Discourse Participants and the Structural Representation of the Context

by

Vera Zu

A dissertation submitted in partial fulfillment

of the requirements for the degree of

Doctor of Philosophy

Department of Linguistics

New York University

May, 2018

<div style="text-align: right">

_____

Anna Szabolcsi

</div>

Dedication

In ever loving memory of

Jinrong Gu

who knew I'd be a PhD long before I did

Acknowledgements

This dissertation is a group enterprise, and I am grateful, first and foremost, to my language consultants who were so generous with their time, for sitting through hours of elicitation sessions, in many cases repeating the same phrase over and over and over and over. It has been a privilege to get to know you all!

A special badge of heroism was earned by six linguists who read and critiqued the entire manuscript: Stephanie Harves, Richard Kayne, Idan Landau, Shigeru Miyagawa, Philippe Schlenker, and Anna Szabolcsi. I've benefited immensely from their acute observations, incisive comments and words of encouragement. They are the major creative force behind this work, but none of them should bear responsibility for its shortcomings.

For years Anna has read every word I've written. Needless to say her fingerprints grace each page in this dissertation (except for this one). She has challenged me to think more deeply and encouraged me to reach more broadly. Stephanie has gone far above and beyond the call of duty in offering her help, support and friendship, ever since I joined the department. She's that person to talk with whenever I have doubts about work, study or life in general. Richie is the only one on earth who asks *what about* questions to inspire, not to baffle. I also thank him for not having written up my dissertation idea twenty years earlier. Philippe kept on providing clear thinking, calm guidance, and analytical

Abstract

The starting point of this dissertation is the observation that the utterance context is essential in the way we understand a great number of expressions in natural languages. With a few exceptions the utterance context does not get the attention it deserves in the theoretical literature. The central claim of this dissertation is that the utterance context, just like the linguistic context, is part of syntax and has an internal structure. Empirically it deals with a wide variety of language data, including materials collected from my own fieldwork in two under-researched Tibeto-Burman languages—Jingpo and Newari. Theoretically it offers a formal account of how syntax and the discourse interact and how this interaction should be represented.

I propose that the structure of the utterance context consists of two tiers. The head of the top tier, the Speech Act Projection (saP), takes the speaker and the addressee as its arguments. The speaker and the addressee are syntactically present in a fixed configuration. They are discourse anchors. This projection is only present in root clauses and is responsible for root clause phenomena across languages. The head of the second tier, the Sentience Projection (SenP), takes a perspective center as its argument. This projection is independent from the saP. In attitude complements it is embedded under an attitude predicate. The SenP is sensitive to the mood, modality, and event types of its complement

clauses and is responsible for point of view phenomena. Depending on where the SenP is merged to, the perspective center can be anchored to different levels and shift its reference accordingly.

Finally, I consider three types of semantic relations that the perspective center may hold with respective to Sen's complement. I identify three grammatical properties underlying these relations. (i) Knowledge: The subject of Sen's complement is co-referential with the seat of knowledge, the individual whose beliefs are used to determine the truth of the complement proposition; (ii) Responsibility: The subject of Sen's complement is co-referential with the responsibility holder, the individual who intentionally brings about the complement event; and (iii) Internal perspective: The perspective center takes a true first-person perspective of the event in Sen's complement. I argue that an implicational hierarchy holds among them, which provides a principled explanation for the fact that across languages, point of view phenomena do not vary in unlimited ways. If a construction requires knowledge, it also requires responsibility and internal perspective. If it requires responsibility, it also requires internal perspective. The core proposals provide a suitable framework for analyzing a wide range of phenomena, including canonical control, jussive mood, volitional modal, and predicates of direct experience.

Contents

List of Tables

Introduction

1.0 The linguistic interest of context

We perform speech acts in context and understand many expressions (e.g., *you, they, this, there, tomorrow, last month*) with reference to the context of the utterance. Moreover, the preceding and surrounding text also provides a linguistic context for our utterances. While studies of the linguistic context are numerous and their key findings help shape and inform standard linguistic theory to a large extent, the utterance context has been marginalized in the linguistic literature. This dissertation aims to bridge the two types of contexts by examining how the discourse participants, i.e., the speaker and the addressee of the utterance, are represented in syntactic structure, over and above providing anchors for context-dependent expressions.

The great theoretical interest of context can be discerned by the way we understand anaphors and pronouns. Expressions like *herself* and *he* depend on antecedents within the

linguistic context (Lees, 1963). While *herself* must find its antecedent within the confines of the clause boundary (1a), *he* may (and sometimes must) search beyond that (1b).

(1) a.   Mary$_1$ can look after *herself*$_1$.
    b.   Don't ask John$_1$. *He*$_1$ won't know.

Indexicals like *I* and *you*, on the other hand, pick their referents from the utterance context (Kaplan, 1989a). The referent of *I* is identified as the person who utters it (the speaker), whereas the referent of *you* is identified as the person to whom it is addressed (the addressee). If Romeo and Juliet each say *I love you* to the other, both of them assert something new. The decoding of indexicals requires the integration of linguistic knowledge and knowledge about the utterance context.

    Ross (1970) is among the first to notice that under specific conditions, anaphors *myself* and *yourself*, can refer to the speaker (2a) and the addressee (2b), just like indexicals do. This is somewhat surprising given standard assumptions about anaphors, namely that they require antecedents (cf., *John can look after her/*herself*).

(2) a.   No one is to blame except *myself*.   (*myself* = speaker)
    b.   Most of our customers are people like *yourself*.   (*yourself* = addressee)

The situation is more puzzling still, since once we look beyond English, the converse situation may be found: even indexicals like *I* and *you* can be interpreted relative to the linguistic context. Consider Amharic (Semitic, spoken in Ethiopia). Whereas the English sentences *John says that he is a hero* and *John says that I am a hero* have starkly different meanings, the Amharic sentence that contains the first person pronoun *I* is ambiguous between those two meanings (3).

(3) Optional indexical shifting in Amharic (Schlenker, 2003a: 68)
    ǰ*ohn* ǰə*gna* $\boxed{nə\text{-}\tilde{n}\tilde{n}}$ *yɨl-all*
    John hero be.PF-1S 3M.say-AUX.3M

    (i) John says that I am a hero.   (*I* = Speaker)
    (ii) John$_1$ says that he$_1$ is a hero.   (*I* = *John*)

An interesting parallel observation concerns predicates of personal taste such as *fun* and *tasty* (Stephenson, 2009).

(4) a.   Snowboarding is *fun*.   (*fun* for the speaker)

   b.   Is snowboarding *fun*?   (*fun* for the addressee)

   c.   John said that snowboarding was *fun*.   (*fun* for *John*)

   d.   John asked Mary if snowboarding was *fun*.   (*fun* for *Mary*)

The interpretation of *fun* is speaker/addressee-dependent in the root clause (4a-b), but in the complement clause, matters are different. In (4c-d), the subject (*John*) and indirect object (*Mary*) of the root clause take over the reference point for personal taste.

The two-fold moral of these observations is as follows. First, discourse participants may be systematically represented in the syntactic structure of sentences, even when indexical pronouns are not overtly realized. Second, the subject and indirect object of root clauses with so-called propositional attitude verbs (*say, ask, think,* etc.) play the same roles with respect to complement clauses as discourse participants do with respect to root clauses.

The next question that arises is whether these claims can be substantiated and made more precise on the basis of detailed linguistic data. Are there languages whose grammar encodes such aspects of interpretation with the same explicitness as Romance languages encode present versus past tense? What kind of encoding might that be?

The goal of this dissertation is to investigate specific questions regarding how the roles of speaker and addressee are represented in syntax. I approach this question from a crosslinguistic perspective by conducting new fieldwork in two Tibeto-Burman languages: Jingpo (SOV, spoken in Myanmar and Southwest China) and Newari (SOV, spoken in Nepal). Both languages have grammatical constructions that directly make reference to the speaker and the addressee, and serve as a good testing ground for a linguistic theory of context.

1.1   What can Jingpo and Newari teach us?

Unifying the two types of contexts is not a trivial shift in linguistics. It ushers in phenomena that so far have been left entirely outside the domain of grammar. For instance, sentence-final particles like *eh, huh, right, again*, etc., are rarely if ever discussed in the generative literature, with the exception of two recent articles (Wiltschko and Heim, 2016; Kayne, 2016). The tag *eh* (5), typically found in Canadian English, serves to grab the addressee's attention, but neither the meaning nor the grammaticality of the sentence changes if *eh* is left out.

(5)   What do you think of that, *eh*?

    In Jingpo, however, the situation is different. A similar discourse function is expressed by the sentence final particle (SFP) *sǝta* (6).

(6)   Agreement with the addressee in Jingpo (Dai, 2010: 10)
    Hkying gade   htu   sǝ-ta ?
    time   how.many point 2SG-WH

    'What time is it?'

Unlike in English, the SFP *sǝta* is grammaticized—it carries agreement. Agreement is regarded as firmly grammar-internal. In Jingpo the particle *sǝta* agrees with the second person singular subject in a similar way (7a). When the subject is in the third person singular, *sǝta* becomes *saʔta* (7b).

(7) a. *Nang gadai hpe ya kau   sǝ-ta ?*
      you whom   have.given 2SG-WH

      'Who have you given (it) to?'

   b. *Shi   gadai hpe ya kau   saʔ-ta ?*
      (s)he whom   have.given 3SG-WH

      'Who has (s)he given (it) to?'

Given that the SFP co-varies with the grammatical subject, the example (6) is intriguing, because its subject is *hkying* 'time', not *nang* 'you'. When Jingpo speakers wish to grab the addressee's attention, they make the SFP agree with the addressee, even if the actual subject is a different person.

Data of this sort suggest that the addressee (as well as the speaker) can be targeted for agreement in Jingpo. If agreement is a morphosyntactic process, it follows that the addressee and the speaker need to be visible in syntax. Therefore Jingpo provides evidence that discourse participants, even when not pronounced, are present in syntactic structure. Moreover, the direct effect both discourse participants and overt pronouns have on the form of the discourse particles makes it possible to draw a direct comparison of the two, which previous work has not been able to do.

Newari provides another piece of the puzzle. This language uses a special morpheme to indicate that in a complex sentence the subject of the complement clause has the same referent as the root clause subject does. Unlike in English where the sentence *Shyam said that he ran away* is ambiguous between Shyam running away and someone else running away, (8a) only has the reading that *Shyam* said something about himself. In a root clause declarative, however, the same morpheme can only be used with first person pronouns (8b). Changing the subject of *wan-ā* to *cha* 'you' or *wa* '(s)he' is unacceptable.

