary by at least one other functional verb, then participle marking is omitted. Many varieties of Afrikaans, including Griekwa Afrikaans (GA) Baster Afrikaans (BA), have at least some constructions of this type.[48] However, in these dialects, V-V patterns are significantly more marked than others. This may be a result of interference from the standard.

[47] IPP is the absence of expected participle morphology on the verbal complement of the past auxiliary and the concomitant realization of that verbal complement as an infinitive. The effect is common in West-Germanic varieties with prefixal participle morphology and 1-2-3 order in the verbal cluster (De Vos 2003b).

[48] These labels are taken from the literature on the topic; their problematic status is noted.

$AUX_1\ ge - V_2\ V_3$**:** In the ge-VV pattern, the participle occurs as the complement of the auxiliary. This is an anti-IPP effect. It is typical of Griekwa Afrikaans and Knysna Boswerker Afrikaans and is also the pattern of 'optional IPP' Robbers (1997) in Standard Afrikaans.

(68) *Hy't* *ge-kom* *werk*
he-AUX PST-come work
'He came to work' (Rademeyer 1938:GA)

(69) *Ek* *het* *hom* *ge-maak* *gaan*
I AUX him PST-make go
'I made him go' (Calitz 1957:KBA)

AUX $V_1\ ge - V_2$**:** The third pattern, V ge-V has participle marking on the embedded lexical verb. It occurs in Baster Afrikaans, Griekwa Afrikaans and Velddrifse Vissertaal (VVT). This pattern, might be called 'non-IPP'.

(70) *Toe* *ek* *my* *kom* *ge-vind* *het*
then I my(self) come PST-find AUX
'Then I came and found myself' Rademeyer (1938:BA)

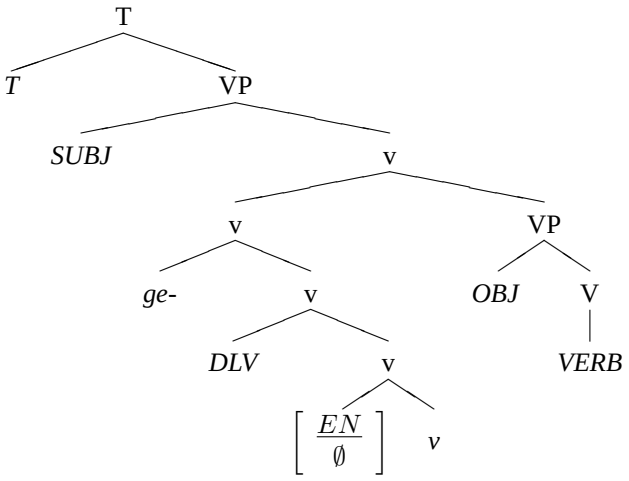
(71) *Hy't* *aanhou* *ge-rondloop* *tot* *hy* *gevang* *is*
he-AUX kept-on PST-round-walk until he PST-catch is
'He kept on walking around until he was caught' (Heiberg 1950:VVT)

A complex-predicate analysis of participle placement

De Vos (2003a;b) argues that, in Afrikaans, the participle prefix *ge-* is located at a different point in the structure from that same prefix in Dutch. The Afrikaans prefix is argued to be located as the head of T2, a tense projection in a modified Reichenbachian framework (Giorgi and Pianesi 1997, Hornstein 1990, Reichenbach 1947). Armed with this, and the complex predicate approach to linking verbs, the curious distribution of *ge-* in Afrikaans follows quite easily. If the DLV is adjoined to *v* and forms a complex head then the prefix can be adjoined to the DLV. This yields word-orders as in (68).[49]

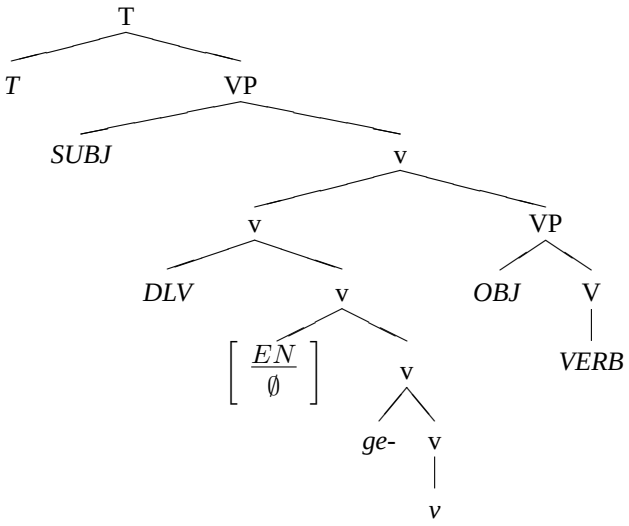
(72)

[49] In ILV constructions, *ge-* may occurs on the ILV (an anti-IPP effect), even in those varieties of Afrikaans that generally have IPP in other contexts e.g. Standard Afrikaans. The same analysis applies.



In special instances, if *ge-* does indeed adjoin to *v*, then when the structure is passed to the morphological component, the prefix is reanalysed as being adjoined to the right-adjacent, lexical, verbal head. This yields word orders such as (70). The difference between the two derivations depends only on when *ge-* is merged to *v*.[50]

(73)



[50]This option is not available in Standard Afrikaans.

7.A.3 Conclusion

In this chapter, a number of Afrikaans pseudo-coordinative constructions have been discussed. It has been claimed that Afrikaans ReCo constructions can be analysed in the same way as their English counterparts. In addition, there are a number of Afrikaans verbs that form obligatory CIs and which can be analysed in terms of ConCo. Finally, it has been argued that ILV constructions involve the coordination of a posture verb with little *v*. Given this analysis, it is possible to introduce a new distinction into the typology that has been developing throughout this dissertation. Pseudo-coordination can be subdivided into XP-based pseudo-coordination and head-based pseudo-coordination.

XP-based types coordinate XPs. I take SceCo to fall under this category. The existence of Afrikaans SceCo constructions is taken for granted and has not been explored in this dissertation.

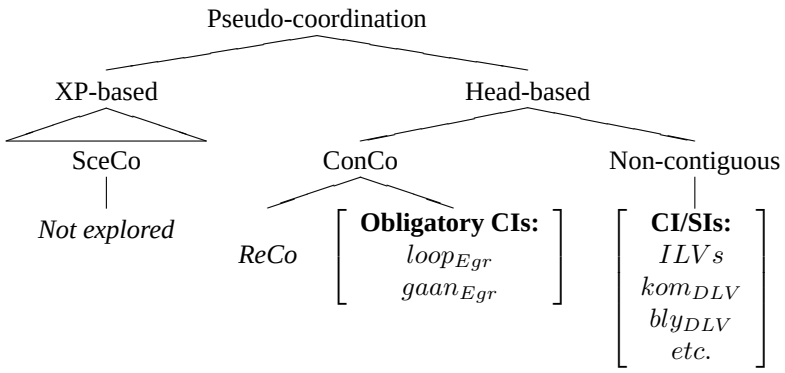
Head-based types coordinate heads. An example of this is the Afrikaans ILV construction. These constructions coordinate a posture verb with *v* and are non-contiguous. This type of pseudo-coordination allows certain XP-like material to intervene within the verbal string. I have also argued that DLVs are not a homogeneous class and that those DLVs which can optionally occur in either CI or SI contexts can be analysed with the same apparatus as proposed for ILVs. The analysis makes verifiable predictions about the formation of partial CIs. It has also been claimed that some DLVs form head-constituents out of which excorporation is impossible, yielding structures which obligatorily form CIs. It has been suggested that these constructions can be analysed as ConCo-type structures.

ReCo and ConCo are also head-based pseudo-coordination but are contiguous. Since both of these coordinate overt verbal heads, the result is a contiguous verbal string. There appear to be a relatively small number of DLVs which behave differently to ILVs and much more like ConCo constructions. These include the class of obligatory CIs.[51] Here too it is evident that the presence of an overt coordinator varies. The resultant typology is illustrated in figure 7.1 on the next page.

This discussion concludes the analysis of Afrikaans CIs. It has been shown that treating the coordinative marker as a real coordination has consequences for the nature of verb movement as well as excorporation. In addition, it has been shown that relatively large clusters of verbs can be analysed as complex heads in Afrikaans.

[51] Although some of these types may prove to be even more complex, this will be left to subsequent research.

Figure 7.1: Pseudo-coordinative types in Afrikaans



Chapter 8

Conclusions and prospects

The purpose of this dissertation was to address the diversity of pseudo-coordinative constructions, illustrating their properties and to provide a formal account for them. In doing so, the hope was to help defend a position where coordination in natural language is always true coordination.

8.1 Pseudo-coordination in a coordinative context

The dissertation was divided into two parts dealing with pseudo-coordination in English and Afrikaans respectively. Each part included a typological component arguing that pseudo-coordination is not a unified phenomenon but consists of a variety of different strategies of coordinating verbal entities. The typology that emerges from the discussion in this dissertation is illustrated in figure 8.1 on the following page.

