Long-Distance Reflexives in Norwegian

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Submitted in total fulfilment of the requirements of
the degree of Doctor of Philosophy

September 2001

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Abstract

Despite the work of linguists such as Thrainsson, Sigurðsson, Pollard, Sag, Popowich and Kuno, among others, the analysis and explanation of long-distance reflexives (LDRs) continues to be carried out primarily in the field of syntax. A major goal of this thesis is to show that, in Norwegian, both reflexives with local antecedents and reflexives with non-local antecedents obey the same general constraints. These constraints are based upon a confluence of factors including the semantic features of reflexives as opposed to pronouns, syntactic features such as clause structure, prosodic features such as intonation, discourse features such as perspective and pragmatic information such as conversational implicature.

A review of the literature on long-distance reflexives reveals several problems with syntactic approaches, the greatest problem being that they are based upon typological tendencies. Because of this, there are exceptions to nearly every analysis. The notions of finite tense, perspective, factivity and logophoricity are relevant to the description and generation of long-distance reflexives in Norwegian, but not exhaustively so.

A major contribution of this thesis to the body of literature available on long-distance reflexives is the presentation of new data. Grammaticality judgements were collected from 180 native speakers of Norwegian on sentence frames which are often used as the basis for arguments in the LDR literature. In addition, 27 speakers completed an oral elicitation exercise, where 6 speakers used LDR. Despite the fact that people disagree on the level of acceptability an LDR construction has, this disagreement is regular, and describable in terms of the Extended Reference Point Proposal, which incorporates information derived from semantics, syntax, prosody, discourse and pragmatics.

Declaration

I declare that this thesis has been composed by myself and that the research reported herein is my own unless otherwise indicated. This thesis complies with all the regulations for the degree of PhD at the University of Melbourne, and falls below the requisite word limit of 100,000 words.

Tania E. Strahan
September 2001

Acknowledgments

There are literally hundreds of people who have worked with me to make this thesis possible – I wish I could personally thank each and every one. Failing that, here is a (partial) list of people whose efforts I must acknowledge.

Firstly, my supervisors. In more or less chronological order, these are: Dominique Estival, for helping me through my first year as a PhD student, and for learning about the world of LDR with me! Then came Lesley Stirling, who seemed to have a strange passion for anaphora, and who opened up the world of discourse analysis to me. Next came Nick Evans and Peter Austin, who had both been on my committee from the start. Their apprehension about the scale of this undertaking was duly noted, and I am pleased to be able to add this data now to the general linguistic corpus. And I have to thank Nick Evans for seeing this project through in its final stages. All and any faults that remain in this thesis are not for want of supervisory advice!

There is one person who has been a constant throughout this thesis apart from myself, and that is Nick Nicholas. While he did abscond to America several years ago, he has returned occasionally, and he has remained in email contact throughout. I remain indebted to him and his grumpy-bum comments on several thousand drafts ;-) .

To Sam Carter, who proved himself invaluable in quickly learning Norwegian and entering data for me, tuusen takk!

To all of my informants, and linguists with whom I had the pleasure of discussing my research in Norway, tusen takk skal Dykk ha!

And thanks must go to my basketball team, the Eltham Wildcats ABA team, because without the physical exertion of playing basketball, I most certainly would have gone mad. Congratulations to the majority of my team who can recite the title of my thesis, and even explain what it means!!

And finally, thanks to my family and friends (some of whom can confidently recite my topic, too!), in particular Lucien Boland and Leslie Layne (I knew it wasn't syntax!)

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PART I

Introduction

Chapter 1

1 Introduction to LDR

Long-distance reflexives (LDRs) are a certain type of 'exempt' anaphor – exempt in the sense that they do not obey the traditional syntactic condition imposed on all reflexives, namely that they must find their antecedent within their clause. While proposals have been made to extend this original condition to cover a more extended domain, exceptions to these proposals are still common in many languages.

1.1 Structure of thesis

This thesis is divided into five parts. The first part is the introduction, and consists of two chapters. Chapter 1 presents the general 'facts' of LDR as they are discussed in the syntactic literature, and gives many examples of this phenomenon in Norwegian as well as other languages. The aim of this chapter is to familiarise the reader with LDR before looking at approaches to explaining it. The second chapter is an overview of Norwegian. This chapter will be particularly relevant to the reader who has no knowledge of, or only a passing familiarity with the linguistic situation in Norway. The meaning of the term 'Norwegian' as used in this thesis is explained in Chapter 2, section 2.2.2.

Part II of this thesis consists of two chapters, where various approaches to accounting for LDR are examined. Chapter 3 looks at some syntactic accounts of LDR. In particular, Reinhart and Reuland's (1993) paper *Reflexivity* is important, as it

highlights the differences between different types of clause-bound reflexives, which leads naturally into a proposal for accounting for LDRs using Binding Theory. Several such approaches are analysed, and there are shown to be problems with all of them. The approach to describing LDR within the Lexical-Functional Grammar framework is presented in Chapter 3, section 3.6. This approach covers some more data than the Government and Binding approach, but still leaves out many types of exempt anaphors. In section 3.7, Hellan's notions of predication-command and perspective-command are shown to be valuable, since they incorporate some non-syntactic ideas, such as perspective. Some more of the non-syntactic research into LDRs is presented in Chapter 4, where factivity and logophoricity are also introduced, and their relevance to LDR is discussed.

Part III comprises the Methodology. The data collection and storage is documented here, as well as some remarks on hypothesis testing. The bulk of the data for this study comes from the intuitions of 180 speakers of Norwegian, who each completed a questionnaire of 60 sentences. 27 speakers also completed an elicitation exercise. The questionnaire used to obtain information about the informants is located in Appendix 1. The test sentences are in Appendix 2, and the elicitation story is in Appendix 3. A transcription of the speech elicited by the elicitation exercise is given in Appendix 4.

Part IV is divided into three chapters. In Chapter 6, an overview is given of the informants who participated in this study. Chapter 7 presents the results of evaluating the hypotheses found to be explicit or implicit in the examination of the syntactic literature, while Chapter 8 addresses the non-syntactic hypotheses.

In Part V, a proposal is made for a new approach to analysing LDR. Chapter 9 looks at some LDR facts that are not addressed in the general LDR literature. In Chapter 10, some concepts from Accessibility Theory and Conceptual Semantics are introduced, as well as van Hoek's (1997) Reference Point Model of anaphora, which is based in Conceptual Semantics. The direction this model could take in order to account for long-distance reflexives is postulated in the Extended Reference Point Proposal. In Chapter 11, I examine several individual speakers' data in terms of the Extended Reference Point Proposal, which incorporates semantic and syntactic factors. Chapter 12 looks at the role of intonation in defining the domain in which a reflexive may be bound. Chapter 13 presents a synopsis of the key factors involved in the Extended

Reference Point Proposal as identified in this thesis and suggests avenues for further research in this area.

Finally, the main findings and conclusions made throughout this thesis are summarised in the last section.

1.2 LDR

To begin this discussion of long-distance reflexives (LDR), I will show some of the methods used to describe long-distance anaphoric binding. This chapter will look only at syntactic approaches, which, as it will be shown, can account for many of the observations associated with LDR, although gaps still remain. I will begin by describing LDR in very basic terms, then going into a more technical definition. The main observable features of LDRs are then listed. These observations have served as the basis for many syntactic accounts of LDR which will be examined in detail in Chapter 3. Finally, a summary of the main syntactic approaches to explaining LDR is presented.

I will be starting in simple terms, using examples mainly from English, with support from other languages where necessary. I will also use as many examples from the Scandinavian languages as possible, especially Norwegian, in order to familiarise the reader with the language. A brief typological introduction to Norwegian is given in the following chapter.

1.2.1 Definitions

There are four terms that need to be defined in order to understand what is meant by the term ‘long-distance reflexive’. These are:

1. reflexive
2. antecedent
3. clause
4. Binding Conditions

For our purposes these explanations need not be exact at this stage – it is one of the aims of this thesis to improve upon the definitions presented here.

Firstly, a *reflexive* may be defined as an anaphor which must be coindexed with another NP in order to achieve any kind of real-world reference at all, eg *himself*, *herself*, *myself*, and Norwegian *seg*, Dutch *zich*, Japanese *zibun*, etc. (Other types of anaphors, eg personal pronouns, may also receive for example deictic reference, but not necessarily coindexation.) An *antecedent* is the NP which the anaphor refers back to in order to achieve its real-world reference as shown in (1.1).

(1.1) *John$_i$ washed himself$_i$ in the bath.*

John is the antecedent for the reflexive *himself*. The term *clause* refers to a unit of a sentence that contains at most one (semantic) verb plus its arguments, which may themselves be entire clauses. In this way, embedding of clauses can occur, eg [*Lucien had been thinking [that he'd like [to see The Matrix at The Astor]]]* contains three clauses, as indicated by the square brackets. The Binding Conditions state essentially that a *reflexive* must find its *antecedent* within its same *clause*. A *non-clause-bounded* or *long-distance* reflexive is thus a reflexive which finds its antecedent outside of its clause.

Cross-linguistically, LDRs are not all that uncommon, as the following sections will show. Theoretically, however, they are of interest, as their distribution is often awkward to describe and predict.

1.3 The problem in more technical terms

There are two conditions which are classically imposed upon anaphoric NPs, ie reflexives and pronouns. Simplified, these may be stated as follows.

> Condition A: a reflexive must be bound in its governing category.
> Condition B: a pronoun must be free in its governing category.

Condition A says that a reflexive must find its antecedent in the same 'governing category' (which is often the clause) as itself, ie a reflexive must have a local antecedent. Condition A taken together with Condition B predicts that an reflexive cannot alternate with a pronoun in a given syntactic environment, ie that it is not possible for a pronoun to occur where an reflexive can, or vice versa (the Disjoint Reference Principle).

Reflexives which violate Condition A are termed *non-clause-bounded reflexives* or *long-distance reflexives* (LDR). It has been pointed out over the past twenty years or so that, while English reflexives must have a local antecedent, the reflexive in languages with LDR 'may occur in clauses at any depth of embedding' (Clements 1975:154). Examples which are regularly cited include the following.

NORWEGIAN

(1.2) *Jon$_i$ ba oss$_j$ snakka om seg$_i$.*
J bade us speak about R
'Jon$_i$ asked us$_j$ to speak about himself$_i$.'

ICELANDIC

(1.3) *Jón$_i$ segir að María$_j$ elski sig$_i$.*
J says that M loves R
'Jon$_i$ says that Maria$_j$ loves himself$_i$.'

The examples in (1.2) and (1.3) have only one clause boundary between the reflexive and its antecedent. However, there are examples where the reflexive is embedded more deeply than this. The following Chinese example is from Cole, Hermon and Sung (1990:11).

CHINESE

(1.4) *Zhangsan$_i$ renwei [Wangwu$_j$ zhidao [$_{CP}$ Lisi$_k$ [$_{PP}$ dui ziji$_{i/j/k}$] mei xinxin]]*.
Z thinks W knows L to R not have-confidence
'Zhangsan$_i$ thinks Wangwu$_j$ knows Lisi$_k$ does not have confidence in himself$_{i/j/k}$.'

ENGLISH

(1.5) *John$_i$ thinks that Shane$_j$ knows that Sean$_k$ doesn't have confidence in himself$_{*i/*j/k}$.*

Reflexives which violate Condition A are found in Chinese, as well as other East Asian languages such as Japanese and Korean, (Cole, Hermon and Sung 1990). They are also well documented in Icelandic (eg, Sigurðsson 1986, Maling 1986, Thráinsson 1976, 1990, 1991, 1997). Recently it has been pointed out that the Mainland Scandinavian languages (Norwegian, Swedish and Danish) may also exhibit LDR (Hellan 1988, Platzack 1998, Moshagen and Trosterud 1990). Although LDR in Scandinavian has often been mentioned, there has been no serious attempt to explain

it, apart from Hellan's (1988)[1] work *Anaphora in Norwegian and the Theory of Grammar*. Hellan's book has been the primary reference of LDR in Norwegian since its publication.

1.4 Main features of LDR

There are several features of LDR which are mentioned in the literature and are purported to be universal. These are a subjecthood condition on the antecedent, the non-complementarity of LDRs and pronouns, the use of LDR in some languages only within a subjunctive clause, and some sort of Tensed S condition blocking binding out of a finite clause. Each of these aspects of LDR will be discussed in this section. The most common approach used by syntacticians to account for LDR involves movement, although the issues of the type of movement (A-movement or A′-movement), potential landing sites and eventual barriers to further movement do not as yet have any unified solution.

1.4.1 Monomorphemicity

It is a widely attested phenomenon that LDRs are monomorphemic. This has been shown for the following languages: Chinese *ziji* (Cole and Wang 1996), Icelandic *sig*, Norwegian *seg* (Hellan 1988), Faroese *sig* (Sigurðsson 1986), Czech *sebe* (Toman 1991), Russian *siebe*, Korean *caki* (Cole, Hermon and Sung 1990), Japanese *zibun*, Polish *sobie* (Reinders-Machowska 1991), Dutch *zich* (Hellan 1988), Latin *se* and many others. Clause-bounded anaphors are often non-monomorphemic, and include Icelandic *sjálfur sig*, Dutch *zichzelf*, Italian *se stesso*, Finnish *hän itse*, Chinese *taziji* and Norwegian *seg sjølv* (Reuland and Koster 1991:12-20).

Hestvik (1992) presents evidence that there is a syntactic difference between monomorphemic and non-monomorphemic anaphors, which explains the difference between English and Scandinavian anaphors with respect to subject/ anti-subject orientation. He does this by building on Chomsky (1986) and Pica (1987; 1991), who assume that anaphoric expressions are either X^0 or XP. It is important to note that it is not the morphemicity of an anaphor which designates it as X^0 or XP (Hestvik

[1] Hellan bases his work upon the Trøndersk/ bokmål dialect which he speaks.

1992:569), rather, other properties such as long-distance binding possibilities do. As we shall see later, some interpretations of the Binding Conditions allow only X^0 elements to be bound outside of the local domain (eg Cole et al's 1990 approach), while under other interpretations, only XP elements may do this (eg Huang and Tang 1991). Another difference between the two types of anaphors is that an X^0 anaphor can take restrictive modifiers while this is impossible for XP anaphors. This is shown in the difference between English pronouns, which are XPs, and Norwegian pronouns, which are X^0 (examples from Hestvik 1992:569).

ENGLISH

(1.6) **he with red hat*

NORWEGIAN

(1.7) *han med raud kaps*
he with red cap
'him with the red hat'

Another difference between X^0 and XP anaphors is that they have different landing sites at LF, which results in their having different binding domains, as the binding conditions apply at LF. This difference is demonstrated in the following examples, showing both the s-structure and the d-structure of binding out of NPs (both these examples come from Hestvik 1992).

NORWEGIAN

(1.8) ss *John$_i$ fortalte Per$_j$ om eit bilete av seg$_{i/*j}$.*
J told P about a picture of R
'John$_i$ told Per$_j$ about a picture of himself$_{i/*j}$.'

(1.9) ds *[John$_i$* INFL*-seg$_i$ [fortalte Per$_j$ om eit bilete av t$_i$]].*

ENGLISH

(1.10) ss *John$_i$ told Bill$_j$ about himself$_{i/j}$.*

(1.11) ds *John$_i$ told Bill$_j$ [$_{PP}$ himself$_{i/j}$ [$_{PP}$ about t$_{i/j}$]].*

In the Norwegian example, the reflexive moves to the Spec of Infl, and is thus c-commanded at d-structure only by *John*. In English the reflexive moves to the Spec of PP and is c-commanded by both *John* and *Bill*. The Norwegian reflexive is therefore

predicted to be only long-distance (and subject) bound, whilst the English reflexive has no subject orientation, and may be bound by either potential antecedent.

Everaert (1991) looks at a wider cross-linguistic range of anaphors, and reaches the same conclusion as Hestvik (1992), namely that the difference between LDRs and short-distance anaphors results from inherent differences in their morphological structure, their semantics, and their syntactic behaviour (both inside and outside of Binding Theory).

Everaert breaks anaphors down into six types: special clitic reflexives, simple clitic reflexives, non-complex reflexives, complex reflexives, non-complex reciprocals and complex reciprocals. These are shown in Table 1.1.

Table 1.1 – Classes of anaphors, according to Everaert (1991)

Class	**Type of anaphor**	**Examples**
a.	special clitic reflexives	French *se*, Italian *si*
b.	simple clitic reflexives	Dutch *zich*, Norwegian *seg*
c.	non-complex reflexives	French *soi*, Italian *sè*, German *sich*
d.	complex reflexives	Dutch *zichzelf*, Norwegian *seg sjølv*
e.	non-complex reciprocals	Polish *siebie*, Dutch *elkaar*
f.	complex reciprocals	Icelandic *hvor annar*, Italian *l'uno … l'altro*

These classes of anaphors have different distributions. Two of these classes, b. and c., contain LDRs (which are also occasionally short-distance anaphors), while the others are all clause-bounded. Example sentences of each class are given here, showing that only classes b. and c. are grammatical with an LDR reading. (Examples come from Pica 1991:125 (French), Everaert 1991:91 (Dutch), Everaert 1991:83 (Polish) and Pica 1991:121 (Icelandic).)

CLASS A. FRENCH

(1.12) **Jean*$_i$ *se*$_i$ *veut [voir]*

J R wants see

Jean$_i$ wants to see himself$_i$.

CLASS B. DUTCH

(1.13) *Jan*$_i$ *liet [mij voor zich*$_i$ *werken]*.

J made me for R work

'Jan$_i$ made me work for him$_i$.'

CLASS C. GERMAN

(1.14) *Hans$_i$ laß [mich für sich$_i$ arbeiten]*.
H made me for R work
'Hans$_i$ made me work for him$_i$.'

CLASS D. NORWEGIAN

(1.15) **Han$_i$ fekk meg til å jobba for seg sjølv$_i$*.
he got me to to work for R self
He made me work for him$_i$.

CLASS E. POLISH

(1.16) **Ch*ł*opcy$_i$ czytali dziewczat wspomnienia o sobie$_i$*.
the boys read the girls' memories about each other
The boys$_i$ read the girls' memories about each other$_i$.

CLASS F. ICELANDIC

(1.17) **Þeir$_i$ sagði [að María elski hvorn annan$_i$]*.
they said that M loved-S each other
They$_i$ said [that Maria loved each other$_i$].

Everaert (1991) claims that each class of anaphor has different binding properties. We do not need to go into these here, where it suffices to note that enough distributional differences exist between monomorphemic and non-monomorphemic anaphors for at least some linguists to claim the distinction to be fundamental to the syntactic description of LDRs.

1.4.2 Subjecthood condition on antecedent

Many linguists, eg Dalrymple (1993), Hellan and Christensen (1986), Reinhart and Reuland (1991) and Anderson (1986) have commented that a subjecthood condition on the antecedent is necessary in the description of all reflexives (not just LDRs), as the typologically unmarked case appears to be when the antecedent is a grammatical subject (or logical subject, in some cases) as opposed to any other grammatical function.

The Binding Conditions do not set any constraints on the antecedent of the anaphor, so this must be dealt with via some other mechanism. Languages such as Icelandic,

Dutch, Latin, Italian, Finnish and Chinese (Koster and Reuland 1991) all seem to have a subjecthood condition. English appears to be rather unusual typologically (Anderson 1986), as English reflexives may take non-subject antecedents[2], as shown.

(1.18) *I asked Franny$_i$ about herself$_i$.*

Anticipating the discussion in Chapter 3, we can say that certain structural properties, including being headed by a nominative Agr, are necessary, although not sufficient, conditions for licencing LDR (Holmberg and Platzack 1995:90). This type of head-movement analysis then accounts for the subject orientation of LDRs. This is discussed in more detailed in Chapter 3.

The following two examples from Icelandic show the contrast in acceptability between a sentence with an available subject (1.19) and a sentence with an available object (1.20) as a potential antecedent. The object is rejected as a possible antecedent in Icelandic, hence there is a subjecthood condition on the antecedent of LDRs in Icelandic (from Thráinsson 1991:55).

ICELANDIC

(1.19) *Jón$_i$ sagði [að ég hefði svikið hann$_i$].*
J said that I had-S[3] betrayed him
'Jon$_i$ said that I had betrayed him$_i$.'

(1.20) **Ég sagði Jón$_i$ [að þú hefðir svikið sig$_i$].*
I said Jon that you had-S betrayed R
I said to Jon$_i$ that you had betrayed him$_i$.

This next example from Dutch shows that within a single clause, the reflexive cannot be bound by the object - it must be bound by the subject (judgement from Lucien Boland p.c.).

DUTCH

(1.21) *Miriam$_i$ vertelt Lisbeth$_j$ over zich$_{i/*j}$.*
M told L about R
'Miriam$_i$ told Lisbeth$_j$ about herself$_{i/*j}$.'

[2] Some of the languages mentioned also have reflexives which take non-subject antecedents.

This is parallel to Danish (Pica 1991:119), Finnish (van Steenbergen 1991:235), Chinese (Huang and Tang 1991:282, fn9) and Norwegian (Dalrymple 1993:26), as shown in the following examples.

DANISH

(1.22) **Jeg fortæller Gertrude$_i$ om sig$_i$.*
I tell G about R
I tell Gertrude$_i$ about herself$_i$.

FINNISH

(1.23) **Puhuin Pekalle$_i$ itsestään$_i$.*
spoke-1sg P R-POSS
I spoke to Pekka$_i$ about herself$_i$.

CHINESE

(1.24) *Zhangsan$_i$ gaosu Lisi$_j$ taziji$_{i/*j}$ de shenshi.*
Z tell L Rself's life-story
'Zhangsan$_i$ told Lisi$_j$ about his$_{i/*j}$ own life.'

NORWEGIAN

(1.25) **Jon fortalte Ola$_j$ om seg$_j$.*
J told O about R
Jon told Ola$_j$ about himself$_j$.

(but:

DUTCH

(1.26) *Ik vroeg Piet$_i$ over zichzelf$_i$.*
I asked P about Rself
'I asked Piet$_i$ about himself$_i$.')

These above examples show a preference for binding in Dutch, Danish, Finnish, English and Chinese with a subject, although (1.26) shows that this is not absolute, as

[3] S = subjunctive mood

the Dutch reflexive may be bound by an object if there is no potential binder in subject position (Hellan 1991:41)[4].

In the following example from Latin (Benedicto 1991:172, from Cicero, De Officiis, 3.86), the LDR is in a conditional relative clause, and refers back to the subject of the main clause, illustrating that Latin reflexives are also bound by a subject antecedent.

LATIN

(1.27) *Perfuga$_i$ ei est pollicitus, [[$_{S\phi}$ si praemium sibi$_i$*
a-deserter-NOM him-DAT promised if a-reward-ACC R-DAT

proposuisset] se eum ueneno necaturum]].
assure-SUBJ R-ACC him-ACC poison-ABL to kill-INF

'A deserter$_i$ promised to him, if (Fabricus) would assure him$_i$ of a reward, to kill him with poison.'

This next example from Italian (1.28) (from Thráinsson 1991:64) isn't particularly clear with regards to obvious subject-orientation of LDRs, as the only other potential antecedent does not have the same φ-features (person) as the real antecedent. It shows the embedded reflexive referring back to the subject of the main clause, however it does not rule out the possibility of a reflexive referring back to an object antecedent outside of its clause. The Norwegian example (1.29) (from Dalrymple 1993:26) uses a similar syntactic construction showing an example often used in the literature to demonstrate the syntactic possibility of binding over a clause boundary. This type of LDR is well documented in Norwegian.

ITALIAN

(1.28) *La signora$_i$ mi$_j$ dice [PRO$_j$ di giacere presso di se$_{i/*j}$].*
the woman me orders to lie near of R
'The woman$_i$ orders me$_j$ to lie near her$_{i/*j}$.'

[4] I am ignoring here the fact that two different Dutch anaphors have been used. The fact that the subjecthood condition may be disobeyed by some Dutch anaphors stands regardless. Such counterexamples are treated in the syntactic literature as exceptions, or non-prototypical uses of reflexives.

NORWEGIAN

(1.29) *Jon$_i$ høyrde oss snakka om seg$_i$.*
J heard us speak about R
'Jon$_i$ heard us speak about himself$_i$.'

In example (1.30) from Chinese (Huang and Tang 1991:273), it can be seen that *ziji* can find its antecedent in any clause within the same sentence regardless of the level of embedding. All these are subjects. Huang and Tang (1991:282, fn9) also argue that the bimorphemic reflexive *taziji* 'also exhibits a strong tendency for subject orientation'[5].

CHINESE

(1.30) *Zhangsan$_i$ manyuan Lisi$_j$ chang shuo Wangwu$_k$ bu xihuan ziji$_{i/j/k}$.*
Z complain L often say W not like R
'Zhangsan$_i$ complained that Lisi$_j$ often said that Wangwu$_k$ does not like himself$_{i/j/k}$.'

Finally, Norwegian also has a subjecthood condition on the antecedent of an LDR. In example (1.31) (from Dalrymple 1993:26), the only available antecedent would be the object of the matrix clause, but this is rejected. This example reinforces the subjecthood claim made on the evidence presented in (1.29) above.

NORWEGIAN

(1.31) **Eg lovde Jon$_i$ å snakka fint om seg$_i$.*
I promised J to speak nicely about R
I promised Jon$_i$ to speak nicely about himself$_i$.

Summary

Data from a wide range of languages has been presented here, showing that subject-orientation is a common condition on antecedents of reflexives. Since it is such a common feature of reflexives, it is usually assumed to be a part of universal grammar. Syntactic explanations of LDR account for the subject-orientation of LDRs by assuming that they receive their φ-features from Agr, either through movement or

[5] It will be argued later (in Chapter 10) that this is due to processing constraints – quite simply, it is very difficult to conceive of a situation where a syntactic object is doing something or having something done to itself.

some other mechanism. Infl is the link in the chains created by these reflexives, hence the subject-antecedent orientation of LDRs.

1.4.3 Complementarity effects

An oft-cited observation in the LDR literature (by eg Dalrymple 1993, Thráinsson 1976, 1991, Reinhart and Reuland 1991, 1993, Sigurðsson 1986) is that LDRs do not obey the Complementarity Principle. This principle, also known as the Disjoint Reference Principle, states that reflexives are bound in a domain in which non-reflexives are free. As shown in the following examples from Icelandic, the LDR is not in complementary distribution with the pronoun, since both are grammatical.

ICELANDIC

(1.32) *Jon$_i$ segir að Maria$_j$ elski sig$_{i/*j}$.*
J says that M loves R
'Jon$_i$ says that Maria$_j$ loves him$_{i/*j}$'

(1.33) *Jon$_i$ segir að Maria$_j$ elski hann$_{i/*j}$.*
J says that M loves him
'Jon$_i$ says that Maria$_j$ loves him$_{i/*j}$'

Marathi, an Indo-Aryan language spoken in west-central India (Dalrymple 1993:3) also shows non-complementarity between the reflexive and the pronoun (from Dalrymple 1993:19).

MARATHI

(1.34) *Jane$_i$ ne John laa aaplyaabaddal$_i$ maahiti dili.*
J ERG J DAT about-R-LD[6] information gave
'Jane$_i$ gave John information about herself$_i$.'

(1.35) *Jane$_i$ ne John laa ticyaabaddal$_i$ maahiti dili.*
J ERG J DAT about-her information gave
'Jane$_i$ gave John information about her$_i$.'

[6] LD = 'long distance reflexive'. This contrasts in Marathi with a short-distance reflexive.

It is interesting to note that Marathi (examples (1.34) and (1.35)) has both a long-distance and a short-distance reflexive[7]. The short-distance reflexive is in complementary distribution with the pronoun. The long-distance reflexive (as shown here) occurs in exactly those environments where a pronoun may be found when its antecedent is in the same sentence. The pronoun may also have an antecedent outside of its sentence, which the LDR cannot. Dalrymple therefore argues for at least two distinct binding domains in Marathi: the *clause*, which the SDR must be, and the LDR and pronoun may not be, bound within; and the *Root S* (root sentence), which the LDR must be, and the pronoun need not be, bound within. It is for this reason that Dalrymple postulates the Root S as another binding domain in Universal Grammar.

Platzack (1998:218) points out that it is not just LDRs which do not obey the Complementarity Principle, but any non-prototypically- (ie subject-) bound reflexive. In other words, only anaphors which obey the binding conditions are subject to the complementarity condition. In Swedish some minimal pairs of sentences exist where the only difference is the use of a reflexive or pronominal, eg (from Platzack 1998:218)

SWEDISH

(1.36) *Jag gav honom$_i$ sin$_i$ lön.*
I gave him R pay
'I gave him$_i$ his$_i$ pay.'

(1.37) *Jag gav honom$_i$ hans$_i$ lön.*
I gave him his pay
'I gave him$_i$ his$_i$ pay.'

The same examples are found in Norwegian, as follows.

NORWEGIAN

(1.38) *Eg ga han$_i$ pengane sine$_i$.*
I gave him money R
'I gave him$_i$ his$_i$ money.'

[7] This is also documented for languages such as Dutch which have an LDR *zich* and an SDR *zichzelf* and Norwegian with LDR *seg* and SDR *seg sjølv*.

(1.39) *Eg ga han$_i$ pengane hans$_i$.*
I gave him money his
'I gave him$_i$ his$_i$ money.'

In none of these examples are the pronominal and reflexive in complementary distribution with respect to the antecedent they choose. It will be shown later that these minimal pairs have a difference in meaning, which is most evident when the complementarity condition is not in effect.

Reflexives in locative PPs are also exempt from the Disjoint Reference Principle, as the following examples show.

(1.40) *Dan$_i$ saw a snake [$_{PP}$ near him$_i$/ himself$_i$]*.
(1.41) *Cliff$_i$ put the beer[$_{PP}$ behind him$_i$/ himself$_i$]*.

Summary
It is not just LDRs which are not in complementary distribution with pronouns – any reflexive which is not bound by a subject or that is with a locative PP (and therefore not 'prototypically bound') does not obey the Disjoint Reference Principle. This conclusion is important to the theoretical description of anaphors in general, as the Disjoint Reference Principle does not apply in all cases.

1.4.4 Tensed S barrier

Binding of LDRs cannot go past a finite clause boundary[8], as shown in the following examples from Swedish (Platzack 1998:216, Holmberg and Platzack 1995:88), Icelandic (Holmberg and Platzack 1995:89), Georgian (Anderson 1986:83), English and Norwegian (Hellan 1988:84).

SWEDISH
(1.42) **[Ove$_i$ sa [att hans$_i$ vän Tommy hade skaffat sig$_i$ en ny båt]]*.
O said that his friend T had gotten R a new boat
[Ove$_i$ said [that his$_i$ friend Tommy had gotten himself$_i$ a new boat]].

[8] There is one main exception to this, and that is when the complement clause is in the subjunctive mood.

SWEDISH

(1.43) *[John$_i$ säger [att Maria älskar sig$_i$]].

J says that M loves R

[[John$_i$ says that Maria loves him$_i$]].

ICELANDIC

(1.44) *[Jón$_i$ uppløsti [hver hafði barið sig$_i$]].

J revealed who had hit R

[Jon$_i$ revealed [who had hit him$_i$]].

GEORGIAN

(1.45) *[vano$_i$ pikrobs, [rom nino saǯmels amzadebs tavistvis$_i$]].

V thinks that N food-DAT prepares R-for

[Vano$_i$ thinks [that Nino is preparing food for her$_i$]].

ENGLISH

(1.46) *[Brent$_i$ hoped [that Beth admired himself$_i$]].

NORWEGIAN (BOKMÅL)

(1.47) ?*[Hun$_i$ håpet [at vi ville snakke om seg$_i$]].

she hoped that we will speak about R

[She$_i$ hoped [that we would talk about her$_i$]].

The fact that binding cannot go past a finite clause barrier is relevant, as some of these languages have examples of binding over a non-finite boundary, as follows (from Platzack 1998:218, Holmberg and Platzack 1995:89 and Hellan 1988:73).

SWEDISH

(1.48) [Kalle$_i$ bad Lisa [att hjälpa sig$_i$]].

K asked L to help R

'[Kalle$_i$ asked Lisa [to help him$_i$]].'

ICELANDIC

(1.49) [Jón$_i$ skipaði mér [að raka sig$_i$]].

J ordered me to shave R

'[Jon$_i$ ordered me [to shave him$_i$]].'

NORWEGIAN (BOKMÅL)

(1.50) *[Jon$_i$ bad oss [forsøke [å få deg [til å snakke pent om seg$_i$]]]]*.
J asked us try to get you to to speak nicely about R
'[Jon$_i$ asked us [to try [to get you [to speak nicely about him$_i$]]]].'

Summary

Long-distance binding of reflexives is found in many languages, including English, although only over a non-finite boundary. Binding over a finite boundary is generally not possible.

We will now look at an important class of exceptions to this general rule.

1.4.5 Subjunctive mood

As illustrated above, binding of LDRs cannot go past a finite clause boundary. There is one main exception to this, and that is when the embedded clause is in the subjunctive mood. Norwegian does not have grammatical mood, so the following examples are all from Icelandic (Holmberg and Platzack 1995:89, Sigurðsson 1986). Icelandic is the language which has seemingly had the most LDR research devoted to it, and is one of the few languages which does allow binding over a finite clause boundary. (Italian also uses the subjunctive mood to license LDR (see Everaert 1991 and references there).) In these examples, I in the gloss indicates the indicative mood, while S indicates the subjunctive mood.

ICELANDIC

(1.51) **Jón$_i$ uppløsti hver hafði barið sig$_i$*.
J revealed who had-I hit R
Jon$_i$ revealed who had hit him$_i$.

(1.52) *Jón$_i$ uppløsti hver hefði barið sig$_i$*.
J revealed who had-S hit R
'Jon$_i$ revealed who had hit him$_i$.'

The verb in the embedded clause in (1.51) is in the indicative mood, hence binding is not permitted outside of this clause. In (1.52), however, the embedded verb is in the subjunctive mood, and the LDR is permissible.

The next example is possibly the most famous and oft-cited of the Icelandic examples. (1.53) is ungrammatical, and uses the indicative mood. (1.54) is grammatical and uses the subjunctive.

ICELANDIC

(1.53) *Jon_i *segir að Maria elskar* sig_i.
J says that M loves-I R
Jon_i says that Maria loves him_i.

(1.54) Jon_i *segir að Maria elski* sig_i.
J says that M love-S R
'Jon_i says that Maria loves him_i.'[9]

To finish this section, here are some more examples, all from Icelandic, showing the ungrammatical use of LDR with the indicative (1.55) and the grammatical use of LDR with the subjunctive mood (1.56), (1.57), (1.58) and (1.59).

ICELANDIC

(1.55) *$Jón_i$ *veit að María elskar* sig_i.
J knows that M loves-I R_i
Jon_i knows that Maria loves him_i.

(1.56) $Ólafur_i$ *segir að María sé hér enn þó að ég kyssi* sig_i.
O says that M is-S here even though that I kiss-S R
'$Olaf_i$ says that Maria is still here even though I am kissing him_i.'

(1.57) $Jón_i$ *hefur sennilega haldið að María ætlaði að slá* sig_i.
J has probably thought that M intended-S to hit R
'Jon_i probably thought that Maria intended to hit him_i.'

(1.58) $Hún_i$ *athugaði hvort einhver skeytti um* sig_i.
she checked if anyone minded-S about R
'She_i checked if anyone had noticed her_i.'

[9] There is a semantic difference between the sentences with subjunctive and those with the indicative mood. This will be discussed in Chapter 6, section 9.1.

(1.59) *Hann$_i$ hélt því fram að það hefði ekki verið ætlun sín$_i$ að …*
he held it forth that it had-S not been intention R's to
'He$_i$ maintained that it had not been his$_i$ intention to …'

Summary

The use of an LDR within an indicative clause is ungrammatical in Icelandic, while the same sentence with the embedded clause in the subjunctive mood is grammatical. This is taken as a strong indication that the subjunctive mood is in fact a licenser of LDR.

Later it will be shown that the subjunctive mood carries some of the same meaning as found in logophoric contexts, namely, the presentation of information from a third person's perspective.

1.5 Summary

It is typologically common for all reflexives, not just LDRs, to be subject-oriented. Since this feature of subject-orientation is apparently universal, it is assumed to be a part of universal grammar. The Disjoint Reference Principle applies only to 'prototypically bound' reflexives. This excludes LDRs as well as non-subject oriented reflexives and reflexives found in locative PPs. Long-distance binding of reflexives is typologically common, although only over a non-finite clause boundary. Binding over a finite boundary is generally not possible, although some factors, such as the presence of the subjunctive mood, seem to allow it. This is taken as a strong indication that the subjunctive mood is in fact a licenser of LDR.

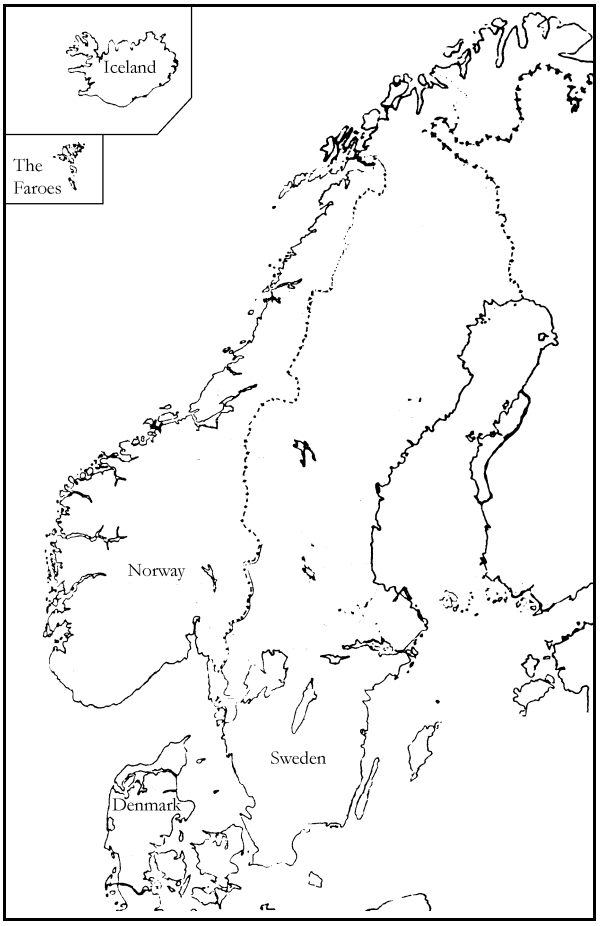
Before looking at these claims in more detail, and examining some syntactic accounts of LDR which purport to explain these observations, I will firstly present some background information about the Norwegian language.

Chapter 2

2 Introduction to Norwegian

Norwegian is a North Germanic language, along with Danish, Swedish, Icelandic and Faroese. These five languages are divided into Mainland Scandinavian (MSc), being Norwegian, Danish and Swedish, and Insular Scandinavian (ISc), being Icelandic and Faroese. These countries are shown on the map below (edited from Sandøy 1992:74).

Figure 2.1 – Map of Scandinavia



2.1 Overview of Scandinavian

Lexically, the Scandinavian languages are very similar. The Mainland Scandinavian languages are mostly mutually intelligible, due more to their high level of lexical similarities than phonetics or syntax. The most noticeable differences in the lexicons

of the Scandinavian languages are perhaps in the pronominal systems. Syntactically and morphologically the Insular Scandinavian languages are far more conservative than the Mainland languages.

Much of the data in the review sections of this thesis will come from Icelandic, as this has been a language which has received a lot of attention in the LDR literature. Some similarities between Icelandic and Norwegian (and to a lesser extent the other Scandinavian languages) will be highlighted at the relevant times.

Norwegian reflexives have in most dialects only the accusative and possessive forms (see section 2.4). This is also true for reflexives in the other Mainland Scandinavian languages. Icelandic reflexives, on the other hand, have distinct dative and accusative forms, in addition to a possessive reflexive.

2.2 Norwegian[1]

There are approximately four million speakers of Norwegian in Norway. Norway has two official written languages, *nynorsk* and *bokmål*. Every Norwegian citizen has the right to receive all official documents, such as government documents and school textbooks, in either language. These languages differ morphologically, syntactically and lexically, and while bokmål may be said to be the native language of some Norwegians, nynorsk is really only a written language. Every Norwegian speaks a dialect, some of which are identified as 'bokmål', some as 'near to bokmål' and some as 'a nynorsk dialect'. (See section 2.3 for a brief introduction to some aspects of dialectal variation in Norway.) Nynorsk and bokmål differ about as much from each other as they do from Swedish and Danish.

2.2.1 Nynorsk

Nynorsk, meaning 'new Norwegian', is an invented language. It was created by Ivar Aasen in the late nineteenth century as a hybrid of many of the most conservative features of hundreds of (mainly West-) Norwegian dialects. It was created as a step towards a Norwegian orthography for the Norwegians, who had first Danish (from

[1] I thank Eric Papazian (pc) for helping to clarify the details of this brief presentation of the Norwegian linguistic situation.

around 1400-1850), then a modified Danish (since 1853) as their only writing system. No-one ‘speaks’ nynorsk, although in news broadcasts and by some academics there is sometimes a standardised nynorsk spoken; however, as there is a strong push for dialect use in all areas of verbal communication, even this is limited. Nynorsk as the main written language (as opposed to bokmål) has its stronghold in Western Norway, although there are pockets of nynorsk users nearly everywhere.

2.2.2 Bokmål

Bokmål, also commonly known as Dano-Norwegian, is based upon Danish. It has undergone many spelling reforms over the past century, to more accurately reflect Norwegian phonetics, phonology, morphology and lexicon. It is the stronger and more prestigious of the two writing systems. Norwegians from the main cities (Oslo, Bergen, Stavanger, Tromsø, etc) tend to both write in bokmål and to say they speak bokmål (as opposed to a dialect). Bokmål is more grammatically and phonologically innovative than nynorsk, as it is based more closely upon Danish. Regular ‘spelling reforms’ have made bokmål closer to spoken Norwegian.

There are no guidelines for LDR use in nynorsk or bokmål, although the current reference work of Norwegian grammar (*Norsk Referansegrammatikk*, published 1997) lists some 59 different environments in which Norwegian reflexives may occur, including both constructed and natural examples. These examples will be referred to throughout this thesis where relevant.

The term ‘Norwegian’ is used in this thesis to refer to nynorsk, bokmål and the spoken dialects. The exception to this is that all examples described as ‘Norwegian’ in this thesis will be in standard nynorsk, unless specified otherwise. One of the goals of this thesis is to discover whether there are any differences with respect to the use of LDR between nynorsk and bokmål.

2.2.3 Typological description of Norwegian

Word order

Like the other Germanic languages, the unmarked word order in Norwegian is SVO. Constituents other than subject NPs normally only precede the verb when their syntactic role is clear[2].

(2.1) *[Det]$_O$ [veit]$_V$ [eg]$_S$.*
it know I
'I know (it).'

(2.2) *[Seint om kvelden]$_{ADV}$ [åt]$_V$ [me]$_S$ [middag]$_O$.*
late about evening ate we dinner
'Late in the evening we ate dinner.'

Otherwise, the word order is SVO. In questions, inversion occurs, such that the word order becomes VSO.

(2.3) *[Blir]$_V$ [du]$_S$ [med oss]$_O$ [ut i kveld]$_{ADV}$?*
be you with us out in evening
'Are you coming out with us this evening?'

Norwegian is a verb-second language, like German, Dutch, and the other north Germanic languages.

Nouns

Nouns in Norwegian fall into three classes traditionally referred to as masculine, feminine and neuter. Bokmål has followed the Danish example in some instances and

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[2] although ambiguity is not uncommon, in particular in questions, for example:

(i) *Kven kvalte Ola*?
who strangled O
'Who strangled Ola?' / 'Who did Ola strangle?'

In these cases it is common to use clefting to avoid ambiguity.

(ii) *Kven var det som Ola kvalte?*
who was it who O strangled
'Who did Ola strangle?'

(iii) *Kven var det som kvalte Ola?*
who was it who strangled O
'Who strangled Ola?'

collapsed the masculine and feminine into a common gender, although idiomatic usage still allows for the feminine in most instances as a secondary form.

Nouns in Norwegian may be inflected for number and definiteness in each of the three (two) genders. Where the common gender is employed, the form takes that of the masculine declension. Otherwise there is a separate inflection for each gender (although the definite feminine singular has the same realisation as the definite neuter plural *-a* and the indefinite neuter plural takes a zero inflection, giving it an identical form with the indefinite neuter singular). This is shown below in Table 2.1.

Table 2.1 – Paradigm of nominal inflections in Norwegian

NYNORSK

	Singular		**Plural**	
	Indefinite	**Definite**	**Indefinite**	**Definite**
Masculine	*stein* 'stone'	*stein.en* 'the stone'	*stein.ar* 'stones'	*stein.ane* 'the stones'
Feminine	*seng* 'bed'	*seng.a* 'the bed'	*seng.er* 'beds'	*seng.ene* 'the beds'
Neuter	*hus* 'house'	*hus.et* 'the house'	*hus.Ø* 'houses'	*hus.a* 'the houses'

BOKMÅL

	Singular		**Plural**	
	Indefinite	**Definite**	**Indefinite**	**Definite**
Masculine	*sten* 'stone'	*sten.en* 'the stone'	*sten.er* 'stones'	*sten.ene* 'the stones'
Feminine	*seng* 'bed'	*seng.a* 'the bed'	*seng.er* 'beds'	*seng.ene* 'the beds'
Neuter	*hus* 'house'	*hus.et* 'the house'	*hus.Ø* 'houses'	*hus.ene/ hus.a* 'the houses'

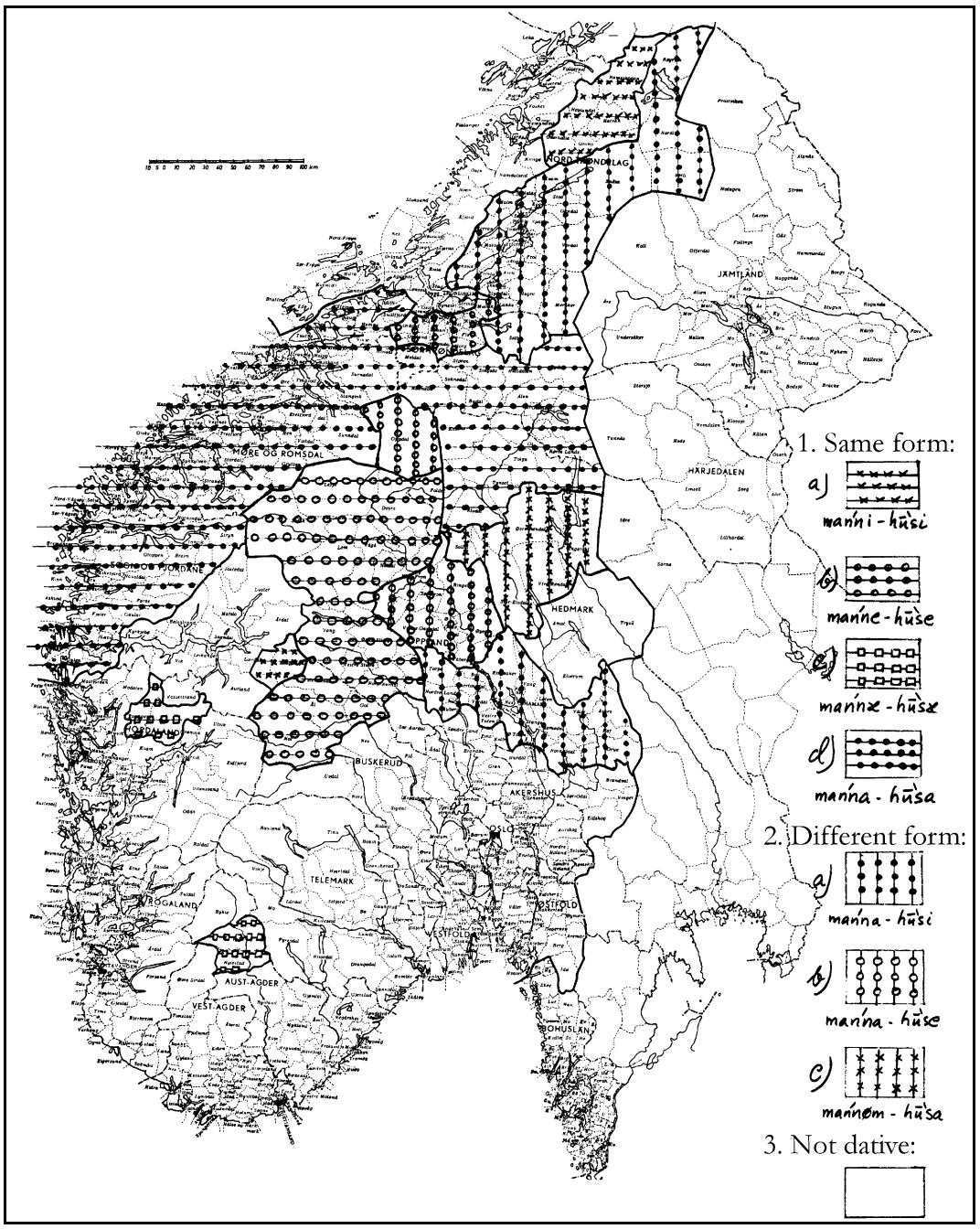
Throughout this thesis, the definite inflectional morphemes will be ignored in the literal glosses, but will be reflected in the free translations where appropriate.

Nominal cases

Norwegian dialects vary as to the number of nominal cases retained from Proto-Germanic. In both nynorsk and bokmål only pronominals are marked for case. Bokmål pronouns have nominative and dative (which functions as the 'object' case) cases throughout the pronominal paradigm. Nynorsk only marks first and second persons with nominative/ dative case – third person (singular and plural) have only etymologically nominative realisations.

Some dialects have morphological (nominative and dative) case marking on all nouns. An isogloss of the distribution of dialects which have dative case marking on definite masculine and neuter nouns is given in Figure 2.2 below (from Helleland and Papazian nd:43).

Figure 2.2 – Forms of dative nouns: definite masculine (*mann* 'man') and neuter (*hus* 'house')



Dative morphology on third person pronouns and other NPs is optional in nynorsk. Bokmål does not show any case marking on NPs other than pronouns.

There is also an 'adjectival pronominal' or possessive pronoun, which inflects for gender and number of the noun it modifies[3]. If the modified noun is masculine, the forms *min* and *din* for the first and second person are used, and *vår* is used for the first person plural. If the modified noun is feminine, then *mi*, *di*, and *vår* are used. For neuter nouns, the forms are *mitt*, *ditt* and *vårt*, while for plural nouns of any gender, the forms are *mine*, *dine* and *våre*.

Table 2.2 – Paradigm of pronouns in Norwegian

NYNORSK

	Nominative		**Dative**		**Possessive Pronoun**						
Person	**Singular**	**Plural**	**Singular**	**Plural**	**Singular**				**Plural**		
					M	**F**	**N**	**Pl**	**M/F**	**N**	**Pl**
1st	*eg*	*me/vi*	*meg* /meg/	*oss*	*min*	*mi*	*mitt*	*mine*	*vår*	*vårt*	*våre*
2nd	*du*	*de*	*deg*	*dykk*	*din*	*di*	*ditt*	*dine*		*dykkar*	
3rd m	*han*	*dei*	*han*	*dei*			*hans*			*deira*	
3rd f	*ho*	*dei*	*ho*	*dei*			*hennar*			*deira*	

BOKMÅL

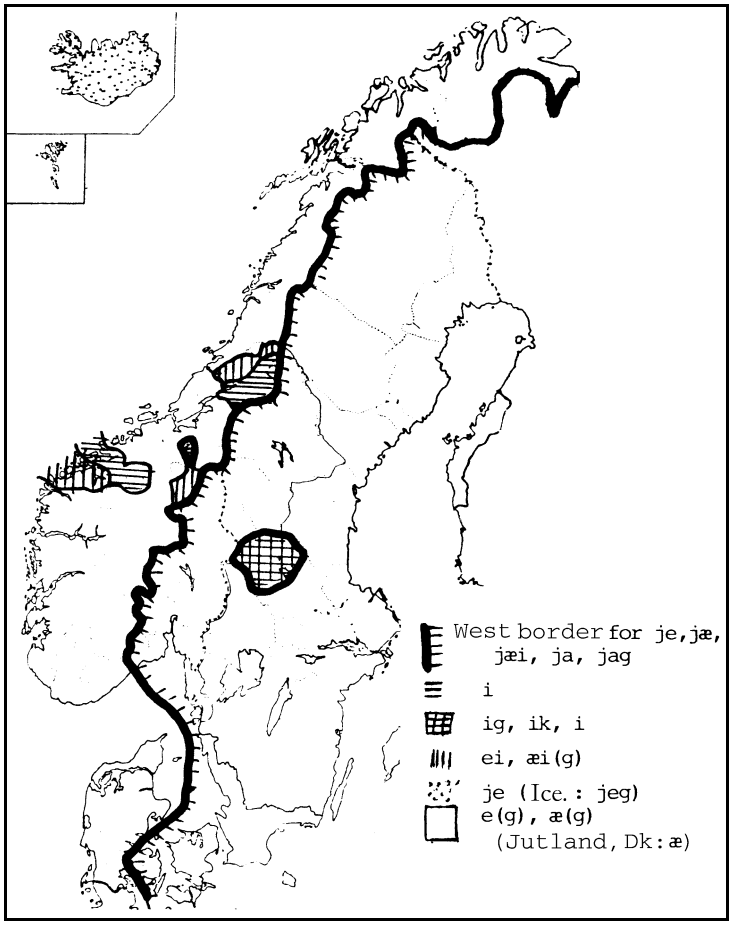
	Nominative		**Dative**		**Possessive Pronoun**						
Person	**Singular**	**Plural**	**Singular**	**Plural**	**Singular**				**Plural**		
					M	**F**	**N**	**Pl**	**M/F**	**N**	**Pl**
1st	*jeg* /jæi/	*vi*	*meg* /mæi/	*oss*	*min*	*mi*	*mitt*	*mine*	*vår*	*vårt*	*våre*
2nd	*du*	*dere*	*deg*	*dere*	*din*	*di*	*ditt*	*dine*		*deres*	
3rd m	*han*	*de*	*ham*	*dem*			*hans*			*deres*	
3rd f	*hun*	*de*	*henne*	*dem*			*hennes*			*deres*	

The forms of the pronouns given in Table 2.2 are not the only forms in use in Norway. The isogloss in Figure 2.3 of the forms used for the first person singular pronoun throughout Scandinavia shows variation within Norway which includes /je, jæ/ and /jæi/ in Eastern Norway, as well as /i, i ei, æi(g), e(g)/ and /æ(g)/ throughout the rest of the country. Variations outside of Norway include /ja, jag, i/ in Sweden, /jeg/ and /je/ in Iceland and The Faroes, and /æ/ in Jutland in Denmark (from Sandøy 1992: 105).

[3] The possessive pronoun in nynorsk has a more restricted usage than in bokmål. The main difference is that if the possessive pronoun is used in conjunction with the possessed NP, then in nynorsk it follows the possessed noun. Otherwise a separate lexical item (the possessive reflexive) is used. In bokmål the reflexive possessive construction is identical in both instances.

NYNORSK: 'his book'		BOKMÅL: 'his book'	
bok.a hans book.the his	*han si bok* he R book	*bok.a hans* book.the his	*hans bok* his book

Figure 2.3 – First person singular nominative forms throughout Scandinavia



Verbs

As in the other Germanic languages, Norwegian verbs fall into several categories. Verbs may be regular or irregular. Regular verbs may be strong or weak. Strong verbs fall into one of seven classes of the Ablautreihe, common to all Germanic languages.

Verbs are inflected for present and past tense. Other tenses are constructed analytically with auxiliaries. The preterite form of the verb may be inflected like an adjective. Dialects are classed as either *e-mål* 'e-variety', *a-mål* 'a-variety', or *delt e-/a-mål* 'split e-/a-variety', depending on vowel used in the normal infinitive and present tense marker[4]. Bokmål follows the e-mål pattern, while in nynorsk, e-mål, a-mål or split e-/a-mål is permitted (where actual usage normally depends on the writer's own dialect).

[4] The vowel used in feminine nouns is also relevant to this classification.

Neither nynorsk nor bokmål inflects verbs for person or number, although isolated dialects such as in Hallingdal (Thoengen 1999:67) still inflect for number[5].

Adjectives

Adjectives have a strong and a weak declension, corresponding to their use with definite or indefinite nouns. They are inflected for gender and number in each declension.

Prepositions

Norwegian has prepositions, not postpositions, just like the other Germanic languages. Since there are no cases in most dialects of Norwegian, prepositions play an important role in identifying thematic roles of nouns.

Syntactic agreement

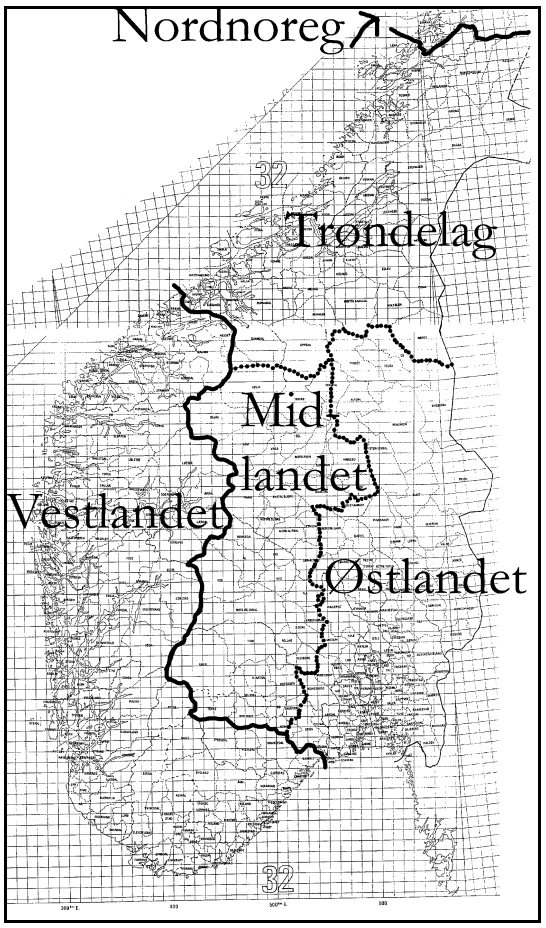
There are several types of grammatical agreement in Norwegian. Adjectives must agree with the noun they modify, with strong and weak forms according to the gender and definiteness of the noun. Dialects differ as to when agreement must be indicated, eg after a copula. Verbs do not show agreement for person or number, only tense (present, non-finite, past). Other tenses are created through the use of auxiliaries.

Linguistic research in Norway

Norwegian dialects vary in syntax, phonetics and phonology, morphology, lexicon, semantics, in fact in every imaginable way. (Not all dialects are equally intelligible to every Norwegian!) The isogloss in Figure 2.4 shows some broad dialect regions, including the regions of Vestlandet, Østlandet and Nordnoreg. Østlandet can be further divided into Trøndelag, Østlandet and Midlandet. These regions are commonly accepted regions in Norway.

[5] ISc still inflect verbs for person and number, while none of the MSc languages do. Until quite recently, Swedish also inflected verbs for number, although in writing only (Vikør 1995).

Figure 2.4 – Commonly accepted broad dialect regions in Norway



Further decomposition of these broad regions is also possible. For example, overlaying isoglosses for the four features of

1) effects of jamvektloven, which affects unstressed vowels in certain environments;
2) apocope;
3) a-mål/ e-mål; and
4) 'split feminine nouns', where strong and weak feminine nouns have different definite markers

divides Norway into twelve broad regions (Sandøy 1992:115-6), including Østlandet, Midlandet, Trøndelag, and other smaller divisions.

The actual number of distinguishable dialects in Norway is far greater than even this suggests; dialect areas can be identified as individual valleys (eg *Gudbrandsmål* 'Gudbrands Valley variety'), as north/south/central valley (*Nordgudbrandsdalsmål* 'North Gudbrands Valley variety'), and even down to individuating between and within neighbouring villages (eg *Frondialekt* 'Fron dialect', *Vinstramål* 'Vinstra

variety', *Ringebumål* 'Ringebu variety', *bydgemålet i Ringebu* 'town (country) variety in Ringebu', *sentrumsmålet i Ringebu* 'town centre variety in Ringebu') (these dialect names come from Rudi 1999, Torp 1999 and those elicited in this study). As Haugen (1976) said: '…There are as many distinguishable dialects in Norway as there are parishes'; in the words of one of his informants, *'Berre du krossa ein bekk, så va de eit anna språk'* 'You just need to cross a creek to find a different language'.

As a result of the diverse range of dialectal variation in Norway, linguistic research on Norwegian has focussed primarily on dialectology and sociology (eg Sandøy 1992), and these have nearly always dealt with lexical items (eg Lundestad 1991, Papazian 1999) and phonetics (eg Jensen 1961, Elstad 1978). Morphological facts about single dialects have also been investigated (eg Fitje 1995, Sundli nd), in particular with regards to the old dative still in use in some dialects (eg Øygarden 1999). A large number of Norwegian linguists also study place-names (eg Nesset 1999), and there are several departments of *Namngransking* 'Toponymy' at universities in Norway. For excellent discussions on Norwegian dialects see especially Vikør (1995), Sandøy (1992) and Haugen (1976, 1982, and others).

Some researchers have investigated Norwegian syntax, such as Taraldsen, Hellan and Åfarli. In particular, Hellan (1988) gives an in depth analysis of anaphora in Norwegian, and this is still the current reference work for this area. Holmberg and Platzack (1995) is a useful comparison of Scandinavian syntax from a theoretical point of view. These studies have all been undertaken within the GB framework. The recently released *Norwegian Reference Grammar* (1997) (pages 1155-1172) contains a very thorough listing of different uses of Norwegian anaphors in officially sanctioned bokmål and nynorsk[6]. They also present examples which are not acceptable to all Norwegians, especially certain cases of LDR.

2.3 Dialectal variation

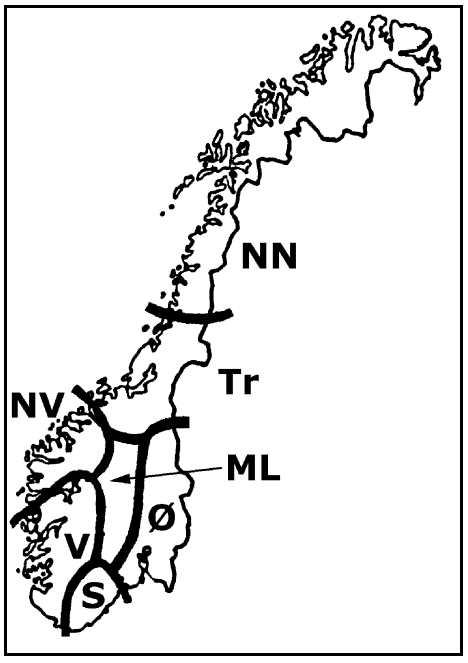
As mentioned above, it is common to divide Norwegian dialects into several broad regions, from three to eleven and more. The regions used in this thesis are based upon isoglosses found in *Norsk Talemål* 'Norwegian Spoken Language' (Helleland and Papazian, nd) and the new LDR data collected for this study.

The abbreviations given in Table 2.3 are used for the postulated LDR dialect regions, which correspond roughly to the areas shown in Figure 2.5. These abbreviations will be used in this thesis when I am talking about the LDR regions, to avoid confusing the names of the LDR regions with the generally accepted geographical regions of the same names, while retaining the usefulness of the mnemonic tool.

Table 2.3 – Abbreviations of LDR dialect regions

Dialect region	Abbreviation
Midlandsk	ML
Nordnorsk	NN
Nord Vestlandsk	NV
Sørlandsk	S
Trøndersk	Tr
Vestlandsk	V
Østlandsk	Ø

Figure 2.5 – Broad LDR dialect regions in Norway



These regions are common ones identified by Norwegian linguists (eg Sandøy's 1992 university textbook on Norwegian dialects and dialectology; Mjaavatn's 1978 comparison of isoglosses of tonemes with traditional isoglosses; Moshagen and Trosterud's 1990 squib on LDR in Norwegian; Hellan and Papazian's (nd) high-school text on variation in spoken Norwegian; Fintoft, Mjaavatn, Møllergård and Ulseth's 1978 study of tonemes; Kortner, Munthe and Tverterås' 1984 general interest

[6] They give referenced examples of at least 59 different uses of reflexives in Norwegian.

book about Norway and Norwegian; plus many others). Some of the defining characteristics of these regions are mentioned here. (Most of the details about features of Norwegian dialects in this section come from Sandøy (1992), Kortner, Munthe and Tveterås (1984) and Helleland and Papazian (nd).)

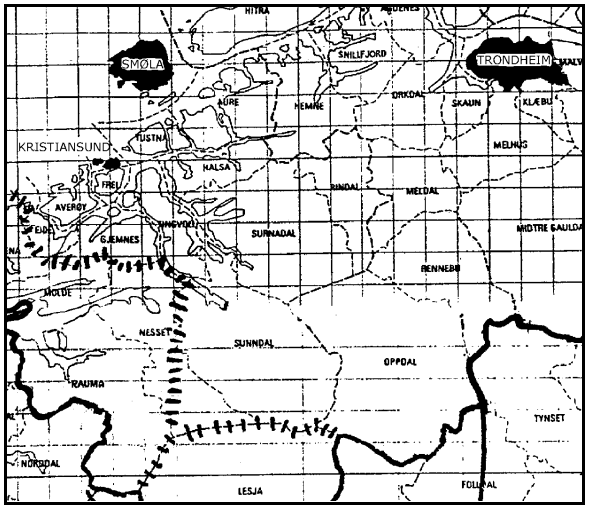
2.3.1 Trøndersk (Tr)

Tr shares a border with ML, Ø and NV to the south, and NN to the north. Typical characteristics of Trøndersk include palatalisation of dental consonants /l, n, t, d/, a retroflex alveolar flap /ɻ/ from Old Norse /l/ and /rð/, apocope of final, unstressed vowels, and effects of the *jamvektloven* 'even weight law', which applies to unstressed vowels in certain environments.

> *Trykklette vokanene a, u og i blitt svekket til ə i ord med lang rotstavelse, men har bevart sin kvalitet i ord med kort rotstavelse.*
>
> 'The unstressed vowels a, u and i were lenited to ə in words with long root syllables, but have preserved their quality in words with short root syllables.'
>
> (Kortner, Munthe and Tveterås 1984:203)

LDR in Trøndelag has been recorded by Moshagen and Trosterud (1990) and Sandøy (1992). The area where the most substantial data on LDR in Norway comes from (mainly from Moshagen and Trosterud's 1990 squib on LDR in Norway) is an island just north of Kristiansund called Smøla, roughly on the same longitude as Trondheim (see Figure 2.6). Smøla is just south of Sør-Trøndelag, although within the area defined as Tr.

Figure 2.6 – Trondheim, Smøla and Kristiansund



2.3.2 Midlandsk (ML)

Midlandsk is spoken in central Norway, south of Trøndersk, west of Østlandsk, north of Sørlandsk and east of Vestlandsk and Nord Vestlandsk. Some of Norway's most archaic dialects are found in Midlandet. Here, for instance, monophthongisation of /ei/, /øy/ and /au/ has not occurred (Sandøy 1992:73) and the dative case is still in widespread use[7] (Sandøy 1992:100), two features of Norrønt or Old Norse that are lost in most areas of Norway. Midlandsk dialects show effects of jamvektloven. They do not have apocope.

2.3.3 Nordvestlandsk (NV)

The region where Nordvestlandsk dialects are spoken is on the west coast of Norway, north of Vestlandet and south of Trøndelag. It is bordered to the east by Midlandet. NV does not have jamvektloven influence. It is an *e-mål* 'e-variety' (as opposed to *a-mål* 'a-variety'), which means that it has an -e ending on verbal infinitives and in the present tense marker, and that weak singular indefinite feminine nouns also end in -e (Sandøy 1992:113). The first person singular nominative pronoun varies throughout this region from /i/ through to /æi/. The first person plural nominative pronoun varies from /me/ and /vi/ to /os/ in some parts of NV which consequently do not have a subject-object distinction in this person (*oss* is the first person plural dative pronoun in

[7] The dative case is strong in Northern Østlandet, Northern Midlandet, Northern Vestlandet and Trøndelag (Sandøy 1992:100, after [Christiansen 1969]).

the rest of Norway). NV dialects also have palatalised consonants, as mentioned for Tr above.

2.3.4 Sørlandsk (S)

Sørlandet is located at the southernmost part of Norway, south of Vestlandet, Midlandet and Østlandet. This region is e-mål, like NV. Intervocalic voiceless stops are voiced in S[8]. This region, like Vestlandet, has a uvular or velar rhotic (fricative or approximant), as opposed to the alveolar tap used elsewhere in Norway.

2.3.5 Nordnorsk (NN)

Nord Noreg is the region north of Trøndelag. It borders Sweden to the east and Finland and Russia in the far north. NN is one of two regions (along with a discontiguous region in Tr) that has retained -r finally in the plural of *konsonantstemmer* 'consonant stems'. These are typically single syllable nouns which have an ablauted vowel in the plural forms, eg *fot* 'foot', *føter* 'feet', *bok* 'book', *bøker* 'books'. NN does not show effects of the jamvektloven. The first person singular nominative pronoun is /æ/.

2.3.6 Østlandsk (Ø)

Østlandsk is spoken in eastern Norway. It is the region which includes the capital, Oslo. Østlandet borders Sweden to the east, Trøndelag to the north, Midlandet to the west and also shares a small border with Sørlandet to the southwest. Like Midlandet, Ø dialects show effects of jamvektloven and do not have apocope. The negation adverb tends to be unpalatalised, with forms such as *ikke, itte* and *inte* (*ikke* being standard bokmål, contrasting with /iɕ:e/ or /itʃe/ elsewhere in Norway). The first person singular nominative pronoun takes the form of /je, jæ/ or /jæi/ (the latter is the Oslo pronunciation of *jeg*), while the first person plural nominative pronoun takes the form /vi/.

[8] The region where intervocalic stops are voiced instead of voiceless does not correspond exactly to S as defined here. The voiced stop region also includes the southernmost tip of V, the southwestern edge of Sweden, and it does not include all of S (Helleland and Papazian, nd).

2.3.7 Vestlandsk (V)

The term Vestlandsk is used to refer to the dialects in Western Norway, west of the central mountains. Vestlandet borders Nordvestlandet to the north, Midlandet to the east and Sørlandet to the south. The cities of Bergen and Stavanger are in Vestlandet. Vestlandsk dialects often have a uvular or velar rhotic, like Sørlandsk. They are a-mål, unlike Nordvestlandsk and Sørlandsk, which are both e-mål. This means that Vestlandsk dialects have an -a ending on verbal infinitives and in the present tense marker, and that weak singular indefinite feminine nouns also end in -a. Vestlandsk does not have the retroflex alveolar flap /ɾ/, nor does it palatalise dental consonants. The first person singular nominative pronoun is /eg/ and the plural is /me/. These are also the standard nynorsk forms. (Recall that nynorsk was created by Ivar Aasen, based upon the most conservative features of mainly Vestlandsk dialects.)

2.3.8 Barriers and connections between regions

Mountain barriers

The mountains that physically divide Norway into east and west, also serve to strengthen the linguistic ties between certain areas, such as ML and V, and ML and Tr. Mountains have been the greatest obstacle to travel in Norway since settlement began several millennia ago. Communication between Eastern and Western Norway through these mountains has always been difficult, hence the linguistic development either side of this divide has been separate until quite recent times.

> *Frå gammalt var det fjellet som stengte, og dermed finn vi dei språklige fellesdraga langs dalføre og langs fjordar på begge sider.*
> 'Since early times the mountains have been closed doors, and thus we find common linguistic features along valleys and along fjords on both sides.'
>
> Sandøy (1992:105, my translation)

Administrative boundaries

Old administrative boundaries also define natural dialect regions, since these encompass regions where communication, and hence a common linguistic development took place (Sandøy 1992:105). Southern Helgeland has only been a part of Nordland since 1760 (p107) and patterns more like Tr than NN for some features such as use of LDR. Hallingdal and Valdres in ML were under the lawful jurisdiction

of Gulatinget (the parliament in Gulen, Vestlandet) until the end of the fourteenth century and remained in the church jurisdiction of Stavanger (Vestlandet) until 1631. This explains some dialectal similarities between ML and V, in particular Hallingdal (ML), Valdres (ML), Sogn (V) and Hordaland (V).

2.3.9 Summary

There is independent evidence for postulating the LDR regions. The regions of ML, Tr, NV, V, NN, Ø and S differ in, among other things, whether monophthongisation of the old diphthongs /ei/, /øy/ and /au/ has occurred; whether the varieties are a-mål or e-mål; the distribution of voiced stops versus voiceless stops; the phonetic realisation of the first person singular and plural pronouns; the effect of the jamvektloven; apocope; the endings on indefinite weak feminine nouns; palatalisation of dental consonants; whether there is a retroflex flapped alveolar phoneme; and whether the -r ending is retained in plural nouns. Geographical features, in particular the mountains and fjords, and traditional administrative regions have been large contributors to a common linguistic development between certain regions and to the separate linguistic development between others.

2.4 Reflexives in Norwegian

Norwegian has several reflexives, which will be referred to in this thesis as *seg*, *sin* and *sjølv*, the standard nynorsk forms[9]. *Seg* is an accusative reflexive, *sin* is often called the possessive variant of *seg* (by eg Hellan 1988:59[10]), while *sjølv* is a separate reflexive with an entirely different distribution. *Sjølv* is sometimes used as an emphatic marker (Hellan 1988:63) and it occurs together with *seg* in the form *seg sjølv*. *Sjølv* does not occur with *sin*, although it has been argued that *egen* 'own' is the genitive suppletive variant of *sjølv* (Hellan 1988:65). *Sin* may occur with *egen* in the form *sin egen* 'R's own'.

[9] *Sjølv* may be more familiar to the reader as the bokmål form *selv*.

[10] Notably, Dalrymple (1993) is unusual in not treating *seg* and *sin* as allolexes, although she concludes that they do have the same binding domains.

Sin and *egen* are sometimes called adjectival possessive pronouns (eg Knudsen 1949:38 '*adjektiviske eiendomspronomenet "sin"*'). This is because they have different forms depending on the number and gender of the noun they modify.

Table 2.4 – Declension of the adjectival possessive pronoun *sin*

Person (sing.)	Masculine	Feminine	Neuter	Plural
1st	*min*	*mi*	*mitt*	*mine*
2nd	*din*	*di*	*ditt*	*dine*
3rd	*sin*	*si*	*sitt*	*sine*

Egen is also declined in a similar way, depending on the gender and number of the possessed noun.

Table 2.5 – Declension of *egen*

Masculine	Feminine	Neuter	Plural
egen	*egen*	*eget*	*egne*

Seg and *sjølv* do not show agreement[11].

Seg and *sin* are the only purely reflexive personal pronouns that exist in Norwegian[12]. *Sjølv* is not a personal pronoun, although it is a reflexive. *Seg* and *sin* may only be used with third person (singular and plural) antecedents, while *sjølv* may be used with any person. Throughout this thesis, both *seg* and *sin* will be glossed with 'R(eflexive)', while *sjølv* will be glossed as 'self'.

Some examples of these reflexives follow. (2.4) shows *seg* as the direct object of a predicate, and *sin* as the object of a preposition, both referring back to the subject. (2.5) uses the intrinsically reflexive predicate *gifta seg* 'get married', while (2.6) contains the intrinsically reflexive predicate *vaska seg* 'wash oneself'. (2.7) contains *sin* in the direct object of the predicate, (2.8) contains *sin* in the object of a preposition. (2.9) is an example of *seg sjølv* being used as a clause-bounded reflexive, and (2.10) shows the emphatic use of *sjølv*.

[11] although *sjølve* 'selves' is used by some speakers and is acceptable in nynorsk. Some dialects distinguish gender also.

[12] There is dialectal variation with regards to the form of *seg*, which is analogous to the form of the first person nominative pronoun. Thus, where the first person pronoun is /e:g/, the form of *seg* used is /se:g/; where the first person pronoun is /æ/, the form of *seg* is /sæ/, etc.

(2.4) *Lille Ingrid$_i$ slo seg$_i$ med bamsen sin$_i$.*
Little I hit R with teddybear R
'Little Ingrid$_i$ hit herself$_i$ with her$_i$ teddy-bear.'

(2.5) *Elisabeth$_i$ skal ikkje gifta seg$_i$ med Morten.*
E shall not marry R with M
'Elisabeth is not going to marry Morten.'

(2.6) *Ho$_i$ vaska seg$_i$ i den kalde fjorden.*
she washed R in the cold fjord
'She$_i$ washed herself$_i$ in the cold fjord.'

(2.7) *Ho$_i$ vaska dottera si$_i$ i den varme bekken.*
she washed daughter R in the warm stream
'She$_i$ washed her$_i$ daughter in the warm stream.'

(2.8) *Ingrid$_i$ lo av pappaen sin$_i$.*
I laughed at dad R
'Ingrid$_i$ laughed at her$_i$ dad.'

(2.9) *Ingrid$_i$ lo av seg sjølv$_i$.*
I laughed at R self
'Ingrid$_i$ laughed at herself$_i$.'

(2.10) *Ingrid$_i$ sto opp sjølv$_i$.*
I stood up self
'Ingrid$_i$ stood up (all by) herself$_i$.'

All of these examples are single clause examples, which are not the focus of this thesis. However, they are useful as an introduction to Norwegian reflexives. More background information on Norwegian LDRs is given throughout the next chapter.

PART II

Long-Distance Reflexives

Research into LDR has largely resided within the domain of syntax. For this reason, Part II of this thesis is divided into two chapters. This chapter is devoted to summarising and appraising syntactic accounts of reflexives and LDRs. In Chapter 4, I will delve into some non-syntactic aspects of LDRs that are mentioned in the literature. Throughout Part II, I will be postulating hypotheses, drawn from arguments in the literature, which will be tested upon the large body of data collected for this thesis.

Chapter 3

3 Introduction to syntactic accounts of LDR

Throughout the presentation of various syntactic accounts of LDR in this chapter, it will be noticed that different linguists have different ideas as to what defines an LDR, and which reflexives should be accounted for by the syntax. Due to the difficulty in presenting close comparisons between different accounts of LDR, each account will tend to be discussed separately in this chapter. Where possible, comparisons will be made.

There are two main works on anaphora and reflexives that are relevant to the syntactic sections of this thesis. They are Reinhart and Reuland's (1993) paper *Reflexivity* and Hellan's (1988) book *Anaphora in Norwegian and the Theory of Grammar*. A good deal of space is spent summarising the main ideas in these important works, which includes some comments highlighting their strengths and weaknesses as compared with other research in this field.

Reinhart and Reuland's (1993) paper *Reflexivity* provides a good starting point for this review of syntactic accounts of LDR. Although they focus on clause-bounded reflexives, a good understanding of the issues they raise is essential, since they touch on many of the central issues common to both clause-bounded and non-clause-bounded reflexives. They divide anaphors into two groups – those which are governed by their revised Binding Conditions, and those which are not. Their revised Conditions A and B are relevant to very explicitly defined environments, while the Chain Condition is also cited as an integral part of anaphoric binding. Another major part of their work is to distinguish between syntactic and semantic reflexivisation.

Although many accounts of LDR attempt to use only syntactic explanations, such as movement accounts (eg Cole et al 1990, Pica 1991 and Huang and Tang 1991) and accounts relying on opacity factors to block movement (eg Anderson 1986 and Holmberg and Platzack 1995), it will be shown that the most descriptively accurate accounts also incorporate semantics (eg Hellan and Christensen 1986, Hellan 1988, 1991 and Sigurðsson 1986), either in the form of logical semantics or more discourse-type notions of perspective.

3.1 Some hypotheses implicit in the Binding Conditions

The Binding Conditions from Chomsky (1986) are given in (3.1).

(3.1) Condition A: an anaphor (ie reflexive or reciprocal) must be bound in its governing category.
Condition B: a pronoun must be free in its governing category.
Condition C: referring expressions are free everywhere.

Condition A accounts for the fact that one can say:

(3.2) *John$_i$ is talking to himself$_i$.*

but not:

(3.3) **John$_i$ said that himself$_i$ was coming*.

Condition B accounts for sentence pairs like:

(3.4) *John$_i$ said that he$_i$ was coming.*

(3.5) **John$_i$ is talking to him$_i$.*

Condition C accounts for:

(3.6) *John$_i$ believed Mary$_j$ to be coming.*

(3.7) ?*John$_i$ believed John$_i$ to be coming.*

Binding is not identical with *coreference,* from which it differs on several key points. Formally, binding is logically intransitive, while coreference is transitive. In other words, if A binds B and B binds C, it does not follow that A binds C. On the other hand, if A is coreferential with B and B is coreferential with C, then A is also coreferential with C. Binding is normally assumed to be asymmetrical, while coreference is symmetrical (Hellan 1988:49). In other words, if A binds B, this does not mean that B binds A. Conversely, if A is coreferential with B, this does mean that B is coreferential with A[1].

Most syntacticians nowadays agree that only two Conditions are needed for binding. Binding Theory does not apply to referring expressions, hence only Conditions A and B will be referred to in the following discussions

Conditions A and B interact to generate hypotheses about anaphoric distribution typologically. Some hypotheses either explicit or implicit in the Binding Conditions as defined above are highlighted in Dalrymple (1993), and may be stated as follows:

(3.8) Anaphors must be bound within their governing category.

(3.9) All reflexives, reciprocals and traces are anaphors.

(3.10) The domain of the governing category is identical for all elements constrained by the Binding Conditions.

(3.11) Binding Conditions apply universally.

These hypotheses taken together mean that all anaphors obey Principle A, ie all anaphors should have exactly the same distribution in every language. Further claims implicit in the Binding Conditions include:

(3.12) All anaphors are in complementary distribution with all pronominals (the Disjoint Reference principle or the Complementarity Principle).

---

[1] Asymmetric antecedency conditions do come into effect, too, with respect to coreference (Ariel 1991, van Hoek 1997). However, these are not considered relevant to the syntactic study of LDR (Hellan 1988:49).

(3.13) No conditions are or may be imposed on the antecedent other than whether or not it may or must occur within the same domain as the anaphor or pronominal element.

These statements are considered to be true for prototypical anaphors, which does not include LDRs. In particular, LDRs are not bound within their governing categories (cf. (3.8)) in languages like Icelandic (Thráinsson 1976). LDRs have a different binding domain to clause-bounded reflexives (cf. (3.10)) as in English (Pollard and Sag 1992). LDRs are also not in complementary distribution with pronominals, in fact, they are often called syntactically optional (cf. (3.12)) eg in Polish (Reinders-Machowska 1991). Finally, semantic constraints, such as the grammatical function of the antecedent, seem to apply to LDRs (cf. (3.13)) eg Finnish (van Steenbergen 1991). The study of LDRs within the framework prescribed by the Binding Conditions therefore requires much ingenuity, some of which will be looked at in this chapter.

3.2 Reinhart and Reuland's account of Reflexivity

Reinhart and Reuland's (1993) paper *Reflexivity* redefines Binding Conditions A and B, plus Chain Theory, and is a major contribution to the literature on reflexives and reflexivisation. It deals solely with clause-bounded anaphora, and demonstrates that the new Binding Conditions apply strictly within the coargument domain. A thorough understanding of the central issues in this paper is relevant to this review of the syntactic research in LDR, since it clearly defines where the new Binding Conditions do and do not apply. It is the cases where the Binding Conditions (and Chain Theory) do not apply that we will be most interested in later. Another important insight of this paper is the distinction between syntactic and semantic reflexivity. A thorough understanding of the issues dealt with in Reinhart and Reuland (1993) will lead to a better understanding of reflexivity in general, and by extension, LDRs.

3.2.1 Anaphoric expressions

Reinhart and Reuland (1993) (henceforth R&R) make a systematic distinction between LDRs and non-LDRs according to the morphemicity of each expression. '[W]hen anaphors are complex expressions, they are universally local, whereas the long-distance type is universally simplex' (p658). In other words, LDRs are monomorphemic, which R&R refer to as *simplex expressions* or SE anaphors. Locally

bound anaphors are non-monomorphemic. R&R refer to these as SELF anaphors. Examples of each type are given in Table 3.1. (Where possible, examples in this section will be from Norwegian, otherwise the majority of R&R's examples are taken from Dutch and English.)

Table 3.1 – Types of anaphors described by R&R

LDRs/ SE anaphors		**Local/ SELF-anaphors**	
Norwegian	*seg*	Norwegian	*seg sjølv*
Dutch	*zich*	Dutch	*zichzelf*
Japanese	*zibun*	English	*herself*

Both SE and SELF anaphors are referentially defective, meaning that they must be bound in order to receive 'the content necessary for their referential interpretation' (R&R, p658).

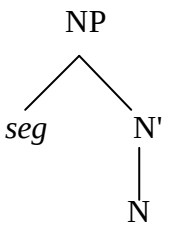
SE anaphors often pattern with pronouns with respect to Condition B, eg (3.14) and (3.15) (R&R, p661).

DUTCH

(3.14) *Jan$_i$ zag jou achter *zichzelf$_i$/ zich$_i$/ hem$_i$ staan*.
J saw you behind Rself R him stand
'Jan$_i$ saw you stand behind *himself$_i$/ himself$_i$/ him$_i$.'

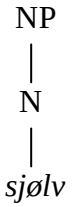
(3.15) *Jan haat zichzelf$_i$/ *zich$_i$/ *hem$_i$*.
J hates Rself R him
'Jan hates himself$_i$/ *himself$_i$/ *him$_i$.'

SE anaphors are therefore considered to have the same internal structure as pronouns, in that they occupy the determiner position, yet project to a full NP (3.16). SELF anaphors occupy the head of the NP (3.17).



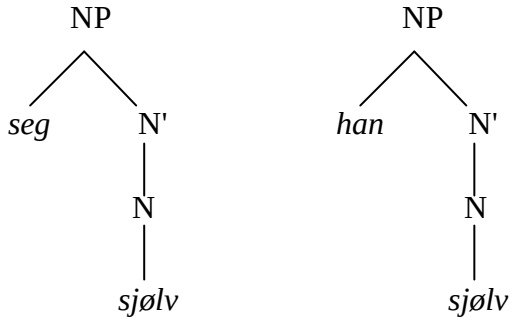
(3.16)

(3.17)



SELF anaphors may combine with SE anaphors and pronouns, as shown in (3.18).

(3.18)



SELF anaphors have a lexical syntactic reflexivising function[2] (R&R, p659) (3.19), while SE anaphors lack this function (3.20). Although R&R do not mention it, SE anaphors are often used with intrinsically reflexive predicates, as in most Germanic languages, like German *sich freuen*, Dutch *zich vermaken* 'enjoy oneself' and the Scandinavian languages Norwegian: *interessera seg*, Danish: *interessere sig* 'be interested', Swedish: *tvätta sig* 'wash oneself'.

NORWEGIAN

(3.19) *Han$_i$ smilte til seg sjølv$_i$.*
he smiled to R[SE] R[SELF]
'He$_i$ smiled to himself$_i$.'

(3.20) **Han$_i$ smilte til seg$_i$.*
he smiled to R[SE]
He$_i$ smiled to himself$_i$.

SE anaphors function as arguments, just like pronouns[3].

[2] as opposed to an intrinsic reflexivising function

[3] Everaert (1991) is also a proponent of the approach that SE anaphors are 'pronominal anaphors'.

(3.21) *Han$_i$ tok ho med seg$_i$ ut*.
he took her with R out
'He$_i$ took her out with him$_i$.'

SE anaphors are subject-oriented, unlike SELF anaphors. SE anaphors are 'interpreted via an association to I' (Agr) (R&R, p659), hence their subject-orientation. This is argued in detail in Reinhart and Reuland (1989).

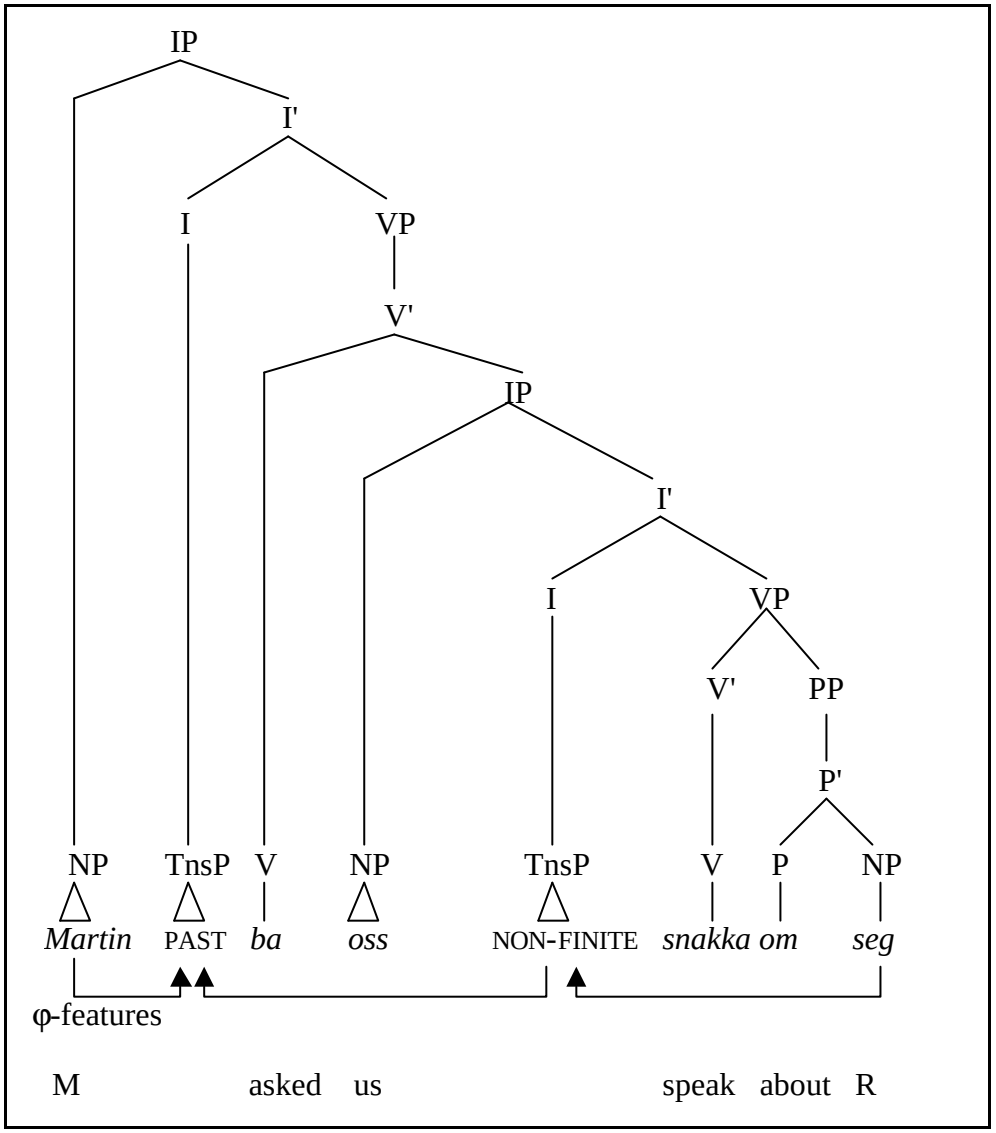
Both SE and SELF anaphors have discourse uses, where the antecedent is not in the same sentence as the anaphor[4]. Most syntacticians agree that these uses of reflexives are not governed by the syntax at all. These exceptions will be pointed out from time to time in this discussion, but will largely be ignored, following the lead of R&R. Ignoring such uses of reflexives, R&R recognise two syntactic domains of reflexivity: the local domain, where a 'SELF anaphor obligatorily reflexivises a predicate, and where both pronouns and the SE-pronominal anaphors are excluded' (p660) (3.15), and the non-local (finite) domain, where SE anaphors are bound ((3.22) and Figure 3.1). Since the finite domain constraint (or the 'Tensed-S' constraint as it was described in the previous chapter) is the main constraint on SE anaphors, it follows that Movement Theory, rather than, or as well as, Binding Theory are the modules responsible for the licensing of LDR (p660).

NORWEGIAN

(3.22) *Martin$_i$ ba oss snakka om seg$_i$*.
M bade us speak about R
'Martin$_i$ asked us to speak about himself$_i$.'

[4] R&R refer to this as a 'logophoric' use of the reflexive, after a phenomenon found in some West African languages. This is discussed in detail later in this thesis.

Figure 3.1 – Phrase-structure diagram of (3.22)



R-Deficiency: Pronouns and SE-Pronominal Anaphors

SE anaphors behave like pronouns in many respects. This is shown in the following Dutch examples, where both the pronoun and the SE anaphor are ruled out in (3.23) and ruled in in (3.24) (R&R, p690).

DUTCH

(3.23) *Willem$_i$ bewondert zichzelf$_i$/ *zich$_i$/ *hem$_i$.*
Willem admires Rself/ *R/ *him.
'Willem$_i$ admires himself$_i$/ *himself$_i$/ *him$_i$.'

(3.24) *Klaas$_i$ duwde de kar voor zich$_i$/ hem$_i$/ (*zichzelf$_i$) uit.*
Klaas pushed the cart before R[SE]/ him/ (*Rself) out.
'Klaas$_i$ pushed the cart in front of himself$_i$/ him$_i$/ (*himself$_i$).'

The differences between pronouns and SE anaphors arise in contexts of intrinsic reflexivisation, where the SE anaphor is required and the pronoun is ruled ungrammatical, as in the following example.

DUTCH

(3.25) *Renate$_i$ schaamt zich$_i$/ *haar$_i$.*
Renate shames R[SE]/ *her.
'Renate is ashamed.'

Condition B more accurately describes the distribution of SE anaphors than pronouns[5] (R&R, p692). This is due to the fact that Conditions A and B define the domains for reflexivisation, which is the function of SELF and SE anaphors, not pronouns. Pronouns are referentially independent [+R], which is how they distinguish themselves from the other anaphors. Pronouns pattern with other NPs in this respect. There are therefore three anaphoric expressions (SE anaphors, SELF anaphors and pronouns) which are uniquely described by the principles of reflexivisation and referential independence.