(8) a. *Shyam-a*   *[wa* $\boxed{\textit{bwye wan-ā}}$ *dhakā:] dhāl-a.*
Shyam-ERG (s)he.ABS run.away-CONJ:PST that say-DISJ:PST
'Shyam$_1$ said that he$_{1/*2}$ ran away.'

   b. *Ji/*Cha/*Wa* $\boxed{\textit{bwye wan-ā}}$.
I.ABS/you.ABS/(s)he.ABS run.away-CONJ:PST
'I/*you/*(s)he ran away.'

This suggests that the grammar of Newari parses seemingly simple sentences like (8b) as complex ones like (8a); roughly, *I say I ran away*.

Unifying the linguistic context and the utterance context, such that *I* seeks the speaker as its antecedent in the same way as *he* seeks *Shyam*, is not a new idea. Half a century ago, Katz and Postal (1964) and Ross (1970) reach a similar conclusion. They assign to the simple declarative clause S a deep structure of the form *I tell you that S*. This is the now-famous Performative Hypothesis (PH). However, PH has received its fair share of criticism from semanticists (Fraser, 1974; Heal, 1977; Gazdar, 1979) ever since it sees the light of day. For that reason, in standard semantic theories the utterance context is built in the semantics of certain heads, in terms of coordinate tuples $\langle \text{SPEAKER}(i), \text{ADDRESSEE}(i), \text{TIME}(i), \text{WORLD}(i) \rangle$ for example, rather than as syntactic structures, and holds only a semantic relation with the variables it binds (e.g., quantification over properties or centered worlds). After all, the overwhelming majority of context-dependent phenomena that have been identified in the literature are based on the interpretation of syntactic objects, cf. (4), not their morphological shape. The question that naturally arises then, is whether the utterance context should be syntactically represented. Do context-dependent expressions bear a bona fide syntactic relation with the discourse participants? Do discourse participants have consequences at the PF side of the grammar? Does the utterance context have an internal structure, just as the linguistic context?

This dissertation serves to answer these questions by investigating a set of agreement processes in Jingpo and Newari. The Jingpo and Newari languages are critical, because they encode identities of the discourse participants and the perspectives those participants take in making statements and posing questions, in specific grammatical ways that English and other well-researched languages do not employ. As will soon become evident, the familiar languages of Western Europe are overshadowed once again by the complexities of systems found elsewhere in the world. Finally, it aims to offer a unified framework for the analysis of these languages as well as English, French, and others, drawing on a wide range of theoretical syntactic and semantic literature.

1.2 Organization of chapters

Following this introductory chapter, the dissertation is divided into five chapters. Chapter 2 lays out the core proposals of the two-tiered structure of the utterance context. It begins with the empirical motivations for a structural approach to the discourse. Drawing data from binding and morphological agreement, I argue that the two most salient individuals in the utterance context, namely, the speaker and the addressee, are better analyzed as syntactic objects. They are identical to the first and second person pronouns in terms of morphological features and can be targeted for syntactic operations. Specifically, I propose that they are structurally organized in a fixed configuration. They are arguments of the two Speech Act heads, Sp and Adr, respectively. The resulting projections, the SpP and AdrP, are only present in root clauses and are not sensitive to the mood, modality or event types, etc., of the clause.

(9) The Speech Act Projection (in root clauses only)
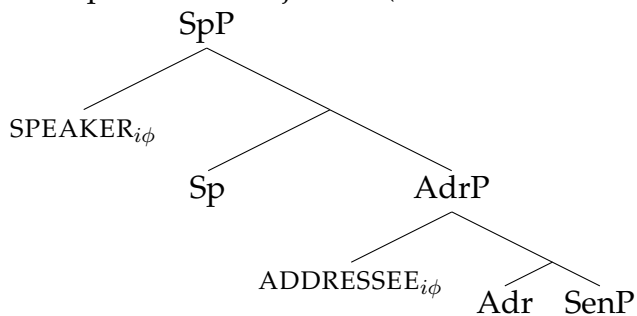
$$
\begin{array}{c}
\text{SpP} \\
\diagup \quad \diagdown \\
\text{SPEAKER}_{i\phi} \qquad \\
\qquad \text{Sp} \qquad \text{AdrP} \\
\qquad \qquad \text{ADDRESSEE}_{i\phi} \\
\qquad \qquad \qquad \text{Adr} \quad \text{SenP}
\end{array}
$$

The existence of point of view phenomena in natural languages calls for a separation of discourse anchors that hold constant across clauses from perspective shifters that provide changing points of view. The solution is to add a separate layer, the Sentience Projection (SenP), in addition to the saP. Its specifier is a perspective center whose reference is allowed to shift. In root clauses the SenP is selected by the sa head. In attitude complements it is selected by an attitude verb.

(10) The two-tiered structure of discourse

a. Root clauses

$\overbrace{\qquad\text{The Speech Act layer}\qquad}$ $\overbrace{\text{The Sentience layer}}$ $\overbrace{\text{root clause}}$

[SPEAKER [Sp [ADDRESSEE [Adr [PERSPECTIVE [Sen [TP ...

b. Attitude complements

$\overbrace{\text{root clause}}$ $\overbrace{\text{The Sentience layer}}$ $\overbrace{\text{complement clause}}$

[Attitude holder [v ... [PERSPECTIVE [Sen [TP ...

The SenP has two important properties. First, it is embeddable. Its embeddability helps bridge the linguistic context and the utterance context. Secondly, the perspective center in Spec, SenP can shift its reference in reflection of various relations. In Chapters 3 through 5 I put into concrete terms what these relations are and how they affect the way we speak.

In the previous section we have seen that in Newari a special verb morphology, the so-called conjunct suffix, is employed when the matrix subject is co-indexed with the embedded one (8). A closer look at this construction indicates that the co-indexation between the two adjacent subjects is a necessary, but not a sufficient condition for the conjunct morphology, cf. (11a).

(11) a. *Shyam-a   dhāl-a   ki   [wa birāmi juy-ā].
       Shyam-ERG say-PST.DISJ that he   ill   become-PST.CONJ

   (Int.) 'Shyam$_1$ said that he$_1$ became ill.'

   b. Shyam-a   dhāl-a   ki   [wa birāmi jul-a].
      Shyam-ERG say-PST.DISJ that he   ill   become-PST.DISJ

   'Shyam$_1$ said that he$_1$ became ill.'

On the basis of detailed Newari data, I propose in Chapter 3 that the distribution of the conjunct verb form is simultaneously conditioned by three grammatical properties, namely, knowledge, responsibility and internal perspective. The complete generalization is summarized as follows.

(12) The distribution of Newari conjunct verbs

    a.   When the conjunct verb is used, its subject is co-referential with the seat of knowledge. The seat of knowledge is defined as the individual whose beliefs are used to determine the truth conditions of the complement proposition.

    b.   When the conjunct verb is used, its subject is co-referential with the responsibility holder. Responsibility holder is defined as the individual who intentionally brings about the complement event.

    c.   When the conjunct verb is used, its subject takes an internal perspective of the complement event. The internal perspective is defined as the true first-person perspective, from which the attitude holder self-ascribes as performing an action or experiencing an emotion or sensation denoted by the complement event.

For the conjunct morphology to be possible, all three conditions must be satisfied. If any of them fails to obtain, the default disjunct morphology is used instead.

Chapter 3 also addresses the relationship between the three properties. In particular, I propose that the following hierarchy holds crosslinguistically.

(13) Knowledge → Responsibility → Internal perspective

The arrows above indicate *implication*. A implies B if and only if when A is true B is also true. Implication can be used to capture linguistic generalizations. If it holds that A implies B, it means if a certain phenomenon exhibits property A, then it also exhibits B.

The hierarchy (13) predicts that the properties—knowledge, responsibility and internal perspective—are not equally relevant across point of view phenomena. For example, since knowledge implies responsibility, we say if a point of view construction requires its subject to be the seat of knowledge, then it also requires it to be the responsibility holder. This hierarchy is falsifiable. If it holds, then there should not be point-of-view phenomena that exhibit the knowledge property but not the responsibility property. The complete paradigm of possible point of view phenomena defined by (13) is tabulated below. Showing sensitivity to all three properties, Newari conjunct constructions (12) belong to the first type.

Table 1.1: Three Types of Point-of-View Phenomena

		Knowledge	Responsibility	Internal Perspective
I	Newari conjunct marking	✓	✓	✓
	Korean volitional modal	✓	✓	✓
II	Canonical control	—	✓	✓
	Jussives	—	✓	✓
III	Gerundive complements	—	—	✓
	Predicates of direct experience	—	—	✓

Chapter 4 explores in finer detail the second type of point-of-view phenomena, in which responsibility and internal perspective, but not knowledge, play a key role in the choice of perspective. I focus on canonical control in particular. In Hungarian and many Eastern European languages, the subject of an embedded clause must be bound by a matrix argument when the embedded clause is in the infinitive. The subjunctives, in contrast, typically exhibits the disjoint reference effect, known as obviation.

(14)   Control vs. obviation in Hungarian (Szabolcsi, 2010: 3)

    a.   *Szeretném   meglátogatni Marit.*
       would like.1SG visit.INF   Mary.ACC

       'I would like to visit Mary.'   (infinitive, control)

    b.   #*Akarom,   hogy meglátogassam Marit.*
       want.1SG that visit.SBJV.1SG Mary.ACC

       (Int.) 'I want for me to visit Mary.'   (subjunctive, obviation)

Subjunctive subjects are exempted from obviation under specific circumstances.

(15)   Exemption from obviation in Hungarian (Szabolcsi, 2010: 4)

    a.   *Szeretnék egészséges lenni*
       like.1SG healthy   be.INF

       'I would like to be healthy.'

    b.   *Akarom, hogy egészséges legyek*
       want.1SG that healthy   be.SBJV.1SG

       'I want for me to be healthy.'

In Newari, we find the same obviation (16b) and exemption-from-obviation effects (11), but they do not involve subjunctive mood, nor are limited to embedded clauses (17b).

(16) Conjunct vs. Disjunct marking in attitude complements

    a. $[_{TP}$ ... Subject$_1$ ... $[_{TP}$ Subject$_1$ T-CONJ ...]]   (conjunct, control)

    b. $[_{TP}$ ... Subject$_1$ ... $[_{TP}$ Subject$_2$ T-DISJ ...]]   (disjunct, obviation)

(17) Conjunct vs. Disjunct marking in root clause declaratives

    a. $[_{saP}$ ... SPEAKER$_1$ ... $[_{TP}$ Subject$_1$ T-CONJ ...]]   (conjunct, control)

    b. $[_{saP}$ ... SPEAKER$_1$ ... $[_{TP}$ Subject$_2$ T-DISJ ...]]   (disjunct, obviation)

The two sets of data are unified in my framework. What distinguishes the infinitive-subjunctive contrast from the conjunct-disjunct contrast, however, is the strictness of complementarity between two competing expressions. In Newari, if the disjunct verb can be used, it must be used. In Hungarian, both the infinitive and subjunctive forms are acceptable in cases of non-canonical control, i.e., when the controller bears no responsibility relation with the complement clause (Farkas, 1992). This is summarized in the following table.