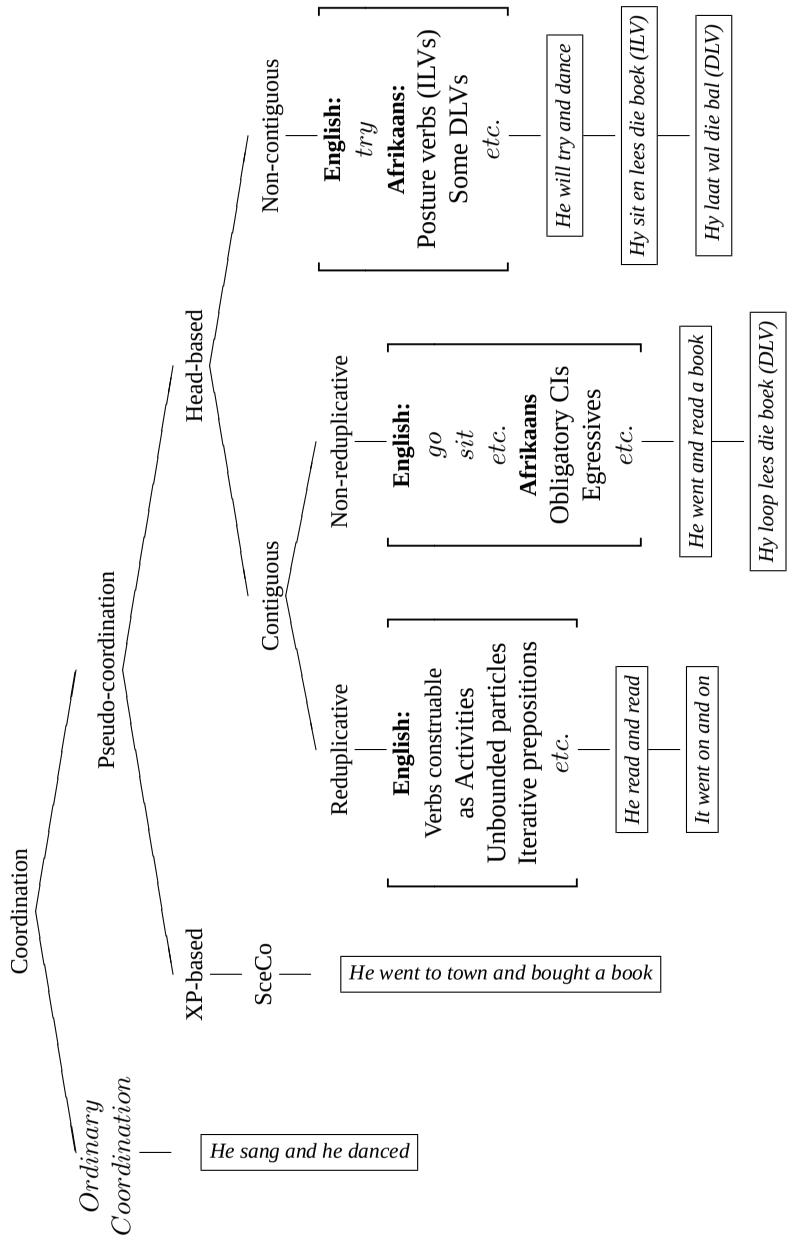
Coordination structures are not necessarily uniform and there are a number of different types. Perhaps the distinction between nominal and verbal coordination is fundamental Haspelmath (2005).

With respect to coordination of verbal entities, a distinction can be made between ordinary, symmetric coordination which arguably coordinates clauses and asymmetric pseudo-coordination which does not. Pseudo-coordination is asymmetric syntactically, in the sense that extraction is possible from one conjunct but not the other, and semantically in the sense that the 'main' meaning is contributed by one conjunct while the other conjunct provides ancillary information. Pseudo-coordination can be subdivided into XP-based and head-based coordination.

XP-based pseudo-coordination is arguably coordination of XP-like constituents, possibly *v*Ps or perhaps something larger. This group includes the Scene-setting coordination (SceCo) discussed in this dissertation, but is arguably a larger class.

Head-based pseudo-coordination consists of coordinated heads or sub-features of heads. The first type of head-based pseudo-coordination is Contiguous coordination (ConCo). This type can be subdivided into Reduplicative coordination and also non-reduplicative pseudo-coordination. ConCo/ReCo structures are base-generated com-

Figure 8.1: The typology of pseudo-coordinative types (Final)



plex coordinated heads with a lexical verb coordinated with an ancillary verb that specifies it further, usually providing aspectual information. This other verb can be either chosen from a relatively small set of 'primitive' verbs such as *go*, *sit* etc. (ConCo), or it could be identical to the lexical verb itself (ReCo). A number of Afrikaans Direct Linking Verbs (DLVs) also occur in this type of construction.

The second type of head-based pseudo-coordination is the non-contiguous type. This is prototypically exemplified by Afrikaans pseudo-coordination with Indirect Linking Verbs (ILVs). As far as the Afrikaans posture type of pseudo-coordination is concerned, it consists of a lexical verb in its base position, while the aspectual, modifying verb is coordinated with a phonologically empty light verb. Complex Initials or Simplex Initials occur depending on whether subsequent V-*v* raising occurs. A complex initial is a phenomenon where a complex predicate undergoes verb-second; a simplex initial occurs when only a single verb moves to the verb-second position.

8.1.1 Part I

Chapter (1) introduced a set of constructions coordinating verbal constituents. These are repeated here.

(1) Caesar went across the Rubicon and he conquered Gaul [OCo]

(2) Caesar went to Gaul and devastated it [SceCo]

(3) Caesar saluted his legions before…
he went and addressed them [ConCo]

(4) Caesar's legions marched and marched for days [ReCo]

These examples illustrate Ordinary Coordination, Scene-Setting Coordination, Contiguous Coordination and Reduplicative Coordination respectively. Chapter (2) was largely devoted to showing that ordinary coordination (1) could be systematically distinguished from pseudo-coordinative constructions such as scene-setting (2) and contiguous coordination (3). It was also demonstrated, that verbs like *sit* could occur in contiguous coordination, a fact that has not been overemphasized in the literature. In addition, in scene-setting coordination, a much wider range of verbs can occur as the first verb than has been suggested before. Generally, it was shown that scene-setting (2) and contiguous coordination (3) are actually distinct subtypes of pseudo-coordination in English. Generally, the tests demonstrated that contiguous coordination consisted of a coordinated verbal string that was contiguous: in other words, the verbal string acted as a constituent of some kind. This is not the case for scene-setting coordination where certain adverbials, PPs and verbal particles could follow the first verb in the verbal string. The fact that these same intervening constituents usually occur in the end-field of English clauses suggests that in scene-setting coordination, the coordinated constituent is at least a *v*P.

Chapter (3) extends the field of empirical inquiry by exploring pseudo-coordination with *try* and reduplicative coordination (4). The status of pseudo-coordinative *try* has

been a bone of contention amongst linguists. Although it superficially looks like contiguous coordination, it is actually a different construction. Unfortunately, it appears to be the only verb of its type in English with the result that almost any analysis remains particular and cannot be generalized. The purpose of the discussion in this chapter is merely to differentiate pseudo-coordinative *try* from other types of pseudo-coordination. Its status is hinted at in section (8.2.3).

In contrast, reduplicative coordination is extremely productive, not only in English, but also in languages like Dutch and German which lack other types of pseudo-coordination. In fact, reduplicative coordination is an extremely common discourse strategy in all the world's languages, although the syntactic structures used to express it may differ from that in English. In fact, reduplicative coordination is not limited to coordinating verbs at all, but can also coordinate degree adverbs and even prepositions.

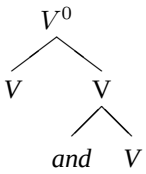
(5) The train went faster and faster

(6) The balloon flew up and up and up into the sky

The tests developed in chapter (2) were systematically applied to reduplicative coordination constructions. The results showed that English reduplicative coordination and contiguous coordination actually could be categorized as syntactically similar: they both behave as though the verbal string is a tightly-knit constituent of some kind. The resulting analysis can also be extended to augmentative examples like (5) and (6).

Chapter (4) established that a subordinative analysis of ConCo/ReCo was not sustainable. A biclausal analysis is ruled out by the fact that it is impossible to license a subject in the second conjunct. A monoclausal, subordinative analysis is eliminated by the fact that the first verb does not pattern like an auxiliary or modal in any respect. In addition, such analyses must regard the coordinator as being a subordinator of a particularly vacuous kind. The analysis which suggested itself in chapter (4) was that the verbal string in ConCo/ReCo contexts is indeed a constituent, more precisely, a single head consisting of two coordinated verbal heads.

(7)



Of course, if coordination occurs *below* head level, then one is led to ask *what* below head level is being coordinated. Standard assumptions about the specification of heads lead to the natural answer that it is features of heads that are actually being coordinated. This point is driven home by a discussion of the interaction of pseudo-coordination with *Aktionsarten*. *Aktionsart* can be characterized with two lexical features, namely τ representing a punctual process/change and φ representing a non-punctual process. These two features can express the distinction between activities, states, accomplishments and achievements discussed by Dowty (1979), Vendler

(1957), Verkuyl (1993) and Tenny (1987). Since ConCo/ReCo is coordination of features below the level of the head, it is obvious that these *Aktionsart* features must be able to be coordinated too. The result is that ConCo/ReCo interacts with *Aktionsart* in interesting ways to yield readings with extended activities, serial interpretations and even contexts when an *Aktionsart* element is deaccented. The upshot of all this is that the *Aktionsart* effects can only be explained by assuming coordination below the level of the head.

8.1.2 Part II

The second part of the dissertation extends and supports the conclusions of the first through an exploration of Afrikaans pseudo-coordinative constructions with posture verbs *sit* 'sit', *staan* 'stand', *lê* 'lie down' and *loop* 'walk'. The basic paradigm is repeated here. Complex Initials occur when two or more verbs, occur in the verb-second position. These verbs can be either posture verbs (Indirect Linking Verbs) which always select a complement headed by pseudo-coordinative *en* 'and', or they may be of a variety of aspectual Direct Linking Verbs. Simplex initials occur when only a single verb appears in verb-second position.

(8) a. *Jan sal die boeke sit en lees*
Jan will the books sit and read
'Jan will sit reading the books'

b. *Jan sit die boeke en lees*
Jan sit the books and read
'Jan sits reading the books'

c. *Jan sit en lees die boeke*
Jan sit and read the books
'Jan sits reading the books'

Afrikaans is important for the study of pseudo-coordination for a number of reasons. Other than English, it is one of the few West Germanic languages to exhibit verbal pseudo-coordination. Moreover, it serves a useful contrast to English, because, unlike English, Afrikaans has verb movement. Consequently, Afrikaans is an ideal testing ground for notions about the interaction of morphology and verb-movement and complex predicates. In addition, Afrikaans is the only Germanic language with complex initials. Clearly any discussion of pseudo-coordination would be incomplete without a discussion of these forms. Moreover, Afrikaans Complex Initial constructions have not been exhaustively studied from a formal perspective and the resultant analysis remedies this situation.

Chapter (5) is a brief introduction to Afrikaans in general and coordinated complex predicates in particular. It is shown that Afrikaans has a complex system of functional verbs, many of which are used to express aspectual meanings. These verbs can be divided into those verbs selecting *te* complements of various kinds, Direct Linking Verbs selecting bare verbal complements and Indirect Linking Verbs selecting

complements headed by pseudo-coordinative *en* 'and'. These functional verbs can be aligned according to a functional hierarchy (De Vos 2001). Afrikaans is also shown to have no inflectional verbal morphology, notwithstanding the existence of preterite forms of some modals and auxiliaries. With respect to verb movement, Afrikaans is an OV, verb-second language exhibiting a matrix-embedded alternation as is familiar in languages like Dutch and German.