Summary of SE and SELF anaphors

Table 3.2 gives a summary of the above information. Bulleted features are different between SE and SELF anaphors, little wedges indicate the same features.

Table 3.2 – Summary of features of SE and SELF anaphors

SE-anaphors	**SELF-anaphors**
➢ referentially defective [–R]	➢ referentially defective [–R]
• used with intrinsically reflexive predicates	• lexical reflexivising function
• otherwise free within local domain	
• full semantic arguments	• bound within local domain
• same internal structure as pronouns	• not semantic arguments
	• different/ complementary internal structure to pronouns
• occupy Spec of NP, project to full NP	• occupy head of NP
• subject to Condition B	• not subject to Condition B
• subject-oriented (linked to Infl)	• not subject-oriented (not linked to Infl)
➢ have discourse/ logophoric uses	➢ have discourse/ logophoric uses

3.2.2 Condition B

As stated in section 3.1, Condition B may be stated broadly as:

[5] Pronouns require some additional rules to accurately describe their distribution.

(3.26) A pronoun must be free in its governing category.

Condition B states essentially that pronouns are disallowed when the antecedent is a coargument of the same predicate, as indicated in the following examples.

(3.27) *Tania$_i$ panicked herself$_i$/ *her$_i$ unnecessarily.*
(3.28) *James$_i$ cut himself$_i$/ *him$_i$ whenever he shaved.*
(3.29) *John Howard$_i$ congratulated himself$_i$/ *him$_i$ on the result of the referendum.*
(3.30) *Fran$_i$ washed herself$_i$/ *her$_i$ thoroughly after being on safari for six weeks.*

This complementarity between pronouns and reflexives breaks down in certain cases, in particular in locative PPs in adjuncts (3.31), (3.32); Small Clauses (3.33), (3.34); and picture-NPs (3.35), (3.36). Kuno (1987) cites similar examples.

(3.31) *Brent Matthew$_i$ saw a cam [$_{PP}$ near him$_i$/ himself$_i$].*
(3.32) *Beth$_i$ counted two short people in the family [$_{PP}$ apart from herself$_i$/ her$_i$].*
(3.33) *Cliff$_i$ fancies [$_{SC}$ himself$_i$/ *him$_i$ quite a beer-brewer].*
(3.34) *Karin$_i$ considers [$_{SC}$ herself$_i$/ *her$_i$ overdue for a holiday].*
(3.35) *Lucien$_i$ listened to [$_{NP}$ a song about himself$_i$/ him$_i$].*
(3.36) *Brent Matthew$_i$ likes [$_{NP}$ wild stories about himself$_i$/ him$_i$].*

These sentences pose problems for the formulation of Condition B in (3.26) for the following reasons. Examples (3.31) and (3.32) should only allow a pronoun, as the adjunct locative PP is not governed by the main predicate. Examples (3.33) and (3.34) should also only permit a pronoun, as the anaphor is not in the same clause as the antecedent, and is thus ungoverned[6]. Finally, examples (3.35) and (3.36) should not allow the pronoun (the inverse of (3.31) and (3.32)), as the anaphor is in the governing domain of the antecedent. From these examples, it seems that pronouns actually have a more restrictive domain than reflexives. Condition B therefore needs some modification.

Intrinsic and Extrinsic Reflexivity

R&R define a predicate as reflexive iff two of its arguments are coindexed. They assume that reflexivity must be licensed in all languages, ie all instances of reflexivity

[6] This of course assumes the Small Clause analysis of these sentences.

must be linguistically marked as reflexive. This may be done either by marking the head or an argument reflexively. Marking the head is *intrinsic reflexivisation*, marking an argument is *extrinsic reflexivisation*. Intrinsically reflexive predicates are lexically reflexive. This may or may not be marked morphologically, as 'an operation on the θ-grid' (p662). Extrinsically reflexive predicates may be indicated by the use of a SELF anaphor as one of the arguments. This information is summarised in the table below.

Table 3.3 – Reflexivity must be licensed

Head marks reflexivity	**Argument marks reflexivity**
• intrinsic reflexivisation • lexically reflexive • morphological marking is optional, reflexivity marked in θ-grid	• extrinsic reflexivisation • not lexically reflexive • SELF anaphor used as an argument

In Norwegian, *seg* may be used with intrinsically reflexive predicates, while *sjølv* cannot be. The domains of *seg* and *seg sjølv* are disjoint as shown by the following examples (Hellan 1988:104).

NORWEGIAN (BOKMÅL)

(3.37) *Jon$_i$ snakket om *seg$_i$/ seg selv$_i$.*
J talked about R R self
'Jon$_i$ talked about himself$_i$.'

(3.38) *Jon$_i$ foraktet *seg$_i$/ seg selv$_i$.*
J despised R R self
'Jon$_i$ despised himself$_i$.'

Seg sjølv must be bound within the single clause, and cannot be bound over a non-finite clause boundary. *Seg*, on the other hand, cannot be bound within a single clause, but can be bound over a non-finite clause boundary.

(3.39) *Jon$_i$ bad oss snakke om seg$_i$/ *seg selv$_i$.*
J asked us speak about R R self
'Jon$_i$ asked us to speak about himself$_i$.'

(3.40) *Jon$_i$ bad oss forakte seg$_i$/ *seg selv$_i$.*
J asked us despise R R self
'Jon$_i$ asked us to despise himself$_i$.'

This notion of intrinsic reflexivity has bearing on LDR, too. If a predicate is intrinsically reflexive, then its non-argument *seg* may not be bound to an antecedent other than the intrinsically reflexive predicate itself. Thus, the sentence

(3.41) *Jon$_i$ ba oss snakka om seg$_i$*
J asked us speak about R
'Jon$_i$ asked us to speak about himself$_i$.'

is fine, as *snakka om seg* 'speak about oneself' is not intrinsically reflexive. On the other hand, the sentence

(3.42) **Jon$_i$ ba oss kjeda seg$_i$*
J asked us bore R
Jon$_i$ asked us to bore himself$_i$

is ungrammatical, as the reflexive *seg* in *kjeda seg* 'be bored' is not an argument, rather it is a part of the intrinsically reflexive predicate (Hellan 1988:107).

There are also certain cases where both *seg* and *seg sjølv* are apparently clause-bounded.

(3.43) *Jon$_i$ vaska seg$_i$.*
J washed R
'Jon$_i$ washed himself$_i$.'

(3.44) *Jon$_i$ vaska seg sjølv$_i$.*
J washed R self
'Jon$_i$ washed himself$_i$.'

In such cases, Hellan argues that there are actually two lexical items of *vaska* 'wash', one of which is intrinsically reflexive, and thus takes *seg* as a 'non- (semantic-) argument', and the other non-intrinsically reflexive verb which, to be reflexive-marked, takes *seg sjølv* as a full patient argument[7]. That *vaska* 'wash' takes a full NP argument is shown in (3.45).

[7] An alternative approach would be to say that *vaska* has two senses, one of which is intrinsically reflexive in Norwegian and must be marked with *seg*, while the other is not intrinsically reflexive and

(3.45) *Jon vaska golvet/ bilen/ ungen.*
J washed floor/ car/ child
'Jon washed the floor/ the car/ the child.'

In this way, the non-complementarity of *seg* and *seg sjølv* is dealt with as being a matter of intrinsic and non-intrinsic reflexivisation. The class of predicates which includes *vaska* 'wash' is distinct from the purely intrinsically reflexive predicates, such as *skamma seg* 'be ashamed', *kjeda seg* 'be bored', *gleda seg* 'look forward to' and *bry seg* 'worry about', which cannot take any other argument in place of the reflexive.

The same applies to Dutch *zich* and *zichzelf* (R&R, p666). Based upon the assumptions in Table 3.3, Condition B can be rewritten to state that

(3.46) a predicate is reflexive iff it is reflexively marked.

The new Condition B is sensitive to semantic information (ie reflexivity), and accounts for the following observations.

(3.47) **Brent Matthew$_i$ praised him$_i$.*
(3.48) *Brent Matthew$_i$ praised himself$_i$.*
(3.49) **Brent Matthew$_i$/ he$_i$ praised Brent Matthew$_i$.*

Since *praise* is not an intrinsically reflexive predicate, only the SELF anaphor is permitted to show reflexivisation (3.48). The pronoun (3.47) and full NP (3.49) result in ungrammatical sentences.

This version of Condition B 'makes no use of configurational relations, c-command or even argument hierarchy. It is strictly a condition on reflexive predicates, regardless of their internal structure' (R&R, p665). Since this is based directly on the semantic properties of the predicates, it has the advantage of making Condition B, as formulated in (3.46) equally applicable cross-linguistically.

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must show lexical reflexivisation with *seg sjølv*. This approach will used in this thesis, specifically in Chapter 6.

Condition B with SE-Pronominal Anaphors

The two linguistic modules which are assigned to ruling out ungrammatical uses of reflexives and pronouns are Condition B and a general condition on coindexation chains. By examining SE anaphors[8], the scope of Condition B can be identified. The contrast between intrinsic and non-intrinsic predicates shows that Condition B applies to coarguments. (The following Dutch examples are from R&R, p665 and Everaert 1991:92.)

DUTCH

(3.50) **Max*$_i$ *praat met zich*$_i$.
M speaks with R[SE].
Max$_i$ is talking with himself$_i$. (*praaten* = non-intrinsically reflexive)

(3.51) *Jan*$_i$ *schaamde zich*$_i$.
J shamed R[SE]
'Jan is ashamed.' (*schaamen zich* = intrinsically reflexive)

NORWEGIAN

(3.52) **Jon*$_i$ *prater med seg*$_i$.
J speaks with R[SE].
Jon$_i$ is talking with himself$_i$. (*prata* = non-intrinsically reflexive)

(3.53) *Jon*$_i$ *skammer seg*$_i$.
J shames R[SE].
'Jon is ashamed.' (*skamma seg* = intrinsically reflexive)

These examples show that the SE anaphor may only be used when the predicate is intrinsically reflexive, otherwise it is disallowed as a coargument of the same predicate as its antecedent. Condition B is therefore sensitive to both the type of anaphor and the type of predicate it is involved in, and as such is not a condition on specific lexical items (R&R, p668).

Condition B also specifically applies to coarguments, it neither allows nor disallows coindexation of non-coarguments (cf (3.54) following).

[8] Recall that SE anaphors have many properties identical with pronouns, such as their internal structure.

DUTCH

(3.54) *Max$_i$ legt het boek achter zich$_i$.*
Max puts the book behind R[SE]$_i$.
'Max$_i$ put the book behind himself$_i$.'

Condition B as reformulated by R&R is therefore a semantic condition on locally bound anaphors.

3.2.3 Condition A

Condition A may be stated broadly as:

(3.55) A reflexive must be bound in its governing category.

Condition A as stated does not account for the distinction found in the following examples (from R&R, p670), which show logophoric uses of anaphors. (For a detailed discussion on logophoric contexts, see the next chapter.)

ENGLISH

(3.56) *It angered him$_i$ [that she$_j$ … tried [to attract [a man like himself$_i$]]].*
(3.57) **It angered him$_i$ [that she$_j$ tried [to attract himself$_i$]].*
(3.58) *Clara$_i$ found time [to check [that [apart from herself$_i$] there was a man from the BBC]].*
(3.59) *Max$_i$ boasted [that the queen$_j$ invited [Lucie$_k$ and himself$_i$] for a drink].*
(3.60) **Max$_i$ boasted [that the queen$_j$ invited himself$_i$ for a drink].*

R&R suggest that these differences might be due to the same factors as pertain to Condition B. This is namely that Condition A should not be thought of as a condition on anaphors, rather as a condition on locally bound (coargument) reflexivisation. R&R rephrase Condition A to state that

(3.61) a reflexive-marked predicate is reflexive (p671).

Stated in this way, Condition A correctly filters out the starred examples above (3.57) and (3.60), as the predicates *attract* and *invite* are neither intrinsically nor extrinsically reflexive, and should therefore not be marked as such. The other sentences (3.56), (3.58) and (3.59) do not have a reflexive in an argument position, and are therefore

not ruled out by this formulation of Condition A[9]. Pollard and Sag (1992) argue that reciprocals are allowed in exactly these same environments as reflexives as discussed here.

Arguments and Non-arguments

The distinction R&R make between argument and non-argument positions is thus very important in the application of Condition A as formulated in (3.61). Arguments are semantic arguments, that is, they are subcategorised for in the subcategorisation frame of the predicate[10]. Non-arguments are not subcategorised for. Both Condition A and Condition B are reformulated by R&R to apply explicitly to semantically and syntactically reflexive predicates and apply strictly within the coargument domain to strict arguments. Reflexives in non-argument position are not subject to R&R's condition's A and B. All reflexives in non-argument position are termed *logophors* by R&R. In this sense, LDRs are one type of logophor.

3.2.4 Logophors

Reflexives that are not governed by the binding conditions are called *logophors*[11] (R&R, p672). One type of logophors are emphatic anaphors, or *focus anaphors.* Focus anaphors undergo movement at LF and therefore do not reflexive-mark the predicate. This is shown in examples (3.62) to (3.65).

(3.62) *This letter was addressed only to myself*.
(3.63) *Why should the state always take precedence over myself?*
(3.64) *Bismarck's impulsiveness has, as so often, rebounded against himself.*
(3.65) *himself$_i$ [Bismarck's impulsiveness has, as so often, rebounded against e_i]*

R&R state that a SELF anaphor may always be used logophorically when it is not in argument position (p673). The term *logophoric* thus covers all reflexive anaphors that do not adhere to the binding conditions.

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[9] Pollard and Sag (1992) also state that Condition A only applies to arguments.

[10] Hellan (1988) also distinguishes between *syntactic arguments*, which may be defined purely in terms of government, and *semantic arguments*, which refer to 'arguments of concept' (p1). Hellan states that these two types of arguments often, but not always, coincide, and that the difference between the two is a key factor in defining binding domains for anaphors. This is consistent with R&R's approach.

[11] R&R use the term 'logophors' to refer to both logophoric (POV) and emphatic (focus) anaphors.

Logophors and coreference

The relationship between logophors and their antecedent may be one of coreference, rather than of variable binding (R&R, p673), as is the standard assumption in the literature on binding theory (eg Sells 1987, Koster 1987, Cole et al 1990, Pica 1991, etc). As Reinhart (1993) argues, there is nothing in the binding theory which comments on coreference; binding theory deals only with syntactic coindexation. Coreference is resolved in the discourse part of the grammar, along with anaphor resolution, and not in the syntax. An anaphor is only a bound variable when it is required by Condition A to be coindexed with the antecedent, and is therefore syntactically bound. Otherwise it may be bound by the discourse, and simply 'corefer'. This is an important claim, as it means that LDRs, which are one type of logophor, may not be governed purely by the syntax. Hellan (1988) also discusses this important difference between coreference and coindexation. This is a rather technical aspect of R&R's analysis which falls out of the interaction between the observable data and the new Conditions A and B.

3.2.5 Syntactic and semantic predicates

There is an important difference between the following sentences.

(3.66) *The queen$_i$ invited [$_{NP}$ both Max and herself$_i$/ *her$_i$] to our party.*

(3.67) *The queen invited [$_{NP}$ both Max and myself/ me] for tea.*

In these examples, the NPs containing the anaphors are not syntactic predicates, since they do not have subjects. The anaphors are also not in argument position, since they are within NPs. The anaphors are therefore logophors and should consequently not enforce the complementarity principle. However, this is not the case for (3.66), which allows only the reflexive, even though it this is true for (3.67), where both the reflexive and the pronoun are acceptable. In R&R's framework, these sentences highlight an important fact about semantic predicates. The semantic structure, or logical structure of (3.66) resembles (3.68) as follows.

(3.68) the queen (λx (x invited Max & x invited x))

The interpretation in (3.68) of the sentence in (3.66) does indeed have a semantically reflexive predicate (λx invited x). No such logical structure exists for (3.67). This indicates that Condition B needs to apply at the level of semantic reflexivisation.

Example (3.67) does not contain such a semantic reflexive, nor is it syntactically reflexive, since the anaphors are not in argument position as mentioned above, hence the logophoric non-complementarity situation is applicable here.

R&R conclude that Conditions A and B are not symmetric – Condition B applies only to semantic reflexivisation, whereas Condition A applies only to syntactic reflexivisation (p678).

P and N Predicates

According to the definition given by R&R, syntactic predicates must always have a subject, while semantic predicates need not have. V predicates are both syntactic and semantic predicates. Prepositional and nominal phrases do not always have a subject, and are therefore only semantic predicates.

Semantic reflexives are defined in logical syntax, syntactic reflexives are defined by grammatical configurations. Syntactic arguments need not be semantic arguments, ie they need not be assigned θ-roles. This accounts for Exceptional Case Marking examples such as the following.

(3.69) *Lucien$_i$ strikes himself$_i$ [t_i as a gun basketball player]*.
(3.70) *Brent Matthew$_i$ seems to himself$_i$ [t_i to be above suspicion]*.
(3.71) **Tania$_i$ thinks [it will bother herself$_i$ [that her$_i$ bedroom has no door-handle]]*.

No logical structure containing an intrinsically reflexive predicate is available for (3.71), though the anaphor is in an argument position. Therefore, this sentence is ungrammatical. Such ECM examples provide the clearest distinction between syntactic and semantic predicates.

Picture-NPs and the Binding Conditions

R&R describe anaphora in picture-NPs as logophoric, that is to say that since any anaphor within an NP will not be in argument position, there need not exist a c-commanding antecedent for anaphora in picture-NPs[12]. Furthermore, anaphors in NPs

[12] Hellan (1988) subscribes to the Complementarity Principle as it is normally defined. He states on page 102 that 'whenever the binding conditions for an NP containing *seg* are met, binding within the same domain of an NP containing *ham* [bokmål: third person masculine object pronoun] rather than *seg*, but otherwise like the former NP, is impossible'. This is in direct contradiction with what is

allow a coreferential reading, not a bound variable one. Condition B does not apply, since an anaphor in a picture-NP is not in argument position, while Condition A does not apply since it deals solely with syntactic coindexation. However, when a (picture-) NP contains a (syntactic) subject, it becomes a syntactic predicate, hence subject to Condition A. This is shown in the following examples.

(3.72) *A picture of myself would be nice on that wall.*

(3.73) *Lucien$_i$ liked [(a) picture of himself$_i$].*

(3.74) */? *Lucien$_i$ liked [my picture of himself$_i$].*

Acknowledging that logophoric anaphora exists obviates the need for excessive restructuring mechanisms for the binding conditions (although it doesn't eliminate it completely (R&R, p684)). Defining strict environments when Conditions A and B do apply means they can be shown to deal accurately with observable data.

Lexical semantics determine whether Condition B is applicable to individual cases, since Condition B only applies to semantically reflexive predicates. R&R (p685) describe this as the presence of syntactically unrealised θ-roles affecting the anaphora options of the realised N arguments. This is clear in the following examples, which have identical syntax, but the semantics of the predicate is the deciding factor in allowing coindexation between a pronoun in a picture-NP and the subject of the sentence. (See also Stirling and Huddleston forthcoming for examples of semantic and syntactic predicates differing in the extent to which they allow or require a reflexive.)

(3.75) *Lucien$_i$ saw a picture of him$_i$.*

(3.76) **Lucien$_i$ took a picture of him$_i$.*

(3.77) *Dan$_i$ heard a story about him$_i$.*

(3.78) **Dan$_i$ told a story about him$_i$.*

(3.79) **Lucien$_i$ performed an operation on him$_i$.*

In (3.76), (3.78) and (3.79), the lexical semantics of the predicates *take a picture*, *tell a story* and *perform an operation* entail that the agent (producer) of the verb must be

claimed by R&R (among others), although it will be interesting to discuss this in a semantic context later in this thesis.

identical to the agent or producer of the head N[13]. Coreference between this agent and the patient thus results in a semantically reflexive predicate, which must be reflexively marked, hence the ungrammaticality of the use of the pronoun. The semantics of *see a picture* and *hear a story* do not entail that the agent of the verb be identical with the agent/ producer of the head noun[14], hence there is no reflexivity requirement, and Condition B does not apply.

Predicative PPs and the Binding Conditions

When a PP is an adjunct, it is also its own semantic predicate (R&R, p664). This is often the case with locative and directional PPs where the NP is an argument of the P (as in (3.80) below), not of the V (as in (3.81) below) (p686). This is not a difference just between adjuncts and complements, since the anaphoric NP in (3.81) is analysed as a complement of V, while in (3.80) it is a complement of P. The important step is to determine whether the NP which is a syntactic complement of a P, is actually a semantic argument of the V or the P. This determines whether Condition B will apply to rule out pronominals. The following contrast (of complementarity and non-complementarity between pronouns and reflexives) is accounted for because of this distinction.

(3.80) *Brent Matthew$_i$ saw a ghost next to him$_i$ / himself$_i$.*

(3.81) *Lucien$_i$ explained Tania$_j$ to *him$_i$ / himself$_i$.*

In (3.80), the binding conditions do not apply because the anaphor is an argument of the P predicate, and so both the pronoun and the reflexive are permitted. In (3.81), the anaphor is coindexed with a coargument; the predicate *explain to* is reflexive, hence reflexive marking is required, and the complementarity principle holds. Binding within PPs is thus parallel to binding within NPs.

Summary of Syntactic and Semantic Predicates

Ps never and Ns sometimes form syntactic predicates (R&R, pp686,688), since Ps never have subjects and Ns sometimes do. PPs and NPs may form their own semantic predicates. They therefore pattern differently to Vs with respect to anaphora, since

[13] This entails that the verb and noun are semantically one predicate, rather than a predicate and its argument.

[14] ie they do not entail that the verb and noun are semantically one predicate.

VPs are always semantic and syntactic predicates, and are thus always subject to Conditions A and B, while Ps and Ns are only ever subject to Condition A and Ns sometimes to Condition B. All predicative heads form semantic predicates[15]. Only some predicative heads form syntactic predicates. Hence Condition B (the semantic reflexivisation rule) applies to all predicates, whereas Condition A (the syntactic reflexivisation rule) applies to only some predicates. R&R do not address the issue of defining feature/s of syntactic predicates[16].

3.2.6 Movement and binding: the chain condition

The boundary between Chain Theory and Binding Theory is quite blurry. The two modules have significant overlap, which has resulted in redundancies with respect to the range of data each accounts for. R&R argue that the Binding Conditions, and not the Chain Condition, are 'sensitive to the R properties of NPs' (p693), since their reformulated Binding Conditions deal specifically with reflexivity, which is based upon the fundamental lack of referential features of reflexive NPs. Chain Theory must also be reformulated to account for a specific data set.

The observation that NP traces (t) must be bound in the same domain as an anaphor ([–R] element) must be bound and a pronoun or any non-anaphor ([+R] element) must be free (R&R, p693) is illustrated in the following examples.

(3.82) *Brent Matthew$_i$ was fired t_i.*
(3.83) *Brent Matthew$_i$ behaved himself$_i$.*
(3.84) **Brent Matthew$_i$ behaved him$_i$.*
(3.85) **Who$_i$ [did he$_i$ behave t_i]?*

Examples (3.81) and (3.82) show that traces and reflexives must be bound in the same environments, while (3.83) and (3.84) show that the pronominal trace and the pronoun cannot be bound in this environment.

NP traces form A-chains, which may be broadly defined as 'any sequence of coindexation that is headed by an A-position and satisfies antecedent government'

[15] This was mentioned earlier in 3.2.5 Syntactic and semantic predicates.

[16] This is similar to the question of binding domain/s.

(R&R, p693). A-chains have the unique property of allowing coindexed elements to form a single argument, which is clearly not the standard interpretation of coindexation. Coindexed elements are considered to form an A-chain iff the chain has one Case-marked position, at its head, and exactly one θ-role, at its tail. An A-chain thus forms one semantic argument. However, R&R argue that all well-formed chains form one syntactic argument, which is not necessarily the same as forming one semantic argument, and that each type of argument has different requirements that need to be fulfilled in order to be part of a grammatical sentence.

The Syntactic (Case) Requirement on A-Chains

Well-formed chains (which project as one syntactic argument) have a referentially independent ([+R]) element as their head, while the tail and all intermediate links are referentially deficient ([–R]). NPs move from a Case-empty slot to a governed slot where they receive Case. The apparent configurational effects of the binding conditions can therefore all be reduced to the Chain Condition (R&R, p696), which R&R state as:

(3.86) *General condition on A-chains*

A maximal A-chain (α_1, …, α_n) contains exactly one link – α_1 – that is both [+R] and Case-marked.

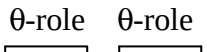
The Semantic (q-) Requirement on A-Chains

The semantic requirement on A-Chains is both an extension and a natural result of the syntactic condition on A-chains coupled with standard theories about arguments[17]. As any syntactic argument must have one and only one θ-role, it follows that an A-chain must also have one and only one θ-role, too. This is, however, difficult to apply to ECM cases such as the following[18], where it is possible to conceive of the reflexive as bearing two θ-roles. Even if the traditional analysis is taken, where the reflexive is the subject of a small clause, and receives its θ-role from the embedded predicate, the A-chain it forms with the higher object will then have two θ-roles, which should not be permitted.

[17] ie θ-theory and Case theory

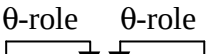
[18] R&R assume a small clause analysis.

ENGLISH



(3.87) *Jan$_i$ heard [himself$_i$ sing]*.

DUTCH



Jan$_i$ hoorde [zich$_i$ zingen].

Jan heard R[SE] sing.

(3.88) 'Jan$_i$ heard [himself$_i$ singing].'

Whether an A-chain corresponds to one or more thematic arguments should be determined by the thematic structure/s of the predicates involved, not by the Chain Condition[19] (p701-2). The Chain Condition therefore only applies to syntactic (argument) chains. The apparent conflict of the old formulation of Chain Theory is no longer present in ECM cases like (3.87) and (3.88) using the new formulation of Chain Theory which applies only to syntactic chains, and ignores the conflict created by an argument having more than one θ-role.

Condition B and the Chain Condition

Both SE anaphors and pronouns are subject to the Chain Condition[20] and Condition B[21]. Under the modern Minimalist Program assumptions, violations of the Chain Condition are more serious than violations of Condition B. The following ungrammatical examples are ruled out by the Chain Condition alone, showing that the Binding Conditions are not always responsible for grammaticality in cases where they may be thought to apply.

The verbs in (3.89), (3.90), (3.91) and (3.93) are intrinsically reflexive, meaning that Condition B allows anything that indicates coreference (R&R, p703). However, the Chain Condition stipulates that the head of a chain must be [+R] and the tail must be [–R]. A pronoun is therefore not permitted to be at the tail of a chain. In these

[19] The Chain Condition does not apply to logophors either, which do not create a chain.

[20] Recall the Chain Condition states that an A-chain must have exactly one link that is both [+R] and Case-marked.

[21] Recall Condition B is the semantic reflexivisation rule, which applies to all predicates, and states that a predicate is reflexive iff it is reflexively marked (see (3.46)).

sentences, therefore, it is the Chain Condition which rules out the pronoun, not Condition B (p703).

DUTCH

(3.89) *Willem$_i$ schaamt zich$_i$/ *hem$_i$.*
Willem shames R[SE] / *him$_i$.
'Willem is ashamed.'

(3.90) *Lucien$_i$ gedroeg zich$_i$/ *hem$_i$.*
Lucien behaved R[SE]/ him.
'Lucien$_i$ behaved himself$_i$/ *him$_i$.'

ENGLISH

(3.91) *Lucien$_i$ behaved himself$_i$/ *him$_i$.*

SE anaphors cannot, by definition, violate the Chain Condition, as they are [–R] and only occur at the tail of a chain (R&R, p702,704). SE anaphors may be ruled out by Condition B only. Pronouns, on the other hand, may be ruled out by both Condition B and the Chain Condition.

In (3.92) and (3.93), a chain is formed between two coarguments. The pronoun is again ruled out by the Chain Condition, since it is [+R], which is not permitted at the tail of a chain.

DUTCH

(3.92) *Henk$_i$ wees zich$_i$/ *hem$_i$ an zichzelf$_i$ toe.*
Henk assigned R[SE]/ him to R[SELF] to.
'Henk$_i$ assigned himself$_i$/ *him$_i$ to himself$_i$.'

ENGLISH

(3.93) *Dan$_i$ assigned himself$_i$/ *him$_i$ to himself$_i$.*

Condition B can only rule out pronouns when a pronoun is a semantic coargument with the antecedent. The Chain Condition only applies to the syntactic representation of a sentence, and hence applies in situations such as small clauses, eg (3.94), (3.95) and (3.96) (R&R, p703).

DUTCH

(3.94) *Jan$_i$ hoorde [zich$_i$/ *hem zingen].*
Jan$_i$ heard R[SE] him sing.
'Jan$_i$ heard [himself$_i$/ *him singing].'

ENGLISH

(3.95) *Jan$_i$ heard [himself$_i$/ *him$_i$ sing].*

(3.96) *Brent$_i$ strikes [himself$_i$/ *him$_i$ as quick-witted].*

Condition B, and not the Chain Condition, can also rule out cases on its own. This occurs mainly when the semantic predicate is not the same as the syntactic predicate, as shown in the following examples.

(3.97) *Lucien$_i$ saw/ *took [a picture of him$_i$].*

(3.98) **Brent$_i$ criticised Lyndon and him$_i$.*

The Chain Condition and Condition B are distinct conditions, having distinct effects on grammaticality judgements, and neither is reducible to the other.

Non-finite Clause: ECM and Raising Structures

In raising structures, the subject of the small clause is a syntactic argument of both the matrix predicate and of the small clause. Condition A therefore applies to filter out ungrammatical use of a non-reflexive in this position, since there is a syntactic argument chain formed where the head and tail are the same, hence the chain is reflexive and must therefore be marked reflexively. Condition B and the Chain Condition also apply at different levels of representation to rule sentences in or out. In the following examples, Condition B rules out the pronoun and the SE anaphor in (3.99) and (3.101), while the Chain Condition rules only the pronoun unacceptable in (3.100) and (3.102). The same rules apply both in Dutch and Norwegian.

DUTCH

(3.99) *Henk$_i$ hoorde *hem$_i$/ *zich$_i$/ zichzelf$_i$.*
Henk heard him R Rself.
Henk$_i$ heard *him$_i$/ *himself$_i$/ himself$_i$.

(3.100) *Henk$_i$ hoorde [*hem$_i$/ zich$_i$/ zichzelf$_i$ zingen].*
Henk heard him R Rself sing
Henk$_i$ heard *him$_i$/ himself$_i$/ himself$_i$ singing.

NORWEGIAN

(3.101) *Kjetil$_i$ høyrte *han$_i$/ *seg$_i$/ seg sjølv$_i$.*
Kjetil heard him R Rself
Kjetil$_i$ heard *him$_i$/ *himself$_i$/ himself$_i$.

(3.102) *Kjetil$_i$ høyrte [*han$_i$/ seg$_i$/ seg sjølv$_i$ omtalast].*
Kjetil heard him R R self be-mentioned
Kjetil$_i$ heard *him$_i$/ himself$_i$/ himself$_i$ be mentioned.

For-to Infinitives

R&R assume that anaphors in the subject position of embedded clauses in *for-to* infinitive constructions, such as shown below in (3.103), are logophors, since they are not in argument position. As such, they are not subject to Condition A or B nor the Chain Condition as described in their paper.

(3.103) *Brent$_i$ would like very much [for himself$_i$ to become a famous rock-star].*

Hierarchical Effects

R&R believe that it is not necessary to incorporate any kind of argument hierarchy into the binding conditions in order to account for the difference between the following sentences[22].

(3.104) *Brent$_i$ said that [he$_i$ amused himself$_i$].*
(3.105) **Brent$_i$ said that [himself$_i$ amused him$_i$].*

Instead, the ordering of elements is independently controlled by the Chain Condition, which must have a [+R] element at its head, and a [–R] element at its tail. Obviously, (3.104) conforms to this, while (3.105) doesn't, and is thus ungrammatical.

Thus, anaphora is governed by two linguistic modules – the Binding Theory, which is comprised of Condition A and Condition B, and the Chain Condition. There is no need for any configurational notion of c-command in binding, nor any other hierarchical restrictions. The notion of referential (in)dependence [+/–R] is the key factor in applying the Chain Condition (R&R, p715). This analysis is an important step forward in the description and explanation of reflexives and LDRs, as it

[22] Although see Pollard and Sag (1992) for an opposing view.

illustrates the restrictions which the Binding Conditions apply under, and incorporates a semantic notion of reflexivisation in Condition B.

3.2.7 Summary and conclusions

Condition A is now a syntactic requirement that reflexivity must be lexically marked. Condition B is now a semantic requirement that a reflexively-marked predicate must be reflexive. The Chain Condition on A-chains states that the head of an A-chain must be [+R] and Case-marked, while the tail must be [–R].

Implications of R&R for LDR

One outcome of R&R's analysis is that anaphors like *seg sjølv* cannot be bound long-distance, since they reflexively-mark the predicate they are an object of, and are therefore subject to Condition B. This means that SELF anaphors must be clause-bound.

Furthermore, if R&R's assumptions are correct, then LDR cannot be governed by Binding Theory, which only applies to local anaphora, although it may be governed by the A-Chain condition. R&R assume that reflexive elements receive their referential properties through their relationship to Infl. All referentially defective elements are assumed to move, which must include LDRs. There is no reason to suppose that the Chain Condition, along with some sort of blocking effect to prevent binding past an indicative mood, will not account for LDR. And, in fact, there are some linguists who believe LDR is a type of A-movement, and is thus governed by the Chain Condition. This is looked at in the following section.

3.3 Movement analyses of LDR

Among those who propose that apparent long-distance binding is actually a series of short distance dependencies are Hellan and Christensen (1986) (following Pica ([1984]; [1987]), Chomsky ([1986a]; [1988]) and Pollock ([1989]), Holmberg and Platzack (1995), Pica (1991), Everaert (1991) and Cole and Wang (1996). Harbert (1995) also mentions movement as a possible solution to LDR.

In order to work, the movement analyses rely on some definition of LDRs which allows them to move, and some feature of the syntax that prohibits illicit movement. Four variations of these factors are presented in this chapter. Cole et al (1990) and

Pica (1991) assume that only X^0 anaphors may be LDRs, while Huang and Tang (1991) assume that only XP anaphors may be LDRs. Blocking effects for Cole et al are caused by certain types of Infl, Pica relies on theoretical levels of structure that use Comp as a blocking node and Huang and Tang use trace-government effects to rule out illicit structures. Finally, Anderson (1986) and Holmberg and Platzack (1995) use a rule of Tense Agreement to prevent illegal binding of LDRs in the Scandinavian languages.

The movement analysis (within the Government and Binding/ Principles and Parameters model) purports to explain several features of LDRs, namely, the fact that LDRs are monomorphemic (as opposed to clause-bounded anaphors which need not be monomorphemic), the apparent subjecthood condition on their antecedent, and their co-occurrence with the subjunctive mood.

3.3.1 X^0-movement

The classification of reflexive anaphors into lexical and phrasal elements, X^0 and XP respectively, accounts for the fact that some reflexives may be bound outside their minimal clause, if it is also assumed that Infl can be lexical or functional (Cole, Hermon and Sung 1990). A lexical Infl allows only lexical (ie X^0) elements to move through it, while a functional Infl is a barrier to such movement.

Although Cole et al (1990) state this difference between X^0 and XP anaphors explicitly, this could be assumed to fall out of the extension to R&R's analysis, with only the Chinese reflexive *ziji* able to create an A-chain, and the English anaphor *oneself* being subject to Condition B. However, the situation in Chinese is more complicated than this suggests. We will therefore leave the extension of R&R's analysis as a hypothetical possibility, with all the details yet to be worked out, since R&R themselves state that LDRs are beyond the scope of their paper.

Returning to Cole et al's (1990) account, it can be seen that languages which allow LDR would be considered to have a lexical Infl, while those which do not permit LDR would be analysed as having a functional Infl[23]. This difference is demonstrated

[23] There are other motivating factors for this distinction between Infls in languages such as Chinese, such as 'the occurrence of nongap topics and null topics (topic chains) and the absence of *that*-trace effects' (Cole, Hermon and Sung 1990:4).

in the following two examples, from Chinese (which has a lexical Infl) and English (which has a functional Infl). Both English and Chinese reflexives are considered to be X^0 under this analysis[24]. (The following examples are from Cole et al 1990:5,8.)

CHINESE

(3.106) *Zhangsan$_i$ renwei [Lisi$_j$ zhidao [Wangwu$_k$ xihuan ziji$_{i/j/k}$]]*.

Z thinks L knows W likes R

'Zhangsan$_i$ thinks [Lisi$_j$ knows [Wangwu$_k$ likes himself$_{i/j/k}$]].

ENGLISH

(3.107) *John$_i$ thinks [Bill$_j$ knows [Tom$_k$ likes himself$_{*i/*j/k}$]]*.

As illustrated in the following phrase structure diagrams Figure 3.2 and Figure 3.3, the lexical Infl in Chinese is not a barrier to movement, while the functional Infl in English does have a blocking effect. Cole et al point out that it is not in fact the binding conditions which rule out LDR in the English example, rather it is blocked by the Empty Category Principle (the ECP) which requires that all traces be properly governed.

In Chinese (Figure 3.2, from Cole et al 1990:6), the lexical Infl lexically-marks (L-marks) the VP, which makes the VP a proper governor (pp2,8). In the English example (Figure 3.3, from Cole et al 1990:9), Infl is functional, not lexical, and therefore does not L-mark the VP. The VP in English is consequently a barrier to movement.

[24] The question of whether English reflexives are syntactically X^0 or XP elements is answered in different ways by different linguists. From a purely morphological point of view, it is obviously bimorphemic *him.self*. For some analyses of movement/ binding possibilities of reflexives, the actual morphological structure is irrelevant, such as here, where movement is constrained by some other part of the syntax.

Figure 3.2 – Phrase-structure diagram of legal LDR-movement in Chinese

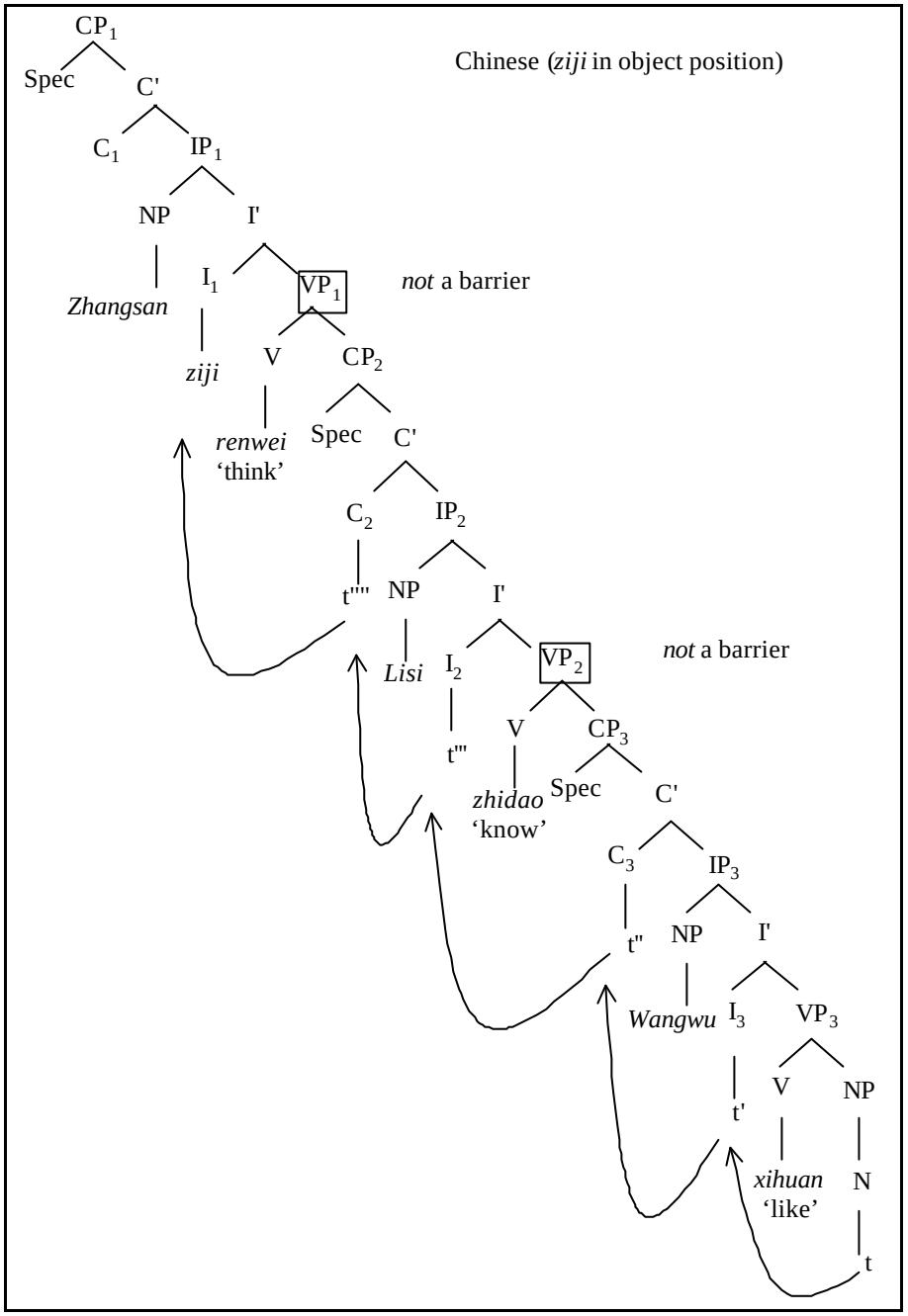
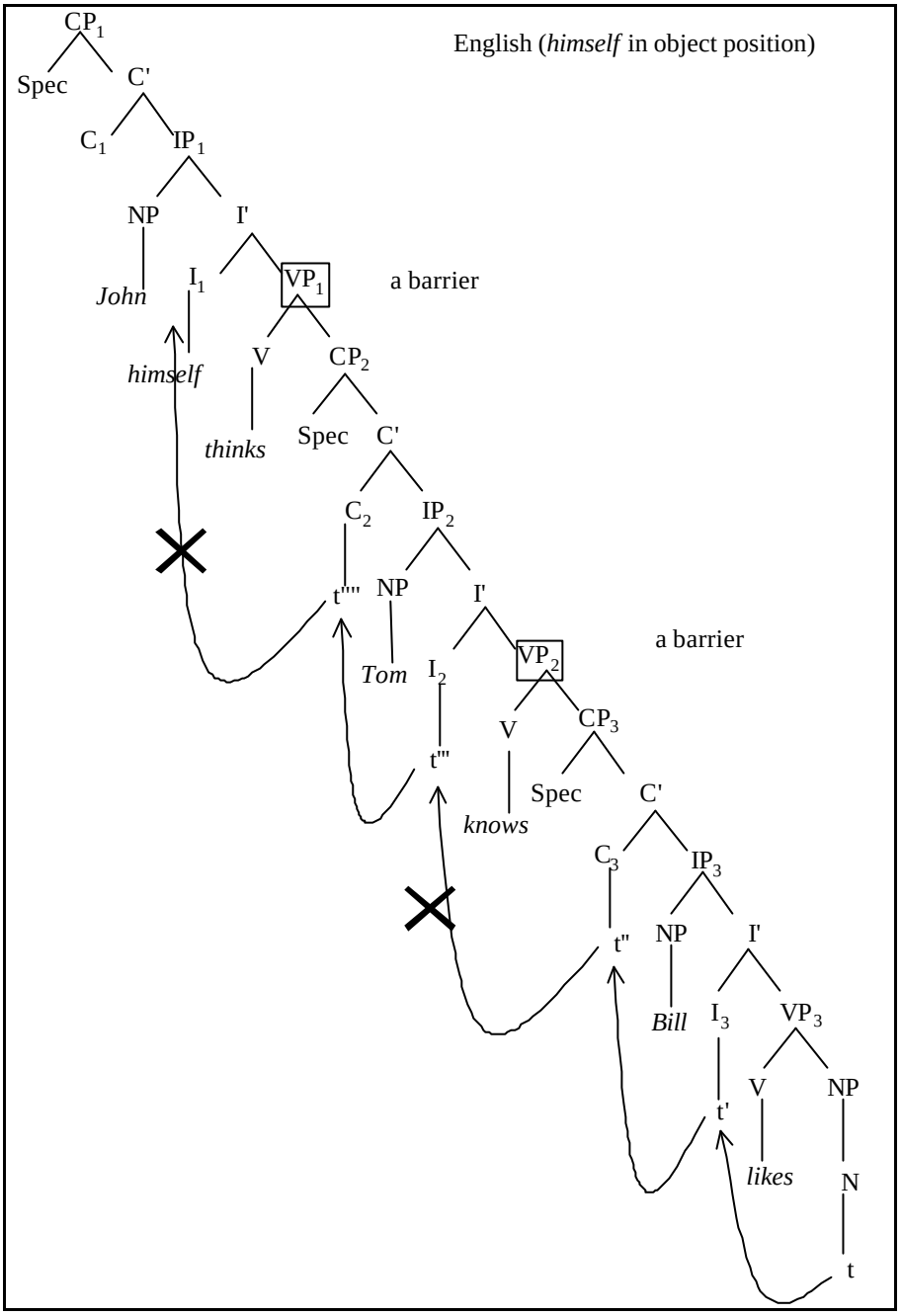


Figure 3.3 – Phrase-structure diagram of illegal LDR-movement in English



This approach to explaining LDR incorporates both lexical differentiation of anaphors and a parametric difference between languages of the type of Infl employed. This account allows for Head-to-Head cyclic movement of X^0 elements through a lexical Infl, which correctly accounts for the subject orientation of LDRs, and gives an explanation for the monomorphemicity of LDRs. Furthermore, it is consistent with the A-Chain Condition governing LDR as only [–R] elements may be at the tail, and [+R] elements may be at the head of such a chain. The reflexive must move from its original position up to an Infl where it will receive φ-features, becoming [+R].

This account does not address the subjunctive mood as a licenser for LDR, nor does it address the Tensed S condition. Cases of non-complementarity of LDRs and pronouns are not discussed, as it is presumed these will simply fall out of the conditions presented here.

Problems with this analysis arise when predicting binding across adjunct clauses or out of NPs (Huang and Tang 1991). There are also theoretical issues with this type of movement, since the tail of an A-chain is normally not assigned Case, while an LDR trace receives Case and a θ-role. For this reason, an XP-movement account of LDR in Chinese may be preferable. Firstly, though, let us examine LDR under an A'-movement analysis.

3.3.2 A'-movement

Pica (1991) proposes an A'-movement analysis of LDR, where the focus is on Comp instead of Infl to provide any eventual blocking effect. Pica assumes that only X^0 anaphors can escape the Specified Subject Constraint (SSC) by cyclic head-to-head movement through Comp at LF[25]. XP anaphors cannot make use of such an escape hatch and are consequently subject to more severe locality restrictions (Pica 1991:121). Pica also says that it is the interaction of binding and antecedent-government (or 'trace-government') that generates LDR, not any single principle. As noted by R&R, the traditional Binding Conditions are only applicable to clause-bounded reflexives, and not to LDRs. Other mechanisms such as the theories of movement must be responsible for a syntactic description of LDRs.

Pica analyses Icelandic *síg* as monomorphemic (ie X^0) and English *himself* as non-monomorphemic (XP)[26]. Therefore the following contrast in grammaticality is accounted for (from Pica 1991:119,131).

[25] This is consistent with R&R, where it was claimed that only clause-bounded reflexives could not be bound past a specified subject.

[26] Designating anaphors as monomorphemic or non-monomorphemic seems to be only partly based upon external factors. If an anaphor may be bound over a clause boundary, this is often seen as justification for describing that anaphor as monomorphemic.

ICELANDIC

(3.108) *Jón$_i$ sagði þeim [að María elski sig$_i$].*
J said them that M loved-S R
'Jon$_i$ told them that Maria loved himself$_i$.'

ENGLISH

(3.109) **Peter$_i$ asks that you love himself$_i$.*

A major assumption made by Pica is that Comp is 'only available for movement when it is not lexically filled' (Pica 1991:123). This position may be either lexically empty, or deleted at LF, as in the case of all non-tensed (indicative) clauses[27], eg (3.110) and (3.111).

ICELANDIC

(3.110) ss

Jón$_i$ INFL *sagði* [$_{CP}$ [C [$_{IP}$ *María* INFL *elski* *sig$_i$*]]].
J said M loved-S R
'Jon$_i$ said that Maria loved himself$_i$.'

(3.111) ds

Jón$_i$ INFL-*sig$_i$ sagði* [$_{CP}$ [*e$_i$* [$_{IP}$ *María* INFL *elski* *e$_i$*]]].
J said M loved-S t
'Jon$_i$ said that Maria loved himself$_i$.'

Pica's A'-movement analysis also applies to Norwegian. In (3.112), the Comp is not lexically filled, it is therefore available to act as a landing site, and LDR is allowed.

NORWEGIAN

(3.112) *Han$_i$ ba oss [*C-Ø *snakka om seg$_i$].*
he bade us speak about R
'He$_i$ asked us to speak about himself$_i$.'

In (3.113), Comp is lexically filled, it does not delete at LF, since it introduces an indicative clause, and can therefore not act as a landing-site. Consequently, LDR is not permitted in this sentence (from Pica 1991:124).

[27] Pica (1991:123) states this without justification.

ICELANDIC

(3.113) **Jón$_i$ veit [að María elskar sig$_i$]*.

J knows that M loves-I R

Jon$_i$ knows [that Maria loves himself$_i$].

This accounts for LDR in languages which have lexical Infl and lexical Comp, according to Pica. Although Pica doesn't mention it explicitly, it can be assumed that some of the conditions that apply to the Wh-A'-chain also apply to the anaphoric A'-chain. This would presumably include the condition that the tail of the chain receive both Case and a θ-role. This means that LDRs, under Pica's analysis, are syntactic and semantic arguments of the predicate they are an object of, while they receive their coindexing from the higher antecedent with which they are coreferential. This is an intuitively pleasing interpretation[28]. It accounts for the monomorphemicity of LDRs, and their subject-orientation. It also accounts for the Tensed S condition, and its occurrence within clauses in the subjunctive mood. Pica himself does not mention complementarity effects, although it may be assumed that they exist when the matrix predicate is indicative, but not when it is subjunctive.

3.3.3 XP-movement

In contrast to the head-to-head movement analyses presented above such as those by Cole et al (1990) and Pica (1991), Huang and Tang (1991) explain LDR in Chinese through A'-movement, or XP-movement. They argue that the head-movement analysis does not correctly predict the cases of LDR in Chinese, as, among other things, head-to-head movement at LF would void the possibility of binding across adjunct clauses or out of NPs (Huang and Tang 1991:271). The head movement analysis allows only for binding or movement of arguments to within VPs which subcategorise for the embedded clause[29]. However, binding across adjunct clauses or out of NPs is clearly possible, as shown in the following (from Huang and Tang 1991:271).

[28] However, Pica (1991:127) also states that the LDR trace can delete, so this interpretation would not be possible. It is unclear what benefit this brings.

[29] This essentially what Koster's dynasty model postulates. Koster's approach will be examined later.

CHINESE

(3.114) *Zhangsan$_i$ shuo [ruguo Lisi$_j$ piping ziji$_{i/j}$], ta jiu bu qu.*
Z say if L criticise R he then not go
'Zhangsan$_i$ said that if Lisi$_j$ criticised himself$_{i/j}$, then he won't go.'

(3.115) *Zhangsan$_i$ bu xihuan [neixie piping ziji$_{i/j}$ de ren$_j$].*
Z not like those criticise R REL person
'Zhangsan$_i$ does not like those people$_j$ who criticise himself$_{i/j}$.'

Under Huang and Tang's (1991) proposal, LDRs are XPs, which adjoin to IP at LF, exactly as for XP-movement (Huang and Tang 1991:273). The moved anaphor is thus lexically governed by Infl, and not subject to antecedent-government, since the XP trace would be deleted (Pica 1991:127). This analysis works for reflexives in argument position, as shown by example (3.116) (from Huang and Tang 1991:279).

CHINESE

(3.116) *Lisi$_i$ bu xihuan [[piping ziji$_{i/j}$ de] neige ren$_j$].*
L not like criticise R REL that person
'Lisi$_i$ does not like the person$_j$ [who criticised himself$_{i/j}$].'

In example (3.116) *ziji* occurs in an argument position, and receives Case and a θ-role from *piping* 'criticise'. It adjoins to IP at LF via XP-movement, where the trace deletes, and is thus not subject to antecedent government. Under a head-movement analysis, an X^0 trace would be left behind, which would be subject to antecedent-government, and the sentence would incorrectly be ruled ungrammatical (Huang and Tang 1991:280), since the A-chain would receive more than one Case, which would violate Case Theory. XP-movement does not leave behind a trace, therefore this construction is okay. *Ziji* is therefore analysed by Huang and Tang as an XP.

Chinese has certain blocking effects associated with the LDR *ziji*. Huang and Tang (1991:277) explain that these effects are the result of φ-feature-checking along the XP-chain.

CHINESE

(3.117) *[Zhangsan$_i$ shuo [ni$_j$ chang piping ziji$_{*i/j}$]].*
Z say you often criticise R
'Zhangsan$_i$ said that you$_j$ often criticised yourself$_{*i/j}$.'

In (3.117), *ziji* cannot be bound to the matrix subject, since the feature-checking which occurs in Infl at LF results in *ziji* being assigned the φ-features of the local antecedent, ie second person. This means that any feature-checking with the (third person) matrix subject would result in a clash of φ-features, and an ungrammatical structure. Movement beyond the local clause is therefore blocked by the φ-features of the local antecedent in Chinese.

When there is one local and one non-local antecedent which have the same φ-features, *ziji* may be coindexed with both antecedents, eg (3.118).

CHINESE

(3.118) *Li Xiaojie$_i$ shuo Zhangsan$_j$ zongshi piping ziji$_{i/j}$.*
L Miss say Z always criticise R
'Miss Li$_i$ said that Zhangsan$_j$ always criticised himself$_j$/ herself$_i$.'

(3.118) also shows that gender is not relevant to φ-feature-checking in Chinese, only person and number are relevant. It is also true that *ziji* checks φ-features with every potential antecedent. Consider the following example.

(3.119) *Zhangsan$_i$ shuo wo juede Lisi$_j$ zongshi piping ziji$_{i/j}$.*
Z say I feel L always criticise R
'Zhangsan$_i$ said that I feel that Lisi$_j$ always criticised himself$_{*i/j}$.'

Even though *Zhangsan* matches the local antecedent for φ-features, it is not a possible binder of *ziji.* This is because the first person pronoun blocks further movement of the anaphor past the local clause.

When taken with the common assumption that binding theory applies at both s-structure and LF, Huang and Tang's (1991) XP-movement account adequately describes the data they present. It also accounts for the subject orientation of LDRs and their monomorphemicity, although it does not directly address the complementarity issue. Since Chinese does not inflect Verbs for tense or mood, the issues of the finite tense domain and subjunctivity being a licenser of LDR are not addressed. It is possible that an extension of this account to address the Icelandic data is possible, by incorporating some notion of the subjunctive mood being a blocking node to LDR movement, although the ramifications of such a change are not known.

3.3.4 Bounding conditions

Another approach to explaining LDR is presented in Koster's (1987) book *Domains and Dynasties*, where the notion of a Bounding Condition is introduced. The domain defined by the Bounding Condition is considered by some linguists (eg Koster 1987, Benedicto 1991) to play a very important role in the binding of NP-traces and reflexive anaphors.

The Bounding Condition defines a domain which may be described as a null domain, or natural domain of binding. This is the minimal domain possible for binding in human language, which corresponds to the coargument domain. The coargument domain is extended through control-operations, creating nested dependencies or *dynasties*. It is within the extended dynasty that so-called long-distance binding occurs.

The definition of a dynasty is contingent upon the definition of government. A dynasty may be defined as follows.

(3.120) A dynasty is a chain of governors such that each governor governs the minimal domain containing the next governor.

This effectively means that, to be an antecedent of an LDR, an NP must be the controller of subcategorised-for embedded clauses. Examples are given here.

DUTCH

(3.121) *Ik denk dat Peter$_i$ [$_S$ Mary$_j$ naar zich$_i$ toe zag komen]*.
I think that P M to R PRT saw come
'I think that Peter$_i$ [saw Mary$_j$ come towards himself$_i$].'

(3.122) **Ik denk dat Peter$_i$ Mary$_j$ dwong [S' om naar zich$_i$ toe te komen]*.
I think that P M forced COMP to R PRT to come
I think that Peter$_i$ forced Mary$_j$ [to come towards him$_i$].

According to Koster's dynasty model, LDR is correctly predicted to be grammatical in (3.121) but not in (3.122). This is because *Peter* is the controller of the embedded clause in (3.121), hence a dynasty is formed, which allows the reflexive *zich* in the embedded clause to refer back to the controller. In (3.122), however, *Mary* is the

controller of the embedded clause. *Peter* therefore cannot be an antecedent for the reflexive *zich*, since *Peter* is not part of the dynasty.

Benedicto (1991) uses Koster's dynasty model to account for Latin LDR without resorting to the traditional explanation of 'indirect reporting'. She says that the usage implied by 'indirect reporting' is not always accurate, due to the existence of sentences like (3.123), which do not use a verb of saying.

LATIN

(3.123) *Cicero$_i$ effecerat [$_{S'}$ ut Quintus Curius consilia Catiliae sibi$_i$ proderet]*
C-NOM induced COMP Q C designs-ACC C-GEN R-DAT reveal-S
'Cicero$_i$ had induced Quintus Curius to reveal Catiline's designs to him$_i$.'

Since *effecerat* 'had induced' subcategorises for a non-finite complement verb, this creates a dynasty, through which long-distance binding can occur. It would be difficult to argue that *effecerat* was a verb of saying, although it could potentially be argued that *Cicero*'s intentions are portrayed in this sentence, and that he presumably induced *Quintus* by linguistic means.

However, there are also examples of sentences where a dynasty is formed, but where LDR is not permitted. This is demonstrated in example (3.124) as follows.

ICELANDIC

(3.124) *Jón$_i$ heldur að Maríu$_j$ hafi verið sagt að þú talaðir um sig$_{i/*j}$.*
J thinks that M has been said that you talked about R
'Jon$_i$ thinks that Maria$_j$ has been told that you spoke about him$_i$/ her$_{*j}$.'

Although both *Jon* and *Maria* are in the dynasty above the reflexive *sig*, only *Jon* may be the antecedent for the reflexive. The reason for this is that in (3.124), only *Jon* holds the perspective over the domain which contains *sig*. Clearly, not every potential antecedent within the 'dynasty' may function as the antecedent for the LDR.

It will be shown in section 3.6.4 that Hellan's account of LDR, which incorporates the notion of perspective, can account for data like (3.124). Now, though, there is one more approach to accounting for LDR that we will examine, known as Tense Agreement. It deals with the Icelandic and Scandinavian data quite well.

3.3.5 Tense agreement

Anderson (1986:65) says that, although the Icelandic data may appear to be 'bizarre' at first glance, the distribution of LDR in Icelandic is merely dependent upon whether or not Tense is present in the underlying structure. Anderson reaches this conclusion by examining three different domains which allow or disallow long-distance binding of anaphora in Icelandic. The three domains he looks at are infinitival clauses, subjunctive clauses and indicative tensed clauses, as illustrated by (3.125), (3.126) and (3.127) respectively.

ICELANDIC

(3.125) *Jón$_i$ skipaði mér að raka sig$_i$/ *hann$_i$.*
J ordered me C shave R him
'Jon$_i$ ordered me to shave himself$_i$/ *him$_i$.'

(3.126) *Jón$_i$ segir að María elski sig$_i$/ hann$_i$.*
J says that M loves-S R him
'Jon$_i$ says that María loves him$_i$.'

(3.127) *Jón$_i$ veit að María elskar *sig$_i$/ hann$_i$.*
J knows that M loves-I R him
'Jon$_i$ knows that María loves *himself$_i$/ him$_i$.'

Binding of the reflexive *sig* is always permitted out of a non-finite clause to the exclusion of a pronoun (3.125), optionally out of a subjunctive clause (3.126), and never out of an indicative tensed clause (3.127).

In accounting for this variation in the acceptability of LDR out of different types of clauses, Anderson (1986:76) postulates a rule of Tense Agreement, described here.

Tense Agreement:

1. Finite indicative clauses base-generate their own Tense.

2. Non-finite clauses do not have base-generated Tense, they copy their Tense from the matrix clause.

3. Subjunctive clauses do not necessarily generate their own tense – they may simply copy it from the matrix clause.

Anderson concludes that anaphors may be bound outside of a clause only if the clause has no base-generated Tense. This rule of Tense Agreement therefore allows for LDR binding out of a non-finite or subjunctive clause, but not out of a finite clause. LDR is optional out of a subjunctive clause, as the Tense may be base-generated, allowing a pronoun, or it may be copied, allowing a reflexive.

Anderson also proposes a parameter controlling the sensitivity of anaphors to having a subject as antecedent (simply [+/– Subject Antecedent]). This would presumably be specified in the lexical entry of each anaphor. As we shall see in section 3.4, Dalrymple (1993) proposes a similar lexical feature, plus others, in her account of LDR within the Lexical-Functional Grammar framework.

Holmberg and Platzack (1995) agree that Tense Agreement licenses LDR not only in Icelandic, but also in the other Scandinavian languages. They argue that it is the presence of Agr in Infl in Insular Scandinavian, and its absence in Mainland Scandinavian which accounts for the fact that LDR is permissible in Icelandic and Faroese, but not in Norwegian, Swedish or Danish, although '[a]ll Scandinavian languages accept LDR in ECM-construction and infinitives' (Holmberg and Platzack 1995:87), since presumably Tense would not be based-generated in these clauses. If a language has a rule of Tense Agreement (as described above under Anderson's approach), then the governing category becomes the whole sentence, rather than just the clause. This accounts for the difference between MSc and ISc with respect to LDR.

Holmberg and Platzack (1995) say that a semantic approach which incorporates perspective and point-of-view is well-founded and accounts well for the data. However, they say that it does not explain why Insular, but not Mainland Scandinavian should have LDR, which a rule of Tense agreement does do. The following sentences are representative of LDR in the Scandinavian languages (from Sigurðsson 1986:6, Sigurðsson 1986:7 [after Barnes 1985], Heini Zachariassen p.c. and Holmberg and Platzack (1995).

ICELANDIC

(3.128) *Jón$_i$ segir að María elski sig$_i$/ hann$_i$.*
J says that M love-S R him
'Jon$_i$ says that Maria loves him$_i$.'

ICELANDIC

(3.129) *Hann$_i$ hélt því fram að það hefði ekki verið ætlun sín$_i$ að …*
he held it forth that it had-S not been intention R to
'He$_i$ maintained that it had not been his$_i$ intention to …'

FAROESE

(3.130) *Hann$_i$ helt fyri at tað hevði ekki verið sín$_i$ ætlan at …*
he held forth that it had-I/S not been R intention to
'He$_i$ maintained that it had not been his$_i$ intention to …'

FAROESE

(3.131) *Jon$_i$ sigur at Maria elskar *sig$_i$/ hann$_i$ …*
J says that M loves R him
'Jon$_i$ says that Maria loves *himself$_i$/ him$_i$.'

NORWEGIAN

(3.132) *John$_i$ seier at Maria elskar *seg$_i$/ han$_i$.*
J says that M loves R him
'John$_i$ says that Maria loves *himself$_i$/ him$_i$.'

SWEDISH

(3.133) *John$_i$ säger att Maria älskar *sig$_i$/ honom$_i$.*
J says that M loves R him
'John$_i$ says that Maria loves *himself$_i$/ him$_i$.'

DANISH

(3.134) *John$_i$ siger at Maria ælsker *sig$_i$/ ham$_i$.*
J says that M loves R him
'John$_i$ says that Maria loves *himself$_i$/ him$_i$.'

There are two examples from Icelandic (3.128) and (3.129) and Faroese (3.130) and (3.131), while only one example each from Norwegian (3.132), Swedish (3.133) and Danish (3.134). This is because the Faroese example (3.131) is not grammatical, even though it is predicted to be so by Holmberg and Platzack. The equivalent example in Icelandic (3.128) is fine. A second Faroese example (3.130) was given, plus its parallel in Icelandic (3.129) to show that, at least in some instances, Faroese has LDR over a finite Tense boundary. The MSc equivalents of (3.129) and (3.130) are ungrammatical.

Holmberg and Platzack maintain that it is the rule of Tense Agreement in ISc which licences the LDR examples, and its lack which rules it out in MSc. It is interesting to see that the Faroese examples actually seem to suggest that Faroese patterns more like MSc than Icelandic with respect to LDR.

This explanation of LDR by a rule of Tense Agreement accounts for all five of the facts about LDR mentioned above: morphemicity, subject-orientation, complementarity, Tensed S condition and the subjunctive mood issues, although the data from Faroese seems to throw some doubt as to the status this language has with respect to LDR.

The rule of Tense Agreement, plus a lexical specification for each anaphor as to whether it takes a subject antecedent or not, neatly accounts for the Scandinavian data. However, it is impossible to apply to a language like Chinese, except on some abstract level, since Chinese does not have a functional Infl (Cole et al 1990). It also does not account for the blocking effects exhibited by NPs in Chinese as discussed above. Therefore, although it is an elegant account of the Scandinavian situation, without modification, it cannot be considered a universal rule.

3.3.6 Summary and conclusions about the movement analyses of LDR

Syntacticians working within the Government and Binding/ Principles and Parameters theory of syntax have not been united in their approach to explaining LDR. Proposals vary as to whether LDRs are lexical (X^0) or phrasal (XP) elements, and whether they move through a lexical or functional Infl, or even through Comp. There is even disagreement about which reflexives are lexical and which are phrasal, with the actual morpheme count of the reflexives seemingly irrelevant, as is the case with eg English *himself*, which Cole et al (1990) consider to be lexical (X^0) and Pica (1991) considers to be phrasal, and Chinese *ziji*, which Cole et al (1990) consider to be lexical, while Huang and Tang (1991) analyse it as a phrasal element.

The idea of dynasties to account for LDR does not always correctly predict when LDR will be possible, and it will be shown in 3.6.3 that perspective is actually a better indicator of the possibility of LDR than a dynasty. Finally, the idea of Tense Agreement, plus the presence of an overt Agr in Infl seems to account for the

distribution of LDR throughout the Scandinavian languages, although this account does not seem applicable to languages like Chinese, which have no overt Agr, but do have LDR.

We will now look at some approaches to LDR within syntactic frameworks other than in the GB tradition. Firstly, we will see some proposals which redefine the scope of the Binding Conditions. Section 3.4.1 looks briefly at anaphora in Head-driven Phrase Structure Grammar, then in section 3.5, we will look at the account of LDR within Lexical-Functional Grammar.

3.4 Anaphors versus Non-anaphors

A common proposal in the syntactic literature on LDR is that of parameterising the Binding Conditions, such that some anaphors are [+Binding Conditions] and hence subject to those conditions, while others are [-Binding Conditions] and hence not subject to them. By dividing the set of anaphors into those which must adhere to the GB Binding Conditions, and those which don't, the Binding Conditions can be shown to work, since they would only apply to cases where they did work (eg Reinhart and Reuland 1993, Anderson 1986).

In a similar vein, Harbert (1995, after [Giorgi 1983]), suggests that 'anaphors' that do not fit the binding conditions are not really anaphors. He postulates a fourth anaphoric element (as opposed to reflexives, reciprocals and pronominals) which may or may not be subject to its own binding conditions. Reinhart and Reuland (1991:311-317, 1993:672ff) call this fourth type of anaphoric element *logophors*, as they have some similarities with *logophoricity*, which will be discussed in section 4.3.

In the following sentences, (3.135) contains an example of a [+BC] anaphor, while (3.136) contains an example of a [-BC] anaphor or a 'logophor', referred to as an LDR in this thesis.

NORWEGIAN

(3.135) *Han$_i$ såg seg$_i$ i speilet*.
he saw R in mirror.the
'He$_i$ saw himself$_i$ in the mirror.'

ICELANDIC

(3.136) *Jon$_i$ segir að Maria$_j$ elski sig$_{i/*j}$.*
J says that M loves R.
'Jon$_i$ says that Maria$_j$ loves him$_i$/ her$_{*j}$'

According to Thráinsson (1991), these are not the only types of anaphors possible. Thráinsson uses four binary features to arrive at a set of eight logically possible combinations of NP features. These four features are [+/- anaphor], [+/- pronominal], [+/- independent reference] and [+/- R-expression], which give syntactic and semantic definitions of NPs.

It is important to noted here that the negative features stipulated by the binding conditions do not in fact state a minus value for a feature, rather they state a non-specified status. Thus, [+anaphoric] is interpreted as 'subject to Principle A' and [-anaphoric] is 'not subject to Principle A', rather than 'does not need to be bound' or 'must not be bound'. Everaert (1991) also reaches this conclusion. For R-expressions, which are [-anaphoric, -pronominal], this means that the peculiar features of 'does not need to be bound, does not need to be free' are avoided, replaced by 'not subject to Principle A, not subject to Principle B'.

Thráinsson's four NP features are defined as follows.

[+an] means the requirement that the NP is bound in some well-defined syntactic domain, and that the NP has no capacity for independent reference (Thráinsson 1991:61).

[-an] means there is no such requirement.

[+ pr] is the requirement that the NP be free in some well-defined syntactic domain.

[- pr] means there is no such requirement.

[+ ind ref] is the capability of 'picking up a definite referent in the world, or [freely] in the previous discourse' (Thráinsson 1991:61, after [Giorgi 1984:309]).

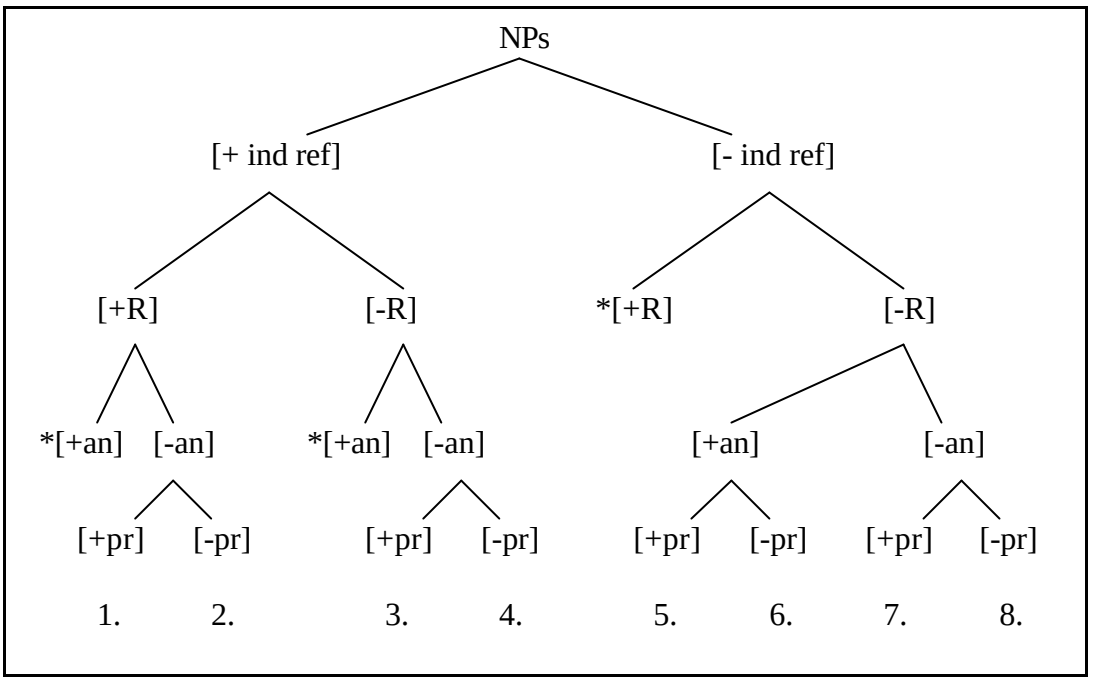
[- ind ref] means there is no such capability.

[+ R] is the Binding Condition-feature of being a referring (R-) expression.

[- R] means there is no such feature in the NP.

Some of these features are mutually exclusive, for instance, the feature specifications [+ana, +ind ref] and [-ind ref, +R]. The features combine as shown in Figure 3.4.

Figure 3.4 – Types of NPs, according to Thráinsson (1991)



Seven of these eight categories are NPs which are subject to (some extension of) the Binding Conditions, while only the final category of LDRs or logophoric expressions is Binding Condition 'free'. Category 1 contains pronominal epithets such as *the mongchild*. Category 2 contains true R-expressions such as *Brent*. Category 3 is pronominals like *she*. Category 4 includes possessive pronouns and 1st and 2nd person pronouns, eg *her*, Norwegian *sin*, Norwegian *eg* 'I'. Category 5 contains PRO and other 'reflexive pronominals' like Norwegian *han sjølv* 'him self'. Category 6 contains true anaphors like *herself*. Category 7 contains LDRs like Marathi *aapaṉ* and *t̲aan*. Category 8 contains true logophoric LDRs like Icelandic *sig*.

Thráinsson also presents a revised version of the Binding Conditions which are based on a review of the literature, plus the categories created by these features, given here in (3.137).

(3.137) **Thráinsson's revised Binding Conditions**

A [+anaphoric] anaphor must be

1. bound in its governing category, or
2. bound by a superordinate subject
3. within its anaphoric domain.

A [+pronominal] anaphor must be

1. free in its governing category
2. subject free (= not bound by a superordinate subject) in its anaphoric domain.

A [+R-expression] NP must be free.

Thráinsson (1991:66)

It is interesting to note that the only anaphors which Thráinsson considers truly exempt from the Binding Conditions are anaphors which may be bound over a sentential boundary. However, the question remains. Should the Binding Conditions be revised to allow them to govern LDR?

Reinhart and Reuland's (1993) revision of the Binding Conditions reduced their role to governing clause-bounded anaphora only. This resulted in a very precise formulation of the new Binding Conditions, with the advantage that they could be shown to apply only in cases where prototypical reflexivisation occurred. Cole et al (1990) and Huang and Tang (1991) give accounts where LDR is not controlled by the Binding Conditions, as do Anderson (1986), Koster (1987) and Holmberg and Platzack (1995), however, these accounts were shown to be adequate only for the language/s they were devised for (Chinese and English, Icelandic, Dutch and Scandinavian respectively). In addition, with Dalrymple's evidence (which will be uncovered in section 3.5) that some anaphors must be bound within the root sentence, the explanatory difficulties for GB re-emerge, since there is no straight-forward way of identifying this domain in GB.

However, let us firstly have a quick look at another approach to accounting for the distribution of reflexives, namely that used in Head-driven Phrase Structure Grammar.

3.4.1 Anaphora in HPSG

Head-driven Phrase Structure Grammar (HPSG) treats clause-bound anaphora separately from non-clause-bound anaphora, with only local anaphora being governed

by the Binding Conditions. Briefly, in HPSG, a reflexive can only be bound to an antecedent which is higher on the obliqueness hierarchy than itself (Pollard and Sag 1994, 1992, 1987). The obliqueness hierarchy is a hierarchy of grammatical relations, which is summarised in (3.138). (*Subject* is the least oblique relation, while *other complements* are the most oblique.) The obliqueness of an NP is stipulated in the SUBCAT list of the predicate which the NP is an argument of.

(3.138) SUBJECT < PRIMARY OBJ < SECOND OBJ < OTHER COMPLEMENTS

Recall that Reinhart and Reuland (1991) attribute the complementarity between reflexives and pronouns to a general condition on θ-grids. When this condition is applied to reflexive predicates, the complementarity principle is in effect (3.139). When the predicate is not reflexive, such as when the reflexive is in a PP and not an argument of the predicate, the complementarity principle is not in effect (3.140) (Reinhart and Reuland 1991:287).

(3.139) *John$_i$ argued convincingly with himself$_i$/ *him$_i$.*
(3.140) *John$_i$ saw a snake near himself$_i$/ him$_i$.*

Pollard and Sag (1992) also reformulate Principle A to state that 'an anaphor must be coindexed with a less oblique argument, if there is one' (p266). This generalisation explains the difference between the following sentences.

ENGLISH
(3.141) *Mary talked to John$_i$ about himself$_i$.*
(3.142) **Mary talked about John$_i$ to himself$_i$.*

In (3.142), the second object *himself* is coindexed with the primary object. This is allowed, since the antecedent is the primary object, which is higher on the obliqueness hierarchy than the secondary object anaphor. In (3.141), however, the anaphor *himself* is contained in the primary object, which cannot take the secondary object as an antecedent, due to the reformulation of Principle A. So this difference in grammaticality between (3.141) and (3.142) is accounted for. R&R's approach to reflexivisation would not cover these examples, since there is no 'reflexive predicate', intrinsic or otherwise, involved here. On the other hand, Pollard and Sag's approach would give identical grammaticality judgements on (3.75) to (3.79), repeated here.

(3.75) *Lucien$_i$ saw a picture of him$_i$.*

(3.76) **Lucien$_i$ took a picture of him$_i$.*

(3.77) *Dan$_i$ heard a story about him$_i$.*

(3.78) **Dan$_i$ told a story about him$_i$.*

(3.79) **Lucien$_i$ performed an operation on him$_i$.*

R&R appeal to the notion of a semantic predicate (thus invoking Condition B) to account for the different judgements here. Pollard and Sag would have to class these as exempt anaphors is order to achieve the same judgements, since their account is based on syntactic grammatical relations and would predict identical judgements for all of these sentences.

Pollard and Sag (1992:271) conclude that Principle A should only apply to nonsubject coargument anaphors. All other anaphors are *exempt*. Exempt anaphors in HPSG are governed by processing and discourse constraints, rather than syntactic ones. With regard to LDRs, therefore, HPSG uses a semantic/ discourse analysis rather than an syntactic account.

We will now look at LDR in LFG, before turning to Hellan's approach to LDR in Norwegian, which introduces the ideas of predication and perspective as the two main licensers of LDR.

3.5 LDR in LFG

While the bulk of the literature on LDR has been within the Government and Binding/ Principles and Parameters framework, linguists working within other frameworks have also made contributions to the LDR field in general. Dalrymple (1993) is of particular interest in this thesis, since she uses Norwegian to develop a theoretical model of LDR within the Lexical-Functional Grammar framework.

In Lexical-Functional Grammar (LFG), anaphoric constraints are stipulated in the lexical entry of each anaphor. This deals well with languages that have more than one anaphor, each with its own binding domain, such as Norwegian and Marathi[30]. It also means that the distinction between anaphors and non-anaphors is irrelevant, since the

[30] Marathi is an Indo-Aryan language spoken in west-central India.

binding domain and other relevant information is listed separately for each lexical item.

Dalrymple (1993) establishes that some anaphoric elements can be defined according to requirements stipulating both which grammatical function an anaphor must or may be bound to, and which it must or may be disjoint from. Some anaphors must be bound by a subject, while others may be bound by some other grammatical function. Some anaphoric elements must be free from either a subject or any other grammatical function. Anaphors are therefore constrained by domain requirements, and by both positive and negative conditions on their antecedent.

3.5.1 Binding domains

Dalrymple identifies several binding domains, which she calls the Coargument Domain, the Minimal Complete Nucleus, the Minimal Finite Domain and the Root S Domain.

The Coargument Domain encompasses a predicate and its syntactic arguments.

ENGLISH

(3.143) *[Lucien brought home flowers]*.

NORWEGIAN

(3.144) *[Me ga han$_i$ pengane sine$_i$]*.
we gave him money R
'We gave him$_i$ his$_i$ money.'

The Minimal Complete Nucleus is the minimal domain containing the reflexive and a subject (Dalrymple 1993:13, 12).

ENGLISH

(3.145) *I told [John$_i$ to pull himself$_i$ together]*.

MARATHI

(3.146) *John$_i$ ne [Jane$_j$ laa swataahlaa$_{*i/j}$ maraaylaa saangitle]*.
J erg J DAT R-ACC hit told
'John$_i$ told Jane$_j$ to hit himself$_{*i}$/ herself$_j$.'

The Minimal Finite Domain is the minimal domain containing the reflexive and a finitely tensed verb (Dalrymple 1993:13).

NORWEGIAN

(3.147) *[Jon$_i$ ba oss snakka om seg$_i$]*.
J asked us speak about R
'Jon$_i$ asked us to speak about himself$_i$.'

The Root S domain is the sentence in which the reflexive appears (Dalrymple 1993:15). Dalrymple does not identify this domain with Norwegian reflexives.

MARATHI

(3.148) *[Tom$_i$ mhanat hota ki Sue ni aaplyaalaa$_i$ maarle]*.
T said that S ERG R-ACC hit
'Tom$_i$ said that Sue$_j$ hit himself$_i$/ herself$_{*j}$.'

Dalrymple has therefore identified an extra binding domain – one not normally recognised in the literature. GB linguists talk about a Tensed S condition, or about IP or CP being a bounding node, however this is not the same thing. The GB domains could not account for the difference in the binding domains between the anaphors in (3.148) and (3.146).

A GB account could state that *aaplyaalaa* 'R-ACC' in (3.148) must be bound within the Tensed S, however there are problems stating the binding domain for *swataahlaa* 'R-GEN' in (3.146). Marathi does not appear to have a subjunctive mood which licenses LDR in sentences like (3.148), so a rule of Tense Agreement will not help. Furthermore, an approach similar to Cole et al's (1990) or Huang and Tang's (1991) movement analyses which rely on only X^0 or XP anaphors being allowed to be bound long-distance would be unjustified for a language like Marathi, where both types of reflexives receive the same inflections and would presumably be classed in the same group with respect to morphemicity. The lexical account in LFG requires no theory-internal justification and is therefore far preferable in this instance.

3.5.2 Anaphoric elements in Norwegian

Seg sjølv

Dalrymple (1993) notes that Hestvik and Hellan have different intuitions about the grammaticality of certain sentences. Hestvik allows binding of *seg sjølv* within the Minimal Complete Nucleus, while Hellan uses the Coargument Domain, which is often smaller (although they sometimes encompass the same elements). Their different judgements are shown in examples (3.149) and (3.150).

(3.149) *Jon$_i$ satte stolen foran seg sjølv$_i$.*
J set chair before R self
'Jon$_i$ put the chair in front of himself$_i$.'

(3.150) *Jon$_i$ dytta Marit frå seg sjølv$_i$.*
J pushed M from R self
'Jon$_i$ pushed Marit away from himself$_i$.'

Hestvik accepts both these sentences, while Hellan rejects them. Dalrymple (1993) opts to go with Hellan's judgements.

According to Dalrymple (1993), *seg sjølv* obeys two Binding Conditions – the Subject BC and the Coargument BC. If Hestvik's judgements were to be used, then *seg sjølv* could be said to obey the Minimal Complete Nucleus BC. The Subject Binding Condition is what Dalrymple calls the Subjecthood Condition. In LFG, anaphors marked within the lexicon as [+SUBJ] must take a subject antecedent. *Seg sjølv* is one such anaphor, as shown in the following two examples.

(3.151) *Jon$_i$ fortalte meg om seg sjølv$_i$.*
J told me about Rself
'Jon$_i$ told me about himself$_i$.'

(3.152) **Me fortalte Jon$_i$ om seg sjølv$_i$.*
we told J about Rself
We told Jon$_i$ about himself$_i$.

Seg

Like many other linguists, Dalrymple (1993) distinguishes between the anaphoric and non-anaphoric uses of *seg*. Non-anaphoric uses of *seg* include examples of

'detransitivisation' and intrinsically reflexive predicates, where the reflexive is not a 'semantic argument' (Dalrymple 1993:25) of the predicate, nor is it replaceable by any other NP. Examples of non-anaphoric uses of *seg* are given below. (3.153) and (3.154) show *seg* used as a part of an intrinsically reflexive predicate, while (3.155) and (3.156) show *seg* used in detransitivised predicates.

(3.153) *Tania kjeder seg.*
T bores R
'Tania is bored.'

(3.154) *Lauren$_i$ gler seg$_i$ til å bli mor.*
L glads R to to become mother
'Lauren is looking forward to becoming a mother.'

(3.155) *Problema$_i$ byggde seg$_i$ opp foran ho.*
problems built R up before she
'The problems built up/ mounted up in front of her.'

(3.156) *Døra åpna seg sakter.*
door opened R slowly
'The door slowly opened.'

In examples (3.153) to (3.156), *seg* is used non-anaphorically, or non-referentially. When used referentially, Dalrymple states that *seg* obeys the Subjecthood Condition (like *seg sjølv*), it must find its antecedent within its Minimal Finite Domain, and it must be disjoint from its coarguments. After Bresnan ([1985], cited in Dalrymple 1993), the features [+SUBJECT], [-COARGUMENT] and [+NUCLEAR] are used in the lexical entry for *seg*, as shown in (3.157).

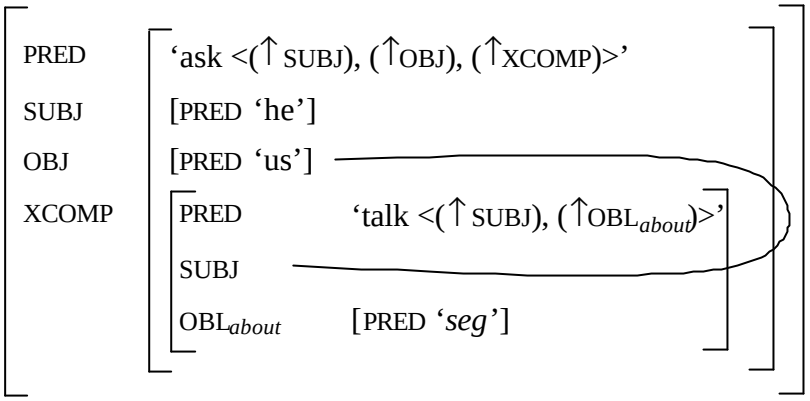
(3.157)

$$\begin{bmatrix} \text{PRED } \text{'}\textit{seg}\text{'} \\ +\ 3\text{PERSON} \\ +\ \text{SUBJECT} \\ -\ \text{COARGUMENT} \\ +\ \text{NUCLEAR} \end{bmatrix}$$

(3.158), with the f-structure in Figure 3.5, gives an example of this information being used in a sentence.

(3.158) *Han$_i$ ba oss [snakka om seg$_i$]*.
he asked us speak about R
'He$_i$ asked us [to speak about himself$_i$].'

Figure 3.5 – F-structure for sentence (3.158)

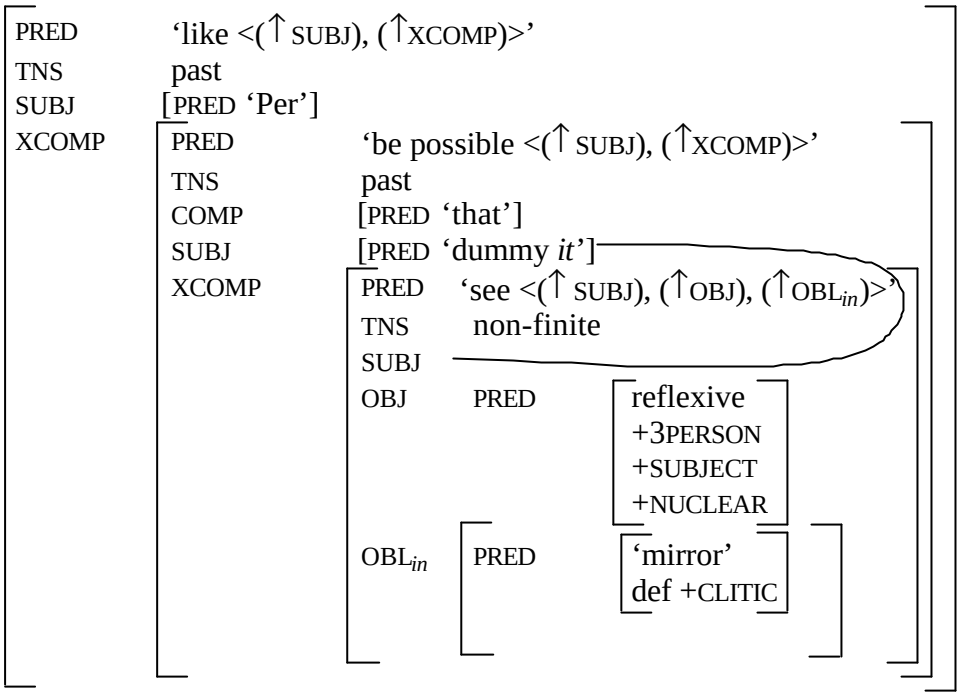


Coindexation between *seg* and the subject of the matrix clause is fine in (3.158), because the [+SUBJECT], [-COARGUMENT], [+NUCLEAR] and [+3PERSON] feature-matching between the reflexive and its antecedent is satisfied. However, there is a problem applying this analysis to test sentence 40, given here.

40 *Per$_i$ likte at det var mogleg å sjå seg$_i$ i speilet når han var på jobb*.
P liked that it was possible to see R in mirror when he was at job
'Per$_i$ liked the fact that it was possible to see himself$_i$ in the mirror when he was at work.'

The f-structure for this sentence is given in Figure 3.6.

Figure 3.6 – F-structure for test sentence 40



There are two possible interpretations of this sentence which result in two crucially different analyses. The first interpretation is that the reflexive element *seg* is bound to the dummy subject *det*, giving the embedded clause a ‘general reading’. Under this reading, *seg* is bound within the finite domain, it is subject-oriented, and it is not coreferential with a coargument. In other words, it fulfils all the requirements of Dalrymple’s (and others’) syntactic models. It is possible to understand from this interpretation that *Per* likes to look at himself, by using pragmatics to determine that, if it is possible for anyone (under the general reading) to see their own reflection while they are at work, then it must be possible for *Per* to do so, too, and that *Per* likes this fact.

The second interpretation is that *Per* likes the fact that he himself is visible in the mirror while he works, where the coreference is between the reflexive and *Per*, with no intervening jumps, or need for pragmatic rules to make the link.

The crucial difference between these two interpretations, is that the first one may be regarded as syntactic binding with a pragmatic coreference interpretation, while in the second, the reflexive does not obey the binding requirements stipulated by the lexicon, namely that *seg* be bound by a [+3PERSON, +SUBJECT, +NUCLEAR] antecedent. A work-around for this sentence in LFG could be to say that, in this case, one of the

interpretations involves a reflexive which must be bound in the Minimal Finite Domain, while the other interpretation involves a reflexive which must be bound in the Root S[31]. However, like all work-arounds, this is a useable, yet far from satisfactory solution. To account for these two interpretations, there would need to be two entries in the lexicon of *seg* – one with the binding domain as the Minimal Finite Nucleus, the other taking the Root S Domain.

Another problem for the analysis as given in Dalrymple (1993) is to account for the Icelandic data, eg (3.159) and (3.160).

ICELANDIC

(3.159) **Jón*$_i$ *veit að María elskar sig*$_i$.
J knows that M loves-I R
Jon$_i$ knows that Maria loves him$_i$.

(3.160) *Jón*$_i$ *segir að María elski sig*$_i$.
J says that M love-S R
'Jon$_i$ says that Maria loves him$_i$.'

One could work around this by saying that another constraint on anaphoric elements is a [+/- SUBJUNCTIVE MOOD] constraint. This is a logical extension of Dalrymple's arguments, however, since the languages she bases her study on (Norwegian and Marathi) do not have an overt Subjunctive mood, she does not mention it at all.

Sin

Unlike many other linguists, Dalrymple does not assume a priori that *seg* and *sin* have the same binding conditions, although after a brief examination of the binding conditions on *sin*, she concludes that *sin* does in fact have the same binding conditions and domains as *seg*.

The main condition on *seg* is that it be disjoint from its coarguments, since it is an LDR. Since *sin* only occurs within an NP, it vacuously fulfils this condition that it be

[31] The empty embedded subject in the f-structure in Figure 3.6 could also be represented by an unbound *pro*, which is coreferential with *Per* by means of some pragmatic interpretation (Lars Hellan p.c.). In such an instance, *seg* would be locally bound, and this sentence would not be exceptional. This is a good interpretation, since for each interpretation it would be pragmatics which would determine whether *pro* is bound to *Per* or dummy *it* and hence which is the antecedent of *seg*. And in fact, this is the line of reasoning that I will adopt and expand upon later in this thesis.

disjoint from its coarguments. It seems then that LFG must be postulating empty categories of sorts, in order to deal with examples such as the following.

(3.161) *Eg tok min og ho tok sin.*
I took mine and she took R
'I took mine and she took hers.'

In (3.161) it would seem difficult to argue that *sin* was not a coargument of its antecedent *ho* 'she'. Since LFG uses surface realisations wherever possible, this kind of sentence seems to pose a problem for the theory.

3.5.3 Conclusions

Dalrymple's LFG account of LDR has several advantages over the GB accounts examined above. Firstly, by identifying the Root S as a binding domain, it captures some data that GB accounts miss. LFG does not place any constraints on the morphemicity of anaphoric elements in order to account for the types of binding conditions that apply to each anaphor, since all anaphors are listed in the lexicon separately, along with their binding constraints. For this reason, Dalrymple treats *seg* and *sin* as separate anaphors, although she concludes that they do have the same binding domains.

There are several weaknesses to the LFG account, too. Firstly, there is no mention of the subjunctive mood acting as a licenser of LDR at any time. It is unclear how the Icelandic data would be accounted for without this mechanism. Secondly, by not referring to the morphemicity of the anaphor, some cross-linguistic generalisation may be lost. Finally, although Dalrymple claims that *seg* and *sin* have the same binding constraints, it will be shown later that they actually have a different distributions. This last comment is also a reflection on the LDR literature in general.

3.6 Hellan's account of anaphora in Norwegian

Hellan's (1988) book *Anaphora in Norwegian and the Theory of Grammar* is a seminal work with a thorough discussion of many aspects of anaphora in Norwegian and other languages. Hellan expands two main ideas from his 1986 paper *On Anaphora and Predication in Norwegian* which are summarised here. The first idea is that there are two types of anaphors, which are distributed not on the basis of the

number of morphemes they have, but rather, on the types of relations they enter into. The second idea is that there are two types of rules which license LDR in different languages. These rules are called predication-command and perspective-command. Thus, like Reinhart and Reuland (1993) and Pollard and Sag (1992), Hellan takes the approach that at least some anaphoric binding is actually governed by semantic principles.