Table 1.2: Canonical vs. Non-Canonical Control

Control types	Complement denotes:	Infinitive	Subjunctive	Conjunct	Disjunct
Canonical	intentional, willful event	✓	*	✓	*
Non-canonical	state	✓	✓	*	✓
	unintentional action	✓	✓	*	✓
	uncontrollable action	✓	✓	*	✓

Conjunct constructions, therefore, differ from infinitives in that the former grammaticizes canonical control. Infinitives, on the other hand, are structurally ambiguous between canonical and non-canonical control.

Chapter 5 addresses a crucial characteristic of perspective shifters—the perspective center must ascribe *de se* attitudes. Rather than treating the *de se* ascription as a side issue, I argue that it is pivotal to our understanding of perspective shifting. More specifically, I divide *de se* expressions into two major classes, i.e., nominal and verbal *de se* expressions. Though the two types of *de se* expressions share many things in common, they differ in at least two aspects.

(18) a. Verbal *de se* expressions are more restricted structurally than nominal *de se* expressions.

b. Verbal *de se* expressions are more selective in the types of events they are compatible with than nominal *de se* expressions.

Drawing empirical data from all three types of point-of-view phenomena, I show that verbal *de se* expressions manifest logophoric control and systematically encode internal perspective of the embedded event. Accounting for the syntactic and semantic differences between the two types of *de se* expressions, I propose an agreement-based account for verbal *de se* expressions. The syntactic differences, in turn, reflect different *de se* relations. Verbal *de se* expressions need to be read *de se* with respect to both the individual argument, whereby the higher subject is aware of his/her identity with the complement subject, and the event argument, whereby the higher subject takes an internal perspective on the complement event.

Chapter 6 concludes this dissertation with some suggestions for further research.

1.3   A note on data collection

Before turning to the main body of the dissertation, a note on methodology is in order. This dissertation deals with a wide variety of language data. They can be generally divided into three groups.

(19) a.   English

    b.   Jingpo and Newari

    c.   Other languages including but not limited to Basque, Hungarian, Japanese, and Korean

The intuitive judgment data from English, unless otherwise referenced, are collected from native speakers of American English using informal questionnaires. The judgment responses were recorded as simple yes-no responses (with *not sure* as a third potential option, indicated as ? in front of the relevant examples), rather than continuous values. For some of the phenomena examined in this dissertation, there is a great number of variation among the responses. Given the limited sample size (n<15) and coarse-grained measurements, the results reported in this dissertation should not be used to draw any definite conclusions on speaker variation.

There are two main sources of Jingpo and Newari data used in this dissertation. A small portion of them comes from previous publications with their references being clearly specified. The others were collected from my own fieldwork. Jingpo is spoken in the China-Myanmar border. Newari is spoken in Nepal. In both regions the official languages are something entirely different. As a result, all of my informants are fluent multilinguals. One factor I cannot account for is to what extent Jingpo and Newari are influenced by Chinese, Burmese, or Nepali.

Jingpo's writing system was created based on the Latin alphabet by the British missionary O. Hansen at the end of the nineteenth century. I adopt this system in my own report. Newari, however, does not have an official writing system. While some of the speakers use the Nepali script for writing Newari, this practice may not be widely accepted. In this dissertation I adopt the unofficial romanization based on the Nepali script used by my informants, instead of transcribing everything in IPA. Admittedly, this may create inconsistencies with other work.

For both languages, I worked with only a small number of speakers. As a result my study cannot properly address speaker variation. The fieldwork consists in regular meetings with native-speaking consultants, and is inspired by Matthewson's (2004) techniques in data elicitation. Specifically, at each meeting I first ask the speaker for translations of particular sentences. Then I pair the sentences with particular discourse contexts, and ask them whether in the discourse contexts provided, the sentences are (a) felicitous and (b) true.

This dissertation also includes data from other languages. They mainly come from published articles, dissertations and manuscripts. For almost all the examples cited from other sources, I have double checked their glosses, translations and the judgment responses with native speaking consultants. Therefore some of the data are slightly modified for the purpose of precision, and may not be exactly the same as the original text. I have occasionally collected first hand data from linguists who speak the languages natively. They are cited as personal communication.

CHAPTER 2

A Two-Tiered Theory of the Context

2.0 Earlier arguments for the syntactic approach to discourse

In recent generative literature there has been a revival of interest in the Performative Hypothesis (Ross, 1970)—the idea that discourse participants such as the speaker and addressee are syntactically represented. Particularly influential is Speas and Tenny (2003), who expand the clause periphery by mapping the speaker and addressee to certain functional projections above the CP. In the wake of their proposal, a number of syntacticians have launched the investigation of a variety of phenomena that were previously considered to have at best a marginal place in the syntax. With a few exceptions (Miyagawa, 2012; Zu, 2015), the discussion so far has mainly focused on the interpretation of syntactic objects, including pronominal elements and other indexicals (Baker, 2008b; Giorgi, 2010; Charnavel, 2015a), discourse adverbs and particles (Haegeman and Hill, 2013; Lam, 2014; Woods, 2014), as well as vocative phrases (Hill, 2007, 2013). While they all share an under-

lying theme that the speaker and addressee are arguments of some functional heads at the left periphery, it is not at all obvious that the functional heads in question, sometimes named the same in various proposals, are syntactically equivalent.

The problem, I argue, lies in the fact that the discourse-related phenomena that have been discussed in these proposals do not constitute a homogeneous group. As a result, although each work accounts for different patterns of the data they start out with, none of them provides a uniform account for the full set of data that motivates a structural approach to the discourse.

The goal of this chapter is to sort out different empirical arguments that have been used to motivate the structural representation of discourse participants but that are not necessarily mutually compatible. I categorize these arguments in two classes, and argue that they are constructed at separate tiers of the discourse projection. The first tier seats discourse anchors, i.e., the speaker and the addressee. It is present in all and only root clauses.[1] I situate perspective shifters in a separate tier. They occur in all clauses and are responsible for the so-called "point of view phenomena" (Speas and Tenny, 2003).

The first part of this chapter is concerned with the empirical evidence for the top tier. The present section takes a look at facts from anaphora and indexicality, mainly in English, which favor an approach that treats the speaker and addressee as syntactic binders. In the next section I present data from two less familiar languages, Basque and Jingpo, to show that the speaker and addressee can be targeted for morphosyntactic agreement. The agreement with the speaker and addressee not only serves as the strongest evidence for the syntactic presence of discourse participants, it also provides a lot of useful clues that can be used to fine-tune the syntactic structure of the discourse. I piece it all together and propose a Speech Act Projection (saP) whose specifiers host the speaker and addressee.

---

[1]For a precise definition of root clauses and how they differ from main clauses, see Section 2.2.2, where I argue main clauses are subsumed under the category of root clauses.

16

In Section 2.2 I argue that the saP exhibits two properties, i.e., (i) it is not sensitive to the declarative-interrogative distinction,[2] and (ii) it cannot be embedded.

The existence of point of view phenomena in natural languages calls for a separation of discourse anchors that hold constant across clauses from perspective shifters that provide changing points of view. In Section 2.3 I bring the center of attention to one of these phenomena—Newari conjunct constructions, in which the point of view is directly associated with the verb morphology. The Newari data motivate an independent projection, the Sen(tience)P, which is crucially different from the saP in the two properties mentioned above. The earlier proposals, I argue, fail to separate the two types of discourse phenomena along this line. Section 2.4 discusses how the current framework can help predict the behaviors of two context-dependent phenomena noted in previous work.

The various proposals of mapping discourse participants to syntax generally fall in two camps. The speaker and the addressee either belong to a separate clause (Ross, 1970) on top of the main clause or to the CP domain within the main clause (Speas and Tenny, 2003). The present account is of the latter type. In Section 2.5 I evaluate the pros and cons of both accounts and demonstrate that there are more theoretical and empirical advantages for the mono-clausal analysis than for the bi-clausal analysis. The last section concludes the chapter.

2.0.1 Evidence from anaphora

Since the early days of Generative Grammar, it has been argued that expressions like *herself* and *he* depend on a second expression, i.e., an antecedent, for their interpretation (Lees, 1963). While *herself* must find its antecedent within the confines of the clause boundary (20a), *he* must search beyond that (20b).

---

[2]I will argue in later chapters that the saP is not only insensitive to the sentence mood of its complement, its insensitivity extends far beyond that.

(20) a.   Jill$_1$ can look after *herself*$_1$.

b.   Don't ask Joe$_1$. *He*$_1$ won't know.

The grammatical conditions that license the way we use and understand anaphors and pronominals are well-known as Binding Principles A and B, respectively. An informal version of these principles are given in Chomsky (1986b), as quoted below.

(21)   Binding Principles (Chomsky, 1986b: 166)

a.   An anaphor is bound in a local domain.   (A)

b.   A pronominal is free in a local domain.   (B)

What exactly constitutes as a "local domain" varies from theory to theory, but there is a consensus that clause is a typical case of such domain.

In this dissertation I define binding as follows.

(22) α binds β iff:

a. α bears the same ϕ-features and index as β, and

b. α c-commands β.

I consider β bound if there is an antecedent α that satisfies both conditions in (22). If such an element α does not exist for β, β is free. If only the first condition is satisfied, we say α and β are co-indexed but α does not bind β. In this dissertation binding necessarily entails co-indexation. The c-command requirement is what distinguishes the two concepts.

On a related note, co-reference has been distinguished from binding in the literature (Bach and Partee, 1980; Reinhart, 1983b). According to the standard definitions, (23) exhibits three cases of binding, but only the first one is considered as co-reference. In the other two cases, the pronouns are bound variables. That is, their meaning co-varies with their binders'.

(23) a.   Joe$_1$ thought he$_1$ heard something.

b.   Jill$_1$ makes her$_1$ own clothes.

c.   Every boy$_1$ has his$_1$ own room.

In Reinhart (1983b), coreference is evaluated at the discourse level. We say *Joe* and *he* are co-referential in (23a) because they both refer to the same individual in the discourse. On the other hand, binding is evaluated at the sentence level. In this view, the pronoun *her* in (23b) does not directly point to a female individual in the discourse. It is bound by, but not co-referential with, *Jill*. The goal of this dissertation, however, is to provide a framework that bridges the utterance context and the linguistic context. In such a framework there are essentially no differences between how a pronoun gets its value from the discourse (23a) and how it gets its value from the sentence (23b).[3] As a result, in this dissertation co-reference is simply the assignment of identical values to referential DPs, regardless of whether they occur in the same sentence or not.[4]

There are a number of variations of the definition of c-command in the literature (Reinhart, 1983a; Chomsky, 1986a; Kayne, 1994), motivated by different sets of data. Here I adopt the standard one (Heim and Kratzer, 1998: 261) to account for the structural relationship between anaphors/pronominals and their antecedents.[5]

(24) α c-commands β iff:

    a.   neither α nor β dominates the other, and

    b.   the first branching node dominating α dominates β.