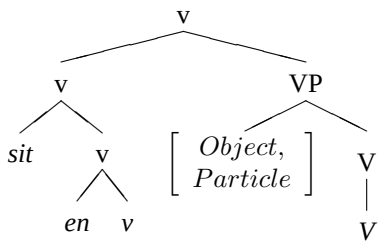
Having introduced Complex Initial constructions in this way, Chapter (6) applies, the pseudo-coordinative tests developed in Chapter (2). It is shown that Afrikaans Complex Initial constructions cannot be ordinary coordination. However, it is also demonstrated that Afrikaans Complex Initial constructions differ in significant ways from English ConCo/ReCo constructions. Crucially, Indirect Linking Verb constructions allow some XP-like material to occur between the coordinator and the second verb when the coordinated verbal string is *in situ*. This shows that they are not base-generated complex heads as is the case with ConCo/ReCo. Indirect Linking Verb constructions also tend to exhibit a greater degree of selection over the subject and display less semantic bleaching than do English ConCo predicates like *go*.[1] Interestingly, Afrikaans Indirect Linking Verb constructions behave very similarly to English pseudo-coordinative *try*. This corroborates the typology developed in the English section of the dissertation.

Chapter (7) develops an analysis of Afrikaans pseudo-coordinative complex initials. It is shown that Afrikaans ReCo constructions can be assigned the same analysis as their counterparts in English. In addition, it is shown that Afrikaans ReCo constructions do not permit Complex Initial/Simplex Initial optionality as is the case for Indirect Linking Verbs. This reinforces the conclusion arrived at in chapter (6) that Indirect Linking Verbs cannot be treated like English ConCo/ReCo constructions.

There are at least three distinct sets of questions relating to the analysis of Afrikaans Indirect Linking Verb constructions: (i) the status of the coordinative marker (ii) the structure to be assigned to the *in situ* verbal string and (iii) the manner of deriving a Complex Initial from that basic structure. Following the results of the first part of the dissertation, the coordinative marker is taken to be a true coordinative marker, imposing the Coordinate Structure Constraint and Law of Coordination of Likes on its conjuncts. However, since the *in situ* verbal string is not a constituent, it is argued that the Indirect Linking Verb is coordinated with *v* while the lexical verb remains *in situ*. The result is the following type of structure which derives many of the syntactic properties of *in situ* Indirect Linking Verb constructions as well as retaining the coordinative analysis of the coordinative marker.

[1] Arguably, there is a gradient involved in both languages. In English, *go* is more grammaticalized than *sit*, while in Afrikaans, Indirect Linking Verbs like *sit* 'sit' are relatively less grammaticalized than *staan* 'stand'.

(9)



The next step is to explain how this structure can derive Complex Initials and Simplex Initials. The derivation of a Complex Initial is as follows. the lexical verb raises to *v* the moment *v* is merged. The coordinator and Indirect Linking Verb are subsequently merged to the V+*v* complex, creating a complex predicate. Given the Subatomic Law of Coordination of Likes (12) on page 163), all the features in both conjuncts are coordinated with each other; assuming the Subatomic Coordinate Structure Constraint (13) on page 164), excorporation of a part of the complex predicate is barred. Consequently, the entire complex head is moved to T (and thence to C) by means of ordinary head movement.

The derivation of an Simplex Initial occurs when V-*v* raising does not occur. The coordinator and Indirect Linking Verb are consequently merged to *v* itself. Following conclusions of Chapter (4) that the coordinator conjoins features below head level, and allowing for a strict interpretation of the Subatomic Law of Coordination of Likes it follows that the phonological features of the Indirect Linking Verb are actually outside the scope of coordination. The effect of this is that these phonological features can be moved to T without violating the Subatomic Coordinate Structure Constraint. Thus, Afrikaans quirky-verb-second effects follow from a strict interpretation of the Coordinate Structure Constraint and Law of Coordination of Likes as applied to features *below* the level of the head. The result is a principled account of apparent excorporation from heads that does not overgeneralize.

This concludes the discussion of Afrikaans pseudo-coordinative structures *per se*. However, the book cannot yet be closed on Afrikaans Complex Initial constructions because Complex Initials can also occur with Direct Linking Verbs, that is, without a coordinative marker. Although the intention is not be exhaustive, Appendix (7.A) briefly addresses this issue. It is shown that some Direct Linking Verbs cannot occur in Complex Initial constructions at all. Others only occur in Complex Initial constructions, hinting at their being either ConCo/ReCo structures or lexical collocations. Only some Direct Linking Verbs can optionally occur in Complex Initial/Simplex Initial constructions. For these, it is proposed that they are fully parallel to the Indirect Linking Verb constructions, albeit with a covert coordinator.

8.2 Prospects

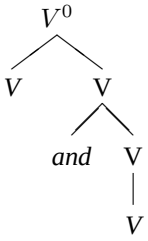
The dissertation sheds light on the nature of category coordination and by extension, the ways in which categories are combined. It also argues that pseudo-coordination is

true coordination and that the Coordinate Structure Constraint and the Law of Coordination of Likes are strong generalizations about the intrinsic nature of coordination.

8.2.1 Category coordination vs feature coordination

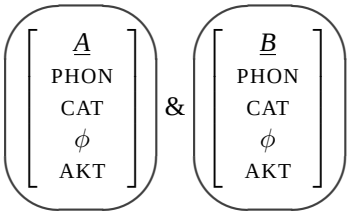
When categories such as heads are coordinated, the resulting phrase structure is as follows.

(10)



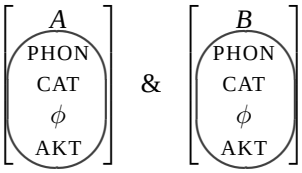
This structure is actually ambiguous between two possible types of coordination. If 'words' are atomic islands, then it might be expected that the entire feature bundle is coordinated as in (11). However, it might also be a possibility that it is individual features within the feature bundle itself which are coordinated as illustrated in (12): coordination at subatomic level.

(11)



[Categorial rule application]

(12)



[Rule application to features]

The results presented in this dissertation show that coordination of heads yields coordination of features within the feature bundle i.e. (12). Thus, English ConCo constructions are sensitive to the morphological and the *Aktionsart* specifications of their component predicates. This follows from an analysis in which it is these individual features being coordinated. In Afrikaans Indirect Linking Verb constructions, it is demonstrated that verb-movement is sensitive to the phonological features of pseudo-coordinative predicates. When *v* has no phonological feature, then simplex initials

result; when *v* is lexicalized by the phonological features of V, then complex initials are obligatory. This result highlights the need for more research on the lexical specification of coordination (i.e. whether it is set-intersection or group-forming etc.), how these properties relate to the actual label on &P and also how this relates to the Coordinate Structure Constraint and the Law of Coordination of Likes.

8.2.2 Pseudo-coordination vs true coordination

The fundamental hypothesis of this dissertation was that pseudo-coordination is actually true coordination. The pseudo-coordinative phenomena that are not typical of ordinary coordination can be explained by the structural environment in which coordination is merged. To the extent that this has been successful, it constitutes evidence for a strong interpretation of the Coordinate Structure Constraint and the Law of Coordination of Likes. This sounds a cautionary note when dealing with other types of coordination which apparently have properties of subordination.

(13) John went to town and bought a book [SceCo]

(14) How many classes can you teach and not go mad?

(15) That is the drug which bodybuilders take and become quite strong.

The first example is SceCo, which was discussed in Chapter (2). The other examples are putative counter-examples to the Coordinate Structure Constraint and are instances of asymmetric coordination. Although it has been claimed that some types of coordination may allow exceptions to the Coordinate Structure Constraint (see *inter alia* Culicover and Jackendoff 1997, Goldsmith 1985, Höhle 1991, Lakoff 1986, Na and Huck 1992)), it could also be the case that at least some of these phenomena can be accounted in terms of true coordination.

The first thing to note is that these examples are not a heterogeneous class of counter-examples to the Coordinate Structure Constraint (Lakoff 1986, Postal 1998). Unlike the coordination in ConCo contexts, coordination in these examples seems fairly transparent semantically. Note that while it is true that the second conjunct is dependent on the first conjunct in some way, such readings are quite common in ordinary coordinative contexts (see also Dik 1968). The following example is clausal coordination but nevertheless displays a temporal and causal dependency between the conjuncts.

(16) John fell down the stairs and he broke his leg

Lakoff (1986) concludes that the counter examples are all coordinative (and thus true counter examples), and Postal (1998) suggests that there are arguments both for and against their coordinative status (implying they are not all true counter examples). At best, then, the evidence that these are not true coordinative markers is mixed. Consequently, these examples are not very strong evidence against the strong hypothesis that coordination is always true coordination. The central problem then boils down to

the fact that a syntactic element can be extracted from one conjunct but not the other: a Coordinate Structure Constraint violation. Following Postal (1998) it is necessary to evaluate which of these examples represent true extraction, rather than utilizing, say, a null resumptive pronoun or operator movement. Should it be conclusively shown that these examples are indeed extractions, then future research should ideally explain why this should be so.

8.2.3 English pseudo-coordinative constructions with *try*

The creation of complex predicates without the use of any subordinator or coordinator is not limited to Afrikaans but may also be present in English 'bare aspectuals' (Jaeggli and Hyams 1993).[2] The semantic similarity of complex predicates using either pseudo-coordination or a null linking element is amply demonstrated by English *try* constructions where both constructions appear to have identical semantic interpretations (17).[3]

(17) a. John will try to eat a crayfish [Infinitival complementation]
b. John will try and eat a crayfish [Pseudo-coordination]
c. John will try eat a crayfish ['bare' aspectual]

First of all it is noticeable that superficially, there appear to be few semantic differences between infintival, pseudo-coordinative and bare-aspectual constructions when conative *try* is used. These similarities underlie proposals to link these constructions derivationally.

It was suggested by Carden and Pesetsky (1977) that the pseudo-coordination and the bare-aspectual construction might be related by a general rule of *and* deletion.[4] This approach has been correctly criticised by Pullum (1990) who points out a number of structural differences between bare aspectuals and pseudo-coordination. However, Pullum (1990) does not subdivide pseudo-coordinative structures as has been done in this dissertation. When one controls for different types of pseudo-coordination, things become clearer. Thus, it has been shown that pseudo-coordination with *try* is substantially different to ConCo/ReCo constructions. However, it may be possible to suggest that 'bare' aspectual constructions are related to pseudo-coordination with *try* and not to ConCo/ReCo. This is born out by the fact that both types of constructions are morphologically defective. One of the most salient features of bare aspectual constructions is that they may not appear in any inflected form (see also Jaeggli and Hyams 1993).

(18) a. John will go talk to his supervisor today

[2] See Jaeggli and Hyams (1993), Pullum (1990) for counterarguments to this claim. Nevertheless, these objections do not take into account the more refined typology of pseudo-coordinative constructions outlined here.