3.6.1 Predication-command

A key factor in determining the long-distance binding capabilities of *seg* and *sin*, according to Hellan, is *predication*[32]. Hellan and Christensen (1986:7) state that a 'peculiarity' of *seg* is that 'it is admitted only if it is contained in a constituent understood as predicated of the antecedent'. This then accounts for the distinction between the following sentences (from Hellan and Christensen 1986:7 and Hellan 1986:114). Hellan analyses *seg sjølv* as a composite of *seg* and *sjølv*, thus the conditions governing *seg* also govern *seg sjølv*.

BOKMÅL

(3.162) *Vi gjorde Jon$_i$ glad i [seg selv]$_i$.*
we made J happy in [R self]
'We made Jon$_i$ like himself$_i$.'

(3.163) **Vi fortalte Jon$_i$ om [seg selv]$_i$.*
we told J about [R self]
We told Jon$_i$ about himself$_i$.

(3.164) **Vi fortalte Jon$_i$ om et forsøk på å hjelpe seg$_i$.*
we told J about an attempt on to help R
We told Jon$_i$ about an attempt to help himself$_i$.

In (3.162), *glad i seg selv* 'happy in oneself' functions as a predicate of the object *Jon*, while in (3.163) *om seg selv* 'about oneself' and (3.164) *om et forsøk på å hjelpe seg* 'about an attempt to help oneself' function as arguments of *fortalte* 'told'. *Jon* **predication-commands** *glad i seg selv* in (3.162), but not *om seg selv/ et forsøk på å*

[32] Hellan groups the Norwegian accusative and genitive reflexive anaphors, *seg* and *sin*, together with regards to their distribution.

hjelpe seg in (3.163) and (3.164). Predication-command only occurs when a reflexive is 'contained in an expression predicated of the antecedent' (Hellan 1986:103).

According to Sigurðsson (1986:45), predication-command makes a correct generalisation over the distribution of clause-bounded reflexives and non-clause-bounded reflexives. We have seen how it correctly accounts for the distribution of clause-bounded reflexives. In the case of LDR, the predication type is very complex, but Sigurðsson (1986:42-4) shows that quantifier scope demonstrates the link between the antecedent and the reflexive.

ICELANDIC

(3.165) *Aðeins Jón$_i$ telur að María$_j$ elski sig$_i$/ hann$_i$.*
only J believes that M loves R/ him
'Only Jon$_i$ believes that Maria$_j$ loves himself$_i$/ him$_i$.'

The logical structure for the reflexive version is:

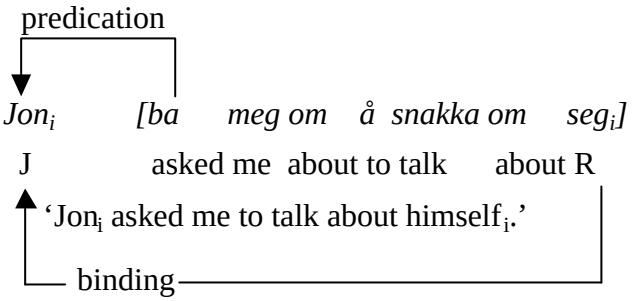
(3.166) Jon is the only *x* such that:
x believes (Maria loves *x*).

The logical structure for the pronominal version is:

(3.167) Jon is the only *x* such that:
i. *x* believes (Maria loves *y*)
& ii. *y* = 'Jon'

In the reflexive version, the quantifier has scope over both the antecedent and the reflexive, while in the pronominal version it just has scope over the antecedent. This predication link is also exploited by LDRs.

(3.168) gives an example of *seg* contained within an embedded clause which is predicated of a non-local antecedent.



(3.168)

Being contained in the domain (clause) which is predicated over by *Jon*, the reflexive *seg* is able to take the non-clause-mate antecedent. The logical structure for (3.168) is something like this:

(3.169) Jon is an *x* such that:
x asked *y* to (speak about *x*).

Predication-command is therefore an important licenser of LDR and SDR in Norwegian. Significantly, it represents a syntactic realisation of a semantic relationship between the reflexive and the antecedent. Like Reinhart and Reuland (1993), Hellan also recognises the importance of including semantic information to accurately describe the distribution of reflexives.

3.6.2 Connectedness and containment anaphors

According to Hellan (1988, 1991), the two types of anaphors that exist are *connectedness* and *containment* anaphors. Unlike other accounts (eg Reinhart and Reuland 1993, Hestvik 1992, Cole et al 1990), Hellan does not distinguish anaphors based on the number of morphemes they contain. Instead, the types of relations they enter into is considered the key factor. These two types of anaphors may be schematised as shown in Figure 3.7 (from Hellan 1988:87) and Figure 3.8 (from Hellan 1988:74). In these diagrams, A is an anaphor, which is bound by B. C is some constituent which bears some relation to B. The dotted lines emanating from C represent the relation between C and A, where the single line in Figure 3.7 represents connectedness, and the two lines embracing A in Figure 3.8 indicate containment.

Figure 3.7 – Connectedness anaphors

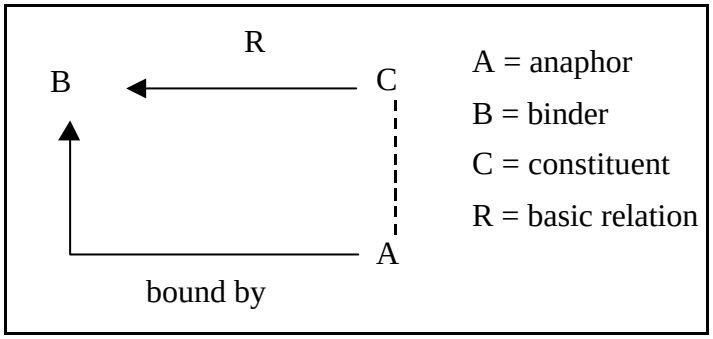
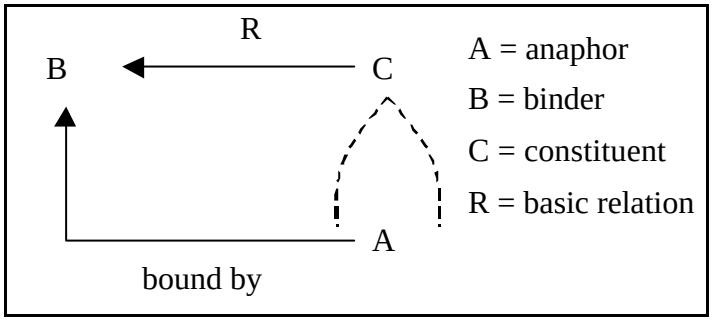


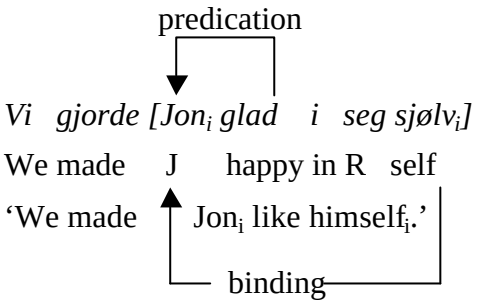
Figure 3.8 – Containment anaphors



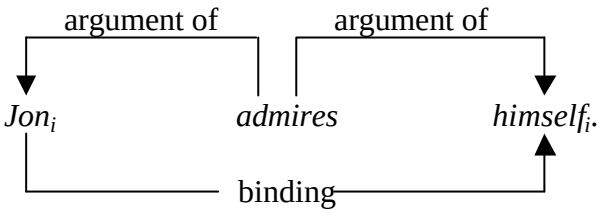
In Figure 3.7, R can only be the relation *be an argument of*. Connectedness anaphors are therefore restricted to the coargument domain. In Figure 3.8, R may be one of several relations, including *predication* and *be within the perspective of* (which Hellan (1988:28) says is synonymous with *logophoricity*). Containment anaphors thus have the capacity to find their antecedent outside of the coargument domain.

Examples of connectedness and containment anaphors are given below. (3.170) uses *seg sjølv*[33], which is a connectedness anaphor, since A *seg sjølv* and B *Jon* are coarguments of the predicate C *vera glad i* 'be happy in', and the basic relation R is predication. A is thus connected with C which is connected with B, hence the term connectedness anaphor. (3.171) more explicitly shows the ties in (3.170) which make it a connectedness anaphor, as defined in Figure 3.7 above.

[33] Hellan just talks about *sjølv*, but to keep consistent with the rest of this thesis, we will still use *seg sjølv*.

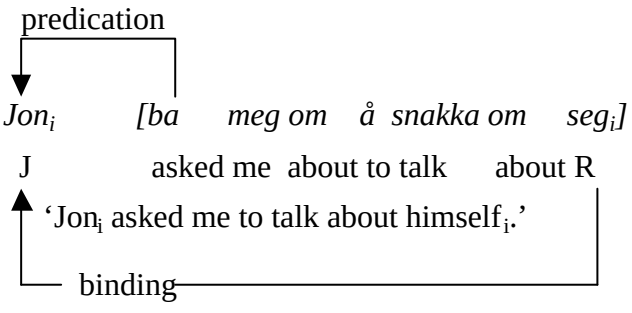


(3.170)



(3.171)

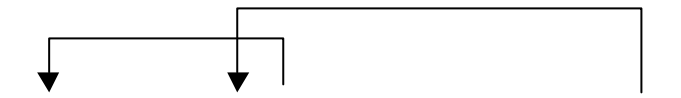
(3.172) uses *seg*, which is a containment anaphor, since B *Jon* predicates over some domain C (the embedded clause) which contains A *seg*. *Seg* is thus contained within a domain predicated over by the binder; *seg* is therefore a containment anaphor.



(3.172)

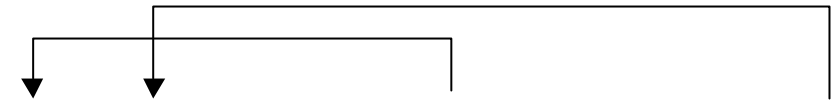
Seg sjølv is a connectedness anaphor (3.170), while *seg* is a containment anaphor (3.172). This distinction is important, as it is the fundamental reason why *seg sjølv* must be clause-bound and *seg* may be an LDR.

Hellan's predication approach to anaphora has the added advantage that no 'otherwise unmotivated PRO-elements are needed in the internal binding constructions, and no non-intersection constraint is needed' (Hellan 1986:120). These are traditional explanations of why (3.173) is ungrammatical.



* *Jeg lovet* *Jon$_i$* *PRO* *å* *snakke pent* *om* *seg$_i$*.
I promised J to speak nicely about R
(3.173) I promised Jon$_i$ to speak nicely about himself$_i$.

However, Hellan argues that (3.173) cannot be ruled ungrammatical by a constraint banning crossing binding-relations, due to the existence of examples like (3.174).



Deg vil *Jon$_i$* *sikkert prøve å* *få* *Ø* *til å* *snakke pent* *om* *seg$_i$*.
you will J surely try to get to to speak nicely about R
(3.174) 'It will be you that Jon$_i$ will surely try to get to speak nicely about him$_i$.'

Hellan's predication approach to anaphoric binding correctly rules out (3.173), since *Jon* does not predicate over the domain containing *seg*, and it correctly rules in (3.174), since in this case, *Jon* does predicate over the domain containing *seg*.

Hellan (1986:121) also states that c-command and the notion of governing category are still necessary parts of the syntax, but not for predicting possible configurations of anaphoric binding. This kind of approach also has support from Maling (1986:53), who says that 'any framework which does not recognize predication relationships cannot hope to account for the differences between various kinds of simplex sentences with respect to reflexivisation'. It is recognised by some syntacticians, then, that anaphora is not governed by configurational syntax alone.

3.6.3 Perspective-command

As mentioned above, Hellan (1986, 1988, 1991) also postulates a *perspective-command* which is a semantic constraint on the syntax, which is applicable in languages such as Icelandic. Perspective-command relates to the notions of point-of-view, or perspective. Essentially, if an embedded anaphor is used which is being viewed from the perspective or point of view of an NP, subject to other constraints such as predication-command, and lexical features such as person, that NP may be an

antecedent for the anaphor. This is shown in the following examples (from Sigurðsson 1986:37).

ICELANDIC

(3.175) *María$_i$ veit að Jón$_j$ fyrirlítur sig$_i$/ hana$_i$*
M knows that J despises R her
'Maria$_i$ knows that Jon$_j$ despises herself$_i$/ her$_i$.'

(3.176) *María$_i$ veit ekki að Jón fyrirlítur *sig$_i$/ hana$_i$*
M knows not that J despises R her
'Maria$_i$ doesn't know that Jon despises *herself$_i$/ her$_i$.'

In (3.175), *Maria* holds the perspective for the sentence, since she knows the contents of the embedded clause. An LDR may therefore be used. In (3.176), however, *Maria* is not cognisant of the content of the embedded clause. Therefore she is not the perspective-holder for the sentence, she does not perspective-command the reflexive, so the LDR is ungrammatical. None of the syntactic approaches discussed above can deal with data like (3.175) and (3.176), since they do not take perspective into account.

Perspective-command is also important, because it dispenses with the need to identify the subjunctive mood as the licenser of LDR. Since there is no overt grammatical mood in Norwegian, the hypothesis that the subjunctive mood licences LDR is not testable by Norwegian data. However, since some Icelandic dialects/ speakers accept LDR coindexing over a finite indicative boundary (eg Sigurðsson), this hypothesis cannot be taken as a universal truth. The following example is from Sigurðsson (1986:8).

ICELANDIC

(3.177) *Jón$_i$ veit að María elskar sig$_i$.*
J knows that M loves-I R
'Jon$_i$ knows that Maria loves himself$_i$.'

Sentences such as (3.177) which have an LDR bound outside of an indicative clause prove that it cannot be the 'presence of [+SUBJUNCTIVE MOOD]' which is the licenser for LDR.

It is sometimes claimed that speakers who allow LDR with the indicative mood like in (3.177) do so on analogy with the versions using the subjunctive mood. The claim is then that the subjunctive mood is a grammaticalised indication of the features that allow LDR, which need not be overt. The factors allowing LDR may be present, as in (3.177), without being accompanied by the subjunctive mood.

3.6.4 LDRs are containment anaphors

Hellan argues that only anaphors which are exclusively containment anaphors may be LDRs. This is in contradiction with Koster's (1987) dynasty model of LDR. Recall that under Koster's proposal, a dynasty is formed by clauses which are predicated by an element in a higher clause. A dynasty chain is formed of elements which are predicated of each previous element. This analysis would make LDRs connectedness anaphors in Hellan's terminology. However, as mentioned above in section 3.3.4 it is possible to have a sentence which has such a dynasty, and therefore should be expected to allow LDR, but which does not. Example (3.124) is repeated here as (3.178).

ICELANDIC

(3.178) *Jón$_i$ heldur að Maríu$_j$ hafi verið sagt að þú talaðir um sig$_{i/*j}$.*
J thinks that M has been said that you talked about R
'Jon$_i$ thinks that Maria$_j$ has been told that you spoke about him$_i$/ her$_{*j}$.'

As stated above, even though both *Jon* and *Maria* are in the dynasty above the reflexive *sig*, only *Jon* may be the antecedent for the reflexive. The real licenser of the LDR is the semantic parameter in Icelandic that an LDR must have a perspective-holder as its antecedent. This rules out *Maria* as a potential antecedent in (3.178). Using Hellan's approach, we can see that *Maria* does not perspective-command the antecedent, while *Jon* does. Thus, Hellan's account provides a better solution to assigning an antecedent to an LDR than does Koster's dynasty model, since it incorporates perspective.

3.6.5 Summary

On Hellan's account, all anaphors are either containment or connectedness anaphors. Norwegian *seg* is a containment anaphor, while *seg sjølv* is a connectedness anaphor.

Icelandic *sig* is a containment anaphor. Only containment anaphors may be LDRs. A rule of predication-command licenses LDR and SDR in Norwegian, while a rule of perspective-command is also needed to account for LDR in languages like Icelandic.

3.6.6 Further comments

Anticipating the discussion somewhat, it will be seen that LDR in some varieties of Norwegian is also licensed by perspective. The examples below are from Sandøy (1992:103), although more examples will also be presented in later chapters. To retain the sense of dialect usage, a broad phonetic transcription is given.

NORWEGIAN (ROMDALSK)

(3.179) /hu ˈpo:stu at de va ˈsiɲ/
Ho$_i$ påstod at det$_j$ var sin$_i$
she claimed that it was R's
'She$_i$ claimed that it$_j$ was hers$_i$.'

NORWEGIAN (TRØNDERSK)

(3.180) /dæm ˈkaɲ ic ˈvɛɲc at ˈfoɽk skal kom te ˈsæ:/
Dei$_i$ kan ikkje venta at folk$_j$ skal komma til seg$_i$
they can not expect that people will come to R
'They$_i$ can't expect that people will come to them$_i$.'

In both (3.179) and (3.180), the antecedent of the LDR is the perspective-holder of the embedded clause, thus supporting Hellan's analysis of anaphora. The use of negation in (3.180) does not obstruct perspective-command. These two examples also show that predication-command is not a prerequisite for LDR in Norwegian. It is interesting to note that these two examples of Norwegian LDR both contain binding over a finite clause boundary. This contradicts what has been said up until now in the albeit brief comments about Norwegian LDR.

The notion of perspective being a licenser of LDR in some Norwegian dialects is also discussed by Moshagen and Trosterud (1990). They demonstrate how it is not the overt syntactic presence of features such as the subjunctive mood which license LDR, as neither Norwegian nor Danish have grammatical mood, although examples of LDR are found in both languages. Instead, they provide evidence which supports their claim that the semantic notion of perspective is the actual licenser of the LDR.

Moshagen and Trosterud (1990) give examples of sentences in which the highest subject 'perspective commands' the embedded anaphor, as shown in the following examples.

NORWEGIAN (SMØLA DIALECT)

(3.181) *Han$_i$ trudde at dæm kom til å flir åt sæ$_i$ / han$_i$.*
he thought that they come to to laugh at R/ him
'He$_i$ thought that they'd laugh at himself$_i$ / him$_i$.'

(3.182) *Han$_i$ vesst at dæm kom te å flir åt sæ$_i$/ 'n$_i$.*
he knew that them come to to laugh at R/ him
'He$_i$ knew they'd laugh at himself$_i$ / him$_i$.'

(3.183) **Han$_i$ vesst itj at dæm kom te å flir åt sæ$_i$.*
he knew not that them come to to laugh at R
He$_i$ didn't know they'd laugh at himself$_i$.

(3.184) *Han$_i$ vesst itj at dæm kom te å flir åt'n$_i$.*
he knew not that them come to to laugh at him
'He$_i$ didn't know they'd laugh at him$_i$.'

When the main predicate is negated, the anaphor is no longer in the perspective of the subject of that main predicate, thus the LDR is ruled out. This is shown in the contrast between (3.181) and (3.183), using *trudd* 'believed'(+ve) and *vesst itj* 'didn't know' (-ve) respectively. It is interesting to note that binding here is over a finite clause boundary. To what extent this approach is applicable to varieties of Norwegian other than Romsdalsk, Trøndersk and Smøla will be examined in later chapters.

3.7 Summary

The proposals reviewed above attempt to manipulate theoretical syntax to provide a quite specific definition of the domain of applicability of the Binding Conditions, with respect to morphological properties and different types of syntactic movement. These 'new' definitions interact with the rest of the syntax in different ways, and therefore achieve varying degrees of success.

Different types of movement have been postulated, such as X^0-movement, A'-movement and XP-movement, which rely on LDRs being either lexical or phrasal

elements, depending on the linguist. A rule of Tense or Mood Agreement was shown to accurately define the binding domain of LDR in Icelandic, although it is unclear how such an analysis would apply to a language like Chinese or Norwegian, which does not overtly encode mood. The binding domain of LDR may also be defined in terms of dynasties, although this leads to empirically incorrect predictions of grammaticality. Hellan's notion of predication-command accounts for the same data as Koster's dynasty model, plus the exceptions which are not accounted for. As well, Hellan uses the notion of perspective-command, creating the most accurate predictions of LDR of those approaches reviewed here. This is also the approach which incorporates the most semantic factors, which seem to be at the core of LDR. The difficulty with Hellan's model arises in knowing when to apply either perspective- or predication-command. In spite of this, it is clear that the notion of perspective must be incorporated into an account of LDR in order for it to be successful.

Thráinsson (1991:71) argues, and I agree, that the syntactic binding conditions should not be extended to account for LDR. Instead, 'one should rather continue to try to get a better grasp of the semantic/ pragmatic (logophoric) concepts involved'. To this end, the next chapter presents an introduction to logophoricity, and looks at some more semantics-oriented aspects of LDR. We will also see further how perspective, also called point-of-view, as well as mechanisms contained in theories of discourse, can account for LDRs and clause-bounded anaphora, without leaving unexplained 'exceptions' or 'exempt anaphors'.

As a final say on the usefulness of syntactic accounts of LDR, I have summarised here the main assumptions both explicit and implicit in the accounts presented in this chapter, for the purpose of testing these hypotheses against empirical data collected from 180 speakers of Norwegian. Details of the data collection are provided in the Methodology chapter, and the results of these hypotheses are included in the chapters thereafter.

3.7.1 Hypotheses based upon survey of syntactic research done into LDRs

- LDRs are monomorphemic (after Hestvik 1992, Pica 1991, Everaert 1991, Reinhart and Reuland 1993, etc).

- Reflexives in general are subject-oriented (after Hestvik 1992, Cole, Hermon and Sung 1990, Koster 1987, Huang and Tang 1991, Reinhart and Reuland 1993, Faarlund et al 1997, etc).
- LDRs move through Infl (after Cole, Hermon and Sung 1990, Pica 1991, Reinhart and Reuland 1993, etc)
- Finite Tense is a barrier to movement of LDRs (after Hellan 1988, Anderson 1986, Holmberg and Platzack 1995, Pica 1991, etc).
- The indicative mood is a barrier to movement (after Pica 1991, Anderson 1986, Holmberg and Platzack 1995, etc).
- There is more than one binding domain for anaphoric elements (after Dalrymple 1993, Hellan 1988, Reinhart and Reuland 1993, etc).
- *Seg* and *sin* have the same binding domains (after Dalrymple 1993, Hellan 1988).

Chapter 4

4 Introduction to the semantic aspects of LDR

One striking conclusion that was drawn in Chapter 3 is that the most accurate predictions concerning LDR come from accounts which incorporate non-syntactic ideas, such as perspective and logophoricity, eg Hellan (1988), Pollard and Sag (1992, 1994), Thráinsson (1991), Reinhart and Reuland (1993). Factivity has not yet been mentioned in this thesis, although it too may be related to the licensing of LDR (eg Rögnvaldsson 1986, Strahan 1999). In light of this, the following sections (4.1, 4.1 and 4.3) introduce the reader to the important aspects of these phenomena. Factivity is looked at first, since it leads easily into the discussion of perspective and deixis. The presentation of perspective then leads naturally into the penultimate section of this chapter, on logophoricity. Finally, some hypotheses about LDR will be postulated, based upon these discussions of factivity, perspective and logophoricity, and which will be tested on the data collected for this study.

4.1 Factive predicates

Rögnvaldsson (1986) and Strahan (1999) present evidence that factive predicates are a factor in the licensing of LDR in Icelandic and Norwegian. Briefly, factive predicates are those which entail the truth of their complement clauses even when negated[1].

The verb *know* is commonly used as an example of a factive predicate. The examples in (4.1) and (4.2) show that even when negated, *know* (*didn't know*) still entails the truth of its complement clause (→ means 'entails'). The sentences used in this section are English versions of typical LDR examples.

(4.1) a. *John knew that Are had spoken about his car*.
b. → *Are had spoken about his car*.

(4.2) a. *John didn't know that Are had spoken about his car.*
b. → *Are had spoken about his car.*

Another test of whether a predicate is factive or not involves questions. A factive predicate preserves its entailments under questioning, such that (4.3) a. entails b.

(4.3) a. *Did John know that Are had spoken about his car?*
b. → *Are had spoken about his car.*

Verbs like *know* are called *true factives*. They contrast with a class of predicates which become ambiguous under certain conditions such as in questions. *Semi-factives* become ambiguous under questioning between an interpretation where the complement is presupposed and one where it is not presupposed. An example is given in (4.4), with the verb *find out*.

(4.4) a. *Did John find out that Are had spoken about his car?*

Under one interpretation, the predicate *find out* entails the truth of its complement, namely that *Are had spoken about his car*, while under another interpretation, it does not.

Verbs may also be *non-factive.* Non-factive predicates do not entail the truth of their complements. Thus, (4.5) a. does not entail b. *Say* is a non-factive predicate, since the sentence containing *say* as the matrix verb may be true, even if the complement clause is false.

(4.5) a. *John said that Are had spoken about himself.*
b. ↛ *Are had spoken about himself.*

4.1.1 LDR and factivity

The factivity of a predicate can influence the acceptability of LDR. Non-factives are more likely than factives to license LDR. This is shown in the following (in Icelandic, *viti* 'know' is factive, while *voni* 'hope' is non-factive (Rögnvaldsson 1986:92-93)).

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[1] But see Garner (1971), Keenan (1971) and Kiparsky and Kiparsky (1971) for some classic arguments concerning logical and pragmatic factivity. For a modern account, Levinson (2000) uses the notion of pragmatic presupposition, which will be incorporated in this thesis in Chapters 7 and 8.

ICELANDIC

(4.6) ??*Ég held að Jón$_i$ viti að þú viljir hitta sig$_i$.*
I think that J know-S that you want-S meet R
I think that Jon$_i$ knows that you want to meet him$_i$.

(4.7) *Ég held að Jón$_i$ voni að þú viljir hitta sig$_i$.*
I think that J hope-S that you want-S meet R
'I think that Jon$_i$ hopes that you want to meet him$_i$.'

LDR out of a clause containing a factive predicate (4.6) is marginal at best, while out of a clause containing a non-factive predicate (4.7) it is universally acceptable.

Support for the idea that factivity is relevant to the licensing of LDR also comes from the Valen dialect of Norwegian. In this dialect, the use of LDR is more acceptable with non-factive predicates than with factive predicates (Strahan 1999).

VALEN DIALECT

(4.8) *Trond$_i$ ba oss snakka om seg$_i$.*
T bade us speak about R
'Trond$_i$ asked us to speak about him$_i$.'

(4.9) ?*Trond$_i$ hørte oss snakka om seg$_i$.*
T heard us speak about R
Trond$_i$ heard us speak about him$_i$.

Here it can be seen that, although syntactically identical except for the matrix verb, the sentence with a factive verb (4.9) is not as acceptable as the sentence with the non-factive verb (4.8). This contrast supports Rögnvaldsson's (1986) contention that factivity is relevant to the licensing of LDR[2]. A purely syntactic account of LDR, such as the Tense Agreement analysis, cannot possibly account for the difference in judgements between (4.6) and (4.7) nor between (4.8) and (4.9).

The difference between true factive, semi-factive and non-factive predicates with respect to the felicitous or infelicitous use of LDR will be tested for explicitly in this

[2] The idea of logophoricity may also account for the differences between these sentences. We will address this in section 4.3.

study. Whether negation of factive predicates is relevant to the licensing of LDR in Norwegian will also be tested for explicitly in this study.

4.1.2 Summary

Factive predicates are those which entail the truth of their complements, even when negated. Factive predicates are divided into true factives, which always entail their complements, and semi-factives, which become ambiguous when used in questions between entailing and not entailing their complement. There is evidence from Norwegian and Icelandic that factivity plays a role in the licensing of LDR, where non-factives license LDR, and factives do not, or do so only marginally.

Factivity hypothesis
A hierarchy of factivity licenses LDR, where non-factive predicates are most likely to license LDR, followed by semi-factive then true factive predicates.

4.2 Perspective

Empathy and point of view are two key terms often mentioned in the literature in relation to LDR and logophors (eg Reinhart and Reuland 1993, Reuland and Sigurjónsdóttir 1997, Pollard and Sag 1992), but they are rarely explicitly defined. Here, I present definitions of empathy perspective, after Kuno (1987), and point-of-view, based on deictic notions of primary and secondary egos involved in discourse, after Sigurðsson (1986). Point-of-view encompasses the deictic factors involved in utterances, while empathy perspective is a construal of syntactic and semantic factors, although the terms perspective, point-of-view and empathy seem to be used synonymously in the syntactic literature. We will begin with an introduction to deixis, which will lead into the notion of primary and secondary egos. Then we will look at empathy perspective. Finally, we will see how these relate to LDR.

4.2.1 Deixis

Deixis concerns points of view, or perspectives. There are at least three types of deixis[3]: temporal, spatial and personal. Temporal deixis concerns the time represented in an utterance, and is indicated by temporal adverbs and other means such as tense. Temporal deixis is grounded in the time of the speaking of an utterance. Spatial deixis has to do with location as represented in an utterance. In English, words such as *here* and *there* are used to manipulate the spatial deixis, with the speaker typically the reference point[4], or centre of deixis, from which an utterance is understood. But the most important type of deixis for the study of LDRs is personal deixis, which has to do with the person who is the centre of deixis from which an utterance is understood. Again, the speaker is typically the reference point (Frawley 1992:280). In the next section we will look at instances when the speaker is not the centre of deixis.

4.2.2 Point-of-View

Language is basically egocentric, that is to say that, canonically, utterances are produced with the speaker as the deictic centre, spatially, referentially and temporally (Frawley 1992:292). Anticipating the discussion, it will be seen that this is what Kuno refers to with his Speech Act Empathy Hierarchy, described below. However, the egocentric type of discourse is not the only one that exists. In certain types of discourse, the centre of deixis is not the speaker. In particular, we will look at direct speech, directly represented speech and indirectly represented speech. In section 4.2.4, we will see how these differences affect LDR usage.

Direct speech

(4.10) *Mary will meet me there (at the station) today*.

The deictic elements in the direct speech in (4.10) (*will*, *me*, *there*, *today*) are all stated from the speaker's POV. The first person pronoun *me* refers directly to the speaker, the temporal deixis *will* and *today* indicate the time the action spoken of occurs with

[3] Fillmore (1997:61) lists five: 1) person deixis, 2) place deixis, 3) time deixis, 4) discourse deixis and 5) social deixis. Here we will just mention the first three.

[4] In some languages, the hearer may also be the reference point for spatial deixis. Consider Palauan, which has *me* 'come (towards speaker)', *eko* 'go (towards hearer)' and *mo* 'go (away from speaker and hearer)' (Anderson and Keenan 1985:279).

respect to the time of the utterance, and the adverbial spatial deixis of the proposition is *there* and not *here*, indicating that the place of the utterance is not the place spoken of. The spatial and temporal deixis of this utterance lies with 'me' 'today'. This is the most egocentric type of discourse.

Directly represented speech

(4.11) *Mary told me yesterday at the station, "I will meet you here tomorrow."*

In (4.11), there is a shift in temporal, spatial and personal deixis from the first clause of non-directly represented speech to the second clause of directly represented speech. In the first clause *Mary told me at the station yesterday*, *me* refers to the speaker and *yesterday* refers to the day before this utterance was spoken. In the second clause containing the directly represented speech *I will meet you here tomorrow*, the first person pronoun no longer refers to the speaker of the utterance, but to the speaker to whom the original utterance of this sentence is attributed, namely *Mary*. In the same way, the second person pronoun now refers to the speaker. The adverbs *here* and *tomorrow* also have as their centre of deixis Mary and the time and place of her utterance.

Directly represented speech involves a total shift of the centre of deixis from the speaker, to some other ego. In (4.11), the primary ego in the directly represented speech becomes *Mary*. Sigurðsson (1986) describes this as the suppression of the actual primary ego, in favour of, and thus promoting, the status of the actual secondary ego to become the primary ego.

Indirectly represented speech

(4.12) *Mary told Brent yesterday at the station that she would meet him there today*.

In the indirectly represented speech in (4.12), the embedded deixis is again dependent upon the speaker's deixis for its reference, just as with directly represented speech. The deictic elements *yesterday*, *there* and *today* are all stated from the speaker's POV. However, there is one major difference between indirectly represented speech on the one hand, and direct and directly represented speech on the other, and that has to do with who holds the responsibility for the truthfulness of the proposition.

With indirectly represented speech, the speaker assumes a responsibility for the truthfulness of the proposition which is not present with directly represented speech

(this is one of the uses of the subjunctive mood – see Chapter 9, section 9.1 for more details)[5]. As well, the temporal deixis in the indirectly represented speech is not that of the speaker, rather it is constrained by the moment of saying defined by the matrix predicate. 'Thus, the temporal deixis of *would meet* is roughly, "future relative to THEN" (where THEN is the "moment of Mary's telling")' (Sigurðsson 1986:19). Since the matrix clause in (4.12) is still viewed from the POV of the speaker, this allows for a split referential, or split anaphoric, deixis. In other words, the embedded clause may contain reference to either the primary ego's POV (ie the POV of the speaker), or the secondary ego's POV (ie the POV of the holder of the deictic reference of the embedded clause). This is discussed more in section 4.3.1 – Logophoric contexts in non-logophoric languages.

Summary

The use of directly represented speech involves a complete shift of deixis from the matrix to the embedded clause, while indirectly represented speech maintains the same deixis in each clause. However, it is not possible to totally disregard the speaker's POV in directly represented speech, since the deixis of the directly represented speech still receives its reference from the speaker's deixis. Thus, this type of direct speech presents two points of view – that of the primary ego (speaker) and that of the secondary ego (subject). The secondary ego's deixis is dependent upon the primary ego's deixis for its reference, in other words, the secondary ego is seen from the POV of the speaker.

We will now look at deixis in another way, from the standpoint of *empathy perspective.*

4.2.3 Kuno's empathy

The terms empathy and perspective are widely mentioned in the literature on LDR (Hellan 1988, Reinhart and Reuland 1991, 1993, Moshagen and Trosterud 1990, Sigurðsson 1986, Thráinsson 1991, etc). However very few linguists ever attempt to define these terms, most linguists simply saying, 'See Kuno 1987'. In light of this, some of the key points of Kuno's (1987) *empathy perspective* are presented here.

[5] In fact, in languages with subjunctive and indicative moods, this is only true of the indicative mood.

Empathy Perspective

Kuno's full term *empathy perspective* is often shortened by him to *empathy*, while most other linguists talk of *perspective.* The terms are interchangeable. The empathy perspective of a sentence lies with one of the entities present in the current discourse, specifically, the entity from whose point of view an utterance is taken to be from. In Sigurðsson's (1986) terminology, this means that the perspective of a sentence lies with the primary ego (which is often the speaker, although it can shift to become an entity in the discourse). This is clearly demonstrated with a few examples (from Kuno 1987:203).

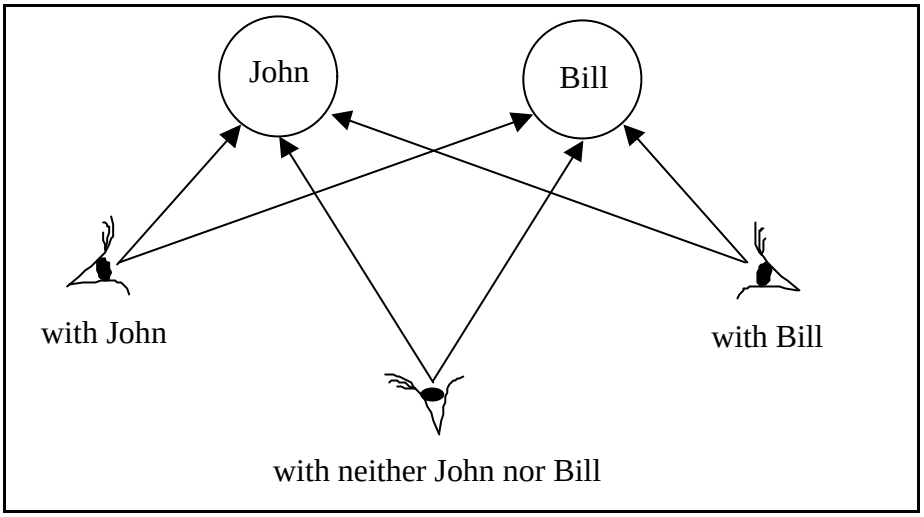
(4.13) *Then John hit Bill.*
(4.14) *Then John hit his brother.*
(4.15) *Then Bill's brother hit him.*
(4.16) ?? *Then John's brother was hit by him.*
(4.17) ?? *Then his brother was hit by John.*
(4.18) *Then Bill was hit by his brother.*

The logical content of these sentences are identical. The differences in acceptability arise from the relationship the speaker presents themself as having with the entities involved in the altercation. Kuno compares this relationship with that of a film director's choices in presenting the fight on film. The director can take an objective viewpoint, filming equidistant from both John and Bill. Or the director can takes sides, filming from closer to John, thus presenting the action from John's point of view, or vice versa. The most extreme perspective the director can take is to film entirely from John's eyes, not showing John at all, presenting the action from John's perspective only.

This film director metaphor describes exactly what happens in every discourse involving events that a speaker wishes to describe. The speaker must choose from which perspective to relay the information. Put another way, a speaker must show some sort of empathy, whether from the viewpoint of one of the participants of the action, or from a more detached, observer point-of-view. Several different 'camera angles' a speaker may choose from are illustrated below in Figure 4.1 and Figure 4.2.

But we will not go into that here – see Chapter 9 for more details.

Figure 4.1 – Partial identification of the speaker



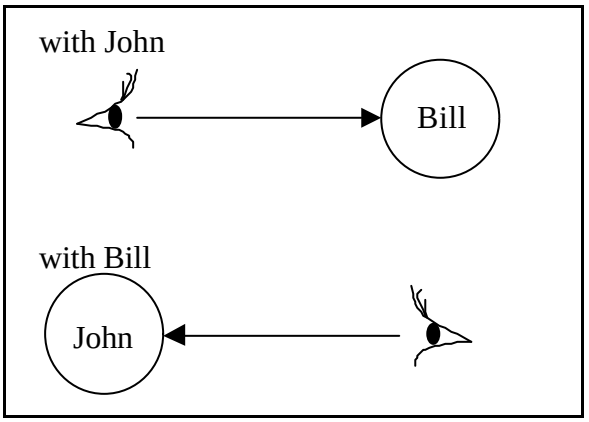
Partial identification of the speaker with either John or Bill results in sentences like (4.14) to (4.18). Sentence (4.13) shows the detached observer's viewpoint. It is not strictly true that the speaker does not take the empathy perspective of either party in an active sentence – empathy tends to be with the subject. Thus the contrast in the following examples can be explained as a difference in empathy perspective.

(4.19) *Then John hit Bill.*

(4.20) *Then Bill was hit by John.*

A speaker may also totally identify with one of the entities involved in a discourse.

Figure 4.2 – Total identification of the speaker



Total identification of the speaker with either *John* or *Bill* results in sentences like the following.

(4.21) *John said, "I hit Bill."*
(4.22) *Bill said "I was hit by John."*

When there is partial identification of the speaker, the following correlations are evident (the hash symbol '#' indicates a clash of empathy perspective'). The linguistic mechanisms used to achieve these judgements will be discussed next.

When the camera is aligned nearer to John, the judgements, due to factors such as the type of NP used and the grammatical role of NPs, are as follows.

(4.23) (#) *John hit Bill.*
(4.24) *John hit his brother.*
(4.25) *# Bill's brother hit him.*
(4.26) *# Bill was hit by John.*
(4.27) *# Bill was hit by his brother.*

When the camera is aligned nearer to Bill, the judgements are as follows.

(4.28) *John hit Bill.*
(4.29) *# John hit his brother.*
(4.30) *Bill's brother hit him.*
(4.31) *Bill was hit by John.*
(4.32) *Bill was hit by his brother.*

When the camera is in a neutral position equidistant from both John and Bill, the judgements are as follows.

(4.33) *John hit Bill.*
(4.34) *# John hit his brother.*
(4.35) *# Bill's brother hit him.*
(4.36) *# Bill was hit by John.*
(4.37) *# Bill was hit by his brother.*

Thus, identification by the speaker with one or another of the entities under discussion does influence the acceptability of the different syntactic constructions.

As stated above, Kuno uses the term *empathy* to describe this concept of camera angle that a speaker may take during discourse. His exact definitions are as follows.

> *Empathy*: Empathy is the speaker's identification, which may vary in degree, with a person/ thing that participates in the event or state that is described in a sentence.
> *Degree of Empathy*: The degree of the speaker's empathy with *x*, E(*x*), ranges from 0 to 1, with E(*x*)=1 signifying total identification with *x* and E(*x*)=0 signifying a total lack of identification.
>
> Kuno (1987:206)

These definitions, in particular the Degree of Empathy, abstract away from what natural languages encode, and attempt to provide mathematically precise figures to describe empathy. It is unlikely that this reflects actual usage, although it provides a method of comparing degrees of empathy. Another method is the less precise, but probably more accurate statement such as 'in sentence (4.31), empathy lies more with Bill than with John'.

Empathy is assigned to one entity over another based on factors such as prominence and topicality. Kuno describes four Empathy Hierarchies which illustrate this. These are the Descriptor Empathy Hierarchy, the Surface Structure Empathy Hierarchy, the Topic Empathy Hierarchy and the Speech Act Empathy Hierarchy. These conditions describe the assignment of empathy in any given utterance.

The Descriptor Empathy Hierarchy governs the use of camera angles at any given time.

> *Descriptor Empathy Hierarchy*: Given descriptor *x* (eg *John*) and another descriptor *f(x)* that is dependent upon *x* (eg *John's brother*), the speaker's empathy with *x* is greater than with *f(x)*.
>
> E(*x*) > E(*f(x)*)
> eg E(John) > E(John's brother)
>
> Kuno (1987:207)

The Descriptor Empathy Hierarchy is a way of identifying where the empathy of a particular phrase or sentence will lie. It specifically mentions possessive NPs, and states that empathy with the possessor NP is greater than with the possessed NP. This may also be related to the Specified Subject Condition, where the semantics of the possessed NP and the relationship between the possessed and the possessor NP also

influence binding out of such NPs[6]. Clearly, the Descriptor Empathy Hierarchy is not static, but may be changed according to the semantics of the two NPs involved.

Another empathy constraint is the Surface Structure Empathy Hierarchy.

> *Surface Structure Empathy Hierarchy*: It is easier for the speaker to empathise with the referent of the subject than with the referent of the other NPs in the sentence.
>
> Kuno (1987:211)

The empathy hierarchy for (4.33) above, repeated here for convenience, is given in (4.38).

(4.33) *John hit Bill.*

(4.38) E(*John*) > E(*Bill*)

The fact that empathy is more often aligned with subjects than with non-subjects is also mentioned by Ariel (1991:455) in terms of accessibility[7], and is directly related to the study of reflexives. The subjecthood condition on antecedents of reflexives may be considered a function of the Surface Structure Empathy Hierarchy constraint. It is a kind of prominence hierarchy, much as the Topic Empathy Hierarchy is.

> *Topic Empathy Hierarchy*: Given an event or state that involves A and B such that A is coreferential with the topic of the present discourse and B is not, it is easier for the speaker to empathise with A than with B:
>
> E(discourse topic) ≥ E(non-topic)
>
> Kuno (1987:210)

This may account for varieties of Icelandic where LDR is permitted with the indicative mood, as shown in the following (from Sigurðsson 1986).

ICELANDIC

(4.39) *Jon$_i$ segir að Maria elskar sig$_i$.*
J said that M loves-I R
'Jon$_i$ said that Maria loves him$_i$.'

[6] This is discussed in more detail in Chapter 7, p265ff.

[7] See Chapter 7, section 7.1 for more details.

The empathy hierarchy for (4.39) is given in (4.40).

(4.40) John = discourse topic; speaker = non-discourse topic[8]
E(topic) > E(non-topic)
∴ E(*John*) > E(speaker)

Syntacticians have so far avoided describing this variety of Icelandic, even though it can be stated simply in terms of empathy. As we shall see, an account of LDR which appeals to factors such as empathy and POV must reach the conclusion that grammatical mood is not the only thing involved in the licensing of LDR. The same semantic and pragmatic contexts arise independent of the grammatical mood used. Mood is a grammaticalisation, or contributing factor in the licensing of LDR, but it is a mistake to assume that it is the only factor involved.

Finally, there is a Speech Act Empathy Hierarchy.

> *Speech Act Empathy Hierarchy*: The speaker cannot empathise with someone else more than with themselves except for stylistic reasons.
>
> Kuno (1987:212)

(4.41) *Brent said that you were coming to Arapiles*.
E(*you*) lies with speaker

(4.42) *Brent said, 'You were coming to Arapiles.'*
E(*you*) lies with *Brent*

Indirect reporting of someone else's speech as in (4.41) is the unmarked form, according to the Speech Act Empathy Hierarchy, where the primary ego is the speaker, so the pronoun *you* is construed with relation to the speaker, and is hence the addressee of this utterance. Direct reporting of someone else's speech, thoughts or

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[8] The hierarchy in (4.40) predicts that sentences such as (i) are acceptable, where the reflexive may refer to either the speaker or the discourse topic.

(i) *Eg fortalte Jon at Maria elska seg.*
I told J that M loved R
'I told Jon that Maria loved myself.'

As will be shown in the results later, several speakers in this study did accept this sentence, although half of those who accepted it stated they preferred a pronoun, either first or third person.

actions as in (4.42) constitutes a violation of the Speech Act Empathy Hierarchy, and hence allows the speaker to empathise with another entity to the extent that the pronoun *you* is construed with respect to *Brent* as the centre of deixis, and the referent of *you* is (potentially) the speaker of the utterance in (4.42). Logophoricity, as will be described below, is another method of showing empathy with another entity.

The Ban on Conflicting Empathy Foci is applied to these hierarchies introduced in this section. It is this constraint which has the power to rule in and out certain constructions.

> *Ban on Conflicting Empathy Foci*: A single sentence cannot contain logical conflicts in empathy relationships.
>
> Kuno (1987:207)

The power of this constraint to rule out certain sentences can be illustrated with a simple example, from Kuno (1987:208).

(4.43) *$Bill_i$'s $sister_j$ hit her_j $brother_i$.

The empathy hierarchy[9] for (4.43) is based upon the Descriptor Empathy Hierarchy. In (4.43), there is a conflict between the perspectives in *Bill's sister* and *her brother*.

(4.44) *Bill's sister*: E(Bill) > E(his sister)
her brother: E(her = Bill's sister) > E(her brother = Bill)
*E(Bill) > E(his sister) > E(her brother = Bill)

There is a logical conflict in (4.43) shown in the third line of (4.44) between the empathy perspectives of *Bill* and *his sister*. The sentence in (4.43) is therefore unacceptable.

Returning to the Icelandic example above, in (4.39), where LDR was acceptable with the indicative mood, I am postulating another possible empathy hierarchy. The subjunctive mood often correlates with LDR, since the subjunctive mood emphasises the fact that empathy lies with the higher subject/ antecedent.

[9] Empathy constraints apply only when NPs are used referentially (Kuno 1987:209).

(4.45) E(subject of predicate with subjunctive complement clause) > E(subject of predicate with indicative complement clause)

The empathy hierarchy in (4.45) could be called the Mood Empathy Hierarchy. It would explain why the subjunctive mood seems to correlate so strongly with LDR in languages like Icelandic, since it emphasises the higher subject which makes it a more accessible antecedent. In order to account for sentences where LDR is acceptable with the indicative mood, however, this hierarchy could be made subordinate to hierarchies like the Topic Empathy Hierarchy, as suggested above[10].

Summary

Empathy is to do with the 'camera angle' a speaker chooses to use to present information in a discourse. This choice is restricted by empathy constraints which prohibit conflicting camera angles from being presented simultaneously. Accessibility prominence relations such as the Surface Structure Empathy Hierarchy and the Topic Empathy Hierarchy dictate the most likely choice for the camera angle of any utterance within some context. I have proposed a fifth condition supplementing Kuno's original four, namely that mood also creates an empathy hierarchy and that for some speakers, this hierarchy could be over-ridden by a hierarchy such as the Topic Empathy Hierarchy, to allow for LDR out of indicative clauses.

4.2.4 POV and reflexives

Empathy perspective, or point-of-view (POV), plays an important role in assigning an antecedent to a reflexive (Sigurðsson 1986, Hellan 1988, Strahan 2001). (4.46) is an actual instance of a reflexive referring back to the speaker without a syntactic antecedent. The speaker was explaining why he and his brother sat their VCE exams alone.

(4.46) *No-one else needed to sit the VCE exams in Holland, it was pretty much only myself and Mark*.

[10] The relative prominence of the different hierarchies could vary by dialect and language. This would allow them to apply to varieties of Icelandic which allow LDR without the subjunctive mood and those which must use the subjunctive.

This is the type of logophoricity that will be referred to in section 4.3.1 – Logophoric contexts in non-logophoric languages below. In terms of primary and secondary egos, it is clear that in (4.46), the primary ego is presenting the story from the primary ego's POV, hence the use of the reflexive. However, this is not the only option for using reflexives. In languages with third person LDR, such as Icelandic (Sigurðsson 1986:19), it is the instances where the secondary ego is viewed from the secondary ego's POV that LDR occurs.

ICELANDIC

(4.47) *Jon$_i$ telur að Maria elski sig$_i$.*
J believes that M love-S R$_i$
'Jon$_i$ believes that Maria loves him$_i$.'

In (4.47), the speaker is representing a secondary ego's (*Jon*'s) thoughts from *Jon*'s POV. Hence, the LDR is allowed. This has also been argued to occur in Norwegian, eg Moshagen and Trosterud (1990).

NORWEGIAN (SMØLA DIALECT)

(4.48) *Han$_i$ trudde at dæm kom til å flir åt sæ$_i$.*
he believed that them come to to laugh at R
'He$_i$ thought that they'd laugh at him$_i$.'

In (4.48), it is the thoughts of the secondary ego *han* which are represented, hence LDR is allowed. LDR is not possible with directly represented speech, due to the shift in deixis. Thus, (4.49) is fine, because it uses a first person pronoun to refer to the higher subject whose thoughts are directly represented in the downstairs clause, while (4.50) is ungrammatical, because the the reflexive must refer to a secondary ego, but the only available potential antecedent is the primary ego of the embedded directly represented speech.

(4.49) *Han$_i$ tenkte, 'Dæm kom til å flir åt mæ$_i$.'*
he thought them come to to laugh at me
'He$_i$ thought, 'They'll laugh at me$_i$.''

(4.50) **Han$_i$ tenkte, 'Dæm kom til å flir åt sæ$_i$.'*
he thought them come to to laugh at R
He$_i$ thought, 'They'll laugh at himself$_i$.'

This association of the third person reflexive with a secondary ego's POV can also be understood from the converse direction. The use of a reflexive can signal the perspective-holder to the hearer. An example from Swedish (Hellberg 1980:40) shows this.

SWEDISH

(4.51) *En Japan$_i$ skildrade scoutlivet i sitt$_i$ land.*
a Japanese described scout-life in R country
'A Japanese person$_i$ described scouting-life in his$_i$ country.'

(4.52) *En Japan$_i$ skildrade scoutlivet i hans$_{i/j}$ land.*
a Japanese described scout-life in his country
'A Japanese person$_i$ described scouting-life in his$_{i/j}$ country.'

Sentence (4.51) uses a reflexive, while (4.52) uses a pronoun. In (4.52), the use of the pronoun *hans* 'his' makes the scouting life 'mera levande för läsaren' 'more living for the reader' (Wellander 1973:125). This is probably because use of the pronoun highlights the writer's/ speaker's perspective on the scouting life, 'utan japanens perspektiv som mellanled' 'without the Japanese speaker's perspective as a intermediary' (Hellberg 1980:40). In other words, the Japanese person's description of their country is presented from an outsider's POV, which matches the reader's, also outsider, POV. This outsider POV makes it easier for the reader to understand and empathise with the proposition of the sentence, because the sentence is presented from the same POV as the reader comes from. This would explain the effect of the description being 'more living for the reader' when the pronoun is used as in (4.52), as opposed to the reflexive as in (4.51).

Another example of this contrast in perspective in Swedish (Hellberg 1980:41) is given here.

SWEDISH

(4.53) *Boken skildrar makarnas$_i$ liv på deras$_{i/j}$ älskade Charlottendal.*
book describes couples's life on their beloved Charlotte-Valley
'The book describes the couples's$_i$ life in their$_{i/j}$ beloved Charlotte Valley.'

(4.54) *Boken skildrar makarnas$_i$ liv på sitt$_i$ älskade Charlottendal.*
book describes couples's life on R beloved Charlotte-Valley
'The book describes the couples's$_i$ life in their$_i$ beloved Charlotte Valley.'

(4.53) and (4.54) are a minimal pair where (4.53) uses a pronoun while (4.54) uses a reflexive. The use of the reflexive in (4.54) 'tydligare förmedlar intrycket att det är makarna själva som älskar Charlottendal' 'more clearly gives the impression that it is the couple themselves who love Charlotte Valley' (Hellberg 1980:41, my translation). Again, this is due to the fact that the reflexive refers to the entity which carries the empathy perspective for the sentence. The use of the pronoun in (4.53) describes the couple from an outsider's perspective, looking at the couple in their valley, as it were, just as with the example of the Japanese person in (4.51). This perspective effect is often supported in narratives by other discourse factors, such as continuity of topic. The use of the reflexive to show empathy may be considered a type of personal deixis. The examples containing reflexives above carried an insider's, or the primary ego's perspective, in each case, while the examples containing pronouns carried an outsider's perspective. It is not necessary to describe this effect in the syntax, and the problems encountered by syntactic approaches in accounting for reflexivity reflect the fact that this effect is not even describable in purely syntactic terms.

We will now look quickly at an interesting case of split referential deixis which occurs in Russian (from Kuno (1987:263) after [Peškovskij 1974]). In Russian, there is a difference between the first person possessive pronoun *moj* and the subject-oriented possessive reflexive *svoj* which show the same perspective effects as the third person possessive reflexives and pronouns in Swedish.

RUSSIAN

(4.55) *Kto ni umrët, ja vsex ubijca tajnyj:*
who ever dies I all's killer secret

Ja uskoril Fedora končinu,
I hastened F's death

Ja otravil ***svoju*** *sestru caricu*
I poisoned R's sister queen

Monaxinju smirennuju … vse ja!
nun meek all I

'No matter who dies, I am the secret murderer of everyone: I hastened Feodor's demise, I poisoned my sister the czarina, the meek nun … I do it all!'

The reflexive *svoj* is used in the third line of (4.55), and not the pronoun *moj*, since the speaker is referring 'not to the real facts but to rumours which he considers false' (Kuno 1987:263). Use of the pronoun in this case, which could be considered the unmarked option, would entail an outsider's, 'objective' POV, ie that he actually poisoned his sister. The reflexive is a marked choice, which draws attention to the fact that the speaker is referring to false rumours and not fact.

I have presented examples from several closely related languages (Icelandic, Norwegian and Swedish), showing that the antecedent of a reflexive is the holder of the empathy perspective of each sentence. In Russian, also, the reflexive and the pronoun carry different perspectives. We will now look at some examples of LDR in English.

Empathy perspective lies with the antecedent of LDRs. Pollard and Sag (1992) use this trait as a deciding element in accounting for exempt, or discourse, anaphors. The following sentences illustrate this point (from Pollard and Sag 1992:273).

(4.56) *John$_i$ thought that it would be illegal to undress himself$_i$.*
(4.57) *John$_i$ thought that Proposition 91 made undressing himself$_i$ illegal.*
(4.58) **John$_i$ thought that Mary would be bothered by undressing himself$_i$.*
(4.59) ? *Charles$_i$ thought that Elizabeth had made undressing himself$_i$ illegal.*

In (4.56) and (4.57), the reflexive *himself* can take a non-local antecedent, due to the fact that there is no entity between *John* and the reflexive to which empathy may be assigned. In other words, empathy lies strongly with *John* in both of these sentences, since there is no other (animate) entity with whom empathy could lie. This is contrasted by sentence (4.58) where a local, animate entity is available as an antecedent, which then blocks the non-local binding possibility of *himself* with *John*. (4.59) is marked with a question mark. It sounds better than (4.58), but is still peculiar. The best interpretation of it is when it is not *Elizabeth* as such who makes undressing illegal, rather it is her position as someone able to make such rules, ie the inanimate entity, which allows the LDR.

Pollard and Sag (1992:272-3) attribute the difference in grammaticality of these sentences to an Intervention Constraint (after [Grinder 1970]), 'which rules out the possibility of a nonlocal controller when another possible controller intervenes'. This supposedly accounts for the ungrammaticality of the following.

(4.60) **John$_i$ thought that Mary was surprised by the fact that criticising himself$_i$ was hard*.

Since the reflexive is not permitted in this construction, Pollard and Sag (1992) say, the pronoun must be used.

(4.61) *John$_i$ thought that Mary was surprised by the fact that criticising him$_i$ was hard*.

However, it seems to me that (4.60) is actually better than (4.61). In fact, when the reflexive is used, it seems to me that *John* is the over-riding consciousness or the empathy perspective-holder in the sentence, and that from *John*'s POV, it seems that *Mary* can't understand why he should find it difficult to criticise himself. When the pronoun is used, it is *Mary* who is finding it hard to do the criticising. So it actually seems that it is not the referent of *himself* or *him* in this case that alters, it is the referent of the criticiser that changes. This strange fact will be referred to again in the final account.

4.2.5 Summary

LDR occurs when the secondary ego is viewed from their own POV, which is why LDR is not possible with directly represented speech. On the other hand, LDR is possible with indirectly represented speech, since a secondary ego is being seen from their own POV.

Reflexives refer to the entity which carries the empathy perspective for the sentence. When a pronoun is also possible, the use of the reflexive acts as a deictic marker to reinforce the perspective-holder's role. The use of a pronoun denies the meaning that the antecedent is the perspective-holder, and thereby entails an outsider's perspective. This is true for both clause-bounded and non-clause-bounded reflexives.

Some syntacticians also call LDRs logophors, based on their occurrence in similar contexts to logophoric pronouns. An account of logophoric contexts in non-logophoric languages is given next, based mainly upon work by Kuno (1987) and Sigurðsson (1986).

Perspective hypothesis

LDRs refer to the perspective holder of a sentence. Reflexives also have a different meaning to pronouns, which is reflected in and reinforced by the semantics of perspective.

4.3 Logophoricity

What is logophoricity? It is often mentioned by linguists with reference to LDR (eg Reinhart and Reuland 1991:311-317, 1993:672ff), and has been mentioned in passing several times in this thesis already. The semantic similarities between LDR and logophoricity are many, according to Clements (1975), Kameyama (1984), Sigurðsson (1986), Sells (1987), Stirling (1993), Strahan (1999) and Levinson (2000). Some syntacticians refer to LDRs as logophors, or more specifically as *perspective logophors*. An introduction to logophoricity and the factors that license it is therefore relevant to the discussion of LDR.

Logophoric pronouns are described by Clements (1975:141) as 'distinguish[ing] reference to the individual whose speech, thoughts, or feelings are reported or reflected in a given linguistic context, from reference to other individuals'. Some

languages, such as Gokana, use verbal inflection to mark logophoric reference (Hyman and Comrie 1981). The term *logophoricity* will be used to cover both logophoric pronouns and logophoric verbal inflections. Logophoricity is thus a type of indirect personal deixis explicitly encoded in some languages.

Logophoricity is used to indicate same-subject/ different-subject of syntactically related clauses[11], but is restricted by the semantic properties of the matrix predicate to certain contexts, typically to clauses of indirect speech, or reporting[12]. The following examples are taken from Clements (1975:142). (For other examples of the employment of various logophoric strategies in Mundaŋ, Tuburi, Gokana and Ewe, see Sells (1987:446-450).)

EWE

(4.62) *Kofi be yè-dzo*.
K say LOG-leave
'Kofi$_i$ said that he$_i$ left'

(4.63) *Kofi be e-dzo*.
K say he/she-leave
'Kofi$_i$ said that he$_j$/she$_j$ left'

The most common licenser of a logocentric context is a verb meaning 'say', as shown in the examples from Ewe above. Other verbs of communication are also common licensers of a logocentric context.

4.3.1 Logophoric contexts in non-logophoric languages

Kuno (1987) posits a Logophoric Rule restricting the usage of reflexives in complement clauses and picture-NPs according to the person value of the anaphor with respect to the antecedent. A value of [+/- logo-1] or [+/- logo-2] is assigned to the each reflexive, where logo-1 indicates the first person and logo-2 the second person. This is almost equivalent to Sigurðsson's primary and secondary egos as

[11] The clauses need not be adjacent, however. There is a famous case reported in Hagège (1974) of a logophoric context being introduced, then, thirty minutes later, the logophoric pronoun being used.

[12] In some languages further grammaticalisation has occurred, such that a verb meaning 'to say' has become a complementiser which licenses a logocentric context (Stirling 1993).

described below. The [logo] marking refers to the person feature of the pronoun in direct discourse. So, (4.64) is acceptable, because the complement clause, with respect to the *John* ego, contains a first person reflexive, as shown in (4.65).

(4.64) *John$_i$ said that this paper was written by Anne and himself$_i$.*

(4.65)
[primary ego]$_i$ *said,: "This paper was written by Anne and myself$_i$."*
[+logo-1]

The complement clause in (4.65) contains a reflexive which is marked [+logo-1] with respect to the primary ego, indicating the use of a grammatical first person reflexive.

(4.66) is a little worse than (4.64), as the underlying direct discourse contains a [+logo-2], ie a second person rather than first person reflexive, as shown in (4.67).

(4.66) *Mary asked John$_i$ if the paper was written by Anne and himself$_i$.*

(4.67)
Mary asked [primary ego]$_i$*: "Was the paper written by Anne and yourself$_i$?"*
[+logo-2]

Kuno's (1987:150) Logophoric Pronoun constraint states that a reflexive pronoun in a logophoric complement clause is acceptable if its primary ego antecedent may be referred to with a first person reflexive, and acceptable or marginal, depending upon the speaker, if the primary ego antecedent is referred to with a second person reflexive. Otherwise it is unacceptable. This is similar to Sigurðsson's (1986) observation that LDR only occurs when a secondary ego is viewed from that secondary ego's POV.

The link between logophoricity and LDR is the overlap in the range of contexts in which both may occur. Recall that a logophoric context is one in which a person's thoughts, feelings or perceptions are reported by another person. Logophoric contexts are typically signalled by reportive predicates. In non-logophoric languages, such contexts also arise and are obvious in cases where the embedded clause, were it to be rephrased as direct speech, would contain a first or second person reflexive. This was shown above. First and second person reflexive pronouns are acceptable without a c-commanding antecedent (Pollard and Sag 1992:271ff), which allows for their use in logophoric contexts. The following examples are from Kuno (1987:291, fn12). (4.68)

and (4.69) are acceptable, since the first and second person referents of the reflexive are assumed to be present in the discourse. (See the discussion and final account in Chapter 10 for more details on accessibility of referents.) (4.70) is unacceptable, since there is no apparent antecedent/ referent available for the third person reflexive.

ENGLISH

(4.68) *This paper was written by Ann and myself*.

(4.69) *This paper was written by Ann and yourself*.

(4.70) **This paper was written by Ann and himself*.

(4.70) would be perfectly acceptable if some male third person was the perspective holder of the sentence, or was present in the discourse in the same way as the first and second persons are in (4.68) and (4.69). The sentence (4.70) would then be embedded within a logophoric context, and the reflexive would have a first person referent.

Summary

Logophoricity is used in contexts where the thoughts, feelings or perceptions of a person other than the speaker are presented. This range of contexts is also relevant to the use of perspective logophors in languages like English. First and second person reflexives may be used without a c-commanding antecedent, as long as their antecedent is understood to be the primary ego with respect to the reflexive. Third person LDR is only permissible when some secondary ego is viewed from that secondary ego's POV.

4.3.2 Defining classes of logocentric predicates

In section 4.3 above, it was stated that a logophoric context is one in which a third person's thoughts, feelings or perceptions are presented. Several linguists have shown that languages with logophoricity allow only certain semantic classes of predicates to license a logophoric context, and that these verb classes are arranged along a hierarchy. Some languages allow only verbs of speech to license a logophoric context, others allow only verbs of speech and verbs of thought, and so on down a hierarchy. There have been at least two such hierarchies postulated, both of which were examined with respect to LDR in Strahan (2001). These are Culy's (1994) Logophoric Hierarchy and Stirling's (1993) Logocentric Hierarchy. A brief recapitulation of these hierarchies is given here, for a more detailed analysis, see Strahan (2001).

Culy (1994) goes to great length to show that his Logophoric Hierarchy can help predict whether a particular verb will license logophoricity in pure logophoric languages. A pure logophoric language, by his definition, is one in which there are logophoric markers (either pronouns or verbal inflections) which only function as logophoric markers. A mixed logophoric language is one in which the logophoric markers have other functions, such as showing reflexivity[13].

Culy's Logophoric Hierarchy

(4.71) Speech > Thought > Knowledge > Direct Perception

Culy shows that his hierarchy is not relevant to LDR, since LDR is by definition not a pure logophoric marker. Given the prevalence of LDR/ logophoric connections in the LDR literature, closer investigation of logophoricity with respect to LDR is warranted. Culy's logophoric hierarchy is also incomplete with regards to pure logophoric languages, as it ignores the class of verbs of psychological state which are used to license logophoricity in some of the languages he mentions as being pure logophoric languages, such as Ewe. Stirling's Logocentric Hierarchy includes this verb class, and is therefore worth investigating further with respect to LDR.

The four verb classes in Stirling's (1993) Logocentric Hierarchy are:

1) verbs of speech,
2) verbs of thought,
3) verbs of psychological state, and
4) verbs of perception.

These four classes of verbs will be called *logocentric verbs*, using Stirling's terminology, and are often discussed in the literature on logophoricity, as well as making up Stirling's (1993) hierarchy of logocentric predicates. These verb classes are mentioned with respect to logophoricity in some African languages (Culy 1994, Stirling 1993, Clements 1975, etc) and LDR in other languages such as Icelandic

[13] This could be more accurately stated as: Pure *logophoricity* is a logophoric system in which the logophoric markers function only to mark *logophoricity*, while mixed *logophoricity* is a system in which logophoric markers have other uses, such as marking reflexivity. Since 'pure logophoricity' is not logically incompatible with LDR, for example, a language could potentially have both. At this stage, however, I am not aware of any language that does have both pure and mixed logophoricity.

(Sigurðsson 1986), Latin and Classical Greek (Clements 1975), Japanese (Kameyama 1984) and Norwegian (Moshagen and Trosterud 1990, Hellan 1988, Strahan 2001).

Logocentric verbs may also be called 'reportive' verbs, as they are used in reported speech, that is, they may take utterances as arguments. Unfortunately, although these verb classes are used by many linguists, there is no categorical list or definition of these classes which may be applied cross-linguistically[14]. This study focusses on the distribution of LDR in Norwegian, so it is important to be able to identify logocentric predicates in this language. This section will attempt to create useable definitions of these verb classes, based upon both semantic and syntactic information. Arguments and evidence from Wierzbicka (1987), Rudanko (1989) and Levin (1993) will be instrumental in the following discussion.

Definitions of these four classes of verbs of speech, thought, psychological state and perception which appeal to semantic features rather than language-specific syntactic features are desirable for two main reasons. Firstly, these categories are referred to often by linguists. Culy (1994:1062) refers to the verb classes in the Logocentric Hierarchy as 'classes of semantic predicates'[15], yet there are no explicit definitions of the semantic components of these classes. To be applicable cross-linguistically, the underlying semantics must be known. Secondly, to be able to say that all complement-taking verbs of psychological state may license a logophoric context in Icelandic is not a useful comment, if the definition of a psych verb is that it licenses a logophoric context. This is a circular definition – it does not enable a linguist to predict whether a particular verb is a psych verb, and hence, also licenses a logophoric context and hence LDR. Since such infelicitous comments seem prevalent in the literature, I propose to collate linguists' intuitions on these four classes of verbs to ascertain whether they are in fact cohesively definable classes. This decision will be based upon the semantic method of componential analysis, plus the notions of factivity, presupposition and implicature.

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[14] There are some large-scale computational linguistic resource projects (eg CYC and Eurowordnet) which may eventually provide such categorical lists of definitions. I thank Fred Popowich (p.c.) for drawing this to my attention.

[15] Culy is referring to the fact that it is the meanings of the predicates in these classes, and not the words themselves, which license logophoricity. He cites an example from Ewe, where the expression *bu tame* literally means 'bow one's head', but is used to mean 'think', thus licencing logophoricity (Culy 1994:1062).

Many of the verbs in Wierzbicka's (1987) classic *English Speech Act Verbs* fall into the category of 'communication'. Unfortunately, no work like the Speech Act Verbs dictionary exists for the other logocentric verb classes, and neither is this thesis the place to do that. Here, however, I issue a challenge to linguists to continue Wierzbicka's dictionary work into other classes of words. The work on LDR-licensing predicates would be far simpler if the constituent components of the predicates were actually known! Since there is not the space here to conduct such a thorough investigation as Wierzbicka's into all the predicates identified as logocentric predicates, we must content ourselves with using basic intuitions, and hope that the paucity of solid definitions for these verb classes will be rectified elsewhere.

In giving the following lists as verbs of communication, thought, psych state and perception, I have called upon other linguists' judgements (Dr. Dominique Estival, Dr. Lesley Stirling and Dr. Nick Nicholas), as well as drawing on research and comments in Wierzbicka's (1987) *English Speech Act Verbs*, Goddard's (1997) *Practical Introduction to Semantic Analysis*, Levin's (1993) *English Verb Classes and Alternations*, Stirling's (1993) *Switch-reference and Discourse Representation* and Rudanko's (1989) *Complementation and Case Grammar*. The purpose of listing several verbs from each class together in this section, is to provide the basis for a definition for each of the classes[16]. The words under discussion are all English, with some Norwegian (namely the predicates which were included in the questionnaire used as the basis for collecting the Norwegian data for this study.) It has been shown above that these categorisations are used in the linguistic literature; now it is time to try and further characterise these classes.

Communication

ENGLISH

acknowledge, admit, affirm, agree, allege, answer, argue, assert, assure, certify, charge, claim, contend, declare, deny, divulge,

[16] According to Wierzbicka (1987), it is completely contrary to the ideal method of semantic analysis, to firstly list the predicates within a class, and then to attempt to define the class, but this is the task we are faced with. The preferred method of analysis is to group the predicates according to meaning components that have already been identified. In this regard, speech act verbs have been fairly well classified, while the other classes of predicates have not been, even though they are referred to regularly in the linguistic literature. The motivation behind the method of analysis being attempted here is to determine whether or not there are common factors between the predicates within each class of logocentric verbs, and whether these commonalties are definable in terms of factors like factivity and the thematic roles of the arguments.

emphasise, explain, grant, guarantee, hint, hypothesise, imply, indicate, insist, intimate, maintain, mention, point out, postulate, predict, promise, prophesy, remark, reply, report, reveal, say, state, suggest, swear, tell, testify, theorise, verify, vow, write

NORWEGIAN

be 'ask', *fortella* 'tell', *lova* 'promise', *omtala* 'mention', *seia* 'say', *snakka med* 'speak with', *snakka om* 'speak about', *spørra om* 'ask about'

Many of the verbs in Wierzbicka's *Speech Act Verbs* are verbs of communication. Although English has a plethora of these types of verbs, some languages have only a handful. All languages have the most basic speech act verb *say* (Goddard 1997:109). With this in mind, it is pleasing to note that all the verbs drawn from the literature and described there as verbs of communication are speech act verbs (apart from *write* and *mention*). These verbs all involve the feature 'say', ie 'communicate verbally', except for *write*[17].

Gropen et al (1989, cited in Levin 1993:210) suggested that these are all verbs of 'communication of propositions and propositional attitudes', while Levin (1993:204ff) also posits spoken interaction as a possible common meaning component these verbs all share. Goddard (1997:109) says that these verbs contain the link of being done *in* or *by saying something*, although this also encompasses some verbs of thought. Thus, *acknowledge* and *insist* are speech act verbs, while *whisper* and *shout* are not, because 'they describe *how* you say something rather than categorising what you are doing as you speak' (Goddard 1997:109). However, in spite of this claim, verbs like *whisper* and *shout* must be speech act verbs (and thus verbs of communication) in some sense, since they involve the meaning component 'say' and may take an utterance as an argument.

Speech act verbs nearly all have two types of components, which Wierzbicka refers to as the *dictum* and the *illocutionary purpose*. The dictum is the thing that is said, the

[17] It is not known whether other verbs of non-verbal communication license a logocentric context, such as *signal, wave, gesture,* etc. Rudanko (1989:77) also classifies verbs of non-verbal communication, eg *demonstrate, establish, indicate, prove, show,* etc, separately from verbs of verbal communication. They could be classed as cognitive verbs, however, they have not been cited in the literature on logophoricity and non-clause-bounded reflexivisation and will therefore be ignored.

illocutionary purpose is the reason deduced by the hearer as to why the speaker would say this. The illocutionary purpose of a particular sentence may therefore vary depending on the context. The meaning of a speech act verb may also include various assumptions, emotions, thoughts and intentions (Wierzbicka 1987:18), and it is these 'other components' that distinguish the different verbs.

The notion of calling this class Verbs of Verbal Communication seems to be a good one, as it brings in the notion of verbalising or saying. This is an important feature in all of the verbs in this category except for *write*[18]. With this in mind, it seems the definition should be more along the lines of 'linguistic communication'. This would then include writing, but exclude gestures, which are not described by verbs of reporting, and hence, not licensers of a logocentric context.

It is interesting to make the point that, were we to postulate a prototypical verb of linguistic communication, it would be *say*. This also happens to be the verb which is most commonly used as a licenser of a logocentric context, either as a verb, or as a grammaticalised function word homophonous with or derived from the word *say*. This is the case in Gokana, where *kɔ* is a complementiser derived from the verb *kɔ́* 'say' (Hyman and Comrie 1981:30; see Dimmendaal 1998, etc for arguments that this is not a grammaticalisation). 'Say' may be the prototype for this class of linguistic communication; in a componential analysis, 'say' could be said to be the common 'meaning component' of verbs in this class.

Syntactically, these verbs mostly take an Agent-like argument, plus a sentential complement. Verbs of linguistic communication are mainly non-factive.

Thought

ENGLISH

agree, believe, calculate, decide, deduce, discover, doubt, estimate, expect, figure out, forget, guess, hope, imagine, know, presume, realise, recall, reckon, remember, suppose, surmise, suspect, think.

[18] Peter Austin suggests that *write* may be thought of as 'visible speech' (p.c.).

NORWEGIAN

kjenna 'know (a person)', *tenka* 'think', *tru* 'believe', *veta* 'know (a thing)'

Verbs of thought concern things that go on in the mind or are internal, they are therefore mental verbs. Further, there is a cognitive aspect to these verbs in that the process they describe concerns knowledge, beliefs or decisions. This cognitive aspect also distinguishes these verbs from verbs of psychological state, discussed next.

Wierzbicka uses five of the verbs listed above as verbs of thought in her definitions of speech act verbs. These are *think, believe, know, expect* and *imagine*. Other canonical examples from this class include: *guess* and *learn*. It seems impractical to say that a prototypical verb of this class exists for either English or Norwegian, given that none of these verbs are reducible to another, while they all involve cognition.

Some of these thought verbs are classed by Wierzbicka as speech act verbs (*agree, calculate, decide, deduce, estimate, guess, presume, reckon, suppose, suspect*), due to the fact that (at least) one of their senses involves speech. This draws our attention to the fact that most words are polysemous, and that each sense of each verb should be categorised into one of the classes under discussion. This also explains the difficulty in assigning some words to an individual class.

Syntactically, verbs of thought may take either an Experiencer or Agent-like subject. Verbs of thought may be non-factive, eg *think* or semi-factive eg *forget*.

Psych Verbs

ENGLISH

admire, amuse, appeal to, be afraid, be certain, be clear, be evident, be interesting, be obvious, be odd, be sorry, be sure, care, judge (not *assess* - does not specify judgement or feeling that reflects outcome of assessment), *like, long, marvel, regret, want*

NORWEGIAN

lika 'like', *ville* 'will/ want'

Psych verbs have as arguments an Experiencer and, optionally, something like a stimulus, theme, cause or object or target of the emotion (Levin 1993:189). Levin

names four classes of psych verbs in English, although she adds that other verb classes, namely verbs of desire and some perception verbs, are also sometimes considered to be psych verbs, because of the Experiencer role of one of the arguments. The Experiencer role is thus important in determining whether a verb is a psych verb. The canonical examples from this class are *admire*, *want* and *like*, all of which express a positive attitude, ie they are assertive (although this is not a requisite feature of this class, eg *regret*[19]). Verbs of psychological state are mental or internal, as with thought verbs above, although they have an emotive element, while thought verbs have a cognitive, or ratiocinative, element.

The most important meaning components for verbs of psychological state are the mental and emotive components, plus the argument role of Experiencer. It is interesting that some verbs of perception such as *feel*, being adjacent to psych verbs on the Logocentric Hierarchy, have similarities to psych verbs, both semantically and syntactically.

Psych verbs are often true factives, eg *admire*, *be odd*, *regret* (but not *want* or *be afraid*, which are non-factive).

Perception

ENGLISH

feel, hear, look at, note, notice, observe, perceive, see, sense, smell, watch

NORWEGIAN

høyra 'hear', *sjå* 'see'

Verbs of perception describe a situation which involves the use of one of the senses. As stated by Levin (1993:187), they do not necessarily refer to the apprehension of something via a sense, merely the use of a sense – it is possible to *look at* something without *seeing* it. For some verbs of perception, such as *feel* and *sense*, the perceiver has an Experiencer role. In this way, these verbs of perception are similar to psych-verbs (Levin 1993:188).

[19] It could be said that *regret* asserts the negative aspect. This may apply to *doubt* and *deny* as well, which could be said to be negatively assertive, too.

The notions of direct and indirect perception make an important distinction within this category. It is well known that direct perception is factive while indirect perception is non-factive, eg *I heard Lucien walk in the door*, which is factive, as opposed to *I heard that Lucien walked in the door*, which is non-factive. This is the difference between having an Experiencer or an Agent-like subject. This difference between direct and indirect perception is included in Culy's (1994) Logophoric Hierarchy, since direct, but not indirect, perception licenses logophoricity in pure logophoric languages.

The canonical examples of this category are *see* and *hear*, which involve the use of different senses. These verbs are also both semantic primitives in Wierzbicka's dictionary, along with *feel* and *perceive.* Verbs of perception may also have a cognitive feature, such as *watch* or *listen to.* It seems impractical to say that a prototypical verb of this class exists (although see Alm-Arvius 1993:17-8, for arguments that *perceive* is the common meaning component of verbs in this class). The features of 'perceive' and 'through the use of a sense' will be used to define the class of perception verbs.

Categorising Logocentric Verbs

The verb types in the Logocentric Hierarchy may be categorised as shown in Table 4.1. Logocentric verbs may be linguistic, mental or sensory. Mental verbs may be cognitive or emotive (or even sensory). Thus we have the four categories of linguistic communication, mental/ cognitive (thought), mental/ emotive (psych state) and perceptory/ sensory (perception).

Table 4.1 - Classes of Logocentric Predicates, with examples

Verb class	**Communication**	**Thought**	**Psych State**	**Perception**
Non-factive	*say*	*think*	*want*	
Semi-factive		*realise*		*see*
True factive			*regret*	
Agentive argument	*say*	*think*		*watch*
Experiencer argument		*hope*	*amuse*	*feel*
Verb type/ definition	Linguistic Communication	Mental-Cognitive	Mental-Emotive	Perceptory/ Sensory

As Table 4.1 shows, the Logocentric Hierarchy is quite close to the factivity hierarchy, although neither is reducible to the other. That is to say that verbs of linguistic communication are non-factive, mental-cognitive verbs are non-factive or semi-factive, mental-emotive verbs are true factives, while verbs of perception are

semi-factive. Verbs of communication take an Agent-like argument, psych verbs take an Experiencer argument, while verbs of thought and perception may take either an Agentive or Experiencer-like argument.

Fuzzy Boundaries

The verb classes within the Logocentric Hierarchy do not have discrete boundaries, rather, they are better viewed as having fuzzy boundaries. There are several reasons for this. Firstly, some verbs are intuitively hard to categorise, for example *acknowledge, grant, vow, agree, promise* and *accept* have components of both communication and thought, in that it is possible to perform the acts described by these verbs both internally and communicatively. *Expect, hope, want, doubt, forget* and *pretend* have both cognitive and emotive elements, and therefore may be classed with both thought and psych-state predicates, while *notice, note* and *realise* are perception verbs, coupled with a cognitive element. On the border between psych-state and perception there is *feel* and *kjenna* 'feel, touch, know'. In some of these cases, it is different senses of the verbs that belong to two categories, such as *accept*, while in other cases, a single sense encompasses more than one category, eg Norwegian *kjenna* 'to know something is true because you feel it', *promise*, etc.

All of these 'borderline' cases belong to adjacent classes in the Logocentric Hierarchy. Furthermore, as mentioned above, verbs of desire and some perception verbs are also sometimes considered to be psych verbs, because of the Experiencer role of one of the arguments. There is obviously no clear-cut dividing line between these classes. The claim being made here then, is that, if a verb does not seem to fall wholly within one class on this hierarchy, then the two classes it is part of are adjacent. In this way, the hierarchy can be said to apply, even without discrete classes.

4.3.3 Summary

The names of the verb classes in the logocentric hierarchy have been restated, in order to make membership more obvious, and more easily applied cross-linguistically. 'Communication' is better referred to as 'linguistic communication', 'thought' becomes 'mental/ cognitive', while 'psych verbs' become 'mental/ emotive'. 'Verbs of perception' may be better understood as 'verbs of using a sense', or 'sensory' although this is the least problematic of the classes. An important feature of these verbs classes is that their boundaries are not discrete, rather they are fuzzy along the

hierarchy of linguistic communication > mental/ cognitive > mental/ emotive > perceptory/ sensory.

In conclusion, even though identifying these classes of verbs has been shown to be problematic, the class of *logocentric* verbs (or *reportive* verbs), which encompasses verbs of linguistic communication, mental/ cognitive and mental/ emotive verbs and perceptory/ sensory verbs, is still recognised as the class which licenses logophoricity. It was stated at the start of this section that Culy's (1994) study concluded that his logophoric hierarchy is not relevant to LDR. On the other hand, Stirling's logocentric hierarchy, which uses the verb classes introduced above (which are different to the verb classes in Culy's hierarchy), may be relevant. I therefore postulate the Logocentric Hypothesis (following), based upon Stirling's Logocentric Hierarchy, to be tested on the data collected for this study.

Logocentric hypothesis

It has been claimed that LDRs obey similar constraints to logophoric pronouns (Sigurðsson 1986, Reinhart and Reuland 1991, Clements 1975, Kameyama 1984, among others). If this is true, then a hierarchy of predicates which license logophoricity (based upon Stirling 1993) may also license LDR. The logocentric hypothesis is then that all logocentric verbs license LDR. Within the class of logocentric predicates, verbs of linguistic communication are most likely to license LDR, followed by mental-cognitive verbs, then mental-emotive verbs, then verbs of perception. Non-reportive predicates, ie non-logocentric verbs, will not license LDR at all.

PART III

Methodology

Chapter 5

5 Methodology

This chapter contains a description of the procedure used for obtaining the raw data for this investigation of LDR. I firstly discuss the questionnaire, which was used to obtain grammaticality judgements on 60 sentences from 180 Norwegian speakers. Some problems with this method of data collection are discussed, including the problem of interpreting the speakers' responses, and I give details of how these problems were addressed. I then describe the method used to store and analyse the data from the questionnaire. Data was also collected through an elicitation exercise, which 27 speakers completed. Finally, some naturally occurring data was collected by both myself and some philologically-trained informants.

Two types of hypothesis testing (Accept-Support and Reject-Support testing) are discussed in section 5.5.

5.1 Preparation for data collection

Preparing for the data collection phase of this research involved many separate issues, the two main ones being locating a large source of Norwegian speakers willing to be involved in the study, and secondly, ensuring that sufficient data was obtained during the fieldwork phase. To this end, several versions of the questionnaire were trialled during the pilot study, as well as methods for eliciting LDR in spoken language. The

creation of the questionnaire is explained in detail in sections 5.1.2, 5.1.3 and 5.1.4. Several large sources of willing informants were also located, these are discussed now.

5.1.1 Getting informants

The informants whose judgements constitute the core data of this study came from several sources. The main one was the Målførearkivet (discussed below). Other avenues were linguists in the universities I visited while in Norway on fieldwork, and a private network of people I met on my first trip to Norway, who agreed to act as informants for this study. Around 230 people responded to my request for informants, and 180 completed the questionnaire.

Målførearkivet

The Målførearkivet in Norway is a 'language variety archive' (my translation). It consists of a list of names and addresses of Norwegians who are both interested in language (in particular Norwegian dialects) and have agreed to have their addresses given to linguists for the purpose of answering questions about their dialects. These people are often elderly and/ or experts of their own dialect, in that many of them have collated word-lists for their region, or conducted deeper analyses of several features of their dialect. As such, the people on the Målførearkivet are often linguists or at least philologists, and make excellent informants. The Målførearkivet is currently directed by Professor Andreas Bjørkum at the INL (Department of Nordic languages and Literature) at the University of Oslo.

5.1.2 Creation of questionnaires

Obtaining grammaticality judgements about LDR from a large number of Norwegian speakers is a central part of this study. Very few, if any, studies of this kind have been carried out for languages other than English, so the design of the questionnaire to elicit responses relied heavily on running a pilot study to determine the usefulness of such a questionnaire. The pilot study is described in detail below. As well as the grammaticality judgements, information about the speakers themselves had to be elicited, in order for comparisons between speakers to be made. Here, the works of linguists such as Labov, Williams and Trudgill were invaluable in identifying extralinguistic factors which group speakers together. Norwegian linguists such as

Sandøy, Helleland and Papazian were also useful in this respect, for their books on Norwegian dialectology and dialectology in general.

Gathering information about the speakers

Dialectal and sociolectal studies in Norway are not uncommon. Therefore it was possible to research the literature and arrive at appropriate questions needed to elicit information which could be used to classify the speakers into groups which were known to have certain similarities in Norway. The factors most likely to influence a speaker's judgements were decided to be:

- the speaker's age
- their sex
- their dialect
- their level of education
- whether they are a native speaker of the dialect
- whether both of their parents were native speakers of the speaker's dialect

While it is generally accepted that a speaker's age, sex, level of education and the linguistic variety they identify with affect their speech, it is less common for the idea of 'nativeness' to be taken into consideration. Jensen (1961), in his study of West Norwegian word accent production and recognition, showed that only speakers who could be considered native speakers of their particular dialect and whose parents were both also native speakers of that dialect gave truly consistent data. The effect of having one parent who was not a native speaker of the dialect in question in some cases resulted in the loss of the two word accent distinction by that speaker. For this reason, speakers in this study were asked to identify the dialects that each of their parents spoke, as well as to answer questions which would help to identify any source of cross-dialectal contamination in their speech, in particular through having spent considerable time away from their dialect area.

Also considered important was the speaker's attitudes towards nynorsk and bokmål, as they might indicate a preference for archaic features such as LDR[1] if they identified more with nynorsk than bokmål. A precedent for administering the questionnaire in

[1] Moshagen and Trosterud (1990) identify LDR as an archaic feature retained in some dialects from Old Norse.

both nynorsk and bokmål is available. Creider (1987, see also Creider 1986) conducted a study on the structural and pragmatic factors influencing the acceptability of sentences with extended dependencies in Norwegian, ie

(5.1) *Hva visste ingen hvem som skrev?*
What knew nobody who that wrote
'What did nobody know who wrote?'

In his study, Creider used questionnaires to elicit grammaticality judgements from 59 speakers from the Trøndelag fylke. He also administered the test in the preferred language (nynorsk or bokmål) of each speaker. He notes (p19) that nynorsk is the 'more conservative of the two written languages' and that this might affect the speakers' judgements.

Sociological information about each speaker in my study was also elicited via a questionnaire. In the questionnaire, some questions required the informants to check one (or more) boxes beside their response, others were open-ended. A brief section of the questionnaire (translated into English) is given in Figure 5.1.

Figure 5.1 – Sample of questionnaire

About you:

Name (not compulsory): _____

Age: ☐ under 15 ☐ 15-20 ☐ 21-25 ☐ 26-40 ☐ 41-60 ☐ 61+

Today's date: ____ / _____ / 199___
day month year

Dialect

1) Do you have a name for your dialect? _____
2) Do you speak a dialect of nynorsk or bokmål?
☐ nynorsk ☐ bokmål
3) How many people do you think speak your dialect? _____
4) Do you normally write in nynorsk or bokmål?
☐ nynorsk ☐ bokmål
5) Which is easier for you to read?
☐ nynorsk ☐ bokmål ☐ both are okay

By using a mixture of closed- and open-ended questions, the data was able to be collated quite quickly without undue loss of accuracy. The full version of this

questionnaire is included in Appendix 1. Both the nynorsk and the bokmål versions are included, plus an English translation.

Gathering the LDR data

After researching current theories on LDR in the linguistic literature (as described in Part II of this thesis), several features were decided upon as the most likely avenues for profitable research. These factors are finiteness, factivity, logocentricity and the apparent subject-orientation not only of LDRs, but also of clause-bounded reflexives. It was also discovered in the pilot study that there appeared to be distributional differences between the possessive and accusative reflexives *sin* and *seg*. These factors were combined to produce sixty test sentences. Some of these sentences used a pronoun instead of a reflexive, to act as control cases, or 'easy cases' for the informants, to ensure they didn't just accept or reject everything.

The questionnaire was devised to elicit information about the antecedent of anaphors in the test sentences, plus grammaticality judgements on the test sentences. The questions were framed in terms of closed-answer questions, to enable simpler comparisons, but with the option for the speaker to suggest their own alternative if they so chose. This style of questionnaire was tested in a pilot study, described here.

5.1.3 Pilot study

The data for the pilot study for this investigation was obtained from several different sources, using several different methods on five separate occasions. A total of seven native Norwegian speakers representing four different LDR dialect regions[2] were consulted, with judgements obtained via questionnaires, group discussion and outright questioning. The pilot study had several aims. One of these was to determine whether information on dialectal variation with regards to LDR may be obtained via the use of a questionnaire. Another aim was to do preliminary testing of the hypotheses raised in the review of the literature to ascertain whether a deeper investigation into these areas was warranted[3].

[2] Speakers from Valen and Bergen, Smøla and Ålesund, Porsgrunn and Asker, and Grimstad participated.

[3] See Strahan (2001) for an analysis of the pilot study data in terms of the Logocentric Hierarchy.

The development of the questionnaire is described below. There were five stages in the development of the final questionnaire. A sample from the pilot questionnaire is included, along with notes on the method of recording and analysing the data from the pilot study. Some problems with this methodology are also mentioned, as well as an outline of the ways these problems were minimised during the actual data collection.

Stage 1

The first set of data for the pilot study was obtained from questionnaires and discussion at an interview with speakers P1, P2 and P3. These speakers had all lived in Australia for six to twelve months at the time of the interview, and were considered bilingual. The interviews were conducted entirely in Norwegian.

Each speaker (P1, P2 and P3) received a different questionnaire. Each questionnaire was divided into three sections; the first part concerning the speaker's dialect, the second part consisting of sentences to be given grammaticality judgements and finally sentences to be translated. This took about half an hour to complete in all. Next, sentences which contained examples of LDR considered grammatical in at least one dialect of Norwegian (Moshagen and Trosterud 1990) were read by the speakers and discussed. This section was recorded on an audio cassette with the permission of the speakers. Finally, twelve sentences containing instances of long-distance binding of *seg* from dialects in Trøndelag and Nord-Trøndelag (from Moshagen and Trosterud 1990) were discussed. This was also tape recorded.

The pilot questionnaire

The first section of the questionnaire elicited information about the speaker that was considered relevant to obtaining an accurate description of the speaker's dialect, such as places of residence of both the speaker and their parents, education, and preferred reading and writing language/s (nynorsk or bokmål).

The second section was the first draft of the questionnaire. It consisted of fifteen to twenty sentences which contained a reflexive (*seg*, *sin*) or pronominal element (*han*, *ho*, *dei* 'he, she, they'). Three different questionnaires were devised to elicit more data. Each speaker in the first pilot interview therefore answered a different questionnaire. Judgements were elicited in the following manner: A sentence was presented to the speaker. This was followed by a question with a multiple-choice answer which was supposed to determine whether the sentence parsed well or not.

The final choice for each question was always "I don't understand the sentence. (Better: .....)", allowing the speaker to indicate whether the sentence was understandable or not (taken to indicate ungrammaticality), and/ or whether there was a more natural way of phrasing the sentence. If a question was answered, and the speaker indicated a "better" way of saying the sentence, the sentence was given a question mark (?). An example question from questionnaire 2 is given in Figure 5.2.

Figure 5.2 – Sample from pilot study questionnaire

Jon snakka med seg.
J spoke with R
'Jon spoke with himself.'
Who did Jon speak with?

☒ Jon
☐ someone else

☐ the sentence is fine in my dialect
☒ the sentence is a bit weird
☐ the sentence is very weird
☐ the sentence cannot be said in my dialect

☐ I don't understand the sentence
☒ I would have said: ..*Jon snakka med seg sjølv*.. 'Jon spoke with himself'…

The grammaticality judgement for the above sentence would therefore read:

?Jon snakka med seg. 'Jon spoke with himself'

plus *Jon snakka med seg sjølv*. 'Jon spoke with himself'

The third section of the initial pilot interview consisted of seven sentences in English which use reflexives of some form or another. These sentences were taken from Faltz (1985), and demonstrated (at least some of) the primary uses of reflexives in English. The translations furnished by the Norwegian speakers showed variation within these sentences. P1 seemed to have a preference for *seg sjølv* over *seg*, while P2 was the opposite. P3 used only two reflexives in the seven translations, one of which was the basic reflexive or compulsory reflexive *seg* (cf Reinhart and Reuland 1993 'SE reflexive'), which neither of the other speakers used. The translations show that *sjølv* often seems to be optional, as it was used by two of the speakers when the third speaker (P2) omitted it.