The c-command requirement is motivated by the following sentences. Specifically, an anaphor (25) must, and a pronominal (26) must not, be bound by a c-commanding DP within the same clause.

---

[3]This view is along the same line as Kayne (2002).

[4]This dissertation does not address quantificational binding like (23c). I leave it open whether or not co-reference and binding differ in that case.

[5]For Barker (2012b), (22b) is a scope requirement, not a c-command requirement. In a great number of cases c-command coincides with scope, but not always. It should be noted that the empirical evidence he presents in support of his view exclusively comes from quantificational binding. Since the present dissertation focuses on pronominal binding (23a,b), not quantificational binding (23c), this distinction does not really make a difference.

(25)   C-command and Binding Condition A

    a.   My dad_1 always blames $himself_1$/*myself.

    b.   The $assistant_1$ who works for Jen_2 blames $himself_1$/*$herself_2$.

(26)   C-command and Binding Condition B

    a.   My dad_1 blames *him_1/me.

    b.   The $assistant_1$ who works for Jen_2 blames *him_1/her_2.

The reflexive *myself* is free in (25a), which is ruled out by (21a). It cannot be bound by *my* as it is not c-commanded by *my* (22b), or by *my dad* as they do not agree with each other in person (22a). Replacing *myself* with *me* would work (26a) as pronouns are allowed to be free (21b).

       Throughout this dissertation I will discuss different instances of binding. In this section I focus on anaphors. Binding Principle A (21a) is essentially a locality condition. It is designed to account for the following contrast.

(27) a.   Jill knows that Joe can look after *himself*.

    b.   *Jill knows that Joe can look after *herself*.

In (27b), *herself* is not entirely free. *Jill* is a possible binder for *herself* as it satisfies both conditions in (22), but such a binding relation is deemed impossible by (21a) as *Jill* and *herself* are not clausemates.

       Although empirically supported by contrasts like (27), Principle A has been subject to challenge ever since its inception. The literature is full of counter examples that contain the so-called "exempt anaphors." A few of them are listed below.

(28) a. $They_1$ made sure that nothing would prevent *each other's*$_1$ pictures from being put on sale. (Kuno, 1987: 95)

    b.   Each $student_1$ was confident that the teacher would criticize everyone but *himself*$_1$. (Pollard and Sag, 1992: 265)

    c. Max_1 boasted that the queen invited Lucie and *himself*$_1$ for a drink. (Reinhart and Reuland, 1993: 670)

d. Serge$_1$ thought that the stories about *himself*$_1$ had been made up. (Sportiche, 2013: 200)

e. She$_1$ knew that everyone had been invited except *herself*$_1$. (*Macmillan Dictionary*)

f. Just then she heard something splashing about in the pool a little way off, and she swam nearer to make out what it was: at first she thought it must be a walrus or hippopotamus, but then she remembered how small she was now, and she$_1$ soon made out that it was only a mouse that had slipped in like *herself*$_1$. (*Alice's Adventures in Wonderland*, Chapter 2)

In each example, the reciprocal *each other* or the reflexive *himself/herself* is bound long distance. Their antecedents are all located in a separate clause from their own.

Different theories have been proposed to account for exempt anaphors' apparent defiance of Principle A. Some (Pollard and Sag, 1992; Reinhart and Reuland, 1993; Safir, 2004; Reuland, 2011)[6] focus on the syntactic properties of exempt anaphors and argue that Principle A does not apply to anaphors that lack co-arguments, in which case the anaphor can search further for a binder. Take (28e) for example. The reflexive *herself* is an argument of the preposition *except*, not an argument of the verb *invited*. As such it does not have a co-argument and is exempt from Principle A. In contrast, Principle A applies to *herself* in (27b), because the verb *look after* has one more argument *Joe* besides *herself*. Some linguists, on the other hand, shift their focus onto the antecedents of exempt anaphors. Charnavel and Sportiche (2016: 39) notice that "the referent of the antecedent of an exempt anaphor must in principle be capable of speech, of thought, of holding a perspective, of having a point of view, or of being an empathic target." Binding by such an antecedent is not subject to Principle A. If such an antecedent is not available, however, Principle A applies. On their account, the exempt anaphors in (28) can be bound from long distance because in each case there exists an eligible perspective-holding antecedent

---

[6]The works cited here differ from each other in how they define co-arguments.

in a higher clause, although it is not clear how their account would rule out ungrammatical sentences like (27b).[7]

If we look beyond English, we can find exempt anaphors in even less restrictive environments. The following examples come from (Mandarin) Chinese (Huang et al., 2009: 338) and Turkish (Kornfilt, 2001: 198), respectively.

(29) Long-distance reflexives in Chinese and Turkish

    a. *zhāngsān yǐwéi lǐsì pīpíng-le zìjǐ.*
       Zhangsan think Lisi criticize-PERF self

       'Zhangsan$_1$ thought Lisi$_2$ criticized him/himself$_{1/2}$.'

    b. *Fatma Ahmed-in kendi-sin-i çok beğen-diğ-in-i bil-iyor.*
       Fatma Ahmed-GEN self-3SG-ACC very admire-GER-3SG-ACC know-PRES.PROG

       'Fatma$_1$ knows that Ahmet$_2$ admires her/himself$_{1/2}$ very much.'

In Chinese (29a), the anaphor *zìjǐ* can be bound either locally, by *Lisi*, or non-locally, by the matrix subject *Zhangsan*. Being the direct argument of *pīpíng* 'criticize,' *zìjǐ* has a co-argument, but the binding of *zìjǐ* does not have to be delimited by its local domain, the embedded clause. Similarly, the Turkish anaphor *kendi* (29b) may find its antecedent in the same clause, i.e., *Ahmet*, but it is also likely that its antecedent, i.e., *Fatma*, resides outside that clause.

This dissertation is not meant to provide an account for exempt anaphors. There will be no more discussion on the conditions under which anaphors are exempt.[8] Rather, it merely points to the existence of such anaphors across languages. Specifically, I take it as a fact that, crosslinguistically, anaphors must be bound, but they may not necessarily occur in the same local domain as their antecedents.

---

[7]Their account is based mostly on French data.

[8]I will discuss, however, the syntactic and semantic properties associated with long-distance reflexives in Chapter 5.

With that in mind, it is somewhat surprising to see exempt anaphors in root clauses, where their antecedents cannot be seen in plain sight. Examples of this kind are prevalent in day-to-day conversation. A few of them are listed below.[9]

(30) a. Many people, like *myself*, prefer a book to a movie.

    b. Where is the most ideal place for someone such as *myself* to live? (https://goo.gl/qvmk8k)

    c. No one is to blame except *myself*.   (Longman dictionary)

(31) a. Many people, such as *yourself*, did not interpret my message in a positive way.

    b. My indecision must drive someone such as *yourself* insane, but I really do have a wellthoughtout plan for my future.   (https://goo.gl/MGCRvT)

    c. Most of our customers are people like *yourself*.   (Longman dictionary)

Ross (1970) is among the first to notice that under specific conditions, anaphors *myself* and *yourself*, can refer to the speaker (30) and the addressee (31), just like indexicals do. In fact, first and second person pronouns are always accepted, if not more preferred, in place of the exempt anaphors *myself* (32a) and *yourself* (32b), respectively.

(32) a. Physicists like myself/me don't often make mistakes.

    b. Physicists like yourself/you don't often make mistakes.

However, the reverse is not true. The indexical pronouns *I* and *you* have a much wider distribution than the exempt anaphors *myself* and *yourself*. In many environments they are not interchangeable, as illustrated below.

(33) a. I/*Myself have to be careful.

    b. I have bad news for you/*yourself.

I will delay the discussion of indexicals to the next section.

Unlike *myself* and *yourself*, third person reflexives are not exempt from Principle A in root clauses. However, as we have already seen in (28), they can act as exempt

---

[9]For sentences found from online searches, I include their short URLs at the end. These URLs are active as of 6/29/2017.

anaphors when they appear in attitude reports. The following pair of examples illustrates this contrast.

(34) a.   *Physicists like himself don't often make mistakes.   (Ross, 1970: 229)

     b.   I told Albert that physicists like himself don't often make mistakes.

Examples in (32) and (34) make Ross conclude that *myself* and *yourself* are not different from *himself* in their distributions. In the same way as *himself* must be bound by a third person antecedent in a higher clause (34b), *myself* and *yourself* in (32) are also bound, except that they are bound by the discourse participants. Unlike *Albert*, the speaker and addressee do not need to be overtly realized.[10]

This is further corroborated by the fact that the use of *myself* (35) and the use of *himself* (36) are restricted by the same set of rules. The judgments of the following sentences are given by Ross (1970: 227-228).

(35) a.   This paper was written by Ann and myself.

     b. ??This paper was written by myself.

     c.   ?Ann and myself wrote this paper.

     d.   *Myself wrote this paper.

     e.   ?The lioness may attack Ann and myself.

     f.   *The lioness may attack myself.

(36) a.   Tom believed that the paper had been written by Ann and himself.

     b. ??Tom believed that the paper had been written by himself.

     c.   ?Tom believed that Ann and himself had written the paper.

     d.   *Tom believed that himself had written the paper.

     e.   ?Tom believed that the lioness might attack Ann and himself.

     f.   *Tom believed that the lioness might attack himself.

Admittedly, when it comes to exempt anaphors, the inter-speaker variation is huge. In this section the examples of exempt anaphors I chose, except for (35) and (36), are those

---

[10]For Ross, the speaker and addressee are present at Deep Structure and undergo deletion in syntax.

that are most agreed upon among speakers. In many cases, speakers vary in their degree of acceptance as to the exact environments where exempt anaphors are allowed. This might be the reason why almost half a century after Ross (1970) we still do not have a full picture of exempt anaphors.[11] However, as far as I can see, individual speakers are fairly consistent about their judgments. For this reason the parallel between (35) and (36) is still interesting. Whichever account one comes up with for the varying degrees of acceptability in (35), it seems to be readily extendable to the data in (36).

The two-fold moral of these observations is as follows. First, discourse participants, even when they are not overtly realized, may be systematically represented in the syntactic structure to serve as the antecedents for exempt anaphors *myself* and *yourself*. Second, the subject and indirect object of root clauses with verbs like *believe* and *tell* play the same roles with respect to complement clauses as discourse participants do with respect to root clauses. The parallel is illustrated below. In this dissertation, following the standard convention, I use full capital letters to represent covert elements, i.e., elements that do not receive a PF representation.