[3] An infinitival option is also available with similar interpretation: *John will try to eat a crayfish.*

[4] However, almost all their examples were with *try* and so their findings are not applicable to pseudo-coordination in English more generally. Also note that Jaeggli and Hyams (1993) hint at the possibility of deriving bare aspectuals by *and* deletion although their own approach does not (Jaeggli and Hyams 1993:317, ff4).

b. *John goes talks to his supervisor today

c. *John went talked to his supervisor today

d. *John has gone talked to his supervisor today

In example (18a) the bare aspectual verb appears without any overt morphology. The verbal string is *in situ*, demonstrating that there is no ban on 3SG subjects *per se*. However, when combined with inflection, the result is ungrammatical. The ungrammaticality is purely a result of inflectional morphology on the verb; it does not depend on abstract features of the subject. Interestingly, pseudo-coordination with *try* also resists morphological marking.

(19) a. John will try and meet his supervisor today

b. John will try meet his supervisor today

c. *John tries and meets his supervisor today

d. *John tries meets his supervisor today

One of the reasons why Jaeggli and Hyams (1993) claim that a coordinate structure is not the source of bare aspectuals is that pseudo-coordinative constructions with *come* and *go* etc. require that the morphology be shared between both verbs, but there is no outright ban on morphology. I would like to point out that Jaeggli and Hyams (1993) are not entirely correct in this generalization. While it is true for ConCo and SceCo, it is not true for pseudo-coordinative *try* (see section (3.1.1)).

(20) a. We always try (and) eat as many vegetables as possible

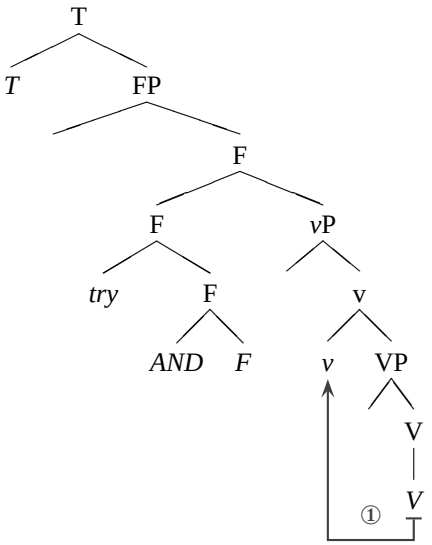
b. *John always tries (and) eats as many vegetables as possible

The morphological defectivity of these *try* constructions is thus especially striking given the fact that Afrikaans has no verbal inflection to speak of; not to mention the fact that the rise of Indirect Linking Verb constructions has been claimed to be related to the loss of verbal inflection (Ponelis 1993).

It thus seems reasonable to conclude that English bare aspectual constructions have similarities with pseudo-coordination with *try* – and consequently, also with Indirect Linking Verb constructions in Afrikaans. Thus, the structure underlying Afrikaans Indirect Linking Verb and optional Complex Initial constructions might be generalizable to the English data too.

While a full analysis will not be pursued here, structure (8) might offer a solution. The intuition is that Indirect Linking Verb constructions place conflicting demands on the morphological component of the language faculty. Assume for a moment, that something similar to the Afrikaans structure underlies the English pseudo-coordinative structure with *try*.

(21)



In this illustration, conative *try* is coordinated with some empty functional verbal head. This structure draws on the insights of Hargreaves (2004) who argues that *try and* is a single head. In addition, V-*v* raising occurs in English, placing the lexical verb adjacent to the complex predicate.[5]

The basic idea is that, in this configuration, T probes the complex predicate *try and v* as the nearest verbal head bearing the relevant features. This should result in an output where *try* can check the relevant morphology, whereas the lexical verb would remain bare. However, since *try* is also coordinated with *v*, it is also the case that features on *v* can be checked since the features of both verbs are present on the mother &P.[6]

The stage is now set for a contradiction to emerge. The logic is as follows. The verb *try* is not ordinarily morphologically defective as is evident from *try* selecting an infinitival complement.

(22) John tries to eat tiramisu

The only difference between this example and (17b) is that the pseudo-coordinative construction has a coordinative marker.[7] This means that morphological defectivity must be triggered by the presence of the coordinative marker.[8] However, this is not a sufficient condition, since it is known from ConCo/ReCo constructions that when both verbs in a complex coordinated head are overt, no morphological defectivity is present. This suggests that it is the fact that *try* is coordinated with a phonologically

[5]Presumably, some types of adverbials are able to be merged between the coordinator and the lexical verb.

[6]See Van Koppen (2005) for a discussion of equidistance as it relates or coordination.

[7]I assume that the 'bare' aspectual construction in (17c) has a phonologically null coordinative marker) and is otherwise largely similar to (17b).

[8]Note that treating *and* as a subordinator will not yield this insight.

unspecified head that is at the root of the morphological defectivity of this construction. The Morphological Sameness Condition ((99) on page 46) repeated here as (23)), entails that both verbs must have the same morphological specification.

(23) **Morphological 'Sameness' Condition (MSC):** Both verbs of a pseudo-coordinative construction must have the same type of morphological marking i.e. both verbs must be either bare or morphologically marked with present, past, participle or similar.

Imagine that the morphological component would assign a morphological representation to the complex head consisting of *try and v*. Although *try* can be assigned a morphological interpretation, little *v* cannot since *v* lacks phonological features. This would result in *try* having a morphological form that would be unavailable to *v*. In turn, this would be a violation of the Morphological Sameness Condition (23). The only way in which the derivation would be possible, is if *try* is morphologically underspecified (as occurs in the majority of the English person/number paradigm). Thus, no distinctive morphology would be applied to either *try* or little *v*. Importantly, however, in Afrikaans, a language without overt inflectional morphology on verbs, this contradiction would never arise.

8.2.4 Cross-linguistic variation and the morphology interface

Afrikaans has always had implications for the debate about the role of morphology in syntactic derivations.. The very existence of Afrikaans was effective refutation of the early minimalist notion that movement was triggered by the need to check morphological features (see *inter alia* Chomsky (1995b), Rohrbacher (1999), Solà (1996), Zwart (1997) but cf. Alexiadiou and Fanselow (2000), Bobaljik (2002) for a different view).

An important question is why Afrikaans is so unique in allowing Complex Initial constructions. The answer alluded to in this dissertation is that Afrikaans has two important properties. First, it has overt verb movement. Second it has absolutely no inflectional verbal morphology. These two factors constitute the syntactically necessary conditions to create Complex Initials. However, they are not sufficient conditions: the fact that the grammar of a language allows a construction is no guarantee that it will be used in discourse.[9]

The uniqueness of Afrikaans Complex Initials thus boils down to the unique com-

[9]Mainland Scandinavian languages also use pseudo-coordinative structures to instantiate these meanings (Josefsson 1991, Lødrup 2002, Wiklund 1996; 2005). Lødrup (2002) shows that these are not a heterogeneous class. Wiklund (2005) argues for infinitival constructions with 'copying' of morphology onto the embedded verb. These constructions appear subject to the Morphological Sameness Condition but are not necessarily contiguous and the first verb must undergo verb second independently of the second verb. All this suggests that ConCo or Afrikaans-type Indirect Linking Verb constructions are not at play, or at least, their presence may be camouflaged by surface-identical SceCo constructions. Additional evidence that Norwegian complex predicates are of a fundamentally different nature to those found in West-Germanic languages comes from Reduplicative Coordination, where the first verb is able to undergo verb-second in an apparently optional fashion (Julien, Nilsen, p.c.).

bination of syntactic properties that Afrikaans has.[10] However, there is at least one language that does have verb movement and inflectional morphology in a subset of paradigms. This language is Edo (EDO: Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Edoid, North-Central, Edo-Esan-Orac (Ethnologue 2005)). In the perfective, Edo verbs raise and also have overt morphology (Baker and Stewart 1998). In other tenses, they remain *in situ* and are morphologically unmarked. Edo also has non-contiguous complex predicates (serial verb constructions). When a complex predicate is used, then it must remain *in situ* and can never raise. In example (24a), it is shown that raising a verb *le* 'cook' across the adverb is ungrammatical in the context of a serial verb construction. Consequently, Edo complex predicates cannot be used in the perfective.

(24) **Evbare ore Ozo le re (ge!le) khien (-ren)*
food FOC Ozo cook PERF truly sell PERF
'It's food that Ozo has truly cooked and sold' [EDO]

'In fact there is no possible outcome for such a numeration in Edo . . . there is no way to have an SVC in past perfective in Edo' (Baker, 1998:9).

The generalization seems to be that raising a complex predicate is blocked by overt morphology. However, when no overt morphology is present then complex predicates may raise. This state of affairs is strongly reminiscent of English pseudo-coordination with *try*, not to mention bare aspectuals.[11] This supports the idea that the absence of overt morphology in Afrikaans allows for the manifestation of complex initials. It also predicts that all other West-Germanic languages cannot have complex predicates parallel to Afrikaans Indirect Linking Verb constructions.[12]

Consider English pseudo-coordinative *try* and bare aspectuals which have much in common with Afrikaans Indirect Linking Verb constructions. The very fact that these constructions cannot be derived with overt morphology is highly relevant. There is no possible convergent derivation. The generalization seems to be that verb-movement does not tend to occur in contexts where overt morphological marking would be applied to certain types of non-contiguous complex predicates. While it has not been my intention to analyse either the English *try* or Edo examples in any depth, it can be noted that none of these examples involve contiguous verbal strings of the ConCo/ReCo type. All of them allow some XP-like material to occur within the verbal complex. In this respect, they are similar to Afrikaans posture verb constructions. Moreover, all

[10] At the very least, such languages seem rare although Irish, Louisiana Creole (Baptista 1999) and ǂHoan (Collins 2002) are other candidates.

[11] Interestingly, Newman and Rice (2001:citing Heine et al. (1993), Köhler (1962)) claim that in the Khoisan language Kxoé certain posture verbs do not conjugate and can only be used in the present tense. Similar examples of overt morphology constraining movement occur in Louisiana Creole (Baptista 1999), where inflection-bearing verb forms cannot undergo movement whereas bare variants of verbs do raise, and in Lango where verbs cannot move in contexts where prefixal morphology is required (Alexiadiou and Fanselow 2000:citing Noonan (1992)).