Stage 2

A follow-up questionnaire (Questionnaire 4) was filled in by two original speakers (P1 and P3) plus a fourth speaker (P4) about three weeks after the first interview was conducted. P4 came from Bergen. Questionnaire 4 was a selection of sentences which the speakers had responded to differently. P4 filled in a form about her dialect, then answered this questionnaire.

Stage 3

A list of sentences was sent to P5, who lives in Valen in the Hordaland fylke. She returned the list to me with each sentence labelled as *okay* 'okay', *tja...* '?maybe', *nei!* 'no!', and sometimes an explanation concerning coreference where it was otherwise unclear from the response. These responses were added to the judgements obtained from the questionnaire responses.

Stage 4

This stage consisted of P6 filling out a revised questionnaire in my presence. P6 comes from Porsgrunn. His responses on this layout, coupled with consultations with my supervisors resulted in the final questionnaire.

Stage 5

A native speaker of the Smøla dialect (discussed by Moshagen and Trosterud 1990 as being a Norwegian dialect with LDR) was located and presented with the sentences given in the Moshagen and Trosterud paper, plus other sentences from the questionnaire. His judgements were also added to the other speakers' judgements, as speaker P7.

Recording and analysing the data from the pilot study

The first interview where the original questionnaires were completed and further discussion took place was at the Melbourne residence of one of the speakers in July 1998. I remained at the table with the three speakers for the duration of the interview, to answer questions and take note of any problems they had with the layout. This proved to be a good idea, as their queries were able to be answered immediately, as well as them suggesting possible improvements to the layout of the questionnaire and phrasing of the questions. Questionnaire 4 was filled in at another speaker's house. I remained in attendance that time, too. Two speakers gave judgments on sentences

from overseas. One of these was a linguist, and the other was one of my informants from my Honours thesis, hence both of them understood was what required of them when asked to give grammaticality judgements and to indicate coreference in a list of sentences. A final speaker answered a questionnaire over lunch in Lygon Street near the university.

Problems with the methodology of the pilot study

As mentioned above, data obtained from the pilot study questionnaires did not give a good indication of the degree of uncertainty or acceptability each speaker felt about a sentence. To combat this, I tried to be present when informants filled out the final questionnaires. The questionnaire was also altered to allow varying degrees of acceptability in the speakers' judgements. Getting several speakers from the same area, so their responses could be dealt with as a group, was also of major concern. This was also addressed in the actual study.

Another concern was that some speakers could misinterpret the instructions accompanying the questionnaire, as happened with speaker P4. To minimise this problem, the instructions were rewritten. I was present as often as possible when informants filled in the final questionnaire, and I went over judgements with the speakers whenever practical to ensure that I had properly understood what their responses meant. Informants who completed the final questionnaire via email received only a few questions at a time. In this way, obvious misinterpretations were able to be corrected before many judgements had been given (ie if the speaker accepted every sentence and did not write any comments at all, I was then able to discuss with them whether they had fully understood the instructions).

Summary

Speakers from seven different towns in Norway provided grammaticality judgements on the acceptability of certain sentences containing reflexives for the pilot study. A questionnaire was developed that elicited clearer grammaticality judgements from speakers during the main data collection phase of this study, and steps were taken to ensure valid responses from speakers in the actual data collection phase.

5.1.4 The final questionnaire

The final questionnaire contained 60 sentences which varied according to the number of clauses, finiteness, factivity, logocentricity, the presence or absence of a first person pronoun, whether they used a pronoun or a reflexive anaphor and whether the anaphor was accusative or possessive. The sentences used in the final questionnaire are included in Appendix 2, with nynorsk, bokmål and English versions. To illustrate the style of questioning, a sample question is included here (in the English translation).

Figure 5.3 – Sample question from LDR questionnaire

3. Sille visste ikkje om skina sine hadde blitt stjålet.
Sille knew not whether skis.the R had been stolen
'Sille didn't know whether herself's skis had been stolen.'
Whose skis had maybe been stolen?

☐ Sille's
☐ someone else's

☐ the sentence is fine in my dialect
☐ the sentence is a bit weird
☐ the sentence is very weird
☐ I don't understand the sentence

☐ the sentence cannot be said in my dialect
☐ I would have said: ……

The layout is very similar to the pilot study questionnaire. The main difference between the two versions is that the second last and third last alternatives have been swapped. 'I don't understand the sentence' was judged to be in the grammaticality hierarchy of the second group of alternatives, while 'the sentence cannot be said in my dialect' was more related to the speaker's dialectal intuitions and what they felt comfortable saying in the third group of alternatives. This change was only minor, but the speakers who participated in the pilot study felt the final layout was clearer than the initial setup. The data obtained from the completed questionnaires was entered into a database as soon as possible after completion. (The database is explained in section 5.3.)

5.1.5 The elicitation exercise

To support any potential results from the questionnaire, an elicitation exercise was created. This was a cartoon story about four people, designed to create contexts where

an LDR might be used. The story (nynorsk, bokmål and English versions) is included in Appendix 3. A transcription of all the speech of the speakers who completed this exercise is included in Appendix 4.

The story begins with one male figure thinking of a female person and expressing the thought that he liked this female. In the second frame, he wonders whether she likes him, too. The story continues in this vein, with the four characters going out to dinner and ends with one of them having a bingle in a car belonging to one of the other characters. The informants were required to tell me, as a third party, what was going on, without reading the comic out word for word. In this way, if a speaker had any LDR, it might be revealed by the 'indirect reporting' style of several third persons needed for the exercise.

The elicited stories were recorded onto audio cassette using a recordable walkman, which were transferred onto CD at a later date. The interviews took place in the informants' homes or workplaces.

5.2 Collecting the data

The main body of data (completed questionnaires) was collected via three methods. The first method was emailed questionnaires, secondly ordinary mail questionnaires, and finally, questionnaires completed in my presence during my fieldwork. 30 speakers completed the questionnaire via email, 53 via ordinary mail, and 87 in my presence. The responses on the questionnaires were interpreted to determine the grammaticality of each sentence, according to each speaker. Judgements of speakers who completed the questionnaire in my presence or via email were double-checked, to ensure the speakers gave consistent responses. The way this was done is discussed next.

5.2.1 Interpreting grammaticality judgements

When the questionnaires were received back from the informants, their responses had to be interpreted. Some responses, such as which antecedent was chosen, or any comments made by the informant, could be recorded without further interpretation at this stage. But since most of the informants were not linguistically trained, the

questionnaire was designed to elicit grammaticality judgements which had to be interpreted in a systematic way.

Judgements recorded on the questionnaire

The questionnaire asked informants to rate each sentence on a scale, from 'this sentence is fine in my dialect' to 'I don't understand the sentence'. The full scale (translated into English) is as follows.

1 this sentence is fine in my dialect
2 this sentence is a bit weird
3 this sentence is very weird
4 this sentence cannot be said in my dialect
5 I don't understand the sentence
6 I would have said: ……..

Each speaker checked a box beside one or more of these judgements, as well as checking a box beside the antecedent they chose. It had been anticipated that choice 1 would lead to the judgement being 'fine', choice 2 would give ?, choice 3 ?*, 4 *and 5 ??. However, it was found, through talking with the informants about their choices, that the difference between 'a bit weird' and 'very weird' did not always equate to a ? or *grammaticality difference, and the other judgements were also not as straightforward. A method needed to be devised which enabled results from each speaker to be compared with others' without going through every single question with every single speaker to ascertain the judgement. This was done in consultation with most speakers who completed the questionnaire in person, ie about half of the total informants who participated in the study.

'Fine'

If the 'fine' box was checked, with no comment added, the judgement recorded was 'fine'. If the 'fine' box was checked and a comment was added, the recorded judgement depended on the comment. If the same anaphor (ie pronoun or reflexive) was used and only minor changes were made, eg -a ending on infinitive replaced with an -e, then the judgement recorded was 'fine', and the minor changes were ignored, since they bore no relevance to the behaviour of the anaphors. If a different anaphor was used, ie a pronoun instead of the given reflexive, or vice versa, then the checked

'fine' box was ignored, and the judgement recorded as *, unless the alternative was accompanied by a comment like 'also possible:'.

'Bit weird'

If the 'bit weird' box was checked, and no comment added, the judgement was recorded as ?. If a comment was added, then the judgement depended on the anaphor suggested and the syntax of the suggested sentence. If the same syntax was used, and the same anaphor, the judgement was recorded as 'fine'. If the same syntax was used but a different anaphor, the judgement was recorded as ?*. If different syntax was used, ie if a speaker completely paraphrased the sentence, then the judgement was recorded as ??, indicating that their response did not give a clear judgement on the use of that type of anaphor in that position.

'Very weird'

If the 'very weird' box was checked, and no comment added, the judgement was recorded as *. If the same syntax was suggested as an alternative, and the same anaphor, the recorded judgement was 'fine'. If the same syntax was suggested, but with a different anaphor, then the judgement was recorded as *. If different syntax was used, then the recorded judgement was ??, as with the 'bit weird' box.

No judgement

If a speaker suggested, as the only alternative, a sentence with different syntax, this was deemed to be no judgement on the sentence, so ?? was recorded, unless the box 'cannot be said in my dialect' was checked, in which case the judgement recorded was *.

If a speaker did not check a grammaticality box, then their suggestion was taken to be the only possible option, unless they stated otherwise.

5.3 Storing the data

Once the data was collected from the informants, it was entered into a database in Microsoft Access. This database consists of three main *tables* where the data is stored and *queries* run on these tables to collate the data.

5.3.1 Tables

Three tables were created for storing the data collected for this study. The first table is a list of the sentences used in the questionnaire, with attributes such as the factivity of the main predicate included as fields. A full list of the fields in this table is given in Table 5.1.

Table 5.1 – Sentences table

Field	Type of data
Sentence ID	sentence number 1-60
sentence	text of the actual sentence used in the questionnaire
gloss	gloss of the sentence
gen/acc	whether the anaphor in the question is genitive or accusative
pron/R	whether the anaphor in the question is a reflexive or a pronoun
finiteness	finite/ non-finite
log pred	linguistic communication/ mental-cognitive/ mental-emotive/ perception/ non-logocentric
factive	true factive/ semi-factive/ non-factive
1st pers pron	whether the sentence contains a first person pronoun (yes/ no)

The second table in the database is the list of informants and information pertaining to their dialect. A full list of the fields in this table is given in Table 5.2.

Table 5.2 – Informants table

Field	Type of data
speaker ID	3-digit speaker identification number
date interviewed	the date the data was collected from each speaker
age	chosen from a scale: 15-20/ 21-40/ 41-60/ 61+
sex	male/ female
dialect	the actual dialect (if any) each informant said they spoke
LDR region	the dialect region the speaker's dialect is from, assigned to each speaker after consideration of the information given by the informant
speaks	elicits whether the speaker thinks their dialect is closer to nynorsk or bokmål
writes	the speaker's preferred writing language: nynorsk/ bokmål/ either
reads	the speaker's preferred reading language: nynorsk/ bokmål/ either
city/ country	whether the informant speaks a city or country dialect. A figure of 20,000 speakers for a dialect was chosen, above which the informant was 'city', below which, 'country'
education	level reached: never begun high-school/ begun high-school/ finished high-school/ begun tertiary education/ finished tertiary education
native speaker	native speaker (of the dialect in question)/ some interference/ non-native speaker; assigned to each speaker based upon factors such as place of birth and time spent away from this area
parents	both native parents/ not both native parents; assigned to each speaker based upon factors such as parents' dialects, their places of birth and time spent away from this area.
LDR	the percentage of sentences where the speaker accepted or suggested an LDR

The final table in the database contained the data obtained from the questionnaires. The fields in this table are given in Table 5.3.

Table 5.3 – LDR data table

Field	Type of data
speaker	the speaker's identification number – linked to the speaker ID in Informants table
question	the number of the sentence – linked to the sentence ID in Sentences table
judgement	how the informant judged the presented sentence: fine/ ?/ ?*/ */ ??.
ante	whether the antecedent nominated by the speaker was in the same clause as the anaphor (SD), a higher clause (LD) or was a discourse antecedent (dc)
anaphor	the anaphor nominated by the speaker: pronoun/ reflexive/ *seg sjølv* or a combination of these, referring to different antecedents
alternative	any comments by the informant
LDR	Value = good/ bad/ blank; non-clause-bounded reflexive (*seg*/ *sin*)
SDR	Value = good/ bad/ blank; clause-bounded reflexive (*seg*/ *sin*)
dcR	Value = good/ bad/ blank; discourse-bound reflexive (*seg*/ *sin*)
LDpron	Value = good/ bad/ blank; pronoun with non-local antecedent
SDpron	Value = good/ bad/ blank; pronoun with local antecedent
dcpron	Value = good/ bad/ blank; pronoun with discourse antecedent
LDss	Value = good/ bad/ blank; non-clause-bounded reflexive (*seg sjølv*)
SDss	Value = good/ bad/ blank; clause-bounded reflexive (*seg sjølv*)
dcss	Value = good/ bad/ blank; discourse-bound reflexive (*seg sjølv*)

These three tables stored all the information about the sentences, the speakers and the judgements which could then be accessed via queries.

5.3.2 Queries

Queries were run on these tables to establish correlations between pieces of data collected from the informants. Simple select queries, find duplicates queries and crosstabs enabled the 10,800 records in Table1, the 60 records in Sentences and the 180 records in Informants to be easily compared.

To identify whether LDR regions existed, the percentage of **[LDR = 'good']** sentences was obtained for each speaker using a query in Access. These scores became the speakers' LDR score, and were saved in table **[informants]**. The lowest score was 8 by speaker 348 from Skånevik in Vestlandet, the highest score was 70 by speaker 386 in Trondheim. Interestingly, neither of these speakers were classed as 'native speakers' of their dialect[4]. The native speaker with the highest LDR score of

[4] Nick Nicholas (p.c.) suggests that the high acceptability of LDR by these speakers could be due to hypercorrection. I am inclined to agree with this opinion.

68 was speaker 109 from Leksvik in Sør-Trøndelag[5], while the native speaker with the lowest LDR score of 10 was speaker 424 from Nissedal in western Telemark.

5.4 Comparing LDR scores

After the LDR scores were created, they were compared against other speakers' scores to identify regions with similar levels of use of LDR, which I refer to as the LDR regions. The starting point for creating the LDR regions were the broad dialect regions initially mentioned in Part I of this thesis, including the regions of Vestlandsk, Østlandsk and Nordnorsk. Østlandsk was then divided into Trøndersk, Østlandsk and Midlandsk, Vestlandsk was divided into Nord Vestlandsk, Vestlandsk and Sørlandsk, and Nordnorsk remained in one part. These divisions occurred after comparing each speakers' scores with other speakers' scores from a) within the same LDR region, b) from nearby areas and c) against the scores of speakers from other regions. In this way, the LDR regions were adjusted to best reflect the LDR scores of the speakers. By comparing the means of each region when speakers were 'moved' from one region to another, the 'best fit' was achieved. This is the closest to cluster analysis that was possible over the geographical area. It was considered that postcodes could be used, and to the extent that this was possible, they show that the regions created by this method are reliable.

The speakers' scores were able to be compared quite simply within Access, using the queries and reports functions. In Access, two queries were created which selected only the required speakers, their LDR scores and their region. The first query selected all speakers while the second one selected only native speakers (of a particular dialect). Native speakers are defined as speakers who have both native parents, who are twenty-one years of age or older, and who have lived all or most of their life in their native area. From these two queries, reports were created, which automatically calculated the average LDR scores for each LDR region.

Each speaker in each region was compared and moved into neighbouring regions, to see how the LDR averages were affected. If a speaker from a particular area seemed to have a score which patterned like a neighbouring region rather than the one he or

[5] The next highest native-speaker was informant 328 from Vårdøl in the Lom kommune in Midlandet with a score of 54.

she was in, then all neighbouring speakers from the same kommune (‘parish’) were likewise tested. The decision to include a kommune in a region other than the generally accepted one was based upon the native area of my informants and their parents. Most of the kommunar which were placed in a region other than the broadly accepted one had both speakers and speakers’ parents from that kommunen, both indicating that their intuitions were at odds with the original region’s. The result of this work are isoglosses showing the boundaries of identifiable LDR regions. These are presented in the next chapter. Firstly, however, we will have a brief look at hypothesis testing.

5.5 Hypothesis testing

Theoretical linguists do not often do large-scale empirical data collection, not as often as applied linguists do, anyway. Therefore, we need to know something about the types and methods of hypothesis test available.

The main type of hypothesis testing done in this thesis is known as RS testing, or *Reject-Support* testing. The strategy behind this type of testing begins with the assumption that the hypothesis to be tested is *false*. This assumption, or null hypothesis, is called *H0*. Using statistical analysis, if H0 can be shown to be likely to be untrue, then the original hypothesis is likely to be true. In other words, ‘by rejecting H0, you support what you actually believe’ (Statsoft 2000:2). The other type of hypothesis testing is known as AS testing, or *Accept-Support* testing. In this case the null hypothesis is that the researcher’s theories are correct.

5.5.1 Errors in hypothesis testing

Both types of hypothesis testing need to be insured against two types of errors, commonly known as Type I error and Type II error (Statsoft 2000:3). Ideally, both these errors should be kept as low as possible. A Type I error in RS testing is a false positive for the researcher’s theory, that is, the researcher falsely rejects the null hypothesis. A Type II error in RS testing is the false acceptance of the null hypothesis, in other words, a correct theory is ignored because it not confirmed. In AS testing, a Type I error is false negative, while a Type II error is a false positive. These are the opposite of RS testing.

Type I errors in AS testing are most commonly encountered when the sample size *N* is too large. In such cases, the researcher almost invariably ends up rejecting the null hypothesis (that the proposed theory is correct), since even trivial differences between the data and the hypothesis may obscure the generalisation. Correlational tests, which compare the statistical distribution of two or more factors to identify similar trends, do not work well with AS testing, as the sample size of populations being AS tested is usually too small (only around 50). Correlational tests are most accurate when the sample population is large. This investigation has a sample size of 180, which does not provide enough leverage for many correlational tests. This is why it is not feasible to test all the hypotheses against all the variables (of age, education, sex, parental background and regional dialect), and why 'regional dialect' has been chosen as the main variable.

5.5.2 Power analysis

Statistical power is associated with Type II error. The official definition is

(5.2) power = 1 - [Type II error].

One problem associated with both RS and AS hypothesis testing is the result of 'too much power', ie if the Type II error is kept 'too low'. In RS testing, this results in trivial effects appearing highly significant, in AS testing, this results in highly accurate generalisations being rejected. Since RS testing will be used in this thesis, there is the danger that non-significant effects will be taken as proof of support for a hypothesis. To counter this, I will only assume a hypothesis to be proven if there is support from more than one piece of data. This will reduce the risk of trivial effects appearing more significant than they actually are.

5.5.3 Significance testing and confidence intervals

RS and AS hypothesis testing are only of use in accepting or rejecting a null hypothesis. They do not offer any kind of 'degree' of acceptance or rejection for one important reason. If a probability *p* is calculated to be 0.075, this could represent one of two things. This could represent a powerful effect within a small sample, or it could be a trivial effect operating within a huge sample (Statsoft 2000:10). Since sample sizes and proportions vary from study to study, and even within the same study, if

several effects are being examined, this means that one literal value of *p* is not comparable to other literal values of *p*. Significance testing is inappropriate for AS and RS testing. Instead, reporting of confidence intervals is preferred (Statsoft 2000:10). For this reason, I will not be citing *p* values in the analyses of the data, rather, I will give means, standard deviations, and confidence intervals, since these are far more informative for the type of hypothesis testing I am doing.

Significance tests do not divulge information about correlations such as 'highly significant' or 'nearly significant'. They give a purely dichotomous result of 'significant' or 'not significant' (Statsoft 2000:10). Confidence intervals, on the other hand, convey more information about the data and 'in a more naturally useable form' (Statsoft 2000:11) than significance tests. However, it is more common for researchers to report results as being 'significant at the 0.001 level' than that 'there is a 95% probability that the population mean is between 0.005 and 0.612', even though the confidence interval measurement gives a far better indication of the data than the significance level.

In this study, the confidence intervals are quite large, reflecting the spread of LDR means in each region. A good follow-up study would be to identify groups within these regions whose LDR means have a narrower spread. However, this kind of study would require many more samples from each group than was achieved here, and is unlikely to occur.

5.5.4 Hypotheses in this study collated

There have been several hypotheses about the use of LDR in Norwegian postulated in this thesis. These are listed here. The results of the quantitative testing of these hypotheses are presented in the next chapter.

1. There is dialectal variation as regards the use of LDR in Norway.
2. LDRs are monomorphemic.
3. Reflexives in general are subject-oriented.
4. Finite Tense is a barrier to movement of LDRs.
5. The indicative mood is a barrier to movement.
6. There is more than one binding domain for anaphoric elements.
7. *Seg* and *sin* have the same binding domains.

8. A hierarchy of factivity licenses LDR, where non-factive predicates are most likely to license LDR, followed by semi-factive then true factive predicates.
9. LDRs refer to the perspective holder of a sentence. Reflexives also have a different meaning to pronouns, which is reflected in and reinforced by the semantics of perspective.
10. The logocentric hypothesis is that verbs of linguistic communication are most likely to license LDR, followed by mental-cognitive verbs, then mental-emotive verbs, then verbs of perception. Non-reportive predicates, ie non-logocentric verbs, will not license LDR at all.

PART IV

Exploring the data

Part IV is divided into three chapters. In Chapter 6, the questions of dialectal and sociolectal variation with regards to the use of LDR in Norwegian is examined. In Chapter 7, the syntactic hypotheses which were raised in Part II are tested against the data. In Chapter 8, the non-syntactic hypotheses postulated in Part II are tested. A summary of these findings is provided collectively in Chapter 8, section 8.3 (p214). The perspective hypothesis is not tested in Part IV, rather, the issues surrounding perspective and the meanings of reflexives and pronouns are considered in detail in Part V.

Chapter 6

6 Overview of informants

There are 180 speakers in this study, who gave responses to 60 sentences via a questionnaire, either via email or in person. This sample of the Norwegian population is described in this section.

The information about each speaker's background was obtained by questionnaire, which they received in either nynorsk or bokmål, depending on which they preferred. The style of the questionnaire was described in the Methodology chapter (section 5.1). Information was obtained about each speaker's dialect, their place/s of residence and education, their parents' dialects and their familiarity with nynorsk and bokmål. Copies of the questionnaires (both the nynorsk and the bokmål versions) are included in Appendix 1 and 2, along with English translations.

The questionnaire contained 50 biclausal (or triclausal) sentences, meaning that a speaker could potentially give LDR responses 50 times. The mean acceptance/ suggestion of LDR for all speakers was 15 times, or 30% of these sentences. The mean LDR scores for groups of speakers classed by sociological characteristics is also included in this section.

Recall that there are seven LDR regions postulated, which correspond broadly to Sørlandsk, Østlandsk, Midlandsk, Vestlandsk, Nordvestlandsk, Trøndersk and Nordnorsk. When referring specifically to the LDR regions, abbreviations (S, Ø, ML, V, NV, Tr and NN respectively) are used in this thesis, to avoid confusion with the established names, whilst retaining the mnemonic tool.

The sample number N of speakers from each region, and the percentage of speakers from each region in this study are given in Table 6.1. The region with the largest sample population is Ø with 43 representatives. A similar number of speakers were sampled from V (41). The smallest sample population is from S with only nine speakers sampled.

Table 6.1 – Number and percentage of speakers in this study from each region

LDR Region	**N**	**%**
Tr	32	18
ML	15	8
V	41	23
NV	24	13
Ø	43	24
NN	16	9
S	9	5
Total	180	100

6.1 Regional influences on the use of LDR in Norwegian

There are two main influences on a speaker's language which depend upon geographical factors. These are the regional location of the speaker's home, and whether that is in the city or the country.

6.1.1 Dialect region

To evaluate the hypothesis that there is dialectal variation as regards the use of LDR in Norway, the null hypothesis is postulated that there is no correlation. By examining the LDR scores of the speakers in this study, this null hypothesis is evaluated and shown to be likely to be false, hence supporting the original hypothesis.

Table 6.2 shows the average LDR scores for speakers in each region. N is the number of speakers, upr/ lwr refers to the upper and lower range of scores, StDev is the standard deviation from the mean, 95% is the range minus 5% outliers, 90% is the range minus 10% outliers, and a dash (–) means the data is not available.

Table 6.2 – LDR scores of speakers in this study from each region

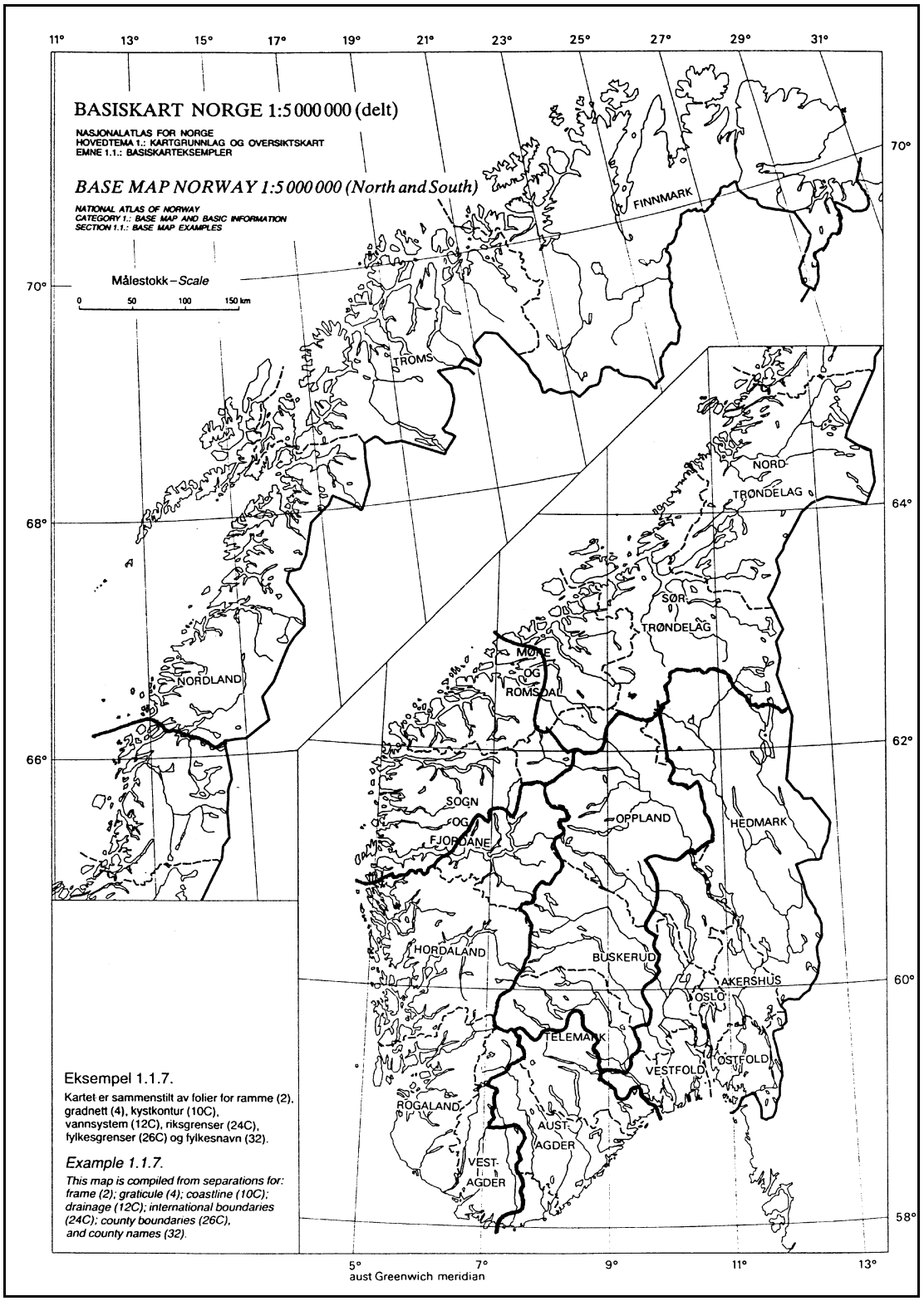
LDR region	**100%**			**Mean**	**StDev**	**95%**			**90%**		
	N	**upr**	**lwr**			**N**	**upr**	**lwr**	**N**	**upr**	**lwr**
Tr	32	70	14	37	14	30	70	22	29	48	18
ML	15	54	16	32	12	14	48	16	13	44	16
V	41	52	8	30	8	39	46	12	37	42	20
NV	24	48	12	28	6	23	36	12	22	36	18
Ø	43	62	16	28	10	41	50	18	39	42	18
NN	16	50	14	27	9	15	42	14	14	32	14
S	9	42	10	22	10	–	–	–	8	34	10
Total	180	70	8	29.7	10.8	162	70	12	162	48	10

Results from Table 6.2 show that the null hypothesis, that there is no correlation between dialect and LDR usage, is likely to be false, since the LDR score does vary from region to region in a more or less contiguous fashion. Therefore these results indicate that there is correlation between dialect and the use of LDR.

Speakers from Tr used LDR the most, followed by ML speakers. This is consistent with the examples of LDR in Norwegian taken from the literature, which have mostly been from Tr dialects (Moshagen and Trosterud 1990 cite LDR over a finite clause boundary in use on Smøla, Sandøy 1992 contains examples of LDR in the speech of people from Romsdal and Trøndelag. All of these areas are classed as Tr in this thesis). Speakers from S used LDR the least frequently. This is also consistent with what is known about S from the literature. As we saw above, S has been influenced by Danish to a greater extent than other dialects. Since Danish does not use LDR (Moshagen and Trosterud 1990), it is unsurprising that neither does S.

As described in the Methodology chapter, the LDR regions do not correspond exactly to the broad dialect regions as commonly accepted. Over the next few pages, the differences between the broad dialect regions and the LDR regions are made explicit. The regions of Ø, S, ML, V, NV, Tr and NN are given in Figure 6.1 on the next page.

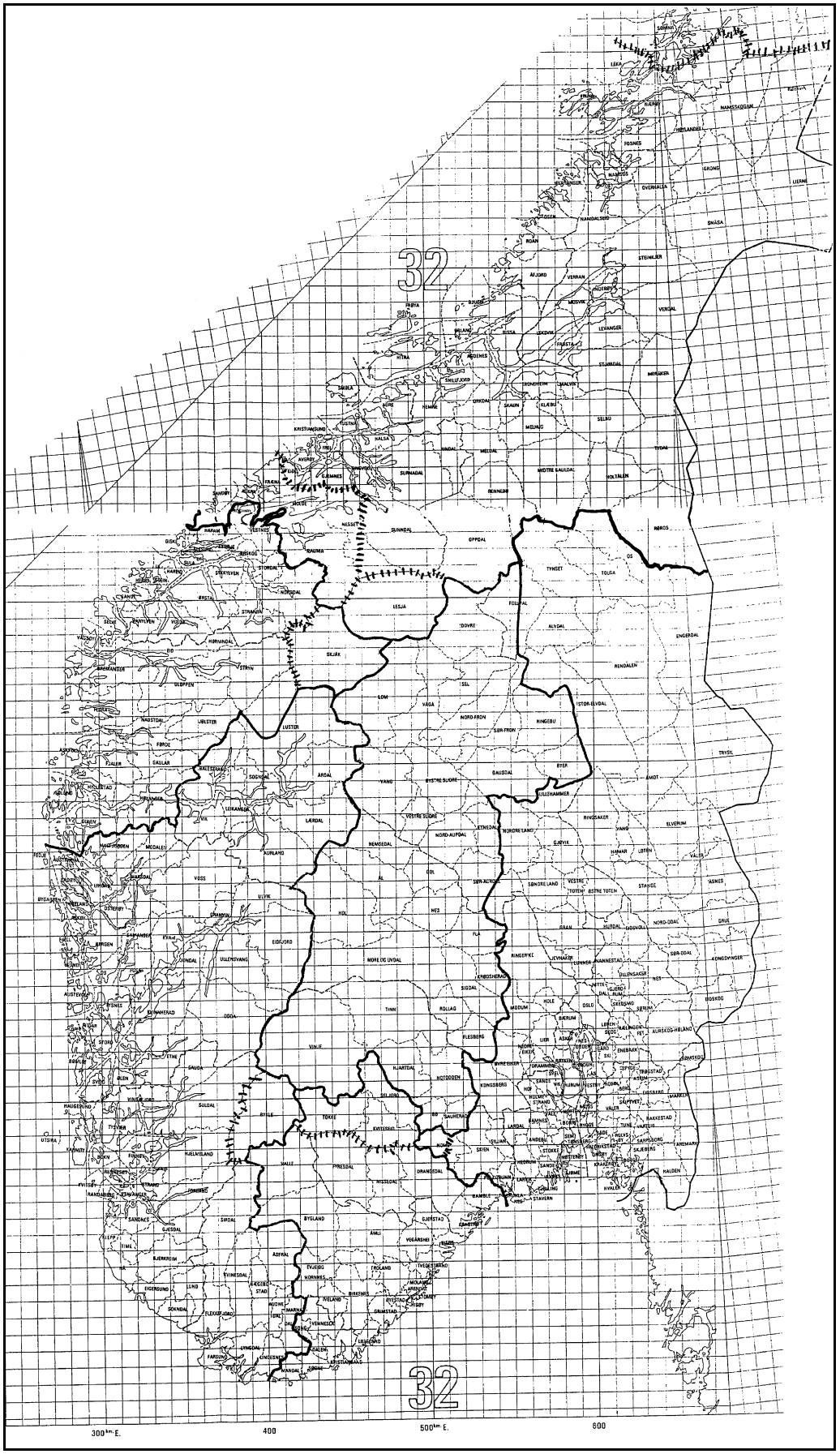
Figure 6.1 – Isogloss of LDR regions in Norway



The descriptions of these LDR regions are based upon the larger scale maps, following. The heavy lines indicate LDR regional boundaries, while the dotted lines show the boundaries for the broad dialect region as is generally accepted. It can be

seen that the LDR boundaries follow the broad dialect boundaries quite closely for the most part.

Figure 6.2 – Detailed map of Southern Norway



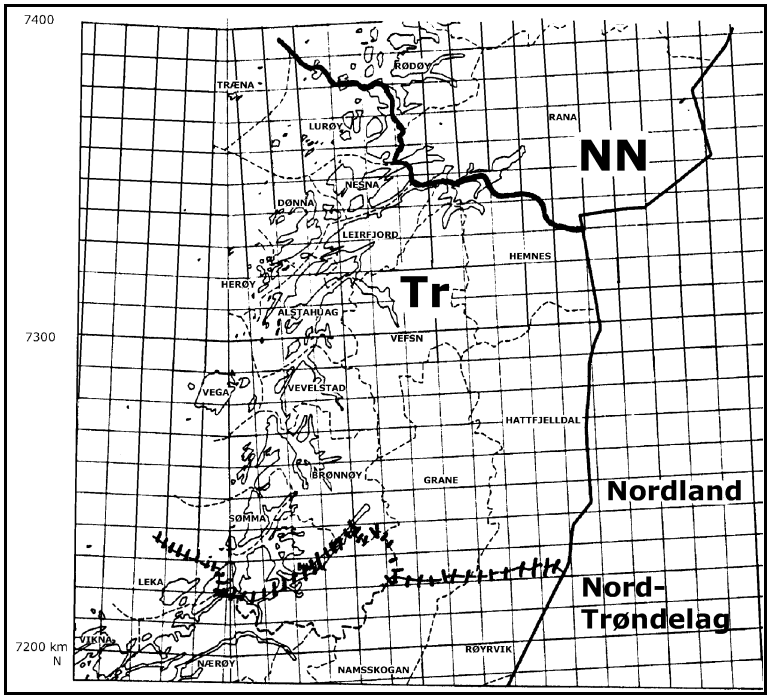
As shown in Figure 6.2, the kommunar of Tokke, Kviteseid and Seljord, normally a part of Midlandet, are grouped here with S. Bykle kommune, normally part of Sørlandet, groups with V instead. As well, Nome, which lies half in Østlandet and half in Midlandet, is entirely within Ø in this isogloss.

Further north, at the border between the fylke of Møre og Romsdal, Oppland and Sør-Trøndelag, Skjåk from Opplandet groups with NV, while Lesja from Opplandet and Rauma and Nesset from Møre og Romsdal group with Tr.

Sandøy (1992:103) in his textbook on Norwegian dialectology identifies NN, Tr and NV as regions in Norway which have LDR, although he only gives examples of LDR from Trøndersk and Romsdalsk. Although Romsdal is traditionally regarded as being a part of Nord Vestlandet, both of these are classified as Tr by my investigation. Sandøy does not give an example of LDR from NN.

The final adjustment to be made to the established dialect boundaries to create the isogloss for the distribution of LDR is at the boundary between Tr and NN (see Figure 6.3). Instead of more or less following the fylke border between Nord-Trøndelag and Nordland, the divide is north of Helgeland, following the northern border of Hemnes, Leirfjord, Nesna, Lurøy and Træna kommunar. Interestingly, this border almost exactly follows the divide between different realisations of the toneme (word accent) categories, as identified in Fintoft et al (1978:202).

Figure 6.3 – LDR and 'normal' boundaries between NN and Tr



6.1.2 City/ country

Speakers who said they spoke a dialect of a town with more than 20,000 inhabitants are classified as 'city', otherwise they are 'country'. 20,000 inhabitants is the number required for a Norwegian town to be classed as a *by* 'city'. The places classed as 'city' in this study are: Oslo and surrounding urban region, Bergen, Trondheim, Kristiansund, Molde, Ålesund, Tromsø and Leirvik on Stord. The distribution of city and country speakers in this study is shown in Table 6.3.

Table 6.3 – Number and percentage of speakers from city and country areas

City/country	**N**	**%**
City	51	28
Country	129	72
Total	180	100

There are several differences between the speech of speakers from the city and those from rural areas (see for example Torp 1999, Skolseg 1999). City and town dialects are nearly always more prestigious than non-city varieties[1]. Innovations are more

[1] Norway is slightly unusual in that dialectal variation is actively encouraged (Sandøy 1992:16-7, Hellevik 1998). The city/ country split may therefore not be as clear-cut as in other countries. Speakers' attitudes towards nynorsk and bokmål (the two official written 'languages', nynorsk being more representative of country, bokmål of city) may be more indicative of a speaker's likelihood of having/

common in city dialects. In the country it is usual to find a more archaic form of the language spoken, and when there is change, it is generally towards the variety spoken in the cities (Vikør 1999, Faarlund 1999, Sandøy 1992), whose residents are regarded as speaking 'better' (Trudgill 1995).

LDR is an archaic form, inherited from Old Norse (Moshagen and Trosterud 1990). Those varieties of Norwegian which are the most conservative are therefore the most likely to have retained this feature. Moshagen and Trosterud's (1990) squib on the use of LDR in Norway over the past two centuries showed that the use of LDR has declined in Norway most in the cities and in the areas physically closest to Denmark, ie S, Oslo, etc. The data collected for this study confirms this, although the actual difference in acceptance of LDR between city and country speakers is not great (less than three percentage points). Table 6.4 shows the LDR scores of speakers from city and country areas in Norway.

Table 6.4 – LDR scores of speakers from city and country areas

City/	**100%**			**Mean**	**StDev**	**95%**			**90%**		
country	**N**	**upr**	**lwr**			**N**	**upr**	**lwr**	**N**	**upr**	**lwr**
City	51	70	12	27.7	9.2	48	40	12	46	40	16
Country	129	70	8	30.6	11.2	123	50	10	116	46	10

As predicted above, speakers from the country used LDR more often than speakers from the cities. The difference between the city and country speakers is not great, however it is significant since it supports the idea that LDR is less accepted in the cities than in the country.

6.2 Sociological influences on the use of LDR in Norwegian

Other influences upon each speaker's language which were measured in this study include their sex, their age, their level of education, their parents' linguistic backgrounds, and their attitude towards nynorsk and bokmål[2].

using LDR than the actual city/ country division. This will be looked at in section 6.2.6 Attitudes towards language.

[2] The sample size of speakers used in this study does not allow for regional information to be taken into account in conjunction with these factors. Clearly, this would be a useful direction for further research.

6.2.1 Sex

Many researchers have uncovered evidence indicating that males and females speak differently (in particular Trudgill 1995 is an interesting reference). In Norway, Fintoft and Mjaavatn (1980, cited in Sandøy 1992) investigated the use of 12 variables in the speech of 50 Trondheim speakers. It was discovered that men used Trondheim forms 80% of the time, while women only used them on average 46% of the time. This was particularly evident in the use of the first person pronoun, where men used the Trondheim form /æ:/ in 90% of cases, while women used this in only 41% of cases. Women preferred the form /jei:/ (which is the Standard Oslo pronunciation of the first person pronoun).

Other examples of studies which have revealed differences in the speech patterns of men and women include a study of the speech of the two sexes in two suburbs of Oslo from 1971 to 1976 (Jahr 1981:339, cited in Sandøy 1992). It was found that women in the city or *tettstadar* 'built-up areas' nearly always use the more prestigious form, while men use the local dialect. On the other hand, a study of speech differences between the sexes in small country towns (*bygder*) and country areas by Stemshaug (1972, cited in Sandøy 1992) showed that there is little difference between the speech patterns of males and females in country areas.

> *Menn og kvinner snakka stort sett likt, og i den grad ein kunne finne forskjell, brukte kvinnene dei mest arkaiske formene i dialekten… forklaringa er at mennene, som var fiskarbønder, var meir ute frå bygda enn kvinnene, m.a. på sesongfiske.*
> 'Men and women spoke generally alike, and to the degree one could find a difference, it was the women who used the most archaic forms in the dialect… the explanation for this is that the men, who were fishermen, were out of their village more often than the women, for example during the fishing season.'
>
> ([Stemshaug 1972:56], cited in Sandøy 1992:144, my translation)

This career-influenced difference between the speech of men and women in country areas is likely to be even less apparent today, as gender equality throughout the workforce is closer today than it was. Still, female speakers are found to use 'forms considered to be 'better' or more 'correct' than those used by men' (Trudgill 1995:72).

Therefore, if there are differences to be found regarding the use of LDR by men and women in Norwegian, we would expect the women to use the 'more correct' form. Since this is usually the city form, we would expect women to use less LDR than men, because LDR (as it was shown in Table 6.4 on page 171) is used less often in the city than the country. In particular, city women and men could be expected to show more differentiation in their use of LDR than country men and women. Let us check the data to see if these predictions are correct.

There are approximately even numbers of men and women involved in this investigation. Table 6.5 shows this distribution, along with the confidence intervals of the average LDR scores for each sex.

Table 6.5 – LDR scores of speakers grouped by sex

Sex	**100%**			**Mean**	**StDev**	**95%**			**90%**		
	N	**upr**	**lwr**			**N**	**upr**	**lwr**	**N**	**upr**	**lwr**
Female	76	70	28	29.2	10.2	72	54	14	68	44	14
Male	81	70	14	30.6	12.0	77	50	14	73	46	14
–	23	52	12	29.2	7.8	22	36	12	21	36	20

As predicted, females did use less LDR on average than men, as the Mean column in Table 6.5 shows, although the difference is minimal (less than 2 percentage points) and probably not significant. However, if we compare the difference between the sexes for country and city speakers, we get the data in Table 6.6.

Table 6.6 – Sex of speaker versus city/ country home for LDR averages (N in brackets)

LDR	**City**	**Country**
Female	26 (25)	30 (51)
Male	29 (18)	31 (63)

Table 6.6 gives data that matches what was predicted above. In the country there is little difference in the use of LDR between the sexes, while in the cities, men are more inclined to use LDR than women.

6.2.2 Age

The informants in this study were divided according to their age. Speakers above 61 years of age are considered to represent the previous generation's version of the dialect. 21-40 year olds and 41-60 year olds are the middle brackets of speakers, who have established speech patterns. There are also several speakers in the 15-20 age bracket. These divisions are similar to the ones used by TAUS-studies in Oslo ([Jahr

1981:339ff] cited in Sandøy 1992:147). The number of speakers in each bracket in this study is presented in Table 6.7.

Table 6.7 – Number and percentage of speakers grouped by age

Age	N	%
15-20	12	7
21-40	48	27
41-60	64	36
61+	54	30

The greatest number of speakers in this study are in the 41-60 age bracket, although the distribution in the three main age groups of 21-40, 41-60 and 61+ is not unbalanced.

Since LDR is an archaic feature of Norwegian, it is expected that older speakers will use more LDR than the younger speakers, whose language is also far more influenced by a media standard. To the extent that one exists, a 'standard Norwegian' is representative of city speakers, who, as noted above in Table 6.4, use less LDR on average than country speakers. Table 6.8 shows the LDR scores and confidence intervals for each age bracket.

Table 6.8 – LDR scores of speakers grouped by age

Age	100%			Mean	StDev	95%			90%		
	N	upr	lwr			N	upr	lwr	N	upr	lwr
15-20	12	52	12	28.2	10.5	11	36	12	10	36	14
21-40	48	70	8	28.3	11.9	46	54	8	43	42	8
41-60	64	70	14	29.9	10.5	61	48	14	58	44	16
61+	54	50	10	31.3	10.2	51	50	16	49	50	20

These LDR scores are interesting, since they suggest that, overall, and ignoring all other potentially interfering factors, older people do accept more LDR than younger people. And in fact, speakers aged 21-25 had an LDR average of 28, while speakers 26-40 averaged a 29 LDR score, indicating that the trend is consistent over the age groups. It can therefore be said that, although there is not a great deal of difference between the use of LDR through the different age groups, the LDR scores are consistent with the prediction that older speakers tend to accept more LDR than younger speakers.

6.2.3 Education

A person's level of education is often used as an indication of their sociolect. A person's occupation is also often used instead of the level of education reached, or a mixture of both level of education and occupation is another option, following Trudgill (1995:23-4), who says that 'social classes are generally taken to be aggregates of individuals with similar social and/ or economic characteristics'. However, the speakers' occupations were not obtained, so the level of education only will be used.

Table 6.9 shows the distribution of the education level reached by informants in this study.

Table 6.9 – Number and percentage of speakers grouped by education[3]

Education	N	%
Never begun high-school	10	6
Begun high-school	20	11
Finished high-school	22	12
Begun tertiary education	14	8
Finished tertiary education	102	57
Total	168	94

The greatest percentage of speakers in this study were tertiary educated. It will be interesting to see if this group of speakers has different LDR results to speakers without a tertiary education. Table 6.10 shows this data.

Table 6.10 – LDR scores of speakers grouped by education (1 = no high school, 2 = some high school, 3 = finished high-school, 4 = some tertiary education, 5 = completed tertiary education, – = data not available)

Education	100%			Mean	StDev	95%			90%		
	N	upr	lwr			N	upr	lwr	N	upr	lwr
1	10	70	24	38.2	12.5	–	–	–	9	48	24
2	20	52	8	30.8	10.7	19	46	8	18	52	20
3	22	50	16	29.1	10.1	21	46	16	20	46	16
4	14	54	12	28.4	13.0	13	48	12	12	42	12
5	102	70	10	28.7	10.2	97	48	14	92	16	46
–	12	50	26	32.5	8.2	11	50	26	10	36	26

Table 6.10 contains very exciting data, as it shows a clear correlation between the level of education a speaker reached and the acceptability of LDR to them. Speakers who never began high-school have an LDR average 10 percentage points above

[3] In the questionnaire, the term *high-school* was actually *vidaregåande skule*, while *tertiary education* was called *universitet*.

speakers who have begun tertiary eduction. Recall that the sample population average for this study is 30 LDR percentage points. Table 6.10 shows that people who had finished high-school have an average slightly lower than the national average, while those who had begun but not (yet) finished high-school were slightly above the national average.

The next intriguing question is to see how each speaker's age and their level of education correlate with their use or acceptance of LDR. Again, basing our predictions upon known factors such as LDR being an archaic feature, and the fact that education is more easily obtained nowadays than it was for speakers in the 61+ age bracket, we expect that older (61+) speakers who had little formal education would be the most accepting of LDR, with younger speakers and the tertiary educated showing the most standard variety. Table 6.11 shows LDRs scores for the speakers according to their age and level of education.

Table 6.11 – Level of education versus age for LDR scores (N in brackets)

Education	**15-20**	**21-40**	**41-60**	**61+**
Never begun high-school		28 (1)	53 (2)	35 (7)
Begun high-school	29 (11)	8 (1)	34 (3)	36 (5)
Finished high-school		26 (6)	28 (8)	32 (8)
Begun tertiary education	14 (1)	29 (10)	31 (3)	
Finished tertiary education		29 (29)	29 (77)	28 (29)

As Table 6.11 clearly shows, speakers aged 41 and over who have not completed high-school have average LDR scores considerably higher (53, 34, 35 and 36) than the national average of 30. It is also interesting to observe that, in the 61+ age bracket, only the group of speakers with a tertiary education scored below average LDR use, while all others had above average LDR scores. Table 6.11 indicates that age and level of education are both relevant factors in predicting the degree to which a speaker accepts LDR, although only less than/ greater than age 40, and whether or not the speaker had begun (but not finished) high-school are the important boundaries as regards LDR use.

6.2.4 Parents

Studies have shown that where a person's parents come from greatly influences the degree to which a speaker can be considered a native speaker of a dialect. Jensen (1961), in his study of word accents in West Norwegian dialects (the area covered by the V region in this thesis), showed that the most important factor concerning the

parents' input into their child's language was whether or not both parents were native speakers of the child's dialect. If only one parent was native, this was shown to affect the recognition of word accents in the dialect of the speaker. Thoengen (1999) and Rudi (1999) who investigated the dialects spoken in Hallingdal and Gudbrandsdalen in ML with regards to dialect change also mention the background of the parents as a major contributing factor to a speaker's dialect. Table 6.12 shows the number of speakers with both native parents (BNP) and not both native parents (NBNP) of the speaker's dialect in this study. These abbreviations are used by Jensen (1961).

Table 6.12 – Number and percentage of speakers grouped by 'nativeness of parents'

Parents	**N**	**%**
Both native parents (BNP)	110	61
Not both native parents (NBNP)	65	36

As indicated in Table 6.12, about twice as many speakers in this study had parents who both spoke the same dialect as themselves, as speakers who had parents where only one or neither spoke the same dialect as themselves. Many speakers said their parents spoke different dialects to themselves, even (or especially!) if their parents were from neighbouring towns two or three kilometres away. This information was used to decide whether the speaker had both native parents (BNP) or not both native parents (NBNP), as it seems to be a good indicator of the speakers' acceptance of LDR[4]. Table 6.13 shows the LDR scores and confidence intervals of speakers grouped according to whether both parents were native speakers of the informants dialect or not.

[4] Originally it was thought that if the speaker's parents came from the same dialect region as the speaker, then this would indicate whether the speaker had both native parents or not. However, sorting the informants in this way showed little variation with respect to the speakers' LDR scores, which contradicted what has been said in the literature about the influence of parents' speech on their children. It was decided that the speakers themselves are reliable judges of whether their parents speak the same dialect as themselves, and the LDR scores based on this decision indicate that this is the case.

Table 6.13 – LDR scores and confidence intervals of speakers grouped by parents (BNP = both parents are native speakers of the informant's dialect, NBNP = not both parents are native speakers of the informant's dialect)

Parents	100%			Mean	StDev	95%			90%		
	N	upr	lwr			N	upr	lwr	N	upr	lwr
BNP	111	70	8	31.1	10.6	105	50	14	100	46	14
NBNP	65	70	12	27.3	10.9	62	48	12	59	36	12
–	4	44	26	32.5	7	–	–	–	–	–	–

Speakers with NBNP were less accepting of LDR (average = 27) than speakers with BNP (average = 31). Another obvious question is whether this variable is relevant to each LDR region. And, in fact, Table 6.14 shows that speakers do have a good idea of whether their parents speak the same dialect as them.

Table 6.14 – Dialect versus nativeness of parents for LDR scores

LDR region	BNP	NBNP
Tr	40 (20)	33 (10)
ML	34 (7)	27 (6)
V	30 (23)	30 (17)
NV	30 (11)	21 (5)
Ø	29 (25)	26 (18)
NN	29 (18)	24 (6)
S	22 (6)	21 (3)
Average	31 (110)	27 (65)

The data in Table 6.14 is quite astounding. Speakers with BNP have consistently higher LDR averages than speakers with NBNP (except for in V where the averages are the same). Tr speakers with BNP have an LDR average of 40, which is 10 percentage points above the sample population average and 3 percentage points above the region average of 37. The LDR average of ML speakers with BNP also rose from the ML average, from 32 to 34. Little or no change is recorded for speakers from V and S from their respective averages, while speakers with NBNP from NN, Ø and NV had considerably lower averages than their BNP counterparts. This data supports the notion that LDR is an archaic feature of Norwegian, as speakers with less interference (ie with BNP) use more LDR than speakers who have had more interference (with NBNP). This supports the idea that LDR is less acceptable in standard Norwegian than in regional dialects. Speakers with more access to a wider variety of dialects use less LDR than those who have had less contact with other varieties. This was also the case with the level of education. The further a person went with formal education, the more likely they were to come in contact with dialects other than their own.

6.2.5 Collating the sociological factors

Based upon the data so far, it seems that speakers from ML and Tr, of either sex, from the country, with BNP, aged 41+, who didn't finish high-school, will use the most LDR. So, let's select just these speakers, and see who we come up with.

Table 6.15 – Results of query selecting only: dialect = ML or Tr; city/ country = country; parents = BNP; age = 41+, education = never begun/ finished high-school

Dialect	City/country	Sex	Parents	Age	Education	Speaker
ML	country	m	BNP	61+	never begun high-school	455
ML	country	m	BNP	61+	never begun high-school	467
ML	country	f	BNP	61+	never begun high-school	505
Tr	country	f	BNP	41-60	never begun high-school	311
Tr	country	f	BNP	61+	never begun high-school	362

There are five speakers who fit this description. Their LDR scores are given in Table 6.16.

Table 6.16 – LDR scores of speakers selected in Table 6.15

Speaker	LDR
311	70
362	48
455	30
467	24
505	42

In fact, the two male speakers, 455 and 467, have lower than average scores, while the three female speakers, 311, 362 and 505, do have higher than average scores. The data from the three females will therefore be used as a starting point in the analysis of data in Chapter 11, since they are assumed be representative of speakers who typically have high acceptance of LDR.

6.2.6 Attitudes towards language

The use of nynorsk is highly charged in Norway with strongly patriotic feelings. Each speaker's attitude towards nynorsk and bokmål, in particular which language they prefer to write in and which they find easier to read, should provide a good indication of a person's attitude towards what they believe is 'true Norwegian' (or 'old-fashioned', depending on their point of view). It is possible that speakers who identify more with nynorsk will show a higher acceptance of LDR than non-nynorsk people will, since LDR is an archaic feature inherited from Old Norse. Categorising speakers' attitudes towards nynorsk and bokmål is potentially important, as it may

reveal much about a person's likelihood of accepting and using LDR. Nynorsk is understood in Norway to be representative of 'the people's language', of non-city dwellers, and it has considerable political implications for many people. Questionnaires for this study were mainly filled out in nynorsk (75%).

Informants in this study who say their dialect is more closely related to nynorsk than bokmål far outnumber the reverse, as Table 6.17 shows. Those who say their dialect is closest to nynorsk do have a higher LDR average (30) than others (27).

Table 6.17 – Number and percentage of speakers grouped by language spoken

Speaks	N	%	LDR
Both	11	6	27
Bokmål	43	24	27
Nynorsk	120	67	30

However, a far greater proportion write bokmål than say they speak it. About one-third of the sample population who said their dialect is closer to nynorsk actually normally write in bokmål, as shown in Table 6.18. Again, those who prefer to write in nynorsk have a higher LDR average (31) than those who prefer to write in bokmål (29) or who have no preference (29).

Table 6.18 – Number and percentage of speakers grouped by language written

Writes	N	%	LDR
Both	15	8	29
Bokmål	83	46	29
Nynorsk	81	45	31

The majority of people in this study (61%) said they read both languages equally as well. Half this number (32%) said they found bokmål easier to read. This is shown in Table 6.19. It seems curious that those who prefer to read nynorsk actually have the lowest LDR average (27), below those who prefer to read bokmål (29), and those who have no preference (31). I have no explanation for this apparent anomaly.

Table 6.19 – Number and percentage of speakers grouped by language read

Reads	N	%	LDR
Both	110	61	31
Bokmål	57	32	29
Nynorsk	12	7	27

It is also interesting to look at the combinations of which language Norwegians consider their dialect to be closer to, which they normally write, and which they find easiest to read. We can predict, based upon Table 6.17, Table 6.18 and Table 6.19 that

speakers with the highest LDR average will be those who say their dialect is closest to nynorsk, who prefer to write in nynorsk, but who read both nynorsk and bokmål equally well. Table 6.20 shows the results of the informants' preferences.

Table 6.20 – Number and percentage of speakers grouped by language spoken, written and read, with their LDR score. (Groups of only one or two informants are not included in this table.)

Group	Speaks	Writes	Reads	N	%	LDR
1	bokmål	bokmål	bokmål	29	16	26
2	bokmål	bokmål	both equally	12	7	31
3	both	nynorsk	both equally	3	2	23
4	both	bokmål	both equally	3	2	26
5	both	both	both equally	5	3	27
6	both	bokmål	bokmål	5	3	42
7	nynorsk	nynorsk	nynorsk	12	7	27
8	nynorsk	bokmål	bokmål	20	11	29
9	nynorsk	bokmål	both equally	14	8	31
10	nynorsk	both	both equally	9	5	31
11	nynorsk	nynorsk	both equally	63	35	31
Total				175	99	30

The following observations may be made about the data in Table 6.20. The most accepting speakers of LDR with an average of 42 are group 6 – those who say their dialect is similar to both nynorsk and bokmål and who prefer to write and read bokmål. The lowest average of 23 is from group 3 – those who say their dialect is close to both nynorsk and bokmål, who prefer to write nynorsk and read both equally easily. Group 11 represents the grouping of factors identified in our prediction above to be the most tolerant of LDR. This is not entirely true, although the LDR average of 31 is the second-highest average of the groups identified here, and is slightly above the sample population average of 30.

The informants' attitudes to nynorsk and bokmål as measured here, are not as indicative of their LDR use as the factors of age, level of education, their LDR region, their parents' linguistic background and whether they are from the city or the country.

This concludes the overview of the informants, whose grammaticality judgements constitute the backbone of this thesis.

Chapter 7

7 Syntactic hypotheses

In reviewing previous accounts of LDR, several common assumptions were identified. These claims have often been treated as facts, which have then served as the basis for theoretical explanations of the phenomenon of LDR, such as the claim that 'only monomorphemic anaphors may be LDRs' resulting in theories that have mechanisms restricting binding of non-monomorphemic anaphors. In the review of syntactic accounts of LDR in Chapter 3, seven such hypotheses were identified. Six of these hypotheses are empirically testable on the Norwegian data gathered for this study. They are:

- LDRs are monomorphemic.
- Reflexives in general are subject-oriented.
- Finite Tense is a barrier to coindexation of LDRs.
- There is more than one binding domain for anaphoric elements.
- *Seg* and *sin* have the same binding domain

The hypothesis that reflexives are bound through a link with Infl is also briefly addressed.

The empirical testing of each of these hypotheses shows that they are all defeasible. The basic assumptions used in the syntactic accounts are not applicable to all varieties of Norwegian spoken by my informants. Syntactic accounts of LDR are therefore flawed in a fundamental way – namely that they are based upon tendencies rather than accounting for all of the actual observable data. At best, the assumptions reflect typological tendencies, and at worst, they ignore other important, non-syntactic generalisations.

Some results from the responses to the questionnaire given to my informants, as they pertain to the syntactic hypotheses identified earlier, will be presented now. For each hypothesis, results are given as percentages within each LDR region, and of my informants overall. Recall that there are 180 speakers' judgements involved in creating these results.

7.1 LDRs are monomorphemic

The claim that LDRs are often monomorphemic is cited often in the literature (eg Everaert 1991, Hestvik 1992, Cole, Hermon and Sung 1990, Huang and Tang 1991, Anderson 1986, Reinhart and Reuland 1991, etc). This claim is testable against the data collected for this study.

Recall from the Methodology chapter that the data was collected through the use of questionnaires, which were necessarily inexplicit in some respects. Sentences were presented to informants with the monomorphemic reflexive *seg*, never with *seg sjølv*. The informants were asked for a grammaticality judgement on the version of the sentence containing *seg*. Percentage figures given as results in this chapter for the *seg* versions of the sentences are therefore representative of the rate of approval of *seg* in that environment, while percentage figures for the non-monomorphemic anaphors represent the rate of *suggestion* of *seg sjølv* as a better substitute for *seg*, not the rate of 'approval' of *seg sjølv* . The actual rate of acceptance of *seg sjølv* with a non-clause-mate antecedent can therefore be expected to be higher than the figures given here.

Speakers did not always propose *seg sjølv* as a better alternative to a monomorphemic possibility, although this was often the case. Some speakers also indicated that both *seg* and *seg sjølv* were acceptable with a non-local antecedent. The number of speakers who would accept both *seg* and *seg sjølv* in a particular instance is probably actually higher than that implied by the rate of suggestion alone, since not all speakers who would accept both *seg* and *seg sjølv* gave this information[1].

Seg sjølv has been termed a 'closeness anaphor' by Hellan (1988, 1991), meaning that it must always be locally bound. Other linguists have also mentioned the local binding properties of Norwegian *seg sjølv* (often referred to as the bokmål version *seg selv*), such as Dalrymple (1993:22), Hestvik (1992b:99) and Reinhart and Reuland (1993). The reason *seg sjølv* must have a local antecedent, say some syntacticians, is because it is not monomorphemic (eg Reuland and Koster 1991, Hestvik 1992).

[1] Sometimes this was elicited afterwards, however, since I could not go over every questionnaire with every informant, there are bound to be some speakers who would accept both *seg* and *seg sjølv*, although this was not indicated in their responses.

Nine test sentences elicited responses which cited a non-clause-mate antecedent, but used *seg sjølv*, a bimorphemic anaphor, instead of the monomorphemic *seg*. These sentences are 10, 16, 28, 30, 32, 36, 40, 44 and 46. These are listed in Table 7.1.

Table 7.1 – Sentences where speakers suggested '*seg sjølv*' with a non-clause-mate antecedent as an acceptable alternative to *seg*

10	*Trond ville at me skulle snakka om seg sjølv.*	Trond wanted that we should talk about Rself.
16	*Per likte å sjå seg sjølv i speilet når han var på jobb.*	Per liked to watch Rself in the mirror when he was at work.
28	*Jon trur at Maria elska seg sjølv.*	Jon thinks that Maria loves Rself.
30	*Martin ba oss snakka om seg sjølv.*	Martin asked us (to) speak about Rself.
32	*Jon hørte seg sjølv bli omtalt.*	Jon heard Rself be mentioned.
36	*Lise fekk Bjarte til å snakka fint om seg sjølv.*	Lise got Bjarte to speak nicely about Rself.
40	*Per likte at det var mogleg å sjå seg sjølv i speilet når han var på jobb.*	Per liked that it was possible to watch Rself in the mirror when he was at work.
44	*Han lot oss snakka om seg sjølv til foreldra våre.*	He let us speak about Rself to our parents.
46	*Eivor låvde Jone å snakka om seg sjølv.*	Eivor promised Jone to speak about Rself.

Table 7.2 – Rates of suggestion (%) of *seg sjølv* – highest to lowest rate of suggestion

Sentence	**S**	**NN**	**Ø**	**Tr**	**NV**	**ML**	**V**	**Av**
46	67	50	44	28	29	47	20	36
36	33	6	16	13	8	20	5	12
16	22	31	19	13	4	7	2	12
32	-	19	14	3	17	-	7	9
40	11	13	19	6	13	-	-	9
30	11	6	7	19	-	-	-	6
44	11	6	7	3	4	-	-	4
10	-	-	2	-	8	-	2	2
28	-	-	-	3	-	-	-	1
Average	17.3	14.6	14.2	9.7	9.3	8.1	4.1	10.1

The figures in Table 7.2 show that it is not always true that non-monomorphemic anaphors never find their antecedent over a clause boundary. The three sentences with the highest rate of suggestion of *seg sjølv* all contain a non-finite clause boundary. Sentence 46 has the highest rate of *seg sjølv* (36% of all informants) as a suggested alternative to given sentence. This is probably because the subject of the matrix clause is understood to be the subject of the downstairs clause, in effect making this a short-distance interpretation. This is also true for sentences 36 (from 5% of V speakers to 33% of S speakers) and 16 (from 2% of V to 31% of NN), which both had the second highest rate of suggestion of *seg sjølv*, averaging 12%. Sentences 16 and 36 also

contained a non-finite clause boundary. In 16, the subject of the upstairs predicate is also the subject of the embedded predicate.

46 was accepted with *seg* by 49% of all speakers (see Table 7.3 below). This sentence contained both a subject and an object which could be counted as non-local antecedents. 6.7% and 11.1% of all speakers selected a grammatical object as the antecedent for *seg* and *seg sjølv* in this sentence.

S had the highest rate of suggestion of *seg sjølv* at 17.3% overall, while V had the lowest at only 4.1%. This is consistent with the general rejection of LDR by S speakers in favour of a locally-bound reflexive. Two-thirds (67%) of S speakers suggested *seg sjølv* for sentence 46, as did half of NN, ML and Ø speakers (50%, 47% and 44% respectively). Just under one-third of NV and Tr speakers (29% and 28%) suggested *seg sjølv* for sentence 46, and one-fifth (20%) of Ø speakers did.

Table 7.3 – Rates of acceptance (%) of *seg*

Sentence	ML	Tr	V	Ø	NV	NN	S	Av
40	100	97	95	98	83	88	89	94
16	93	97	88	84	96	81	78	89
44	93	84	68	63	67	50	33	68
36	80	75	73	53	79	44	33	66
46	53	69	59	42	33	44	22	49
30	67	38	46	49	38	50	33	46
32	47	63	51	47	17	31	44	45
10	20	19	7	21	8	6	11	14
28	33	38	7	7	8	0	0	14
Average	65	64	55	52	48	44	38	54

We have already discussed the rate of acceptance of *seg* with sentence 46. There are eight other sentences for which speakers suggested *seg sjølv* with a non-clause-mate antecedent. These are sentences 10, 16, 28, 32, 30, 36, 40 and 44. Recall that speakers suggested *seg sjølv* for these sentences on average between 1 and 12% of the time (see Table 7.2). To see the reason for this, we need to look at the ratio of approval of the sentences with *seg* (see Table 7.3). Sentences 40 and 16 were accepted by nearly all speakers with *seg* as an LDR (94% and 89% of all informants respectively). Since these questions were answered positively by most speakers with no modification, no further information was given by the informants. This could explain the low rate of suggestion of *seg sjølv* (9% and 12%) for these sentences. Sentences 44 and 36 were accepted with an LDR *seg* by around two-thirds of speakers, while 30 and 32 were

accepted by just under half of all speakers with the reading. Between 4% and 12% of speakers suggested *seg sjølv* as a possibility for these sentences. Again, most speakers did not offer more information once a question had been given a positive reading.

The lowest rate of acceptance with *seg* in these sentences was for sentence 28, where no NN or S accepted the LDR interpretation, while 38% of Tr speakers did.

Seg is highly acceptable to all speakers in question 16 (see Table 7.3). This may explain why there is such a seemingly low incidence of *seg sjølv* – it was not thought of because it was not directly asked for.

NN and S had equal or more speakers suggesting *seg sjølv* as an accepted version of sentence 46 over *seg*. This indicates that although the hypothesis that LDRs are always monomorphemic is not strictly true, the Norwegian monomorphemic reflexive is normally preferred to the bimorphemic reflexive under a long-distance interpretation.

Sentences 30 and 32 were accepted with *seg* by nearly half of all speakers (46% and 45%), about the same as sentence 46 (49%), so this in itself does not explain the low incidence of *seg sjølv* for these two sentences. Around half the informants therefore did not approve of an LDR reading of *seg* for sentences 30 and 32, nor did they suggest *seg sjølv* as an alternative. Possible reasons for this are suggested here.

Test sentence 32 in its original form was considered ‘archaic’ and ‘literary’ and, since I had specifically asked for dialect forms, this sentence was widely rejected. The most common alternatives given for sentence 32 involved using a finite relative clause and an ordinary non-reflexive pronoun, instead of the construction presented in the questionnaire. These two alternatives were suggested by a total of 43% of all speakers and are given here.

(7.1) *Jon hørte (at) folk/ nokon/ de prata/ tala/ snakte på/ om han*.
J heard that people someone they spoke on about him
‘Jon heard (that) X spoke about him.’

(7.2) *Jon høyrde at han vart/ blei/ ble/ var omtalt/ omtala/ snakka om*.
J heard that he PASSIVE AUX mentioned spoken about
‘Jon heard that he was mentioned.’

This preference for finite embedded clauses instead of non-finite clauses is evident elsewhere, too. For instance, there is no equivalent 'for X' subject construction in Norwegian. Thus, the sentence in (7.3) can only be rendered in Norwegian as (7.4).

ENGLISH

(7.3) *I wanted for him to go.*

NORWEGIAN

(7.4) *Eg ville at han skulle gå.*
I wanted that he should go
'I wanted him to go.'

Another factor which makes sentence 32 less than ideal for testing LDR, is the theoretical status of any clause boundary in sentences with so called 'exceptional clauses', or 'small clauses'. Sentence 32 was included in the questionnaire since it is often cited in the LDR literature as an example of Norwegian LDR, after Hellan (1988). Clearly, however, this is not a preferred construction for many Norwegian speakers.

Let us return to the question of the acceptability of sentence 30. Table 7.4 shows the rate of acceptance/ suggestion of a pronoun with a non-clause-mate antecedent for several sentences in the questionnaire.

Table 7.4 – Rate of acceptance/ suggestion of a pronoun with a non-clause-mate antecedent

Sentence	S	NN	Ø	NV	Tr	V	ML	Av
10	78	81	84	71	78	80	67	78
30	56	50	53	63	56	51	47	54
28	89	44	49	42	53	51	47	51
36	33	44	30	25	22	7	13	23
44	56	38	30	21	6	17	7	22
46	33	6	21	13	19	15	13	17
32	0	0	2	0	3	5	0	2
Average	49	38	38	34	34	32	28	35

54% of all speakers suggested a pronoun for test sentence 30. Sentences 10 and 28, which were only accepted by 14% of all speakers with *seg*, also had a high rate of suggestion of a pronoun, at 78% and 51% respectively. This shows that when *seg* is not acceptable as an LDR, a pronoun is often the preferred option.

7.1.1 Further evidence

Further evidence that LDRs need not be monomorphemic was given by an informant who had noticed *seg sjølv* being used with a non-local antecedent and who had recorded her observations. One of these came from her local paper in the Hedmark fylke in Eastern Norway (the region described in this thesis as Ø). The fact that this example comes from Ø and not Tr or ML where LDR is normally thought to occur shows that not enough fieldwork has been carried out in these 'other' regions in terms of LDR research.

ØSTLANDSK[2]

(7.5) *Susann$_i$ har ei bestemor$_j$ som$_j$ er like fotballgal som seg$_i$ sjølv*
S has a grandmother who is equally soccer.mad as R self
'Susann$_i$ has a grandmother$_j$ who$_j$ is just as mad about soccer as herself$_i$.'

This sentence has binding of a non-monomorphemic anaphor out of a (tensed) relative clause, unlike sentences 16 and 46, where the upstairs subject is understood to be the subject of the downstairs predicate. However, in (7.5) there is no such escape clause. The subject of the relative clause which contains the reflexive is coreferential with the grammatical object of the matrix clause. The antecedent for the reflexive is neither of these. Syntactically, there is no mechanism which allows the non-monomorphemic *seg sjølv* to be bound outside of its clause. However, the semantics of the lexical items in this sentence may provide the answer.

Safir (1997:355-357) describes the class of predicates such as *like* and *similar to* as *similarity predicates*. Examples from English include the following.

ENGLISH

(7.6) *Sissy$_i$ insists that Darby is fairly similar to herself$_i$.*

(7.7) **Sissy$_i$ insists that Darby is fairly deferential to herself$_i$.*

(7.8) *Etta$_i$ attacks people similar to herself$_i$.*

(7.9) **Etta$_i$ attacks people deferential to herself$_i$.*

In these cases ((7.6) and (7.8)), long-distance binding is preferentially done by a monomorphemic anaphor, but non-monomorphemic anaphors may also find their

[2] This example comes from the Østlendingen, a local newspaper from Elverum in Østlandet, 7/1/1998. Example from Marit Julien (p.c.).

antecedent outside of their clause. Norwegian *vera like X som Y* 'be as X as Y' would fall into this category.

Safir (1997) also shows that *exclusion predicates* allow LDRs, even in English.

(7.10) *Dole$_i$ pointed out that the Republicans would look foolish if anyone other/ rather than/ apart from/ except/ save himself$_i$ were nominated.*

Both similarity predicates and exclusion predicates allow their object complement to corefer with a non-local antecedent[3].

7.1.2 Conclusion

It is clear that for some speakers non-monomorphemic reflexives may be LDRs and that syntactic accounts of LDRs which use the number of morphemes in an anaphor as a basis for the account cannot accurately describe all the data. In Chapter 9 we will see whether a semantic link between morphemicity and LDRs can be postulated.

7.2 Reflexives in general are subject-oriented

To ascertain whether all reflexives are subject-oriented, we can look for counter-examples to this claim, ie cases where a reflexive referred back to a grammatical object. Sentences 6, 31, 35, 46, 52, 54, 55, 56 and 59 were judged okay with an object antecedent by at least one speaker.

[3] Safir (1997:356) attributes this to the 'semantic force of the predicates involved'. Anticipating the discussion somewhat, it will be seen that the similarity predicates and exclusion predicates create a strong notion of a higher reference point bearing some relation to a lower NP, and that it is this strong association which permits reflexives commonly termed 'closeness anaphors' (Hellan 1988) to have a non-local antecedent. See Chapter 9 for more details.

Table 7.5 – Test sentences where at least one speaker accepted the reflexive as being coreferential with an object antecedent

06	*Eg hørte frå Jon at Maria elska seg.*	I heard from Jon that Maria loves R.
31	*Eivor låvde Jone å snakka om prosjektet sitt.*	Eivor promised Jone to speak about R's project.
46	*Eivor låvde Jone å snakka om seg.*	Eivor promised Jone to speak about R.
52	*Me arresterte Jon før avreisa si.*	We arrested Jon before R's departure.
54	*Jon ga Per jakka si.*	Jon gave Per R's jacket.
55	*Jon fortalte Per om kona si.*	Jon told Per about R's wife.
56	*Me ga han pengene sine.*	We gave him R's money.
59	*Jon fortalte Per om seg.*	Jon told Per about R.

Table 7.6 - Rate of acceptance of R/obj coreference by regional varieties for both LDR and SDR interpretations

Sentence	**ML**	**Tr**	**NN**	**NV**	**S**	**Ø**	**V**	**Av**
56	27	22	31	29	11	35	32	29
52	-	13	6	13	-	7	15	9.4
46	7	16	-	4	11	9	7	8.3
54	-	3	6	8	11	5	2	4.4
06	-	9	6	4	-	-	5	3.9
31	-	13	-	-	-	5	5	4.4
55	-	-	-	8	11	5	-	2.8
59	-	-	6	8	-	-	5	2.8
Average	17	13	11	11	11	11	10	8

Table 7.6 shows that these sentences were in general not highly accepted under the interpretation where the reflexive was coreferential with an object. The main exception to this is sentence 56, which was accepted with object/ reflexive coreference by 29% of all speakers. Sentences 52 and 46 were accepted with this reading by just under 10% of all informants, while the remainder of sentences were accepted by less than 5% of all speakers with this reading. Looked at dialectally, sentence 56 was acceptable with object/ reflexive coreference by 11% of S to 35% of Ø speakers. 15% of V speakers accepted sentence 52 with this reading, down to no ML or S speakers. The interesting thing to note about sentences 56 and 52 is that they are both single clauses, they both contain the possessive reflexive *sin*, and the only potential antecedent (ie third person NP) is a grammatical object, the subject in each case being a first person pronoun. Thus it appears that judgements can be influenced

by factors such as availability of an appropriate antecedent[4]. This is often taken into consideration by syntactic accounts of reflexives, with some sort of "bind to a subject unless there is a feature clash, then bind with non-subject" rule. However, as will be shown later (in Chapter 7, section 7.2), the subject may match the reflexive for features such as person and number, and still the preferred (or only) interpretation is for the object to be the antecedent of the reflexive.

Interestingly, three times as many speakers accepted the object coreferring with the reflexive in 56 as in 52, even though the syntactic structures are similar. However, in 52, the reflexive is within an adjunct, while in 56 it is in an argument of the same predicate as its antecedent. This would appear to support Hellan's Coargument Condition and Dalrymple's Minimal Finite Nucleus Binding Domain, which identify the predicate and its semantic arguments as a primary domain.

Sentences 46 and 54 are also acceptable to small numbers (8.3% and 4.4%) of Norwegians with an object/ reflexive coreference reading. In both of these cases, there is an available subject NP to act as the antecedent. An account of reflexivisation that defined 'available' in terms of person and number only would not be able to account for the cases where such an 'available' antecedent was present but not selected as the actual antecedent.

As was noted in the discussion on *seg sjølv* above, no particular antecedent was requested, and only one answer was given by most speakers, so it is likely that the actual levels of acceptance of object/ reflexive coreference are higher than those indicated here. The fact that an absence of an available subject can influence coreferencing options shows that the hypothesis that reflexives must refer back to a subject is not always true. Even when there is an available antecedent, it is not always selected. This applies to clause-mate and non-clause-mate potential antecedents. The factors controlling object-antecedents are discussed in Chapter 10.

[4] Up until now, the notion of an 'available' or 'appropriate' antecedent has been assumed to be defined in terms of syntactic features only, such as person and number. In Part V, we will re-evaluate this notion to also include semantic and pragmatic features.

7.2.1 Further evidence

The statement that reflexives in general tend to have a subject antecedent is supported by my data, although it does not seem to be an absolute statement. There is evidence that the use of a reflexive to refer to a non-subject is constrained by semantic factors. This will be discussed in Chapter 9 (section 9.3.1), with reference to Swedish examples, similar to the Norwegian ones used in this study.

7.2.2 Conclusion

Subject antecedents are overwhelmingly preferred when they are 'available', ie when they match the reflexive for person features. Otherwise, it appears that a sizeable minority (at least 7.5% of all informants, based upon the results of these eight sentences only) do accept coreference of a reflexive with a non-subject antecedent. This has also been observed by Hellan, who postulated the Coargument Domain as a primary binding domain for reflexives. More compelling evidence against the subject-antecedent hypothesis would need to be found in order to claim that the syntactic conditions of subject-antecedency and the Coargument Binding Domain were false claims. More evidence suggesting that reflexives need not have a subject antecedent will be examined in Chapter 9. It will be seen that, although this is largely true, an approach which takes into account the semantics of the lexical items involved can explain object-antecedency without resorting to labelling it an 'exception'.

7.3 Finite tense is a barrier to coindexation of LDRs

There were 30 sentences which either contained a reflexive in an embedded finite clause in the test sentence or elicited a reflexive in an embedded clause from at least one speaker, and 17 sentences which were judged fine with LDR over a non-finite clause boundary. The sentences with non-finite clauses were overwhelmingly more acceptable with an LDR reading than the sentences with finite clauses.

The rates of acceptance of long-distance readings of reflexives out of non-finite and finite clauses are summarised in the bar charts in Figure 7.1 and Figure 7.2. It is clearly the case that binding of reflexives out of non-finite clauses is far preferable to coreferencing out of finite (tensed) clauses.

Figure 7.1 – Rate of acceptance of LDR out of a non-finite embedded clause

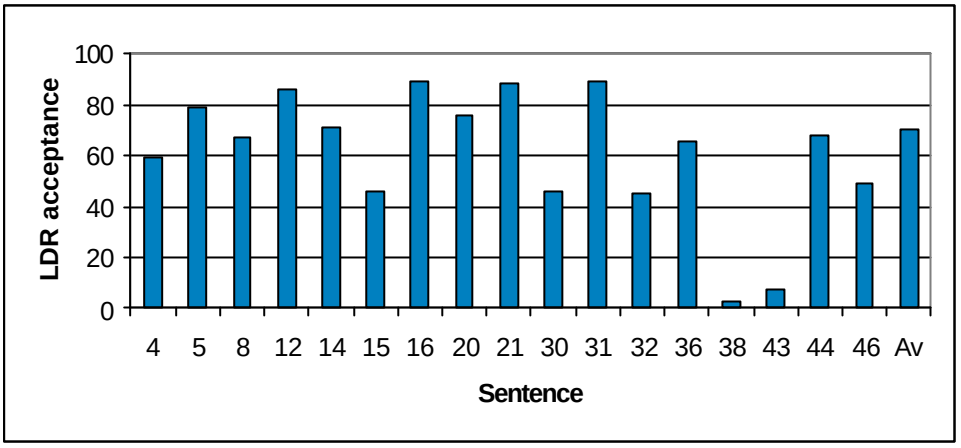
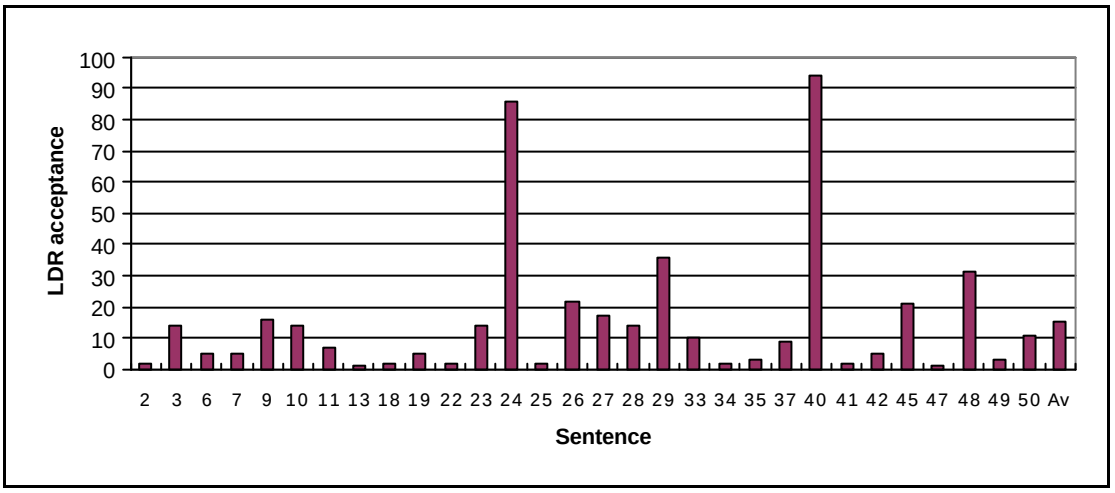


Figure 7.2 – Rate of acceptance of LDR out of a finite embedded clause



There is considerable variation as regards long-distance binding out of a tensed clause, with spikes at sentences 24 and 40, and smaller jumps for 29 and 48. Responses to the non-finite sentences showed less variation, although 15, 30, 32, 38, 43 and 46 were less acceptable than the other sentences, 38 and 43 considerably so. Coreferencing out of non-finite clauses was accepted by over half of all informants. Coreferencing out of finite clauses was accepted by only 15% of all speakers.

The difference between the acceptability of the finite versus non-finite sentences is even more pronounced if we remove the four finite sentences with the highest rate of acceptance of an LDR reading (24, 29, 40 and 48). Since these sentences are far more acceptable than any of the other finite sentences, the responses to these questions are skewing the results. The averages of these 'exceptional' finite sentences versus the 'non-exceptional' sentences are shown in Table 7.7.

Table 7.7 – Rates of acceptance (%) of LDR out of finite embedded clauses

Finite sentences	Tr	V	ML	NN	Ø	NV	S	Av
'Exceptional'	69	65	63	60	59	55	53	62
'Non-exceptional'	14.3	6.7	10.5	4.3	6.4	6.1	4.2	8.0

The 'exceptional' sentences were acceptable to more than eight times as many informants on average than the 'non-exceptional' sentences. As regards dialectal variation of acceptance of the exceptional sentences, there is a steady cline from Tr, with a 69% rate of acceptance, down to only 53% for S. For the non-exceptional sentences, Tr and ML have far higher rates of acceptance than the other regions, at 14.3% and 10.5% respectively. V, Ø and NV have similar rates of acceptance, at around 6.5%, while NN and S speakers accepted these sentences only 4% of the time.

7.3.1 Investigating the exceptions

The overall pattern of Norwegian is clearly that long-distance binding of reflexives out of a non-finite clause is far preferable to long-distance binding out of a finite clause. There are a few outstanding exceptions to this generalisation, in particular the responses to sentences 40, 24, 29 and 48, where 94%, 86%, 36% and 31% respectively of informants said that an LDR reading was fine in their dialect. These sentences are given here in Table 7.8.

Table 7.8 – Test sentences 24, 29, 40 and 48

40	*Per likte at det var mogleg å sjå seg speilet når han var på jobb.*	Per liked that it was possible to watch R in the mirror when he was at work.
24	*Per likte at det var mogleg å sjå kona si i speilet når han var på jobb.*	Per liked that it was possible to watch R's wife in the mirror when he was at work.
29	*Ho trudde naboane snakka om foreldra sine, då ho såg dei snakke saman.*	She thought they were talking about R's parents when she saw them talking together.
48	*Trond ville at me skulle snakka om broren sin.*	Trond wanted that we would speak about R's brother.

As can be seen in the glosses, sentences 24 and 40 contain only one potential antecedent (the only other NP that is syntactically possible to be an antecedent is an expletive/ dummy subject). Sentences 24 and 40 are identical except that 24 contains the genitive reflexive *sin* (the noun it modifies is feminine, hence the form is *si*) while 40 contains the accusative *seg*. 24 is accepted by 86% of speakers, while 40 is accepted by 94%. Since these sentences, in particular sentence 40, are acceptable to

nearly all speakers involved in this study, it is illogical to suggest that finite clause boundaries per se block coreferencing options of reflexives.

With sentence 48, the clause-mate NP with the reflexive is not 'available', since it does not correspond with the reflexive for the person feature. *Me* 'we' is the first person plural pronoun, which cannot be an antecedent for the third person reflexive *sin*. 31% of speakers in this study (from 22% of S to 40% of ML speakers) said the sentence was acceptable with the reflexive finding its antecedent outside of its (tensed, embedded) clause. Syntactic accounts which ban LDR over a finite boundary are ignoring data from nearly a third of the Norwegian speakers in this study.

Sentence 29 is an unusual case for this group, since even more informants accepted an LDR reading with this sentence than for sentence 48, even though it has an 'intervening potential antecedent' and a 'barrier' to coreference possibilities of reflexives in the form of finite Tense. There is no syntactic explanation for this although a semantic-based account will be used later to account for this apparent exception, by appealing to the fact that 29 had a context biasing interpretation of the antecedent to be the non-local NP.

7.3.2 Minor exceptions

Several other sentences with finite embedded clauses received fair support (between 10% and 22% of all speakers) for an LDR interpretation. These were sentences 26 (22%), 45 (21%), 27 (17%), 9 (16%), 3, 10, 23, 28 (14% each), 50 (11%) and 33 (10%). These sentences are given in the table below.

Table 7.9 – Test sentences containing a finite embedded clause, which received fair (10-22%) support from informants with an LDR reading, in order of acceptance

26	*Henrik trudde at kjæresten sin hadde vore utro.*	Henrik thought that R's girlfriend had been unfaithful.
45	*Jon hørte at Tordis var klar til å snakka med seg.*	Jon heard that Tordis was ready to speak with R.
27	*Sille visste ikkje at skina sine hadde blitt stjålet.*	Sille didn't know that R's skis had been stolen.
9	*Jon var ikkje klar over at Are hadde snakka om seg.*	Jon did not realise that Are had spoken about R.
3	*Sille visste ikkje om skina sine hadde blitt stjålet.*	Sille didn't know whether R's skis had been stolen.
10	*Trond ville at me skulle snakka om seg.*	Trond wanted that we should talk about R.
23	*Jon var klar over at Are hadde snakka om seg.*	Jon realised that Are had spoken about R.
28	*Jon trur at Maria elska seg.*	Jon thinks that Maria loves R.
50	*Tori visste at foreldra sine var godt likt av naboane sine.*	Tori knew that R's parents were well liked by R's neighbours.
33	*Jon sa til meg at Maria elska seg.*	Jon said to me that Maria loved R.

Sentences 26 (22% approval of LDR), 27 (17%) and 3 (14%) contain a genitive reflexive inside the subject of the finite embedded clause. In each of these three sentences there is only one potential antecedent, which is outside of the finite clause the reflexive is within. Still, most speakers (82% overall – see Table 7.10) rejected the use of the reflexive in these three sentences, instead preferring a pronoun.

Table 7.10 – Rate of suggestion of a pronoun for sentences 03, 26 and 27

Sentence	**S**	**Ø**	**NN**	**ML**	**NV**	**Tr**	**V**	**Av**
03	100	88	75	80	79	91	80	84
26	100	84	94	67	71	69	66	76
27	100	91	81	87	83	72	73	82
Average	100	88	83	78	78	77	73	82

Table 7.11 – Rate of acceptance of reflexive in sentences 03, 26 and 27

Sentence	**V**	**Tr**	**ML**	**NV**	**NN**	**Ø**	**S**	**Av**
03	15	9.4	20	21	19	12	0	14
26	32	31	27	17	6.3	16	0	22
27	27	25	6.7	17	13	9.3	0	17
Average	24	22	18	18	13	12	0	15

An interesting point to note here is that it was not the same speakers who accepted all three sentences, nor was there some sort of hierarchy of acceptability, where it would be possible to say that 'If a speaker accepts an LDR in sentence 3, then they will also

accept it in sentence 27 and 26'. Some generalisations can be made, however, and a slight preference for the sentences in the order of 26 (most accepted), 27 then 03 (least accepted) can be deciphered.

6.7% of all speakers accepted all three of 03, 26 and 27; 6.7% accepted only 26 and 27; and a further 6.1% accepted only 26. 2.2% accepted 26 and 03; 2.2% accepted 27 and 03; and 2.8% accepted 03 only. 1.1% accepted only 27. This information is repeated in the table below.

Table 7.12 – Rate of acceptance of combinations of sentences with a possessive reflexive inside the subject of an embedded clause

	03, 26, 27	**26, 27**	**26 only**	**03, 26**	**03, 27**	**03 only**	**27 only**
%	6.7	6.7	6.1	2.2	2.2	2.8	1.1

Further comments can be made about the speakers who accepted combinations of these sentences. Only speakers from Tr and V accepted 26 and 27 but not 03. Only speakers from Tr accepted 27 but not 03 or 26. No Tr speaker accepted just 03 or 27 and 03 but not 26. V speakers only accepted the following combinations: all three, 26 and 27, 26 only, 03 only.

No speaker from S accepted any of 03, 26 or 27 with an LDR.

Four Ø speakers accepted all three sentences, three accepted only 26 and one accepted only 03.

One NV speaker accepted all three sentences, one accepted 26 and 03, two accepted only 26, three accepted 27 and 03 and one accepted only 03.

If a speaker is from V, Ø or ML and they accept 27, then they will also accept 26. Speakers from S do not accept a possessive reflexive in the subject of an embedded clause having an antecedent over a finite clause boundary. Sentence 03 is the most acceptable to speakers of NN. The three NN speakers who accepted any of these three sentences did not agree on any other sentence.

If a speaker accepts only one of 26, 27 or 03, then it will most likely be 26, followed by 03 then 27. No NN speaker accepted only 26. No speaker from NN, S or Tr accepted only 03. Only speakers from Tr accepted 27 without accepting 26 or 03. These statements are based on the table below, which shows the rates of acceptance of combinations of these three sentences by speakers of different dialects.

Table 7.13 – Rates of acceptance of combinations of sentences 03, 26 and 27

	26 only	26, 27, 03	26, 27	03 only	03, 27	03, 26	27 only	Av
ML	13	6.7	-	6.7	-	6.7	-	4.8
NN	-	6.3	-	6.3	6.3	-	-	2.7
NV	8.3	4.2	-	-	13	4.2	-	4.2
S	-	-	-	-	-	-	-	0
Tr	6.3	3.1	16	-	-	6.3	6.3	5.4
V	4.9	9.8	17	4.9	-	-	-	5.2
Ø	7.0	9.3	-	2.3	-	-	-	2.7
Average	5.7	5.6	4.7	2.9	2.7	2.4	0.9	

Leaving these three sentences now, and looking at another sentence for which over one-fifth of speakers accepted the LDR over a finite clause boundary, we can see that sentence 45 contains the accusative reflexive *seg*. There are two 'potential antecedents', one 'beyond' a non-finite boundary, and one beyond a finite boundary as well. That 21% of speakers chose the antecedent over the finite boundary is explicable by the fact that, for many of these informants, the closest NP was not an available antecedent. This is due to the predicate *seg* is an object of – *vera klar til å snakka med X* 'be ready to speak with X'. Many speakers found it incomprehensible, or at least pragmatically incongruous, that *Tordis* should become 'ready to speak with herself', hence for these speakers the only possible antecedent was *Jon*.

Sentence 28 can be analysed in the same way: many speakers stated that it was 'unnatural' or 'unNorwegian' to love oneself, hence the local NP was not an available antecedent for these speakers. 14% of speakers accepted the LDR for 28. In sentence 10 (also 14% acceptance of LDR), the local NP does not match the reflexive for person, so it is not a potential antecedent. Sentences 9 (16%) and 23 (14%) were also commented on in the same vein as sentence 28 – it was considered 'unNorwegian' to talk about oneself, so the local NP was not considered to be a potential antecedent for the reflexive. Comments from the informants in this study indicate that the semantic or pragmatic concepts associated with the embedded predicates must be considered an integral part of the 'licensing' of LDR in Norwegian.

7.3.3 Conclusion

Comparing the data from the sentences containing finite and non-finite embedded clauses shows that it is not merely the presence of a finite clause boundary which inhibits binding or coreferencing possibilities for reflexives, although for some speakers at least, this may be true. Some speakers use non-syntactic methods for

judging the acceptability of sentences containing potential LDRs, such as the semantics of a reflexive predicate such as *love oneself*, or its pragmatic feasibility, such as *be ready to speak with oneself*.