(37) a. Root clause
SPEAKER$_1$ ... [physicists like myself$_1$ don't often make mistakes]
ADDRESSEE$_1$ ... [physicists like yourself$_1$ don't often make mistakes]

b. Embedded clause
Albert$_1$ told me [that physicists like himself$_1$ don't often make mistakes]
I told Albert$_1$ [that physicists like himself$_1$ don't often make mistakes]

2.0.2 Evidence from indexicals

Cooper (1983) categorizes pronouns into two groups, bound and free, carrying different presuppositions. Indexical pronouns, like *I* and *you*, are considered free. They pick their

---

[11]There are a few attempts (Reinhart and Reuland, 1993; Ahn, 2015; Charnavel and Sportiche, 2016), none of which offers a story comprehensive enough to account for the inter-speaker variations. For all we know, there are a variety of factors at work, including but not limited to, dialectal differences, distinct stress patterns and differences in register.

values from a distinguished context parameter (Kaplan, 1989a). The referent of *I* is identified as the person who utters it (the speaker of the context, s_c), whereas the referent of *you* is identified as the person to whom it is addressed (the addressee of the context, a_c).

(38) The Kaplanian view of indexicals

    a. $[\![I]\!]^{c,w,g} = s_c$

    b. $[\![you]\!]^{c,w,g} = a_c$

    Semanticists such as Schlenker (2003b) and Heim (2008) take a different approach. They do not analyze *I* and *you* as free variables. Rather, in their system indexical pronouns are allowed to be bound. Below are two examples of the bound variable use of indexical pronouns, also known as fake indexicals.

(39) I'm the only one around here who will admit that I could be wrong.   (Partee, 1989: 279)

    a.   I'm the only x such that x admits that I could be wrong.
        No one else admits that I'm wrong.   (Free)

    b.   I'm the only x such that x admits that x could be wrong.
        No one else admits that they're wrong.   (Bound)

(40) Only you eat what you cook.   (Kratzer, 2009: 188)

    a.   you are the only x such that x eats what you cook.
        No one else eats what you cook.   (Free)

    b.   you are the only x such that x eats what x cooks.
        No one else eats what they cook.   (Bound)

Both (39) and (40) are ambiguous between a referential interpretation where *I* and *you* in the embedded clauses respectively refer to the speaker and the addressee, in the same way as *I* and *you* in the root clauses do, and a bound variable interpretation where the embedded *I* and *you* depend on another entity in the sentence for reference. For example, in a universe where Joe and Jill are the only two living creatures, if Joe utters (39), with the bound variable interpretation, he essentially accuses Jill of never admitting her own mistakes. In this case, the embedded *I* is not directly interpreted as the speaker. Rather,

it is bound to the matrix subject which happens to refer to the speaker. In other words, the fake indexicals *I* and *you* are not that different from bound pronouns *he* and *she* in the following sentences. For Schlenker (2003b) and Heim (2008), both types of pronouns are bound variables. They are morphologically distinct because their respective antecedents have distinct ϕ-features.

(41) a. Joe$_1$ is the only one who will admit that he$_1$ could be wrong.
b. Only Jill$_1$ eats what she$_1$ cooks.

There are generally two approaches to fake indexicals. Some consider the ϕ-features of such use of *I* and *you* as agreement reflexes (Kratzer, 2009). They do not carry presuppositions. They enter syntax with no ϕ-features and only acquire these features from their binders at PF. Some allow fake indexicals to start with full-fledged ϕ-features which undergo deletion at LF once binding is achieved (Stechow, 2003). Putting aside the technical detail, both approaches rely on the existence of a binder for the interpretation of fake indexicals. For Kratzer (2009) the binder needs to be present in syntax for agreement purposes. For Stechow (2003) the fake indexical needs a co-indexed antecedent in syntax for feature deletion to be possible.

Bevington (1998) identifies another use where indexical pronouns are bound. Say Romeo and Juliet have the following conversation (Bevington, 1998: 84).

(42) a. (Romeo to Juliet:) I love you.
b. (Juliet to Romeo:) I do too.
    i. I love myself too. (= Juliet loves herself.)
    ii. I love you too. (= Juliet loves Romeo.)

Juliet's response can be interpreted in two ways. With the strict reading (i), the elided variable is bound by the local subject *I*. The more natural reading of Juliet's response, however, is when the elided variable is understood as Romeo, the addressee of (42b). This is the so-called sloppy reading (ii). The problem is, the indexical pronoun *you* is not present in (42b) to serve as the binder.

Charnavel (2015b) argues that the actual binder of the elided variable in (42b) is the matrix subject *I*. She proposes an Addressee function (43a) that takes *I* and *you* as input and yields *you* and *I* as output (Charnavel, 2015b: 24). To put it simply, the Addressee function turns *you* into *my addressee* (43b) and *I* into *your addressee* (43c).

(43) a. $A = \{\langle s, a \rangle, \langle a, s \rangle\}$
     b. $[\![you]\!]^{c,w,g} = [\![A(s)]\!]^{c,w,g} = a$
     c. $[\![I]\!]^{c,w,g} = [\![A(a)]\!]^{c,w,g} = s$

In her analysis, the sloppy reading of (42b) essentially means *I love x's addressee* where x is bound by *I*. Since *my addressee* is *you*, the sentence thus yields the reading *I love you*. Roughly (42a) and (42b) have the following LF.

(44) a. (Romeo to Juliet:) I λ1 love [my₁ addressee]
     b. (Juliet to Romeo:) I λ1 ~~love [my₁ addressee]~~ too.

Having *I* to bind *you* (and vice versa) would run into problem with languages in which indexical pronouns agree with discourse participants in ϕ-features, because knowing the morphological features of the speaker tells you nothing about the morphological features of the speaker's addressee. As a concrete example, let's have a look at the conversation between Romeo and Juliet in Hebrew.

(45) Bound indexicals in Hebrew (Itamar Kastner, p.c.)
     a. *ani ohev   otax.*
         I   love.MASC you.ACC.FEM

         'I love you.'

     b. *gam ani.*
         also I

         'So do I.'
         i. I love myself too. (Juliet loves herself.)
         ii. I love you too. (Juliet loves Romeo.)

The Hebrew second person pronoun exhibits gender distinction. When Romeo reveals his feeling to Juliet, he uses the feminine second person pronoun *otax*. If Juliet, in return,

wants to confess her love for Romeo in so many words, she would have to use the masculine second person pronoun *otxa*. Since Juliet's response (45b), a case of stripping (i.e., roughly TP ellipsis), still allows the sloppy reading, the rest of the sentence that undergoes ellipsis here contains a bound variable, not directly referential. The question is, what binds this variable?

For Charnavel (2015b), the variable is bound by the bare argument left in (45b), *ani*. In English, *my addressee* can be readily spelled out as *you* at PF. In Hebrew, however, the two instances of *my addressee* are morphologically distinct. It is not clear how stripping is licensed in the first place, assuming that the identity condition on ellipsis is syntactic (Sag, 1976; Williams, 1977; Fiengo and May, 1994; Chung et al., 1995; Kehler, 2002).[12]

This problem becomes trivial if the speaker and addressee are syntactically present. For Stechow (2003), the second person pronoun enters syntax with a second person feminine or masculine feature which gets deleted once it establishes a binding relation with its antecedent, the addressee. After feature deletion, the two instances of second person pronouns would be essentially the same, as illustrated below. The second instance of *you*, together with the entire VP of Juliet's response, can undergo ellipsis.

(46) a.   (R to J:) SPEAKER ... ADDRESSEE$_{2S.FEM}$ ... I love you$_{\overline{2S.FEM}}$ too

    b.   (J to R:) SPEAKER ... ADDRESSEE$_{2S.MASC}$ ... I love you$_{\overline{2S.MASC}}$ too

For Kratzer (2009), bound variable pronouns enter syntax as minimal pronouns ($\varnothing$), deprived of morphological features. Ellipsis applies to the VP that contains the second minimal pronoun, roughly represented below. At PF the first minimal pronoun copies the morphological features of its binder, the addressee, and is consequently spelled out as second person feminine in Hebrew.

---

[12]Note, however, this view is not uncontroversial. There are linguists, most notably Merchant (2001), who take the identity condition to be semantic.

(47) a.   (R to J:) SPEAKER ... ADDRESSEE$_1$ $\lambda 1$ ... I love $\varnothing_1$

    b.   (J to R:) SPEAKER ... ADDRESSEE$_1$ $\lambda 1$ ... I ~~love~~ ~~$\varnothing_1$~~ too

This treatment would help unify bound variable readings of indexical pronouns and shifted indexicals that have been reported in many languages in recent years. Consider Amharic (Semitic, spoken in Ethiopia). Whereas the English sentences *John says that he is a hero* and *John says that I am a hero* have starkly different meanings, the Amharic sentence that contains the first person pronoun *I* is ambiguous between those two meanings (48).

(48)   Optional indexical shifting in Amharic (Schlenker, 2003a: 68)
    ǰohn *ǰəgna* $\boxed{\textit{nə-ññ}}$ *yɨl-all*
    John hero be.PF-1S 3M.say-AUX.3M

    (i) John says that I am a hero.   (*I* = Speaker)
    (ii) John$_1$ says that he$_1$ is a hero.   (*I* = *John*)

More on shifted indexicals will be discussed in Chapter 5. At this point suffice it to say that the parallel is well expected once we map speaker and addressee onto syntax. The indexical pronouns are bound by discourse participants in English and Hebrew in an analogous fashion as they are bound by matrix arguments of some propositional attitude verbs in Amharic. This is roughly schematized as follows.

(49) a.   English, Hebrew
          SPEAKER$_1$ ... ADDRESSEE$_2$ ... [...I$_1$/you$_2$...]

      b.   Amharic
          Matrix subject$_1$ ... matrix indirect object$_2$ ... [...I$_1$/you$_2$...]

2.1 Morphological arguments for the syntactic approach to discourse

The evidence we have seen so far suggests that discourse participants are crucial in understanding exempt anaphors and bound indexicals. Both sets of facts would be nicely captured by the syntactic representation of covert discourse participants, but neither is conclusive as they both rely on the assumption that binding is syntactic in nature. If we can find a bona fide syntactic operation that makes reference to covert speaker and addressee, that would be the most compelling evidence for the syntactic presence of discourse participants.

2.1.1 Evidence from agreement

Building on the earlier work by Miyagawa (2012) and Zu (2015), in this section I review morphological agreement with speaker or addressee which are neither arguments of the predicate nor overtly realized in syntax. Ever since the early days of the Generative Grammar, it has been taken as a wildly accepted principle that each argument must be assigned a θ-role. This requirement is well-known as the θ-Criterion (Chomsky, 1981: 36). In other words, as a defining characteristic, arguments always hold a thematic relation with their corresponding predicates. Given the θ-Criterion, the discourse participants may or may not be arguments. In (50a) the speaker and the addressee are event participants, and act as the agent and the theme of the seeing event, respectively. They are the arguments of the main predicate *saw*. The speaker and the addressee of the utterance (50b), on the other hand, do not have theta roles. As a result I take them as non-thematic.