[12] This only applies to complex predicates with Complex Initial/Simplex Initial optionality. There is no prediction made about the occurrence of complex predicates which are obligatory Complex Initials i.e. ConCo/ReCo constructions. Nothing prevents these from occurring in other West-Germanic languages.

of these constructions have restrictions of one kind or another where morphology is concerned. The English conative *try* construction cannot take morphology and Edo complex predicates cannot have morphological marking in the presence of movement. This would seem to indicate that although verb movement is not triggered by the presence of overt morphology, it is constrained by it.

Bibliography

Ackema, P. (1995). *Syntax Below Zero*. Ph. D. thesis, Utrecht.

Alexiadiou, A. and G. Fanselow (2000). On the correlation between morphology and syntax: The case of V-to-I. In J.-W. Zwart and W. Abraham (Eds.), *Studies in Comparative Germanic Syntax: Proceedings from the 15th Workshop on Comparative Germanic Syntax (Groningen, May 26–27, 2000)*, pp. 219–242. Amsterdam: John Benjamins.

Baker, M. (1985). The Mirror Principle and Morphosyntactic Explanation. *Linguistic Inquiry 16*(3), 373–415.

Baker, M. and O. Stewart (1998). Verb movement, objects and serialization. In P. Tamanji, M. Hirotani, and N. Hall (Eds.), *Proceedings of the Northeast Linguistics Society (NELS) 29*, MA, pp. 17–32. Graduate Linguistic Student Association of the University of Massachusetts.

Baptista, M. (1999). On the non-universality of functional projections and the effects on parametrized variation: Evidence from creoles. *University of Pennsylvania working papers in linguistics 6*, 17–35.

Barbiers, S. (2000). The right periphery in SOV languages: English and Dutch. In P. Svenonius (Ed.), *The Derivation of VO and OV*, pp. 181–218. Amsterdam: John Benjamins.

Bayer, S. (1996). The coordination of unlike categories. *Language 72*, 579–616.

Bennis, H. (1992). Long head movement: The position of particles in the verbal cluster in Dutch. In Bok-Bennema, R. and Van Hout, R. (Ed.), *Linguistics in the Netherlands*, pp. 37–47. Amsterdam: John Benjamins.

Biberauer, T. (2002). Verb second in Afrikaans: Is this a unitary phenomenon? *Stellenbosch papers in linguistics 34*, 19–69.

Biberauer, T. (2003). *Verb Second (V2) in Afrikaans: A Minimalist Investigation of Word Order Variation*. Ph. D. thesis, St John's College, Cambridge.

Biberauer, T. (2004). Reconsidering the EPP and spec-TP in Germanic. *Cambridge Occasional Papers in Linguistics 1*, 15–40.

Bickel, B. (1997). Aspectual scope and the difference between logical and semantic representation. *Lingua 102*, 115–131.

Bobaljik, J. (2002). Realizing Germanic inflection: Why morphology does not drive syntax. *Journal of comparative Germanic linguistics 6*, 129–167.

Bobaljik, J. and S. Wurmbrand (2004). Anti-reconstruction effects are anti-reconstruction effects. m.s. Website: http://www.bobaljik.uconn.edu/files.html.

Borer, H. (2003). Aspect and aktionsart. Class taught at the EGG summer school, 28 July–8 August 2003, Lublin Poland.

Borer, H. (2004). The grammar machine. In A. Anagnostopoulou and M. Everaert (Eds.), *The Unaccusativity Puzzle: Explorations of the Syntax-Lexicon Interface*. Oxford: Oxford University Press.

Bošković, Ž. and S. Franks (2000). Across-the-board movement and LF. *Syntax 3*(2), 107–128.

Brody, M. (1993). Theta-theory and arguments. *Linguistic Inquiry 24*, 1–23.

Burzio, L. (1986). *Italian Syntax*. Dordrecht, The Netherlands: Riedel.

Calitz, F. (1957). Die Knysnaboswerkers: Hulle taalvorm as denkvorm, met spesiale verwysing na hulle bedryfsafrikaans. Master's thesis, Stellenbosch University, South Africa.

Carden, G. and D. Pesetsky (1977). Double- verb constructions, markedness and a fake coordination. In *Papers from the 13th Regional Meeting, Chicago Linguistic Society*, Chicago, pp. 82–92. University of Chicago. Reprinted in: Minoru Yasui (ed.) Kaigai Eigogaku-ronso, (1979) Eichosha Company, Tokyo.

Cardinaletti, A. and G. Giusti (2001). "Semi-lexical" motion verbs in Romance and Germanic. In N. Corver and H. Van Riemsdijk (Eds.), *Semi-Lexical Categories : The Function of Content Words and the Content of Function Words*, pp. 371–414. Berlin: Mouton de Gruyter.

Carnie, A. (1995). *Non-Verbal Predication and Head-Movement*. Ph. D. thesis, Massachusetts Institute of Technology.

Carnie, A. (2000). On the definition of X^0 and XP. *Syntax 3*, 59–106.

Chomsky, N. (1970). Remarks on nominalization. In R. Jacobs and P. Rosenbaum (Eds.), *Readings in English Transformational Grammar*, pp. 184–221. Waltham MA: Ginn.

Chomsky, N. (1981). *Lectures in Government and Binding*. Dordrecht: Foris.

Chomsky, N. (1993). A Minimalist Program for Linguistic Theory. In K. Hale and S. J. Keyser (Eds.), *The View from Building 20: Essays in Linguistics in Honour of Sylvain Bromberger*, pp. 1–52. Cambridge MA: MIT Press.

Chomsky, N. (1995a). Bare Phrase Structure. In G. Webelhuth (Ed.), *Government and Binding theory and the Minimalist Program*, pp. 383–439. Cambridge MA: Basil Blackwell.

Chomsky, N. (1995b). *The Minimalist Program*. Cambridge MA: MIT Press.

Chomsky, N. (1999). *Derivation by Phase*. MIT Occasional Papers in Linguistics 18. Cambridge MA.: MIT.

Chomsky, N. (2001). Derivation by Phase. In M. Kenstowicz (Ed.), *Ken Hale: A Life in Language*, pp. 1–52. Cambridge MA.: MIT Press.

Cinque, G. (1990). *Types of A-Bar Dependencies*. Cambridge MA: MIT Press.

Cinque, G. (1999). *Adverbs and Functional Heads: A Cross-Linguistic Perspective*. New York: Oxford University Press.

Collins, C. (2002). Multiple verb movement in ǂHoan. *Linguistic Inquiry 33*, 1–29.

Comrie, B. (1976). *Aspect : An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press.

Corbett, G. (1983). Resolution rules: Agreement in person, number and gender. In G. Gazdar, E. Klein, and G. Pullum (Eds.), *Order, Concord and Constituency*, pp. 175–206. Dordrecht: Foris.

Cormack, A. and R. Breheney (1994). Projections for functional categories. *UCL working papers in linguistics 6*, 35–62.

Cremers, C. (1993). *On Parsing Coordination Categorially*. Ph. D. thesis, Holland Institute of Generative Linguistics.

Culicover, P. (1991). Topicalization, inversion and complementizers in English. In D. Delfitto, M. Everaert, A. Evers, and F. Stuurman (Eds.), *Going Romance, and Beyond. Fifth Symposium on Comparative Grammar*, pp. 1–43. Utrecht: Research Institute for Language and Speech.

Culicover, P. and R. Jackendoff (1997). Semantic subordination despite syntactic coordination. *Linguistic Inquiry 28*(2), 195–217.

Cusic, D. (1981). *Verbal Plurality and Aspect*. Ph. D. thesis, Stanford.

Daniels, M. (2002). On a type-based analysis of feature neutrality and the coordination of unlikes. In F. Van Eynde, L. Hellan, and B. Dorothee (Eds.), *The Proceedings of the 8th International Conference on Head-Driven Phrase Structure Grammar*, Stanford CA, pp. 137–147. CSLI Publications.

De Stadler, L. (1992). Die werkwoorde *kom* en *gaan* as deiktiese medewerkwoorde. *South African Journal of Linguistics 10*(2), 89–98.

De Villiers, M. (1951). *Werkwoordsvorme in Afrikaans in die verlede tyd*. Annale Van Die Universiteit Van Stellenbosch. Stellenbosch: Stellenbosch University.

De Villiers, M. (1968). *Die Grammatika Van Tyd En Modaliteit*. Cape Town: A.A. Balkema.

De Vos, M. (2001). Afrikaans verb clusters: A functional-head analysis. Master's thesis, Tromsø, Norway.

De Vos, M. (2003a). Dutch and Afrikaans inseparable prefixes. In T. Markopoulos, A. Salamoura, S. Skoufaki, and D. Hall (Eds.), *Proceedings of the First Postgraduate Conference on Language Research*, Cambridge UK, pp. 105–111.

De Vos, M. (2003b). Past participles in Afrikaans dialects and Dutch. In G. Harding and M. Tsujimura (Eds.), *Proceedings of the 22nd West Coast Conference on Formal Linguistics*, Somerville MA., pp. 519–532. Cascadilla Press.

De Vos, M. (2004a). Pseudo coordination is not subordination. In L. Cornips and J. Doetjes (Eds.), *Linguistics in the Netherlands 21*, Volume 21, pp. 181–192. Amsterdam/Philadelphia: John Benjamins.

De Vos, M. (2004b). Verbal compounding and complex initials. In D. Austin, V. Chondrogianni, E. Daskalaki, N. Katsos, M. Mavrogiorgos, G. Newton, E. Orfanidou, M. Reeve, and J. Srioutai (Eds.), *Proceedings of the Second Postgraduate Conference on Language Research*, Cambridge, UK.

Den Besten, H. (1988). Universal-Grammatik und/oder Zweitsprachenerwerb: Der Fall Afrikaans. In N. Boretzky, W. Enninger, and T. Stolz (Eds.), *Essener Kolloquium über Sprachkontakt, Sprachwandel, Sprachtod*, pp. 11–44. Bochum: Studienverlag Dr. N. Brockmeyer.

Den Besten, H. (1989). *Studies in West Germanic Syntax*. Ph. D. thesis, Katholieke Universiteit Brabant, Tilburg, Amsterdam.

Den Besten, H. (2002). Khoekhoe syntax and its implications for L2 acquisition of Dutch and Afrikaans. In R. Mesthrie and P. Roberge (Eds.), *Focus on Afrikaans Sociohistorical Linguistics. Part II*, Volume 14, pp. 3–56. Journal of Germanic Linguistics.

Den Besten, H. and G. Webelhuth (1990). Stranding. In G. Grewendorf and W. Sternefeld (Eds.), *Scrambling and Barriers*, pp. 77–92. Amsterdam: John Benjamins.