7.4 There is more than one binding domain for anaphoric elements

It has been shown by many researchers that there is more than one binding domain for reflexive elements (eg Dalrymple 1993, Maling 1984, Popowich 1988, as well as the contributors to a collection of essays on LDR in various language in a volume edited by Koster and Reuland 1991). The data collected for this research is consistent with this.

Commonly identified binding domains include the local domain, also known as the coargument domain, or the domain containing the first accessible subject; a slightly larger syntactic domain, usually within the first finite Tense or first finite Infl; a larger domain where binding occurs past a finite Tense boundary; and finally the domain including the whole discourse context or paragraph. Reflexives which are bound in this final domain, ie discourse anaphors, are often called logophors, since this is similar to the domain of logophors in logophoric languages. The middle two domains are those where LDRs are found, while the first domain is the local domain. Examples (7.11) to (7.15) give examples of these in Norwegian and English. Example (7.13) comes from the Aftenposten newspaper 22/5/1999:29, (7.14) from Marit Julien, p.c. and (7.15) is from the book 'En å elske' by Georgia Bockoven.

7.4.1 Local domain

(7.11) *Lucien$_i$ called himself$_i$ on his mobile.*

(7.12) *Elisabeth$_i$ er glad i dottera si$_{i/*j}$.*
E is glad in daughter R
'Elisabeth$_i$ loves her$_{i/*j}$ daughter.'

7.4.2 First non-local domain

(7.13) *De$_i$ leier noen til å gjøre det for seg$_i$.*
they hire someone to to do it for R
'They$_i$ hire someone to do it for them$_i$.'

7.4.3 Second non-local domain

(7.14) *Han$_i$ trudde at ho$_j$ var sint på seg$_i$*
he thought that she was angry on R
'He$_i$ thought that she$_j$ was angry at him$_i$.'

7.4.4 Discourse domain

(7.15) … *Hun$_i$ skjøv seg$_i$ ut på kanten av sofaen og heiste seg$_i$ opp.*
she$_i$ shoved R$_i$ out on edge of sofa and hoisted R$_i$ up

Automatisk la hun$_i$ håndflaten mot maven, den bevegelsen hun$_i$
automatically lay she$_i$ palm against stomach the movement she$_i$

hadde kommet til å tenke på som en gravid kvinnes morgenhilsen til
had come to to think on as a pregnant woman's morning-greeting to

barnet. Da det gikk opp for henne$_i$ hva hun$_i$ hadde gjort, senket hun$_i$
child then it went up for her$_i$ what she$_i$ had done sank she$_i$

hånden ned langs siden. Graviditeten ville snart bli synlig nok.
hand down along side pregnancy will soon be visible enough

Det var ingen grunn til å bekjentgjøre den for tidlig ved stadig å klappe
it was no reason to to known-make it too soon by steadily to clap

***seg$_i$** på maven*.
R$_i$ on stomach

'…She$_i$ moved herself$_i$ out onto the edge of the couch and hoisted herself$_i$ up. She$_i$ put her$_i$ palm automatically on her$_i$ stomach, the movement she had come to think of as a pregnant woman's morning greeting to her child. When she$_i$ realised what she$_i$ had done, her$_i$ hand sank to her side. Her pregnancy would soon be visible enough. There was no reason to publicise it too soon by constantly clapping **herself$_i$** on her stomach.'

7.4.5 Conclusion

There is more than one binding domain for reflexives. Although this is contrary to the prediction of the original Binding Conditions, at least four binding domains are generally accepted nowadays. These are the local (coargument) domain, the first non-local (finite) domain, the second non-local (Root S) domain, and the discourse, or paragraph domain. Whether or not the Binding Conditions themselves should be made to account for binding in each domain is a separate issue. I believe the Binding

Conditions are inadequate, even within the clause domain (see Chapter 10, section 10.3.3) and that an alternative model of anaphora is needed.

7.5 LDRs move through Infl

The claim that LDRs move through Infl is a theoretical claim specific to GB. This assumption combines with other GB notions, such as that LDRs are monomorphemic, and that coindexing of reflexives and their antecedent takes place at a certain level of structure and within a certain structural configuration. Under these analyses, certain reflexives can move into the Tense slot in Infl (when it is unfilled, ie when the clause is non-finite), in order to 'escape' up to the next clause and be coindexed with an antecedent in a higher clause than the trace of the reflexive. This analysis also requires different levels of representation, and it still relies on the assumption that finite Tense blocks movement, and hence the LDR binding possibilities.

Since it has already been shown in this chapter that LDRs need not be monomorphemic, and that LDRs may find their antecedent past a finite clause boundary, the hypothesis that LDRs move through Infl can be disregarded as a universally valid account.

7.6 *Seg* and *sin* have the same binding domain

Most researchers who discuss LDR in Norwegian consider *seg* and *sin* to have the same binding domains, eg Dalrymple (1993), Hellan (1988). This assumption can be tested against the data collected for this study by comparing near-minimal pairs of sentences which differ only in the use of either *seg* or *sin*. There were eighteen minimal pairs of these sentence in the questionnaire. It is not necessary to test this hypothesis against every pair – if it can be shown that *seg* and *sin* have different binding domains for one pair, this will discount the hypothesis. In fact, the results will show that there is a definite division in the binding domains of *seg* and *sin* across nearly all sentence pairs.

Table 7.14 – Acceptance of LDR *seg* and *sin* in finite and non-finite sentences[5]

Finite sentences					**Non-finite sentences**				
Sin	**% LDR**	***Seg***	**% LDR**	**Difference**	***Sin***	**% LDR**	***Seg***	**% LDR**	**Difference**
38	3	45	21	18	21	88	32	45	43
13	1	28	14	13	31	89	46	49	40
19	5	09	16	11	04	59	30	46	13
22	2	33	10	8	05	79	44	68	11
24	86	40	94	8	20	76	14	71	5
37	9	23	14	6	08	67	36	66	2
17	0	06	5	5	38	3	45	2	1
49	3	11	7	4	12	86	16	89	-3
18	2	34	2	-1					
42	5	35	3	-2					
48	31	10	14	-17					

If *seg* and *sin* really had the same binding domains, we would expect very little variation within each sentence pair. However, as Table 7.14 shows, there is variation, and it is consistent. *Seg* is more acceptable with a long-distance reading in finite sentences, while *sin* is more acceptable with a long-distance reading in the non-finite sentences. This is true for fifteen sentence pairs. The fact that there is substantial difference (more than 10% – remember this is equivalent to 18 speakers) between the acceptability of LDR with *seg* and *sin* in nearly half of the test sentences shows that *seg* and *sin* do not have identical binding domains, or, if they do, that there are factors other than purely syntactic ones which influence the acceptability of LDR in Norwegian.

[5] Sentences 38 and 45 contain both a finite and non-finite clause boundary. Two different results for these sentences are therefore given in this table.

Chapter 8

8 Non-syntactic hypotheses

In the review of the literature on LDR, two non-syntax-based hypotheses were identified. These are

- The hierarchy of logocentric predicates applies to LDR.
- Non-factive predicates are most likely to license LDR, followed by semi-factive then true factive predicates.

As was the case with the syntactic hypotheses in Chapter 7, these non-syntactic hypotheses account for some, but not all of the data collected for this study.

8.1 The hierarchy of logocentric predicates applies to LDR

Recall from section 7.3 above (the hypothesis that Finite tense is a barrier to coindexation of LDRs), that LDR over a finite boundary is considerably less acceptable to most speakers of Norwegian than LDR over a non-finite clause boundary. In light of this, the link between logophoricity and LDR for sentences with finite and non-finite clause boundaries will be discussed separately.

Non-finite sentences

This initial section is based on Strahan (2001), on a sample of three speakers, from Ø, V and Tr. These results are indicative of the results found in the full-scale study.

The sentences containing non-finite clause boundaries which are relevant to our discussion of LDR and the logocentric hierarchy are collated here. 46 and 16 are from the questionnaire, as is 30. (8.1) is new data. 46 and 30 contain a verb of communication, 16 contains a psych verb, and (8.1) contains a verb of perception. Verbs of thought only occur with finite complement clauses in Norwegian, so will be discussed in the next section. The sentences containing the verbs of communication and psychological state were judged fine by the three informants (in the full-scale

study, 89% accepted LDR in 16, 49% in 46 and 46% in 30), while the sentence containing the verb of perception (not used in the full-scale study) was judged fine by one speaker, marginal by the second, and ungrammatical by the third speaker[1]. Here this sentence is marked with a question-mark, as a reflection of the differences between the three speakers' intuitions.

[46] *Eivor$_i$ låvde Jone$_j$ å snakka om seg$_{i/j}$.*
E promised J to speak about R
'Eivor$_i$ promised Jone$_j$ to speak about herself$_i$/ him$_j$.'

[16] *Per$_i$ likte å sjå seg$_i$ i speilet når han var på jobb.*
P liked to look R in mirror when he was at work
'Per$_i$ liked to watch himself$_i$ in the mirror when he was at work.'

[30] *Jon$_i$ ba oss snakka om seg$_i$.*
J bade us talk about R
'Jon$_i$ asked us to speak about himself$_i$.'

(8.1) ?*Jon$_i$ hørte oss$_j$ snakka om seg$_{i/j}$.*
J heard us speak about R
?Jon$_i$ heard us$_j$ speak about himself$_i$.

This small sample of data supports Stirling's logocentric hierarchy. In particular, the results for (8.1) are interesting. As reported in Strahan (2001) , for the speaker who accepted this sentence as fine, the hierarchy predicts that the sentences containing the other logocentric predicates will also be fine, and this is indeed the case. Anticipating the discussion somewhat, it will also be seen that this speaker accepted LDR over a finite boundary, too, something the other two speakers did not do to the same extent. The speaker who thought that (8.1) was marginal also made the comment that 30 was better, since it made more sense, and was easier to imagine a context for 30 than (8.1). The third speaker rejected (8.1), but accepted the other sentences. Again, this is consistent with the logocentric hierarchy.

[1] The three informants come from Ø, V and Tr. The judgements given by these speakers are consistent with the judgements given by speakers in these regions when compared to results from the full study.

Finite sentences

The picture of LDR in Norwegian becomes considerably more complex when we consider sentences where the reflexive and the antecedent are separated by a finite clause boundary. Since not all Norwegians allow reflexive-antecedent coreference over a finite clause boundary, here we will only consider those dialects which do allow it. These will be referred to as the F-LDR dialects.

Firstly, let us consider some data from the Norwegian dialects of Romsdalsk and Trøndersk (from Sandøy 1992).

ROMSDALSK

(8.2) *Ho$_i$ påstod at det$_j$ var sin$_i$.*
she claimed that it was R
'She$_i$ claimed that it$_j$ was hers$_i$.'

(8.3) *Dei$_i$ kan ikkje venta at folk$_j$ skal komma til seg$_i$.*
they can not expect that people will come to R
'They$_i$ can't expect that people will come to them$_i$.'

These sentences are interesting cases of LDR in Norwegian, since they are recorded cases of LDR occurring in natural speech. The both use logocentric verbs, namely *påstå* 'to claim', being a verb of communication, and *venta* 'to expect', being a verb of thought, and so are consistent with the idea that the logocentric hierarchy is relevant to LDR in Norwegian.

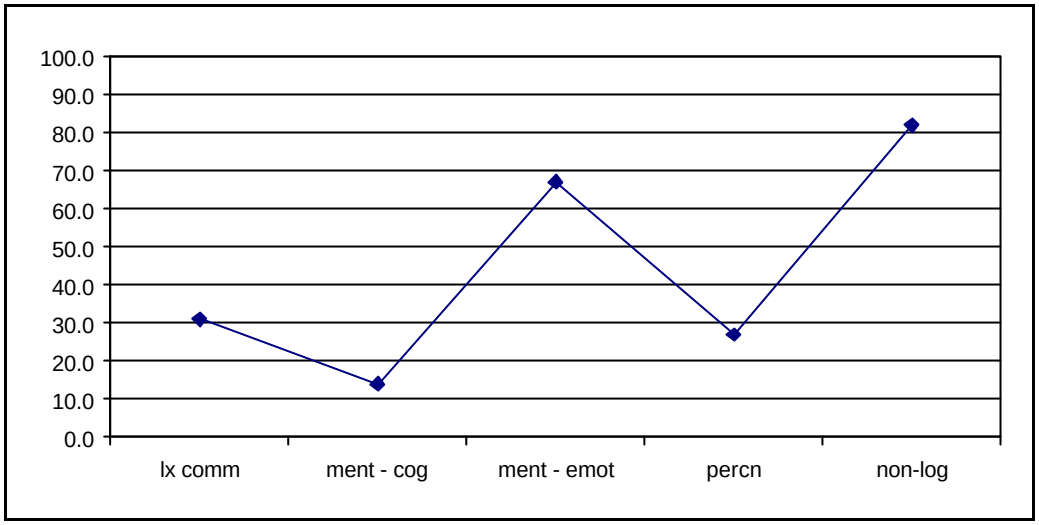
Testing the hypothesis against new data

Turning now to the data collected for this study, we find that the logocentric hierarchy is not particularly useful in predicting when LDR is licensed to occur. Table 8.1 shows the rate of acceptance of LDR by speakers in this study for sentences using each of the logocentric verb types. Thus, 31% of speakers accepted LDR in sentences with verbs of linguistic communication. Figure 8.1 presents this information graphically.

Table 8.1 – Average acceptance/ suggestion of LDR across logocentric predicate types

Log. pred	lx comm	ment - cog	ment - emot	percn	non-log
Average (%)	31	14	67	27	82

Figure 8.1 – Graph of acceptance/ suggestion rates (%) of LDR across logocentric predicate types



If the hypothesis is true, that the logocentric hierarchy is the primary factor in the licensing of LDR, then Figure 8.1 should not have a zero value to the left of a positive value, and this is indeed the case. So the logocentric hypothesis as formulated above is consistent with the data of all informants from this study. These results are complicated by the fact that some classes of predicates only occur in the less-preferred, finite construction. Therefore, closer analysis of this data tells a different story.

The graph in Figure 8.1 shows a curve with three turning points (at mental-cognitive, mental-emotive and perception). Although not stated explicitly, it seems logical that if verbs to the left on the hierarchy are more likely to allow LDR than verbs to the right, and if the data includes judgements from speakers of different dialects, then we would expect higher levels of acceptance of LDR with verbs higher up (ie to the left in) the hierarchy. This would be the case if some dialects for instance accepted LDR with only verbs of communication, other dialects accepted LDR with verbs of communication and mental-cognitive, while a third group accepted LDR all the way down the list, or something similar. The fact that this graph has turning points needs to be investigated more closely.

If we look at individual speakers' results (ML only), a similar pattern to Figure 8.1 emerges.

Table 8.2 – Individual data records for logocentric verbs, ML speakers only

Speaker	Non-finite sentences					Finite sentences				
	Linguistic communication	Mental - cogniitve	Mental - emotive	Perception	Non-logocentric	Linguistic communication	Mental - cogniitve	Mental - emotive	Perception	Non-logocentric
106	100	-	100	67	50	0	33	100	33	-
113	83	-	100	33	100	0	0	50	0	-
213	100	-	100	67	100	0	50	75	33	-
310	67	-	100	67	75	0	8.3	50	0	-
328	100	-	100	67	75	25	58	100	33	-
331	33	-	100	33	50	0	0	25	0	-
405	17	-	100	33	25	13	0	50	0	-
411	83	-	50	67	75	13	42	100	33	-
446	83	-	100	33	100	0	8.3	50	0	-
455	83	-	100	33	75	0	8.3	75	0	-
467	67	-	100	0	50	0	17	50	0	-
505	100	-	100	33	100	0	33	75	33	-
510	17	-	100	0	100	0	0	50	0	-
516	50	-	100	67	100	13	0	50	0	-
517	33	-	100	33	100	0	0	50	0	-
Average	68	-	97	42	78	4.2	17	63	11	-

Although the initial investigation into this phenomenon reported in Strahan (2001) suggested that the Logocentric Hierarchy was relevant to individual speakers, Table 8.2 shows that this is clearly not always the case. When applied to individual speakers, the logocentric hypothesis is not consistent with the data. Speakers 213 and 505, for example, accepted LDR with all types of non-finite predicates, consistent with the logocentric hypothesis, and with all types of predicates bar verbs of linguistic communication in the finite sentences. This clearly contradicts the logocentric hypothesis, since, all other things being equal, verbs of linguistic communication are postulated to be the most acceptable with an LDR, while the judgements from speakers 213 and 505 indicate the exact opposite. Other counter-examples to this hypothesis come from speakers 467 and 510. Neither of these speakers accepted LDR with a non-finite verb of perception, although both accepted LDR with a non-finite non-logocentric verb. Furthermore, both of these speakers accepted LDR with a finite, mental-emotive verb, but neither accepted LDR with a finite verb of linguistic communication.

Since percentages and probabilities do not typically work well with individuals, the individual results here may not necessarily mean the logocentric hypothesis is wrong.

If the whole region is taken into account, as shown in the 'Average' row, then this hypothesis does apply. Not all regions are like this, however. The logocentric hypothesis is not consistent at all with the data taken from S.

Table 8.3 – Individual data records for logocentric verbs, S speakers only

Speaker	Non-finite sentences					Finite sentences				
	Linguistic communication	Mental - cogniitve	Mental - emotive	Perception	Non-logocentric	Linguistic communication	Mental - cogniitve	Mental - emotive	Perception	Non-logocentric
101	83	-	50	33	75	0	8	25	33	-
221	33	-	100	0	25	0	0	25	0	-
392	33	-	100	67	75	0	0	50	33	-
424	0	-	50	0	25	0	0	50	0	-
430	33	-	100	0	25	13	0	25	0	-
432	100	-	100	67	75	0	25	75	33	-
433	67	-	100	67	75	0	8.3	100	33	-
442	33	-	50	0	25	0	8.3	50	0	-
461	17	-	100	67	0	0	0	50	0	-
Average	**44**	**-**	**83**	**33**	**44**	**1.4**	**5.6**	**50**	**15**	**-**

As with the ML data above, the individual judgements from S speakers are not consistent with the logocentric hypothesis. In this case, however, the hypothesis is barely consistent with the data from the whole region. The data from speaker 424 is particularly problematic, while nearly half the S speakers judgements of non-finite sentences do not support the logocentric hypothesis. Finite sentences in particular do not adhere to the logocentric hypothesis, with only one instance of LDR (out of a possible 81) with a verb of linguistic communication being permitted by a S speaker (424), while all S speakers accepted LDR with at least one mental-emotive predicate.

Discussion

Examples of LDR in non-logocentric contexts from the questionnaire which were acceptable to speakers in this study include the following.

Table 8.4 – LDR sentences with a non-logocentric predicate from the questionnaire, with rate of acceptance across all speakers

	Sentence		%
05	*Han lot oss snakka om bragdene sine til foreldra våre.*	He let us speak about R's deeds to our parents.	79
15	*Han lot oss snakka om bragdene hans til foreldra våre.*	He let us speak about his deeds to our parents.	46
08	*Lise fekk Bjarte til å snakka fint om biletet sitt.*	Lise got Bjarte to speak nicely about R's picture.	67
36	*Lise fekk Bjarte til å snakka fint om seg.*	Lise got Bjarte to speak nicely about R.	66

Test sentences 05 and 15 used the verb *lot* 'let', while 08 and 36 used *fekk* 'got'. These sentences were accepted by just under half (46% for sentence 15) to four-fifths (79% for sentence 05) of all speakers.

Other examples of LDR in non-logocentric contexts in Norwegian include the following.

TRØNDERSK

(8.4) *Han$_i$ bruker det$_j$ som$_j$ passer sæ$_i$.*
he uses it which suits R
'He$_i$ uses that$_j$ which$_j$ suits him$_i$.'

BOKMÅL

(8.5) *De$_i$ leier noen til å gjøre det for seg$_i$.*
they hire someone to to do it for R
'They$_i$ hire someone to do it for them$_i$.'

VALDRESMÅL

(8.6) *Ho$_i$ hadde ingen$_j$ som$_j$ var glad i seg$_i$.*
she had no-one who was happy in R
'She$_i$ had no-one$_j$ who$_j$ loved her$_i$.'

GRUEMÅL

(8.7) *Susann$_i$ har ei bestemor$_j$ som$_j$ er like fotball.gal som seg$_i$ sjølv.*
Susann has a grandmother who is equally soccer.mad as R self
'Susann$_i$ has a grandmother$_j$ who$_j$ is just as mad about soccer as her$_i$.'

In conclusion, while it may be true that logophoricity as found in languages like Ewe and Mundang is found in similar semantic contexts to LDR, the hierarchy of logocentric predicates does not predict when LDR will be acceptable. Furthermore,

LDR may occur in non-reportive, or non-logocentric, contexts. The trend of referring to LDRs and discourse reflexives as logophors seems misleading.

8.2 A factivity hierarchy applies to LDR

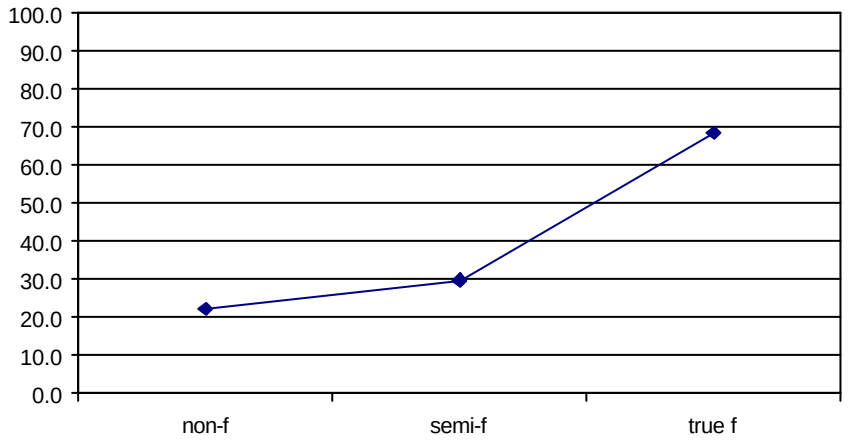
The hypothesis that non-factive predicates are more likely than factive predicates to license LDR is based upon several factors. Firstly, that logophoric predicates are more or less arranged along a factivity hierarchy (Culy 1994). Secondly, Thráinsson (1976) shows that factivity is related to mood in Icelandic. Since LDR shows a high level of correlation with the subjunctive mood, it may be that factivity is the underlying factor involved in the licensing of LDR in Icelandic. This view is presented by Rögnvaldsson (1986), who cites a minimal pair of sentences which differ only in the factivity of the matrix predicate. LDR is permitted with the non-factive predicate, while it is unacceptable with the factive predicate.

Data from the investigation, however, suggests that the opposite is true in Norwegian, namely that true factive predicates are the most likely to license LDR, followed by semi-factive, then non-factive predicates. The actual figures are given in Table 8.5. These are based upon the 30 sentences containing a non-factive matrix predicate, 11 sentences containing a semi-factive and 9 containing a true factive. This data is presented in graphical form in Figure 8.2.

Table 8.5 – Average acceptance/ suggestion of LDR across factive predicate types

Factivity	**Non-f**	**Semi-f**	**True f**
Average (%)	22	30	69

Figure 8.2 – Graph of acceptance rates of LDR across factive predicate types



The hypothesis that non-factive predicates are the most likely to license LDR is wrong, according to the data in Table 8.5. Furthermore, the hypothesis that the different types of factivity license LDR in a hierarchy appears to be true, although in the reverse order to that stated in the hypothesis. In the data collected for this study, non-factive predicates were the least likely to allow LDR, true factives were the most likely, and semi-factives were rated somewhere in between.

This data is contrary to the account given in Rögnvaldsson (1986) and Strahan (1999), where data from Icelandic and Norwegian was presented which supported the notion that non-factive predicates were more likely than factive predicates to license LDR. The greater number of examples and test subjects used in this study lends more validity to the current results than earlier work.

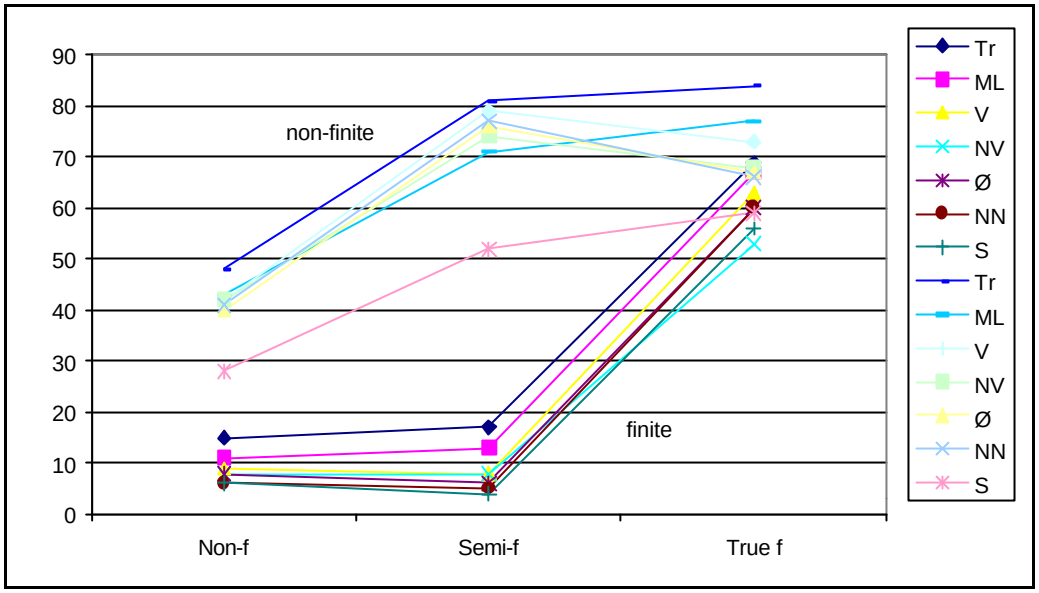
The dialectal variation with regards to the use of LDR with predicates of different types of factivity appears to be more related to the overall acceptance of LDR, rather than factivity as a licenser of LDR in any dialect. The rates of acceptance of LDR with predicates of different types of factivity are given in the following table.

Table 8.6 – Rates of acceptance of LDR with predicates of different types of factivity

	Finite			**Non-finite**		
	Non-f	**Semi-f**	**True f**	**Non-f**	**Semi-f**	**True f**
Tr	15	17	69	48	81	84
ML	11	13	67	43	71	77
V	9	8	63	42	79	73
NV	8	8	53	42	74	68
Ø	8	6	60	40	76	67
NN	6	5	60	41	77	66
S	6	4	56	28	52	59

The data in Table 8.6 show that for sentences with a finite clause boundary, semi-factives are equally or more acceptable than non-factives, while true factives are four to fourteen times more acceptable than semi-factives with an LDR. The same is mostly true for non-finite sentences, except that sentences with all factivity types are generally more acceptable. Five of the seven LDR regions also record higher levels of acceptance of LDR with semi-factive predicates than with true factives (only Tr and S have a positive gradient throughout). This is more clearly seen in graph format.

Figure 8.3 – Rates of acceptance of factive, semi-factive and true factive sentences (finite and non-finite sentences listed separately) across dialects



One more point of note about Table 8.6 is that for the finite sentences, the informants gave similar responses to the non-factive and semi-factive sentences, while for the non-finite sentences, the semi-factives and true factives had more similar responses. This data suggests that factivity, to the exclusion of other factors, is not relevant to LDR in Norwegian.

8.3 Summary and conclusions

Part IV of this thesis has focussed on empirical testing of common claims and assumptions about LDRs made in the literature. The Norwegian data has shown that, although most of the claims are generally true, there are many exceptions that are not easily explained.

There does appear to be dialectal variation with regards to the level of acceptability of LDR throughout Norway. The LDR regions of Tr and ML, which broadly correspond to Trøndelag and Midlandet, have the highest rate of acceptance of LDR. This corroborates findings reported in the literature, from eg Moshagen and Trosterud (1990) and Sandøy (1992). However, the other areas of supposedly high LDR use as reported in the literature, ie Northern Norway and Northern Vestlandet, were found to have below average acceptance of LDR in this study. Another unexpected finding was that Ø and V, which correspond broadly to Østlandet and Vestlandet, had similar levels of LDR use. Dialects in western Norway are normally considered to be more

conservative than eastern Norway, however the findings of this study show that this is not strictly true in this case.

There is also sociolectal variation with regards to degree of acceptability of LDR by Norwegians. In particular, age and level of education were found to have a significant effect on a speaker's use of LDR. Speakers aged 41 and over who have never completed high-school had LDR scores around 10 percentage points higher than the rest of the sample population. Combining these factors with the LDR dialect region, and performing a search of the data identified only five speakers – three females and two males – with these traits. The three female speakers had higher than average LDR scores, while the two males had lower than average scores. The responses to the questionnaire of each of the female speakers are closely examined in Chapter 11, as they are deemed to be representative of the classes of speakers who accept LDR.

Regarding the syntactic hypotheses, it was found that although LDRs are often monomorphemic, there are examples of non-monomorphemic LDRs in Norwegian. Reflexives are generally subject-oriented, however, this is not always the case. The subject-orientation of reflexives should not be used as a basis for a syntactic account of reflexives for this reason, meaning that accounts of reflexives that require movement to and through Infl are misguided. Finite tense is not a barrier to binding of LDRs for all speakers of Norwegian, and nearly all speakers of Norwegian accept some LDR binding over a finite boundary. In particular, context can influence the acceptability of LDR binding over a finite boundary. The last syntactic hypothesis concerns the binding domains of *seg* and *sin*, which most researchers assume to be the same. In fact, it appears that *seg* is preferentially bound long-distance, while *sin* is preferentially bound short-distance (including over a non-finite boundary).

As concerns the non-syntactic hypotheses, it was shown that the hierarchy of logocentric predicates does not provide us with any useful information about the distribution of LDR in Norwegian. Furthermore, the hypothesis that factivity may play a role in licensing LDR is possibly true, however it does not follow the rules that seemingly should apply. Sentences in this study which contained a non-factive matrix predicate were the least likely to allow LDR, while true factives, which supposedly do not license logocentric contexts, were the most likely.

Results from the empirical testing of these hypotheses show that a complex array of factors is at play in the licensing of LDR in Norwegian. Moreover, of the factors tested for here, no single factor (other than perhaps the presence of finite tense) accounts for the LDR data in one dialect region and not another. When testing each of the hypotheses, it was found that the relative order of the LDR regions, in terms of the level of LDR acceptance for each hypothesis, was consistent. Although syntactic accounts capture many generalisations, they also ignore a lot of data. The next chapter will look in detail at some more facts about LDRs, in particular the semantic meanings of reflexives and pronouns, and the use of the subjunctive mood as a licenser of LDR.

PART V

The Extended Reference Point Proposal

In Part V, a new approach to describing LDR – the Extended Reference Point Proposal – is suggested, and its usefulness is demonstrated on the data collected for this study. The foundations of this proposal are established in Chapters 9 and 10, while Chapters 11 and 12 show how these ideas apply to the Norwegian data. In Chapter 13, I give a synopsis of the factors involved in the ERPP as identified in this thesis.

Chapter 9

9 Some more facts about LDR

The previous chapters have demonstrated that syntactic accounts of LDR are fundamentally flawed, since they are based upon typological generalisations rather than strict syntactic rules. Another such generalisation is that the subjunctive mood syntactically licenses LDR in languages like Icelandic. In this chapter we will see that the subjunctive mood is semantically controlled, and although it has a high correlation with LDR in Icelandic, this correlation is not complete. We will then look once more at the notion of perspective and see whether this correlates with the distribution of LDR. Finally, we will try to identify some of the meaning components of pronouns and reflexives. The meaning differences between these two types of anaphors actually accounts for much of their distribution.

9.1 The Subjunctive mood

A crucial assumption often made in purely syntactic approaches to LDR is that it is the subjunctive mood which legitimises LDR (eg Pica 1991, Everaert 1991, Anderson 1986, Holmberg and Platzack 1995). Norwegian does not have grammatical mood, while it does have LDR. Although this immediately discounts the role of mood in the licensing of LDR, an examination of the subjunctive mood and LDR in a language which has both should lead to the disclosure of important facts about LDR.

It is well known that the subjunctive mood often correlates with the acceptable use of LDR, while the indicative mood correlates with LDR being unacceptable. The subjunctive mood has been described as a syntactic feature, in particular in GB, where mood is defined as a feature in Infl. The presence of the subjunctive mood within Infl is used to explain the apparent subject-orientation of LDRs, using cyclic head-to-head movement through Infl, where an indicative mood in Infl acts as a blocker to further movement. However, as will be shown here, not all types of subjunctive clauses allow LDR. In this section, we will follow Thráinsson (1976), who looks in some detail at the distribution of the subjunctive mood in Icelandic, and its correlation with LDR. We will attempt to identify some of the meanings associated with the subjunctive mood in section 9.2, where we will also look at sentences where LDR is allowed without the subjunctive mood.

9.1.1 Grammaticalisation of mood with certain predicates

Firstly, certain predicates in Icelandic only take indicative complements. *Vita* 'to know' is one of these. Thus we get the following judgements (Thráinsson 1976:226).

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(9.1) *Jón veit að 2 + 2 eru/ *séu 4.*
J knows that 2 + 2 is-I is-S 4
'Jon knows that 2 + 2 is- I/*S 4.'

Secondly, certain predicates in Icelandic only take complements with the subjunctive mood, such as *segja* 'to say'.

(9.2) *Jón segir að 2 + 2 *eru/ séu 4.*
J says that 2 + 2 is-I is-S 4
'Jon says that 2 + 2 is-*I/S 4.'

One difference between predicates like in (9.1) versus those like in (9.2) has to do with factivity, as defined above. *Vita* 'to know' is a factive verb, while *segja* 'to say' is non-factive. One difference, then, between (9.1) and (9.2) is that with the non-factive *segja* 'to say', the use of the subjunctive mood has been grammaticalised. LDR is typically permitted with verbs like *segja* 'to say' which have grammaticalised subjunctive complements, but not *vita* 'to know', which must take an indicative complement. This is the basis for subjunctive-mood dependent accounts of LDR, such as Anderson (1986) and Holmberg and Platzack (1995).

Embedding under a non-factive verb such as *segja* 'to say' allows a subjunctive clause to be the complement of a factive predicate such as *vita* 'to know', as shown in (9.4).

(9.3) *Jón segir að Haraldur viti að María elskar Billa.*
J says that H knows-S that M loves-I B
'Jon says that Harald knows that Maria loves Billa.'

(9.4) *Jón segir að Haraldur viti að María elski Billa.*
J says that H knows-S that M loves-S B
'Jon says that Harald knows that Maria loves Billa.'

The difference in factivity between (9.3) and (9.4) is a product only of the inherent non-factivity of the subjunctive mood. The only difference between these two sentences is that (9.3) contains an indicative clause, while (9.4) contains only subjunctive complement clauses. The difference in meaning is the same as between other minimal pairs, like (9.9) and (9.10) below, and is related to the highest subject's opinions of Harald knowing about Maria loving Billa. In (9.3), the use of the indicative clause in the deepest embedded clause conveys the meaning that it is an objective fact that Maria loves Billa, while in (9.4), the use of the subjunctive mood indicates that it is only Jon's opinion that Harald knows about Maria loving Billa. Apart from this grammaticalisation of factivity, there are other uses of the subjunctive mood in Icelandic.

9.1.2 Subjunctive and counterfactual conditionals

The subjunctive is used with counterfactual conditionals, such as *X would be happy if Y.* Some other conjunctions such as *nema* 'unless' and *þó að* 'although' also require the subjunctive mood in their complements. *þó að* is particularly interesting with

regards to its requiring the subjunctive in its complement clause, as it presupposes this complement (although presupposition normally involves the indicative mood). That *þó að* presupposes its complement is made clear by the fact that the following sentence involves a contradiction (Thráinsson 1976:227).

(9.5) **Jón er hér þó að María sé hér, en María er ekki hér*.
J is here although M is here but M is not here
Jon is here although Maria is here but Maria is not here.

LDR is not permitted with this type of subjunctive, as shown following (Thráinsson 1976:232).

(9.6) **Jón$_i$ veit að hann$_j$ kemur þó að María kyssi sig$_i$*.
J knows that he come-I although M kisses-S R
Jon$_i$ knows that he$_j$'s coming although Maria would be kissing him$_i$.

LDR in Icelandic therefore seems to correlate with the semantic notion of presupposition or factivity (which is the opposite to what was found in the last chapter with regards to factivity and LDR in Norwegian), rather than the overt grammatical mood of the clause, since the mere presence of the subjunctive mood does not license LDR, although the two are closely linked.

LDRs in subjunctive adverbial clauses are also not accounted for by defining the subjunctive mood as a syntactic licenser of LDR. LDR is not permitted in (9.7) where the reflexive is in an adverbial subordinate clause, even though it is in the subjunctive.

(9.7) **Jón$_i$ væri glaður ef María kyssti sig$_i$*.
J would-be glad if M kiss-S R
Jon$_i$ would be happy if Maria kissed him$_i$.

However, if this sentence is embedded under another predicate like *segja* 'say', then LDR is permissible.

(9.8) *Jón$_i$ sagði að hann$_i$ væri glaður ef María kyssti sig$_i$*.
J said that he would-be glad if M kiss-S R
'Jon$_i$ said that he$_i$ would be happy if Maria kissed him$_i$.'

Examples like (9.7) and (9.8) show that it is not the adverbial islandhood per se that licenses LDR. This suggests that it is neither possible nor plausible to account for LDR syntactically. The claims made by syntacticians that LDR is licensed by the subjunctive mood, or by some other type of agreement within Infl, seem unmotivated and even incorrect, in light of the fact that, in Icelandic, this is not always true, and in languages without overt Agr, LDR is still also acceptable.

We will now look at minimal sentence pairs which differ only in the presence of the subjunctive or indicative mood, and attempt to identify the semantic differences. This will give us a better understanding of the reason for the high correlation (in some languages) of the subjunctive mood and LDR.

9.1.3 Minimal pairs – subjunctive versus indicative

An important difference between the subjunctive and indicative moods is that the indicative mood indicates a factive complement in Icelandic, while the subjunctive mood indicates a non-factive complement. Travis (1999) analyses the subjunctive in Spanish in terms of the Natural Semantic Metalanguage framework. The main meaning component carried by the subjunctive mood, she says, is an anti-cognoscente meaning, which she phrases as 'I don't want to say: I know this', after [Wierzbicka 1988:148]. This is clearly the factivity meaning mentioned above[1]. When minimal pairs of sentences differing only in mood are compared, this subtle but important difference is evident.

ICELANDIC

(9.9) *Jón las það í blaðinu að María hafði komið heim*.
J read it in paper that M had-I come home
'Jon read in the paper that Maria had come home.'

(9.10) *Jón las það í blaðinu að María hefði komið heim*.
J read it in paper that M had-S come home
'Jon read in the paper that Maria had come home.'

[1] Hooper (1975) describes the use of the Spanish subjunctive mood in terms of assertivity, and how this relates to the speaker's willingness to be responsible for the truth of the proposition.

The difference between (9.9) and (9.10) is that 'the indicative states a fact whereas the subjunctive reports what John read, and the speaker doesn't commit himself [sic] to the truth of that material' (Thráinsson 1976:227). This difference is borne out by various semantic tests such as adding a negating clause …*but she didn't come home.* With the indicative prior to this addition, the result is ungrammatical. When this addition follows the subjunctive, the sentence is fine. This indicates that the subjunctive itself is non-presupposing, or shows non-factivity. This supports what is commonly stated in the literature, that LDR correlates with non-presupposing or non-factive complements, just as the subjunctive mood normally does. Discrepancies in the correlation between the subjunctive mood and LDR occur when the subjunctive mood is used with factive complements, as was the case with *þó að* 'although' in (9.5) above.

9.1.4 Summary

There are at least three different uses of the subjunctive mood in Icelandic. These are in grammaticalised complements of non-factive predicates, grammaticalised complements of counter-factual conditionals and certain other conjunctions, and in minimal pairs with the indicative mood, where the choice of mood is dependent upon the meaning the speaker wishes to convey. However, contrary to popular opinion, it seems false to say that it is the subjunctive mood which licenses LDR. An examination of the role of perspective in the meaning of the subjunctive mood, and the effects it has on the interpretation of the sentence it is in may shed some light on the meaning and effects of LDR.

9.2 The role of perspective

Perspective has an important role to play in the overall meaning of the subjunctive mood. Recall from Chapter 4 that a speaker can choose to represent a proposition from various perspectives using a range of linguistic tools. We saw that the perspective of a sentence tends to lie with a grammatical subject (the Surface Structure Empathy Hierarchy). Other perspective constraints discussed there included the Topic Empathy Hierarchy (empathy tends to lie with a discourse topic rather than a non-discourse topic) and the Ban on Conflicting Empathy Foci (a sentence cannot simultaneously present conflicting perspectives). I also proposed a Mood Empathy Hierarchy, which accounts for the use of the subjunctive mood in certain clauses to

state or emphasise the fact that the perspective-holder of that clause lies with an entity in a higher clause.

We can identify the perspective-holder of a sentence containing the subjunctive mood as the entity whose efforts or intentions are stressed ([Smári 1920:210], Thráinsson 1976:228). This effect can be understood as a result of the grammatical encoding of the conceptual dependence of the subjunctive clause on the matrix clause. We can see that the subjunctive mood stresses some higher subject's efforts by the fact that if a word which reduces the higher subject's involvement in the action is added to the matrix clause, the result is unacceptable if the embedded clause is in the subjunctive mood. One such word is *óviljandi* 'inadvertently'; the result is shown here.

(9.11) **Jón kom því óviljandi til leiðar að María kæmi heim*.
J come it inadvertently to leading that M came-S home
Jon brought it about inadvertently that Maria came home.

(9.12) *Jón kom því óviljandi til leiðar að María kom heim*.
J come it inadvertently to leading that M came-I home
'Jon brought it about inadvertently that Maria came home.'

The clash between the subjunctive mood, which emphasises *Jon*'s participation in (9.11), and the word *óviljandi* 'inadvertently' is so great that it renders the sentence ungrammatical. No such clash exists in (9.12), which is fine. The subjunctive connotes a greater conceptual dependency between the matrix and the complement than the indicative, which is independent of the factivity or presuppositions of the sentence. Further evidence of the conceptual dependency between the matrix and the complement is found in the fact that inanimate subjects result in a lower degree of acceptability with a subjunctive complement. This is because it is illogical to stress the higher subject's efforts or intentions when no efforts or intentions on the part of that subject are feasible. Inanimate entities cannot be perspective-holders.

Thráinsson states that the use of the subjunctive mood 'implies a report from the higher subject's "point of view"' (Thráinsson 1976:229), implying some sort of intentionality on the part of the higher subject. Embedded clauses in the subjunctive mood therefore encode a greater conceptual dependence upon the matrix clause, just as embedded non-finite clauses do. Neither a clause in the subjunctive mood, nor a non-finite clause can have an independent perspective from the matrix clause.

Further support for this contention comes from Benedicto (1991), who shows in her investigation into Latin LDR that the subjunctive mood represents a dependent verbal inflection of sentential complements, just like non-finite clauses do, but it does not have any effect in *triggering* LDR. Thus, in Latin, LDR may be present with the indicative mood, as in (9.13) (from Benedicto 1991:175).

(9.13) *Epaminondas$_i$ [$_{NP}$ ei [qui sibi$_i$ ex lege praetor*
E-NOM him-DAT that-NOM R-DAT by law-ABL praetor-NOM
successerat]] exercitum non tradidit.
succeeded-I army-ACC not transferred
'Epaminondas$_i$ did not transfer the army to the one that succeeded himself$_i$ as a praetor according to the law.'

Epaminondas is the perspective-holder in (9.13) of both the main clause and the clause containing the reflexive. LDR is therefore clearly not 'mechanically "governed" by the subjunctive but rather correlates with a certain type of subjunctive' (Thráinsson 1976:236), typically the complement of a verb which takes a grammaticalised subjunctive mood. The role of perspective in governing LDR supersedes the role of overt grammatical mood, as we shall see in the next section.

9.2.1 LDR without the subjunctive

More evidence that it is the perspective inherent in the subjunctive mood and not the overt presence of the mood itself which licenses LDR comes from the fact that LDR may be present with the indicative mood, as it is for example in some dialects of Icelandic (Thráinsson 1991, Sigurðsson 1986:8). The variety of Icelandic normally described in the literature which does seem to require the presence of the subjunctive mood to license LDR is referred to as the S-dialect, while the variety which allows LDR with the indicative mood is referred to as the I-dialect. An example of LDR in the I-dialect is given here (from Sigurðsson 1986:8).

ICELANDIC

(9.14) *Jón$_i$ veit að María elskar sig$_i$.*
J knows that M loves-I R
'Jon$_i$ knows that Maria loves him$_i$.'

For speakers of the I-dialect, *Jon* may be the perspective-holder of the whole sentence in (9.14). The role of perspective, rather than overt grammatical mood, in licensing LDR is clear when we compare examples like (9.14) with (9.15) (from Thráinsson 1991:52).

(9.15) **Ég$_i$ lofaði Önnu$_j$ [PRO$_i$ að kyssa sig$_j$]*.
I promised A to kiss R
I$_i$ promised Anne$_j$ to kiss herself$_j$.

In (9.15), *Önnu* cannot be construed as a perspective-holder, so LDR with her as the antecedent is not allowed. In a similar way, *Jon* in (9.16) cannot be construed as the perspective-holder for the domain containing the reflexive, so the LDR is unacceptable (from Thráinsson 1991:55).

(9.16) **Ég sagði Jóni$_i$ [að þú hefðir svikið sig$_i$]*.
I said J that you had betrayed R
I told Jon$_i$ that you had betrayed himself$_i$.

Some syntacticians, eg Anderson (1986), Pica (1991), have used the similarity between the subjunctive mood and non-finite clauses to explain why LDR is permitted across non-finite and subjunctive boundaries, while the finite indicative mood blocks binding. These approaches to LDR then group together LDR out of non-finite clauses and subjunctive clauses. Contra to these arguments, Reuland and Sigurjónsdóttir (1997) show that there are 'consistent differences between the antecedent possibilities of [the Icelandic reflexive] in subjunctives versus infinitives' (p326). They argue that LDR in infinitives is governed by the syntax, while LDR in subjunctives is governed by the semantic feature of perspective. Reflexives in infinitives must have a c-commanding antecedent, they say, while reflexives in subjunctives only require a perspective-holder antecedent. However, in light of examples like (9.16), we must acknowledge that perspective also seems to be important to LDR out of non-finite clauses.

Another argument against grammatical mood governing LDR and for perspective as the true governor is that languages which do not have grammatical mood, such as Norwegian and Faroese, do have LDR. Moreover, the distribution of LDR in these languages occurs in similar environments to the distribution of LDR in Icelandic (Moshagen and Trosterud 1990, Sigurðsson 1986). The presence of the subjunctive

mood cannot be said to license LDR in these languages, by omission (examples from Sandøy 1992:103 and Sigurðsson 1986:7 after [Barnes 1985]).

NORWEGIAN (ROMDALSK)

(9.17) /hu ˈpo:stu at de va ˈsɨɲ/
Ho$_i$ påstod at det$_j$ var sin$_i$
she claimed that it was R
'She$_i$ claimed that it$_j$ was hers$_i$.'

NORWEGIAN (TRØNDERSK)

(9.18) /dæm ˈkaɲ ic ˈvɛɲc at ˈfoɽk skal kom te ˈsæ:/
Dei$_i$ kan ikkje venta at folk$_j$ skal komma til seg$_i$
they can not expect that people will come to R
'They$_i$ can't expect that people will come to them$_i$.'

FAROESE

(9.19) *Hann$_i$ helt fyri at tað hevði ekki verið sín$_i$ ætlan at …*
he held forth that it had not been R intention to
'He$_i$ maintained that it had not been his$_i$ intention to …'

In (9.17), (9.18) and (9.19), the perspective-holder in each sentence is the antecedent of the LDR. The Norwegian dialects of Romsdalsk and Trøndersk (which are both in the Tr region), as well as Faroese, do not have a grammatical subjunctive mood marking. Clearly, any account of LDR which relies upon the presence of the subjunctive mood is inadequate to describe the data.

The distribution of the indicative and subjunctive moods is controlled by semantic features, including perspective, in Icelandic (Sigurðsson 1986:29). Sigurðsson comments that

> …the fact that the distribution of the moods [indicative versus subjunctive] is semantically controlled (for all speakers) makes it rather suspicious that the correlation of LDR with the subjunctive in the S-dialect should be a syntactic feature.
>
> Sigurðsson (1986:29)

In other words, the distributions of LDR and the subjunctive mood have some overlap, however this does not mean that one licenses the other. We have seen

throughout this section (9.2) that perspective correlates more closely with the use of LDR than does the presence of the subjunctive mood. This high level of correlation between the subjunctive mood and LDR also seems to be due to the role perspective plays in the distribution of each.

9.2.2 Summary

Some varieties of Icelandic allow LDR with the indicative mood, and languages such as Norwegian and Faroese, which do not have grammatical mood, do have LDR. The link between the subjunctive mood and LDR seems to lie in the role that perspective plays in each. The subjunctive mood expresses intentionality on behalf of the higher subject, or this subject's effort or point of view. Clauses in the subjunctive mood also have similarities with non-finite clauses, in that neither may present a perspective different to that of the matrix clause. LDRs always seem to refer to the perspective-holder of a sentence or particular domain.

What we haven't identified in this section is a way of determining who the perspective-holder of each sentence is – we have merely taken for granted that this role is clear. This omission reflects the LDR literature in general. This issue will be taken up again in the next chapter (section 10.3.5). But firstly, there is another area concerning LDR which must be addressed, which is identifying the meaning/s of anaphoric elements, ie reflexives and pronouns.

9.3 Meaning differences between reflexives and pronouns

Reflexives carry more semantic information than mere coreference relations[2]. This has been hinted at by Thráinsson (1976, 1991), Sigurðsson (1986), Kemmer (1995) and Reuland and Sigurjonsdottir (1997). Further aspects of the meaning carried by reflexives are discussed in this section. In section 9.3.1, we will compare the meanings of non-LDR reflexives and pronouns. In section 9.3.2, we will look at some data from languages with two reflexives. In 9.3.3, we will compare LDRs with pronouns. Finally, in 9.3.4, we will look briefly at languages with two LDRs. The findings are summarised in 9.3.5.

[2] Some of this work on the meanings of reflexives and pronouns has already been published in Strahan (2001). This section has been reworked and expanded from that publication.

9.3.1 Reflexive versus pronominal anaphors

There is a clear difference between the meaning carried by a pronoun and that of a reflexive[3]. As well as both being anaphors in the general sense of the word, and thus being dependent upon some antecedent to achieve real-world reference, the reflexive also carries with it some sense of a body, a person and their values.

Recall from Chapter 3 that Reinhart and Reuland's (1993) definition of reflexivity was contingent upon the semantics of the predicate involved in the reflexive construction. Another way to view this is to say that the main consideration to take into account in basic reflexive constructions is whether the object/s of the predicate are semantically direct recipients or targets of the actions represented by the predicates (Kuno 1987:67). Only a reflexive can be used if the anaphor is a direct recipient or target of the action represented by a predicate and is coreferential with the antecedent. In this way, the semantics of the predicate combine with the semantics of the reflexive to produce meaningful sentences. Note that this applies to semantic predicates, which include a verb and any prepositions which are semantically part of the predicate. This accounts for the differences between the following sentences.

(9.20) *John$_i$ wrote to Mary about himself$_i$.*
(9.21) **John$_i$ wrote to Mary about him$_i$.*
(9.22) **John$_i$ has an air of aloofness about himself$_i$.*
(9.23) *John$_i$ has an air of aloofness about him$_i$.*

In (9.20), *John* is the direct target of the predicate *write about X*, in that the link between *himself* and *John* is predicated by a single predicate. But in (9.22), *have an air of aloofness* does not have *John* as a target of action (Kuno 1987:66), as *himself* and *John* are linked through two concepts: *having something* and *an air of aloofness*. Use of the reflexive in this case is thus ungrammatical. The reverse arguments apply to (9.21) and (9.23).

This semantic difference is clearer in examples where both the reflexive and the pronoun are acceptable. Here, we also see that the distinction between the distribution

[3] Some linguists, eg Dirven (1973), McKay (1991), refer to the different *functions* of reflexives and pronouns. However, under the approach taken here, these different functions are due to the different meanings of reflexives and pronouns.

of the pronoun and the reflexive is not equivalent to the distinction between adjuncts and complements. Above, the sentence containing the adjunct was grammatical only with the reflexive, while the complement required a pronoun. Here, both reflexives and pronouns are acceptable in adjuncts (9.24) and complements (9.25), (9.26), (9.27).

(9.24) *Brent$_i$ hid the book behind him$_i$/ himself$_i$.*
(9.25) *Lucien$_i$ pulled the doona over him$_i$/ himself$_i$.*
(9.26) *Cliff$_i$ put the beer next to him$_i$/ himself$_i$.*
(9.27) *Anthony$_i$ put the blanket under him$_i$/ himself$_i$.*

In (9.24) to (9.27), although both the reflexive and the pronoun produce acceptable sentences of English, they are not semantically equivalent. When the reflexive is used, there is a sense that the whole person is somehow involved, and contact between the person and the object is also involved. This is not the case when a pronoun is used. In (9.24), use of the pronoun could mean that the book was ten feet away behind *Brent* somewhere, whereas use of the reflexive means that it is *Brent*'s body that is hiding *the book* from sight. Use of a reflexive here asserts physical contact, or at least proximity, between the antecedent of the reflexive and the direct object. (9.25) with a reflexive means that *Lucien* hid the whole of himself under *the doona*, whereas the use of the pronoun implies only that some part of himself was covered by *the doona* after he had pulled on it. The use of the reflexive in (9.26) implies that *Cliff* was maybe touching *the beer*, or that he was at least being somewhat possessive of it. Use of the pronoun does not imply any type of possession. Finally, in (9.27), the version with the pronoun does not imply any sort of contact between *Anthony* and *the blanket*. *Anthony* could be sitting on a chest, into which he put *the blanket*. On the other hand, when the reflexive is used, it implies that he probably spread it out on the ground beneath him and sat directly upon it[4].

Use of the reflexive entails some sort of possession, ownership, contact or use of the whole body, whereas a pronoun is merely some form of expressing coindexation when a reflexive is not acceptable[5]. That is to say that the reflexive is more concretely

[4] I presented these examples at a seminar, where these meanings were agreed to represent people's intuitions. Nobody seemed to disagree with them.

[5] Following Levinson's (2000) Generalised Conversational Implicatures, which are based upon Grice's Maxims of Relevance, Quantity and Quantity (summarised in eg Levinson 1983:101-118), one form is

associated with the referent as an entire entity, while the pronoun need not be entirely coreferential. There is also some sort of intentionality associated with the action of which the reflexive is a direct argument. This is absent when a pronoun is used.

The same meaning differences between reflexives and pronouns are found in similar minimal pairs in other languages, too. (9.28) to (9.31) are equivalent sentences in Norwegian and Swedish (from Platzack 1998:218). The Norwegian glosses attempt to elucidate the semantic difference between the reflexive and the pronoun. This difference is not explicit in the Swedish examples and is not as pronounced as in Norwegian (Catrinn Norrby, p.c.), although there is still some difference.

NORWEGIAN

(9.28) *Eg ga han$_i$ pengane sine$_i$.*
I gave him money R
'I gave him$_i$ his$_i$ (previously owned) money.'

(9.29) *Eg ga han$_i$ pengane hans$_i$.*
I gave him money his
'I gave him$_i$ his$_i$ (owed) money.'

SWEDISH

(9.30) *Jag gav honom$_i$ sin$_i$ lön.*
I gave him R pay
'I gave him$_i$ his$_i$ pay.'

---

taken to entail the default interpretation, while the other form takes a non-default interpretation by implicature. For intrinsically reflexive predicates, eg *shave*, *behave*, the default form is the reflexive and the non-default the pronoun. The reverse is true for non-intrinsically reflexive predicates, eg *cut*, *hit*. For example, in English, we can omit the overt object of an intrinsically reflexive predicate: *He's shaving*, *we're behaving*, and the default assumption is that the object is coreferential with the subject. In Norwegian, the simplex reflexive *seg* is used to mark the default intrinsic reflexivisation.

In English, we cannot omit the object of a non-intrinsically reflexive predicate, because we need to specify which entity the object is. In Norwegian, the complex reflexive *seg sjølv* is used to show coreference with a non-intrinsically reflexive predicate, eg *Han er glad i seg sjølv* 'He likes himself'. Note that in Norwegian, it is possible to get an intrinsically reflexive interpretation of *slå seg* 'hit oneself' and *skjæra seg* 'cut oneself'. These default interpretations contrast with the marked forms *slå seg sjølv* 'deliberately/ forcibly hit oneself' and *skjæra seg sjølv* 'deliberately cut oneself'. When the marked form is used, more agentive characteristics are implied. This is discussed in more detail in section 9.3.2.

(9.31) *Jag gav honom$_i$ hans$_i$ lön.*
I gave him his pay
'I gave him$_i$ his$_i$ pay.'

When the reflexive is used as in (9.28) and (9.30), clear ownership of the possessed NP is understood. This parallels the English examples where use of a reflexive entails some sort of possession, ownership, contact or use of the whole body. Use of the pronoun as in (9.29) and (9.31) expresses coindexation when this meaning is not intended. The possessive pronoun may also refer to some fourth party, not mentioned in the sentence, but present in the discourse. Use of the pronoun therefore produces an ambiguous sentence, while the reflexive does not. Several speakers from this study (in particular 395, 510 and 537) commented that the construction in (9.28) was fine, if some extra word meaning 'back to' or 'again' was added. This reinforces the idea that the money originated with 'him', it emphasises the ownership or possessive nature of the reflexive.

9.3.2 Languages with two reflexives

In languages with two reflexives, such as Norwegian and Dutch, each reflexive has its own meaning. Postma (1997:316) says that 'standard Dutch *zich* refers to the possessor as a whole, whereas *zichzelf* refers to the possessor with all his (relevant) parts.' In other words, the meanings attributed to the possessive reflexive *sin* above may be divided into two groups – one referring to the part-whole relationship between a person and their relevant parts (eg *seg sjølv*), and the other referring to all of these parts at once (eg *seg*). The following sentences illustrate this.

DUTCH

(9.32) *De monnik$_i$ bezeerde zich$_i$.*
the monk-EXP hurt R
'The monk$_i$ hurt himself$_i$.'

(9.33) *De monnik$_i$ bezeerde zichzelf$_i$.*
the monk-AG hurt R
'The monk$_i$ hurt himself$_i$.'

The context of (9.32) could be that *the monk* hurt his finger, his head, or even his spirit (in an argument with God, perhaps). *De monnik* 'the monk' in this case is an

Experiencer of the hurt, due to the intrinsically reflexive nature of the predicate *zich bezeeren* 'hurt oneself'. On the other hand, the only logical interpretation of (9.33) is that *the monk* attacked himself with the purpose of injury. This follows from the meaning of *zichzelf* as being 'the monk and all his relevant parts'. These parts include his entire physical and spiritual bodies; it follows that the only way *the monk* could injure his entire 'self' would be if he was the Agent of the hurt, as well as the recipient.

Postma (1997:310ff) describes this difference between *zich* and *zichzelf* in terms of part-whole relations. Essentially, Postma (1997) argues that weak reflexives likes *zich* and *seg* are used to refer to the person. The strong reflexive, eg *zichzelf* and *seg sjølv*, refers to the actual physical or spiritual body of a person – all the parts of a person. Consider the difference between the following.

NORWEGIAN

(9.34) *Døra$_i$ åpna seg$_i$.*
door opened R
'The door opened.'

(9.35) *Døra$_i$ åpna seg sjølv$_i$.*
door opened R self
'The door$_i$ opened itself$_i$.'

When the weak reflexive *seg* is used with the intrinsically reflexive predicate *åpna seg* as in (9.34), the door opening may be viewed as an action pertaining to the door, but not necessarily caused by it. In (9.35), the heavy reflexive *seg sjølv* indicates that the whole of the body of the door moved, and it implies that the door created this movement itself, since there is a strong feeling of the whole of the door being involved. And in fact, the only circumstances under which (9.35) would be acceptable were if the door in question was somehow sentient and could therefore be responsible for such movement of its own accord.

The sense of the whole (sentient, physical) self being involved when a heavy reflexive is present, is also present in well-known Norwegian examples. The difference between the intrinsically-reflexive predicate *vaska seg* and the non-intrinsically reflexive predicate *vaska seg sjølv* is due to the different meanings of the two reflexives, as shown following.

(9.36) *Jon$_i$ vaska seg$_i$.*
J washed R
'Jon washed.'

(9.37) *Jon$_i$ vaska seg sjølv$_i$.*
J washed R self
'Jon$_i$ washed himself$_i$.'

The weak reflexive in (9.36) can be thought of under Postma's (1997) account as not necessarily involving *Jon*'s whole person, while the heavy reflexive in (9.37) does imply this. This is probably seen more clearly with a predicate which does not itself imply the use of the whole self, eg

(9.38) *Jon$_i$ beundret seg$_i$ (i speilet).*
J admired R in mirror
'Jon$_i$ admired himself$_i$ (in the mirror).'

(9.39) *Jon$_i$ beundret seg sjølv$_i$.*
J admired R self
'Jon$_i$ admired himself$_i$.'

In (9.38), it is only *Jon*'s reflection that is being admired, in other words, *Jon* is admiring only a part of himself. On the other hand, in (9.39), *Jon* is admiring his whole self, his whole person, as it were. Hellan (1988:143, fn4) comments that *seg sjølv* defines a domain which is a subpart of the configuration constituting the domain of *seg*. The reason for this, he says, is due to the emphatic nature of *sjølv* which restricts the domain of *seg* when used in conjunction with it. Under the semantic analysis being taken here, we can see that, while *seg sjølv* refers to the whole person and all of their relevant parts, *seg* may only refer to part of the person. This analysis is compatible with Hellan (1988). Evans and Wilkins (2000) also comment that the physical, social and psychological sides of a person are included in the meaning of *self*. This could explain the preference for *seg* with intrinsic reflexives, and why *seg sjølv* is used for non-default reflexivisation.

And now we may turn our attention to identifying the meaning differences between LDRs and pronouns. Postma's (1997) notion – that weak reflexives like *seg* only refer to part of a person, and implicate, rather than entail, all the person's relevant parts –

provides a simple explanation as to why LDRs are normally weak, or simplex. The use of *sjølv* carries stronger agentive connotations which explains why it is normally clause-bound. The fact that heavy, non-monomorphemic reflexives like *seg sjølv* may also have syntactically non-local antecedents derives directly from their meaning, not from any syntactic, morpheme-related restriction.

9.3.3 LDRs and pronouns

It has been previously noted in the literature (eg Thráinsson 1976, Sigurðsson 1986) that LDRs carry other information besides just grammatical coreference. As stated already, pronouns and LDRs may occur in the same environment, as shown following. (To refer to *Maria*, the heavy reflexive *sjálfur sig* would be used.)

ICELANDIC

(9.40) *Jón$_i$ telur að María elski hann$_i$ / sig$_i$.*
J believes that M love-S him R
'Jon$_i$ believes that Maria loves him$_i$ / himself$_i$.'

It is interesting to note that many speakers in fact prefer the reflexive over the pronoun in cases like this (Thráinsson 1976:236). This is attributable to the fact that the version with the reflexive is not ambiguous with regards to the antecedent, whereas the pronoun may also take a discourse antecedent. This is also true for LDR in Norwegian. Speakers in this study who accept LDR often preferred the reflexive over the pronoun, citing disambiguation as the main reason for this (Strahan 2001).

The meaning difference between the two versions in (9.40) becomes very clear under quantifier testing.

ICELANDIC

(9.41) *Aðeins Jón$_i$ telur að María$_j$ elski sig$_i$/ hann$_i$.*
only Jon$_i$ believes that Maria$_j$ loves R$_i$/ him$_i$.
'Only Jon$_i$ believes that Maria$_j$ loves him$_i$.'

The logical structure for the reflexive version may be stated as 'The only one$_i$ who believes Maria loves him$_i$ is John', or:

(9.42) Jon is the only *x* such that:
x believes (Maria loves *x*).

The logical structure for the pronominal version may be stated as 'The only one who believes Maria loves John is John himself', or:

(9.43) Jon is the only *x* such that:

i. *x* believes (Maria loves *y*)

& ii. *y* = 'Jon'

In the reflexive version, the quantifier has scope over both the antecedent and the reflexive, while in the pronominal version it just has scope over the antecedent. This scope relationship is also exploited by LDRs, whose antecedents have scope over a domain which itself has an embedded domain containing the reflexive (Sigurðsson 1986:45). A sentence containing an LDR could have a logical structure similar to (9.42)[6], while a minimal pair sentence with a pronoun could have a similar logical structure to (9.43).

Thráinsson (1976:237) does not state what the meaning expressed by Icelandic LDR is, other than to say that it 'is related to the meaning reflected in the subjunctives that correlate with it'. The problem, then, lies in identifying the meaning components which are involved in certain uses of the subjunctive mood. Although Thráinsson does not identify these, it was claimed above that perspective may be (at least part of) the answer. What is certain is that disambiguation plays a role in the semantics of LDRs. If we assume that the non-clause-bounded reflexive has (at least some of) the same meaning as a clause-bounded reflexive, then we can assume that the LDR means something like 'the whole person, with some sense of a physical body, the person's (spiritual) values, and other factors attributable to being a person'. This is in line with what has been said about reflexives in the literature (Postma 1997, Kuno 1987), and provides an explanation for the fact that LDRs stress the antecedent's effort or perspective. (In section 9.3.4 we will look more closely at the difference between weak and heavy LDRs.) In the following LDR example, it is clear that the reflexive is referring to some part of the antecedent, and thereby implicating the whole person.

[6] Hellan (p.c.) asks whether this is meant to argue that at least one the meanings involved should be captured by representing the reflexive as a bound variable. The answer to this is yes, it can.

TRØNDERSK

(9.44) *Han$_i$ bruker det som passer sæ$_i$.*
he uses it which suits R
'He$_i$ uses what pleases him$_i$.'

In (9.44), the reflexive carries the meaning of 'his mood' or 'his whims'. It does not refer to the whole body of *han* 'him', only part of him and his related bits. It refers to his whole self by implicature.

SMØLA DIALECT

(9.45) *Han$_i$ trudd at dæm kom til å flir åt sæ$_i$.*
he thought that they come to to laugh at R
'He$_i$ thought that they'd laugh at him$_i$.'

In (9.45), the thing potentially being laughed at was the way *he* looked, or something *he* might do. The rest of his person is implicated by the use of the LDR.

9.3.4 Two types of LDRs

It is often stated in the literature that LDRs are simplex, or monomorphemic. Examples of heavy, non-monomorphemic reflexives with LDR readings are not mentioned. However, as was shown in Chapter 7, they do exist. The meaning differences between the LDR simplex and complex reflexives in Norwegian mirror the meaning differences between locally-bound simplex and complex reflexives, as discussed in section 9.3.2.

Example (9.46) uses the heavy reflexive *seg sjølv* as an LDR.

(9.46) *Susann$_i$ har ei bestemor$_j$ som$_j$ er like fotball.gal som seg sjølv$_i$.*
S has a grandmother who is equally soccer.mad as R self
'Susann$_i$ has a grandmother$_j$ who$_j$ is just as mad about soccer as herself$_i$.'

In (9.46), *Susann*'s whole person is mad about soccer. The use of the heavy reflexive *seg sjølv* in this case indicates that soccer is an all-encompassing passion, not just a passing fad or ephemeral past-time. The meaning carried by this LDR is the whole person. Note that *seg* in this instance would sound odd, since *being soccer-mad* carries connotations of a person who lives for soccer. *Seg* does not have the meaning

of the whole person, so it would not make sense to use it in this case. Use of the pronoun would be possible here, and it would carry with it an outsider's perspective.

(9.47) *Susann$_i$ har ei bestemor$_j$ som$_j$ er like fotballgal som ho$_i$.*
S has a grandmother who is equally soccer.mad as her
'Susann$_i$ has a grandmother$_j$ who$_j$ is just as mad about soccer as her$_i$.'

In Chapter 7, section 7.1, many more examples were given of *seg sjølv* acting as an LDR, in particular the test sentences 10, 16, 28, 30, 32, 36, 40, 44 and 46 elicited judgements stating that *seg sjølv* was fine as an LDR in these cases. Some speakers made comments concerning the difference between the use of *seg* and *seg sjølv*. Speaker 374 from Tr commented on sentence 16, given in Table 9.1.

Table 9.1 – Test sentence 16

16	*Per likte å sjå seg i speilet når han var på jobb.*	Per liked to watch R in the mirror when he was at work.

According to speaker 374, using *seg* in sentence 16 would mean that Per liked looking at his *image*, or his reflection, whereas *seg sjølv* would refer to his whole *body*. This is precisely the claim that is being made here – that *sjølv* refers to a whole body, while *seg* refers to some part of the body, referring to the whole person by implicature[7].

9.3.5 Summary

Reflexives carry meaning which includes a sense of body, a person, their values, possession, ownership, contact, proximity or use of the whole body. When a pronoun could potentially refer to the same antecedent, point-of-view (POV) effects are also present, such that use of the reflexive presents the proposition from the antecedent's POV, while use of a pronoun denies this POV.

When a language has two reflexives, they have different meanings. This was shown for Norwegian and Dutch[8]. The different meanings have a part-whole relationship,

[7] Unfortunately, the questionnaire did not specifically ask the informants to explain the meaning difference/s of sentences where both *seg* and *seg sjølv* were possible. Therefore most informants gave explanations along the lines of 'ambiguous – use *seg sjølv* to disambiguate' or 'more precise – *seg sjølv*'. An interesting paper would arise from this question being posed to a Norwegian linguistics class, and collating the results.

[8] Interviews with native speakers of Swedish indicate that the reflexives *sig* and *sig själv* have very similar (although not identical) meanings to the Norwegian equivalents *seg* and *seg sjølv*.

such that the heavy, or strong, reflexive (eg *seg sjølv*, *zichzelf*) refers to the whole physical and spiritual body of a person including all their relevant parts, while the weak reflexive (eg *seg, zelf*) is used to refer to some part of the body or mind which then entails the rest of the person. Both weak and strong reflexives may be used as an LDR, depending on the meaning intended (or allowed pragmatically).

We have now looked at the meanings of the subjunctive mood and reflexives, and discovered that overlap occurs in the conceptual area of 'person' and related concepts such as perspective and 'intentionality'. In the next chapter, we will look at some concepts from studies in discourse and cognitive semantics, in particular, *accessibility, profiles* and *bases*, and try to isolate more of the conditions which are necessary for an entity to be the referent of a reflexive. The notion of a *reference point* is discussed, and a proposal is made to combine this notion with the LDR facts uncovered in this thesis to create a unified account of reflexives. This proposal is based upon work on anaphora constraints in van Hoek (1997) and is called here the Extended Reference Point Proposal.

Chapter 10

10 Discourse theories

This chapter contains an introduction to Accessibility Theory and Conceptual Semantics, two linguistic theories that use similar notions to describe language in non-syntactic terms. They are both useful in examining LDR for this reason. The relevant notions from Accessibility Theory (after Chafe 1996 and Ariel 1990, 1991) are introduced first, followed by those from Conceptual Semantics (after Langacker 1972, 1973 and van Hoek 1997). Of particular interest to this thesis is van Hoek's (1997) Reference Point model, which, as she shows, accounts for the distribution of pronouns and full NPs, as well as clause-bound reflexives. This Reference Point model is so interesting, because it can be extended to account for LDRs, discourse reflexives, and other types of 'exempt' anaphora, by incorporating into van Hoek's outline the facts about reflexives summarised in this thesis so far, and Levinson's (2000) ideas about pragmatic implicatures. The result is the Extended Reference Point Proposal (ERPP). The general outline of the applicability and usefulness of the ERPP in accounting for LDRs and other types of exempt reflexives is the second major contribution this thesis makes to the study of LDR, after the introduction of the body of new data.

10.1 Accessibility Theory

The notion of *accessibility* refers to how easily the referent of a particular idea or piece of information in a discourse may be recovered. Information is generally classed as falling into one of three categories: *active, semi-active* or *inactive* (Chafe 1996:40). *Active information* is defined as being in the speaker's consciousness, *semi-active* is defined as being in the speaker's peripheral consciousness, while *inactive* information is typically encyclopedic knowledge stored in the speaker's long-term memory. Active ideas are also said to be *given*. Inactive ideas, when introduced into the discourse, are classified as *new*. Semi-active ideas are either *accessible* or *identifiable*. Inactive ideas are new ideas once they are introduced into the discourse.

Chafe (1996) also distinguishes within the domain of semi-active information, information that is *accessible* and information that is *identifiable*. According to him, 'speakers treat a referent as identifiable if they judge that the words they use to express it will enable the listener to identify it' (p38). Also, '[a]n idea can be said to be *accessible* if the speaker assumes that at this point in the discourse it is semiactive in the listener's consciousness' (p40). It is unclear precisely how the difference between accessible and identifiable information may affect anaphora, or even if this is relevant, since one idea can quite easily be 'more' or 'less' accessible or identifiable than another. In view of this, only the term *accessible* will be used. The types of information described by the terms *active*, *semi-active* and *inactive* are arranged along a scale of *accessibility*, with semi-active information covering a range of levels of accessibility. Semi-active information may be immediately obvious, or previously mentioned, information, through to associations which are inferable from the discourse, although not yet active information. This difference is highlighted in the examples below.

(10.1) *Beth got a kitten. She called it Cobweb.*
(10.2) *Beth got a kitten. Her husband called it Cobweb.*
(10.3) *Beth got a kitten. Brent called it Cobweb.*

In (10.1), the first sentence sets up a context where both *Beth* and *her kitten* are active information, meaning that in the second sentence pronouns are used for both entities since they are accessible. In (10.2), *her husband* is an identifiable association, especially if we know that *Beth* is married. (10.3), on the other hand, may seem a little odd if we do not know who *Brent* is. *Brent* in this context is new information. (10.2), for those who do not know *Brent* and *Beth*, is easier to process than (10.3), since the associations in the second sentence are recoverable from the first sentence. The notion of *her husband* in (10.2) is more accessible than the name *Brent* in (10.3).

For a referent in a discourse to be accessible, the speaker has to have used language specific enough for them to believe the identity of the referent is clear to the listener[1] (Chafe 1996:38). This occurs first and foremost when the speaker judges that knowledge of the referent is already shared with the hearer. The speaker must choose

[1] Unfortunately, speakers do not always manage to do so felicitously for the hearer, which is when misunderstandings can arise.

language that will immediately identify the unique referent in the most salient manner appropriate. So, for people who know *Brent* and *Beth*, (10.3) is the easiest or best way to phrase the second sentence. In addressing people who do not know *Brent* and *Beth*, (10.2) provides the same logical content as (10.3), but in a manner consistent with notions of accessibility. While the notion of *Beth* having a husband is identifiable or accessible information to those who do not know her, the mere name *Brent* does not convey this same information, and therefore sounds slightly incongruous. On the other hand, to people who know that *Brent* and *Beth* are married, (10.3) sounds the most natural, since the idea of *Brent* is accessible once *Beth* has been mentioned, while (10.2) sounds like it is unnecessarily stressing the fact that she is married[2].

All of these aspects of accessibility are governed at least partially by Grice's Maxim of Relevance (Ariel 1990:4), which states that a speaker's utterance generally has some relevance to the conversational context. A listener may draw on many factors to recover the relevance of an utterance, such as their encyclopedic knowledge, the physical context, or the linguistic context. These contexts also represent varying degrees of *givenness* of an idea (Ariel 1990:29).

The level of *givenness* an NP has is another way of referring to the accessibility of that NP. Brand new information has a very low level of givenness, while identifiable information has a higher level of givenness. The level of givenness of a discourse entity is reflected in the type of NP used to refer to it, and is thus a concept directly relevant to the study of anaphora.

Summary

The notion of *accessibility* plays an important role in analysing discourse. Information in a discourse is classified as either *active*, *semi-active* or *inactive*, corresponding to the degree of accessibility the speaker judges the information to have. Importantly, how accessible information is in a particular discourse is not an objective, static fact, but rather it is dependent upon the knowledge of the speaker and hearer.

[2] For those who watch daytime soap operas on television, the characters' habitual way of referring to other people by their relationships rather than by name has this effect. The characters use terms of identification for the audience's benefit, instead of using other characters' names, which would be more natural, but harder for an audience to follow.

We will now look at the main factors involved determining the accessibility of an entity and the role these factors play in anaphora resolution.

10.1.1 Accessibility Theory and anaphora

The actual definition of accessibility lies in our memory structures (Ariel 1990:11). The accessibility of a referent is related to how many clauses distant the anaphoric element is[3]. There is a processing constraint involved in identifying coreference relationships, where referents used in the previous clause take far less processing time to identify than referents used two or more clauses earlier. In fact, there is little difference between two, three and four clauses earlier, while the jump from one clause to two is substantial (an extra 17.8% processing time is required on average to comprehend a sentence containing an NP marked as accessible whose referent is three sentences away as opposed to only one, based upon an experiment by Clark and Sengul (1979, cited in Ariel 1990:21)). Ariel does not discuss whether different types of clause boundaries add to the processing time, although anecdotal considerations would suggest that tensed boundaries should require more time than non-tensed boundaries. This could explain the apparent Tensed S condition[4]. Non-finite clauses also connote a greater conceptual dependency upon the matrix clause, which makes processing easier. This factor would then also contribute to the Tensed S condition.

The main factors in determining accessibility include recency of mention, prominence, unity and a lack of competition. These factors all contribute to make an NP more salient, and hence more likely to function as the antecedent of an anaphor (Ariel 1991:445, 1990:28-9). Recency of mention refers to the temporal or syntactic distance between an anaphor and its antecedent. Prominence requires that an antecedent be a prominent part of the discourse, whether a topic or non-topic. Unity requires that the anaphor is somehow connected with the antecedent by being part of the same frame or paragraph[5]. Competition refers to the number of potential antecedents available to an anaphor. These factors can be condensed into two main

[3] Other factors such as unity are also relevant.

[4] Recall from Chapter 3 that syntacticians describing LDR often claim that a finite clause boundary (Tensed S) blocks binding possibilities, thus restricting LDR to within a finitely-tensed domain.

[5] Cf Hellan's (1988) work on LDR in Norwegian, where it was argued that reflexives are either containment or connectedness anaphors.

components, being prominence (recency of mention/ competition/ prominence) and connectedness (recency of mention/ unity). These are also the main features Ariel uses to establish the degree of accessibility an antecedent has, although she refers to them as saliency (comprised of distance and topicality) and prominence (Ariel 1990:31).

Parallel to the degree of accessibility an NP has, is the degree of attenuation of the phonetic realisation of that NP (Ariel 1991). Non-attenuated NPs are those such as full names with a modifier, such as *the current Prime Minister of Australia, Mr John Howard*, or NPs which denote a unique entity, such as *Tania Strahan*. More attenuated NPs are things like stressed pronouns, unstressed pronouns and zeroes (such as pro). I assume that reflexives are more attenuated than pronouns. How accessible an NP is in the discourse determines the degree of attenuation of the NP, thus, the degree of attenuation of an NP can tell us how accessible the entity denoted by the NP is. The more accessible an entity is, the more attenuated is its phonological and semantic form, which are assumed to be linked.

'[N]atural languages code the *degree of Accessibility* of an antecedent' (Ariel 1990:10). A highly accessible entity is referred to with a highly attenuated NP, where discourse principles such as accessibility are responsible for the type of NP used in any instance (including anaphora), while syntactic rules which attempt to restrict anaphoric elements based upon purely configurational locations are not relevant.

Summary

Accessibility Theory provides us with some key concepts for the non-syntactic study of anaphora. In particular, the principles of prominence and distance/ connectedness are central to the notion of accessibility and to the account of anaphora proposed here. The degree of attenuation of an NP is linked to its level of accessibility. Reflexives are highly attenuated NPs, which means that the referent of a reflexive must be highly accessible.

We will now look at a theory of semantics, which uses the ideas introduced in Accessibility Theory, although in a different framework. We will see that 'grammatical' anaphora is in fact governed by the same factors as 'discourse' anaphora in that the referents of both must be highly accessible.

10.2 Conceptual Semantics

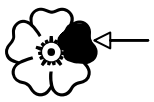
The account of clause-bounded anaphora presented now is based upon van Hoek (1997). Conceptual Semantics has similarities to Accessibility Theory, although there are different mechanisms to talk about concepts such as given and new information. What follows is a brief introduction to Conceptual Semantics, then a presentation of van Hoek's Reference Point model in section 10.3. This model is then extended, combining van Hoek's ideas with the facts about reflexives as presented here, as well as Levinson's (2000) interpretations of pragmatic implicatures. This new model is called the Extended Reference Point Proposal (ERPP), and accounts for LDRs as well as clause-bounded anaphors. It is tested in Chapter 11 on the data collected for this study, and is shown to account for this data in ways that purely syntactic approaches cannot.

10.2.1 Profiles and bases

Firstly, I want to introduce the expressions *profile* and *base.* These terms are used to refer to the focus of a semantic concept, and associated concepts respectively. That is to say, the word *petal* has as its profile, some concept of the coloured, leafy thing on a flower. *Flower* is a base of *petal,* ie it is associated with the notion of *petal*, although it is not the focus of attention at this time. Another example is *twenty-four second clock*, one base for which would be knowledge of the timing rules of a basketball game. Every entity can be profiled, or brought into the spotlight by using a certain type of noun or grammatical role. Van Hoek uses the terms *onstage* and *offstage*, with profiled concepts being brought onstage, while the base concepts remain offstage[6].

[6] In the terminology of Accessibility Theory, a base concept of a profiled concept is *identifiable*. Base concepts may be more or less *accessible*, or closely related, to the profile.

Table 10.1 – Some examples of profiles and base concepts

Word	*petal*	*24 second clock*	*rego*
Profiled concept			
Base concepts	flower, sweet scent, romantic evening, dew drops, softness, pink, summer salads, …	basketball, timing rules of basketball, referees' whistles, scoreboard, …	car, payments, numbers, letters, bills, car insurance, RACV membership, …

Van Hoek (1997:16) states that an 'expression may activate any number of knowledge systems, beliefs, images (visual and otherwise), and so forth'. In other words, profiled concepts or expressions do not have a limited number of concepts as their bases. The bases which are assembled by the speaker and hearer (who are both *conceptualisers* of the expression) equate to a contextual knowledge area within which a statement or expression is understood. This contextual knowledge area is referred to as a *construal*, which specifically refers to a 'conceptualizer's ability to portray a conceived situation in various ways' (van Hoek 1997:16).

Summary

A *base* is a set of conceptions which are invoked by a linguistic expression and which are a critical part of the meaning of that linguistic expression. A *profile* is the highlighted part of the base; it is what the linguistic expression designates. A *construal* is the contextual knowledge area within which the profile and its base are conceptualised.

10.2.2 Trajectors, landmarks and relations

On a par with the profile/ base distinction is a prominence asymmetry between *trajector* and *landmark*, which is used to characterise grammatical roles within relations (van Hoek 1997:19-20). *Relations* may be verbs, adjectives or prepositions, since these all serve as interconnections between entities (p18).

Figure 10.1 – Some examples of relations, showing the trajectors and landmarks

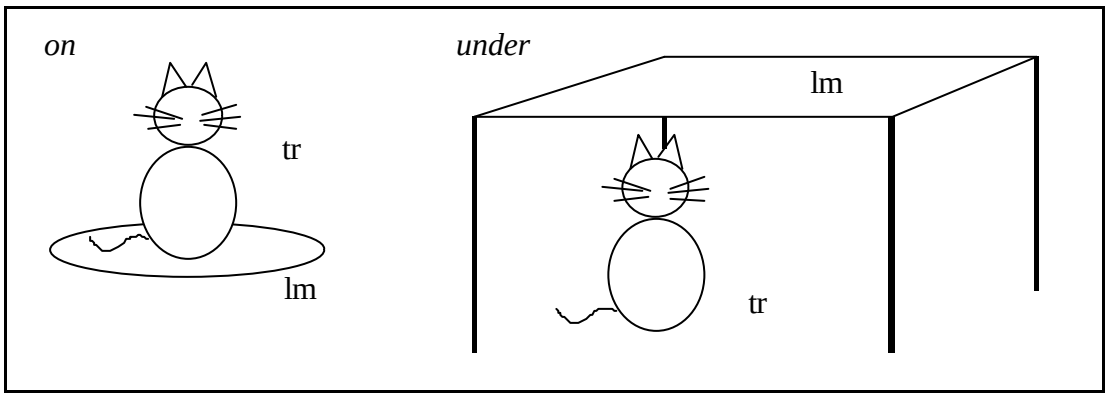
Relations	V	A	P
	hit *John* *the ball* tr lm *John* ***hit*** *the ball*	**big** [size of NP] [relative to 'normal'] tr lm *That's a* ***big*** *house*	**on** *the cat* *the mat* tr lm *The cat* *sat* ***on*** *the mat*

The trajector is defined as the entity which stands out, or is in some sense profiled, in the relation. The landmark is the less prominent entity (or entities).

Of these relations, verbal relations (which van Hoek 1997:18, based on Langacker 1987, calls *processes*) are unique in that they include some concept of time. Reflexives are canonically associated with verbal relations, ie clause-bound reflexives, but also LDRs, discourse reflexives, etc. Reflexives in locative PPs are mediated through both verbal and prepositional relations.

Another important facet of the trajector/ landmark relation is that assignment of the role of trajector to a particular expression is not an automatic, objective choice. Rather, it is a product of the construal created by the conceptualiser, where the trajector is identified as the most prominent entity in a relation. The example given by van Hoek (1997:19) is that of the difference between *on* and *under*. While *the cat sat on the mat* profiles the object which is physically higher (ie *the cat*), *the cat sat under the table* profiles the physically lower object (ie *the cat*). The construals of *on* and *under* are therefore cognitive representations profiling certain entities in relation to others. These are illustrated in Figure 10.2 below.

Figure 10.2 – The relations *on* and *under*, showing the landmarks and trajectors



Summary

A *trajector* is the prominent, or profiled, entity in a relation. It must always be expressed with respect to a *landmark* or landmarks. The roles of trajector and landmark are defined in the construal of the relation they participate in.

Using the notions of accessibility, profiles and bases, construals, trajectors and landmarks, and relations, we will now look at the notion of a *reference point*, which will be central to the account of LDR proposed in this thesis.

10.3 Reference points

A reference point (RP) acts as an anchor for a particular *domain*, specifically, a *conceptual structure* (van Hoek 1997:53), where a conceptual structure is a kind of semantic representation of a concept (Langacker 1973, 1972). Two examples of conceptual structures are given in Figure 10.2 above. RPs are selected on the basis of their high accessibility. Therefore they are often a trajector (subject), or at least an NP from whose perspective a domain is viewed. A strong RP is associated with features or qualities that are highly trajector- (agent-) like. In (10.4) and (10.5) below, the reference points are indicated in bold.

(10.4) [***Brent*** *really likes playing computer games with Beth.*]
(10.5) [*It freaks* ***Lucien*** *out watching horror movies*.]

The domain of the RP is the conceptual structure, which may be equal to a PP, as shown in Figure 10.2, or as shown following, a conceptual structure may be an NP, a clause, a sentence or a paragraph. (Example (10.9) comes from the novel *By One, By Two, and By Three*, by Stephen Hall.)

(10.6) *Mary liked [$_{NP}$* ***Tom$_i$'s*** *picture of himself$_i$]*.
(10.7) *John said that [$_{CLAUSE}$* ***Mary$_i$*** *loved herself$_i$]*.
(10.8) *[$_S$ It amused* ***Dan$_i$*** *to berate himself$_i$ in a silly voice]*.
(10.9) *[$_{PARA}$ One man, whom* ***he$_i$*** *loved,* ***he$_i$*** *had bidden it slay, or else it would have slain himself$_i$.]*

Examples (10.6) to (10.9) show reference points and their domains (indicated by the square brackets). Interestingly, each of these domains (NP, clause, sentence and paragraph) is mentioned in the anaphora literature (eg Dalrymple 1993, Harbert 1995)

as the binding domain for different types of anaphors. However, as we shall see, it is because the RP may preside over domains of different types that reflexives appear to be bound long-distance, locally, by the discourse, etc. Basically, anything that is found within the domain of a reference point 'is construed *in relation to* the reference point' (van Hoek 1997:55). Therefore, the factors involved in determining the reference point are central to the investigation of reflexives, as the claim here is that reflexives must refer to the RP of its domain.

10.3.1 Establishing a reference point

There are two main factors to take into account when determining a reference point (RP). These factors define specific reflexive-antecedent configurations that 'become entrenched within established constructional schemas' (van Hoek 1997:58), ie become grammaticalised. The degree to which a schema, such as 'a reflexive must find its antecedent within its own syntactic clause', becomes entrenched correlates closely with the level of prototypicality which the schema contains. The more prototypical a schema, the more robust the judgements concerning that schema are, and the more entrenched the schema becomes. Under this view, it is understandable that syntactic accounts of anaphora identify prototypical binding of reflexives as clause-bound and subject-bound, since these are highly entrenched schemas. The syntactic accounts fail when the data varies from this prototypical schema, since syntactic rules are taken to be immutable[7], or at least not subject to influence from non-syntactic factors. Under the Extended Reference Point Proposal suggested here, we will see that variation from the prototypical schema of reflexivisation is regular, and is describable in semantic and pragmatic terms.

The two factors to take into account when choosing a reference point are prominence and conceptual connectivity. In fact, a reference point is defined as the most prominent entity in a domain, while the scope of the domain is dependent upon the notion of conceptual connectivity. These factors were also listed above in section 10.1.1 as the main factors involved in determining the accessibility of an entity.

[7] The latest incarnation of the Government and Binding theory, namely the Minimalist Program, arranges syntactic rules in a way such that some rules are more important than others. This approach will not be looked at here.

The reference point is always the most prominent entity in the domain, which means that semantic, syntactic, prosodic and other discourse factors play a role in designating the RP. If present, empathy (perspective) always lies with the reference point. Recall from Chapter 4 that *empathy* refers to the identification of the speaker with one of the entities in the discourse. Empathy is therefore a construal of the speaker (and hearer) – it is not a factor in determining the reference point per se. Van Hoek (1997) also lists linear word order as a third factor (on top of prominence and conceptual connectivity) in determining a reference point, although it will be argued below that this is actually a function of prominence rather than being a separate factor altogether.

In the following examples, the reference points are indicated in bold, and their domains by square brackets. The domains of each RP are based upon the semantics of the lexical items involved plus the pragmatic interpretations that create the conceptual construals in each case.

(10.10) *[**Sam** is in Europe]*.
(10.11) *[**Brent** likes his cat]*.
(10.12) *[**Lucien** doesn't want to play basketball tonight]*.
(10.13) *[**Lucien** laughed at [**Tania** helping herself to a huge bowl of icecream]]*.
(10.14) *[[**Beth** thinks that [**Tania** is quite tall], while] [**Brent** thinks [**she** is short]]]*.

As the square brackets show, the reference points' domains are not exactly equivalent to the syntactic phrases used in GB. In particular, *that* in (10.14) is in the domain of *Beth*, not of *Tania*, since it is part of the semantic predicate *think that X*. It is clear in this example that *Tania*'s height is stated relative to both *Brent* and *Beth*'s respective heights, and that the clauses *Tania is quite tall* and *she is short* are within the domains of other reference points, too. *While* is also conceptually in the domain of *Beth*, indicating that some concept which contrasts with the information presented in the domain of the RP *Beth* will follow. It is possible to argue that *while* is a connective link between the two domains [*Beth thinks that Tania is quite tall*] and [*Brent thinks she is short*] and not part of either, or that the contrastive meaning ascribed to *while* is due to some attribute of *Brent*, however, there are several arguments in favour of the analysis as given in (10.14). The use of *while* in this sentence has the meaning that two contrasting concepts are being presented. But this is not the only meaning. The subtle implication is that what Beth thinks is going to be contrasted with what

someone else thinks about the same topic. Thus, the sentence in (10.15) is pragmatically odd (indicated by the hash #), since it does not fulfil this expectation.

(10.15) # *Beth thinks that Tania is quite tall, while Brent wants to go climbing.*

In this case, the only (vaguely) reasonable interpretation is that Beth is sitting down thinking about how tall Tania is, while at the same time, Brent is hoping to go rock-climbing. For this reading, *while* would be outside of the domain of either Brent or Beth (10.16), which would indicate an objective link between the two domains[8].

(10.16) *[[**Beth** thinks that [**Tania** is quite tall]], while [**Brent** wants to go climbing]].*

As the discussion of this example shows, whether a particular lexical item is part of one domain or another is dependent ultimately on the conceptual links between items involved. We will see in a moment (section 10.3.2) that this conceptual factor will play a key role in our Extended Reference Point Proposal analysis of LDR.

Returning to the examples (10.10) to (10.14) above, the reference points are all subjects. In fact, it is quite hard to come up with non-subject reference points, although it is possible. Experiential verbs such as *amuse* and *frighten* both fall into this category. Note that in (10.19), the RP is not even an embedded subject[9].

(10.17) *[It amused **Dan** to answer the phone in a silly voice].*
(10.18) *[It frightened **Brent** to read the whole of The Green Mile in one night].*
(10.19) *[It amused **Dan** to be watched by Merrick and Rosso].*

Reflexives are possible in embedded clauses with these predicates, even though the antecedent is a syntactic object, rather than a subject.

(10.20) *[It amused **Dan**$_i$ to berate himself$_i$ in a silly voice when [**no-one** else was around]].*

---

[8] Alternatively, in a larger context of comparing height, *Brent* wants to 'opt out' (Lesley Stirling p.c.). Again, this interpretation puts *while* outside of the domain of both *Beth* and *Brent*.