(50) a. I saw you yesterday. (thematic speaker/addressee)
      b. Joe saw Jill yesterday. (non-thematic speaker/addressee)

Now let us take a look at Basque allocutive agreement. Allocutive agreement refers to a morphological property in which verbs inflect for some morphological feature(s) of the addressee. In Basque, allocutive forms are obligatorily used whenever the speaker talks to a familiar, non-thematic addressee. The following pair of Basque sentences are synonymous. The alternations are purely determined by allocutive agreement. The suffixes *k* and *n* indicate that the addressees of the two sentences differ in gender.

(51) Allocutive agreement in Basque (Oyharçabal, 1993: 92-93)

    a.   *Pette-k*   *lan egin*   di-k
            Peter-ERG   worked   3.ERG-M

         'Peter worked.'   (said to a male friend)

    b.   *Pette-k*   *lan egin*   di-n
            Peter-ERG   worked   3.ERG-F

         'Peter worked.'   (said to a female friend)

Agreement with the addressee is not only sensitive to gender. In Jingpo, the sentence final particle (SFP) may agree with the addressee in person and number. For instance, the following sentences minimally differ from each other in terms of the target of the agreement. In (52a), the SFP agrees with the third person subject *hkying* 'time', whereas it agrees with a second person in (52b).

(52) Subject agreement vs. addressee agreement in Jingpo

    a.   *hkying gade*   *htu*   saʔ-ta ?
            time   how.many   point   3SG-WH

         'What time is it?'

    b.   *Hkying gade*   *htu*   sə-ta ?
            time   how.many   point   2SG-WH

         'What time is it?'   (Dai, 2010: 10)

In both sentences, the overt subject *hkying* 'time' remains third person singular, and the speaker asks the same question, "what time is it?", except that in (52a) it is not clear

whether there is an addressee in the context, whereas (52b) is infelicitous if the speaker is just murmuring the question to him/herself.

Note that unlike in Basque, only one agreement relation is encoded in (52). That is, the SFP must make a choice between agreeing with the subject and agreeing with the addressee, but not with both. This difference, I argue, is conditioned by the two languages' respective morphological system. In Basque the agreement morphemes and their meanings are generally in one-to-one correspondence. It is possible to attach multiple agreement affixes to one auxiliary. In Jingpo, however, there is a closed list of SFPs. Agreement with both the speaker and the subject cannot be morphologically expressed as no such an SFP exists. Kastner and Zu (2017) distinguish systematic gaps from accidental gaps in morphological paradigms and propose that the former occurs when the grammar fails to generate the form because of independent syntactic or phonological constraints. In the next section I present Jingpo's inflectional paradigms and show that the missing cells follow a set pattern. Therefore I take them as systematic gaps in the sense of Kastner and Zu (2017).

The speaker may also trigger ϕ-feature agreement. In Jingpo, speaker agreement establishes an intimate relation between the speaker and the subject. For instance, (53a) and (53b) depict the same scenario and both can be used when a teacher reports to a principal about her students. What differs in the two sentences, however, is that (53b) indicates that the teacher and her students are on good terms (or at least she wants the principal to believe so) whereas (53a) has no such indication.[13]

---

[13]Note that speaker agreement in Jingpo is necessarily plural. Zu (2015) suggests that the plurality requirement is a by-product of bonding, not directly tied to speaker agreement. The same requirement also holds in English nurse-*we* constructions (*Are we/#Am I feeling better today?*) that establish a similar bonding relation between a nurse and his/her patient without displaying any agreement relation with the speaker. Interested readers should consult Zu (2015) for details. Also see Collins and Postal (2012) for a recent discussion of the plurality requirement of nurse-*we* constructions.

(53) Subject vs. speaker agreement in Jingpo

    a.   *Jongma du hkum* $\boxed{\textit{mas-ai}}$
       student arrive complete 3PL-DECL

       'The students have all arrived.'

    b.   *Jongma du hkum* $\boxed{\textit{saga-ai}}$
       student arrive complete 1PL-DECL

       'The students have all arrived.'   (Dai, 2010: 5)

One thing to note is that the discourse participants that are targeted by addressee or speaker agreement cannot be overtly realized. In Basque any attempt to pronounce the non-thematic addressee is doomed to failure, regardless of its case marking (54).

(54) The target of allocutive agreement must be covert in Basque
(*Hi-∅/k/ri)   *mintza* $\boxed{\textit{ni-ai-teke-k/n}}$
you-ABS/ERG/DAT speak I.ABS-AUX-POT-M/F

'I can speak.'   (Oyharçabal, 1993: 104)

In Jingpo, the overt first person pronoun cannot trigger speaker agreement (55a). It may be targeted by possessor agreement (55b), but in that case it becomes an argument.[14] That is to say, in (55b) the speaker is necessarily the possessor and the sentence can only be uttered by someone who holds a possessor-possessee relationship with the students. In contrast the speaker is not an event participant in (55a) and the sentence can be felicitously uttered by anyone who believes they have a close relationship with the students (e.g., a caring and loving janitor). Note how Jingpo morphologically distinguishes the two types of agreement relations. The SFPs that inflect for possessor and those that inflect for the subject or speaker belong to separate morphological paradigms, to be discussed shortly in Section 2.1.2.

---

[14]Following Barker and Dowty (1993), I do not limit thematic relations in verbal domains. DPs in the nominal domain can also bear θ-roles and occur in argument positions.

(55) The target of speaker agreement must be covert in Jingpo

    a.   *(*Ngai) jongma du   hkum   saga-ai*
        I   student arrive complete 1PL-DECL

        'The students have all arrived.'   (speaker agreement)

    b.   *(Ngai) jongma du   hkum   sali-ai*
        I   student arrive complete 1SG(POSS)-DECL

        'My students have all arrived.'   (possessor agreement)

      Another difference between possessor agreement and speaker agreement is that the former, not targeting a discourse participant, does not carry any discourse functions. In (55b), there is no indication of a warm relationship between the possessor and the possessee, and thus no plurality requirement is posed by the agreement.[15] The above contrast seems to suggest that the covertness of the speaker in (55a) is more related to its status of being a non-argument, rather than its status of not being a syntactic object.

      In this section I have presented the basic agreement facts in Basque and Jingpo. Both languages allow the main predicate to agree with the non-thematic discourse participants. In Basque, the predicate targets the gender feature of the addressee. This agreement happens along with the subject agreement. In Jingpo, the predicate targets the person and number features of the discourse participants. This agreement is in place of the regular subject agreement. Unlike the agreement with grammatical subjects, speaker agreement and allocutive agreement in Basque and Jingpo has specific discourse functions. In Section 2.1.3 I argue that the agreement with covert discourse participants is morphosyntactic in nature, which necessitates a structural representation of the speaker and addressee. But first the next section familiarizes the readers with the morphology of Jingpo SFPs.

---

[15]Note that Jingpo is an argument drop language and allows its possessors to be omitted.

2.1.2 The morphology of Jingpo sentence-final particles

In this section I address the morphological decomposition of Jingpo SFPs. The goal is not to arrive at any big conclusions, but to simply show that the SFPs in Jingpo are composite, rather than mono-morphemic. Readers who are more interested in how they are indicators of morphosyntactic agreement with the speaker and the addressee should feel free to skip this section.

Jingpo has a rich inventory of SFPs. It has been reported that there are around 350 SFPs in total (Dai, 1996, 2003), the use of which is obligatory in most cases. When the main verb is a copular (56a) or followed by a volitional modal (56b), the SFP is absent.

(56) a. *shi   go   nye sara   re.*
          s/he TOP my   teacher COP

          'S/he is my teacher.'   (Dai and Xu, 1992: 64)

      b. *hpotni   sa   sana.*
          tomorrow come/go VOL

          'I'll come/go tomorrow.'   (Xu et al., 1983: 714)

DeLancey (2008) divides Jingpo SFPs into two parts, i.e., prefinal and final. The final part, usually the last syllable or the rhyme of the last syllable, encodes exclusively the sentence mood, i.e., the morpheme that morphologically distinguishes declaratives, interrogatives, imperatives, etc. The prefinal part, on the other hand, encodes verb inflections, including person and number agreement, change of state aspect, among others.[16] The relative ordering of the four morphemes in question are schematically illustrated below.

(57)

$$\overbrace{Number + Change \quad of \quad State + Person}^{Prefinal} \quad \overbrace{Mood}^{Final}$$

---

[16]Dai and Xu (1992) have identified five distinct grammatical functions encoded in Jingpo SFPs, namely, agreement, aspect, clause type, emphatic mood and spatial deixis. I leave out the last two as they are not part of the Jingpo SFPs included in this dissertation.

It is worth noting that unlike the ϕ-feature agreement in familiar Indo-European languages, the person feature and the number feature in Jingpo, when both are present, are split as two morphemes and can be separated by the change-of-state morpheme.

An SFP may contain only one morpheme, indicating that the sentence is a declarative (58a), an imperative (58b) or an exhortative (58c). In this case the subject of the sentence must be a default person. Specifically, the subject is third person singular in declaratives, a second person singular in imperatives, and a first person plural in exhortatives.

(58) a. *shi grai shakut ai.*
  s/he very hardworking DECL

  'S/he is very hardworking.'   (Dai and Xu, 1992: 269)

  b. *nang sa u!*
  you come/go IMP

  'Come/Go!'   (Dai and Xu, 1992: 270)

  c. *ya na ta go anhte yong hkauna sa hkai lom ga!*
  next month TOP we all paddy fields come/go plant join EXH

  'Let's all go plant in the paddy fields next month.'   (Dai and Xu, 1992: 296)

Some sentence moods, such as interrogatives (59a) and exclamatives (59b), must contain at least two morphemes. That is, the prefinal part of interrogative and exclamative SFPs are obligatory, which at the minimum includes the person feature of the subject.

(59) a. *Nang n ra n-ni?*
  you not want 2-Q

  'Do you not want (it)?'   (Xu et al., 1983: 616)

  b. *Ngai mung rai n chye a-hka*
  I also still not understand 1-EXCL

  'I can't believe that I still don't get it!'   (Dai and Xu, 1992: 313)

Each sentence mood has its own set of inflectional paradigms, a thorough discussion of which would be the theme of a separate dissertation. In this section I focus my discussion to just the declarative SFPs, i.e., the SFPs that end with the *-ai* morpheme (58a).

Jingpo SFPs make a systematic distinction between an event denoting a state from an event denoting a change of state. The contrast between the two can be shown in the following examples.