Den Dikken, M. (1995). *Particles: On the Syntax of Verb Particle, Triadic and Causative Constructions*. Oxford Studies in Comparatrive Grammar. New York: Oxford University Press.

Dik, S. (1968). *Coordination: Its Implications for a Theory of General Linguistics*. Amsterdam: North Holland Publishing Company.

Donaldson, B. (1993). *A Grammar of Afrikaans*. Berlin: Mouton de Gruyter.

Dougherty, R. (1970). A grammar of coordinate conjoined structures. *Language 46*, 850–898.

Dowty, D. (1979). *Word Meaning and Montague Grammar: The Semantics of Verbs and Times in Generative Semantics and in Montague's PTQ*. Dordrecht: Reidel.

Du Plessis, H. (1990). Die skakelwerkwoorde *loop* en *kom*. *South African Journal of Linguistics 8*(2), 69–78.

Ernst, T. (2002). *The Syntax of Adjuncts*. Number 96 in Cambridge Studies in Linguistics. Cambridge, UK: Cambridge University Press.

Ethnologue (2005). Ethnologue languages of the world. Website: http://www.ethnologue.com.

Evers, A. (1976). *The Transformational Cycle in Dutch Language and German Language*. Ph. D. thesis, Ann Arbor MI.

Evers, A. (2001). Verbal clusters and cluster-creepers. m.s. Utrecht.

Farrell, P. (2005). English verb-preposition constructions: Constituency and order. *Language 81*(1), 96–137.

Feyerabend, P. (1993). *Against Method* (3 ed.). London, New York: Verso.

Francois, J. (1988). *The Statue Within: An Autobiography*. New York: Basic Books.

Frost, R. (1915). *North of Boston*. New York: Henry Holt and Company.

Gazdar, G., E. Klein, G. Pullum, and I. Sag (1985). *Generalized Phrase Structure Grammar*. Oxford: Basil Blackwell.

Giorgi, P. and P. Pianesi (1997). *Tense and Aspect: From Semantics to Morphosyntax*. New York: Oxford University Press.

Gleitman, L. (1965). Coordinating conjunctions in English. *Language 41*, 260–293.

Goldsmith, J. (1985). A principled exception to the coordinate structure constraint. In W. Eilfort, P. Kroeber, and K. Peterson (Eds.), *CLS 21, Part 1, Papers from the General Session at the Twenty-First Regional Meeting*, Chicago, pp. 133–143. Chicago Linguistic Society.

Grosu, A. (1973). On the nonunitary nature of the coordinate structure constraint. *Linguistic Inquiry 4*, 88–92.

Guéron, J. (1990). Particles, prepositions and verbs. In J. Mascaró and M. Nespor (Eds.), *Grammar in Progress*, pp. 153–166. Dordrecht: Foris.

Haegeman, L. and J. Guéron (1999). *English Grammar: A Generative Perspective*. Malden MA: Blackwell.

Hale, K. and S. J. Keyser (1993). On Argument Structure and the Lexical Expression of Syntactic Relations. In K. Hale and S. J. Keyser (Eds.), *The View from Building 20*, pp. 53–109. Cambridge MA: MIT Press.

Hargreaves, K. (2004). 'To' and 'and' complementation in English. Master's thesis, Cambridge. M.s.

Harley, H. (1995). *Subjects, Events and Licensing*. Ph. D. thesis, Massachusetts Institute of Technology.

Harley, H. (2003). Merge, conflation and head movement; the first sister principle revisited. Handout for NELS 34, Stoney Brook.

Harley, H. (2004). Merge, conflation and head movement; the first sister principle revisited. In K. Moulton and M. Wolf (Eds.), *The Proceedings of NELS 34*, Amherst MA. North East Linguistic Society. To appear.

Haslinger, I. and M. Van Koppen (2003). De verbale hendiadys als pseudocoördinatie. *Taal en Tongval 15-16*, 102–122.

Haspelmath, M. (2005). Coordination. To appear in: "Coordination" In: Shopen, T. (ed.) Language typology and syntactic description. 2nd ed. Cambridge. Cambridge University Press.

Heiberg, L. (1950). *Die Taal van die Velddrifse Vissers*. Ph. D. thesis, University of Stellenbosch.

Heine, B., T. Gülderman, C. Kilian-Hatz, D. Lessau, H. Roberg, M. Schladt, and T. Stolz (1993). *Conceptual Shift: A Lexicon of Grammaticalization Processes in African Languages*. Cologne: Institut für Afrikanistik, University of Cologne.

Hoeksema, J. (1983). Plurality and conjunction. In A. Ter Meulen (Ed.), *Studies in Model-Theoretic Semantics*, pp. 63–84. Dordrecht: Foris.

Hoekstra, E. (1999). De opkomst van het aspektuele hulpwerkwoord *liggen*. *TABU 29*, 43–47.

Hoekstra, J. (1997). *The Syntax of Infinitives in Frisian*. Ph. D. thesis, Rijksuniversiteit Groningen.

Höhle, T. (1991). Assumptions about asymmetric coordination in German. In J. Mascaró and M. Nespor (Eds.), *Grammar in Progress*, pp. 221–235. Dordrecht: Foris.

Hornstein, N. (1990). *As Time Goes by*. Cambridge MA: MIT Press.

Ijbema, A. (2002). *Grammaticalization and Infinitival Complements in Dutch*. Ph.d thesis, Holland Institute of Generative Linguistics.

Ijbema, A. (2003). Grammaticalization and reanalysis in Dutch aspectual constructions. m.s. University of Leipzig.

Ingria, R. (1990). The limits of unification. In *Proceedings of the 28th Annual Meeting on Association for Computational Linguistics*, Morristown NJ, pp. 194–204. Association for Computational Linguistics.

Jackendoff, R. (1977). *X' Syntax*. Cambridge MA: MIT Press.

Jaeggli, O. and N. Hyams (1993). On the independence and interdependence of syntactic and morphological properties: English aspectual *come* and *go*. *Natural Language and Linguistic Theory 11*, 313–346.

Johannessen, J. (1998). *Coordination*. New York: Oxford University Press.

Johanson, L. (1996). Terminality operators and their hierarchical status. In B. Devriendt, L. Goossens, and J. V. der Auwera (Eds.), *Complex Structures: A Functionalist Perspective*, pp. 229–258. Berlin: Mouton de Gruyter.

Johnson, K. (1991). Object positions. *Natural language and linguistic theory 9*, 577–636.

Josefsson, G. (1991). Pseudo-coordination: A VP+VP coordination. *Working papers in Scandinavian syntax 47*, 130–156.

Julien, M. (2000). *Syntactic heads and word formation: A study of verbal inflection*. Ph. D. thesis, University of Tromsø.

Kayne, R. (1994). *The Antisymmetry of Syntax*. Cambridge MA: MIT Press.

Köhler, O. (1962). Studient zum Genussystem und Verbalaufbau der zentralen Khoisan-Sprachen. *Anthropos 57*, 529–546.

Kombuis, K. (2002). Equilibrium. Compact Disk, Copyright: Rhythm Records.

Koops, C. (2004). Emergent aspect constructions in present-day English. In G. Radden and K.-U. Panther (Eds.), *Studies in Linguistic Motivation*, Volume 28 of *Cognitive Linguistics Research*, pp. 1–34. Berlin: Mouton de Gruyter.

Kratzer, A. (1993). On external arguments. *University of Massachusetts (Amherst) Occasional Papers 17*, 103–130.

Kratzer, A. (1996). Severing the External Argument from its Verb. In J. Rooryck and L. Zaring (Eds.), *Phrase Structure and the Lexicon*, Volume 33 of *Studies in Natural Language & Linguistic Theory*, pp. 109–137. Dordrecht: Kluwer Academic Press.

Kuhn, T. S. (1970). *The Structure of Scientific Revolutions* (Second ed.), Volume 2(2) of *International encyclopedia of unified science*. Chicago: University of Chicago Press.

Kuteva, T. (1999). On *sit/ stand/lie* auxiliation. *Linguistics 37*(2), 191–213.

Lakoff, G. (1986). Frame semantic control of the coordinate structure constraint. In A. Farley, P. Farley, and K.-E. McCullough (Eds.), *CLS 22, Part 2, Papers from the Parasession on Pragmatics and Grammatical Theory*, Chicago, pp. 152–167. Chicago Linguistic Society.

Larson, R. (1988). On the Double Object Construction. *Linguistic Inquiry 19*, 335–391.

Lasersohn, P. (1995). *Plurality, Conjunction and Events*. Dordrecht: Kluwer Academic Publishers.

Lasnik, H. (2002). Movement, ellipsis, and their interaction: Implications for syntactic theory. Lecture series at Leiden University, May 27–31.

Le Roux, J. J. (1923). *Oor Die Afrikaanse Sintaksis*. Amsterdam: Swets and Zeitlinger.

Lemmens, M. (2002). The semantic network of Dutch posture verbs. In J. Newman (Ed.), *The Linguistics of Sitting, Standing and Lying*, Volume 51 of *Typological Studies in Language*, pp. 103–139. Amsterdam, Philadelphia: John Benjamins.

Levy, R. and C. Pollard (2002). Coordination and neutralization in HPSG. In F. Van Eynde, L. Hellan, and B. Dorothee (Eds.), *The Proceedings of the 8th International Conference on Head-Driven Phrase Structure Grammar*, pp. 221–234. CSLI Publications.

Link, G. (1984). Hydras: On the logic of relative clause constructions with multiple heads. In F. Landman and F. Veltman (Eds.), *Varieties of Formal Semantics*, pp. 245–257. Dordrecht: Foris.

Lødrup, H. (2002). The syntactic structures of Norwegian pseudo-coordinations. *Studia Linguistica 56*, 121–143.

Marantz, A. (2000). Derivational morphology. Workshop at the University of Trondheim, Norway.

Marantz, A. and M. Halle (1993). Derivational morphology and the pieces of inflection. In K. Hale and S. J. Keyser (Eds.), *The View from Building 20: Essays in Linguistics in Honour of Sylvain Bromberger*, pp. 111–176. Cambridge MA: MIT Press.

Matthee, D. (1985). *Fiela Se Kind*. Cape Town: Tafelberg.

Matushansky, O. (2002). The status of head-movement in linguistic theory. pp. 1–44. m.s. CNRS/Université Paris VIII.

Matushansky, O. (2005a). Head-movement in linguistic theory. To appear in Linguistic Inquiry 37.1.

Matushansky, O. (2005b). Moving a-head. In K. Hiraiwa and J. Sabbagh (Eds.), *Minimalist Approaches to Clause Structure*, Volume 50 of *MIT Working Papers in Linguistics*, pp. 1–45. Cambridge MA: MIT.