[9] although in this case, there is no reflexive-antecedent schema set up, and so a reflexive is not permitted (or at least, it sounds 'silly and stupid', as two of my informants put it!), eg *?? It amused Dan to be watched by himself.* This is at least partly due to the established semantic schema of the verb *watch*, which is typically done by one entity to a different entity. On the other hand, verbs such as *nominate*, which are more regularly done to oneself produce a slightly better sentence: *?It amused Dan to be nominated by himself among all the bigwigs.*

(10.21) *[It frightened **Brent**$_i$ seeing himself$_i$ on Australia's Most Wanted]*.

A perspective analysis could be used to account for this use of reflexives, and this is because a reference point may carry with it the perspective of the domain. Looked at another way, it can be said that the perspective-carrier of a domain is the reference point. Before we re-examine some of the data looked at earlier from the viewpoint of perspective, let us firstly investigate the notions of prominence (following) and conceptual connectivity (section 10.3.2) as the two main factors involved in defining a reference point and delimiting its domain.

Prominence

The fundamental attribute of an RP is prominence. Prominent entities are selected as RPs on the basis of conceptual salience, and are used as a starting point from which to make contact, or conceptual connections, with other, less salient entities in the discourse. Recall that Accessibility Theory also uses competition and distance as factors of prominence, which are more readily identifiable aspects of what is recognised as prominent or salient.

(10.22) ***The cat*** *sat on the mat.*

In (10.22), the most prominent NP is *the cat*. This is mainly due to its position as the trajector of the sentence, and its relationship with the other elements. *The cat* is the trajector of the predicate; this increases its salience. The subject need not be the trajector of the predicate, ie it need not be highlighted against the predicate, as is the case with Experiential predicates such as those mentioned above like *amuse* and *frighten*. So the prominence of *the cat* in (10.22) is due to the fact that it is the trajector (rather than just the subject) of the predication relation it is part of. The fact that *the cat* is the only animate entity in the sentence is another factor which contributes to its high prominence.

Within Conceptual Semantics, the most important prominence relations are profiling and figure/ ground organisation. The element most likely to be chosen as the RP

within a conception is the profiled element, or the trajector of a relation[10]. The profile/ base distinction is a prominence asymmetry.

(10.23) *[**Brent**$_i$ thinks that [**he**$_i$ will become an engineer]]*.

In (10.23), *Brent* is the reference point for the matrix clause. The embedded clause is construed relative to this reference point. This may be stated another way, namely that the conceptualisation of the embedded clause is dependent upon the reference point of the matrix clause. This was discussed in section 9.2 above. Although it will be claimed that reflexives always refer back to the RP, (10.23) is a clear example of a pronoun doing so. And, in fact, this is due mainly to the fact that reflexives do not appear in subject position in English, as LDRs can in certain instances[11] in Icelandic, for example (from Reuland and Sigurjónsdóttir 1997:326).

ICELANDIC

(10.24) *Skoðun Jóns$_i$ er að sig$_i$ vanti hæfileika.*
opinion J's is that R-DAT lacks-S talents
'Jon$_i$'s opinion is that he$_i$ (lit. 'to him') lacks talents.'

Returning to the discussion above, the embedded clause in (10.23) has its own reference point, *he*, which is coreferential with the reference point of the matrix clause. The matrix reference point is the more prominent of the two; this is due to two main reasons. Firstly, the matrix reference point is non-attenuated, while the embedded reference point is an attenuated NP (pronoun), due to the dependence relationship. Attenuated NPs are less prominent than non-attenuated NPs. Secondly, the referent of the embedded reference point is recovered through its link with the reference point *Brent* in the higher domain. It is clear that linear order is important in such prominence hierarchies, due to the ungrammaticality of reversing the attenuated and non-attenuated NPs.

(10.25) **He$_i$ thinks that Brent$_i$ will become an engineer*.

In a double object construction, such as

[10] Recall that a trajector is defined as the profiled concept within a relation.

[11] Some subjects in Icelandic take the dative case, which allows a reflexive to occur in this position in embedded clauses.

(10.26) *[I gave [**John$_i$** his$_i$ book]]*

there is one trajector NP, *I*, and two landmark NPs, *John* and *his book*. The landmarks are not equally prominent – the Benefactor is more prominent than the Theme. The fact that one object is more prominent than the other can be seen by the contrast in grammaticality between (10.26) and (10.27), where the non-attentuated NP *John* is exchanged with the attenuated pronoun *his*/ *him*.

(10.27) **I gave him$_i$ John$_i$'s book*.

In (10.26), *John* acts a reference point for *his book*, in other words, the primary landmark is the reference point for the secondary landmark. Linear word order therefore seems to be relevant to the constraints on anaphora resolution as a factor contributing to the prominence of an entity.

In cases of cataphora, or backwards anaphora, the RP is still more prominent than the pronoun or reflexive which refers to it. Thus, in (10.28) and (10.29), the RPs preside over a domain which precedes their appearance.

(10.28) [*Near him$_i$, **Dan$_i$** saw a snake.*]
(10.29) [*Apart from herself$_i$, **Beth$_i$** counted one other short person in the Strahan clan.*]

It is clear that linear word order is only a part of prominence.

The notion of prominence is also used by Pollard and Sag (1992) in HPSG to account for the distribution of clause-bounded anaphora. In Norwegian, this explains the difference between the use of a reflexive or a pronoun to show coreference between objects in a double object construction. Some speakers construe the primary landmark as the reference point for the secondary landmark, while others conceptualise only one reference point for the clause, and coreference must therefore be indicated with a pronoun. This was made clear by test sentence [56], which was acceptable to many, although not all, informants for this study with coreference between the two objects.

NORWEGIAN
[56] *Me ga han$_i$ pengane sine$_i$.*
We gave him money R
'We gave him$_i$ his$_i$ money.'

Only those speakers who could construe the primary landmark as the RP for the secondary landmark accepted [56] with a coreferential reading between the primary and secondary landmarks. Otherwise, speakers indicated that a pronoun had to be used to show the coreference. Primary and secondary landmarks usually correspond to direct and indirect objects. Part of the reason for this is that syntactic factors, such as the use of prepositions or morphologically oblique case, contribute substantially to the differences between primary and secondary landmarks.

The fact that different speakers can find different entities in a given text the most prominent has been proven in an experiment (Anderson, nd, cited in Ariel 1990:25). For the experiment, speakers were asked to continue the narration in (10.30).

(10.30) *The Bus Journey*

Mrs Grey was travelling by bus.
A (teenage) conductor collected the fares.
The bus jolted and rattled as it went.
After two hours joints still ached.

Half of the speakers were given the text with the elaborating adjective *teenage*, while the other half received the text with the bare noun *conductor*. As Ariel (1990:25) notes, 'crucial to our point at present, […] is that of those who chose *the conductor* to be the next topic there were more subjects who received the more elaborate description of the conductor as context.' This leaves implicit the fact that some people at least who did not receive the elaborated context still chose *the conductor* as the most prominent entity, ie in both cases, either *Mrs Grey* or *the conductor* could be chosen as the most prominent entity. This is clear proof that the factors governing prominence are cognitive processes, rather than being a strict list of purely linguistic factors. This does not preclude us from attempting to identify syntactic and semantic prominence hierarchies (among others) relevant to anaphora resolution, but we need to keep in mind that, ultimately, the description of antecedent-reflexive relations will also need to include cognition-based information.

Linear Word Order

As mentioned above, linear word order is important as a contributing factor in identifying an RP. Concepts made available to the conceptualiser earlier are more likely to be conceptualised as an RP (see eg Garrett 1990 for comments on sentence

processing which support this claim). Van Hoek (1997:59) states that the effects of linear word order are not as powerful as those of prominence and conceptual connectivity, but still lists it as a separate factor in assigning the status of RP to an entity. However, I argue that linear word order is not in itself an identifier of RPs, but rather it is a factor in assigning prominence.

Subjects, which normally appear first in a sentence (assuming there are no topicalised objects preceding them), are highly prominent.

(10.31) *John cut his hand.*
(10.32) *Choc-dot Crispies, I like.*

Thus, in (10.31), the subject *John* is the most prominent entity in the sentence. The following concept of *his hand* is construed in relation to this prominent concept. Since there is no competing entity (outside of a larger discourse context) for the role of antecedent of the anaphor *his*, this encourages a coreferential reading with *John*. (10.32) is a version of the popular example *Beans, I like*, which shows topicalisation of an object. If linear word order is a major factor in assigning prominence, then the topicalised object *Choc-dot Crispies* should be more prominent than the subject *I*, due to its position at the very head of the sentence. However, if this is so, then we should also be able to get a reflexive to refer back to this topicalised position. It is interesting to see that it is very difficult to think of an example where a reflexive refers back to a topicalised object.

NORWEGIAN
(10.33) ? *Det var Per som Jon fortalte om sin kone.*
it was P that J told about R wife
? It was Per_i that John told about his_i wife.

ENGLISH
(10.34) *[**Brent** spoke [with **Beth** about herself]].*
(10.35) ?*With Beth, Brent spoke about herself.*
(10.36) ?*It was Beth that Brent spoke with about herself.*
(10.37) **It was with Beth that Brent spoke about herself.*

With the examples in (10.33) to (10.37), reflexives do not appear to be able to refer back to topicalised or clefted objects. It seems that topicalised or clefted objects are not more prominent than subjects. However, the judgements in examples (10.33) to

(10.37) are probably due to a lack of conceptual connectivity rather than low prominence.

In summary, prominence may be thought of as conceptual salience. An entity is likely to be conceptualised as highly prominent if it is a trajector, a non-attenuated NP, sentient, animate, a subject, an agent, a discourse topic, a perspective-holder, and if it occurs early in a domain. Studies such as *The Bus Journey* by Anderson (nd, cited in Ariel 1990) indicate that this list is not exhaustive, and that cognitive processes are also relevant.

Let us now consider the notion of conceptual connectivity with respect to how it defines a domain for an RP, then return to the problem posed by the varying degrees of acceptability of the sentences in (10.34) to (10.37).

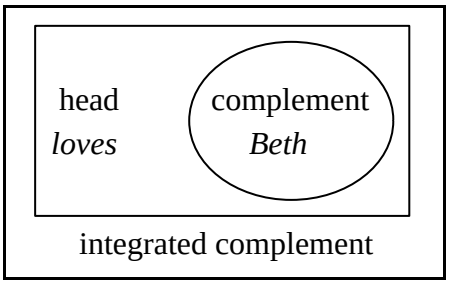
10.3.2 Domain of an RP

Conceptual connectivity is the key factor in defining the domain of an RP. NPs are more or less strongly *connected*, depending on the types of relations they participate in (van Hoek 1997:79ff). Strongly connected NPs have an explicit interconnecting relation, for example in a complement chain (eg head-complement structure, such as *verb + complement arguments*). Weakly connected NPs do not have an explicit interconnecting relation, but merely co-occur within some linguistic unit (eg a sentence or conceptual paragraph).

(10.38) *Brent loves Beth.*
(10.39) *Brent said he loved someone, and that that person knew who they were*.

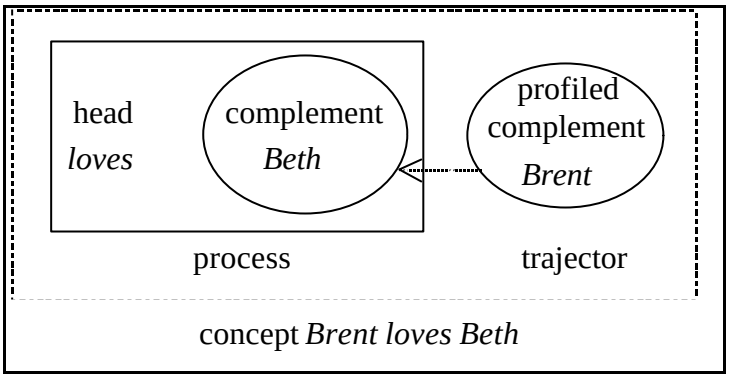
In (10.38), the predicate *loves* is the head, and the concept entity *Beth* is the complement. This is illustrated in Figure 10.3.

Figure 10.3 – The head-complement process *loves Beth*



The integrated complement *loves Beth* is a process. The conception profiled by *Brent* is the trajector and complement of this process, illustrated in Figure 10.4.

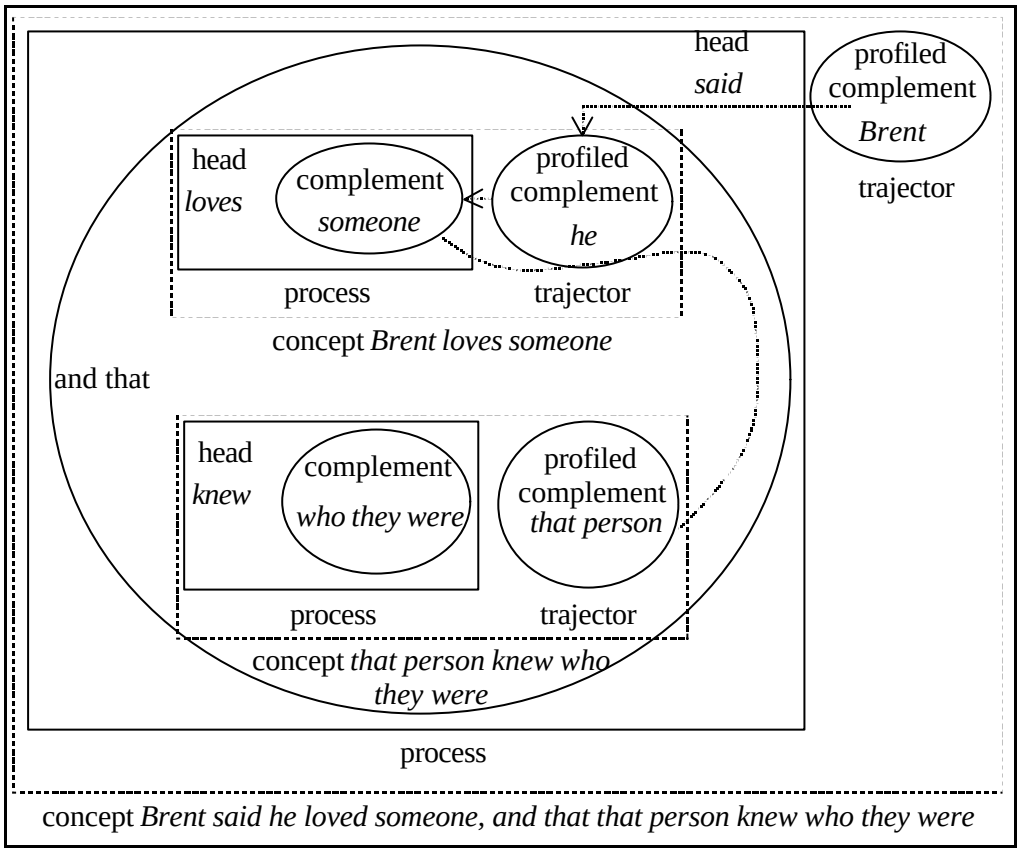
Figure 10.4 – The concept *Brent loves Beth*, showing the process and complement trajector



There is a direct relation, shown in Figure 10.4, between the profiled complement *Brent* and the complement profiled within the process of this complement *Beth.* That is to say, *Brent* and *Beth* are connected through a single predicate.

In (10.39), however, the relation between *Brent* and *that person* is not direct, as a clause boundary intervenes, plus there is a processing task to be performed to recover the identities of (the coreferential entities) *someone* and *that person*.

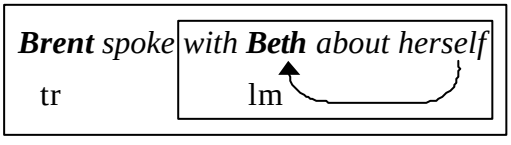
Figure 10.5 – A simplified version of the concept *Brent said he loved someone, and that that person knew who they were*, showing the processes and complements, and showing the link between *someone* and *that person*



The conceptual connectivity between the trajector *Brent* and the referent of the landmark of the process *Brent* is the complement of (ie the person who Brent loves) is greater in (10.38) than in (10.39).

Returning to the questions posed above with regards to sentences (10.34) to (10.37) (repeated here), let us examine the conceptual connectivity of the reflexives and their intended antecedents.

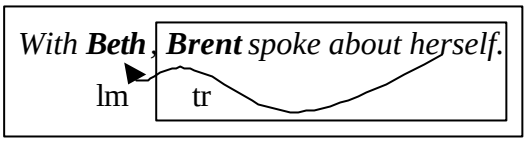
(10.34) *[**Brent** spoke [with **Beth** about herself]].*



For those speakers who can construe the landmark *Beth* in (10.34) as a reference point, the conceptual connectivity between the reflexive and *Beth* is quite high. However, when this syntactic object is fronted, the conceptual connectivity between

the reflexive and the landmark decreases, with a corresponding decrease in acceptability.

(10.35) ?*With Beth, Brent spoke about herself.*



Increasing the conceptual distance between *Beth* and *herself* in (10.35) is the fact that *Brent spoke about X* is a highly entrenched schema of reflexivisation in English. This fact strengthens the bond between the entities in this string, which has the effect of increasing the conceptual distance from entities within the string (in this case the reflexive) to those without (ie *Beth*). The same occurs when the object is topicalised in an it-cleft (10.36). Interestingly, the sentence becomes even worse when the preposition is clefted along with the NP (10.37).

(10.36) ?*It was Beth that Brent spoke with about herself*.
(10.37) **It was with Beth that Brent spoke about herself*.

In terms of conceptual connectivity, by not also fronting the preposition in the clefted string in (10.36), this serves to reinforce the idea that *Beth* is the landmark of the process *spoke with,* since there is an obvious gap where the syntactic object is normally found. This in turn strengthens the idea that the trajector of this process, ie *Brent*, is the RP for this sentence. In (10.37), however, where the preposition *with* is also fronted, the final clause *Brent spoke about herself* is in the highly entrenched reflexive schema for English (*NP_i Ved NP_i,* where V stands for a semantic verbal predicate*)*, meaning that the reflexive must refer to the local entity. Since the reflexive *herself* doesn't match *Brent* for the gender feature, the result is an unacceptable sentence.

Conceptual connectivity in a discourse domain

The use of a pronoun where a full NP would be syntactically acceptable signals a continuation in a discourse of a particular semantic idea or domain. It is well accepted in the discourse literature (eg Ariel 1991, 1990, Toolan 1988, Tomlin 1987 and Grimes 1970) that the use of a pronoun or a full NP by the speaker indicates such things to the hearer as topic continuity or change over a discourse or long narrative. The notion of reference points and domains also accounts for the distribution of

pronouns and full NPs on a discourse level. Within a sentence, the choice of NP or pronoun may be influenced or dictated by the domains created (example from van Hoek 1997:13).

EXCERPT FROM RETURN OF THE JEDI, P94

(10.40) *[[That did it for* ***the Ewok*****$_i$***.] [***He$_i$*** *jumped up, grabbed a four-foot-long spear, and held it defensively in her direction.] [Warily* ***he$_i$*** *circled, poking the pointed javelin at her, clearly more fearful than aggressive.]]*
["Hey, cut that out," ***Leia$_j$*** *brushed the weapon away with annoyance.]*

In (10.40), use of the full NP *Leia* is not needed for positive identification, as she is the only female in the narration. Instead, it signals a 'semantic discontinuity which motivates closure of the preceding reference point's domain' (van Hoek 1997:13). The preceding reference point is *the Ewok*. By using the full NP *Leia*, her point-of-view can be presented, instead of continuing with *the Ewok*'s. It is interesting to observe that if a pronoun is used here instead of the name as in (10.41), the reference point remains *the Ewok*. The narrative then presents *Leia*'s annoyance from an outside perspective, not from her own, as we can see by comparing (10.40) and (10.41).

(10.41) *[[That did it for* ***the Ewok*****$_i$***.] [***He$_i$*** *jumped up, grabbed a four-foot-long spear, and held it defensively in her direction.] [Warily* ***he$_i$*** *circled, poking the pointed javelin at her, clearly more fearful than aggressive.]*
["Hey, cut that out," ***she$_j$*** *brushed the weapon away with annoyance.]]*

The examples (10.40) and (10.41) highlight the correlation between the use of a pronoun (or attenuated NP) versus a full NP and the continuity or severance/ renewal of an RP's domain. They also show how perspective is important in maintaining the domain of an RP. These factors are relevant to the felicitous use of reflexives, including LDRs.

The notions of reference points and domains have now been introduced and their applicability over longer narratives has been shown. What follows now is a short look at clause-bound anaphora, showing that van Hoek's Reference Point model also accounts for data which is not explained by c-command, as well as data which is so explained.

In summary, conceptual connectivity is the key factor in determining which elements make up the domain of an RP. Two entities are likely to be strongly connected conceptually if they are linked by a single relation, eg the arguments of a single semantic predicate, or if they are linked through a profile/ base relationship. Conceptual breaks, such as those indicated by the use of a full NP is used where an attenuated NP would be syntactically acceptable, motivate the closure of one domain and the establishment of a new one.

This sketch definition of conceptual connectivity will be augmented in Chapters 11 and 12 as evidence is uncovered from the Norwegian data. Firstly though, we will reconsider the rule of c-command. It provides a reasonable generalisation of clause-bound anaphora, although it breaks down in non-prototypical cases. The notion of RPs and their domains will be shown to account for the distribution of reflexives in both prototypical and non-prototypical cases.

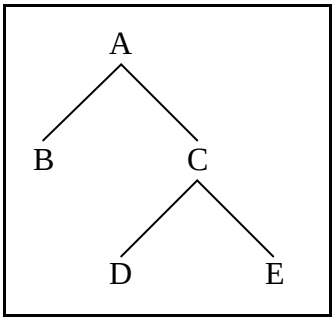
10.3.3 Clause-bound anaphora

Clause-bound anaphora is considered by many linguists to be licensed by syntax, and in particular by the rule of c-command. O-command, as proposed by Pollard and Sag (1992) is similar to c-command, but uses grammatical roles instead of structural configurations to define anaphoric relations. Both c-command and o-command only apply to locally-bound anaphora. However, the semantic generalisations they capture reflect only a small part of the data which is encompassed by the reference point model.

C-command

C-command has already been defined above in the introductory chapter, but is restated here briefly for ease of reference. The points in (10.42) refer to the diagram in Figure 10.6.

Figure 10.6 – Stylised phrase structure tree



(10.42) Node B c-commands node D iff

a. B ≠ D,

b. B does not dominate D and D does not dominate B, and

c. every A that dominates B also dominates D.

In (10.42) is the definition of c-command, which relies solely on the structural configuration of the constituents of a sentence. Many of the accounts in the syntactic review section of this thesis were attempts to maximise the applicability of c-command, to show that the word order and constituency governed not only clause-bound anaphora, but also LDRs.

There are several problems with accounts of reflexivisation which rely on c-command. Firstly, even within the local domain, it is not applicable universally. In non-configurational languages where grammatical roles are not defined by word order, such as Warlpiri, it is awkward and inelegant to postulate an underlying English-type word order, simply to make the phrase structure trees and hence c-command work. Secondly, c-command makes incorrect predictions about the distribution of reflexives whose antecedents are in NPs, in English and other languages like Japanese and Chinese. Thirdly, backwards anaphora must also be described as exempt anaphora, even though there is only one clause involved. These problems are looked at now.

Non-configurational languages

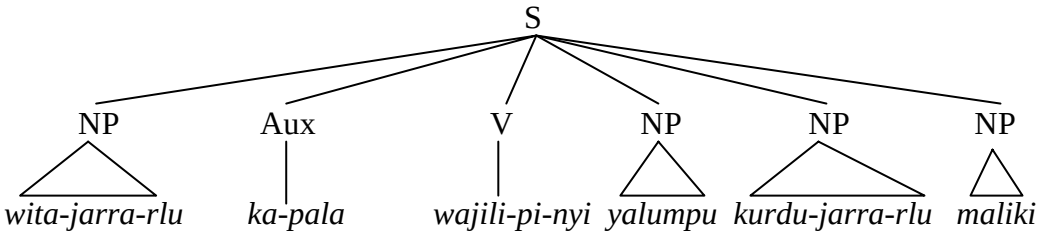
An illustration of the inappropriateness of structural trees comes from Warlpiri. In the following example, ‘every permutation of the words in the sentence is possible, with the same meaning, so long as the auxiliary (Aux) tense marker occurs in the second position’ (Bresnan 2001:6).

WARLPIRI

(10.43) *wita-jarra-rlu ka-pala wajili-pi-nyi yalumpu kurdu-jarra-rlu maliki*
small-DUAL-ERG pres-3duSUBJ chase-NPAST that.ABS child-DUAL-ERG dog.ABS
'The two small children are chasing that dog.'

In syntactic models which allow it, such as LFG, the surface tree structure for this sentence is flat, as shown here (10.44). Phrase structure rules for GB do not permit such a structure[12], since 'part' of the constituent *the two small children* is found inside the other NP *that dog* at surface-structure, which disobeys the rule that constituents are whole units.

(10.44)



small-DUAL-ERG pres-3duSUBJ chase-NPAST that.ABS child-DUAL-ERG dog.ABS
'The two small children are chasing that dog.'

The structural rules needed in non-configurational languages like Warlpiri to link the non-contiguous NPs in (10.43) above (*the two small children* and *that dog*) are so complex in GB as to be untenable. NPs in non-configurational languages do not necessarily form syntactic phrases, but they do form conceptual units. Bresnan (1995:3,4) speaks of 'word shapes' as opposed to 'word groups', and highlights the fact that the morphology signals the semantic links, not the constituency. This is also clear in reflexive sentences in languages like Warlpiri (from Bresnan 2001:7), as shown following.

WARLPIRI

(10.45) *Napaljarri-rli ka- nyanu paka-rni*.
N ERG PRES R hit NONPAST
'Napaljarri$_i$ is hitting herself$_i$.'

[12] In GB, grammatical relations such as Subject are defined structurally. Every clause must have a Subject, so this requires strict constituent structures, which are manifestly awkward to produce in non-configurational languages.

(10.46) **Napaljarri-Ø ka- nyanu paka-rni.*
N ABS PRES R hit NONPAST
Herself$_i$ is hitting Napaljarri$_i$.

In Warlpiri, it is the morphology which defines the grammatical relations, not constituency or phrase-structure rules. Non-configurational languages are compelling evidence against the universal applicability of c-command, since they use morphology and not syntactic word order to define relations.

Types of reflexives

A different approach to c-command is taken by Reinhart and Reuland (1993), which was summarised in Chapter 3. There, it was shown that c-command can be refocussed to only apply to prototypically-bound anaphora. Pollard and Sag (1992, 1994) and Thráinsson (1991), among others, also argue for the class of anaphors to be divided into locally bound anaphora, LDRs, discourse anaphora, and other exempt anaphora, with only locally bound anaphora being subject to the binding conditions and c-command, with discourse principles governing the other types of anaphors. In another branch of linguistics (pragmatics), Levinson (2000) assumes a minimal, syntactic domain of anaphora, from which pragmatic implicatures define other types of anaphors. Part of his analysis is incorporated into the overall ERPP. This division of labour works quite well for many cases of reflexivisation in quite a few languages.

C-command is therefore postulated to apply only to prototypically-bound anaphors. Prototypically bound anaphors are subject-bound and clause-bound. They are considered to embody the canonical type of anaphoric relation, which is describable syntactically. The following is a list of the types of anaphors mentioned in the literature:

Locally- or clause- or minimally- or prototypically-bound anaphors.
LDRs or middle-distance anaphors.
Discourse anaphors or logophors.
Other exempt anaphors, eg backwards anaphora, reflexives in locative PPs and reflexives whose antecedents are in NPs.

C-command only defines the first class of anaphors, and then only in configurational languages. Pollard and Sag (1994) extend the range of c-command by referring to

grammatical roles, rather than grammatical configurations, in a rule called *obliqueness-command*.

O-command

In HPSG, Pollard and Sag (1992, 1994) use *obliqueness-command*, or *o-command*, to account for locally-bound anaphors in all languages. O-command is based on grammatical roles, not structural configurations, and thus accounts for configurational and non-configurational languages alike. The rule of o-command applies to a prominence hierarchy of grammatical relations as shown in (10.47).

(10.47) subject > primary object > secondary object
more prominent … less prominent

This is very similar to the prominence hierarchy in Conceptual Semantics shown in (10.48).

(10.48) trajector > primary landmark > secondary landmark

In HPSG, the rule of o-command stipulates that the grammatical role of an anaphor must be less prominent than the grammatical role of its antecedent. This explains why the antecedent of *himself* in (10.49) is *Brent* and not *the guitar*.

(10.49) *Brent$_i$ amused himself$_i$ on the guitar*.

Brent is the subject in (10.49), and is higher on the obliqueness hierarchy than *himself*, which is an object. *The guitar* is a secondary object, which is lower on the obliqueness hierarchy than *himself*, therefore o-command does not license a reflexive-antecedent relationship here. O-command also deals with anaphora in non-configurational languages, since it doesn't rely on structural configurations.

Pollard and Sag (1992, 1994) also distinguish between anaphors which are subject to o-command and those which are exempt from it. (O-command only applies to local anaphora.) Anaphors whose antecedents are in NPs, backwards anaphora and anaphors within locative PPs are all classed as exempt. A few examples of these are given in the remainder of this section.

Antecedents in NPs

(10.50) **[$_{NP}$Brent$_i$'s sister pinched himself$_i$] to see if she was dreaming*.

Sentence (10.50) would be predicted to be grammatical by c-command, since the first branching node above the potential antecedent dominates the reflexive anaphor. However, this is quite obviously ungrammatical. O-command would also predict it to be grammatical. However, under the proposals made by Reinhart and Reuland (1993) and Pollard and Sag (1992) (summarised in Chapter 3 of this thesis), this example is not in the domain of c-command or o-command, therefore some other module of grammar must rule it out. Interestingly, the same pattern occurs in Japanese and Chinese, but is fine (from Pollard and Sag 1992:276).

JAPANESE

(10.51) *[Zibun$_i$-no buka-no husimatu-ga* ***Taroo$_i$-no*** *syusse-o*
R-of subordinate-of misconduct-SUBJ T-of promotion-OBJ
samatagete-simatta.]
blocked-have
'Misconduct of his$_i$ subordinate has blocked **Taroo$_i$'s** promotion.'

CHINESE

(10.52) *[Zhangsan$_i$ de* ***baba$_j$*** *de quian$_k$ bei ziji$_{*i/\,j/\,*k}$ de pengyou tousou lei]*.
Z PART father PART money BEI R PART friend steal PER
'[Zhangsan$_i$'s **father$_j$'s** money$_k$ was stolen by **his$_{*i/\,j/\,*k}$** friend].'

(10.53) *[****Zhangsan$_i$*** *de baba de quian bei ziji$_i$ de pengyou tousou le.*
Z PART father PART money BEI R PART friend steal PER
Mama de shu ye bei ziji$_i$ de pengyou touzou le].
mother PART book also BEI R PART friend steal PER
'**Zhangsan$_i$'s** father's money was stolen by **his$_i$** friend. (His) mother's books were also stolen by **his$_i$** friend.'

In possessive NPs, the possessed NP is normally more prominent than the possessor NP. In example (10.50) this means that *sister* is the reference point for the clause, and hence the antecedent of the reflexive. A reflexive in this (context-free) instance cannot refer back to *Brent* at all, since there is no way to construe *Brent* as a reference point.

In (10.51), *Taroo* is the RP for the whole sentence, so a reflexive is licensed. Neither c-command nor o-command applies here. Under the ERPP, *Taroo* is the only animate/ human entity in (10.51), so empathy lies with him. Other factors including his

promotion and having subordinates both lead to empathy being strongly aligned with *Taroo*, influencing the choice of him as the RP for the whole sentence. These factors combine to result in the felicitous use of the reflexive *zibun*.

The Chinese example in (10.52) parallels the English example (10.50), where the antecedent for the reflexive does not c-command the reflexive, but is selected on the basis of its semantic prominence. However, as (10.53) shows, the preference for the prominent antecedent in a possessive NP to be the possessee and not the possessor is defeasible under certain conditions. The first sentence in (10.53) is the same sentence as in (10.52). But, as the second sentence continues the same discourse topic, it is implied that there is no change of RP, and it is possible to construe *Zhangsan* as the most prominent entity, and therefore the antecedent of the reflexives in both sentences in (10.53).

While c-command and o-command treat the anaphora in (10.50), (10.51), (10.52) and (10.53) as exempt, the ERPP deals with these examples easily. The role of antecedent is assigned to the RP, being the most prominent entity in each example.

Backwards anaphora and anaphors in locative PPs

C-command and o-command also do not cover backwards anaphora and the complementarity effects found, among other places, within locative PPs.

(10.54) *Himself$_i$ an engineer, Sam$_i$ thought he could repair the old engine in no time.*

(10.55) *With no-one but himself$_i$ to blame, Morten$_i$ realised he was going to be a father.*

(10.56) *Dan$_i$ saw a snake near himself$_i$/ him$_i$.*

In (10.54) and (10.55), the reflexive actually c-commands its antecedent, which would be incorrectly predicted to be ungrammatical. (10.55) could be argued to be licensed by o-command, since the reflexive is a grammatical object, and its antecedent a grammatical subject, while in (10.54) the reflexive is a topic, which is not covered by o-command. In (10.56), the antecedent c-commands the anaphor, which means the pronoun is predicted to be ungrammatical. These examples are more cases of exempt anaphora with respect to c-command and o-command.

Meanwhile, the examples in (10.54), (10.55) and (10.56) are accounted for by the notion of reference points and domains, since these are based upon non-syntactic

features such as prominence and POV. The RPs and their domains for these sentences are given below in examples (10.57) to (10.60).

The initial clausal adjuncts in (10.54) and (10.55) (repeated as (10.57) and (10.58)) are within the domain of the RPs *Sam* and *Morten*, as indicated by the square brackets. The conceptual structures of these adjuncts are not established as complete schemas in their own right – part of their entrenched schemas is that they carry the POV of the main clause; they do not have their own POV. For this reason, they must be connected to another syntactic domain which does have a prominent entity fulfilling the role of reference point. In these cases, it is the following syntactic clause. The conceptual structures of the adjuncts are therefore within the same conceptual structure as the following syntactic clauses. It is the fact that conceptual structures may encompass more than a single syntactic domain that gives explanatory power to this type of analysis.

(10.57) *[Himself$_i$ an engineer, **Sam$_i$** thought [**he** could repair the old engine in no time]]*.

(10.58) *[With no-one but himself$_i$ to blame, **Morten$_i$** realised [**he** was going to be a father]]*.

In (10.56), repeated here as (10.59) and (10.60), ***Dan*** is the most prominent entity in the sentence. However, the POV effects and other meaning difference associated with pronouns and reflexives, as discussed in the previous chapter, mean that the conceptual structures of the two sentences are different.

(10.59) *[**Dan$_i$** saw a snake near himself$_i$]*.

(10.60) *[**Dan$_i$** saw a snake [near him$_i$]]*.

One of the meanings associated with a third person reflexive is that it refers to the third person from their own point-of-view (‘refers to a secondary ego from that secondary ego’s POV’). In other words, the reflexive must be within the same conceptual structure as the RP antecedent. However, the use of a pronoun, in cases where the Complementarity Principle does not hold, signals that the anaphor is not within the same immediate domain as its antecedent. Full details of this analysis have not been worked out, yet this seems a promising approach to take.

C-command and semantic prominence

In Reinhart and Reuland's (1993) account of reflexivity, Pollard and Sag's (1992, 1994) examination of the binding theory and Levinson's (2000) analysis of the distribution of reflexives and non-reflexive pronouns in terms of pragmatic implicatures, the notion of a minimal domain of syntactic anaphoric binding is central. Even the accounts examined in the syntactic review chapter used c-command licitly to describe many cases of LDR. The question is then, if c-command is not the best way to describe anaphoric relations, why does it work in so many cases?

The answer can be viewed in different ways, but essentially, c-command captures the prominence relationship between two entities. As it was shown above, o-command, which relies on grammatical relations rather than structurally-defined constituents, covers essentially the same data as c-command. However, there are still certain types of anaphora such as LDRs where o-command does not apply.

The relation that both c-command and o-command capture is best described in terms of the ERPP. C-command defines grammatical relations in terms of phrase structure trees, while o-command does this in terms of grammatical roles, independent of their syntactic realisation. In the ERPP, the grammatical role of an entity is only part of the information available for anaphoric resolution. RPs are selected on the basis of prominence, which is what both c-command and o-command attempt to emulate, with varying degrees of success[13], since syntax is a prototypical means of expressing those semantic relations.

Conclusion

In conclusion, the reason c-command applies as well as it does, is because it approximates the prominence relationship required between anaphor and antecedent. O-command is a slight improvement on c-command, since it also covers anaphoric distribution in non-configurational languages. This effect is found because reference points, being the most prominent NPs in a domain, are often subjects. C-command and o-command work best when the antecedent is a subject. The semantic ERPP account of the generalisation captured by c-command and o-command needs no modifications to apply equally to non-prototypically-bound anaphors as well as

[13] For an indepth discussion of c-command and the semantic prominence relations behind it, see van Hoek (1997:107ff).

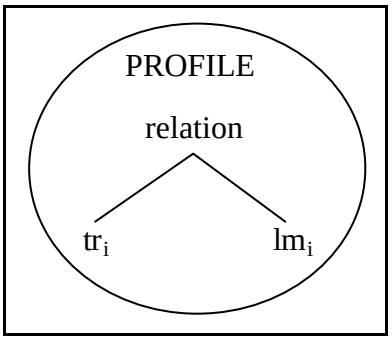
prototypically-bound anaphors. This account based upon semantic configurations also applies equally well to configurational as non-configurational languages.

10.3.4 Reflexives in Conceptual Semantics

Defining reflexives within van Hoek's reference point model is somewhat awkward, although the actual concepts are quite simple. Firstly, a distinction is made between the *reflexive anaphor* and the *reflexive construction*.

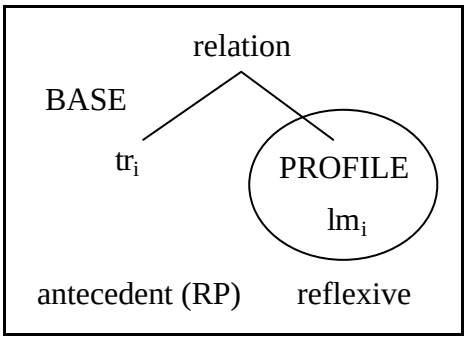
The reflexive construction is simple to describe – it profiles a relation with a coreferential trajector and landmark (often an agent and patient)[14]. This is shown in Figure 10.7.

Figure 10.7 – The reflexive construction



The reflexive anaphor, on the other hand, profiles just the landmark in the processual relation of the reflexive construction. The trajector in this relation is the RP. This is shown in Figure 10.8.

Figure 10.8 – The reflexive anaphor



[14] Reinhart and Reuland (1993) also describe this as semantic reflexivisation, which is controlled by their formulation of Condition B.

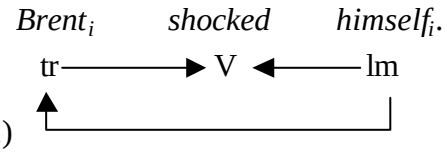
The distinction between the reflexive construction and a reflexive anaphor is necessary, since it allows for different types of reflexivisation. Recall from Chapter 3 that Reinhart and Reuland (1993) also described two basic reflexive situations. They stated their conditions in terms of semantic reflexivity and lexical/ syntactic reflexivity. These are equivalent to the two prototypes postulated by van Hoek (1997). Reinhart and Reuland's (1993) Condition A stated that a relation that is reflexive is reflexively-marked – this is equivalent to Figure 10.7; while a reflexively-marked relation is reflexive, eg Figure 10.8. Note that by referring to relations here instead of processes, we are in effect including any entities that may be connected, not just verbal predicates. This allows us to generalise over prototypical reflexivisation, where a predicate connects the reflexive and its antecedent, and the use of emphatic reflexives, where the connection is between the reflexive and the antecedent directly.

Prototype analysis of reflexives

Van Hoek adopts a prototype analysis of reflexives, arguing that 'the range of variation found in the uses of the reflexives in English reflects the development of an inventory of constructional schemas which retain, to varying degrees, the central semantic properties of one or both of the prototypical values [postulated]' (van Hoek 1997:172). I contend that these schemas also reflect the central semantic properties of the two Norwegian reflexive elements – *seg* and *sjølv*.

There are two prototypes postulated by van Hoek. The first construction is where the reflexive denotes a landmark of the verb and is coreferential with the trajector, eg (10.61).

(10.61)



This is what Faltz (1985) refers to as the *primary reflexive strategy* of languages, or the *archetypal reflexive context*. Dalrymple (1993), Pollard and Sag (1992), Reinhart and Reuland (1991, 1993) and Kuno (1987) are among those who do not use a prototype model, but who also identify the primary use of the reflexive as linking two coreferential coarguments.

The second prototype van Hoek identifies is the use of the reflexive as an emphatic marker, as in the following[15].

(10.62) *Brent$_i$ himself$_i$ is well aware that he is easily shocked.*

Van Hoek argues that there is no reason why the schemas of reflexives should be organised around only one prototype. The emphatic use of reflexives occurs not infrequently, and this makes the schema highly entrenched and a good candidate for a prototype. All other uses of reflexives are extensions of these two prototypes. The emphatic reflexive is frequently ignored in syntactic accounts of anaphora, although it clearly fits the definition of a reflexive construction given above. The difference between the primary and secondary reflexive prototypes revolves around the type of relation between the landmark and the trajector, in particular, whether the link is mediated by a predicative process or not. Since this secondary type of reflexivisation is not linked by a predicative process, it cannot be used as an LDR.

10.3.5 Re-examining perspective

In this section we will re-examine the perspective data presented in the previous chapter in terms of reference points and conceptual connectivity. Examples (10.63), (10.64) and (10.65) are all repeated from earlier.

LATIN

(10.63) *[[**Epaminondas$_i$** ei qui sibi$_i$ ex lege praetor*
E-NOM him-DAT that-NOM R-DAT by law-ABL praetor-NOM
successerat] exercitum non tradidit].
succeeded-I army-ACC not transferred
'Epaminondas$_i$ did not transfer the army to the one that succeeded himself$_i$ as a praetor according to the law.'

In the previous chapter, it was claimed that the reason LDR is permitted in (10.63) is because *Epaminondas* is the perspective-holder of both the main clause and the clause containing the reflexive. However, this perspective account does not fully explain the situation. Using the notion of reference points, we can instead state that *Epaminondas*

[15] Other linguists also recognise the emphatic use of the reflexive as one of the two primary uses of reflexives, eg Kemmer (1995), McKay (1991) and Dirven (1973), among others.

is the most prominent entity in the sentence. This prominence is attributable by, among other things, subjecthood and animacy. The anaphor is within the domain of this RP, and is therefore a reflexive. The perspective of the sentence lies with *Epaminondas*, as he is the RP. Thus, it is not the role of perspective which licenses LDR here, it is the role of RP.

Similar arguments apply to the Icelandic data. In (10.64), *Jon* is the RP for the whole sentence. The prominence of this entity is due to subjecthood and animacy, as was the case in (10.63). However, in this case, there is competition for the role of RP in the embedded clause from *Maria*. This is where conceptual connectivity comes in; in this case it is a type of *pragmatic feasibility* (Strahan 2001). There is a strongly established schema of one person loving another; therefore, in the embedded clause, the expectation is that the object of *elskar* 'loves' will be someone other than the subject of the verb. An LDR is permitted in the I-dialect to refer to Jon in (10.64), since he clearly fulfils the role of RP. He is an animate subject, and the sentence is presenting his knowledge. Earlier, the meaning of reflexives was shown to include a sense of a person and their values. A person's knowledge could also fill this role. *Jon* is a strong RP in this sentence, and *Jon* is conceptually connected with the anaphor in the embedded clause through entrenched schemas including the pragmatic feasibility of the proposition expressed in (10.64). Therefore, it is unsurprising that the sentence in (10.64) is grammatical. What seems more unusual, in light of the points mentioned here, is that the subjunctive mood is seemingly required at all to license LDR in Icelandic.

ICELANDIC

(10.64) *[**Jón**$_i$ veit að María elskar sig$_i$]*.
J knows that M loves-I R
'Jon$_i$ knows that Maria loves him$_i$.'

In examples like (10.65) (from Thráinsson 1991:52), the ERPP also provides a clear analysis.

(10.65) **Ég$_i$ lofaði Önnu$_j$ að kyssa sig$_j$*.
I promised A to kiss R
I$_i$ promised Anne$_j$ to kiss herself$_j$.

The embedded clause in this sentence is not related in any straightforward way to *Önnu*. *Önnu* is not prominent with respect to the syntactically embedded clause. It is not just the grammatical roles of subject and object that are relevant here, the fact that *lofaði* 'promised' is a subject-control verb is also important. The syntactic information in this sentence overwhelmingly points to *ég* 'I' as the RP, not *Önnu*.

So far the notion of reference points and conceptual connectivity has not accounted for anything that the perspective model also does not. Let us therefore now look at some oft-cited examples, where LDR is not permitted until the sentence is embedded under some other contextualising verb such as *say*. (These examples are from Hellan 1991:36.)

(10.66) *$Ólafur_i$ *hefur ekki enn fundið vinnu sem* $sér_i$ *likar*.
O has-I not yet found job which R likes
$Olafur_i$ has not yet found a job which he_i likes.

(10.67) *[**$Jón_i$** segir að* $Ólafur_j$ *hafi ekki enn fundið vinnu sem* $sér_i$ *likar]*.
J says that O has-S not yet found job which R likes
'Jon_i says that $Olafur_j$ has not yet found a job which $he_{i/j}$ likes.'

The first thing to observe is that *Olaf* in (10.66) is a human subject, which makes him a potential candidate for RP. However, this is the S-dialect of Icelandic, meaning that LDR is not permitted without the subjunctive mood. The S-dialect requires overt grammatical coding of a conceptual dependence relation in order for an RP's domain to span several syntactic domains. Since there is an indicative mood between *Olaf* and the anaphor, and there is no other factor that could create conceptual connectivity between the two, the LDR is rejected.

On the other hand, in (10.67), the sentence occurs in a contextualising environment. By prefacing the sentence with *Jón segir að* 'Jon says that …', a context is created where a subjective opinion is presented. The prominence of *Jon* and his opinions in this case is quite high, since the speaker is reporting his comments. At the same time, the prominence of *Olaf* is also raised as a potential RP for the following clause, because *Jon* is apparently reporting something that might be of interest to us. This means that *Olaf* should now be a potential antecedent as well as *Jon*, which is indeed the case, as shown in (10.68).

(10.68) *[**Jón**$_i$ segir að [**Ólafur**$_j$ hafi ekki enn fundið vinnu sem sér$_j$ likar]*.
J says that O has-S not yet found job which R likes
'Jon$_i$ says that Olafur$_j$ has not yet found a job which he$_{i/j}$ likes.'

It is interesting that in (10.66), an LDR may not refer to *Olaf* until this sentence is itself embedded in an LDR context. Hellan (1991:36) says that, 'it seems that once a certain domain is perspective commanded by some item X, certain operations can be licensed […] within this domain'. Under the ERPP, this fact is not just noted, it is also accounted for. Another point to make is that as well as potentially raising the prominence of *Olaf*, prefacing the sentence with *Jon says that…* increases the conceptual connectivity between *Olaf* and the concept of him finding a job he likes, again, simply because it is all reported information. It is the fact that *Jon* is relaying the information about *Olaf* and his job-hunt that allows an LDR, not just the fact that the subjunctive mood is now involved.

It is assumed that in the I-dialect, there are cases of unacceptable uses of LDR, just as there are in Norwegian, and that these also relate to RPs and conceptual connectivity, and not just perspective. It seems incomplete to say that perspective alone governs LDR in both (10.66) and (10.67), else one would expect the same LDR readings to obtain in both sentences. For this reason, the Extended Reference Point Proposal seems a viable proposition, since it appeals to several factors which combine to license LDR rather than relying on one explanation. A statement of this proposal is given here, which will be tested against the Norwegian data collected for this study in the next chapter.

Extended Reference Point Proposal

The Extended Reference Point Proposal is that all reflexives, including LDRs, always have the reference point (of the domain the reflexive is in) as the antecedent. The reference point of a domain is selected on the basis of its prominence with respect to the other elements in the domain. The domain of the RP is determined by conceptual connectedness, which involves factors such as unity, perspective and syntactic

relations. In the case of LDRs, the conceptual connectedness between the reflexive and its antecedent can involve very complex syntactic relations[16].

[16] In clause-bound anaphora, the notions of profiles and bases will have a lot to do with what is considered the landmark and the trajector in the process.

Chapter 11

11 Applying the Extended Reference Point Proposal

The Extended Reference Point Proposal (ERPP) will be tested against the data collected for this study in two ways. In section 11.1, we will look at the rate of acceptance of LDR in the test sentences across all speakers involved in this study. Thus, we will identify those constructions which are either accepted or rejected as 'Norwegian'. In section 11.2, we will look at several speakers individually, namely, those speakers who are representative of the groups of speakers with the highest rates of LDR, as identified in Chapter 6.

11.1 LDR use in the sample population

The Extended Reference Point Proposal (ERPP) can be tested for by analysing all the sentences which allowed LDR, and all the sentences which didn't. If the antecedent in each case can be interpreted as the reference point, then this hypothesis will be supported. If an antecedent is chosen that cannot be understood to be the RP, then this will be evidence against this hypothesis.

We will begin by looking at sentences which were overwhelmingly accepted with a non-local antecedent (section 11.1.1). Then we will turn our attention to sentences which were overwhelmingly rejected or ignored with a non-local antecedent (section 11.1.2). We will look at factors such as context, finite clause boundaries and the presence of several plausible antecedents to determine whether these also affect the establishment of RPs and their domains. Table 11.1 shows the rates of acceptance of LDRs for all sentences, as an average of all speakers.

Table 11.1 – Rates of acceptance/ suggestion (%) of LDR for all sentences where it was permitted by at least one speaker

Sentence	%LDR	Sentence	%LDR	Sentence	%LDR	Sentence	%LDR
02	2	14	71	27	17	40	94
03	14	15	46	28	14	41	2
04	59	16	89	29	36	42	5
05	79	18	2	30	46	43	7
06	5	19	5	31	89	44	68
07	5	20	76	32	45	45	21
08	67	21	88	33	10	46	49
09	16	22	2	34	2	47	1
10	14	23	14	35	3	48	31
11	7	24	86	36	66	49	3
12	86	25	2	37	9	50	11
13	1	26	22	38	3		

The variation in responses to individual sentences by different speakers is due to the fact that the task of interpreting the sentences required speakers to construct their own conceptual structures for each sentence. We have seen that there is dialectal variation with regards to the overall level of acceptability of LDR in Norway; we have also seen that there is variation in the acceptance of LDR across other regional and sociological groups, where factors such as age, nativeness to the dialect of the speaker and their parents, level of education and whether the speaker is from the city or the country are all influences. There is not room in this thesis to go over every one of these groups of speakers to identify the factors (such as finite tense or perspective) which have the greatest influence on that group's acceptance of LDR. Instead, we will look at the informants overall in this section, and identify sentences which were accepted or rejected by the majority of Norwegian speakers, and attempt to explain these general 'Norwegian' sentences in terms of the Extended Reference Point Proposal.

11.1.1 LDR sentences

Sentences 40, 16, 31, 21, 12 and 24 were overwhelmingly (by more than 80% of informants) accepted with a non-local antecedent. These sentences are given in Table 11.2 below.

Table 11.2 – Sentences accepted with an LDR reading by at least 80% of informants

12	*Per likte å sjå kona si i speilet når han var på jobb.*	Per liked to watch R's wife in the mirror when he was at work.
16	*Per likte å sjå seg i speilet når han var på jobb.*	Per liked to watch R in the mirror when he was at work.
21	*Jon hørte diktet sitt bli omtalt.*	Jon heard R's poem be mentioned.
24	*Per likte at det var mogleg å sjå kona si i speilet når han var på jobb.*	Per liked that it was possible to watch R's wife in the mirror when he was at work.
31	*Eivor låvde Jone å snakka om prosjektet sitt.*	Eivor promised Jone to speak about R's project.
40	*Per likte at det var mogleg å sjå seg speilet når han var på jobb.*	Per liked that it was possible to watch R in the mirror when he was at work.

In five of these six sentences, the reflexive has only one potential antecedent. This means that there is only one RP for the domain which includes the reflexive, so the ERPP is supported by default. In the other sentence, 31, the subject of the higher predicate is understood to be the subject of the lower predicate, making this entity the RP for both clauses, hence also supporting the ERPP by default. In two sentences (24 and 40) there is a finite clause boundary between the reflexive and the antecedent, but there is no change of RP, because there is no substantive subject. Although these sentences are problematic for syntactic accounts of LDR, since they contain a blocking node (the finite tense boundary), the ERPP predicts that both of these sentences will be fine, since there is no change of RP from one clause to the next.

Sentences 12 and 16 are the possessive and accusative versions of each other, as are 24 and 40. In these constructions, *seg* and *sin* behave alike. However, from the pairs 21-32 and 31-46, only the possessive reflexive in 21 and 31 is acceptable to most people. (Just under half of all speakers accepted the accusative versions 32 and 46.)

Table 11.3 – Sentence pairs 21-32 and 31-46

21	*Jon hørte diktet sitt bli omtalt.*	Jon heard R's poem be mentioned.
32	*Jon hørte seg bli omtalt.*	Jon heard R be mentioned.
31	*Eivor låvde Jone å snakka om prosjektet sitt.*	Eivor promised Jone to speak about R's project.
46	*Eivor låvde Jone å snakka om seg.*	Eivor promised Jone to speak about R.

This is consistent across all the data, since in 21 and 31, the reflexive can be understood as being local to the antecedent. In 21, it is only a syntactic theoretical stance that calls this LDR. The NP the reflexive is in here functions as both the landmark of the first process and the trajector of the second. *Sin* is preferentially

short-distance bound, and this sentence fits that description. Sentence 31, as stated before, has a subject-control predicate in the matrix clause. Semantically, therefore, the higher trajector is also the lower trajector, and the reflexive can again be considered to be locally-bound. As will be discussed in section 11.1.4, *seg* is preferentially long-distance bound. In 32 and 46, the reflexives are conceptually local to *Jon* and *Eivor*, meaning that *seg* is dispreferred in both of these cases.

Let us now look at the sentences where LDR was not acceptable to the majority of informants.

11.1.2 Non-LDR sentences

The following sentences were accepted by 2% or fewer informants with a LDR reading, or an LDR was suggested by 2% or fewer informants: 01, 02, 13, 17, 18, 22, 25, 34, 39, 41, and 47. These sentences are given in the table below.

Table 11.4 – Test sentences which had less than 2% support for an LDR reading

01	*Jon var klar over at Are hadde snakka om bilen hans.*	[**Jon** realised that [Are had spoken about **his** car]].
02	*Jon hørte at Tordis var klar til å snakka med han.*	[**Jon** heard that [Tordis was ready to speak with **him**]].
13	*Jon trur at Maria elska jobben sin, fordi at ho snakka om han ti gongar om dagen!*	[Jon thinks that [**Maria** loves **R's** job], because she talks about it ten times a day!]
17	*Eg hørte frå Jon at Maria elska leraren sin.*	[I heard from Jon that [**Maria** loved **R's** teacher]].
18	*Jon blei låvd av Eivor at ho skulle snakka om songen sin.*	[Jon was promised by **Eivor** that [**she** would speak about **R's** song]].
22	*Jon sa til meg at Maria elska leraren sin.*	[Jon said to me that [**Maria** loved **R's** teacher]].
25	*Trond ville at me skulle snakka om broren hans.*	[**Trond** wanted that [we would speak about **his** brother]].
34	*Jon blei låvd av Eivor at ho skulle snakka om seg.*	[Jon was promised by **Eivor** that [**she** would speak about **R**]].
39	*Jon hørte at Tordis var klar til å snakka med advokaten hans.*	[**Jon** heard that [Tordis was prepared to speak with **his** lawyer]].
41	*Trond ville at me skulle snakka om han.*	[**Trond** wanted that [we would speak about **him**]].
47	*Jon sa til meg at Maria elska han.*	[**Jon** said to me that [Maria loved **him**]].

Speakers judged these sentences to be fine, either with *sin* and a local antecedent, or with a pronoun and a non-local antecedent. (Only one sentence used *seg*.) These

sentences were therefore not used with an LDR. Under ERPP assumptions, only the reflexive refers back to the RP, while a pronoun must be used to show coreference with any other entity[1].

All of the non-LDR sentences listed in Table 11.4 bar one fall into one of these two groups. Sentences 01, 02, 25, 39, 41 and 47 use a pronoun felicitously, while sentences 13, 17, 18 and 22 use the possessive reflexive which was overwhelmingly interpreted as clause-bound. Sentence 34 has an the accusative reflexive, and is the only exception in this group.

It is important to keep in mind that the interpretations used here as the data are not specific judgements on whether a reflexive can be coreferential with a non-clause-mate antecedent. The judgements are on the interpretation of the sentences that each speaker understood. Some speakers indicated that a reflexive in some instances was ambiguous between two antecedents. For sentences 13, 17, 18 and 22 (the possessive reflexive group), however, only the short-distance antecedent was recorded.

The possessive reflexive group (sentences 13, 17, 18, 22) and the exception (34) share certain characteristics. Firstly, they each have the finite clause complementiser *at*, so they each contain a finite embedded clause. For three of these sentences, the 'source' NP is not a grammatical subject (17, 18 and 34). 18 and 34 use a passive construction, while 17 uses a receive-type predicate (which will be discussed below), which many speakers rejected on the grounds that this construction is not natural in their dialect. Some speakers indicated that the active versions of these sentences would be fine with LDR interpretations (5.6% for sentence 17, 23% for 18 and 6.1% for 34).

One factor to take into consideration here is that these general constructions are not impossible in Norwegian dialects, rather that Norwegians are schooled to prefer direct, active constructions over indirect, passive ones. The Norsk Språkråd sent out a memo in October 1984 concerning the use of nynorsk by teachers and students in Norwegian schools. The final comment in this memo says that '*den naturlege seiemåten i vanleg talemål … må vere rettesnora*' 'the natural way to say things in the usual speaking-form … must be the guideline' (Hellevik 1998:31). In other words, forms that sound verbose or grandiose are to be avoided.

[1] This includes any entity that is not the RP of the domain the reflexive is in.

In nynorsk the guidelines also stipulate that nominalisation is best avoided, genitive forms of nouns can also be avoided, and that the active construction is preferred over the passive. The following examples from Hellevik (1998:32) *Nynorsk ordliste* 'Nynorsk wordlist' illustrate this. (11.1) is an example of actual (non-nynorsk) speech on NRK television, which would be highly-marked stylistically if said in dialect, or written in nynorsk. (11.2) is the example given in Hellevik (1998) of how this would be preferably translated into nynorsk.

BOKMÅL

(11.1) *Han har innsett viktigheten av å ha et riktig forhold mellom*
he has realised importance of to have a right relationship between
offensiv og defensiv fotball.
offensive and defensive soccer.
'He has realised the importance of having a solid relationship between offensive and defensive soccer.'

NYNORSK

(11.2) *Han har innsett kor viktig det er å ha …*
he has realised how important it is to have
'He has realised how important it is to have … '

Sentence (11.3) is another example of (non-nynorsk) speech from NRK television containing a nominalised verb, while (11.4) is its preferred translation into nynorsk.

BOKMÅL

(11.3) *Trikkene har problemer med fram.kommelig.heten i byene*.
trams have problems with arrive.coming.ness in cities
'Trams have problems with arrival/ through-passage in the cities.'

NYNORSK

(11.4) *Trikkene har problem med å komme fram i byen*.
trams have problems with to come forward in city
'Trams have problems with arriving/ getting through in the cities.'

The sentence in (11.5) is an example of a sentence in bokmål, while (11.6) is a possible translation into nynorsk, and (11.7) is considered even better.

BOKMÅL

(11.5) *Vi vil at saken skal bli gjenstand for en granskning av en*
we want that matter shall be object for a investigation of a

uavhengig kommisjon.
independent commission.

'We would like the matter to be the object of an investigation by an independent commission.'

NYNORSK

(11.6) *Vi vil at saka skal granskast av ein uavhengig kommisjon.*
we want that matter shall investigate-PASS of a independent commission
'We would like the matter to be investigated by an independent commission.'

(11.7) *Vi vil at ein uavhengig kommisjon skal granske saka.*
we want that a independent commission shall investigate matter
'We would like an independent commission to investigate the matter.'

In each of these cases, the nynorsk version is seen as a reflection of natural speech, as being more clear and direct, and being less verbose than bokmål.

The use of the passive construction in the test sentences is therefore very relevant to the acceptability of the sentences for Norwegian speakers, without taking the LDR into consideration. Even considering the speakers' preference for the active voice, there is yet another factor which weakens the link between an LDR and a potential antecedent, and that concerns the use of receive-type predicates.

Sentence 17 uses the verb *hørte,* which is a receive-type predicate. Some receive-predicates do not have an agent-like subject, and, as such, are similar to passive verbs. It is also claimed here that receive-type predicates, such as *take*, *buy*, *receive*, *get*, *obtain*, *hear* and passive constructions such as *be shown* and *be given*, often have a weaker RP than give-type predicates. Thus, *eg* 'I', as the first person syntactic subject, and *Jon*, as the source or logical subject are both weak candidates for the role of RP in test sentence 17. This is also recognised in the thematic role of the arguments. Give-type predicates typically take an Agent, Theme and Benefactor. Receive-type predicates take a Goal, a Theme and a Source. The difference between the subject roles of the two types of predicates is crucial, since a strong RP is associated with features or qualities that are most agent-like. *Jon* in 18 and 34, as the subject of the

passive matrix verb was overwhelmingly rejected as the antecedent for both *seg* and *sin* (only 2% each). On top of this, 23% of speakers said they preferred 18 in the active voice, and 14% of speakers said they preferred 34 in the active voice. Only one speaker for each sentence said that LDR would then be fine (speaker 217 for sentence 18 and speaker 109 for sentence 34). The test sentences equivalent to 18 and 34 but in the active voice also contained non-finite, instead of finite, clauses. LDR was acceptable in these sentences (31 and 46) by 89% and 49% of informants respectively. 18 and 34 do not select the expected RP (*Eivor*) since sources are only weak candidates for this position.

The final point to note here is that four of the five 'non-LDR' sentences use *sin* and not *seg*. The equivalent sentences with *seg* were accepted with LDR by between 1.7% and 14% of informants, as shown in the following table. Sentence 13 pairs with 28, 17 with 06, 18 with 34 and 22 with 33. It is possible that this difference is due to the fact that *sin* is always 'more deeply embedded' (inside an NP) than *seg*. However, studies such as Kuno (1987) have shown that it is not just the presence of an NP per se that blocks reflexive-binding, rather it is the combination of the meanings of the lexical elements involved that determine whether binding out of an NP is acceptable or not.

Table 11.5 – Rates of acceptance of the *seg* equivalents of non-LDR *sin* sentences

***Sin* sentence**	**%LDR**	***Seg* version**	**%LDR**
17	0	06	4.4
13	0.6	28	14
22	1.7	33	10
18	2.2	34	1.7

Table 11.6 – Non-LDR *sin* sentences and *seg* counterparts (the sentences in Table 11.5)

17	*Eg hørte frå Jon at Maria elska leraren sin.*	[I heard from Jon that [**Maria** loved **R's** teacher]].
06	*Eg hørte frå Jon at Maria elska seg.*	[I heard from Jon that [Maria loves R]].
18	*Jon blei låvd av Eivor at ho skulle snakka om songen sin.*	[Jon was promised by Eivor that [**she** would speak about **R's** song]].
34	*Jon blei låvd av Eivor at ho skulle snakka om seg.*	[Jon was promised by Eivor that [she would speak about R]].
13	*Jon trur at Maria elska jobben sin, fordi at ho snakka om han ti gongar om dagen!*	[Jon thinks that [**Maria** loves **R's** job], because [she talks about it ten times a day]]!
28	*Jon trur at Maria elska seg.*	[Jon thinks that [Maria loves R].
22	*Jon sa til meg at Maria elska leraren sin.*	[Jon said to me that [**Maria** loved **R's** teacher]].
33	*Jon sa til meg at Maria elska seg.*	[Jon said to me that [Maria loved R]].

The two *seg* sentences which were barely accepted with an LDR reading (06 and 34) were the partners to 17 and 18. For these sentences there are two potential antecedents, one of which is local and a subject, the other of which is non-local and not a (either grammatical or logical) subject. In the case of the *sin* sentences, only the local NP was chosen as an antecedent. For the *seg* sentences, however, a couple of informants chose the non-local, non-subject NP to be the antecedent.

This difference between acceptability of LDR with *seg* and *sin* is even greater when we compare the 13/28 and 22/33 pairs. For these sentences, there are also two potential antecedents, one of which is local and a subject, the other which is non-local but is still a grammatical subject. The grammatical and logical function of potential antecedents is clearly important in assigning the role of antecedent to an NP. This is clearly explained by the ERPP, since subjects are more easily construed as RPs than any other grammatical or logical function.

There is one main point about the distribution of *seg* and *sin* that has become clear, namely that *sin* is preferentially short-distance bound, while *seg* is preferentially long-distance bound. This may be due to the role *seg* plays in intrinsically reflexive predicates in Norwegian, and the distribution of reflexivisation strategies in Norwegian in relation to this. This is elaborated upon next.

11.1.3 Establishing the domain of a reference point

To begin with, it is clear that in sentences with more than one clause, it is possible, and maybe even likely, that each clause will have its own RP. Within each RP's domain, the elements all bear a relation to one another, in particular, reflexive elements are coreferential with the RP which is the head of the domain the reflexive is in. With regards to sentences 13 and 22, the elements within the coargument domain, to borrow syntactic terms for the moment, coalesce to form a coherent, logical sentence. Thus,

(11.8) *Maria$_i$ elska jobben sin$_i$.*
M loved job R
'Maria$_i$ loved her$_i$ job.'

(11.9) *Maria$_i$ elska leraren sin$_i$.*
M loved teacher R
'Maria$_i$ loved her$_i$ teacher.'

are complete and (pragmatically) logical sentences. Compare these with the minimal domain of the *seg* counterpart sentence

(11.10) *Maria$_i$ elska seg$_i$.*
M loved R
Maria$_i$ loved herself$_i$.

and the difference becomes quite apparent, since the notion expressed in (11.10) is that of an intrinsic reflexive. (Recall that in Norwegian, there is a construction identical to that in (11.10) where the predicate involved is termed intrinsically reflexive, and the reflexive anaphor is often not considered to be a semantic argument of the predicate.) The concept 'love oneself' is not available as a reflexive predicate in Norwegian. The clause, although headed by the one RP, with no other potential RP to muddy the waters, is not a (pragmatically) coherent unit.

If we now look at the test sentences which contained the embedded clause in (11.10), we can see that there is more than one potential antecedent, or RP for the reflexive.

Table 11.7 – The *seg* equivalents of non-LDR *sin* sentences

28	*Jon trur at Maria elska seg.*	Jon thinks that Maria loves R.
33	*Jon sa til meg at Maria elska seg.*	Jon said to me that Maria loved R.

In both 28 and 33 there are two RPs – *Jon* and *Maria*. Furthermore, the two higher RPs are plausible antecedents for the reflexives. There are now several choices for speakers of different dialects of Norwegian to indicate coreference between the object of the embedded predicate and two subjects (of the matrix and embedded clauses).

For those speakers who can establish a strong affinity between the embedded clause and the higher subject, this subject may become the RP for the whole sentence. In these cases, since reflexives always refer to RPs, the higher subject may be the antecedent for the reflexive anaphor. For those speakers for whom the finite tense indicates a strong shift of RP, the RP for the reflexive can only be the local NP. These speakers then have several options for coreferencing. Many speakers (those for whom the finite tensed embedded clause represents a shift of RP) stated that although *seg* was a possible option to indicate clause-bounded reflexivisation, it sounded better with *seg sjølv*. Many other speakers stated that *seg* just didn't make any sense – it was not pragmatically feasible, or did not belong to an entrenched schema – and that *seg sjølv* had to be used. The reasons for this were stated above: for nearly all speakers of Norwegian, *seg* is preferentially bound long-distance, except when it is part of an intrinsically reflexive predicate. Since neither 28 nor 33 provides an acceptable reading in Norwegian when the reflexive has a local antecedent, the emphatic marking *sjølv* is required to show local coreference[2]. The second coreferencing option for speakers for whom the finite tense indicates a strong shift of RP, is with the non-local NP, which must be referred to with a pronoun. The use of a pronoun, however, is often ambiguous, since it can refer to any non-RP referent in the discourse which matches the pronoun for number, person (and gender in the case of third person singular pronouns). Those speakers who have LDR often cited disambiguation as their reason for preferring the reflexive to the pronoun to indicate coreference for this reason.

[2] Compare this with Levinson's (2000) conversational implicatures, where lexical items always have complementary distribution. Where they appear to have the same distribution, some other factor, such as semantic or pragmatic meaning, must provide the complementarity.

The establishment of RPs therefore plays a crucial role in allowing or disallowing LDR. It is important to understand that RPs are *not* static, unchanging roles. Context plays a massive part in assigning the role of RP to a particular NP. For this reason, the same sentence in different contexts can at one time result in a clause-bounded interpretation of a reflexive anaphor, and at another time in a non-clause-bounded interpretation. This fact is highlighted by the repetition of several sentences in the questionnaire, with different contexts, for example test sentences 7 and 29.

Table 11.8 – Test sentences where context influenced the informants' choice of antecedent

7	*Foreldre til Hege og Susanne hadde nettopp flytta til Island. Morten trudde dei to jentene snakka om foreldra sine, då han såg dei snakka saman.*	The parents of Hege and Susanne had just moved to Iceland. Morten thought the two girls were talking about R's parents when he saw them talking together.
29	*Tori visste at foreldra sine var godt likt av naboane sine. Ho trudde naboane snakka om foreldra sine, då ho såg dei snakke saman.*	Tori knew that R's parents were well liked by R's neighbours. She thought they were talking about R's parents when she saw them talking together.

5% of informants cited the non-local *Morten* in sentence 7 as a potential antecedent for *sine*, while 36% cited the non-local *Tori* as an antecedent of sentence 29. Seven times as many speakers selected the LDR interpretation when the sentence appeared in a context biasing the idea that the higher subject was the RP than when the context influenced the decision to choose the local NP as the RP. This is an important piece of data, as there is no possible syntactic explanation for this discrepancy between the rates of acceptance of LDR in the two sentences. The difference is context-driven. Previous accounts of anaphora have distinguished two types of anaphora here, one governed by the binding conditions, and the other by discourse factors. However, clearly, the discourse factors are involved in both cases, in their contribution to establishing an RP in each case. The reflexives in both 7 and 29 are governed by the same factors, and should not be separated.

Other examples of a reflexive referring back to the RP, where the RP may be thought of as a discourse topic, occur in the following. This is a sample of actual speech, recorded when I was visiting informant 213, who was a neighbour of informants 310 and 311. Informant 213 went to look up 310's phone number to arrange a meeting for me. As he searched through his address book, he muttered:

SPEAKER 213

(11.11) *E ha:r jo nummere si her. Nummeret hass, altså.*
I have yes number R-DATIVE here number his therefore
'I've got his(R) number here. His(pr) number, I mean.'

The referent of *sin* in (11.11) was clearly present in the discourse, he was the discourse topic. The use of the reflexive in the first instance shows that this was the case. The correction to use a pronoun also shows that the antecedent of a reflexive must be overtly present. We can also say that, in (11.11), the discourse topic became the reference point for the sentence which did not contain the overt antecedent. This runs against the established schema, which seems to be that pronouns are used when the antecedent is not in the same sentence as the anaphor, while reflexives are used when the antecedent is located in the same sentence, except for stylistic reasons, such as in novels. In this case, speaker 213 rephrased the sentence to use the more established schema; he corrected himself to use the pronoun, since the antecedent is not in any way 'local'.

Hence, factors like discourse topic are important to establishing an RP and thus antecedent for a reflexive, but there is still a preference for a linguistically overt RP to act as antecedent. Another example of the discourse topic being so strongly established that it allows a non-c-commanding antecedent to refer back to it occurred in the natural speech of speaker 386. Speaker 386 was discussing his girlfriend's mother, who always wanted him to do odd-jobs around the house for her. In the list of tasks he has done for her, he explained one attempt, given in (11.12).

SPEAKER 386

(11.12) *Æ skulle bare prøve å ta skifte dekk på bilen sin.*
I should only try to take shift tyres on car R
'I was just going to try to change the tyres on her car.'

Here, *sin* refers back to the mother of the girlfriend, and there is no correction to use a pronoun. From this we may conclude that some speakers use the discourse topic to maintain an RP to a greater extent than others.

Examples of this kind have traditionally been treated separately from the clause-bounded anaphora, such that the study of discourse anaphora is traditionally separate from intra-sentential anaphora. Pollard and Sag's (1992) account of anaphors in

English is a prime example of this. It is a well-accepted phenomenon that reflexives may have discourse antecedents, however, up until now this has been of little interest to syntacticians who study intra-sentential anaphora. It should be clear, though, that discourse reflexives are subject to the same constraints as LDRs and clause-bounded anaphors. Pollard and Sag (1992, 1994) proposed a model of discourse anaphora that syncs well with the ERPP proposed here.

Discourse anaphors in HPSG

Pollard and Sag's (1992) treatment of exempt anaphors, ie, those not bound by Principle A, shows that there are two main types of constraints relevant to discourse anaphors and LDRs. These are processing and discourse constraints, which Pollard and Sag (1992:271) refer to as *intervention* and *point-of-view* respectively. The intervention constraint has to do with sentences containing more than one potential antecedent. When the intended antecedent is syntactically non-local, only inanimate NPs may intervene. This is illustrated by the following. The judgements given here are from Pollard and Sag (1992:271-2).

(11.13) **Bill$_i$ remembered that Tom saw [a picture of himself$_i$] in the post office.*

(11.14) *? Bill$_i$ remembered that The Age had printed [a picture of himself$_i$] in the Sunday edition.*

(11.15) *Bill$_i$ thought that nothing could make [a picture of himself$_i$ in The Age] acceptable to Sandy.*

In (11.13), the animate NP *Tom* intervenes between the reflexive and its intended antecedent *Bill*, and the result is ungrammatical. In (11.14), the non-animate NP *The Age* is used. This gives a marginal grammaticality judgement. (11.15) has only the completely inanimate *nothing* intervening between the reflexive and the intended antecedent, and the construction is fine.

Super Equi is another type of non-local anaphoric relation which illustrates the effects of the intervention constraint (Pollard and Sag 1992:272-3).

(11.16) *Mary$_i$ knew [that [PRO$_i$ getting herself$_i$ arrested] would be unpleasant].*

(11.17) **John$_i$ thought [that Mary would be bothered by [PRO$_i$ shaving himself$_i$]].*

(11.18) *John$_i$ thought [that Proposition 91 made [PRO$_i$ undressing himself$_i$] illegal].*

(11.16) is fine, since there is no intervening NP between the reflexive and the intended antecedent. The intervention constraint is applicable in (11.17), rendering the sentence unacceptable. In (11.18), however, the intervening NP is inanimate, and the sentence is acceptable.

The intervention constraint can be understood in terms of reference points and their domains. Recall that reference points are associated with strongly agent-like qualities. Inanimate NPs rarely possess such qualities, and, as such, their presence does not tend to indicate a change of RP. It is far easier to construe animate NPs and corporate NPs (eg *The Age*) as having the qualities necessary to make them an RP than it is with inanimate NPs. In each of the examples (11.13) to (11.18) above, the presence of the second animate NPs indicates a very strong change of reference point. If a reflexive is used, it must therefore have a syntactically local antecedent. When the inanimate NP intervenes, there is no change in RP, and the reflexive may have a syntactically non-local antecedent. Note that, semantically, the reflexive-antecedent relationship is not long-distance inasfar as the antecedent is the anchor or point of reference for the clause containing the reflexive. Thus, in (11.15), Bill is the reference point for the phrase *a picture of himself in The Age*. Although the phonetic realisation of the reference point is syntactically non-local to this phrase, being outside of the Tensed S and past a Comp, the reference point for this phrase 'carries through', as it were. The conceptualisation of the phrase *a picture of himself in The Age* occurs against the background of *Bill* as the RP. This is what I mean when I say that the reflexive-antecedent relationship in this case is not long-distance. The same can be said for (11.16) and (11.18). Since there is no change of RP through these sentences, each successive clause or concept is conceptualised against the background of the main RP, *Mary* and *John* respectively. The RPs are, in a discourse sense, local, while being syntactically non-local.

This is also relevant to the types of anaphors which Pollard and Sag (1992) say are licensed by perspective constraints. Pollard and Sag (1992:274) give only two examples, given here as (11.19) and (11.20), to support their claim that perspective is important in allowing a reflexive, but they demonstrate this effect very clearly. These examples also support the main claim of this thesis, namely that reflexives can only refer back to the reference point.

(11.19) *John$_i$ was going to get even with Mary. That picture of himself$_i$ in the paper would really annoy her, as would the other stunts he had planned.*

(11.20) **Mary was quite taken aback by the publicity John$_i$ was receiving. That picture of himself$_i$ in the paper had really annoyed her, and there was not much she could do about it*.

In (11.19), *John* is the RP of both sentences. This is set up by the first sentence, where *John* is not only the syntactic subject, but also possesses strongly agent-like qualities. The process described in this first sentence is one which profiles the strong intentions of *John*, and presents these desires in a factual way, viewed from *John*'s perspective. In other words, the speaker portrays a strong empathy with *John* and his plans. The second sentence does not contain any entity which may be construed as a new RP, thus, the reflexive is in the domain of the RP *John*, and is acceptable.

In (11.20), the first sentence sets up *Mary* as the primary RP. *Mary*'s feelings are portrayed, and the context presents these from her perspective. A reflexive in this domain can only refer back to *Mary*, which is not the case in (11.20), where there is a clash in the gender feature. The reflexive in this instance is therefore unacceptable.

The ERPP proposed here deals with data described as discourse anaphora as presented in Pollard and Sag (1992). Pollard and Sag describe two types of non-prototypically bound anaphora, namely LDRs and discourse anaphors. It has been shown here that the intervention constraints and perspective factors that Pollard and Sag postulate are facets of reference points and their domains.

11.1.4 *Seg* is LDR, *sin* is SDR

Seg generally has a non-local antecedent, while *sin* generally has a local one. This is not a hard and fast rule – we have just been looking at examples of discourse-bound *sin*. However, this is a good heuristic. Of the four sentence pairs where *seg* was not more acceptable than *sin* as an LDR, three of the pairs show a difference of 3% or less. Only one pair of sentences therefore really contradicts the generalisation that *seg* is better than *sin* over a finite boundary. This is the pair 48 and 10.

Table 11.9 – Sentences 10 and 48

10	*Trond ville at me skulle snakka om seg.*	Trond wanted that we should talk about R.
48	*Trond ville at me skulle snakka om broren sin.*	Trond wanted that we would speak about R's brother.

Neither 10 nor 48 has a potential intervening antecedent, but they both contain a finite clause boundary. We predict that, if the hypothesis is correct that *seg* is predominantly long-distance bound, and *sin* predominantly short-distance bound, then 10 will rate better than 48. But in fact, only 14% of informants approved of LDR in 10, while 31% approved of LDR in 48.

This curious anomaly can be explained by the semantic relationships between *Trond* and *seg* in 10, and between *Trond* and *broren sin* in 48. *Seg* in 10 has no elements in the sentence which may be construed as being part of its base, while the sentence containing *broren sin* in 48 does. The concept of *bror* 'brother' has as part of its base a notion of a person who has a brother. This makes the conceptual connectivity between *broren sin* and *Trond* greater in 48 than between *seg* and *Trond* in 10, which strengthens the notion of *Trond* being the RP in 48, hence the higher rate of acceptance of LDR in 48 than in 10. Unfortunately, we cannot explore this avenue more fully here – but it certainly identifies an area where further research might fruitfully be carried out.

11.1.5 Summary

The following factors are crucial to the establishment of an RP and to the reflexive-antecedent relationship: the presence of several potential antecedents; the pragmatic feasibility of a sentence, or degree to which a schema has become entrenched; the presence of finite tense boundaries; the availability of a grammatical or logical subject; the discourse context; and the conceptual connectivity between the reflexive and the antecedent, which is due to profile-base relations. These factors all influence the establishment of RPs and their domains.

Syntactic accounts of reflexivisation based solely on structural configurations or grammatical roles apply well to prototypical reflexivisation, because they approximate the semantic prominence relationship between a reflexive and its antecedent. However, since syntactic accounts do not use any other linguistic information, they do not account for as wide a range of data as the Extended

Reference Point Proposal postulated here, which does take other factors into consideration.

11.2 Investigating some individual speakers' data

In this section, we will examine data from individual speakers, in the context of the ERPP, expanding the discussion begun in the previous section. This data consists of judgements about anaphoric binding in different environments as taken from the questionnaire.

Recall from Chapter 5 Methodology, that certain groups of speakers have higher levels of acceptance of LDR than others. Speakers of the ML and Tr dialects, those from the country rather than the city, those whose parents are both native speakers of the same dialect as the speaker, those aged 41 and over and those who never finished high-school, averaged higher LDR scores than other speakers for each field. There are just five speakers in this study who have all of these qualities. They are given here in Table 11.10, repeated from Chapter 6.

Table 11.10 – Results of query selecting only: dialect = ML or Tr; city/ country = country; parents = BNP; age = 41+, education = never begun/ finished high-school

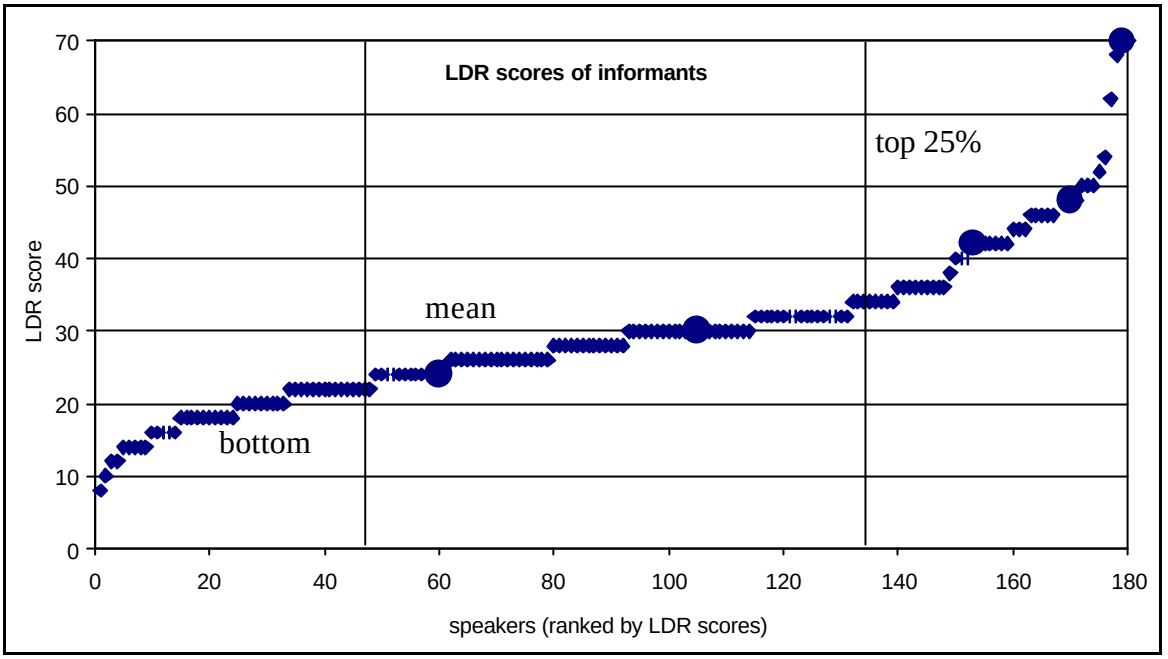
Dialect	City/country	Sex	Parents	Age	Education	Speaker
Tr	country	f	BNP	41-60	never begun high-school	311
Tr	country	f	BNP	61+	never begun high-school	362
ML	country	m	BNP	61+	never begun high-school	455
ML	country	m	BNP	61+	never begun high-school	467
ML	country	f	BNP	61+	never begun high-school	505

The LDR scores of these five speakers are given in Table 6.16. The scores of all speakers are plotted in the chart in Figure 11.1, with these five speakers' scores highlighted, to give some idea of the distribution of the LDR scores across the sample.

Table 11.11 – LDR scores of speakers selected in Table 11.10 (mean of all speakers = 30)

Speaker	LDR
311	70
362	48
455	30
467	24
505	42

Figure 11.1 – Chart of LDR scores of informants (circles represent speakers in Table 11.11)



As stated in the Methodology chapter, male speakers in country Norway typically speak more standardised language than women (Sandøy 1992). It is not surprising then, that the two male speakers, 455 and 467, actually have lower than average scores, while the three female speakers, 311, 362 and 505, have higher than average scores. The data from the three females will therefore be used as a starting point in the analysis of data here[3]. There is not space in this thesis to go through the data of every speaker individually, so these three women have been selected as representatives for speakers who typically have high LDR acceptance, based upon some important sociological characteristics. Even among these three speakers, it will be seen that there is considerable difference in the responses to the questionnaire. It is for this reason that the Reference Point model of reflexive anaphora is proposed, since it allows apparently contradictory evidence, which a purely syntactic account simply cannot do.

The data will be examined from the viewpoint of the Reference Point model, and it will be shown how the data fits this model. In particular, examples which were treated as containing exempt anaphors under syntactic accounts will be shown to follow

[3] Of the four speakers with the highest LDR scores, three of them are recorded as having some interference in their dialect. The speakers we will look at in this section are all classed as being native speakers of their own dialects, and should thus provided more reliable and consistent data.

exactly the same principles of reflexivisation as non-exempt, or clause-bounded reflexivisation.

11.2.1 Speaker 311

Speaker 311 is a female in the 41-60 age bracket from the Tr region. Both of her parents are native speakers of her dialect, and she has never been to high-school. She says her dialect is closer to nynorsk than bokmål, although she reads and writes both nynorsk and bokmål equally well. She had an LDR score of 70 for this study, meaning that she accepted or suggested LDR readings for 70% of the sentences in the questionnaire. This is the equal highest score, along with speaker 386. A brief description of speaker 386's LDR usage will be given at the end of this section.

Firstly let us consider sentences where LDR was not acceptable to speaker 311. These sentences are given in Table 11.12. Table 11.13 shows the rates of acceptance of these sentences across all speakers.

Table 11.12 – Sentences where LDR was not acceptable to speaker 311

03	*Sille visste ikkje om skina sine hadde blitt stjålet.*	Sille didn't know whether R's skis had been stolen.
06	*Eg hørte frå Jon at Maria elska seg.*	I heard from Jon that Maria loves R.
26	*Henrik trudde at kjæresten sin hadde vore utro.*	Henrik thought that R's girlfriend had been unfaithful.
27	*Sille visste ikkje at skina sine hadde blitt stjålet.*	Sille didn't know that R's skis had been stolen.
50	*Tori visste at foreldra sine var godt likt av naboane sine.*	Tori knew that R's parents were well liked by R's neighbours.

Table 11.13 – Rate of acceptance of LDR across all speakers for sentences in Table 11.12

Sentence	%
03	14
06	4
26	22
27	17
50	11

Setting aside sentence 03 for the moment, let us look at sentence 06. In sentence 06, the only potential antecedents are *Jon* and *Maria*. *Eg* is not a potential antecedent, because it is first person, and *seg* must refer to a third person. *Maria* is within the same clause as the reflexive, while *Jon* is an object in the higher clause. It is very difficult to interpret *Jon* as the RP for the embedded clause, since the conceptual

connectivity between *Jon* and the embedded clause is very weak. This is due to several things. Firstly, *Jon* is not the trajector of the process *hørte at X* 'heard that X', although he is a source. Recall from earlier (section 11.1.2, summarised in 11.1.5) that Norwegians overall prefer grammatical or logical subjects to be antecedents for reflexives. It is therefore difficult in Norwegian to construe the embedded clause in 06 as being from *Jon*'s perspective. It is easier to conceptualise the speaker as being responsible for the truth value of the embedded clause. The combination of these factors result in the reflexive being infelicitous in this sentence.

There are several speakers who did accept an LDR reading for sentence 06. Their comments are worthwhile seeing here, too.

Table 11.14 – Speakers who accepted LDR in sentence 06, with LDR scores of each speaker

Speaker	Comment	LDR
352	[no comment]	52
359	*meg* 'me' [pronoun]	30
379	better: *ham* 'him' [pronoun]	46
386	stress on antecedent here; context problem, can mean that *hun elske seg og/ eller Jon* 'she loves herself and/ or Jon'	70
392	as it stands: both *seg* og *seg selv*, but that's like a funny meaning so would prefer to put *meg* 'me' [pronoun]	26
423	[no comment]	46
445	[no comment]	30
611	[no comment]	36

Of the eight speakers who accepted LDR in sentence 06, four did so with the comment that there existed a better alternative. Speaker 379 stated that he preferred to use the pronoun, even though the reflexive was okay. This indicates that he understood the logical subject function of *Jon* as strong enough to enable it to be the RP. However, for speaker 379, the conceptual connectivity between *Jon* and *seg* is not so great that the reflexive/ antecedent link could be firmly established, and he noted that he still preferred to use the pronoun in this case. Speakers 359 and 392 both understood the subject of the matrix clause as the RP for the embedded clause, to which the reflexive could refer. However, since the reflexive *seg* is third person, they stipulated the first person object pronoun *meg* as preferable to the third person object reflexive *seg*, thus indicating a similar preference to speaker 379. Speaker 386 was very accepting of LDR everywhere. He seems able to establish RPs very easily. Indeed, his comments on this sentence and on other sentences are mainly to the effect that stress or intonation cues are needed in order to interpret which of the potential RPs is in fact the antecedent. The four remaining speakers who accepted LDR in

sentence 06 did so without comment. Three of these speakers had above average LDR scores (speakers 352, 423 and 611), while the remaining speaker (445) had an average LDR score.

It is also interesting that test sentence 33 uses the same logical semantic arguments, but in different syntactic roles. Speaker 311 accepted this sentence with the LDR interpretation of *seg* referring back to *Jon*. We can adduce from this that grammatical roles are important for the reflexive-antecedent relationship for this speaker.

The other sentences which speaker 311 did not accept with an LDR are 03, 26, 27 and 50. In fact, all of these sentences contain *sin* in the trajector of the process of the embedded clause (in syntactic terminology, this means that *sin* is in the subject of the embedded clause)[4]. These sentences can be contrasted with, for example, sentence 29, which contains *sin* in a landmark of the embedded process, and which speaker 311 does accept with an LDR.

Table 11.15 – Sentence 29

29	*Ho trudde naboane snakka om foreldra sine, då ho såg dei snakke saman.*	She thought they were talking about R's parents when she saw them talking together.

In sentence 29, speaker 311 permits the possessive reflexive *sine* to have *ho* 'she' as the antecedent over a finite clause boundary. It is therefore not the presence of the finite tense boundary per se that is the problem with the other sentences above. This outright rejection of the type of sentence exemplified by 03, 26, 27 and 50 can be explained if we remember the basic prototype of the reflexive anaphor. The reflexive anaphor is the landmark in the reflexive processual relation. Landmarks are canonically syntactic objects, thus, the appearance of a reflexive within a concept that is itself a trajector is not a highly entrenched schema. Speaker 311 does not allow the possessive reflexive *sin* to be within a trajector (ie a subject), while reflexives within landmarks (ie objects), are acceptable. In this case we could just as easily have stated a syntactic restriction on the use of LDR by speaker 311, saying that the possessive reflexive is not permitted in the subject of an embedded clauses at all. In this case, then, the ERPP is no more or less useful than a syntactic account of LDR. However,

[4] Recall that I am avoiding using syntactic terminology wherever possible, even though the terms I am using may be less familiar to the reader. This is because I want to discourage the reader from thinking of reflexivisation in terms of syntax, since the relationship between reflexive and antecedent is semantic/ pragmatic, and not syntactic.

when we consider cases where the reflexive was ambiguous between referring to a local or non-local antecedent for speaker 311, we see that the ERPP accounts for these, since it appeals to semantic and pragmatic factors, while syntactic accounts cannot explain this data.

Let us now look at sentences where speaker 311 said the reflexive was ambiguous between having the local or non-local NP as the antecedent.

Table 11.16 – Sentences where the reflexive was ambiguous between the LDR and SDR interpretations for speaker 311

09	*Jon var ikkje klar over at Are hadde snakka om seg.*	Jon did not realise that Are had spoken about R.
18	*Jon blei låvd av Eivor at ho skulle snakka om songen sin.*	Jon was promised by Eivor that she would speak about R's song.
30	*Martin ba oss snakka om seg.*	Martin asked us (to) speak about R.
34	*Jon blei låvd av Eivor at ho skulle snakka om seg.*	Jon was promised by Eivor that she would speak about R.
42	*Han sa at ho hadde snakka med kameraten sin.*	He said that she had spoken with R's friend.
49	*Jon blei fortalt av meg at Maria elska kameraten sin.*	Jon was told by me that Maria loved R's friend.

The sentences in Table 11.16 are interesting. Sentence 30 was considered marginally ambiguous, even though the reflexive does not match the closest NP *oss* 'us' for person features. Sentences 09 and 34 contain the embedded predicate *snakka om seg* 'speak about R', which some informants considered to be an intrinsically reflexive predicate. For these speakers, therefore, including speaker 311, the trajector of the processual relation in which the reflexive is the landmark must be coreferential with the landmark. In other words, since this is an intrinsically reflexive predicate (for these speakers), the subject and reflexive object are coreferential. The ambiguity arises for speaker 311, because the higher subjects in 09 and 34 are easily construed as RPs for the embedded clauses, meaning that the reflexives can also refer back to them. Factors such as empathy perspective and subjecthood make *Jon* in 09 and 34 easily identifiable RPs for the lower clauses.

Sentences 18, 42 and 49 all contain the possessive reflexive *sin* inside the landmark of the embedded process. Since it has been hypothesised that *sin* is preferentially short-distance bound, the fact that speaker 311 accepts these sentences with a local reading supports this contention. However, finite tense boundaries are not strong indicators of

changes of RPs for speaker 311, and binding past a finite tense boundary is not a problem for her, as stated above. Hence, these sentences with *sin* are also fine for speaker 311 with the non-local antecedent.