(60)   State vs. Change-of-state in Jingpo (Dai and Xu, 1992: 272)

    a.   *shi*   *jong*   *lung*   *ai*
        s/he school go up DECL

        'S/he attends school. (= S/he is a schoolgirl/schoolboy).'

    b.   *shi*   *jong*   *lung*   *s-ai*
        s/he school go up COS-DECL

        'S/he has attended school. (= S/he has become a schoolgirl/schoolboy).'

The above examples are morphologically different from each other in that (60b) contains an additional *s*-prefix in the SFP. As a result the two sentences receive different interpretations. While (60a) depicts a state or an ongoing event which is being held at the moment of speech, (60b) indicates that the subject undergoes a recent change from a previous state (not attending school) to the current one (attending school). LaPolla (2003) claims that across Sino-Tibetan languages the *s*-prefix has a causativizing, denominative or change of state function. In Jingpo, the change-of-state morpheme has a few allomorphs, all of which starts with an *s*, as will be seen shortly.

Besides the change-of-state aspect, the prefinal part of Jingpo SFPs is also where person and number agreement features are invariably marked. Jingpo SFPs may choose to agree with either the subject, the possessor of the subject, or both the subject and the object. I discuss the three types of agreement relations in the following subsections.

2.1.2.1 Possessor agreement paradigms

Possessor agreement is an agreement relation held between the main verb and the possessor of the main subject. Two such examples are illustrated below.

(61) a. *(anhte-a) gasha-ni yong jong   lung   ma-sa-li-ai*
        we-POSS child-PL all   school go up PL-COS-1-DECL

    'Our children have all attended school.'

    b. *(shi-a)   gasha-ni yong jong   lung   sa-lu-ai*
        s/he-POSS child-PL all   school go up COS-3-DECL

    'His/Her children have all attended school.'

The main subject in both sentences is *gasha ni* 'children', a third person plural. The two sentences differ in the choice of the SFPs because the subject has distinct possessors. In (61a) the possessor of *gasha ni* is a first person plural, whereas in (61b) the possessor is a third person singular.

SFPs that are contained in the possessor agreement paradigms, as tabulated below, have the most straightforward morphology.

Table 2.1: Jingpo SFPs Indicating Possessor Agreement in Declaratives

	State		Change of State	
	Singular	Plural	Singular	Plural
First person possessor	li ai	mali ai	sali ai	masali ai
Second person possessor	lit dai	malit dai	salit dai	masalit dai
Third person possessor	lu ai	malu ai	salu ai	masalu ai

From the above table, we can identify the following morphs.

(62) a.   First person possessor: *li*

   b.   Second person possessor: *litd*

   c.   Third person possessor: *lu*

   d.   Plural: *ma*

   e.   Change of state: *sa*

   f.   Declarative: *ai*

These morphs come in a fixed ordering: Number — Change of State — Person — Declarative. Thus, the change of state declarative SFP that shows agreement with a second person plural would be spelled out as *masalit dai*. Note that singular number and stative aspect are null. Singular is indicated by the absence of the plural *ma*, and state is indicated by the absence of the change of state *sa*. As a result, the state declarative SFP that agrees with a first person possessor, i.e., *li ai*, contains only two overt morphemes, person (62a) and mood (62f).

2.1.2.2 Subject agreement paradigms

Besides possessor agreement, Jingpo also allows subject agreement, where the SFPs inflect for the person and number of the sentential subject. The SFPs for the two types of agreement belong to separate paradigms. This contrast is exemplified below.

(63) Possessor agreement vs. subject agreement in Jingpo

    a. *shanhte-a   gasha-ni yong jong   lung   ma-sa-lu-ai*
       they-POSS child-PL all   school go up PL-COS-3-DECL

      'Their children have all attended school.'   (Possessor agreement)

    b. *shanhte-a   gasha-ni yong jong   lung   ma-s-ai*
       they-POSS child-PL all   school go up PL-COS-DECL

      'Their children have all attended school.'   (Subject agreement)

The above pair shares the same subject *shanhte a gasha ni* 'their children,' but the target of the agreement in each sentence is different. In (63a), the SFP agrees with the third person plural possessor, in this case *shanhte*, namely the children's parents, whereas in (63b) the agreement targets the subject, *gasha ni* 'the children.' As a result, the two SFPs are morphologically distinct even though the two targets share the same ϕ-features (i.e., both DPs are third person plural).

The SFPs that are contained in the subject agreement paradigms are listed in the following table. Their morphology is more complex.

Table 2.2: Jingpo SFPs Indicating Subject Agreement in Declaratives

	State		Change of State	
	Singular	Plural	Singular	Plural
First person subject	nngai	ga ai	sangai	saga ai
Second person subject	ndai	madai	sindai	masindai
Third person subject	ai	ma ai	sai	masai

Let's start with the person feature. The third person is morphologically null in subject agreement paradigms (64c). The first person (64a) and the second person (64b), on the other hand, have a couple of allomorphs.

(64) a. First person subject → *ga* when the subject is plural
→ *nng* in states
→ *ng* elsewhere

b. Second person subject → *d* when it immediately follows *ma*
→ *nd* elsewhere

c. Third person subject: ∅

Similarly, the plural (65a) and change of state (65b) morphemes have a few different overt realizations, depending on the subject's person.

(65) a. Plural → *ga* when the subject is first person
→ *ma* elsewhere

b. Change of State → *sa* when the subject is first person
→ *si* when the subject is second person
→ *s* elsewhere

2.1.2.3 Subject and object agreement paradigms

The last type of agreement relation targets the subject and the object simultaneously. In Jingpo, with intransitive predicates, the SFP agrees with the subject in person and number (63b). When there are two arguments, the situation becomes more complicated. The SFP agrees with the person (66a vs. 66b) and number (66a vs. 66c) of the object, but only

41

with the person of the subject. Whether the subject is singular (66a) or plural (66d) is morphologically irrelevant.

(66) a. *Ngai nang-hpe daini tan kau sinde-ai.*
I   you.SG-OBJ today search PERF 1:2SG-DECL

'I have been looking for you today.'

b. *Ngai Mala-hpe daini tan kau se-ai.*
I   Mala-OBJ today search PERF 1:3SG-DECL

'I have been looking for Mala today.'

c. *Ngai nanhte-hpe daini tan kau masinde-ai.*
I   you.PL-OBJ today search PERF 1:2PL-DECL

'I have been looking for you guys today.'

d. *Anhte nang-hpe daini tan kau sinde-ai.*
we   you.SG-OBJ today search PERF 1:2SG-DECL

'We have been looking for you today.'

The full paradigm for declarative SFPs that agree with both the subject and the object are tabulated below.

Table 2.3: Jingpo SFPs Indicating Subject and Object Agreement in Declaratives

Subject	Object	State		Change of State	
		Singular	Plural	Singular	Plural
First person	Second person	de ai	made ai	sinde ai	masinde ai
	Third person	we ai	mawe ai	se ai	mase ai
Third person	First person	ni ai	mani ai	—	—
	Second person	nit dai	manit dai	—	—
	Third person	nu ai	manu ai	sanu ai	masanu ai

It is worth highlighting the existence of many gaps in the above table (Zu, 2011). First, indicated by "—" are four missing cells. No change of state SFPs that agree with third person subject and first/second person object have been attested in Jingpo. This may sound specific and arbitrary, but there are good reasons to believe that this gap is systematic. The exactly same set of cells are missing in other sentence mood as well. As an illustration, below is the subject and object agreement paradigms in interrogatives.

42

Table 2.4: Jingpo SFPs Indicating Subject and Object Agreement in Interrogatives

Subject	Object	State		Change of State	
		Singular	Plural	Singular	Plural
First person	Second person	de ni	made ni	sinde ni	masinde ni
	Third person	we ni	mawe ni	se ni	mase ni
Third person	First person	ni ni	mani ni	—	—
	Second person	nit ni	manit ni	—	—
	Third person	u ni	mu ni	nu ni	manu ni

See Hsieh (2005) for a phonological account for the missing cells in the above paradigms.

Second, no SFPs in these paradigms agree with second person subjects. Zu (2011) hypothesizes that these SFPs may have been lost due to their lack of use, for Jingpo's rich inventory of sentence moods provides better alternatives. In English, declaratives with a second person subject are commonly used not to inform the addressees of something about themselves, but to make a request or a suggestion to the addressee (67a), to attempt a guess and ask for the addressee's confirmation (67b), or to express that the speaker is surprised by the addressee's actions (67c).

(67) a. You have to learn to behave yourself.   (Make a request)

b. You are going to the museum. (Right?)   (Ask for confirmation)

c. So you've made your decision already!   (Express surprises)

In Jingpo, the similar discourse functions are conveyed using highly specialized sentence moods. Imperative SFPs are used to make a request (68a). Suppositives are used to check with the addressee to see if what has been said is correct (68b). Exclamatives indicate that the speaker is surprised at what is said in her statement (68c).

(68) a. *Sara,   ngai-hpe sharin ni!*
       teacher I-OBJ   teach 2:1-IMP

       'Teacher, please teach me.'

b. *nang nnu-hpe   mu nitdong?*
       you   your mother-OBJ see 2:3-SUPP

       'You've seen your mom, right?'   (Dai and Xu, 1992: 313)

c. *nang shi-hpe   garum nithku!*
you   s/he-OBJ help   2:3-EXCL

'Oh, so you helped him.'   (Dai and Xu, 1992: 314)

Finally, no SFPs in Jingpo inflect for two arguments whose referents coincide. Therefore, there are no SFPs in Table 2.3 that hold an agreement relation with both a first person subject and a first person object. For the same reason, the SFPs in the last row of Table 2.3 can only be used in sentences where the subject and the object are disjoint in reference. This contrast is further illustrated below.

(69) a. *Ma Gam shi-hpe   laika   sharin ya   nu-ai*
Ma Gam s/he-OBJ characters teach   AUX 3:3-DECL

'Ma Gam$_1$ taught him/her$_2$ characters.'

b. **Ma Gam   tinang-hpe laika   sharin ya   nu-ai*
Ma Gam self-OBJ   characters teach   AUX 3:3-DECL

(Int.) 'Ma Gam$_1$ taught himself$_1$ characters.'

I will discuss this in more detail in Section 2.1.3.1.

With these systematic gaps in mind, now let's decompose the SFPs in Table 2.3. The plural number and the declarative mood are invariably marked by *ma* and *ai*, respectively. The change of state morpheme has a few allomorphs (70) as in the previous case.

(70)   Change of state → *si* when the object is second person
→ *sa* when both subject and object are third person
→ *s* when both subject is first person and object is third person

The person marking in Table 2.3 poses some challenges for a fully decomposed analysis of Jingpo SFPs. It is difficult to segment the synthetic person marking to achieve a one-to-one correspondence between form and meaning. It is easy to identify the five segments that bear person features, i.e., *(n)de, we, ni, nitd,* and *nu*, but they each are complex in meaning and may be further divisible. For instance, *nu* indicates that both the subject and the object are third person, whereas *(n)de* indicates that the subject is first person and

44

the object is second person. A more satisfactory decomposition analysis of Jingpo SFPs, however, is far beyond the scope of this dissertation.