Moens, M. and M. Steedman (1988). Temporal ontology and temporal reference. *Computational linguistics 14*(2), 15–28.

Müller, G. (2002). Two types of remnant movement. In A. Alexiadou, E. Anagnostopoulou, S. Barbiers, and H.-M. Gaertner (Eds.), *Dimensions of Movement: From Features to Remnant*, pp. 209–241. Amsterdam,Philadelphia: John Benjamins.

Müller, G. (2004). Verb-second as vP-first. *Journal of comparative Germanic linguistics 7*, 179–234.

Munn, A. B. (1993). *Topics in the Syntax and Semantics of Coordinate Structures*. Ph. D. thesis, University of Maryland.

Musan, R. (2001). The present perfect in German: Outline of its semantic composition. *Natural language and linguistic theory 19*, 355–401.

Na, Y. and G. Huck (1992). On extracting from asymmetrical structures. In D. Brentari, G. Larson, and L. Macleod (Eds.), *The Joy of Grammar: A Festschrift in Honor of James D. Mccawley*, pp. 251–274. Amsterdam/Philadelphia: John Benjamins.

Neeleman, A. (1994). *Complex Predicates*. Ph. D. thesis, Utrecht.

Newman, J. (2002). A cross-linguistic overview of the posture verbs *sit*, *stand* and *lie*. In J. Newman (Ed.), *The Linguistics of Sitting, Standing and Lying*, Volume 51 of *Typological Studies in Language*, pp. 1–24. Amsterdam, Philadelphia: John Benjamins.

Newman, J. and S. Rice (2001). English *sit*, *stand* and *lie* in small and large corpora. *International computer archive of modern and mediaeval English 25*, 109–134. (http://helmer.aksis.uib.no/icame/ij25/)).

Nilsen, Ø. (2003). *Eliminating Positions: Syntax and Semantics of Sentential Modification*. Ph. D. thesis, Utrecht Institute of Linguistics OTS.

Noonan, M. (1992). *A Grammar of Lango*. Berlin: De Gruyter.

Pesetsky, D. (1995). *Zero Syntax: experiencers and cascades*. Cambridge: MIT Press.

Peterson, P. (2004). Coordination: Consequences of a lexical-functional account. *Natural language and linguistic theory 22*, 643–679.

Pollard, C. and I. A. Sag (1994). *Head-Driven Phrase Structure Grammar*. Chicago, Illinois: University of Chicago Press and CSLI Publications.

Pollock, J.-Y. (1994). Checking theory and bare verbs. In G. Cinque (Ed.), *Paths Towards Universal Grammar: Studies in Honour of Richard S. Kayne*, pp. 293–310. Washington D.C.: Georgetown University Press.

Ponelis, F. (1968). *Grondtrekke Van Die Afrikaanse Sintaksis*. Pretoria: J.L. van Schaik.

Ponelis, F. (1979). *Afrikaanse Sintaksis*. Pretoria: J.L. Van Schaik.

Ponelis, F. (1993). *The Development of Afrikaans*. Frankfurt am Main: Die Deutsche Bibliothek.

Postal, P. (1998). *Three Investigations of Extration*. Cambridge MA: MIT Press.

Progovac, L. (1998a). Structure for coordination (Part I). *GLOT International 3*(7), 3–6.

Progovac, L. (1998b). Structure for coordination (Part II). *GLOT International 3*(8), 3–9.

Pullum, G. and A. Zwicky (1986). Phonological resolution of syntactic feature conflict. *Language 62*, 751–773.

Pullum, J. (1990). Constraints on intransitive quasi-serial verb constructions in modern colloquial English. In B. Joseph and A. Zwicky (Eds.), *When Verbs Collide: Papers from the 1990 Ohio State Mini-Conference on Serial Verbs*, Number 39 in Ohio State University Working Papers in Linguistics, Columbus, Ohio, pp. 218–239. Ohio State University.

Pylkkänen, L. (2002). *Introducing Arguments*. Ph. D. thesis, Massachusetts Institute of Technology.

Quirk, R., S. Leech, and J. Svartvik (1985). *A Comprehensive Grammar of the English Language*. Longman, London.

Rademeyer, J. (1938). *Kleurling Afrikaans: Die Taal Van Die Griekwas En Rehoboth-Basters*. Amsterdam: N.V. Swets and Zeitlinger.

Ramchand, G. (2005). First phase syntax. m.s. (http://www.hum.uit.no/a/ramchand/rdownloads/antilex.pdf).

Reichenbach, H. (1947). *Elements of Symbolic Logic*. Berkley CA: University of California.

Reinhart, T. (1981). A second COMP position. In A. Belletti, L. Brandi, and L. Rizzi (Eds.), *Theory of Markedness in Generative Grammar*, pp. 517–557. Pisa, It.: Scuoala Normale Superiore.

Richards, N. (1997). *What Moves When in Which Language?* Ph. D. thesis, Massachusetts Institute of Technology, Cambridge MA.

Rizzi, L. (1986). On chain formation. In H. Borer (Ed.), *Syntax and Semantics 19: The Syntax of Pronominal Clitics*, pp. 65–95. New York: Academic Press.

Rizzi, L. (1990). *Relativized Minimality*. Cambridge MA: MIT Press.

Rizzi, L. (2002). On the grammatical basis of language development: A case study. Published by Centro Interdipartimentale di Studi Cognitivi sul Linguaggio (m.s.) http://www.ciscl.unisi.it/doc/doc_pub/rizzi2002-on_the_grammatical_basis_of_language_development.doc.

Robbers, K. (1997). *Non-Finite Verbal Complements in Afrikaans*. Ph. D. thesis, University of Amsterdam.

Roberge, P. (1994). On the origins of the Afrikaans verbal hendiadys. *Stellenbosch papers in linguistics 28*, 45–81.

Rohrbacher, B. (1999). *Morphology-Driven Syntax. A Theory of V-to-I Raising and Pro-Drop*. Amsterdam, Philadelphia: John Benjamins.

Ross, J. (1967). *Constraints on Variables in Syntax*. Ph. D. thesis, Massachusetts Institute of Technology.

Rothstein, S. (2004). *Structuring Events*. Oxford: Blackwell Publishing.

Ruys, E. (1993). *The Scope of Indefinites*. Ph. D. thesis, Utrecht.

Sag, I., G. Gazdar, T. Wasow, and S. Weisler (1985). Coordination and how to distinguish categories. *Natural language and Linguistic theory 3*, 117–171.

SAND (2005). Dynamic syntactic atlas of the Dutch dialects. Barbiers, S. *et al*. Website: http://www.meertens.nl/sand.

Schmerling, S. (1975). Asymmetric conjunction and rules of conversation. In P. Cole and J. Morgan (Eds.), *Speech Acts*, Volume 3 of *Syntax and Semantics*, pp. 211–231. New York: Academic Press.

Shopen, T. (1971). Caught in the act. In *Papers from the Seventh Regional Meeting, Chicago Linguistic Society. April 16-18, 1971*, Chicago, pp. 254–263. Chicago Linguistic Society.

Smith, C. (1997). *The Paremeter of Aspect*. Dordrecht: Kluwer Academic Publishers.

Solà, J. (1996). Morphology and word order in Germanic languages. In H. Thráinsson, J.-W. Zwart, W. Abraham, and S. Epstein (Eds.), *Minimal Ideas: Syntactic Studies in the Minimalist Framework*, Volume 12 of *Linguistik Aktuell*, pp. 217–251. Amsterdam/Philadelphia: John Benjamins.

Solomey, N. (1997). *Het Ongrijpbare Neutrino: Een Subatomair Detectiveverhaal*. Number 61 in De Wentenschappelijke Bibliotheek. Amsterdam: Natuur en Techniek, Veen Magazines.

Stahlke, H. (1970). Serial verbs. *Studies in African linguistics 1*, 60–99.

Steedman, M. (1985). Dependency and coordination in the grammar of Dutch and English. *Language 61*, 523–568.

Stefanowitsch, A. (1999). The go-and-verb construction in a cross-linguistic perspective: Image-schema blending and the construal of events. In D. Nordquist and C. Berkenfield (Eds.), *Proceedings of the Second Annual High Desert Linguistics Society Conference*, Alburquerque, pp. 1–12. High Desert Linguistics Society.

Surányi, B. (2002). *Multiple Operator Movements in Hungarian*. Ph. D. thesis, Utrecht University, The Netherlands.

Svenonius, P. (2002). Case is uninterpretable aspect. In *Proceedings on Perspectives on Aspect Conference at Utrecht*, Utrecht, pp. 1–10. UIL OTS. (http://www-uilots.let.uu.nl/conferences/Perspectives_on_Aspect/Proceedings/Svenonius.pdf)).

Tenny, C. (1987). *Grammaticalizing Aspect and Affectedness*. Cambridge MA: MIT Press.

Travis, L. (1994). Event phrase and a theory of functional categories. In P. Koskinen (Ed.), *Proceedings of the 1994 Annual Meeting of the Canadian Linguistic Association*, Toronto, pp. 559–570. Toronto working papers in linguistics.

Travis, L. (2000). Event structure in syntax. In C. Tenny and J. Pustejovsky (Eds.), *Events as Grammatical Objects*, pp. 145–185. Stanford CA: CSLI Publications.

Uriagereka, J. (1999). Multiple spell-out. In S. Epstein and N. Hornstein (Eds.), *Working Minimalism*, pp. 251–282. Cambridge MA: MIT Press.

Van Craenenbroeck, J. (2004). *Ellipsis in Dutch Dialects*. Ph. D. thesis, University of Leiden.

Van der Kleij, S. (1999). Tijd en aspect in het werkwoordelijke systeem van het Afrikaans. Master's thesis, Leiden University.

Van Koppen, M. (2005). *One Probe-Two Goals: Aspects of Agreement in Dutch Dialects*. Ph. D. thesis, University of Leiden Centre for Linguistics.

Van Niekerk, J. (1995). 'n Medewerkwoordklien vir Afrikaans. *South African Journal of Linguistics 13*(4), 146–153.

Vendler, Z. (1957). Verbs and times. *The Philosophical Review 66*, 143–160. Reprinted: (1967), Linguistics in Philosophy. Cornell University Press: New York.

Verkuyl, H. (1972). *On the Compositional Nature of the Aspects*. Dordrecht: Reidel.

Verkuyl, H. J. (1993). *A Theory of Aspectuality : The Interaction Between Temporal and Atemporal Structure*. Cambridge, UK: Cambridge University Press.