Table 11.17 – Sentences where *seg sjølv* can take a non-local antecedent for speaker 311

16	*Per likte å sjå seg sjølv i speilet når han var på jobb.*	Per liked to watch Rself in the mirror when he was at work.
40	*Per likte at det var mogleg å sjå seg sjølv i speilet når han var på jobb.*	Per liked that it was possible to watch Rself in the mirror when he was at work.

As shown in Table 11.17, speaker 311 says that it is also possible for *seg sjølv* to take a syntactically strictly non-local antecedent. In both sentences 16 and 40, *Per* is the only available antecedent. *Per* is also very easily construed as the RP. For this reason, *seg sjølv* is possible[5]. *Seg sjølv* seems to require a very strong RP to be its antecedent. By this, I mean that its antecedent must have more of the features of an RP than the antecedent of *seg*. This is probably due to the meaning of *seg sjølv* as compared to *seg*, where *seg sjølv* refers to the whole body, and *seg* only to a part of a body, including the rest of the body by pragmatic implicature rather than semantic meaning. It is often stated that *sjølv* is a 'closeness anaphor' (Hellan 1988) or a 'focus anaphor'. *Sjølv* is often cited as having an emphatic use, which was mentioned in the introduction to Norwegian reflexives. The claim being made here, however, is that *sjølv* only ever has an emphatic use, due to its meaning of 'whole body' or 'whole self' as argued earlier. When used in conjunction with *seg*, empirical evidence shows that it nearly always has a local antecedent. The emphatic use of the reflexive therefore serves to strengthen an already very strong RP.

The addition of *sjølv* can be seen as emphasising the body-ness of the landmark in the reflexive relation. Thus, while the difference between (11.21) and (11.22) has been previously seen as a process of detransitivisation (eg Hellan 1988), there is another view which highlights the semantic difference between the two sentences. (11.21) and (11.22) are two sentences which all Norwegians find acceptable. (11.21) is often called 'intrinsically reflexive', or detransitivised, while (11.22) is referred to as transitive.

[5] Speaker 311 also accepts *seg* in both of these sentences.

(11.21) *Jon$_i$ vaska seg$_i$.*
J washed R
'Jon washed.'

(11.22) *Jon$_i$ vaska seg sjølv$_i$*
J washed R self
'Jon$_i$ washed himself$_i$.'

If we look at these sentences semantically, we see that in (11.21), the reflexive *seg* is an intrinsic part of the processual relation *vaska seg* 'wash oneself'. The complement *Jon* of this processual relation is the only possible referent for the landmark of the process, *seg*. The complement of this process, *Jon*, is also the RP for the process, ie the process is within the domain of the RP *Jon*. So example (11.21) is compatible with the ERPP. In (11.22), the reflexive *seg sjølv* is not an intrinsic part of the processual relation *vaska seg sjølv* 'wash one's self', rather, it is a complement of the predicate head *vaska* 'wash'[6]. There is a sense of the physical body being washed in (11.22) that is not present in (11.21).

The emphatic nature of *sjølv* is also evident when it is used as a modifier of an entity other than *seg*, eg (11.23).

(11.23) *Jon$_i$ sjølv$_i$ vaska seg$_i$.*
J self washed R
'Jon$_i$ himself$_i$ washed.'

Sentence (11.23) sounds rather bizarre without context, which could be in the form of (11.24).

(11.24) *Jon could scarcely believe the commotion when his family finally arrived at the holiday resort. Beth ran upstairs to put on her bathers and Brent rushed to the tele to play his new Playstation game. Jon himself washed and tried to wind down from the car trip.*

[6] Hellan (1988) argues that this is reflected in the syntactic description of (11.22), where *seg sjølv* is assigned a θ-role by the predicate. This contrasts with (11.21), where the reflexive *seg* is not a semantic argument, and therefore does not receive a θ-role.

It conforms to the predictions of the ERPP that *Jon* must be the overriding consciousness in the narrative in order to use the construction in (11.23), since it confirms the notion that reflexives must refer back to the reference point, and that *sjølv* requires a very strong RP.

Apart from one sentence (test sentence 06), speaker 311 allows binding of an LDR over a finite tense boundary, she allows the non-monomorphemic *seg sjølv* to be an LDR under strict conditions, and she can interpret *seg* as both locally and non-locally bound in the same sentence, creating ambiguity. However, speaker 311 does not allow binding of a possessive reflexive out of a subject (test sentences 03, 26, 27 and 50). This can be understood in terms of the ERPP followed here, where speaker 311 only allows reflexives to be landmarks, or part of landmarks, which is the most entrenched schema available for reflexives.

Speaker 386

At the beginning of this section, it was mentioned that speakers 311 and 386 shared the distinction of having the highest LDRs scores in this study. A brief description of speaker 386 is therefore in order.

Speaker 386 is a male aged 26-40. His dialect is a city dialect of Tr. He does not have both native parents of this dialect, and is himself classed as having some interference in his dialect. The major other influence on his language is Swedish, since he was born in Sweden, and spent many childhood holidays there. His friends say he has a strong Trøndersk accent, but that he sometimes says funny things. He says that his dialect is a mixture of both nynorsk and bokmål, although he prefers to write in bokmål, and finds bokmål easier to read. He had an LDR score of 70 for this study, meaning that he accepted or suggested LDR in 70% of the sentences in the questionnaire.

Let us begin by considering the one sentence containing a potential LDR which was not acceptable to speaker 386. This is shown in Table 11.18.

Table 11.18 – Sentence 03

03	*Sille visste ikkje om skina sine hadde blitt stjålet.*	Sille didn't know whether R's skis had been stolen.

Interestingly, this sentence was also rejected by each of the other three speakers whose data is being examined in this section (and by 84% of informants overall). Why speaker 386 should reject this sentence, and accept an identical sentence containing 'that' instead of 'if' is unclear, although it may be related to pragmatic factivity or empathy. It is possible that it is the structure of sentence 03 that does not allow LDR. Since the complement is of undetermined modality, it is neutral in its empathy, that is to say it is neither asserted nor denied by anyone. Under this approach, the concept of *not knowing whether* sets up a major shift in RP from the complement of the process, *Sille*, to an objective RP 'it is the case that'. If this is the case, then a reflexive embedded in the a *not know whether* clause should not be able to refer to an antecedent outside of the new domain, which is apparently how this construction is interpreted by speaker 386.

The major factor influencing speaker 386's choice of antecedent is context. In 13 of the 38 sentences in the questionnaire that had two or three potential antecedents (ie 34%), he stated that the reflexive could refer to either the local or non-local entity. The grammatical function of the entity was only relevant for him in the local domain, where the reflexive had to refer to the grammatical subject, or the profiled element in the process. In the non-local domain, the reflexive could refer to either a subject (eg sentences 02, 05, 09, etc) or an object (eg sentences 06, 31 and 46). In each case, speaker 386 said the choice of antecedent was dependent on 'stress' and 'context', although he did not elaborate upon this. In other words, the grammatical function of the antecedent was less important for him than factors such as stress and context in assigning an entity the role of reference point for speaker 386. An account of reflexivisation that appealed purely to syntactic features would not be able to account for the data from this speaker.

11.2.2 Speaker 362

Speaker 362 is a female in the 61+ age bracket from the Tr region. Both of her parents are native speakers of her dialect, and she has never been to high-school. She says her dialect is closer to bokmål than nynorsk, and she prefers to write in bokmål, although she reads both nynorsk and bokmål equally well. She had an LDR score of 48 for this study, meaning that she accepted or suggested LDR readings for 48% of the sentences in the questionnaire. This places her in the top 8% of speakers with regards to their LDR scores.

Following the pattern above, let us firstly consider sentences where LDR was not acceptable to speaker 362. These sentences are given in Table 11.19.

Table 11.19 – Sentences where LDR was not acceptable to speaker 362

03	*Sille visste ikkje om skina sine hadde blitt stjålet.*	Sille didn't know whether R's skis had been stolen.
06	*Eg hørte frå Jon at Maria elska seg.*	I heard from Jon that Maria loves R.
10	*Trond ville at me skulle snakka om seg.*	Trond wanted that we should talk about R.
11	*Han sa at ho hadde snakka med seg.*	He said that she had spoken with R.
30	*Martin ba oss snakka om seg.*	Martin asked us (to) speak about R.
33	*Jon sa til meg at Maria elska seg.*	Jon said to me that Maria loved R.
35	*Jon blei fortalt av meg at Maria elska seg.*	Jon was told by me that Maria loved R.
48	*Trond ville at me skulle snakka om broren sin.*	Trond wanted that we would speak about R's brother.

In each of the sentences in Table 11.19, speaker 362 preferred a pronoun. The data from speaker 362 is not as consistent as the data from speaker 311 above. Speaker 362 rejected LDR in sentence 03, but accepted it in 26, 27 and 50 (see Table 11.20), which had identical syntactic constructions, with the possessive pronoun in the complement of the embedded process. It is clear that while speaker 311's use of reflexives can be explained in syntactic terms (binding is not permitted out of a subject or to a non-grammatical subject), speaker 362's use of reflexives must be described by different factors.

Let us begin here by attempting to describe the difference between sentence 03 on the one hand, and 26, 27 and 50 on the other.

Table 11.20 – Sentences in the questionnaire with *sin* in the subject of the embedded clause

03	*Sille visste ikkje om skina sine hadde blitt stjålet.*	Sille didn't know whether R's skis had been stolen.
26	*Henrik trudde at kjæresten sin hadde vore utro.*	Henrik thought that R's girlfriend had been unfaithful.
27	*Sille visste ikkje at skina sine hadde blitt stjålet.*	Sille didn't know that R's skis had been stolen.
50	*Tori visste at foreldra sine var godt likt av naboane sine.*	Tori knew that R's parents were well liked by R's neighbours.

There is no straightforward syntactic explanation for the difference between sentence 03 and the sentences in Table 11.20. However, from the RP viewpoint, we can make the following claims. The context of the preceding sentences allowed speaker 362 to

become 'attuned' to understanding sentences with an LDR interpretation[7]. Speaker 362 rejected sentence 03, because she could not conceptualise *Sille* as the RP for the following clause.

In the model of anaphora being developed here, it is claimed that certain features of an utterance more strongly suggest changes of RPs than other features. Those features which suggest change of an RP include prosodic features such as stress and intonation patterns, discourse features such as pauses, change of topic or theme, context and shifts in deixis (including use of first person pronouns), conceptual semantic features such as complementisers which are typically associated with a finite tense boundary, and syntactic features such as a finite tense boundary, change of tense or mood, and beginning a new sentence. Not all of these features are directly testable on the data collected for this study, although many are. Some of these factors are also relevant to examples cited in the LDR literature, as we shall see in a moment.

In the case of speaker 362, I claim that the complementiser *om* 'if', which must be followed by a clause carrying finite tense, is a strong indicator of a change of RP. *Om* 'if' clauses are also antithetical to assertions and empathy, which means there is a strong reason for *om* to change the RP from the higher subject to an unknown, objective RP[8]. For this reason, the reflexive could not be used in sentence 03, since the reflexive was not in the domain of the intended antecedent. In other words, *Sille* in sentence 03 does not carry the empathy perspective of the domain containing the reflexive. Given an appropriate context, it is likely that speaker 362 would accept sentence 03 – this is the case for nearly all of the sentences, since RPs may be created through context, which overrides other (discourse, prosodic, syntactic) factors. As claimed above, it is possible that this speaker accepted the syntactically similar sentences 26, 27 and 50 because the preceding sentences accustomed her to the LDR reading.

Like speaker 311, speaker 362 rejected sentence 06. The reason for this, as stated above, is due to the difficulty of establishing the demoted (passive) agent *Jon* as the

[7] Similar arguments were made by Creider (1987) in his quantitative study on the use of extended dependencies in Norwegian (in the Trøndelag and Nord-Møre fylke).

[8] Similarly, on semantic grounds, we would expect a shift of RP with *whether that* clauses, but not *whether to*.

RP for the domain containing the reflexive, since *Jon* is only indirectly connected to the domain containing the reflexive.

Finally, speaker 362 also rejected sentences 10, 11, 30, 33, 35 and 48, given in Table 11.21 below. The first five of these sentences use *seg*, while 48 uses *sin*. The *sin* versions of these *seg* sentences were all accepted with a local interpretation, except for 10, which is partnered by 48. Sentence 30 has a non-finite clause boundary, while the others contain a finite clause boundary. Sentences 10, 30 and 48 only have non-local entities which may be the antecedent for the reflexive, while the other sentences also have local potential antecedents. Sentence 35 has a passive matrix predicate, the others all have active predicates.

Table 11.21 – Sentences rejected by speaker 362

03	*Sille visste ikkje om skina sine hadde blitt stjålet.*	Sille didn't know whether R's skis had been stolen.
06	*Eg hørte frå Jon at Maria elska seg.*	I heard from Jon that Maria loves R.
10	*Trond ville at me skulle snakka om seg.*	Trond wanted that we should talk about R.
11	*Han sa at ho hadde snakka med seg.*	He said that she had spoken with R.
30	*Martin ba oss snakka om seg.*	Martin asked us (to) speak about R.
33	*Jon sa til meg at Maria elska seg.*	Jon said to me that Maria loved R.
35	*Jon blei fortalt av meg at Maria elska seg.*	Jon was told by me that Maria loved R.
48	*Trond ville at me skulle snakka om broren sin.*	Trond wanted that we would speak about R's brother.

As regards the non-syntactic features of the sentences 10, 11, 30, 33, 35 and 48, they are all non-factive[9]. They use a mixture of verbs of linguistic communication, mental-cognitive, psychological state and perception.

From the list of syntactic and semantic features, there is nothing that these sentences have in common (apart from non-factivity). Using the RP account, however, we can take into account other features, such as the presence of a first person pronoun. And this is where the results from this speaker suddenly become very interesting. Table 11.22 shows the results of a query run to select only those sentences which contain a first person pronoun in any clause and in any grammatical function. The features of finiteness, possessive/ accusative, pronoun/ reflexive and factivity are included, along with the LDR and SDR judgements and alternatives given by speaker 362.

Table 11.22 – Some results for speaker 362

1st	Finiteness	Poss/acc	Pron/R	Factivity	ID	LDR	SDR	Alternative
yes		poss	R		52			*før han reiste* 'before he left'
yes		poss	R		56		bad	*pengane hans* 'his money'
yes	finite	acc	pron	non-f	41			
yes	finite	acc	pron	non-f	47			
yes	finite	acc	R	non-f	06	bad		*han* 'him'
yes	finite	acc	R	non-f	10	bad		*han* 'him'
yes	finite	acc	R	non-f	33	bad		*han* 'him'
yes	finite	acc	R	non-f	35	bad		*han* 'him'
yes	finite	poss	pron	non-f	25			
yes	finite	poss	R	non-f	17		good	
yes	finite	poss	R	non-f	22		good	
yes	finite	poss	R	non-f	48	bad		*broren hans* 'his brother'
yes	finite	poss	R	non-f	49		good	*wants active: Jeg fortalte Jon at …* 'I told Jon that …'
yes	non-finite	acc	R	non-f	14	good		
yes	non-finite	acc	R	non-f	30	bad		*han* 'him'
yes	non-finite	acc	R	non-f	44	good		
yes	non-finite	poss	pron	non-f	15	good		*bragdene sine* 'R's deeds'
yes	non-finite	poss	pron	non-f	43			
yes	non-finite	poss	R	non-f	04	good		
yes	non-finite	poss	R	non-f	20	good		
yes	non-finite	poss	R	true f	05	good		
no	finite	poss	R	non-f	07		good	
no	finite	poss	R	semi-f	27	good		
no	finite	acc	R	non-f	11	bad		han
no		poss	R		60			før han reiste.
no	finite	acc	pron	non-f	02			
no		acc	pron		53			
no	finite	poss	R	semi-f	37		good	
no	finite	poss	R	non-f	03	bad		skiene hennas
no	non-finite	acc	R	semi-f	46	good		
no	finite	poss	R	true f	24	good		
no	finite	poss	R	true f	19		good	

Once the data is viewed in this way, that a strong pattern suddenly emerges. At the top of the list, we can ignore sentences 52 and 56 for the moment, since they are single-clause sentences. The next sentences, 41 and 47, do not record any judgements in the LDR or SDR fields, since they use pronouns felicitously. Next, the finite sentences with *seg* are unanimously bad with an LDR interpretation. This cannot be explained simply by the finiteness factor, since this speaker accepted 9, 23, 28 and 45 with an LDR reading, all over a finite boundary. The difference must be due to the presence of the first person pronoun (either as a subject or an object) in the sentences in Table 11.22. In terms of our ERPP, we know from studies in discourse (eg Ariel 1991:455)

[9] Speaker 362 also accepted LDR in non-factive sentences, as well as semi- and true factive sentences

that the presence of the first person has a strong orientation effect towards that person. Given the high accessibility of the first person in discourse, any overt mention of this person creates a very strong reference point, overriding empathy created with other entities through their syntactic and thematic roles. In other words, by mentioning 'I' or 'us' in the test sentence, the sentence effectively becomes in the domain of this first person RP, ruling out the option of a third person reflexive. So, for this speaker, when a first person pronoun is used, *seg* may not have a non-local antecedent, since it cannot refer to a first person NP and the presence of a first person NP has a strong tendency to usurp the role of RP from any rival RP in the sentence.

Table 11.23 – Sentences comparing the effect of the presence of a first person pronoun

28	*Jon trur at Maria elska seg.*	Jon thinks that Maria loves R.
06	*Eg hørte frå Jon at Maria elska seg.*	I heard from Jon that Maria loves R.
33	*Jon sa til meg at Maria elska seg.*	Jon said to me that Maria loved R.
35	*Jon blei fortalt av meg at Maria elska seg.*	Jon was told by me that Maria loved R.

As shown in Table 11.23, sentence 28 has no first person pronoun, and speaker 362 accepted this sentence with an LDR interpretation. Speaker 362 rejected sentences 06, 33 and 35, which do have a first person pronoun. The syntactic and thematic roles of the entities involved do not seem to be relevant to reflexive-antecedent coreferencing for this speaker. In sentence 06, the first person *eg* has a benefactive role, while the potential non-local antecedent *Jon* is a source. In 33, these thematic roles are the same, but *Jon* is now a syntactic subject, and the first person pronoun *meg* is a syntactic object. In 35, *Jon* is again a syntactic subject, but this time in the benefactive role, while the first person *meg* is a syntactic object, but has the thematic role of source. In other words, the set of θ-roles is the same, but their pairing with syntactic relations is reversed. The grammatical roles of the involved entities do not seem to be relevant for this speaker, while the presence of the first person pronoun does appear to have a powerful effect in aligning the RP with the primary ego (ie the speaker) of each sentence.

Looking now at the *sin* sentences which contained a finite boundary, we see that the reflexives are all locally bound. This follows the general rule in Norwegian that *sin* preferentially has a local antecedent. This rule receives support from sentences 17, 22 and 49, which are all fine with an SDR reading, and sentence 48, which cannot be

locally bound, due to the unavailability of a third person local antecedent, and which must therefore use a pronoun to show coreference outside of this domain[10].

Skipping the non-finite *seg* sentences for a moment, we see that *sin* is always fine over a non-finite boundary for speaker 362, even with the presence of a first person pronoun. This seems to be more like the syntactic binding that is mentioned in the literature (eg Hellan 1988, Reuland and Sigurjónsdóttir 1997), where discourse factors are irrelevant. This can be incorporated into the ERPP here. There is clearly a difference between coreference options over finite and non-finite boundaries in Norwegian. I will claim here that non-finite boundaries are equivalent, for binding purposes, to the minimal coargument domain. I make this claim, because binding over a non-finite boundary seems to result in the same grammaticality judgements as binding within the coargument domain, and I believe this is due to several factors. In particular, non-finite predicates typically have one argument which is not overt, and is recovered through syntactic or semantic relationships. How this happens is not important here. The fact remains that if we assume that *sin* is preferentially locally bound, and that non-finite boundaries do not normally contain shifts of RPs, we can see that *sin* will be bound over a non-finite boundary too, since this is now a secondary minimal domain. Thus, the *sin* LDR sentences with a non-finite boundary are predicted to be fine, since this is the preferential binding domain of *sin*.

If we now turn our attention to the non-finite sentences with *seg*, the story becomes even more interesting, as more factors turn out to be relevant to assigning anaphoric coreference. Speaker 362 accepted LDR in sentences 14 and 44, and rejected it in 30. The difference between these sentences is one of what we will call pragmatic factivity (after Keenan 1971 and Levinson 1983), as opposed to semantic, or lexical, factivity. Keenan (1971:49) suggests that 'an utterance of a sentence pragmatically presupposes that its context is appropriate', thus defining pragmatic presupposition, or pragmatic factivity, 'on the relation between utterances and their contexts' (p51). Levinson (2000) describes a system of pragmatic factivity, which he calls Generalised Conversational Implicatures (GCIs). GCIs lead to default inferences of utterances or

[10] In fact, if we look at the results for all speakers, we see that, when a sentence with *sin* has a finite boundary, it is accepted with an LDR reading in 9% of cases (ignoring the outlier sentence 24, which was accepted by 85% of speakers due to maintenance of the RP's domain over the finite boundary). Finite *sin* sentences are accepted with a local reading in 82% of cases (ignoring the outlier sentences 50 which was accepted by 4% of speakers due to contextual factors biasing an LDR interpretation).

sentences by drawing on semantic, syntactic and prosodic information present in a discourse. A similar approach was developed in Strahan (2001). The relevance here is that both Keenan and Levinson recognise that presupposition need not only apply at the clausal level. When we speak of factive predicates, we are referring to a class of predicates which presuppose the truth of their complement clauses. However, it seems that LDR is related to a more complex type of presupposition than ordinary factivity.

It is not purely the factivity of the matrix predicate alone that determines the acceptability of LDR for speaker 362, since 14 and 30 both have the same matrix predicate, yet 14 is fine and 30 is not with an LDR reading. It is also not the factivity or intrinsic reflexivity of the embedded predicate alone that determines the acceptability of LDR here, since 30 and 44 both have the same embedded predicate. However, the combination of the matrix and embedded predicate in each case do determine the acceptability of LDR.

In the sentences which were acceptable to speaker 362 with an LDR (14 and 44), there is a sense of desire or willingness on behalf of *oss* 'us' to carry out the action described by the embedded predicate. In 44 this is clearly indicated by the matrix predicate *lot* 'let', which entails that the subject *han* 'he' somehow gave permission to *us* to carry out this action, and that it was something we wanted to do. In 14, this relationship is slightly more difficult to explain. One speaker (mother to speaker 383) explained that in 14, if someone asks you to help them with something, it normally happens right away. In this respect, *Trond* can ask *us* whether we will help him, and know the outcome immediately. On the other hand, in 30, if *Martin* asks *us* to talk about him, to our mutual boss, for example, he does not know whether this actually happens, specifically, he does not have first-hand knowledge that this actually occurs. So the immediacy, or directness/ indirectness, of the action is relevant to the use of LDR[11].

Essentially, LDR is permitted when the outcome, or the proposition of the embedded clause, is presupposed (either known or expected), as in 14 and 44. LDR is not permitted when the outcome is not presupposed, or assumed to be unknown to the

[11] Nicholas (1999) notes similar semantic notions of givenness or immediacy associated with the Greek complementiser *pu* 'that'.

subject, eg 30[12]. This relates closely to the empathy of LDRs mentioned in the literature (eg Levinson 2000, Bresnan 2001). Let us look more closely at this now.

Table 11.24 – Non-finite *seg* sentences with first person pronouns

14	*Trond ba oss hjelpa seg.*	Trond asked us (to) help R.
30	*Martin ba oss snakka om seg.*	Martin asked us (to) speak about R.
44	*Han lot oss snakka om seg til foreldra våre.*	He let us speak about R to our parents.

This sense of first-hand knowledge is inferred due to the meaning of the reflexive. *Seg* has some meaning along the lines of 'part of [a person and all their relevant parts]'. Since, for a reflexive to be permitted, something must happen to at least part of a person, it is inferred that the person is cognisant of what has happened. *Sin* differs from *seg* in this respect, since *sin* does not refer to part of a person and their relevant parts, rather to the relationship one entity can have with other entities or concepts.

The distribution of the reflexives *seg* and *sin* in the speech of speaker 362 is not describable in syntactic terms. The ERPP, however, takes into account factors such as the presence of a first person pronoun, finiteness, the meaning of each reflexive, and a concept called here pragmatic factivity, and is thus able to neatly define this speaker's use of reflexives.

11.2.3 Speaker 505

Speaker 505 is a female speaker in the 61+ age bracket from the ML LDR region. She has never been to high-school. She says that her dialect is closer to nynorsk than bokmål, and she prefers to write in nynorsk, although she reads both languages equally easily. Speaker 505 had an LDR score of 42 for this study, meaning that she accepted or suggested LDR for 42% of the sentences in the questionnaire. The ranks her in the top 15% of speakers with regards to their LDR scores.

We will firstly consider those sentences where speaker 505 did not accept LDR. These sentences are given in Table 11.25.

[12] This assertion is based upon interviews with informants, where the speakers were asked to stated why LDR was fine in some cases and not fine in others.

Table 11.25 – Sentences where LDR was not acceptable to speaker 505[13]

03	*Sille visste ikkje om skina sine hadde blitt stjålet.*	Sille didn't know whether R's skis had been stolen.
10	*Trond ville at me skulle snakka om seg.*	Trond wanted that we should talk about R.
11	*Han sa at ho hadde snakka med seg.*	He said that she had spoken with R.
27	*Sille visste ikkje at skina sine hadde blitt stjålet.*	Sille didn't know that R's skis had been stolen.

The first thing we notice about the data from speaker 505 is the role that perspective plays, in that the antecedent of the reflexive must be a perspective-holder. This provides support for Moshagen and Trosterud's (1990) analysis of LDR in Norwegian, in that it parallels their Smøla data. On Smøla, perspective plays a major role in the licensing of LDRs. Recall from earlier the examples showing this, which are repeated here for convenience. (11.25) and (11.26) show that an LDR on Smøla may have an antecedent over a finite clause boundary. *Sæ* is the dialect rendering of *seg*.

SMØLA

(11.25) *Han$_i$ trudde at dæm kom til å flir åt sæ$_i$.*
he believed that them come to to laugh at R
'He$_i$ thought that they'd laugh at him$_i$.'

(11.26) *Han$_i$ vesst at dæm kom til å flir åt sæ$_i$.*
he knew that them come to to laugh at R
'He$_i$ knew that they'd laugh at him$_i$.'

Both *trudd* 'believed' and *vesst* 'knew' license LDR in these cases. However, when the matrix predicates in each case are negated, there is an interesting result, as shown in (11.27) and (11.28).

SMØLA

(11.27) *Han$_i$ trudde itj at dæm kom til å flir åt sæ$_i$.*
he believed not that them come to to laugh at R
'He$_i$ didn't think that they'd laugh at him$_i$.'

[13] This speaker rejected fewer LDR sentences than the previous speakers who had higher scores than she did. This is due to the fact that the other speakers suggested LDR more often than this speaker for sentences which were presented in the questionnaire with a pronoun, thus increasing their LDR scores.

(11.28) *Han_i *vesst itj at dæm kom te å flir åt sæ$_i$.*
he knew not that them come to to laugh at R
He_i didn't know they'd laugh at him_i

Trudd itj 'didn't believe' still licenses LDR, while *vesst itj* 'didn't know' doesn't, and a pronoun must be used, as shown in (11.29).

SMØLA

(11.29) *Han_i vesst itj at dæm kom te å flir åt'n$_i$.*
he knew not that them come to to laugh at him
'He_i didn't know they'd laugh at him_i.'

The argument put forward by Moshagen and Trosterud (1990) is that the verbs *trudd* 'believed' and *vesst* 'knew' contain the implications that the embedded clauses are viewed from the perspective of the subject of these matrix verbs. When these verbs are negated, only *trudd itj* 'didn't believe' still maintains this implicature. Using *vesst itj* 'didn't know' does not entail the higher subject's perspective, and so LDR is not permitted.

Returning to speaker 505's data above, we can see that test sentences 03 and 27 were both rejected. These sentences both contain *visst ikkje* 'didn't know', which, if we follow Moshagen and Trosterud's (1990) argument as stated above, leads to the conclusion that it is the lack of perspective that rules out the possibility of LDR in these cases. This conclusion is further supported by another sentence in the questionnaire, which used the same syntactic structure, but did not use a negated verb. This is sentence 26.

Table 11.26 – Sentence in speaker 505's data which parallels the Smøla data

26	*Henrik trudde at kjæresten sin hadde vore utro.*	Henrik thought that R's girlfriend had been unfaithful.

This sentence was judged fine by speaker 505. Under the ERPP, we can state that for Smøla speakers, as well as speaker 505, perspective plays an important role in assigning empathy to an RP, allowing its domain to extend into the non-local domain. In other words, perspective is one facet of an RP.

The other sentences which speaker 505 did not accept with an LDR interpretation were 10 and 11. These sentences were not accepted by speaker 362 with an LDR

reading, either, although speaker 311 accepted both with an LDR reading. For speaker 362, it was argued above that sentence 10 was unacceptable due to the interferring presence of a first person pronoun. Sentence 11 remained unexplained.

Just over 7% of informants accepted sentence 11 with an LDR reading[14]. This is interesting, since it is very similar to the most commonly cited examples of LDR in Icelandic, namely 'Jon said that Maria loved himself'. Sentence 11 uses the verb *seia* 'to say', which is described as the verb which most often licenses a logocentric or LDR context. However, both speakers 362 and 505 rejected it. The question is, how does the ERPP deal with this? Quite simply, the answer lies in the context. Sentence 11 does not name either of the participants, it refers to them simply as *han* 'he' and *ho* 'she'. This results in a sentence where neither participant is highlighted against the other, or against the background of the processes with which they are involved, which means that neither participant is a strong candidate for RP. This is the only *seg* sentence which contains a finite clause boundary and does not name any of the participants[15]. Sentence 42 contains *sin* in a finite embedded clause and does not name any of the participants, and is only interpreted as being locally bound. This follows the regular pattern, that *seg* and *sin* have different antecedents – they are not subject to exactly the same constraints.

11.2.4 Conclusions

It has become clear throughout this perusal of several individual speakers' data, that an important factor as to whether LDR is permitted or not is the presence of a finite tense boundary, combined with some other factor. The other factors which have been highlighted so far are the presence of a first person pronoun, the presence of a perspective-holder, the presence of expressions of negation and certain complementisers, and whether the entities in the sentence are named, or merely referred to by a pronoun. In each case, the domain of the RP is affected. When a first person pronoun is used, the speaker becomes the dominant entity in the sentence, meaning that a third person reflexive often cannot be used, since any reflexive would

[14] For our purposes, 7% of speakers represents a minor, but not insignificant proportion of speakers. These judgements cannot be dismissed as noise.

[15] Where one or more of the referents is named, 61% of informants accept binding of *seg* over a non-finite boundary.

be in the domain of the first person RP. The presence of expressions of negation interfere with a speaker's or hearer's ability to empathise with the entities mentioned in the sentence, and hence weaken the status of those entities as RPs for the domain containing the reflexive, as does the presence of the complementiser *om* 'if'. When pronouns only are used to refer to the entities in the sentence, rather than names, none of the entities are profiled against the processes described in the sentence, which weakens their status as potential RPs for reflexives.

It was also argued that the domain encompassing a non-finite boundary should not be regarded as an LDR domain. Non-finite boundaries do not normally entail a shift of RP. For this reason, most Norwegians allow 'LDR' over a non-finite boundary.

Chapter 12

12 Prosodic effects on LDR judgements

Until this point, we have been examining aspects of LDR without regard for prosodic information. In this chapter, we will look at examples of LDR, taking prosody into account, in order to see whether prosody has any explanatory power with respect to LDR.

Some of the examples in this section come from an exercise designed to elicit LDR, while other examples come from natural speech. In section 12.1, we will look at some of the data obtained through the elicitation exercise. In sections 12.2 and 12.3 we will reconsider reflexivisation over a finitely tensed clause boundary, and out of an intrinsically reflexive predicate, using prosodic information.

12.1 The elicitation exercise

The elicitation exercise (described in chapter 5, section 5.1.5) was used to obtain speech samples from 26 speakers. Of these 26 speakers, 6 used an LDR on at least one occasion. Some of these uses will be analysed in this section. A full transcription of the elicitation exercise can be found in Appendix 4.

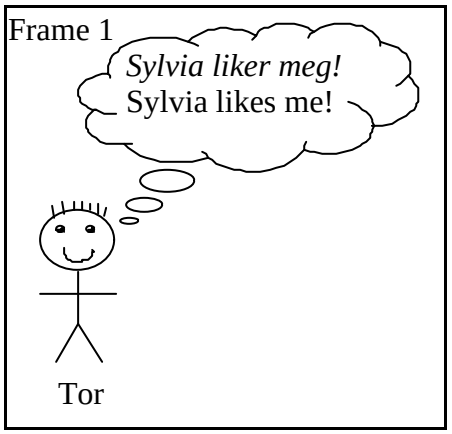
Use of LDR in the elicitation exercise correlates somewhat with acceptance of LDR as identified by the questionnaires. Speakers who used LDR in the elicitation exercise had an average LDR score (based on their responses to the questionnaire) of 32.4, while those who did not use LDR in the elicitation exercise had an LDR score average of 26.5. (The overall average was 30.) Two speakers (103 and 701) who used LDR in the elicitation exercise did not complete a questionnaire, so their LDR scores are not known. However, speaker 103 also produced LDR in natural (non-elicited) speech, so the actual LDR score average of speakers who used an LDR in the elicitation exercise is probably higher than indicated here.

12.1.1 Rules for transcription

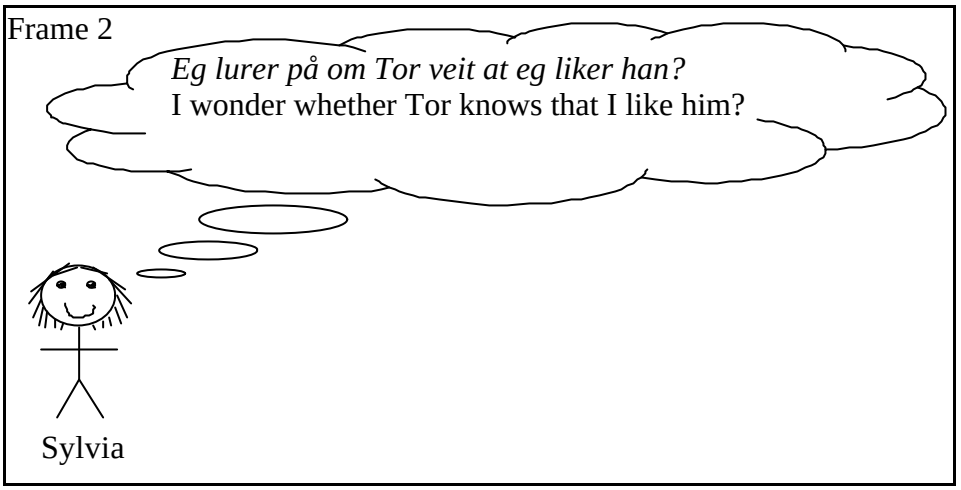
The transcription of the elicitation exercise follows the guidelines for transcribing discourse given in Du Bois, Schuetze-Coburn, Cumming and Paolino (1998). The main notation that the reader needs to be aware of are described briefly now. In the transcription, each line represents one intonation unit. Where there are deemed to be intonation breaks, a new line is started. No punctuation at the end of a line indicates that there is only a minor intonation break. A comma at the end of a line indicates a 'continuing' intonation, such as rising tone, while a full stop indicates a completed intonation unit. A double hyphen (--) indicates that the projected intonation unit was not completed. A single hyphen (-) indicates that a word was not completed. Two full stops (..) indicate a minor pause in the speech, while three dots (…) indicate a tangible break (up to three seconds). Any time longer than three seconds is recorded and given in brackets after the pause, eg …(6) means a pause of six seconds. A dialectal orthographic transcription is given. This means that the flavour of each speaker's pronunciation is retained, while the text remains accessible to those who can read Norwegian.

12.1.2 The data

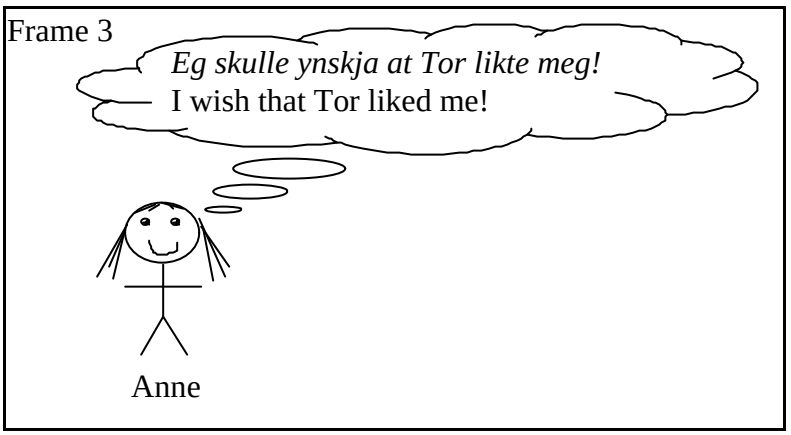
The first four frames of the elicitation cartoon story elicited the clearest examples of LDR and non-LDR usage, so we will concentrate on the speech elicited from them in this section. The first four frames elicited speech which generally corresponded to something like the sentences [1] to [4]. (See Appendix 3 for the full story.)



[1] Tor is thinking about that Sylvia likes him.



[2] Sylvia is wondering about whether Tor knows that she likes him.



[3] Anne is dreaming about/ wishing that Tor liked her.

[4] Tor asks whether Anne and Mark want to go out with him and Sylvia tonight.

12.1.3 Observations

As stated above, there were six speakers who used an LDR in their description of at least one of these four frames. These were speakers 103, 304, 321, 385, 386 and 701.

We will begin by looking at the speech elicited by frame 3, where all of these speakers used an LDR. The relevant chunks of text from each speaker are given in (12.1). Note that in each case, there is no major intonation boundary between the reflexive and its antecedent. In particular, speakers 321 and 701 have minimal shifts in the intonation contours of the sentence. This shows that minor intonation boundaries do not affect the domain of the RP. All speakers also used phrasing which put a finite clause boundary between the anaphor and the antecedent, which supports the finding from the questionnaire, that a finite clause boundary does not always block reflexive-antecedent coreference. (The line numbers identify the speaker's speech as it is found in the transcription in Appendix 3.)

(12.1) Speech elicited by frame 3

SPEAKER 103		
9	Og Anne,	And Anne,
10	hu ynskjer at 'n Tor .. likt'a.	she wishes that Tor .. liked her.
11	Eller at 'n Tor likt sæi[1].	Or that Tor liked R.
SPEAKER 304		
7	Anne .. skulle ønske at Tor likte sæi.	Anne .. wishes that Tor liked R.
SPEAKER 321		
12	Anne --	Anne --
13	Anne .. har også ønske om at	Anne .. has also wishes about that
14	Tor	Tor
15	Tor er glad i sei.	Tor loves R.
SPEAKER 385		
9	Å Anne tenkje at --	And Anne is thinking that --
10	skull ønskjt at --	wished that --
11	at yn skull ønskjt at 'n Tor lika se.	that she wished that Tor like R.
12	Eller lika ho.	Or liked her.

[1] Some speakers were aware that the task was intended to elicit whether a reflexive and/ or a pronoun was possible, and have therefore provided both when acceptable.

SPEAKER 386

15	Bilde tre.	Picture three.
16	Der tenke Anne, …	There Anne is thinking, …
17	at hu skulle ønsk at Tor likt sæ.	that she wished that Tor liked R.

SPEAKER 701

19	ho ønsk- --	she wish- --
20	skulle ønskjt	wished
21	at'n Tor likte se.	that Tor liked R.

Contrasting with these sections of elicited data are the descriptions these speakers gave for frame 2, where all speakers used a pronoun. These are given in (12.2). Speakers 103 and 304 have significant intonation breaks between the pronoun and its antecedent. As with the speech elicited by frame 3, all speakers phrased their description of frame 2 such that there is a finite clause boundary between the anaphor and the antecedent.

(12.2) Speech elicited by frame 2

SPEAKER 103

7	Og hen Sylvia lurer på om 'n Tor veit=,	And Sylvia wonders whether Tor knows=,
8	at o lik'en.	that she likes him.

SPEAKER 304

7	Og Sylvia tror at --	And Sylvia thinks that --
8	erm,	um,
9	nei,	no,
10	lurer på om Tor vet,	wonders if Tor knows,
11	at hu likjer han.	that she likes him.

SPEAKER 321

8	Men-men Sylvia	But-but Sylvia
9	lurer samtidig på om- om virkelig	wonders at the same time if- if really
10	han vet at hun liker han.	he knows that she likes him.

SPEAKER 385

8	Å	And
9	Sylvia lura på om 'n Tor .. veit at .. at ho lika hann.	Sylvia is wondering whether Tor .. knows that .. that she likes him.

SPEAKER 386

13	Sylvia tenke at	Sylvia is thinking that
14	hu- hu lure på om Tor veit at hu like ‘en.	she- she is wonderingt whether Tor knows that she likes him.

SPEAKER 701

5	Men så Sylvia, ho .. lurer på om’n Tor væ:t	But then Sylvia, she .. is wondering about whether Tor knows
6	at ho like han.	that she likes him.

The speech elicited from frame 1 (given in (12.3)) also mainly contained a pronoun and not a reflexive, although two speakers (103 and 385) stated that both were possible. (It is interesting that both speakers used the reflexive, and then added that a pronoun would also be possible. This suggests that they prefer the reflexive in this instance.) All speakers (except 386) had a significant intonation break between the pronoun and its antecedent. Speaker 386 did not render his description into the third person, and used a first person in directly represented speech (or direct speech).

(12.3) Speech elicited by frame 1

SPEAKER 103

3	han= --	he= --
4	Tor lurer på om a Sylvia likt sæi.	Tor wonders whether Sylvia liked R.
5	Eller,	Or,
6	at o likt’n.	that she liked him.

SPEAKER 304

5	Tor tenkjer at,	Tor is thinking that,
6	Sylvia likjer han.	Sylvia likes him.

SPEAKER 321

4	Jeg tror at,	I think that,
5	Tor er klar over at,	Tor realises that,
6	Sylvia liker han.	Sylvia likes him.

SPEAKER 385

3	det er det fyst ein Tor,	there’s first of all a Tor,
4	ja, asså,	yes, so,
5	som tenkje på om at o= Sylvia lika se,	who is thinking about tha=t Sylvia likes R,
6	eller lika hannj.	or likes him.

SPEAKER 386

7	Tor tenke --	Tor is thinking --
8	øøø,	umm,
9	Sylvia like= mæi,	Sylvia likes= me,
10	blir det.	it'll be

SPEAKER 701

1	Ja,	Yes,
2	dette her er ei fortelling	this here is a tale
3	om ein som hete Tor,	about a boy called Tor,
4	og han .. lurer på om o S-Sylvia like'n.	and he .. is wondering about whether S-Sylvia likes him.

Finally, the speech elicited by frame 4 (given in (12.4)) proved to be difficult for the speakers to render in the third person. Three of the speakers (304, 321 and 386) used a first person pronoun (*meg* 'me') in directly represented speech rather than a third person anaphor. Speakers 103 and 385 used the third person reflexive *seg*. These were also the only speakers to use a reflexive in their description of frame 1. The last speaker, 701, used an LDR, then corrected himself to use a pronoun instead. We will examine the reasons for this in a moment.

(12.4) Speech elicited by frame 4

SPEAKER 103

12	'n Tor spurd om --	Tor asks whether --
13	om o Anne .. ville …	if Anne .. wanted …
14	om om … om	if if … if
15	Anne og Mark ville bli --	Anne and Mark wanted to --
16	bli med sei	be with R
17	og Sylvia	and Sylvia
18	ut i kveld.	out tonight.

SPEAKER 304

13	Og så sier Tor til Anne.	And so Tor says to Anne.
14	Vil du og Mark bli-	Do you and Mark want to-
15	Mark bli med meg og Sylvia ut i kveld?	Mark [want] to come out with me and Sylvia tonight?

SPEAKER 321

16	Kunne du tenke at Mark og,	Do you think Mark and,
17	kunne du tenk deg at	do you think that
18	at du og Mark ville bli med	that you and Mark would want to come with
19	meg og Sylvia	me and Sylvia
20	ut i kveld?	out tonight?

SPEAKER 385

13	Og ‘n Tor han spår om --	And Tor, he asks about --
14	spår ho Anne om .. ho og Mark .. vil= bli me se og= hono Sylvia	asks Anne if .. her and Mark .. want= to come with R a=nd Sylvia
15	ut i kveld.	out tonight

SPEAKER 386

27	Dær sjer Tor til Anne at --	Then Tor says to Anne that --
28	…	…
29	mm	mm
30	vil du å Mark bli med --	do you and Mark want to come --
31	Sss…	Sss…
[9 lines omitted]		
41	vil du å Mark bli me mæ å Sylvia ut i kveld?	do you and Mark want to come out with me and Sylvia tonight?

SPEAKER 701

22	Og det neste det --	And the next thing it --
23	det e at’n Tor,	it is that Tor,
24	han spør o Anne,	he asks Anne,
25	om ho vil at ..	if she wants that ..
26	ho og Mark skal bli med se,	her and Mark should be with R,
27	nei	no
28	bli med honom,	be with him,
29	og Sylvia,	and Sylvia,
30	ut i kveld (/kwel/).	out tonight.

Speakers 103 and 385 used a reflexive to describe frame 4, while speaker 701 used a reflexive initially, which he then corrected to a pronoun. The reason for this seems to lie in the domain as indicated by the intonation breaks. Speakers 103 and 385 do not have a major intonation break between the anaphor and its antecedent. Furthermore, the phrasing by each of these speakers, ignoring false starts and other repetition,

creates a domain where *Tor* wishes to find out some information which concerns himself, namely the proposition that *Anne* and *Mark* may come out with him in the evening. On the other hand, when we consider the phrasing used by speaker 701, we see that Anne is actually the RP for the domain containing the anaphor. This is because of the intonation break at the end of line 24, followed by line 25 which realigns the speaker's empathy with *Anne* and her desires, rather than *Tor* and his question. It is possible that the reflexive in this case was ambiguous between referring to *Anne* or *Tor*, while the pronoun, being gender specific, removes this ambiguity. Thus, we can see that speaker 701 uses a different construction to speakers 103 and 385, with the result that the anaphor is within (or potentially within) the domain of an RP other than the intended antecedent.

12.1.4 Perspective

In the chunks of elicited speech in (12.1) to (12.4), two things stand out. Firstly, the reflexive *seg* was only used when the informant was reporting on a first person pronoun in the third person (eg frame 3). Third person pronouns in the elicitation story did not become third person reflexives in speech. This is what linguists such as Sigurðsson (1986) and Kuno (1987) have claimed about LDRs – that they are transformations from a first person pronoun in direct speech, to a third person reflexive in indirect speech.

Secondly, the character depicted in a particular frame of the elicitation exercise was chosen as the RP in the speech about that frame, ie each frame was described from the perspective of the character pictured, not from some other character's perspective. Thus, in frame 3, Anne is pictured, and six speakers in the study used a reflexive, while in frame 2, Sylvia is pictured, while the anaphor refers to Tor. In this case, all speakers used a pronoun to refer to *Tor*. This difference in POV is what Hellan (1986, 1988, 1991) refers to as perspective-command, where an antecedent must be the perspective-holder of the domain containing the reflexive. It is important to realise, however, that perspective is only part of the LDR-licensing mechanism. For this reason, perspective-command is incorporated into the ERPP, rather than superseding it. Clearly, perspective can play an important role in the distribution of LDRs, and the perspective of a particular domain lies with the RP for that domain.

12.1.5 Intonation units

Domains defined by the syntax, such as a finitely tensed clause, often correlate with the domain in which a reflexive must be bound. Another linguistic device which is used to delimit a conceptual domain is intonation.

The data collected in the elicitation exercise shows a very interesting feature of LDR that is not necessarily clear in written texts, namely that when an LDR is used, it normally falls within the same intonation unit as its antecedent. Although this was mentioned several times in the section 12.1, above, we will consider this proposition in more detail now.

We will start by examining the elicited speech from speaker 103, given in (12.5).

SPEAKER 103

(12.5)

2	Ja,	Yes
3	han= --	he= --
4	Tor lurer på om a Sylvia likt sæi.	Tor wonders whether Sylvia liked R.
5	Eller,	Or,
6	at o likt'n.	that she liked him.
7	Og hen Sylvia lurer på om 'n Tor veit=,	And Sylvia wonders whether Tor knows=,
8	at o lik'en.	that she likes him.
9	Og Anne,	And Anne,
10	hu ynskjer at 'n Tor .. likt'a.	she wishes that Tor .. liked her.
11	Eller at 'n Tor likt sæi.	Or that Tor liked R.
12	'n Tor spurd om --	Tor asks whether --
13	om o Anne .. ville …	if Anne .. wanted …
14	om om … om	if if … if
15	Anne og Mark ville bli --	Anne and Mark wanted to --
16	bli med sei	be with R
17	og Sylvia	and Sylvia
18	ut i kveld.	out tonight.

Lines 3-4 were elicited by the first frame, which shows Tor thinking, "Sylvia likes me!" Speaker 103 used a reflexive in this case to indicate that 'Tor was wondering whether Sylvia liked Tor.' As the transcription shows, speaker 103 used intonation in a way that included the reflexive anaphor and its antecedent *Tor* in the same domain. Tor is the RP for this domain, as he is the most prominent entity in it. Tor is

introduced in line 3, and is the first entity mentioned in line 4, where he is the subject of the main verb *lurer på om* 'wonder whether that'. There is only one intonation contour for the whole sentence containing the proposition that Tor is wondering whether Sylvia likes Tor. This shows that the embedded clause which contains the proposition that 'Sylvia likes someone' is within the domain of the RP entity controlling the verb that the clause is a complement of. Koster's (1987) dynasty model of LDR attempted to capture this type of predication relation by appealing to syntactic factors only. Clearly, prosodic factors are also important to creating and identifying linked propositions.

Prosodic features, in particular intonation, play a vital role in determining the domain of a particular RP. The role of RP in each of the domains in the text in (12.5) above is given to the first entity mentioned in a intonation group. So in line 4, Tor is the RP for the whole line, and therefore acts as the antecedent for the reflexive. This contrasts with the phrasing by eg speaker 304, shown in (12.6).

SPEAKER 304

(12.6)

3	Ømm,	Umm,
4	Ja.	Yes.
5	Tor tenkjer at,	Tor is thinking that,
6	Sylvia likjer han.	Sylvia likes him.

Speaker 304 separates the two syntactic clauses with an intonation break, and uses a pronoun to refer back to the higher subject. The intonation break, coupled with the syntactic finite clause boundary, is a strong indicator of a change of RP, which means a pronoun, and not a reflexive, must be used to show coreference with *Tor*. This speaker uses an LDR two frames later in line 12, where the reflexive and the antecedent are within the same intonation contour, shown in (12.7).

SPEAKER 304

(12.7)

12	Anne .. skulle ønske at Tor likte sæi.	Anne .. wishes that Tor liked R.

In each case (lines 4 and 7-8 for speaker 103 and lines 5-6 and 12 for speaker 304), when the anaphor was in the same intonation contour as the antecedent, a reflexive was used, whereas when the anaphor and antecedent were separated by an intonation

boundary, a pronoun was used. This pattern is also found in the speech of other speakers, such as speaker 321.

SPEAKER 321

(12.8)

12	Anne --	Anne --
13	Anne .. har også ønske om at	Anne .. has also wishes about that
14	Tor	Tor
15	Tor er glad i sei.	Tor loves R.

The lack of punctuation at the ends of lines 11 and 12 show that there are only minor intonation breaks at these points. *Anne* is the reference point over the whole domain in lines 12-15, and a reflexive is used to refer to her. This contrasts with another example by the same speaker (given in (12.9)), where each syntactic clause has its own intonation contour, and the pronoun is used to refer to an antecedent outside of the intonation unit, but within the same sentence.

SPEAKER 321

(12.9)

4	Jeg tror at,	I think that,
5	Tor er klar over at,	Tor realises that,
6	Sylvia liker han.	Sylvia likes him.

Other examples from the corpus could also be given that illustrate the apparent condition that it is a prosodic domain of a single intonation unit, rather than for example a syntactic domain, that constrains the distribution of reflexives. However, I believe that it would be wrong to attempt an analysis of reflexives with a purely prosodic approach. The examples given in this section so far should be taken as support for the idea that prosodic information is part of the information parcel that is used to identify the domains of RPs, not that prosodic information is the only means of defining an RP's domain.

This prosodic domain created through the use of a single intonation contour helps to establish the domain of the RP, and reinforces the linkage, or conceptual connectivity, between the two elements. Recall that van Hoek (1997) speaks of prominence and conceptual connectivity as the key factors of anaphora resolution. Aspects of these factors of prominence and connectivity are also mentioned in the syntactic LDR literature, such as stress and predication. Stress is sometimes mentioned as a factor

which influences the choice of antecedent, while predication links, such as Hellan's predication-command or Koster's dynasty model, are also postulated as licensers of LDR. The data presented in this section shows that intonation units are also relevant to creating prominence and connectivity between two entities.

Intonation is a useful instrument with which to show the elements of an utterance that 'belong' together, and those which are separate. Therefore, it seems logical that when the anaphor and antecedent are within a single intonation unit, a reflexive is used, while when the anaphor and antecedent are in separate intonation units, a pronoun is used.

The main claim of this thesis is that reflexives refer to the reference point in their domain, the reference point being the most prominent entity in that domain. By containing the reflexive and RP within the one intonation unit, this helps to establish the domain of the RP, and reinforces the conceptual connectivity between the two elements.

12.1.6 Summary

Perspective is important to the reflexive-antecedent relationship. Perspective lies with the reference point of a domain. Intonation is used to identify a reference point's domain. When the anaphor and its antecedent are within the same intonation unit, a reflexive is often used. When the anaphor and its antecedent are in separate intonation units, a pronoun is often used. These tendencies can be attributed to the role intonation plays in determining conceptual links between two entities. Entities which are within a single intonation unit are conceptualised as being more closely connected than entities in separate intonation units. The role of intonation units is therefore similar to the role of syntactic units in that both influence the prominence of the antecedent, and the conceptual connectivity between the anaphor and the antecedent. Prominence and conceptual connectivity are the two key factors involved in anaphoric coreference resolution.

12.2 Reflexivisation over a finitely-tensed clause boundary

It was noted above in the description of the elicitation exercise that the reflexive was often in a finitely tensed subordinate clause and the antecedent was in the matrix

clause. Speaker 321 was one of the speakers who used this type of reflexivisation to describe frame 3.

SPEAKER 321

(12.10)

12	Anne --	Anne --
13	Anne .. har også ønske om at	Anne .. has also wishes about that
14	Tor	Tor
15	Tor er glad i sei.	Tor loves R.

In (12.10), the reference point for the subordinate clause is clearly established as the subject of the matrix clause. The predicate *har ønske om at …* 'have dreams about that' profiles a process where the desires of the complement of the process (ie the matrix subject) are portrayed in the complement to the head predicate. It is in *Anne*'s construal of an ideal world that *Tor* loves her. Earlier, it was argued that the single intonation unit allowed the reflexive to refer to *Anne*. This is a potential problem for the analysis proposed here. However, looking closely, we see that there is no significant intonation boundary at the ends of lines 13 or 14. We can therefore refine the generalisation that there cannot be any intonation break between a reflexive and its antecedent to state that very minor breaks are permitted to intervene.

Several informants also sent me examples of LDR from their local region. In Grue, in southern Hedmark in the Ø region, it is reported that LDR is used by the older generation, although not by most speakers under the age of 40. Two examples are given here.

GRUE, SOUTHERN HEDMARK, Ø

(12.11) *Han$_i$ trudde at ho$_j$ var sint på seg$_i$.*
he thought that she was angry on R
'He$_i$ thought that she$_j$ was angry at him$_i$.'

(12.12) *Ho$_i$ hadde ingen$_j$ som$_j$ var glad i seg$_i$.*
she had no-one who was happy in R
'She$_i$ had no-one$_j$ who$_j$ liked her$_i$.'

In (12.11), *seg* is contained in a finitely tensed embedded clause, headed by a verb of thought. (12.12) uses *seg* contained in a finitely tensed relative clause. It is interesting to note that both of these examples have predicates of emotion as the heads of the

embedded clauses. Combined with the matrix predicates, there is a strong sense of empathy with the higher subject for their role in the processes described by these predicates. This identifies the higher subject as the RP for the embedded clause, allowing the reflexive to have an LDR interpretation. Since the younger speakers tend to reject such a construction, it is clear that the finite boundary is becoming an increasingly strong indicator of a reset of the RP's domain, disallowing reflexivisation over a finite boundary.

Other examples of LDR permitted over a finite boundary were supplied by speaker 411. According to his notes on his local Valdres dialect, the following sentences are acceptable.

VALDRESMÅL

(12.13) *Ho$_i$ høyrde at mø$_j$ tala um sé$_i$.*
she heard that we spoke about R
'She$_i$ heard that we$_j$ were talking about her$_i$.'

(12.14) *Ho$_i$ stirde a såg um det var veg åt sé$_i$.*
she stared and saw if it was way to R
'She$_i$ looked about to see if there was a path for her$_i$.'

(12.15) *Dei$_i$ skjøna ikkje ko$_j$ so$_j$ ha være sé$_i$.*
they understand not what which has been R
'They$_i$ don't understand what$_j$ has become of them$_i$.'

(12.13), (12.14) and (12.15) all use *seg* with a non-local antecedent. In each case, there is no competing potential antecedent. In addition, the processes described in (12.14) and (12.15) strongly align empathy with the higher subjects.

(12.16) is an example of *sin* with a non-local antecedent in the Valdres dialect.

VALDRESMÅL

(12.16) *Dei$_i$ e redde ner far sin$_i$ er burte.*
they are afraid when father R is away
'They$_i$ are afraid when their$_i$ father is away.'

Again, the higher subject is the complement of a verb of psychological state. Furthermore, this emotional state concerns their father. These two facts make *dei*

'they' highly prominent conceptually, enabling this entity to act as the RP for the whole sentence, and thus allowing the use of the reflexive in the embedded clause. Note that the use of the reflexive highlights the bond between them and their father, too, indicated by the possessive meaning of the reflexive.

12.3 LDR out of an intrinsically reflexive predicate

A comment by speaker 213 is relevant here, since he discusses the possibility of using *seg* in the elicitation exercise. The main thrust of his argument is that *ho likte han* and *ho likte seg* mean two different things. The first expression uses a straight-forward transitive verb meaning 'she liked him', while the second expression contains an intrinsically reflexive predicate, and means something like 'she had a good time'. In speaker 213's opinion, this meant that the elicitation exercise would not elicit LDR, since one of the frames set up to elicit LDR contained an intrinsically reflexive predicate, in which speakers would not be able to use LDR. However, this turned out not to be the case. Several speakers used *seg* as the complement of what is normally considered to be an intrinsically reflexive predicate to refer back to a non-local antecedent. These speakers were the six speakers whose data was discussed above, namely 103, 304, 385, 386, 397 and 701.

Each of these speakers used the construction *lika seg*, which is normally considered to be an intrinsically reflexive predicate meaning 'to enjoy oneself'. However, for these speakers, *seg* actually refers to a non-local antecedent, and is not part of the intrinsically reflexive predicate. It is also interesting that several of these speakers said that a pronoun was also possible. Some examples are repeated in (12.17), from the speech elicited by frame 3.

(12.17) Speech elicited by frame 3

SPEAKER 103

19	Og Anne,	And Anne,
20	hu ynskjer at 'n Tor .. likt'a.	she wishes that Tor .. liked her.
21	Eller at 'n Tor likt sæi.	Or that Tor liked R.

SPEAKER 304

8	Anne .. skulle ønske at Tor likte sæi.	Anne .. wishes that Tor liked R.

SPEAKER 321

21 Anne --	Anne --
22 Anne .. har også ønske om at	Anne .. has also wishes about that
23 Tor	Tor
24 Tor er glad i sei.	Tor loves R.

SPEAKER 385

16 Å Anne tenkje at --	And Anne is thinking that --
17 skull ønskjt at --	wished that --
18 at yn skull ønskjt at 'n Tor lika se.	that she wished that Tor like R.
19 Eller lika ho.	Or liked her.

SPEAKER 386

18 Bilde tre.	Picture three.
19 Der tenke Anne, …	There Anne is thinking, …
20 at hu skulle ønsk at Tor likt sæ.	that she wished that Tor liked R.

SPEAKER 701

22 ho ønsk- --	she wish- --
23 skulle ønskjt	wished
24 at'n Tor likte se.	that Tor liked R.

Unfortunately, no speaker said what the differences, if any, were between the construction with the pronoun and that with the reflexive, so it is just noted here that for some speakers, the notion of an intrinsically reflexive predicate does not affect whether or not the reflexive may have a non-local antecedent, ie the intrinsic reflexivity of a reflexive construction is defeasible for at least some speakers.

Another example of this comes from the natural speech of speaker 103.

(12.18) *Han$_i$ bruker det$_j$ som$_j$ passer sæ$_i$.*
he uses it which suits R
'He$_i$ uses that$_j$ which$_j$ suits him$_i$.'

Sentence (12.18) contains a normally intrinsically reflexive predicate *passa seg* 'care for/ suit oneself/ fit'. With this meaning, the sentence in (12.18) would be understood as 'He uses whatever looks after itself/ fits itself', which doesn't make much sense. The speaker used *seg* in this case to emphasise the reflexive nature of the feeling that one uses what suits one, one does what pleases one most. The construction *passa seg*

is not intrinsically reflexive in this case. *Han* ‘he’ as the reference point in this sentence is imbued with a sense of being the deictic centre of the utterance, which is due to the use of the reflexive.

12.4 Summary

Prosodic information is an important factor in the felicitous use of LDR in Norwegian. In the data gathered for this study, it was found that a reflexive must be within the same intonation contour as its antecedent, and that the antecedent must be a reference point. Minor intonation breaks, represented in discourse transcription by a new line (but no punctuation), could occur between the reflexive and its antecedent. A significant intonation break (such as those represented by a comma or full stop) always occurred between a pronoun and its RP antecedent. The finite tense boundary only obstructed the use of an LDR when it was accompanied by a significant intonation break. It was also found that an LDR may be bound outside of what is normally considered to be an intrinsically reflexive predicate, eg *lika seg* ‘enjoy oneself’.

Chapter 13

13 Summary of the Extended Reference Point Proposal

In this chapter, I summarise the main factors involved in the Extended Reference Point Proposal (ERPP), noting some of the advantages of using such an approach over previous approaches.

There are three main aspects to the ERPP which are listed here.

Firstly, the ERPP is based upon the fact that reflexives have different meanings to pronouns (discussed in Chapter 9, section 9.3), and that light reflexives (eg *seg*) have different meanings to heavy reflexives (eg *seg sjølv*). While these assumptions are implicit in the work of most modern linguists (ie that languages do not possess exact synonyms), this is often ignored in the syntactic literature, which does not allow for the fact that the distribution of lexical items may be governed by their meanings.

The second important aspect of the ERPP is the notion of a reference point. Reflexives refer back to the reference point of their domain, whereas pronouns do not refer to the reference point of their domain. A reference point is the most prominent entity in its domain, where prominence is a product or result of cognitive processing, and 'is not determined mechanistically by adding up factors' (van Hoek 1997:60). Despite this, there are several factors which lead to a particular entity being conceptualised as the most prominent, and hence, the reference point, for a domain. The grammatical role and the logical semantic role of the antecedent are both important, as are context, intonation, animacy and the overall combined meaning of the lexical items in a chunk of discourse. The presence of competing entities for the role of RP, and their relative prominence are also important in assigning the role of RP to an entity. Heavy reflexives, like *seg sjølv*, require a stronger RP than light reflexives, like *seg*. A strong RP is one that has more of the features associated with RPs, such as: high prominence; agentlike qualities such as animacy and sentience; has the grammatical role of subject; is within a finite domain; and is a perpective-carrier.

Conceptual connectivity is the third important aspect in the ERPP. This has been noted by syntacticians such as Hellan (1986, 1988, 1991), Koster (1987) and Reuland and Sigurjónsdóttir (1997), although only predication and perspective were considered. Here I have shown that intonation units also play a major role in the connectedness of an anaphor and its antecedent. Syntactic features, in particular the presence of tense, are the other major factor in conceptual connectivity. Finite clause boundaries and intonation breaks are the two main factors which signal a change of RP, and hence preclude the use of a reflexive. Other factors may also be involved – this would be a profitable direction for future research to take.

Thus, the three main devices which constitute the crux of resolving reflexive-antecedent coreference in Norwegian are:

1) the meanings of the lexical items involved and their combined pragmatic meanings;

2) the reference points in each domain, ie establishing or identifying the most prominent entity in a domain, from whose perspective a domain is viewed; and

3) conceptual connectivity between the reflexive and its antecedent, which is influenced by factors such as the presence of a finite tense boundary and the use of complete intonation contours.

Previous accounts have often only addressed point 3 (cf Hellan's predication-command), but clearly points 1 and 2 are also crucial. Point 2 is partially covered by accounts of reflexivisation which appeal to the notion of perspective, however, these accounts tend to focus on the fact that perspective must be involved, without identifying the perspective-holder as the most prominent entity in the domain. How the role of perspective-holder is assigned in these accounts without this stipulation is unclear. To the extent that point 3 is addressed in other accounts, the focus has been on predication relationships. Under the ERPP, these relationships are important, but they are not the only factor involved in creating conceptual connectivity. Intonational contours are at least, if not more, important in defining a conceptual domain than syntactic relations.

The division of labour in the study of reflexivisation has tended to atomise different environments in which reflexives may occur. This has resulted in prototypical, clause-

bound anaphora being studied by syntacticians, along with LDR over a non-finite boundary but not a finite boundary. Other 'types' of reflexivisation, such as intrinsic reflexivisation, are studied by semanticists and morphologists. LDRs over subjunctive (but not indicative) clause boundaries, backwards anaphora and discourse reflexives whose antecedents are outside of their sentence, are delegated to discourse analysts, along with anything that does not fall into one of the above categories, such as reflexives in locative PPs. However, after studying LDR in Norwegian in depth, and comparing LDR with other 'types' of reflexivisation, it has become clear that a unified account is not only possible, but provides the most accurate analysis of empirical data.

The Extended Reference Point Proposal, based on van Hoek (1997) and incorporating ideas from Reinhart and Reuland (1993), Levinson (2000) and Postma (1997), accounts for all 'types' of reflexivisation:

- prototypically (clause- and subject-) bound reflexives
- non-prototypically bound reflexives, such as:
- object-bound, local reflexives
- reflexives in locative PPs
- reflexives in NPs
- LDRs
- discourse reflexives

The ERPP is an improvement on previous models of anaphora, because it combines several important insights, such as the role of perspective (Hellan 1986, 1988, 1991) and prominence (Kuno 1987, Pollard and Sag 1992, 1994) in the licensing of reflexives, as well as facts which are not considered in syntactic approaches, such as the meanings of reflexives contributing to their distribution and the role of intonation in defining the domain in which a reflexive finds its antecedent. By using concepts and terminology from non-syntactic theories, namely Conceptual Semantics (van Hoek 1997) and Accessibility Theory (Ariel 1990, 1991, Chafe 1996), factors from several linguistic fields, eg syntax, semantics, pragmatics, prosody and discourse, involved in all types of reflexivisation can be appealed to.

As with any model of language, the ERPP needs to address the two issues of parsing and generating grammatical utterances. As a hearer, we deduce prominence and

conceptual connectivity through the signals given by semantic, syntactic, prosodic, discourse and other pragmatic features of the discourse text. As a speaker, we create prominence and conceptual connectivity through specific combinations of words, using their semantic and syntactic characteristics to achieve the effect we want. As a speaker, we also influence the prominence and conceptual connectivity of the entities in the discourse through the use of prosodic and discourse features such as intonation and context.

These features of the ERPP make it inherently awkward to implement within a framework such as LFG, GB or HPSG, since they each have an underlying assumption that domains are consistently definable in terms of particular lexical, morphological or syntactic features only. A method of representing and uniting discourse information, in particular pragmatic and intonational information, with the syntactic and lexical representations in any of these theories is required before the ERPP can be fully employed in these frameworks.

Although intuitively plausible and holding the promise of a useful account, the main limitation of the ERPP is that it is not yet fully functional. A goal for future research will be to attempt to exhaustively define the relevant linguistic features involved in anaphora resolution, in order to create a truly complete ERPP.

Summary of thesis

I have shown throughout this thesis that the distribution of reflexives in Norwegian is not purely syntactically controlled. Factors such as the semantics of reflexives versus pronouns, the combined meanings of lexical items in a construction, perspective, intonation and others, all contribute to the felicitous or infelicitous use of reflexives.

In Part II we examined how LDRs are portrayed in the literature. There are many conflicting arguments about how LDRs are licensed, including the mechanisms that allow the binding to occur, such as whether LDRs must or must not be monomorphemic, and how to classify an anaphor as monomorphemic or phrasal. However, several main themes were identified. These were the claims that LDRs are monomorphemic, they are subject-oriented, that finite tense is a barrier to movement, that there is more than one binding domain for anaphoric elements, that factivity and perspective license LDR and that LDRs are related to logophoricity. As regards LDR use in Norway, it had been claimed that there is dialectal variation in the acceptability of LDR throughout Norway, and that *seg* and *sin* have the same distribution.

Basing the analysis of these hypotheses on the data collected from 180 Norwegian speakers, it was found in Part IV that some of these hypotheses were supported. A major finding, though, was that these hypotheses often represented tendencies, rather than absolutes. Thus, although LDRs are often monomorphemic, they need not be. While finite tense is often a barrier to LDR use, this is not always the case. Reflexives are often subject-oriented, although this seems to be related to semantic factors and need not entail a syntactic account of reflexivisation. Factivity and perspective were found to be related to the felicitous use of LDRs, although not in isolation of other factors. For those languages which have the subjunctive mood, this would also be a contributing factor. In the same way, logophoricity was found to be related to LDR, although the hierarchy of logocentric predicates which can be used to predict whether predicates of certain classes will licence logophoricity in certain West African languages, was shown to be uninformative when applied to LDR in Norwegian.

In Chapter 6, I also showed that the level of acceptability of LDR in Norwegian varies across dialects, from regions broadly corresponding to Trøndersk and Midlandsk

being the most accepting of LDR, through to Sørlandsk, which accepts very little LDR. Age and level of education were also found to be good indicators of the level of LDR an individual used, with those aged over 41 who had never finished high-school having the highest LDR scores. Speakers' attitudes to nynorsk and bokmål were found to be less indicative of their LDR use than these other factors. No single factor was found to be overwhelmingly dominant in the licensing of LDR in one region but not in another, although the role of finite tense comes close.

Part V develops a line of argumentation in favour of a multi-faceted, unified account of reflexives, called the Extended Reference Point Proposal (ERPP). The main factors involved in the ERPP were recapitulated in Chapter 13. The ERPP is based on facts uncovered throughout this thesis. We saw in Chapter 9 that reflexives have a different meaning to pronouns, and in languages with more than one reflexive, each means something different. Reflexives entail some sort of possession, ownership, contact or use of the whole body, and are concretely associated with the referent as an entire entity. The empathy effects associated with a reflexive align empathy with the antecedent. A pronoun can be used to express coindexation when a reflexive is not acceptable, and it need not be entirely coreferential. The empathy effects associated with the use of a pronoun are aligned with an outsider's point-of-view to the antecedent. There are also differences between non-monomorphemic reflexives like *seg sjølv*, and monomorphemic reflexives like *seg*, where the phrasal reflexive (ie *seg sjølv*) refers to the whole physical and spiritual body of a person and all their relevant parts, and the monomorphemic reflexive (ie *seg*) refers to some part of the body or mind, entailing the rest of the person by pragmatic implicature. Similar differences obtain in Dutch (*zich* versus *zichzelf*) and Swedish (*sig* versus *sig själv*).

We also saw in Chapter 10 that the tendency for reflexives to be subject-oriented is based in semantics, just as the tendency for 'intervening antecedents' and finite tense boundaries to prevent binding is also semantically controlled. The success of c-command in accounting for the distribution of reflexives was shown to be due to the fact that this structural-based rule approximates the prominence relationship of the most highly entrenched schema of reflexivisation.

A major finding of this thesis, addressed in Parts IV and V, is that the reflexive elements *seg* and *sin* have different distributions, which is contrary to what has been claimed in the literature. It was found that *seg* is preferentially long-distance bound,

while *sin* is preferentially locally-bound, including over a non-finite boundary. *Seg sjølv* seems to have a similar distribution to *sin*, although it is preferentially even more locally-bound. (This issue was not directly addressed in the questionnaire, and would be a profitable direction for future research.) The distribution of these reflexive elements was found to by explained by their meanings, where the preferential binding domain of reflexives is affected by the semantics of the lexical items involved in the sentence. This includes the choice of antecedent within a single clause, or the use of *seg sjølv* as an LDR to contribute the meaning of the whole self, rather than just part of the self.

Another important finding of this study is that of the role of intonation in defining the domain in which a reflexive must be bound. Reflexives must be within the same intonational contour as their antecedent, while pronouns cannot be. This is the only rule which was found to be without exception in this study. The tools of discourse analysis in LDR and other reflexivisation studies will provide a rich source of data in future research.

To integrate all the findings from the research carried out for this thesis, I expanded upon van Hoek's (1997) Reference Point model, suggesting the Extended Reference Point Proposal. This proposal has its roots in Conceptual Semantics and Cognitive Grammar, going back to Langacker (1972, 1973), although the ideas of van Hoek (1997), Postma (1997) and Levinson (2000) are more directly influential. The ERPP for reflexivisation incorporates information from many key linguistic fields, including syntax, semantics, prosody, discourse and pragmatics. Because of this, it is able to better account for the distribution of all types of reflexives (not just LDRs) than other approaches which do not take as many factors into consideration. Since much space in this thesis was devoted to the goal of showing that syntactic accounts of LDRs are not sufficient, there has not been room to develop the ERPP further. Clearer delimitation of the factors involved in anaphora resolution in Norwegian and other languages is needed, as well as a method of implementing the ERPP.

This thesis is not unique in its approach of re-examining anaphora in a non-syntactic way. Many researchers (eg Popowich 1988, Huang 1994, Verspoor 1997, Nariyama 2000, Levinson 2000) are realising that it is far more than just the syntax which governs the distribution of anaphora. However, this thesis is unique in the way that it approached what has been considered a syntactic problem, namely by obtaining a vast

number of grammaticality judgements and using them as the basis for describing anaphora constraints, rather than relying on a single speaker's intuitions. The variation in responses to every sentence in the questionnaire suggests that the conditions governing anaphora in Norwegian are not purely syntactic, since syntactic rules (such as whether the definite article precedes or follows the noun it modifies, or the placement of a verb in a clause) are generally far more uniform than the responses I received about anaphora resolution.

The methodology used to obtain the data for this study was carefully checked at every stage, although, as with any pioneering methodology, there will be ways to improve this in the future. Following on from the work here, the next step is to use more systematic experimentation of variables such as the use of context and intonation in order to make more explicit the roles of reference point and conceptual connectivity in anaphora resolution.

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APPENDICES

Appendix 1

1 Obtaining information about the speakers

1.1 Questionnaire – English

University protocol: Everything you write with respect to this study will be used just for this study. You do not have to answer any question, but anything you write will help me to classify your dialect. You can stop participating in this study at any time, and you can ask me to withdraw all your answers that you have given me. Giving this information back to me means that you agree with these conditions.

Questionnaire: The first part of this questionnaire is designed to find out information about your dialect. It will take about 20 minutes to fill out. The second part consists of sentences and questions. Answer the questions by writing on the line after the question. Thanks for your help!

About you

Name (not compulsory): _____

Age: ☐ under 15 ☐ 15-20 ☐ 21-25 ☐ 26-40 ☐ 41-60 ☐ 61+

Today's date: ____ / _____ / 199___
day month year

Dialect

1) Do you have a name for your dialect? _____

2) Do you speak a dialect of nynorsk or bokmål?
☐ nynorsk ☐ bokmål

3) How many people do you think speak your dialect? _____

4) Do you normally write in nynorsk or bokmål?
☐ nynorsk ☐ bokmål

5) Which is easier for you to read?
☐ nynorsk ☐ bokmål ☐ both are okay

Residence

6) Where do you live in Norway?

city/ town: _____
kommune (shire?): _____
fylke (state?): _____

7) How long have you lived here? _____ years

8) Have you lived anywhere else (not just in Norway)? If yes, where? How long did you spend in each place and how old were you then? (city, kommune, fylke, etc)

_____
_____

9) How far away is each of the above-named places from where you live now? (If there are several, write a number or the place beside the answer, instead of putting a cross.)

☐ 10 km ☐ 30 - 50 km ☐ 110 - 200 km
☐ 20 km ☐ 60 - 100 km ☐ over 210 km

Education

10) Where did you go to school?

	place	kommune	fylke
1.	_____	_____	_____
2.	_____	_____	_____

11) What level did you reach?

☐ never began high-school ☐ began high-school ☐ finished high school
☐ started university ☐ finished university

12) Did you go to a folk-high school?

☐ yes ☐ no

If yes, where? (place, kommune, fylke): _____

About your parents

13) Is there a name for the dialect of – your mother? _____
– your father? _____

14) Were your parents born in the same place where they live now?

☐ yes ☐ no

If yes, have they always lived there?

☐ yes ☐ no

If you answered no to either of the questions in 14), continue with 15). If you answered yes to both, you may start the questionnaire.

15) Where do your parents live in Norway?

Mother	Father
town/ city: _____	town/ city: _____
kommune: _____	kommune: _____
fylke: _____	fylke: _____

16) How long have they lived here?

Mother: _____ years Father: _____ years

17) Have they lived anywhere else (not just in Norway)? If yes, where? How long did they spend in each place, and how old were they then? (town, kommune, fylke, etc)

Mother:

_____

_____

Father:

_____

_____

18) How far away is each of the above-named places from where they live now? (If there are several, put a number or write the place beside the answer.)

Mother:		Father:	
☐ 10 km	☐ 60 - 100 km	☐ 10 km	☐ 60 - 100 km
☐ 20 km	☐ 110 - 200 km	☐ 20 km	☐ 110 - 200 km
☐ 30 - 50 km	☐ over 210 km	☐ 30 - 50 km	☐ over 210 km

Thanks a lot!

1.2 Spørjeskjema – nynorsk

Universitet protokoll: Alt som du skriver mht dette prosjektet blir brukt berre til dette prosjektet. Du trenger ikkje svara, men det du skriver vil hjelpa meg til å klassifisera dialekten din. Du kan slutta å delta i dette prosjektet kor tid som helst, og du kan spørje meg om å fjerna alle ubehandelte data du har gitt meg. At du sender denna meldinga tilbake til meg betyr at du er enig i desse vilkåra.

Spørreskjema: Fyste delen av spørreskjemaet går ut på å finna ut informasjonar om dialekten din. Det tar ca. 20 minutt å fylla ut. Andre delen omfatter setningar og spørsmål. Det tar ca. 40 minutt å fylla ut. Du trenger ikkje gjera alt dette på ein gong. Du kan svara på spørsmål enten ved å setje eit kryss eller å skriva etter spørsmål. Takk for hjelpa!

Om deg

Namn (ikkje obligatorisk): _____

Alder: ☐under 15 ☐15-20 ☐ 21-25 ☐ 26-30 ☐ 31-40 ☐ 41-60 ☐ 61+

Dato idag: ___ /_____ / 199__
dag månad år

Dialekt

1) Har du eit navn for dialekten din?_____

2) Er dialekten din nærmare til bokmål eller nynorsk?
☐ nynorsk ☐ bokmål

3) Kor monge folk trur du snakker dialekten din? _____

4) Pleier du å skriva på nynorsk eller bokmål?
☐ nynorsk ☐ bokmål

5) Kallas er lettast for deg å lesa?
☐ nynorsk ☐ bokmål ☐ like greie

Bustad

6) Kor bur du i Noreg?
by/ landsby: _____
kommune: _____
fylke: _____

7) Kor lenge har du budd her? ____ år

8) Har du budd i ein annen plass/ by (ikkje bare i Noreg)? Om ja, kor? Kor lenge tilbrakte du i kvar plass og kor gammel var du då? (by, kommune, fylke - siste fyst)

_____
_____

9) Kor longt vekke er kvart overnevnte plass frå kor du bur no? (Viss det er fleira, sett eit nummer eller skriv plassen ved sida av svaret, istedenfor å fortykka det.)

☐ 1 mil ☐ 3 - 5 mil ☐ 11 - 20 mil
☐ 2 mil ☐ 6 - 10 mil ☐ over 21 mil

Utdanning

10) Kor gjekk du på skulen? (siste fyst)

	plass	kommune	fylke
1.	_____	_____	_____
2.	_____	_____	_____

11) Kallas nivå nådde du?

☐ aldri begynnt på vidaregåande skule
☐ begynnt på vidaregåande skule
☐ ferdig med vidaregåande skule
☐ begynnt på universitet/ høgskule
☐ ferdig med universitet/ høgskule

12) Gjekk du på ein folkehøgskule?

☐ ja ☐ nei

Om ja, kor? (plass, kommune, fylke): _____

Om foreldrene dine

13) Finnes/ fantes det eit navn for dialekten til – mora di? _____
– faren din? _____

14) Er foreldrene dine fødte i same plassen som dei bur/ budde sist?

☐ ja ☐ nei

Om ja, har dei alltid budd her/ budde dei alltid her?

☐ ja ☐ nei

Viss du svarte nei til eit eller annet av desse spørsmåla i 14), fortsett med 15). Viss du svarte ja til begge kan du begynna på spørreskjemaet.

15)Kor bur/ budde foreldrene dine i Noreg sist?

Mor	Far
by/ landsby: _____	by/ landsby: _____
kommune: _____	kommune: _____
fylke: _____	fylke: _____

16) Kor lenge har dei budd/ budde dei her?

Mor: ____ år Far: ____ år

17) Har dei budd/ budde dei i ein annen plass/ by (ikkje bare i Noreg)? Om ja, kor? Kor lenge tilbringte dei i kvar plass og kor gammel var dei då? (by, kommune, fylke)

Mor:

_____

_____

Far:

_____

_____

18) Kor longt vekke er kvart overnevnte plass frå kor dei bur/ budde sist? (Viss det er fleira, skriv nummeret ved sida av svaret.)

Mor:		Far:	
☐ 1 mil	☐ 6 - 10 mil	☐ 1 mil	☐ 6 - 10 mil
☐2 mil	☐ 11 - 20 mil	☐ 2 mil	☐ 11 - 20 mil
☐ 3 - 5 mil	☐ over 21 mil	☐ 3 - 5 mil	☐ over 21 mil

Tusen takk skal du ha!

1.3 Spørreskjema – bokmål

Universitet protokoll: Alt som du skriver mht dette prosjektet blir brukt bare til dette prosjektet. Du trenger ikke svare, men det som du skriver vil hjelpe meg til å klassifisere dialekten din. Du kan slutte å delta i dette prosjektet hvor tid som helst, og du kan spøre meg om å fjerne alle ubehandelte data du har gitt meg. At du sender denne meldingen tilbake til meg betyr at du er enig i desse vilkåra.

Spørreskjema: Første delen av spørreskjemaet går ut på å finne ut informasjoner om dialekten din. Det tar ca. 20 minutt å fylle ut. Andre delen omfatter setninger og spørsmål. Det tar ca. 40 minutt å fylle ut. Du trenger ikke gjøre alt dette på en gang. Du kan svare på spørsmål enten ved å sette ei kryss eller å skrive etter spørsmål. Takk for hjelpa!

Om deg

Navn (ikke obligatorisk): _____

Alder: ☐under 15 ☐15-20 ☐ 21-25 ☐ 26-30 ☐ 31-40 ☐ 41-60 ☐ 61+

Dato idag: ____ /_____ / 199___
dag måned år

Dialekt

1) Har du et navn for dialekten din? _____

2) Er dialekten din nærmere til bokmål eller nynorsk?
☐ nynorsk ☐ bokmål

3) Hvor mange folk tror du snakker dialekten din? _____

4) Pleier du å skrive på nynorsk eller bokmål?
☐ nynorsk ☐ bokmål

5) Hvilket er lettest for deg å lese?
☐ nynorsk ☐ bokmål ☐ like greie

Bostad

6) Hvor bor du i Norge?
by/ landsby: _____
kommune: _____
fylke: _____

7) Hvor lenge har du bodd her? _____ år

8) Har du bodd i en annen plass/ by (ikke bare i Norge)? Om ja, hvor? Hvor lenge tilbringte du i hver plass og hvor gammel var du då? (by, kommune, fylke - siste fyst)

_____
_____

9) Hvor longt vekke er hvert overnevnte plass fra hvor du bor nå? (Hvis det er flere, sett et nummer eller skriv plassen ved siden av svaret, istedenfor å sette et kryss.)
☐ 1 mil ☐ 3 - 5 mil ☐ 11 - 20 mil
☐ 2 mil ☐ 6 - 10 mil ☐ over 21 mil

Utdanning

10) Hvor gikk du på skolen? (siste først)

	plass	kommune	fylke
1.	_____	_____	_____
2.	_____	_____	_____

11) Hvilket nivå nådde du?

☐ aldri begynnt på vidaregåande skule
☐ begynnt på vidaregåande skule
☐ ferdig med vidaregåande skule
☐ begynnt på universitet/ høgskule
☐ ferdig med universitet/ høgskule

12) Gikk du på en folkehøgskole?

☐ ja ☐ nei

Om ja, hvor? (plass, kommune, fylke): _____

Om foreldrene dine

13) Finnes/ fants det et navn for dialekten til – moren din_____
– faren din? _____

14) Er foreldrene dine fødte i samme plassen som de bor/ bodde sist?

☐ ja ☐ nei

Om ja, har de alltid bodd her/ bodde de alltid her?

☐ ja ☐ nei

Hvis du svarte nei til et eller annet av disse spørsmåla i 14), fortsett med 15). Hvis du svarte ja til begge kan du begynne på spørreskjemaet.

15) Hvor bor/ bodde foreldrene dine i Norge sist?

Mor	Far
by/ landsby: _____	by/ landsby: _____
kommune: _____	kommune: _____
fylke: _____	fylke: _____

16) Hvor lenge har de bodd her/ bodde de her?

Mor: ____ år Far: ____ år

17) Har de bodd/ bodde de i en annen plass/ by (ikke bare i Norge)? Om ja, hvor? Hvor lenge tilbringte de i hver plass og hvor gammel var de da? (by, kommune, fylke)

Mor:

_____
_____

Far:

_____
_____

18) Hvor longt vekke er hvert overnevnte plass fra hvor de bor/ bodde sist? (Hvis det er flere, skriv nummeret ved siden av svaret, istedenfor å sette et kryss.)

Mor:		Far:	
☐ 1 mil	☐ 6 - 10 mil	☐ 1 mil	☐ 6 - 10 mil
☐2 mil	☐ 11 - 20 mil	☐ 2 mil	☐ 11 - 20 mil
☐ 3 - 5 mil	☐ over 21 mil	☐ 3 - 5 mil	☐ over 21 mil

Tusen takk skal du ha!

Appendix 2

2 The test sentences

1 nn *Jon var klar over at Are hadde snakka om bilen hans.*
bm *Jon var klar over at Are hadde snakket om bilen hans.*
'Jon realised that Are had spoken about his car.'

2 nn *Jon hørte at Tordis var klar til å snakka med han.*
bm *Jon hørte at Tordis var klar til å snakke med ham.*
'Jon heard that Tordis was ready to speak with him.'

3 nn *Sille visste ikkje om skina sine hadde blitt stjålet.*
bm *Sille visste ikke om skiene sine hadde blitt stjålet.*
'Sille didn't know whether R's skis had been stolen.'

4 nn *Martin ba oss snakka om det stort talentet sitt på ski.*
bm *Martin ba oss snakke om det stort talentet sitt på ski.*
'Martin asked us (to) speak about R's huge talent on skis.'

5 nn *Han lot oss snakka om bragdene sine til foreldra våre.*
bm *Han lot oss snakke om bragdene sine til foreldrene våre.*
'He let us speak about R's deeds til our parents.'

6 nn *Eg hørte frå Jon at Maria elska seg.*
bm *Jeg hørte fra Jon at Maria elsket seg.*
'I heard from Jon that Maria loves R.'

7 nn *Foreldre til Hege og Susanne hadde nettopp flytta til Island. Morten trudde dei to jentene snakka om foreldra sine, då han såg dei snakka saman.*

bm *Foreldre til Hege og Susanne hadde nettopp flyttet til Island. Morten trodde de to jentene snakket om foreldrene sine, da han så dem snakker sammen.*

'The parents of Hege and Susanne had just moved to Iceland. Morten thought the two girls were talking about R's parents when he saw them talking together.'

8 nn *Lise fekk Bjarte til å snakka fint om biletet sitt.*
bm *Lise fikk Bjarte til å snakke pent om bildet sitt.*
'Lise got Bjarte to speak nicely about R's picture.'

9 nn *Jon var ikkje klar over at Are hadde snakka om seg.*
bm *Jon var ikke klar over at Are hadde snakket om seg.*
'Jon did not realise that Are had spoken about R.'

10 nn *Trond ville at me skulle snakka om seg.*
bm *Trond ville at vi skulle snakke om seg.*
'Trond wanted that we should talk about R.'

11 nn *Han sa at ho hadde snakka med seg.*
bm *Han sa at hun hadde snakket med seg.*
'He said that she had spoken with R.'

12 nn *Per likte å sjå kona si i speilet når han var på jobb.*
bm *Per likte å se konen sini i speilet når han var på jobb.*
'Per liked to watch R's wife in the mirror when he was at work.'

13 nn *Jon trur at Maria elska jobben sin, fordi at ho snakka om han ti gongar om dagen!*
bm *Jon tror at Maria elsker jobben sin, fordi hun snakker om den ti gonger om dagen!*
'Jon thinks that Maria loves R's job, because she talks about it ten times a day!'

14 nn *Trond ba oss hjelpa seg.*
bm *Trond ba oss hjelpe seg.*
'Trond asked us (to) help R.'

15 nn *Han lot oss snakka om bragdene hans til foreldra våre.*
bm *Han lot oss snakke om bragdene hans til foreldrene våre.*
'He let us speak about his deeds to our parents.'

16 nn *Per likte å sjå seg i speilet når han var på jobb.*
bm *Per likte å se seg i speilet når han var på jobb.*
'Per liked to watch R in the mirror when he was at work.'

17 nn *Eg hørte frå Jon at Maria elska leraren sin.*
bm *Jeg hørte fra Jon at Maria elsket læreren sin.*
'I heard from Jon that Maria loved R's teacher.'

18 nn *Jon blei låvd av Eivor at ho skulle snakka om songen sin.*
bm *Jon ble lovd av Eivor at hun skulle snakke om sangen sin.*
'Jon was promised by Eivor that she would speak about R's song.'

19 nn *Jon var ikkje klar over at Are hadde snakka om bilen sin.*
bm *Jon var ikke klar over at Are hadde snakket om bilen sin.*
'Jon didn't realise that Are had spoken about R's car.'

20 nn *Trond ba oss hjelpa mora si.*
bm *Trond ba oss hjelpe moren sin.*
'Trond asked us (to) help R's mother.'

21 nn *Jon hørte diktet sitt bli omtalt*
bm *Jon hørte diktet sitt bli omtalt.*
'Jon heard R's poem be mentioned.'

22 nn *Jon sa til meg at Maria elska leraren sin.*
bm *Jon sa til meg at Maria elsket læreren sin.*
'Jon said to me that Maria loved R's teacher.'

23 nn *Jon var klar over at Are hadde snakka om seg.*
bm *Jon var klar over at Are hadde snakket om seg.*
'Jon realised that Are had spoken about R.'

24 nn *Per likte at det var mogleg å sjå kona si i speilet når han var på jobb.*
bm *Per likte at det var mulig å se konen sin i speilet når han var på jobb.*
'Per liked that it was possible to watch R's wife in the mirror when he was at work.'

25 nn *Trond ville at me skulle snakka om broren hans.*
bm *Trond ville at vi skulle snakke om broren hans.*
'Trond wanted that we would speak about his brother.'

26 nn *Henrik trudde at kjærasten sin hadde vore utro.*
bm *Henrik trodde at kjæresten sin hadde vært utro.*
'Henrik thought that R's girlfriend had been unfaithful.'

27 nn *Sille visste ikkje at skina sine hadde blitt stjålet.*
bm *Sille visste ikke at skiene sine hadde blitt stjålet.*
'Sille didn't know that R's skis had been stolen.'

28 nn *Jon trur at Maria elska seg.*
bm *Jon tror at Maria elsket seg.*
'Jon thinks that Maria loves R.'

29 nn *Ho trudde naboane snakka om foreldra sine, då ho såg dei snakke saman.*
bm *Hun trodde naboene snakket om foreldrene sine, da hun så demi snakke sammen.*
'She thought they were talking about R's parents when she saw them talking together.'

30 nn *Martin ba oss snakka om seg.*
bm *Martin ba oss snakke om seg.*
'Martin asked us (to) speak about R.'

31 nn *Eivor låvde Jone å snakka om prosjektet sitt.*
bm *Eivor lovde Jone å snakke om prosjektet sitt.*
'Eivor promised Jone to speak about R's project.'

32 nn *Jon hørte seg bli omtalt.*
bm *Jon hørte seg bli omtalt.*
'Jon heard R be mentioned.'

33 nn *Jon sa til meg at Maria elska seg.*
bm *Jon sa til meg at Maria elsket seg.*
'Jon said to me that Maria loved R.'

34 nn *Jon blei låvd av Eivor at ho skulle snakka om seg.*
bm *Jon ble lovd av Eivor at hun skulle snakke om seg.*
'Jon was promised by Eivor that she would speak about R.'