Vriends, E. (1998). Morphosyntax of verb movement and Afrikaans verbal constructions. *Stellenbosch Papers in Linguistics 31*, 95–124.

Weynen, A. (1965). *Zeventiende-Eeuwse Taal*. Zutphen: Thieme.

Wiklund, A.-L. (1996). Pseudo-coordination is subordination. *Working papers in Scandinavian syntax 58*, 29–54.

Wiklund, A.-L. (2005). *The Syntax of Tenselessness: On Copying Constructions in Swedish*. Ph. D. thesis, University of Umeå.

Williams, E. (1978). Across the board rule application. *Linguistic Inquiry 9*, 31–43.

Winter, Y. (1996). A unified semantic treatment of singular NP coordination. *Linguistics and philosophy 19*, 337–391.

Wulff, S. (2005). Go-v vs go-and-v in English: A case of constructional synonymy? In S. Gries and A. Stefanowitsch (Eds.), *Corpora in Cognitive Linguistics*. To appear.

Zoerner, E. (1995). *Coordination: The Syntax of &P*. Ph. D. thesis, University of California, Irvine.

Zwart, J.-W. (1994). Dutch is head-initial. *The Linguistic Review 11*(3), 377–406.

Zwart, J.-W. (1997). *Morphosyntax of verb movement: A Minimalist approach to the syntax of Dutch*. Studies in Natural Language and Linguistic Theory. Dordrecht: Kluwer Academic Publishers.

Nomenclature

1PL	First person plural
1SG	First person singular
2PL	Second person plural
2SG	Second person singular
3SG	Third person plural
3SG	Third person singular
AUX	Auxiliary
DIM	Diminutive
EGR	Egressive
EMPH	Emphatic particle, discourse particle etc.
HON	Honorary, polite form
LEXV	Lexical verb
MOD	Modal
PASS	Passive
POSS	Possessive
PRT	Separable verbal particle
PST	Past tense marker *ge-* (occurs as a prefix on participles)
BA	Baster Afrikaans
CI	Complex initial
CI/SI alternation	The ability of an ILV or DLV to optionally occur in either a CI or SI with no semantic distinction between the two constructions.

ConCo	Contiguous coordination
CSC	Coordinate Structure Constraint
DLV	Direct linking verb, a restructuring verb taking a bare verbal complement.
DLV CI	A complex initial with a direct linking verb
GA	Griekwa Afrikaans
ILV	Indirect Linking Verb, a restructuring verb taking a pseudo-coordinative complement headed by *en*.
ILV CI	A complex initial with an indirect linking verb
KBA	Knyska Boswerker Afrikaans
LCL	Law of Coordination of Likes
MSC	Morphological Sameness Condition
ReCo	Reduplicative coordination
SceCo	Scene-setting coordination
SI	Simplex initial
V2	Verb second
VVT	Velddriffse Vissertaal

Index

Samenvatting

Constructies met verbale pseudo-coördinatie zijn complexe predikaten. Deze predikaten bestaan op zijn minst uit twee werkwoorden die gescheiden worden door een verbindingselement dat vaak de vorm heeft van een coördinatie markeerder. Normaal gesproken komt het werkwoord in het eerste conjunct uit een gesloten klasse van lexemen. Dit werkwoord is semantisch ondergeschikt aan het tweede. Samen vormen de conjuncten een eenheid van gebeurtenis. Onderzoek naar deze constructies verschaft ons meer inzicht in de aard van coördinatie, de structuur van *events* en de eenheden waar syntactische operaties op toegepast kunnen worden.

Dit proefschrift legt de nadruk op: (i) het ontwikkelen van een typologie van constructies met pseudo-coördinatie en (ii) een taalkundige analyse die systematisch de eigenschappen verklaart van deze constructies.

Hoofdstuk (1) introduceert een typologie van constructies die mogelijk gecoördineerde verbale constituenten hebben.

(25) Caesar went across the Rubicon and he conquered Gaul [OCo]

(26) Caesar went to Gaul and devastated it [SceCo]

(27) Caesar saluted his legions before…
he went and addressed them [ConCo]

(28) Caesar's legions marched and marched for days [ReCo]

Deze zinnen zijn voorbeelden van respectievelijk Gewone Coördinatie (OCo), Scène-beschrijvende Coördinatie (SceCo), Opeenvolgende Coördinatie (ConCo) en Reduplicerende Coördinatie (ReCo).

Hoofdstuk (2) is voor het merendeel gewijd aan het aantonen dat Gewone Coördinatie systematisch verschilt van pseudo-coördinatieve constructies als Scène-beschrijvende en Aangrenzende Coördinatie. Door middel van tests kan aangetoond worden dat Opeenvolgende Coördinatie bestaat uit een gecoördineerde opeenvolging van aangrenzende verbale constituenten, met andere woorden de verbale opeenvolging gedraagt zich als constituent.

Hoofdstuk (3) breidt de empirische dekking van het onderzoek uit naar pseudo-coördinatie met *try* ('proberen') en reduplicatieve coördinatie (28). Reduplicatieve coördinatie is extreem productief, niet alleen in het Engels, maar ook in talen zoals

het Nederlands en het Duits, waarin pseudo-coördinatie verder niet voorkomt. De tests die ontwikkeld werden in hoofdstuk (2), werden hier systematisch toegepast op reduplicatieve coördinatie. De resultaten lieten zien dat Engelse reduplicatieve coördinatie en Opeenvolgende Coördinatie gecategoriseerd kunnen worden als syntactisch gelijkwaardig: de beide soorten coördinatie gedragen zich alsof de verbale opeenvolging een hechte constituent is. Deze classificatie stelt ons in staat om in hoofdstuk (4) een meer diepgaande analyse van pseudo-coördinatie te geven. In dit hoofdstuk wordt aangetoond dat de unieke eigenschappen van een deelverzameling pseudo-coördinaties verklaard kan worden door echte coördinatie van Vs die samen een complex hoofd vormen. De analyse kan gemakkelijk worden uitgebreid worden naar andere soorten gecoördineerde predikaten zoals reduplicatieve coördinatie. Als coördinatie onder het niveau van syntactische hoofden kan plaatsvinden, dan is de vraag wat er precies onder dit niveau gecoördineerd wordt. Standaard aannames over de aard van hoofden geven het vanzelfsprekende antwoord op deze vraag: de *features* van hoofden worden eigenlijk gecoördineerd. Dit wordt tevens bevestigd door de interactie van pseudo-coördinatie met *Aktionsart*. Afzonderlijke *Aktionsart-features* uit de verbale feature-opmaak kunnen namelijk door de syntaxis gemanipuleerd worden.

De tweede helft van het proefschrift breidt de conclusies van het eerste gedeelte uit, en vormt tevens extra evidentie voor deze conclusies, naar pseudo-coördinatie in het Afrikaans met werkwoorden die een lichamelijke houding uitdrukken, zoals bijvoorbeeld *sit* (’zitten’), *staan* (’staan’), *lê* (’liggen’) en *loop* (’lopen’). Het paradigma dat de basis voor discussie vormt wordt hieronder herhaald en wordt oorspronkelijk besproken in hoofdstuk (5). *Complex Initials* is een constructie waarin twee of meer werkwoorden in de V2-positie voorkomen. De werkwoorden die in deze constructies kunnen voorkomen zijn of werkwoorden van lichamelijke houding (Indirecte Verbindingswerkwoorden – ILVs) of aspectuele directe verbindingswerkwoorden (DLVs). Werkwoorden van lichamelijke houding selecteren altijd een complement dat het pseudo-coördinatieve *en* (’en’) als hoofd heeft. *Simplex Initials* zijn constructies waarin alleen maar een werkwoord zich in V2 bevindt.

(29) a. *Jan sal die boeke sit en lees*
Jan zal de boeken zit en lees
‘Jan zal de boeken zitten te lezen’

b. *Jan sit die boeke en lees*
Jan zit de boeken en lees
‘Jan zit de boeken te lezen’

c. *Jan sit en lees die boeke*
Jan zit en lees de boeken
‘Jan zit de boeken te lezen’

Deze constructies in het Afrikaans verschillen van die in het Engels doordat er hierin sprake is van *verb raising* en dat er sprake kan zijn van *pied-piping* van extra hoofd-materiaal naar de V2-positie.

In hoofdstuk (6) wordt aangetoond door middel van de tests voor het Engels dat pseudo-coördinatie in het Afrikaans verschilt in sommige opzichten van die in het Engels.

Hoofdstuk (7) is gewijd aan een analyse van de Afrikaanse constructies. De kern van de analyse is dat pseudo-coördinatie echte coördinatie van verbale hoofden is met het cruciale verschil dat er in plaats van coördinatie van V sprake is van coördinatie van *v*. Een bespreking van de unieke eigenschappen van pseudo-coördinatie in het Afrikaans toont aan dat de *Coordinate Structure Constraint* en de *Law of Coordination of Likes* ook van toepassing zijn op features en daarom strikte beperkingen opleggen. Tevens toont deze discussie aan dat syntactische operaties zoals werkwoord verplaatsing gevoelig zijn voor de feature-opmaak van gecoördineerde hoofden. Het hoofdstuk eindigt met een korte discussies van directe verbindingswerkwoorden. Alhoewel deze klasse niet homogeen is, kunnen directe verbindingswerkwoorden die optioneel *complex initials* vormen, geanalyseerd worden op dezelfde manier als indirecte verbindingswerkwoorden. Het enige verschil is dat in het geval van de directe verbindingswerkwoorden de coördinator niet fonologisch gerealiseerd is.

Curriculum Vitae

Mark Andrew de Vos was born on 11 April 1975 in Kwe-Kwe, Zimbabwe and matriculated at Pretoria Boys High School, South Africa, in 1992. He read towards a Bachelor of Journalism degree at Rhodes University in Grahamstown from 1993 to 1996 where he first encountered Linguistics. After graduating with academic colours, he worked for a while at Wedge Projects, writing project proposals before spending two years in the Department of Journalism at Tshwane University of Technology (formerly Technikon Northern Gauteng). In 1999 he was awarded a scholarship to read towards a Masters degree in Linguistics at the University of Tromsø, Norway, under the supervision of Prof. Tarald Taraldsen. The resulting M.Phil. thesis was entitled *Afrikaans verb clusters, a functional head analysis*. On completion in 2001, he was selected to be a Doctoral researcher (Assistent in Opleiding) at the Leiden University Centre for Linguistics in the Netherlands. He is currently a lecturer in the Department of English Language and Linguistics at Rhodes University in Grahamstown, South Africa. His interests include building steam engines and sailing.