35 nn *Jon blei fortalt av meg at Maria elska seg.*
bm *Jon ble fortalt av meg at Maria elsket seg.*
'Jon was told by me that Maria loved R.'

36 nn *Lise fekk Bjarte til å snakka fint om seg.*
bm *Lise fikk Bjarte til å snakke fint om seg.*
'Lise got Bjarte to speak nicely about R.'

37 nn *Jon var klar over at Are hadde snakka om bilen sin.*
bm *Jon var klar over at Are hadde snakket om bilen sin.*
'Jon realised that Are had spoken about R's car.'

38 nn *Jon hørte at Tordis var klar til å snakka med advokaten sin.*
bm *Jon hørte at Tordis var klar til å snakke med advokaten sin.*
'Jon heard that Tordis was prepared to speak with R's lawyer.'

39 nn *Jon hørte at Tordis var klar til å snakka med advokaten hans.*
bm *Jon hørte at Tordis var klar til å snakke med advokaten hans.*
'Jon heard that Tordis was prepared to speak with his lawyer.'

40 nn *Per likte at det var mogleg å sjå seg i speilet når han var på jobb.*
bm *Per likte at det var mulig å se seg i speilet når han var på jobb.*
'Per liked that it was possible to watch R in the mirror when he was at work.'

41 nn *Trond ville at me skulle snakka om han.*
bm *Trond ville at vi skulle snakke om ham.*
'Trond wanted that we would speak about him.'

42 nn *Han sa at ho hadde snakka med kameraten sin.*
bm *Han sa at hun hadde snakket med kameraten sin.*
'He said that she had spoken with R's friend.'

43 nn *Martin ba oss snakka om det stort talentet hans på ski.*
bm *Martin ba oss snakke om det stort talentet hans på ski.*
'Martin asked us (to) speak about his huge talent on skis.'

44 nn *Han lot oss snakka om seg til foreldra våre.*
bm *Han lot oss snakke om seg til foreldrene våre.*
'He let us speak about R to our parents.'

45 nn *Jon hørte at Tordis var klar til å snakka med seg.*
bm *Jon hørte at Tordis var klar til å snakke med seg.*
'Jon heard that Tordis was ready to speak with R.'

46 nn *Eivor låvde Jone å snakka om seg.*
bm *Eivor lovde Jone å snakke om seg.*
'Eivor promised Jone to speak about R.'

47 nn *Jon sa til meg at Maria elska han.*
bm *Jon sa til meg at Maria elsket ham.*
'Jon said to me that Maria loved him.'

48 nn *Trond ville at me skulle snakka om broren sin.*
bm *Trond ville at vi skulle snakke om broren sin.*
'Trond wanted that we would speak about R's brother.'

49 nn *Jon blei fortalt av meg at Maria elska kameraten sin.*
bm *Jon ble fortalt av meg at Maria elsket kameraten sin.*
'Jon was told by me that Maria loved R's friend.'

50 nn *Tori visste at foreldra sine var godt likt av naboane sine.*
bm *Tori visste at foreldrene sine var godt likt av naboene sine.*
'Tori knew that R's parents were well liked by R's neighbours.'

51 nn *Jon liker bilen hans*
bm *Jon liker bilen hans.*
'Jon likes his car.'

52 nn *Me arresterte Jon før avreisa si.*
bm *Vi arresterte Jon før avreisa si.*
'We arrested Jon before R's departure.'

53 nn *Jon fortalte Per om han.*
bm *Jon fortalte Per om ham.*
'Jon told Per about him.'

54 nn *Jon ga Per jakka si.*
bm *Jon ga Per jakka si*
'Jon gave Per R's jacket.'

55 nn *Jon fortalte Per om kona si.*
bm *Jon fortalte Per om konen sin.*
'Jon told Per about R's wife.'

56 nn *Me ga han pengane sine.*
bm *Vi ga han pengene sine.*
'We gave him R's money.'

57 nn *Jon snakka med seg.*
bm *Jon snakkte med seg.*
'Jon talked with R.'

58 nn *Jon liker bilen sin.*
bm *Jon liker bilen sin.*
'Jon likes R's car.'

59 nn *Jon fortalte Per om seg.*
bm *Jon fortalte Per om seg.*
'Jon told Per about R.'

60 nn *Jon blei arrestert før avreisa si.*
bm *Jon ble arrestert før avreisa si.*
'Jon was arrested before R's departure.'

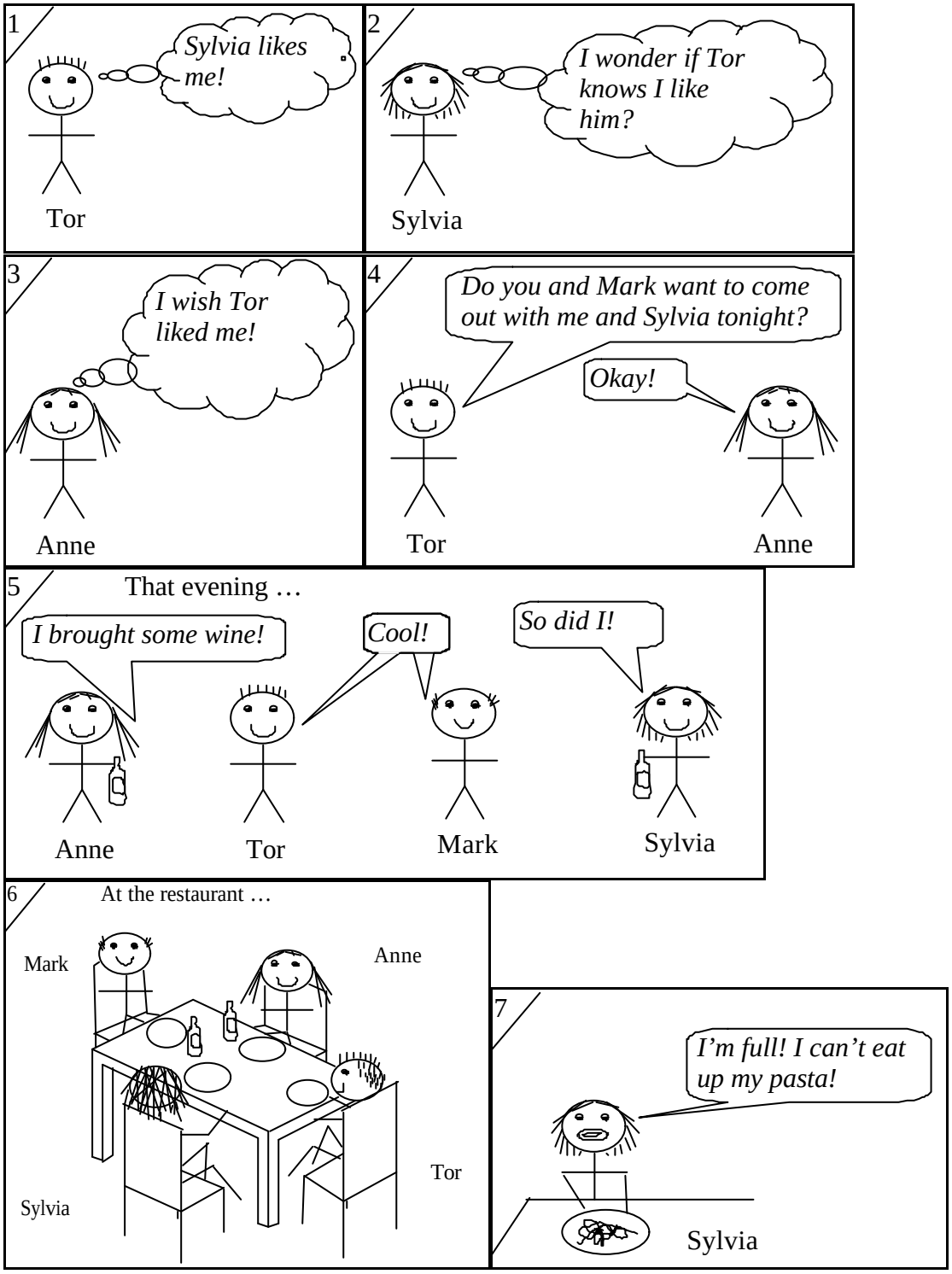
Appendix 3

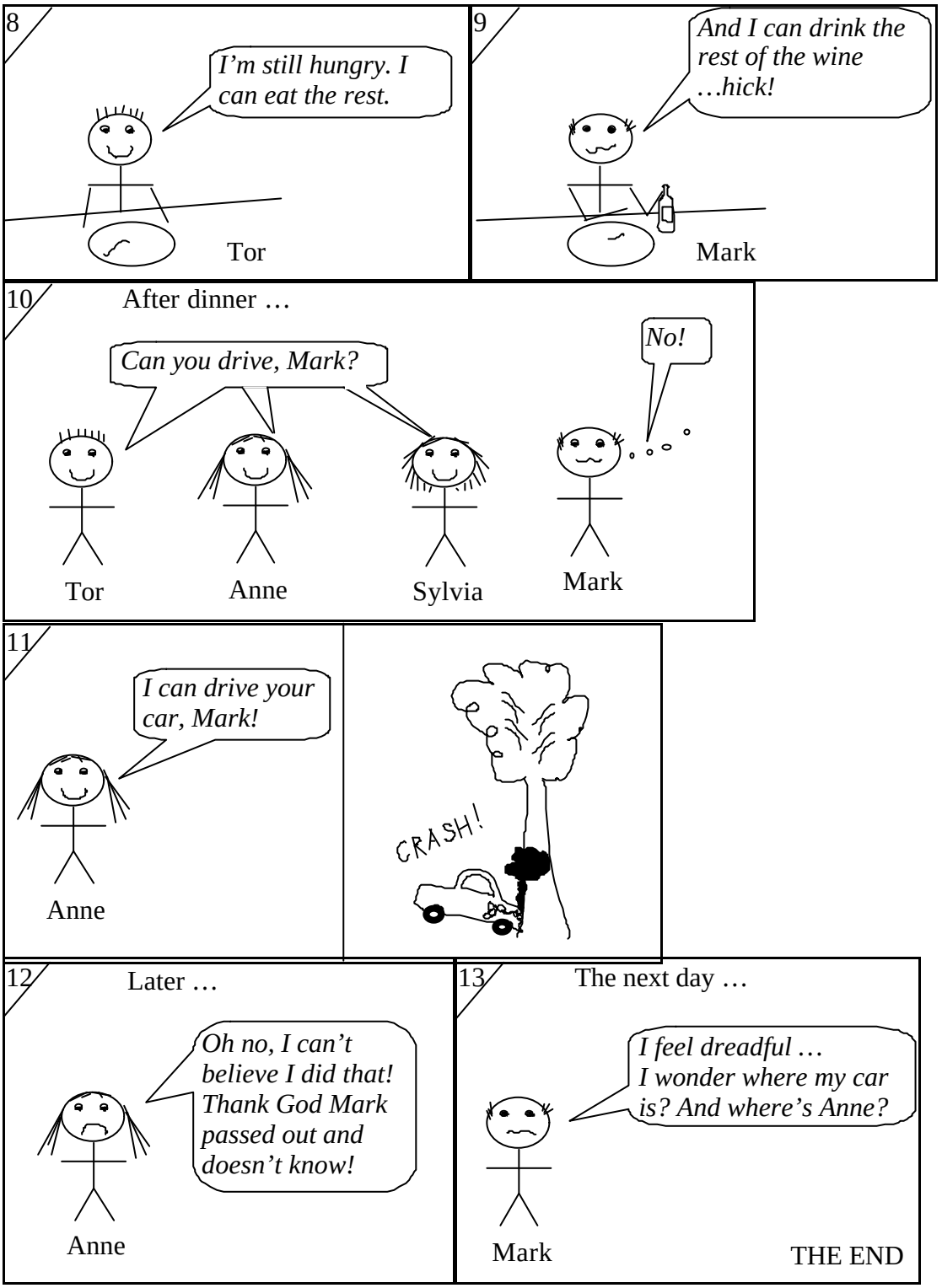
3 The elicitation story

Ein uskuldige kjærleikshistorie som utviklar seg til ein kveld med dramatisk avslutning ...

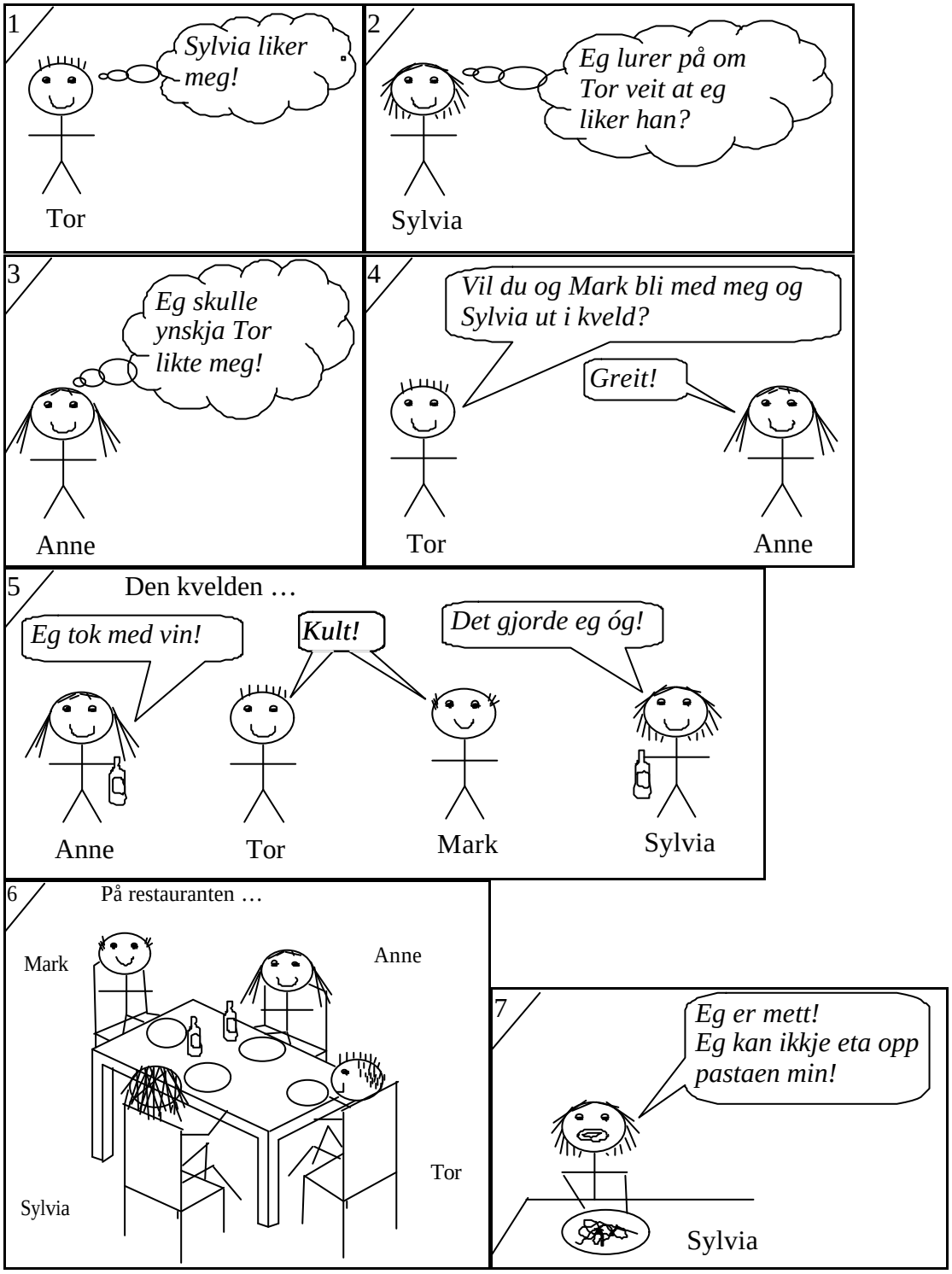
An innocent love-story which develops into an evening with a dramatic conclusion …

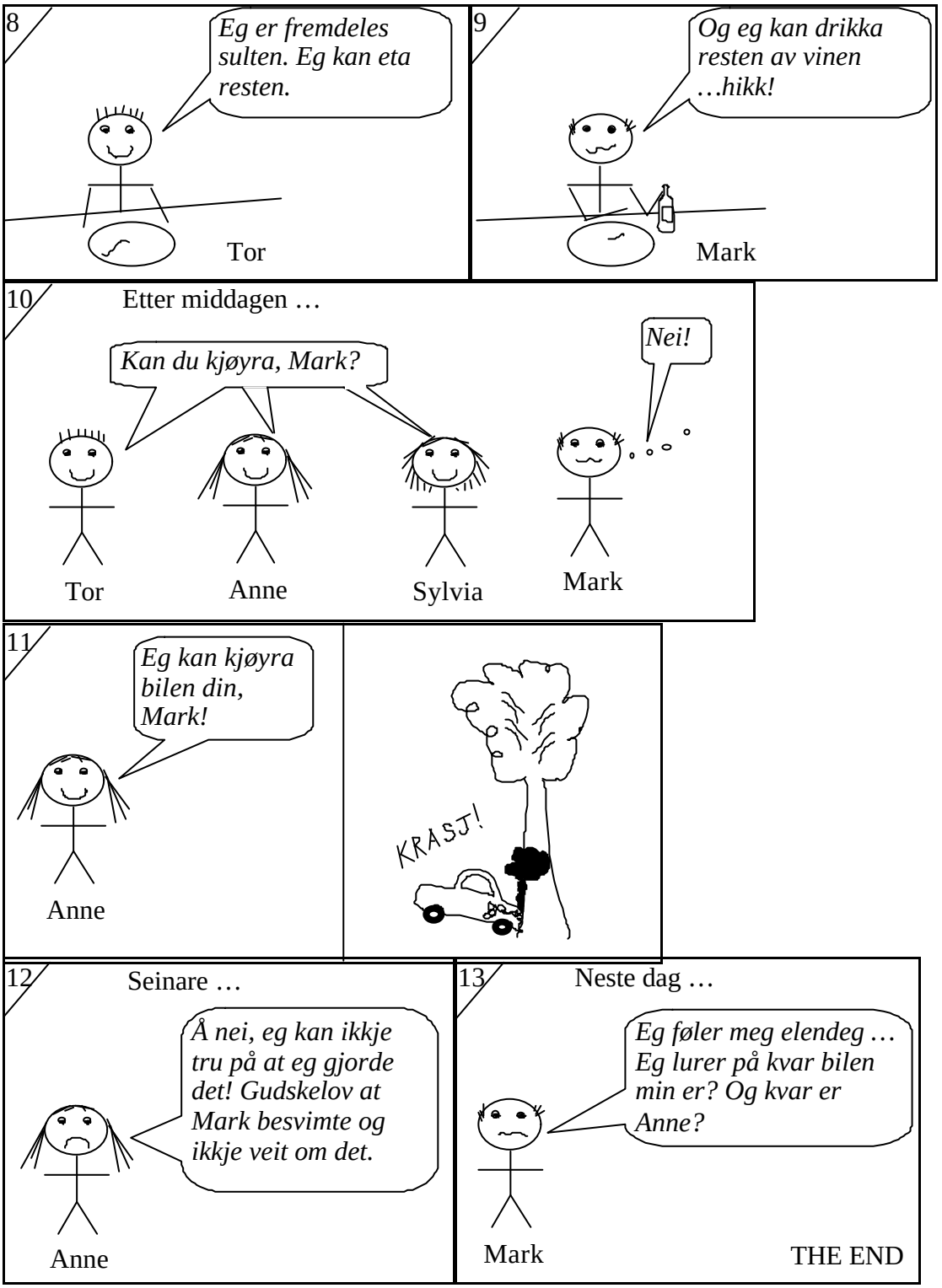
3.1 The elicitation story – English



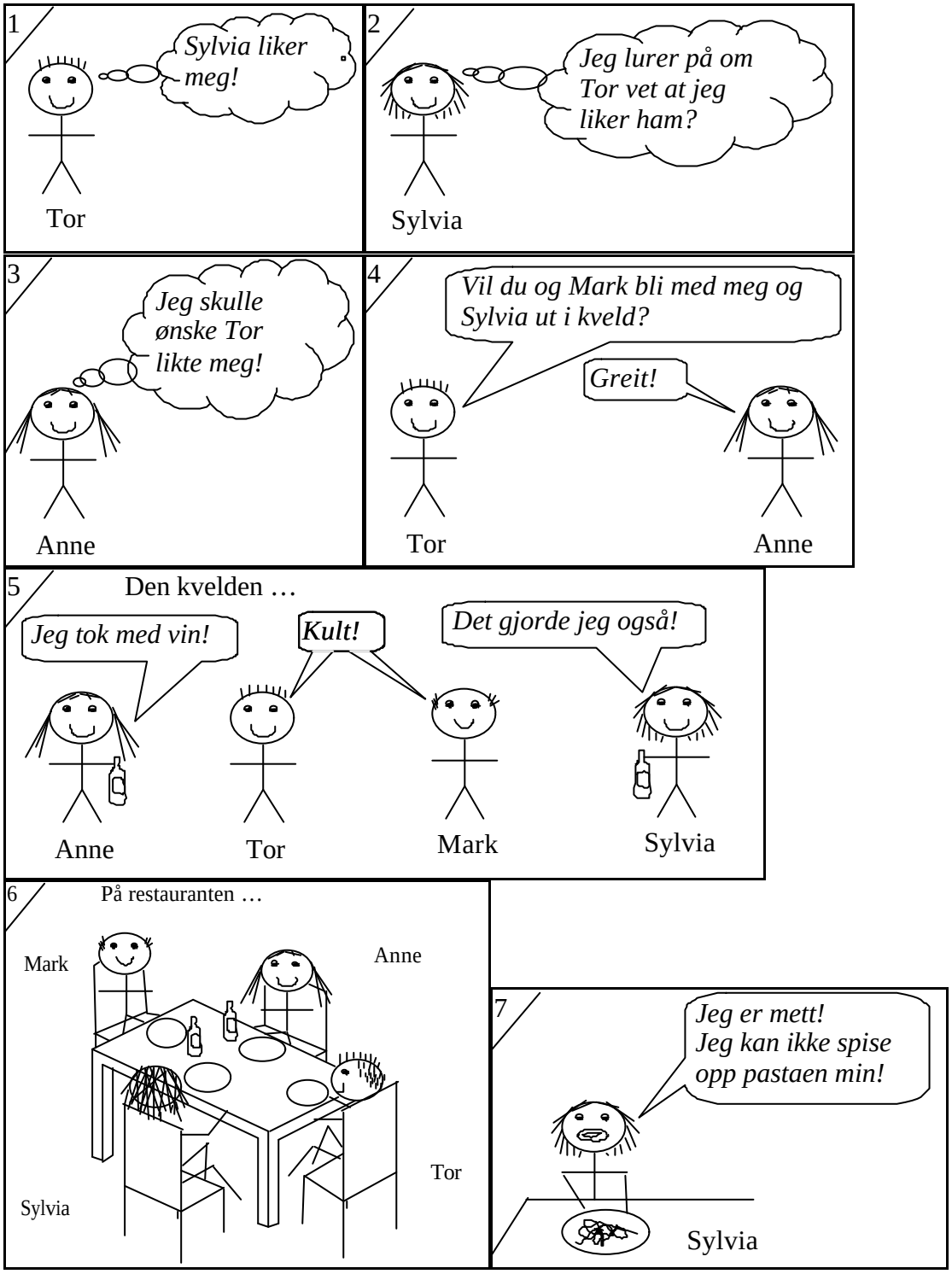

8
I'm still hungry. I can eat the rest.
Tor
9
And I can drink the rest of the wine …hick!
Mark
10
After dinner …
Can you drive, Mark?
No!
Tor
Anne
Sylvia
Mark
11
I can drive your car, Mark!
Anne
CRASH!
12
Later …
Oh no, I can't believe I did that! Thank God Mark passed out and doesn't know!
Anne
13
The next day …
I feel dreadful … I wonder where my car is? And where's Anne?
Mark
THE END

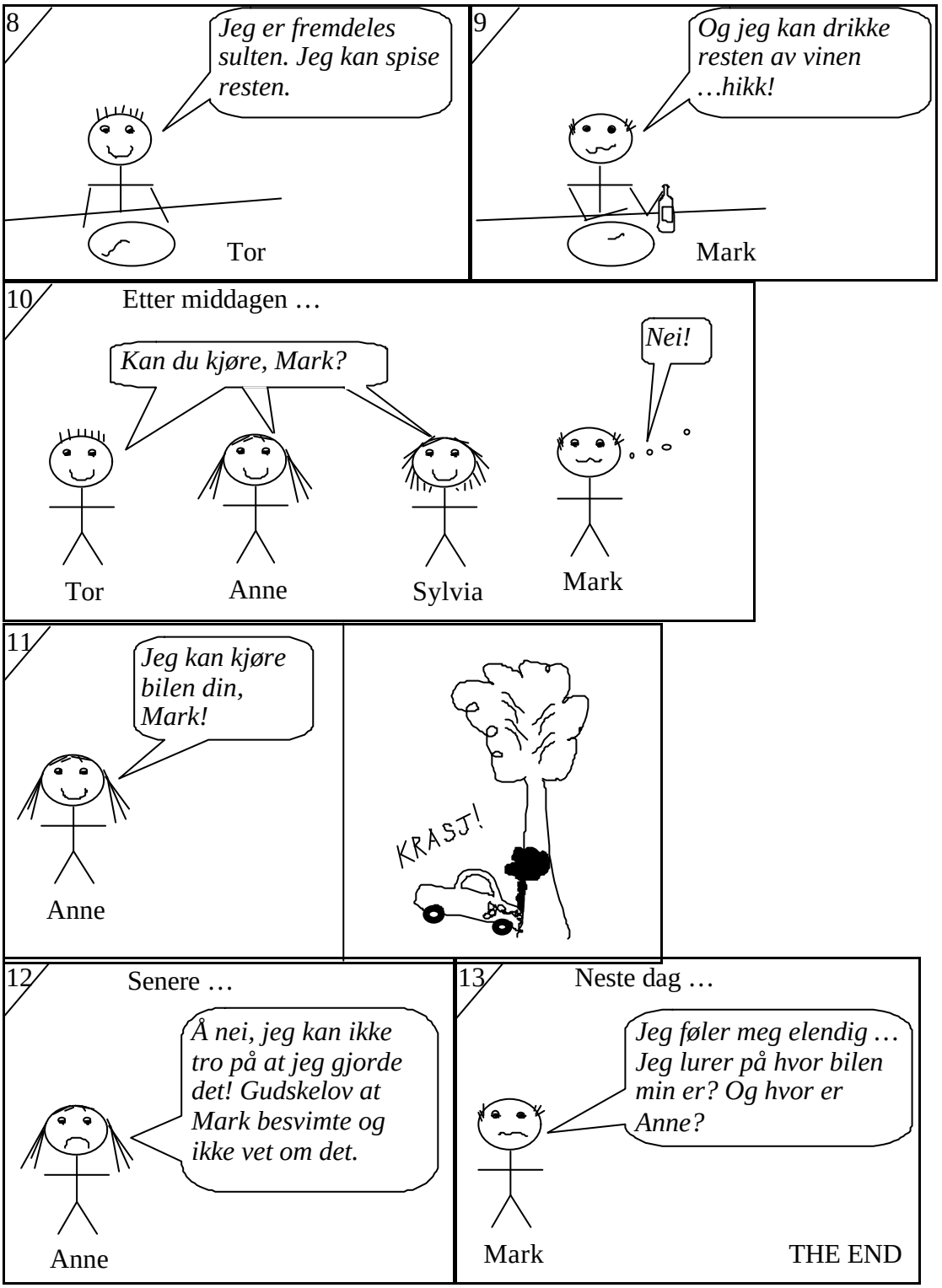
3.2 The elicitation story – nynorsk




8
Eg er fremdeles sulten. Eg kan eta resten.
Tor
9
Og eg kan drikka resten av vinen …hikk!
Mark
10
Etter middagen …
Kan du kjøyra, Mark?
Nei!
Tor
Anne
Sylvia
Mark
11
Eg kan kjøyra bilen din, Mark!
Anne
KRASJ!
12
Seinare …
Å nei, eg kan ikkje tru på at eg gjorde det! Gudskelov at Mark besvimte og ikkje veit om det.
Anne
13
Neste dag …
Eg føler meg elendeg … Eg lurer på kvar bilen min er? Og kvar er Anne?
Mark
THE END

3.3 The elicitation story – bokmål




8
Jeg er fremdeles sulten. Jeg kan spise resten.
Tor
9
Og jeg kan drikke resten av vinen …hikk!
Mark
10
Etter middagen …
Kan du kjøre, Mark?
Nei!
Tor
Anne
Sylvia
Mark
11
Jeg kan kjøre bilen din, Mark!
Anne
KRASJ!
12
Senere …
Å nei, jeg kan ikke tro på at jeg gjorde det! Gudskelov at Mark besvimte og ikke vet om det.
Anne
13
Neste dag …
Jeg føler meg elendig … Jeg lurer på hvor bilen min er? Og hvor er Anne?
Mark
THE END

Appendix 4

4 Transcription of the elicitation story

Asterisks indicate the speaker used non-prototypical reflexivisation.

Track 1 [Speaker 102]

TS:

1 speaker one oh two.
2 Værsågod!

SPEAKER 102

3 Han Tor e så gla,
4 fordi han veit jo at ho Silvia,
5 eller ho Sylvia,
6 som ho heite,
7 ho lik ‘an.
8 Men ho Sylvia,
9 ho går og lure på om Tor veit,
10 at,
11 ho like han.
12 /stikker det/.
13 Og så e det ei annj jente som hete Anne,
14 og ho
15 skulle ønske å at han Tor likte ho!
16 @@@@
17 Og så,
18 spør han Tor ho Anne,
19 om …ho kan bli @@ bli med- med
20 med han og Mark og Sylvia ut.
21 Og det ville hon gjerne vere med på.
22 På den kvelden så kjæm ho Anne og Sylvia og tek med sei vin.
23 Kuult, sei ‘n Tor og Mark.
24 Det e dei glad for!
25 Så var dei på restaurang,
26 og set rundt bord,
27 satt seg rundt bord der,
28 for å ete.
29 Sylvia blir mett,
30 og grei ikkje å ete opp all pastaen sin.
31 Ah.
32 Han Tor er fremdeles svolte.
33 Og han tebyr seg å ete opp resten.
34 For o Sylvia.
35 Han Mark,
36 han byr seg te å drikke opp resten av vin!
37 @@
38 Etter midda’en så,
39 er det spørsmål om kannj som skal kjøre bilen.
40 Han Tor spør om ‘n Mark kan kjøre,
41 og Anne spør om ‘n Mark kan kjøre,
42 og o Syl-Sylvia spør om ‘n Mark kan kjøre. Men han Mark, han sei nei!
43 Etter,
44 for han har drukje vin.
45 @
46 Men ho Anne ho sei at ho kan kjøre bilen hass.
47 Og då .. krasjer ho bilen inn i et tre. …
48 Etterpå blir o Anne fortvilt
49 og kan ikkje forstå,
50 at det e ho som kjørte bilen inn i treet.
51 Men heldigvis
52 så
53 besvimte han Mark
54 og
55 veite ikkje at det e ho som gjord’det.
56 Neste dag vakne ‘n Mark,
57 og føler seg elendig.
58 Han lurer på kar bilen e,
59 og ‘n lurer på kar o Anne e.
60 Han finn o ikkje igjen.

TS:

61 takk skal du ha!

Track 2 [Speaker 103]*

TS:

1 speaker one oh three

SPEAKER 103

2 Ja,
3 han= --
4 Tor lurer på om a Sylvia likt sæi.
5 Eller,
6 at o likt’n.
7 Og hen Sylvia lurer på om ‘n Tor veit=,
8 at o lik’en.
9 Og Anne,
10 hu ynskjer at ‘n Tor .. likt’a.
11 Eller at ‘n Tor likt sæi.
12 ‘n Tor spurd om --
13 om o Anne .. ville …
14 om om … om
15 Anne og Mark ville bli --
16 bli med sei
17 og Sylvia
18 ut i kveld.
19 Og Anne sei at ho tok med vin.
20 Tor og Mark sei at det var fint.
21 Og Sylvia sei at det gjorde ho å.
22 Og der kan vi gjer ein pause,
23 for å la mei få tenke mer, du.

TS:

24 nei, nei, bare forsett!

SPEAKER 103

25 Nei, æi skjønne itte egentleg på restaurangen
26 ka det er som skal sei og se.

TS:

27 Ja, bare fortell meg ka som skjer,
28 lissom.

SPEAKER 103

ka som skjer?

TS:

ja.

SPEAKER 103

Ja, dæm satt se rundt i bord.
Og så har dæm fått satt to flasker fram for sæi.
Å dæm har enno itte kum i gang med drikkinga, men @@@
så dæm- dæm sitt ganske pent å pyntlig!
Å,
om det foregår no samtale,
det /?går itj fram på bilde/ det er heilt feil,
men det kan godt hend at-
dæm å diskuterer opplegget.
Ja, er, så sei ho Sylvia da at ho e mætt,
og ho itt kannj eta opp ma- pastaen sin.
Ah, Tor sei at han er hungrig --
at'n at'n at'n at'n e hungrig no,
å at'n --
og at'n kan eta opp, det som stå igjæn.
Å 'n Mark, han, sei no at han kan drikke resten tå vinå,
han har tydeligvi fått--
fått en del,
å hen har lyst på mer.
Ætter midda'en så e det da Tor, Anne og Sylvia som spør om
'en Mark skal kjør.
Å han Mark sei nei.
Å Anne sei at æi skal kjøre bilen din, Mark.
Men så kjør o bort i treå, da
og kræsje fullstendig.
Å seinere så sei o Anne at o itt kan tru at o som gjord'det
og det var- det var gudskjelov at 'n Mar-,
sei at o ah, ja,
nei o var glad, da, fordi at 'n Mark besvimt,
og at 'n itt veit om det.
Å 'n Mark
da'en etterpå
så sei 'n Mark at 'n e--
da føle n sæi elendig da.
Han lur kor bilen er hænn å
kor e Anne hænn?

TS:

takk skal du ha.

SPEAKER 103

det va-

Track 3 [Speaker 213]

TS:

speaker two one three.
Værsågod.

SPEAKER 213

takk.
Em.
'n Tor
lure paå om ho
Sylvia like han.
Og Sylvia lure paå om 'n Tor
veit at
ho liker henn.
Og o Anne skull ynskje at 'n
Tor likte o.
'n Tor .. lure paå om ..
Anne og Mark vil bli me'om--
med honom og --
on Sylvia
ut i kveld.
Så den kvelden
så to o Anne ein vin,
og det tykt 'n Tor og
'n Mark var'k-
kult, som dem si!
Det tykte dem var modigt.
Da gjorde o Sylvia æu.
Så på restauranje.
Det e dativ…

TS:

å ja!

SPEAKER 213

der sitt dem
Sylvia og 'n Mark og o Anne og 'n Tor
og dem sitt på kår si sia ta borde.
Og o Sylvia
si at ho æ mætt,
Og ho si at ho itji kan ete æupp pastaen sin.
Og 'n Tor
'n sier at 'n fremdeles æ svolte,
og 'n ..
'n kan ja,
'n kan ete resten,
ja.
Og så e det 'n Mark,
og han Mark,
han sier at han kan drikke resten tå vine.
Og så etter midda'je så
luræ o S-Sylvia og o Anne og 'n Tor på om
'n Mark kan kjøre døm.
Nei, si Mark.
Og Anne
si at ho kan kjøre
bilen hass.
Hass Mark.
Å så
kjøre ho inn i et tre,
ser jeg.
Og så
e det o Anne da,
som si seinare at ho …
kan /? viss ikj X/ tro å forstå at ho har gjort det.
Og det var gudskelov at 'n Mark
besvimte
og ikkje veit någ øm det.
Og neste dag si Mark at 'n
føle se elandog,
'An lure på kor bilen hass ær
og kor o Anne ær.

TS:

takk skal du ha

Track 4 [Speaker 213's comments]

SPEAKER 213

Og visst e si
Anne skull ynskje at 'n Tor likte se
så betyr det någo anna
for da må se vise
attande på Anne
som må deregast

TS:

Det kan'kje bli Anne om det

SPEAKER 213

nei, e må

74 eg må seie at …
75 Anne lure på om ‘n Tor likt o --
76 likte ho asså.
77 Men e ser at d’æu,
78 for d’ær presist,
79 i og med at det ikkje er tilsteds nøgen
80 nøgen annen person.
81 Forda
82 e skull ynskje at ‘n Tor likte se.
83 Det,
84 det betyr vel egenteg at, --
85 asså like se,
86 du kjenne dau uttrykket?

TS:

87 ja, ja,
88 det var det eg skulle seia

SPEAKER 213

89 altså trivast.
90 altså peike se attande på Tor.

TS:

91 Og om du skulle seia er glad i,
92 skulle du seia at Anne skulle ynskja at Tor var glad i seg?
93 Skulle du sagt det?
94 Eller?

SPEAKER 213

95 Og så ho skull ynskje at ‘n Tor var glad …
96 ti se…
97 var glad,
98 var glad ti’n.
99 E ville like så godt seia
100 henne da også.

TS:

101 Mm.

SPEAKER 213

102 Men asse
103 ette dæo
104 med problematisk da
105 viss dæe fleire personer […]

TS:

106 [ja?]

SPEAKER 213

107 testeds da, så.
108 Visst asse…
109 e si at,
110 fleire og æ dær…

TS:

111 ja så om me seier det er Sylvia der óg,
112 for eksempel

SPEAKER 213

113 så e det,
114 så e det klart du er inne på et område dær e litt,
115 kan bli opræsist,
116 men,
117 inn i tala,
118 i tala,
119 så ha’me fleire presisjonsmiddel.

TS:

120 mm?

SPEAKER 213

121 så du ha oss’n…
122 du gjer de forstått vel
123 og /du velg vel hva du vil skriv/.
124 For da må du vere meire presis og nøyaktog, ikkje sant,
125 du kan’tje
126 XXX hva du prate.

TS:

127 m-hmh.

SPEAKER 213

128 for da at
129 når du skriv så bli det mer en envegs kommunikasjon.
130 Å prate så ha’n jo heile tid mogleghet
131 til å fang up jo
132 døm ‘n prate med.
133 Skjønna?

TS:

134 nei, eg trur kanskje det.

SPEAKER 213

135 ja,
136 det e’kje tvil om da.

TS:

137 ja

SPEAKER 213

138 men når no’n skriv,
139 så bli det jo,
140 da e et problem
141 men,
142 man har jo no’n indiviser i norsk
143 så se‘n da at
144 det e en del elever
145 ikkje sjøl godt nok millom
146 da som æ
147 kanskje meire
148 talemåls språkssituasjon
149 og skriftsspråksituasjonar.

TS:

150 m-hmh.

SPEAKER 213

151 Og ‘n ær itt klar over at
152 det krev jo en
153 olik måte å uttrykkje se på da.

TS:

154 ålrait @ Takk!

Track 5 [Speaker 303]

TS:

155 This is speaker 303.

SPEAKER 303

156 står på?

TS:

157 Ja,
158 Eg trur det.

SPEAKER 303

159 Skal jeg lese det høyt opp i?
160 Ja.
161 Sylvia liker meg,
162 jeg lurer på om…

TS:

163 nei, nei, nei, altså

SPEAKER 303

ja?

TS:

ikkje lese da opp,

SPEAKER 303

‘ikkje’?

TS:

men,

SPEAKER 303

ikke høyt?

TS:

jo,
høgt,
men,
ikkje bare lese da,
men,
fortell meg ka som står der,
likesom?

SPEAKER 303

nå skjønner jeg IKKe hva du mener

TS:

altså,
late som,
om eg ikkje kan sjå da som du leser

SPEAKER 303

hmm?

TS:

har i håndo.
Og så fortell meg
ka som skjer i kvar forskjellige= skritt eller sånn.
Skjønner du? …

TS:

nei,
okay,
vent litt

SPEAKER 303

jeg vet ikke hva du mener
i det hele tatt.
Give me some more seconds, please.

TS:

yeah, okay,
if there’s a pause button…

SC:

pause is on the back
…

SPEAKER 303

ja, okay. …
Jeg ser en som heter Jone,
som sier at
“Sylvia liker meg”.
Bedre?

TS:

bedre, ja.

SPEAKER 303

Ja, okay.
Øh, så var det Sylvia,
som lurer på om Jon vet
at jeg liker ham.
Så er det Anne,
Øh, jeg sku ønske at Jon likte meg.
Syns Anne.
Så møtes Jone og Anne,
Og da sier .. Jone,
“Vil du og Mark
bli med meg og Sylvia
ut i kveld?”
Og da sier Anne,
“Det er greit.”
Nå forstår jeg!
Ja?

TS:

jaaa.
Bedre,
men ikkje bare les da som står,
men…

SPEAKER 303

ja,
men da forstår jeg IKKe hva du mener.

TS:

ja, ja, da er greit nok.

SPEAKER 303

ja.
Og så møtte Anne, Mark, Jone og Sylvia.
@@@@
Og da sier Anne
at hu tok med litt vin,
og det syns alle de andre at det er veldig kult. @@
Og så kom de på en restaurang.
Og da sitter alle så fire rundt et bord.
Mark, Sylvia, Anne og Jone sitter der.
Så får man se Sylvia
og hu sier at hun er mett,
og ikke kan spise opp … pastaen min. @
A-ha!
Who translated this?

TS:

someone from Bergen.

SPEAKER 303

mm-hmm?
Og så er det Jone,
som prater om maten sin,
og han sier at han
fortsatt er sulten.
“Jeg kan spise resten.”
av det Sylvia har.
Nå forstår jeg.
Og så er det Mark
som ser ut som et gresskar.
Og hans- --
han sier at,
“jeg kan drikke resten av vinen”.
Og begynner å bli ganske full.
Øh,
etter middagen,
så ser vi at de fire er på veien bort,
og så,
spør Jone, Sylvia og Anne,
“Kan du kjøre --
Kan du kjøre,
Mark?”
Og da sier’n,
“Nei”.
Fordi at han har drikket for mye vin.
Og da sier Anne at --
“Jeg kan kjøre bilen din Mark.”
Ja, det kan hu gjøre.
Senere.

Og så sier Anne,
"Oh nei,
jeg kan'ke tro
at jeg gjorde det.
Gudskelov
at Mark besvimte og
ikke vet om det."
Skjønner ingen sammenheng,
Så er det neste dag,
og da sier
Mark,
"Jeg føler meg elendig,
og jeg lurer på hvor bilen min er,
og hvor Anne --
hvor er Anne?"
Og da er det slutt.
Og jeg skjønnte ingen ting!

TS:

og så har du ingen ting å seia om da, då!
Ja, da er da greit!

SPEAKER 303

xxx

TS:

ja, altså her

SPEAKER 303

det føles som om du hopper over
en ti-tolv bilder her!

TS:

nei, ikkje så monge.
Nei, fordi,
fordi at --
her, sant?,
så seie Anne

SPEAKER 303

ja, men jeg skjønnte,
jeg skjønnte det når jeg lest det siste,
så skjønnte jeg
hva som er skjedd.

TS:

dei to der?

SPEAKER 303

mm?

TS:

ja,
og så Anne har gjort nåke--
kanskje har gjort nåke,
med Mark sin bil, sant?

SPEAKER 303

kjørt'n,
eller krasje?

TS:

og,
Mark vett ingen ting om da.
Og så har'kje peiling

SPEAKER 303

han har'ke peiling
på hvor bilen er.

TS:

ja,
og så han vett ingen ting?
og, takk skal du ha!

SPEAKER 303

ja.

TS:

da var da!

Track 6 [Speaker 304]*

TS:

er, three oh four?
I think.

SPEAKER 304

Ømm,
Ja.
Tor tenkjer at,
Sylvia likjer han.
Og Sylvia tror at --
erm,
nei,
lurer på om Tor vet,
at hu likjer han.
Anne .. skulle ønske at Tor likte sæi.
Og så sier Tor til Anne.
Vil du og Mark bli-
Mark bli med meg og Sylvia ut i kveld?
Greit, sæi Anne.
Og så er det samme kvelden,
der Anne sæi at hu tok
med vin.
Og Mark og Tor sæi kult.
Sylvia sæier at,
åh!
det gjorde jeg ó!
Mm, så er de på restaurangen,
Der sitter Mark Anne Tor og Sylvia rundt et bord,
Og Sylvia sæie at,
jæi er mett,
æi kan ikke--
æi kan itte spise upp pastaen min.
Så sæier Tor at han er fremdeles så sulten,
at han kan spise opp resten.
Mark sæier at,
han itte kan drikke opp resten av vinen sin.
Hikk!
Ett- --
Så er det etter middagen.
Tor, Sylvia og Anne spørrer om,
Mark kan kjøre--
nei, da.
om Mark kan kjøre,
kan du kjøre, Mark?
Nei, sæier Mark.
Så sæier Anne at,
jeg kan kjøre bilen din, Mark.
Og så skjer det ett øh lite uhell,
en krasj.
Så litt senere,
Anne sæier,
å nei
…
e kan ikke--
e kan itje tro at æi gjorde det.
Gudskelov at,
Mark besvimte,
og itte vet noen ting om det.
Så er det neste dag.
Der Mark sæier at han føler sæi elendig,
Han lurer på hvor bilen er hen,
og hen Anne er hen.
Og det vet hon ikke.

TS:

Og vett du kva som er skjedd?

SPEAKER 304

62 hah?

TS:

63 Vett du kva som er skjedd?

SPEAKER 304

64 nei.

TS:

65 nei.

SPEAKER 304

66 nei.

TS:

67 Det er likeson at Anne har krasja bilen til Mark
68 og,
69 ho ville ikkje fortella han…

SPEAKER 304

70 og så har u stykke ho å.

TS:

71 ja, kanskje det.
72 Eg er ikkje sikker på det, men

SPEAKER 304

73 ja, men det vart sikkert kjempeflausam!

TS:

74 @ ja. Takk skal du ha.

SPEAKER 304

75 værsågå

Track 7 [Speaker 307]

TS:

1 speaker three oh seven

SPEAKER 307

2 Tor tenke at Sylvia like,
3 like han.
4 Og Sylvia lurer på om Tor-Tor veit at .. ho like han.
5 Um
6 Anne tenke at …
7 ho skulle ønske at ..
8 Tor likte ho.
9 Og mm
10 …(6)
11 Tor spør … Anne om .. ho og Mark vil med .. han og Sylvia
12 ut i kveld.
13 Og samme kvelden,
14 så= tok Anne med vin,
15 og Tor og Mark synst at det var kult,
16 Og Sylvia hadde òg med seg vin.
17 Øm,
18 så e de på restaurang,
19 Mark og Anne, Tor og Sylvia,
20 Sylvia seie at ho e mett,
21 og ho klare ikkje å eta opp .. all pastaen sin.
22 Um.
23 Tor er fremdeles sulten,
24 Han kan eta opp resten.
25 @@
26 Resten av .. Sylvia sin,
27 sikkert.
28 Mark,
29 han kan drikka opp resten av vinen.
30 Han ser ganske sjabbi ut!
31 @@
32 Tor og Anne og Sylvia spørre Mark
33 om han kan kjøra,
34 etter middagen,
35 og da kan han IKKJe,
36 han e for full.
37 Da tilbyr Anne seg å kjøra,
38 De krasjer,
39 i et tre,
40 Ser ut som,
41 Seinare så seie Anne,
42 å nei,
43 e kan'kje tru at e gjorde da,
44 gudskelov at Mark besvimte utenatt,
45 å han vett ikkje om da ein gong.
46 Og neste dag føle Mark seg elendig,
47 og han lure på kor bilen e,
48 og kor e Anne?

TS:

49 takk skal du ha!

SPEAKER 307

50 var da bra?

TS:

51 ja!

Track 8 [Speaker 310]

TS:

1 informant tre ti.

SPEAKER 310

2 Det e en gut som hete Tor
3 som lure paå om,
4 Sylvia like 'an.
5 Og Sylvia,
6 ho lure på om 'n Tor veit at
7 ho liker heinnj, da?
8 Og o Anne,
9 og ei jente som hete Anne,
10 ho …
11 ho sier at ho skulle ynskje at 'n Tor likte ho,
12 Og så ær det Tor og Anne som møtes hær og --
13 …
14 og det ær Tor som spør ho Anne vil du og Mark bli med mei og Sylvia ot i kveld?
15 Og o Anne o svare at det e greit.
16 Og så ær det det som foregår om kvelden, da.
17 Anne ho si
18 e tog me vin.
19 Og 'n Tor og Mark døm svare at det e kolt.
20 Og Ann- og Sylvia,
21 ho dæ gjorde e æu,
22 sier ho Sylvia,
23 som har vin med ho også.
24 Og så æ dem på restaurangje da.
25 Og æ plassert se rundt bord i --
26 ei visse rækkefølgje da.
27 Så æ det seinare,
28 da si'r ho Sylvia
29 at ho æ mætt,
30 kan itje ete æup pastaen sin.
31 Men 'n Tor hæinnj er svol å --
32 e er framdeles svoltne,
33 e kan ete --
34 e kan ete æup resten.
35 Og 'n Mark
36 han si'r at,
37 e kan drikke æup resten ta vine.
38 Hikk, hikk!
39 XXXXXXXX
40 XXXXXXXX / XtydeligivsX/

Så itte middagen, da han --
både Tor og Anne og Sylvia,
dem spør 'n Mark
om 'n kænnj kjøre,
og Mark, han svåre,
nei.
Så si'r o Anne,
e kænn kjøre bilen din, Mark.
Og så ær o nå ot å kjøre,
og krasje inn i et tre der
tydeligvis.
Og seinare så …
æ det o Anne som drive å filosifere og litt a' dæ,
å nei
e kænn itje tro
på at e gjorde det,
Gudskelov at Mark besvimte,
og itje veit um det.
Og neste dågen da ..
æ det 'n Mark som ..
e ot å ..
filosofera litt
e føle me elandog å
e lure på…

Track 9 [Speaker 313]

TS:

Er – this is speaker 313.

SPEAKER 313

ja,
Tor,
han .. trur at Sylvia liker han.
Og Sylvia,
å luræ på om
kanskje Tor vet at e liker han.
Og så er det ei tredje jente som heter Anne,
Og hun lurer på om kanksje også Tor,
hu ønsker at Tor sjku lik 'o da.
Og, …
Tor,
han kjæm og spør .. Anne,
om, …
om ho og Mark ..
skal bli med han og Sylvia ut i kveld.
Ja,
de e greit.
sier Anne.
Og, nå kjæm på --
kjæm XXX
så si'r Anne at
æ tok na me vin,
og Mark og Tor syns de æ kjæmpekult.
Og Sylvia,
ho ha også tatt me sæ vin.
Men no fæ't je, no e æ /XfassånstanoX/.
No fast e tale heilt som dialekt egentlig.

TS:

Ja, ja, da ville e.
Heilt dialekt,
da e heilt fint, da.

SPEAKER 313

Æ e'kke så,
æ snakke litt sånn brear.

TS:

Ja- okay.
Ikkje for brei sånn at eg
ikkje skjønne ka du seie, men…

SPEAKER 313

Og sammen sitt sæi bort på restaurang,
Mark og Anne og Tor og Sylvia.
Og dæm har bestilt sæ pizza,
Og Sylvia sier så at
å jeg er så mett,
jeg klarer itte å eta opp alle pastaen min.
Men Tor,
han syns at han ha'ke fått noe mat,
så han er fremdeles sulten,
så han kan æt opp resten.
Og Mark,
hannj har fått litt for mye å drikk,
så hannj bynnje å bli litt sånn,
påssnu,
og hannj kannj drikk opp resten av vinen sin.
Og er dæm ferdig åter middag,
så ska dæm heimat,
og så s-spør
både T-Tor og Sylvia og Anne,
kan du kjør, Mark?
Nei.
sier'n.
Han har fått litt for mye å drikk,
antagelig.
Men da foreslår Anne at,
e kan kjør bilen din,
Mark.
…(5)
Og litt seinar,
så…(7)
/X nå vet å itj hva man kan gjør X/
Ja.
Ihvertfall seinar så sier Anne at,
å nei, æ kannj itj tru at æ gjor'det.
Gudskelov at Mark besvimte
og ikke veit noe om det.
Å ness' dag,
så…
Mark har føle sæ så dårlig full,
og han,
han lurer på kor bilen--
e lurer på kor bilen min er.
Å kor e blitt a' Anne?
Det va slutten.

TS:

Ja,
og så,
kan du finna nåke ut a' da, lissom?

SPEAKER 313

Hæh?

TS:

Lissom, kan du skjønna
ka som e skjedd der?

SPEAKER 313

Nei, nei, det var
…(6)
Nei, det jeg itj forstå er at ho skulle kjør bilen hans?
Det va det jo snakk om da.
Anne.
Og han er dårlig full neste dag,
og det er fordi han har drukkje for mye,
og så lurer han på kor bilen er hen.
Og hvor er Anne.

TS:

Vett du kor bilen er?

SPEAKER 313

…(3)
Ja, ho Anne har'n sikkert da!

TS:

99 Ja, har'kje ho gjort noko med da,
100 eller?

SPEAKER 313

101 …(4)
102 Ja,
103 XXXX /Xdet maa demahe, næ!X/

TS:

104 Ja, okay,
105 det var fint.
106 Det var alt eg har.
107 Takk skal du ha!

Track 10 [Speaker 315]

TS:

1 This is speaker three one five.
2 Værsågod!

SPEAKER 315

3 Tor, han
4 lurer på da om Sylvia liker .. han.
5 Er..
6 Det er vanskelig!

TS:

7 @@@@ Nei,
8 det er heilt greit, det!
9 Berre slapp av, då!

SPEAKER 315

10 Sylvia, i så fall blir veldig glad,
11 visst at ..
12 han .. da vil ..
13 kanskje ut med henne.
14 Men så er det også en annen inn i bildet,
15 og det er Anne,
16 som også gå å lurer på om Tor --
17 er mere glad i henne,
18 kanskje,
19 er glad i henne.
20 …(9)
21 Hmm!
22 …(4)

TS:

23 @@@

SPEAKER 315

24 Anne synes ihvertfall at det er greit,
25 at når To-Tor spør,
26 om da ville vera med ut,
27 Da skal de ut og så ta med på seg litt vin,
28 Hadde det litt kult sammen.
29 Alle sammen,
30 både Anne, Mark, Tor og Sylvia.

TS:

31 @@@Du må'kje le av tegneserien min!

SPEAKER 315

32 Og da skal de ut på en restaurang,
33 da sitter de rundt et bord og
34 har det hyggelig sammen alle sammen.
35 Men så har .. Sylvia vært og spist før på dagen,
36 så er'kke hun veldig sulten,
37 så da= orker hun ikke å spise opp maten sin.
38 Selv om det er en deilig pasta.
39 Men han Tor,
40 han tar med seg det meste
41 og han spise opp alle maten.
42 Men han Mark
43 han er veldig glad i vin,
44 så han ville heller ta med vin,
45 han da,
46 enn med maten.
47 Så det blir litt for mye på han.
48 Men så er det snakk om hvem som skal kjøre,
49 det er ikke så greit.
50 Mark kan ihvertfall ikke kjøre,
51 han har fått i seg altfor mye vin.
52 …(5)
53 Men Anne da,
54 som ikke har hverken spist eller drukket så mye
55 kan prøve å= å kjøre,
56 eller kjøre da bilen.
57 …(9)
58 Men seinere,
59 eller dagen etter
60 når de snakket alle sammen,
61 så var--
62 så husket ikke Mark hvem som hadde .. kjørt hjem,
63 for han var helt .. ute av .. funskjon,
64 eller var
65 fullstendig .. kollapsa.
66 Og han lurte på også hvor bilen var blitt av.
67 Og så dama
68 han visst heller ikke hvor dama si var blitt av.
69 Hun var også blitt borte.

TS:

70 @@@Ja, takk skal du ha! Det var det!

Track 11 [Speaker 316]

TS:

1 Nummer --

SPEAKER 316

2 tre hundre og seisten.

TS:

3 Takk.

SPEAKER 316

4 Tor tror at Sylvia liker ham.
5 …(6)
6 Sylvia lurer på om Tor vet
7 at hun liker ham.
8 …(3)
9 Anne skulle ønske at Tor likte henne.
10 … (7)
11 Tor spør Anne om .. hun og Sylvia vil være med ..
12 ham og Mark ut i kveld.
13 …(11)
14 Anne og Sylvia hadde tatt med seg vin,
15 og det syns Mark og Tor var kult.
16 /TURNS PAGE/
17 Mark, Anne, Sylvia og Tor gikk på restaurang.
18 …(5)
19 Sylvia bleve så mett
20 at hun ikke kunne spise opp pastaen sin.
21 …(6)
22 Tor var fremdeles sulten…
23 nei, det var,
24 det var litt dumt… (5)
25 Tor var fremdeles så sulten at han kunne spist opp resten.
26 …
27 Og Mark kunne drikke opp resten av vinen.
28 …(7)
29 Ingen kunne kjøre hjem.
30 /TURNS PAGE/

TS:

Hm?

SPEAKER 316

Nei.
Tor og Sylvia og Anne spurte Mark om
han kunne kjøre hjem.

TS:

Ja.

SPEAKER 316

Mark kunne ikke kjøre hjem.
Anne kunne kjøre bilen til Mark.
… (16)
hmmm, ja
… (4)
Anne kunne ikke tro at hun hadde --
kjørt bilen til Mark.
Hun var glad for at Mark besvimte og ikke visste om det.
…(6)
Mark følte seg elendig dagen etter og lurte på hvor bilen hans var.
Og hvor Anne var.

TS:

Ja.
Du skjønner ikkje poenget av det?

SPEAKER 316

Hmm?

TS:

Skjønner du kva som er skjedde med bilen?

SPEAKER 316

nei.

TS:

Nei?
Oh!
Meininga var vel at,
Anne ho skulle ha krasja bilen,

SPEAKER 316

mm-hmm?

TS:

og at,
"Å nei!
Å nei,
eg kan ikkje tru på at eg gjorde det!
Å nei!
Kossen gjorde eg det?

SPEAKER 316

@

TS:

Så Mark skulle seia,
"Å nei,
eg føler meg heilt elendig!
Og kor er bilen??
Å nei!"
316: Men.
Det var helt eintydig, da!

TS:

Men det var meir som ein 747! @
Å nei.

SPEAKER 316

Nei, vet du hva jeg trodde?

TS:

Ja, nei?

SPEAKER 316

Jeg trodde at Mark var for full
at han ikke visst hvem som hadde kjørt bilen hans.

TS:

Oh ja @

SPEAKER 316

Og at han egentlig ikke ville låne bort bilen til Anne,
fordi hun var en så dårlig sjåfør,
tenkte jeg!
Ja, han var så full at han besvimte,
så jeg synst det var litt rart, men

TS:

Ja,
alle seier det,
det er heilt greit,
det er ein ting å skriva det sjølv,
sant,
men det er ein heilt annen ting å

Track 12 [Speaker 317]

SPEAKER 317

tre hundre og sytten.

TS:

Takk.

SPEAKER 317

Tor er veldig glad,
fordi at han tenker at Sylvia liker han.
Og Sylvia lurer på om ..
Tor har skjønt,
at hun liker ham.
Og så tenker hun at hun
skulle ønske at Tor skulle like henne.
Å nei, det var Anne, det!
Å ja.
Hm.
Og så, og så er den en dame til,
og det er Anne,
som også ønsker at
Tor skulle like henne.
Så kommer Tor og spør Anne
om
hun vil være med
ut
i kveld,
sammen med Mark og Sylvia.
Og ja,
det vil hun gjerne.
Skal vi se.
Og Anne har tatt med seg litt vin,
og Mark og Tor synes det er kjempe flott,
Og Sylvia tok også med litt vin,
Ja, de er på restaurangen,
og så sitter de sånn annenhver rundt,
sånn at det ikke er lagd noen par av dem enda.
Og Sylvia har fått litt for stor porsjon,
så er hun mett,
og ikke orker å spise opp maten sin.
Men han Tor er fremdeles sulten,
og han kan gjerne spise restene.
Og med Mark sitter sånn og passe= på å ha nok å drikke
men han kan godt drikke resten av vinen, han!
Og etter maten da
så spørrer Tor og Sylvia og Anne om Mark kan
kjører hjem,

42 men det vil han ikke.
43 Det er fornuftig, da,
44 etter det vininntaket!
45 Men jeg kan kjøre bilen din,
46 sier Anne til Mark.
47 Og senere.
48 … (8)
49 Nå skjønte jeg ikke.
50 Men --
51 Anne har jo tydeligvis kjørt bilen til --
52 bilen til Mark,
53 men…
54 hun angrer,
55 for at hun har gjort det,
56 …
57 imens Mark har besvimt.
58 Det skjønte jeg ikke
59 @@@@@@
60 Og neste dag så lurer Mark veldig på da,
61 hvor bilen er blitt av,
62 og hvor Anne er hen og,
63 samtidig som han føler seg helt elendig,
64 Som en typisk dag XX
65 @@@@@

TS:

66 @@@@
67 nei

SPEAKER 317

68 jeg skjønte ikke hva som er da

TS:

69 altså, @
70 meininga var at
71 ho har krasja bilen, sant?

SPEAKER 317

72 Å, hun har krasja!

TS:

73 ja,
74 det er noko sånt,
75 ja.

SPEAKER 317

76 javel.
77 javel.
78 men ihvertfall hadde skjedd et eller annet!

TS:

79 ja…

SPEAKER 317

80 som hun da håber at
81 Mark ikke har .. oppdaga.
82 For han har jo da .. tydeligvis besvimt.
83 Han har besvimt,
84 så fælt at han er så syk dagen etter @@@@

TS:

85 @@@ Takk skal du ha!

SPEAKER 317

86 værsågod! @@

Track 13 [Speaker 318]

TS:

1 three hundred and eighteen.

SPEAKER 318

2 Hmm,
3 ja.
4 Sylvia,
5 hun har en klassekamerat
6 som heter Tor.
7 Hun er veldig opptatt av han,
8 og hun lurer veldig på
9 om han liker henne.
10 Og hun er også veldig opptatt av,
11 om han vet,
12 at hun liker ham.
13 Men det går flere piker i den klassen,
14 og Anne,
15 hun er også veldig .. veldig .. opptatt av Tor.
16 Hun er litt sjalu,
17 hun er ..
18 ja.
19 Ser det på ansiktsuttrykket!

TS:

20 @@@@@@

SPEAKER 318

21 Ehm
22 …(4)
23 Vil du og Mark bli med meg og Sylvia ut i kveld.
24 Ja.
25 Tor
26 han .. treffer Anne
27 og det hadde han veldig lyst til,
28 og han og kameraten Mark,
29 de .. ber
30 … (6)
31 ska vi se
32 …
33 Tor,
34 han skal ut på byen med Sylvia,
35 og så treffer han Anne,
36 og ber samtidig Anne og Mark blir med ut
37 på byen.
38 Og kvelden,
39 …
40 møtes de,
41 …(5)
42 men der er de Mark og Tor
43 som kommer isammen,
44 og Anne og Sylvia,
45 de har tatt med seg en flaske vin hver.
46 Er det noe mer?

TS:

47 Å ja!

SPEAKER 318

48 De bestemmer seg for å gå ut på en restaurang,
49 Og der skal de spise.
50 …(5)
51 Sylvia
52 hun= har= spist= litt for mye,
53 hun= føler at --
54 opplever at
55 hun ikke klarer å spise opp maten sin.
56 …
57 Men Tor,
58 han er en stor og sterk gutt,
59 og Tor har plass til masse mat,
60 og han vil gjerne spise opp Sylvia sin mat.
61 …
62 Og Mark,
63 han er mest opptatt av vinen,
64 så han tar gjerne litt mer vin,
65 men det ser ut som han har fått .. nok.
66 …(7)
67 Så skal de hjem,
68 God' og mette og,
69 inntatt litt vin
70 alle sammen.
71 Og der er det spørsmålet,

hvem kan kjøre.
Jeg kan kjøre bilen din, Mark,
sier Anne.
Det var ikke så veldig lurt,
fordi Anne hadde også drukket vin, --
… (11)
Hun hadde drukket vin
og det skjedde .. et uhell på veien hjem.
Hun var,
tross ulykke,
lykkelig over at Mark besvimte,
og ikke fikk med *seg,*
at de hadde vært i en ulykke.
Mark våknet dagen etterpå,
og husker ingen ting fra dagen i forveien.
Og husker ikke hvor bilen hans er,
og vet heller ikke hvor Anne er.

TS:

Takk skal du ha!

Track 14 [Speaker 319]

TS:

tre…

SPEAKER 319

nitten.

TS:

nitten?

SPEAKER 319

nitten.

TS:

takk

SPEAKER 319

Ja da har vi Tor da,
som tenker at Sylvia liker meg,
på bilde nummer en.
Og Sylvia,
hun= går og lure på om Tor vet at.. --
og ja, det var- --
Jeg lurer på om Tor vet at jeg liker ham!
Og Anne tenker at,
jeg skulle ønske at Tor likte meg!
…
Så sier Tor til Anne,
vil du og Mark
bli med meg og Sylvia
ut i kveld?
Og da svarer Anne at
det er greit.
Så kommer kvelden.
Så sier Anne
jeg tok med vin.
Og= Mark og Tor
de= svarer i kor .. at
det er kult.
Og Sylvia svarer .. at
det gjorde jeg også.
Så kom dæm til restaurangen.
Og da sitter
Mark og Anne og Sylvia og Tor
rundt et bord,
for å spise.
Sylvia sitter med maten sin og ..
orker ikke --
jeg er mett,
jeg kan ikke spise opp pastaen min,
sier hun.
Og Tor svarer
jeg er fremdeles sulten og
jeg kan spise resten.
Og Mark sitter der,
han ser ut som han har fått nok,
men jeg kan drikke resten av vinen.
Hikk,
sier han.
Og etter middagen,
så=
skal de hjem
og=
da sier både Tor, Sylvia og Anne
kan du kjøre, Mark?
Ingen av de har lyst til å kjøre.
Mark svarer,
nei!
Da kommer Anne og sier,
jeg kan kjøre bilen din, Mark.
Og dermed så .. krasjer hu i en stolpe.
Og litt senere
så sier Anne,
å nei,
jeg kan'kke tro at jeg gjorde det.
Gudskelov at Mark besvimte,
…(3)
og ikke vet om det.
Neste dag.
så sier Mark jeg føler meg elendig,
jeg lurer på bilen min er,
og hvor er Anne?
Altså jeg fikk ikke til å si noe til rundt bildene,
fordi jeg blir så opptatt av den teksten,
Så du klarer ikke da å si

TS:

XXXXXX

SPEAKER 319

XXXXX

TS:

takk!

Track 15 [Speaker 320]

TS:

Og du er nummer--

SPEAKER 320

tre hundre og tjue.

TS:

takk.

SPEAKER 320

Ja,
her har vi da en mann som
tydeligvis er interessert i ei jente,
og så lurer han på åssen han ska=
møte henne da,
altså at han kommer litt i kontakt med 'a.
Og så har hu litt nedover /X under sida X/
så er a,
så er hu litt lei sæi
og hun skulle ønske at han Tor var --
likte henne.
Og så
han Tor, han …
tar med seg --
han vil be med seg henne ut, da.
Og så da be- --
be'enne --
og så ta med seg en annen kar!
Ja.

23 Det skjer ofte.
24 Og så er det den kvelden.
25 Så sier Anne at hu tok med seg litt vin, ja.
26 Anne og Sylvia de tar med seg vin
27 og Mark og Tor er der,
28 så da blir det fire stykke.
29 Så har vi,
30 så går dem,
31 ja her,
32 dæm går ut og spise på restaurang.
33 Og så er det Mark, Anne, Sylvia og Tor.
34 Og så sier Sylvia,
35 jæ er mett,
36 jeg kan ikke spise opp pastaen min
37 … (10)
38 Ja …
39 Men Tor kan spise opp maten hennes.
40 Og så kan /X Mark X/ også drikke opp resten av vinen,
41 tydeligvis,
42 selv om det ser ut som han har fått mer enn nok.
43 Og etter middagen,
44 kan du kjøre, Mark?
45 Nei,
46 ingen kan det,
47 nei han kan ikke kjør
48 fordi han har fått for mye vin.
49 Men Anne da.
50 Anne!
51 Anne tok med seg vin,
52 men Anne,
53 ser ikke ut som hun har drikket noe særlig vin, hu.
54 Så Anne kjører bilen, ja,
55 og så krasjer, ja
56 … (8)
57 Ja
58 … (4)
59 Akkurat.
60 Mark var tydligvis så dritings
61 sånn at han ikke husker noen ting!

TS:

62 Ja, dette var jo… ja

SPEAKER 320

63 Jeg er ikke sikker på om jeg forstod poeng her, men
64 …
65 Mark besvimte og ikke vet om det
66 ..
67 Var det bilen han krasja?

Track 16 [Speaker 321]*

TS:

1 number
2 three hundred and twenty-one.

SPEAKER 321

3 Nå er den på luften.
4 Jeg tror at,
5 Tor er klar over at,
6 Sylvia liker han.
7 Mmm.
8 Men-men Sylvia
9 lurer samtidig på om- om virkelig
10 han vet at hun liker han.
11 …
12 Anne --
13 Anne .. har også ønske om at
14 Tor
15 Tor er glad i sei.
16 Kunne du tenke at Mark og,
17 kunne du tenk deg at
18 at du og Mark ville bli med
19 meg og Sylvia
20 ut i kveld?
21 Ja, det er greit for meg.
22 Jeg tok med meg litt vin.
23 Det syns- det syns vi=
24 Vi g- --
25 det synes .. vi gutter
26 hørtes greit ut.
27 Jeg tok også med meg litt vin.
28 Så er de alle--
29 @@@@
30 etter at de hadde vært --
31 vært hjem og drukket opp vinen,
32 gikk de en tur på restaurang,
33 …(7)
34 Um.
35 …(4)
36 Plutselig sier Sylvia at
37 hun tror hun er mett,
38 og ikke orker spise opp maten sin,
39 Eller pastaen sin,
40 Mens Tor derimot
41 er fremdeles sulten og
42 kunne tenk seg og spise opp
43 resten av maten til Sylvia.
44 Mark er mer av den,
45 drikkesalge, og=
46 ville heller drikke opp vinen istedet for maten.
47 …(6)
48 Når de er ferdig med å spise
49 er ikke de helt enig om hvem skal,
50 som skal
51 kjøre hjem.
52 Så de,
53 spør Mark om han kunne tenk seg å kjøre, men,
54 Mark som ser
55 XXXX /X nekklannen X/ litt beruset ut,
56 så 'n sier nei.
57 Anne derimot har antageligvis ikke drukket så mye og
58 sier at
59 jeg kan kjøre bilen din, Mark.
60 Men hun er såpass uheldig at hun,
61 kjøre bilen i en- i en stolpe.
62 Anne blir veldig lei seg,
63 hun kan ikke tro at hun gjorde det.
64 Men,
65 …
66 hun tenker at,
67 hun veit da godt at Mark besvimte og
68 og av den grunn ikke vet noe om det.
69 Dagen etter, føler Mark seg elendig
70 og lurer på hvor bilen hans er?
71 Han lurer samtidig også på hvor Anne er.
72 Virker det bra?

TS:

73 Ja!
74 Takk skal du ha!
75 Det gjekk bra.

Track 17 [Speaker 322]

TS:

1 three two two.
2 Værsågod!

SPEAKER 322

3 Ja,
4 det er Tor som= vet at Sylvia= liker han,
5 men= Sylvia vet .. ikke om= Tor .. vet om .. hu liker han.
6 Men det er noe hu= gjerne vil få han til å vite.
7 Så= vil Tor gjerne ha'ne med,

8 ..
9 vil gjerne ha med Anne og Mark,
10 ..
11 ut samm'me Tor og Sylvia,
12 erm ..
13 Og de @@@
14 de tar med litt gode å drikke,
15 Anne tar med= vin,
16 Mark og Tor syns det er- det er veldig- veldig gøy,
17 Og Sylvia og har med,
18 har med vin.
19 Så er de
20 kommet på restaurangen,
21 Sitter de og spise,
22 Mark, Sylvia, Anne og Tor,
23 Og sier de --
24 så blir Sylvia veldig mett og
25 klarer ikke å spi- --
26 vil ikke spise mer.
27 Men Tor er,
28 fortsatt sulten
29 så han kan spise resten.
30 Og
31 Mark kan ta=
32 resten av vinen,
33 han ser ut som han har fått .. nok, men.
34 Så er de ferdig med å spise, og=
35 da lurer alle dem på hvem som skal kjøre hjem.
36 Tor, Sylvia og Anne spør alle Mark om han kan kjøre,
37 men= det kan han ikke.
38 Men da finner Anne på at
39 hu kan kjøre bilen til Mark.
40 Det går jo ikke, ik- veldig- veldig bra.
41 Hu krasjer i,
42 ja,
43 det ser ut som et tre.
44 Jo!
45 Anne er veldig lei seg for at hu,
46 @@
47 for at
48 for at hun krasjet,
49 og,
50 @@@
51 hun er også veldig glad fordi @@
52 Mark besvimte så han veit ikke noe om at
53 det er skjedd da.
54 Så våkne Mark= neste dag,
55 og han er veldig=
56 ser ut som han er fullesjuk,
57 og han lurer på hva som er= skjedd, og
58 han vet ikke hvor= bilen er og
59 ikke hvor Anne er.
60 Så han vet ikke hva som skjedde dagen før.
61 Kanskje var det fordi han hadde litt for mye å drikk'.

TS:

62 takk skal du ha!

Track 18 [Speaker 324]

SPEAKER 324

1 dette er tre to fire

TS:

2 @@ takk!
3 værsågod!

SPEAKER 324

4 og forteller en liten historie
5 …
6 D'er en gutt,
7 som lurer på om=
8 Sylvia er interessert i han.
9 Og Sylvia lurer på .. om han vet at
10 hu er interessert i han.
11 Og=
12 så er det ei jente --
13 ei som heter Anne
14 som håper at .. han … liker henne.
15 Og=
16 Tor kommer og= … spørrer Anne
17 om de --
18 om hu og Mark vil være med
19 han og Sylvia ut,
20 i kveld,
21 og det sier hu,
22 det sier Anne,
23 det syns hu er greit,
24 Og det blir sammens den kvelden,
25 så=
26 kommer,
27 da kommer jentene,
28 d'er jentene som kommer,
29 og de har med seg vin= alle sammen.
30 Når skal dere dra?

TS:

31 Hm? XXXX

SPEAKER 324

32 Når skal dere dra?

TS:

33 @@ Ah, berre sånn vorspiel, då!
34 Ja, så er det greit!

SPEAKER 324

35 Skjer det nå noe?

TS:

36 ja!

SPEAKER 324

37 Ja. @@XX
38 Og etter at eit lite vorspiel,
39 så=
40 @@ vi blei enig om det!
41 Ja så,
42 tok de seg en tur på restaurang,
43 for å spise,
44 og= Sylvia
45 hu orker ikke å spise opp
46 maten sin.
47 Men Tor
48 han har gjort
49 han har spist opp,
50 og Mark,
51 han drakk bare masse vin.
52 Og så var de,
53 så skull de på vei hjem og=
54 det var likesom ingen som det var=
55 når de spurt om Mark kunne kjøre
56 men han
57 ville ikke kjøre.
58 Og da sa Anne
59 at hu= kunne kjøre bilen til Mark.
60 Men hu= krasja.
61 Og=
62 hu tenkte bare at det var=
63 Mark besvimte
64 og så hu,
65 og så han ikke visst om det og,
66 dagen etter så= har Mark ein liten sånn 'hangover'.
67 Og han lurer på hvor er blitt av både bilen
68 og litt sånn 'tømmermann'.
69 Han er blitt,
70 hvor er blitt både han og Anne.
71 Det var the end.

TS:

72 takk skal du ha!

SPEAKER 324

73 bare hyggelig!

Track 19 [Speaker 326]

TS:

1 er… tre to seks

SPEAKER 326

2 Ja.
3 Da er det en historie om,
4 Tor som
5 han trur at Sylvia liker= ham,
6 sjølv,
7 Og så er det to jenter,
8 Sylvia og Anne,
9 som= begge liker Tor.
10 Og han Tor spørrer om= Anne og Sylvia vil være med ham og Mark ut.
11 Og s på kvelden så drikker dem vin og /ku:seræi/ /X koser dei X/.
12 Og spiser på restaurang ute.
13 Og Sylvia, hun blir fort mett
14 og orker ikke å spise alt sammen.
15 Mens Tor han er fortsatt sulten og
16 spiser som bare det.
17 Og han drikker også mye vin,
18 og bli litt brisen.
19 Og
20 …
21 nei,
22 det er Mark som er /X gri: X/.
23 Og etter middagen
24 så spørrer dem Mark om han kan kjøre,
25 og det kan han ikke.
26 Imens Anne derimot foreslår å kjøre
27 og=
28 dessverre så krasjer= bilen.
29 /X med henne med X/ /me: na mi:/
30 Da blir Anne veldig lei seg.
31 Og angrer for at Mark han besvimte,
32 og ikke veit hva hu gjorde.
33 Og dagen etter,
34 så=
35 føler dem seg ganske dårlig,
36 og Mark han lurer på hvor bilen er,
37 og hvor Anne er.

TS:

38 takk skal du ha!

Track 20 [Speaker 327]

TS:

1 speaker three two seven.
2 Værsågod.

SPEAKER 327

3 Mm.
4 Sylvia liker Tor.
5 Sylvia lurer på om Tor vet,
6 at henne li- --
7 at hu liker han!
8 Anne skulle ønske Tor likte henne.
9 Tor spør Anne,
10 vil du og Mark bli med meg
11 og Sylvia
12 ut i kveld?
13 Det er greit,
14 sier Anne.
15 Samme kvelden.
16 Anne.
17 jeg tok med vin!
18 Kult,
19 sier Mark og Tor.
20 Det gjorde Sylvia også.
21 På restaurangen.
22 Mar-
23 der sitter Mark og Anne og Sylvia og Tor.
24 Sylvia er mett,
25 hun .. kan ikke spise opp pastaen sin.
26 Tor er fremdeles sulten.
27 Han kan spise resten.
28 Og je- --
29 Og Mark kan drikke resten av vinen.
30 Hikk!
31 Etter middagen
32 så spør Tor
33 og Sylvia og Anne
34 Mark,
35 kan du kjøre?
36 Nei,
37 det kan --
38 nei.
39 Anne kan kjøre bilen,
40 Mark sin bil.
41 Senere.
42 Og nei!
43 Anne kan ikke tro at hun gjorde det.
44 Gudskelov at Mark besvimte
45 og ikke visst om det.
46 Neste dag.
47 Mark føler seg elendig.
48 Han lurer på hvor bilen hans er,
49 og hvor er Anne?
50 Slutt.

TS:

51 takk skal du ha!

Track 21 [Speaker 331]

TS:

1 speaker three three one.
2 Værsågod.

SPEAKER 331

3 ‘N Tor lurer på om o Sylvia like’n.
4 Og Sylvia lure på om ‘n Tor væt at
5 ho like hænn.
6 Og Anne
7 ho ønskje at ‘n Tor sku’ like ho.
8 Så sier Tor at ‘ne Anne
9 vil du og Mark bli med mei
10 og ‘ne Sylvia
11 ut i kveld?
12 Og Anne sier at det e greit.
13 Så kjem oss åt kveld da,
14 og der sier o Anne at --
15 Anne sier at,
16 ho tok med sei vin.
17 Og ‘n Tor og ‘n Mark sier at
18 det var kult.
19 Sylvia fortell at ho æu tok me’ se.
20 Så e dem på restaurang.
21 ‘n Mark og o Anne og o Sylvia og ‘n Tor.
22 Og så sier o Sylvia at ho-
23 ho æ mett
24 og ho kan itte ete opp pastaen sin.

TS:

25 Så var det den neste sia.

SPEAKER 331

Er,
jess
og så ‘n Tor svulte igjen hann,
og så hann sier at han kan ete resten.
Og ikke at han kan drikke resten ta vina
men da fortell ‘n Mark
at han kan gjera.
Etter midda’en så si’ ‘n
så spør både ‘n Tor og Anne og Sylvia
om ‘n Mark kan kjøre.
Men det si ‘n nei att.
Men i kan kjøre bilen din Mark si o Anne.
Krøsj, dem kjøre inn i et tre,
og saner,
så syns ho Anne at --
kan itte tru ho gjorde det ho gjord.
Ho e æu glad for at ‘n Mark hadde

Track 22 [Speaker 338]

TS:

speaker three three eight.
Værsågod.

SPEAKER 338

En,
sannsynlig gutt
Tor,
som er= sikker på= at
en jente som heter Sylvia
liker han da.
Sylvia
ho å lurer på om
Tor vet at ho liker han.
Men det e en liten intrige,
for=
Anne,
hon også skulle ønske at=
Tor,
han var=
likte hon da.
Så=
Tor,
han kommer til Anne da,
å= spørrer hon,
om hon ville vere med ut på by’n en tur.
Jaa=, det var jo greit!
Samme kvelden åssså=
kommer hon Anne inn i rommet å
Mark å Tor de er allerede tilsteder.
Nå kommer= Anne inn da,
å o tok med vin,
å det hadde jo selvfølgelig Sylvia åsså gjort da,
fordi,
ho vil gjøre alt for denne Tor.

TS:

@@@

SPEAKER 338

Kult, si’r æu selvfølgelig Tor å Mark no,
for de får masse flasker med vin.
På restaurangen nå
så plasserer de sei rundt bordet,
hver på sin ande
med Mark å Tor med Ole Dole,
å Sylvia å Anne med Ole Dola.
Å!
Sylvia,
Æ æ mætt!
Klarer ikkje spise pastaen,
sier hon no,
vet du.
Mens= Tor,
åh,
eg e framdeles litt sulten,
så=
han kunne det spise!
Men=, Mark,
han har ikkje spist mye anna,
berre /oß/

TS:

@@@

SPEAKER 338

Kanskje drikke jeg litt mer av vinen, ei!
Litt mer= berusete enn han skulle være.
Ætte middagen,
så= e det Tor å Sylvia
XXXXXX å de har selvfølgelig så lyst å komme seg hjem
å Mark har jo bil,
kan du kjøre Mark,
åa naaii,
han e iallfall ikkje .. i stand til det da.
/Ja come on nei, ja/
Anne kunne selvfølgelig kjøre da.
Men det gikk ikkje så bra.
Senere så=,
etter en liten ulykke da,
så
/oß/
tenker Anne,
dette her kan jo ikkje være noe særlig bra.
Men dæ æ godt da at
han Mark besvimte
så han ikkje merkte at
eg krasjet bilen.

TS:

@@@@@@

SPEAKER 338

Neste dag då
så ligger jo han Mark der
å sikkert litt fullesjuk å
tong i hodet.
/oß/, e føle meg elandig
og han lurer litt på om
kor bilen hans e da,
og kor egentlig Anne e hen da?

TS:

@ Takk skal du ha!

Track 23 [Speaker 339]

TS:

informant tre tre ni,
værsågod

SPEAKER 339

Æm.
det er en gutt som heter Tor,
som lurer på om,
om det er en jente
som liker’n,
som heter Sylvia,
og hun li- --
nei han veit at han --
hu liker han.
Og så er det en annen jente,
hu Sylvia lurer på om ‘n Tor vet at hu liker han.
Og så er det Anne da,
hun er litt og litt forelska i .. Tor.
Så er det --

møte de to andre hverandre.
Og Tor spørrer om ..
Anne har lyst til å bli med ..
Mark og Sylvia
ut i kveld,
og hu Anne har selvfølgelig lyst til det,
fordi hu er forelska i Tor.
Ah, senere kvelden da så møtes= alle fira,
Og jentene de har tatt med sei vin,
som de skal drikke,
/?det blir ikke kjenn på det/.
Så drar de på en restaurang,
sitter og spiser alle sammen.
Ah,
Sylvia, hun blir mett
og så få ikke spist opp pastaen sin.
Men Tor han .. tar og så=
spiser opp resten av pastaen hennes da,
han er jo kjempesulten.
Ah=
Og så= Mark,
han har veldig lyst til å drikke opp resten av vinen,
og så begynner han å bli litt sånn småfull,
Og så skal de dra hjem.
etter middagen da.
Og Mark han kan ikke kjøre.
Men Anne,
hu kan kjøre hu.
Men det som skjer det er at,
hu kjører rett i et tre og hu krasjer bilen.
til Mark.
Ja.
Dagen etter da.
Nei,
senere på kvelden,
så er Anne kjempe lei seg,
for at hu .. kjørte bilen til Mark,
og han besvimte og
hu er --
hu er kjempe glad for at han besvimte,
for da vet han ikke noe om det.
Og Mark våkner neste dag,
så .. føler han seg veldig elendig,
sikkert fullesjuk og sånn.
Han lurer på hvor bilen sin er,
og hvor Anne er?

TS:

takk skal du ha!

Track 24 [Speaker 385]*

TS:

speaker= tre åtti fem.

SPEAKER 385

Ja.
det er det fyst ein Tor,
ja, asså,
som tenkje på om at o= Sylvia lika se,
eller lika hannj.
Å
Sylvia lura på om ‘n Tor .. veit at .. at ho lika hann.
Å Anne tenkje at --
skull ønskjt at --
at yn skull ønskjt at ‘n Tor lika se.
Eller lika ho.
Og ‘n Tor han spår om --
spår ho Anne om .. ho og Mark .. vil= bli me se og= hono Sylvia
ut i kveld.
Og Anne si at
de er greitt.
Og så e det kvelden.
E tok med vin,
sei ho Anne.
Kult,
svar han Tor og Mark.
Det gjord i å,
sei ho Sylvia.
Og så set dæm på= restaurong all fir,
med mat og drikk.
Og så er det gått ei stund
så sei ho Sylvia,
at ho e mætt
å at ho kann itje eta opp pastaen sin.
Men i e framdeles svolte,
i kan eta resten
sei han Tor.
Å i kan drikk resten ta vin,
sei han Mark.
Han begynne visst å bli god og godt /på jannj/.
Etter midda’en så=
spår ho .. Anne og Sylvia og Tor
om ‘n Mark kan kjør.
Nei,
svar an.
Men i kan kjør bilen din, Mark
sei ho= Anne.
Å så krasje hon mot et tre.
Og seinar så=
så e ho Anne fortvila,
ho kann itje tro at ho gjord’det.
Men gudskelov at ‘n Mark besvimte og itje veit om det.
Næste dag så føle ‘n Mark sei elandig
å han lure på kar bilen sinnj er.
Og kar o Anne e.
Å så var det slutt.

TS:

tusen takk!

Track 25 [Speaker 386]*

TS:

three hundred and eighty-six.
Take two.

SPEAKER 386

@@@@
okay.
Tor --
å så bilde en.
Tor tenke --
øøø,
Sylvia like= mæi,
blir det.
Okay,
men bilde to.
Sylvia tenke at
hu- hu lure på om Tor veit at hu like ‘en.
Bilde tre.
Der tenke Anne, …
at hu skulle ønsk at Tor likt sæ.
Bilde fire,
Dær sjer Tor,
ah,
ka /X bilde va det X/

TS:

Ka for nåke?

SPEAKER 386

Bilde fire,
vil du ha det fremdeles i tredje person,
sånn?

TS:

ja, alt

SPEAKER 386

Dær sjer Tor til Anne at --
…
mm
vil du å Mark bli med --
Sss…
ka blir det på tredjers, da?

TS:

ja,
du [kan likesom] OMbeskriva det litt,

SPEAKER 386

[kan du]

TS:

[[/ XXXXXX /]]

SPEAKER 386

[[okay, da vil det bl- --
da vil det bli
okay]]

TS:

sant?

SPEAKER 386

vil du å Mark bli me mæ å Sylvia ut i kveld?
Mm,
å da= Anne syns at det e heilt greit.
Ja.
Fem den kvelden.
Ja.
Det e vanskele det[å]snakke hær men okay.

TS:

[mm]

SPEAKER 386

Anne sie at= hu tok me vin.
Å det syns Mark og Tor er helt kult.
Sylvia å sie at ø= det gjorde hu også.
Sæks.
På restaurongen.
Dær e= sie dem ingen ting,
dær sitt dæm bare rundt et bord.
Sju.
Så seie hu Sylvia at
hu e mætt,
å at hu it kan spise opp .. pastaen sin.
Otte.
Tor sie at hannj e fremdeles sulten,
å at
hannj kan spise resten.
Bilde ni,
så= trur æ Mark si eller tenke,
hann si kanskje,
ihvertfall at
hann kann drikk resten av vin.
Å ti.
Ætte midda'en
så spør Tor, Sylvia å Anne om= at
Mark kan kjør.
Å hann si,
nei.
Ellve,
så si Anne at,
hu kann kjør bilen te Mark.
Å= tolv,
senere,
så si Anne at --
at --
å nei,
hu kan it tro at hu gjord'det,
øm,
gjord' hva?

TS:

@

386:

krasj!
@
Okay, greit!
@
Øh,
gudskelov at Mark besvimte
å itj veitt om det @@.
Trætten.
Øø,
neste dag,
så sie Mark,
at hannj føle sæi elendig
og at 'n lure på kor bilen er hen.
Å kor er Anne.

TS:

takk skal du ha!

Track 26 [Speaker 504]

TS:

informant fem null fire, værsågod

504:

Ja,
Tor er en fin, liten gut,
Han .. er interessert i ei jante som hete Sylvia.
Og en dag … såg Sylvia så pent på han og då tenkt 'an,
Sylvia lika me!
Og ho Sylvia ho er sikker
ho likte Tor,
men ho æ ikje sikker.
Æi lure på om han Tor veit at æi like han?
E skull ynskje Tor likte me.
Han e så fin en gut.
Vil du og Mark bli med mei og Sylvia ut i kveld?
Greit,
sa han.
Å kvelden kom.
Æ tog me litt vin,
det sa Anne.
Kult,
sa Tor og Mark.
Det gjorde e ó,
sa Sylvia.
Å de kom dær til restaurangen.
Dær satte sei rundt et stort, fint bord.
Mark og Anne,
Tor og Sylvia.
Å dem åt å åt
å drakk å drakk.
Te slutt sa Sylvia,
ei æ mætt.
E kenn ikji ete æup pastaen min.
E e framdeles svolter e,
sa 'n Tor.
E kan eta resten.
Å e kan drikke resten ta vin din.
Hikk,
sa Mark.
Etter middagen.
Så lurer dem på
/X kæn X/ dem sku komme dem heimatt.
Kenn du kjøre Mark?
Nei!

43 sa han.
44 Han har drukje for mykje vine.
45 Og det har vel desse andre tri å da?
46 E kenn kjøre bilen din,
47 Mark,
48 sa ho Anne.
49 Og døm kjørde,
50 men det gikk ikje så bra.
51 På veigen så møte dem- @@

TS:

52 @@ så møte dei eit tre?!@

SPEAKER 504

53 så møte døm et tre @
54 å det sa krasj!

TS:

55 Treet sa krasj, altså? @@@@

SPEAKER 504

56 Æu, æu æ æu æu,
57 å nei,
58 e kan ikje tru .. at e gjorde det.
59 Gudskelov at Mark /X oatter X/
60 å ikje veit om det,
61 så Anne,
62 gråtande.
63 Neste dag ..
64 sa Mark ..
65 e kjenne me så låg,
66 e lure på kor bilen min æ,
67 å kor æ o Anne?

TS:

68 @ takk skal du ha!

Track 27 [Speaker 701]*

SPEAKER 701

1 Ja,
2 dette her er ei fortelling
3 om ein som hete Tor,
4 og han .. lurer på om o S-Sylvia like'n.
5 Men så Sylvia, ho .. lurer på om'n Tor vat
6 at ho like han.
7 Og så e det æu ei som heite Anne,
8 å o tænkje som så
9 at o skulle ønskjt
10 at'n Tor likte .. me,
11 tenkje ho.
12 Eller o tenkje altså at
13 @
14 …
15 @@
16 det var dire- direkte taling
17 og det var ikkje meining at det skulle vere det da. …
18 men ho --
19 ho ønsk- --
20 skulle ønskjt
21 at'n Tor likte se.
22 Og det neste det --
23 det e at'n Tor,
24 han spør o Anne,
25 om ho vil at ..
26 ho og Mark skal bli med se,
27 nei
28 bli med honom,
29 og Sylvia,
30 ut i kveld (/kwel/).
31 Å da svare o Anne at
32 det e greitt.
33 Den kvelden
34 har o Anne ti me sæi vin
35 og blir 'n Tor og 'n Mark svert så glad i for.
36 Men o Søl- Sylvia har æu faktisk
37 ti me sæi vin.
38 Det blir mye vin der tydeligvis.
39 Og så e dem på restaurang da,
40 og der s= --
41 sitter rundt bordet,
42 både 'n Mark og o Anne og 'n Tor og o Sylvia.
43 Å o Sylvia,
44 ho bli nokså brått mett,
45 og sier at ho kan ikkje eta opp .. pastaen sin.
46 Mens 'n Tor han er fremdeles svulte,
47 og si at 'n kan ete resten.
48 Og Mark, han e fremdeles tyst,
49 og så si at 'n kan drikke resten ta vinen.
50 Eller resten ta vina.
51 Dativ.
52 Etter midda'en,
53 så,
54 skal sjå,
55 så ska dem til å kjøre hemat.
56 Det må vere ein som ikkje kan kjøre,
57 for dem har drukkje for my'.
58 Så Mark han si at han kan ikkje kjøre,
59 når --
60 når 'n Tor og Anne og Sylvia spør han om det.
61 Mens o Anne ho si,
62 da,
63 at ho kan kjøre bilen hass .. Mark.
64 Det går da dessverre ittje bra,
65 dermed ho kollidere,
66 kjøre inn i et tre.
67 Å noe sanere så
68 …
69 så synes o Anne det e rart
70 at dette her e skjedd,
71 kan ittje tro at o a gjort det.
72 Å o e gla' for at 'n Mark besvimte,
73 å ikke vat om det som e skjedd,
74 tænkje o.
75 Neste dag
76 så sir'n Mark at 'n føle seg elendig,
77 og så lure'n på kor bilen hass e hen.
78 Og lure æu på kor o Anne e hen.
79 Og det var slutten.

TS:

80 takk skal du ha!