2.1.3 The Speech Act Projection

In the previous sections, drawing data from binding and agreement, I demonstrate that discourse participants, though phonologically null, are better analyzed as syntactic objects. In this section, I formalize this intuition by projecting the speaker and addressee in syntax.

We have already seen that in Basque and Jingpo the speaker and addressee serve specific discourse functions and have morphological consequences. Assuming the standard Y-model of the language design (Chomsky, 1995) whereby at the point of spell-out the computation splits into Phonetic Form (PF) and Logical Form (LF), speaker and addressee agreement must take place in narrow syntax, which in turn suggests that the speaker and addressee are bona fide syntactic objects. In this section I explore the structural organization of discourse participants. Borrowing terms from Speas and Tenny (2003) and Haegeman and Hill (2013), I argue that the speaker and addressee are syntactic arguments of the Speech Act head. However, the proposal is different from Speas and Tenny's and Haegeman and Hill's in two crucial aspects, briefly summarized in (71).

(71) a.   There is a separate layer, Sen(tience)P, along with the saP.

   b.   Both the speaker and addressee are base-generated above the SenP.

Before we move on, a brief note on the speaker and addressee is in order. The speaker and addressee are informal names for Speas and Tenny's (2003) pragmatic roles. One should not take these names in their literal sense. Speaker does not just mean one who speaks. It is more restricted than that. In this dissertation I take the words "speaker" and "addressee" as relational nouns. A person counts as a speaker only in virtue of

standing in a particular relationship, i.e., authorship, with an utterance. Similarly, the addressee is a person the utterance is addressed to. In Speas and Tenny's (2003) framework, the relevant pragmatic roles are speaker and hearer. Following Haddican (2015), I take the term addressee as a better name than hearer to serve as a pragmatic role. The reason, as Haddican points out, is that non-addressee hearer, such as someone who overhears a conversation, never triggers discourse-related phenomena such as allocutive agreement.

2.1.3.1 Speaker and addressee are syntactically active

Despite the lack of an overt target, Miyagawa (2012) and Zu (2015) propose that addressee agreement and speaker agreement should be treated on a par with morphosyntactic agreement for two reasons. First, the agreement with the non-thematic speaker and addressee is morphologically identical to the agreement with first and second person pronominal arguments. The masculine gender marker *k* and the feminine gender marker *n* in Basque not only indicate allocutivity (72), they can also be used in agreement with second person ergative pronouns (73) or second person dative pronouns (74).[17]

(72) Allocutive agreement in Basque (Oyharçabal, 1993: 92-93)

    a.   *Pette-k*   *lan egin* $\boxed{di\text{-}k}$
        Peter-ERG worked 3.ERG-M

       'Peter worked.'   (said to a male friend)

    b.   *Pette-k*   *lan egin* $\boxed{di\text{-}n}$
        Peter-ERG worked 3.ERG-F

       'Peter worked.'   (said to a female friend)

---

[17]Note that despite the morphological identity between the allocutive forms and the ergative agreement morphemes, (73) is not an instance of allocutive agreement. Recall that allocutivity comes with specific discourse functions. (72), for instance, can only be used in familiar and informal registers. In contrast, the non-allocutive forms in (73) are perfectly fine in formal speech.

(73) Basque ergative person agreement (Oyharçabal, 1993: 95)

    a.   *Lan egin* $\boxed{\textit{dü-k}}$
          worked AUX-2SG.ERG.M

        'You worked.'   (male 2nd person ergative subject)

    b.   *Lan egin* $\boxed{\textit{dü-n}}$
          worked AUX-2SG.ERG.F

        'You worked.'   (female 2nd person ergative subject)

(74) Basque dative person agreement (Oyharçabal, 1993: 95)

    a.   *Gertatü* $\boxed{\textit{∅-zai-k}}$
          happened 3SG.ABS-AUX-2SG.DAT.M

        'It happened to you.'   (male 2nd person dative object)

    b.   *Gertatü* $\boxed{\textit{∅-zai-n}}$
          happened 3SG.ABS-AUX-2SG.DAT.F

        'It happened to you.'   (female 2nd person dative object)

    Similarly in Jingpo, the agreement with the first person subject (75) and that with the speaker (76) are spelled out the same.

(75) Subject agreement with the first person pronoun in Jingpo

    a.   *(Anhte) masum lang hti* $\boxed{\textit{saga-ai}}$
          we   three   time read 1PL-DECL

        'We have read (it) three times.'   (Dai and Xu, 1992: 125)

    b.   *(An)*   *lahkong lang sa yu* $\boxed{\textit{saga-ai}}$
          we:DUAL two   time go PST 1PL-DECL

        'The two of us have been there twice.'   (Xu et al., 1983: 705)

(76) *Jongma du hkum $\boxed{saga\text{-}ai}$*
      student arrive complete 1PL-DECL

      'The students have all arrived.'   (Dai, 2010: 5)

Given this fact, I assume that the non-thematic speaker/addressee and the first/second person pronominal arguments bear the same set of morphological features and can be treated alike in syntax.

Secondly, allocutive agreement and speaker agreement compete with morphosyntactic agreement. In Basque, when the addressee is an event participant (77a) allocutive agreement is not possible. In (77a) the addressee is the grammatical subject of the sentence and it triggers subject agreement. The allocutive form cannot be added to the verb in this case (77b).

(77) Allocutive agreement and second person subject agreement are mutually exclusive
      (Oyharçabal, 1993: 101)

   a. *Lan egin* $\boxed{du\text{-}zue}$
       worked AUX-2PL.ERG

       'You(pl) worked.'   (agreement with 2nd person subj)

   b. **Lan egin* $\boxed{di\text{-}na\text{-}zue}$
       worked AUX-F-2PL.ERG

       (Int.) 'You(pl) worked.'   (agreement with addressee and 2nd person subj)

Oyharçabal (1993: 102) attributes the ungrammaticality of (77b) to a general property of Basque verb inflection. That is, in Basque agreement relations cannot coincide. The auxiliary only agrees with the same person once. (77b) is ungrammatical in the same way as (78) is. Basque generally allows its auxiliary to agree with two arguments, unless the two arguments refer to the same person.

(78) **Mirailean* *ikusi* $\boxed{gait\text{-}u\text{-}t}$
      mirror.LOC seen 1PL.ABS-AUX-1SG.ERG

      (Int.) 'I saw us in the mirror.'

It is worth noting that Oyharçabal's account is based on an implicit yet non-trivial assumption that the non-thematic addressee and the second person pronominal argument in (77b) overlap in the same way as the two first person pronominal arguments in (78) do.

As has been discussed in Section 2.1.2.3, Jingpo also has a general ban on double agreement with co-indexed arguments. No SFPs in the language inflect for two arguments whose referents coincide, as evidenced by the systematic gaps in the subject and object agreement paradigms (Table 2.3). As an illustration, in (79) below both the subject and the object refer to the first person, therefore only subject agreement obtains.

(79) *Ngai tinang-hpe mu   yu* | *sang-ai* |.
     I   self-OBJ   see PERF 1SG-DECL
     'I have seen myself.'

I am not aware of any discussion of the theoretical reasons why (some) languages do not allow agreement with both the subject and the object when they refer to the same person. Here is one possibility. As we know the co-reference between the two argument DPs is a result of binding. Let us assume the second DP (YP) is bound by the first DP (XP) and does not have interpretable ϕ-features on its own (80b). It is therefore not an appropriate target for agreement. Consequently the auxiliary only agrees with one DP. This is in contrast with (80a). When the two DPs are disjoint in reference, both can be targeted for agreement. In this dissertation dashed lines are reserved to indicate agreement, angled lines indicate binding and solid curved lines are for movement.

(80) a.   When YP is not bound by XP   b.   When YP is bound by XP
                AuxP   AuxP

        $\text{Aux}_{[u\phi]}$ $\text{Aux}_{[u\phi]}$
                $\text{XP}_{[i\phi]}$ $\text{YP}_{[i\phi]}$ $\text{XP}_{[i\phi]}$ $\text{YP}_{[u\phi]}$
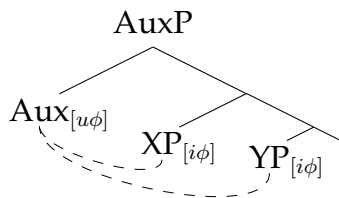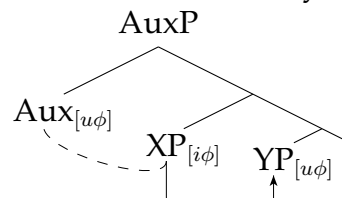
I will not explore this account any further. What is important for the present purposes is the descriptive conclusion that there is a ban on double marking the same person in Basque and Jingpo. This ban extends to speaker agreement as well. That is, when the speaker is the grammatical subject only vanilla subject agreement is possible (81a).

(81) Speaker agreement and first person subject agreement are mutually exclusive

    a.   *Ngai du*   &boxed;sang-ai&boxed;

         I   arrive 1SG-DECL

         'I have arrived.'

    b.   **Ngai du*   &boxed;saga-ai&boxed;

         I   arrive 1PL-DECL

         (Int.) 'I have arrived.'

Recall that speaker agreement, not subject agreement, poses plurality requirement on the SFP. However, when the first person singular pronoun occurs in the subject position the SFP has to agree with it in number (81a). In other words, speaker agreement is blocked in this case (81b). Following Oyharçabal (1993), I conclude that the ban on double agreement does not discriminate non-thematic discourse participants from their thematic counterparts.

2.1.3.2   The structural organization of speaker and addressee

So far I have demonstrated that agreement with non-thematic discourse participants in Basque and Jingpo is morphosyntactic agreement because (i) it is spelled out in the same way as morphemes that agree with thematic first and second person pronouns, and (ii) it can be blocked by the agreement with thematic first and second person pronouns. To treat speaker agreement and allocutive agreement as morphosyntactic agreement, instead of, say, honorification marking[18] which some may argue is not really agreement

---

[18]This is not to say speaker agreement and allocutive agreement do not serve extralinguistic functions. Grammatical constructions involving discourse participants express attitude, politeness or solidarity, or to

(Bobaljik and Yatsushiro, 2006), we need to treat the speaker and addressee as real syntactic objects. I consider them as the arguments of two functional projections SpP and AdrP, schematically represented in (82) below.

(82) The Speech Act Projection

```
                    SpP
                   /    \
         SPEAKER_iφ      \
                        /    \
                      Sp      AdrP
                             /    \
                  ADDRESSEE_iφ     \
                                  /    \
                                Adr      TP
                                        /    \
                            SUBJECT_iφ        \
                                          /        \
                                    T_{D,uφ}        vP
```
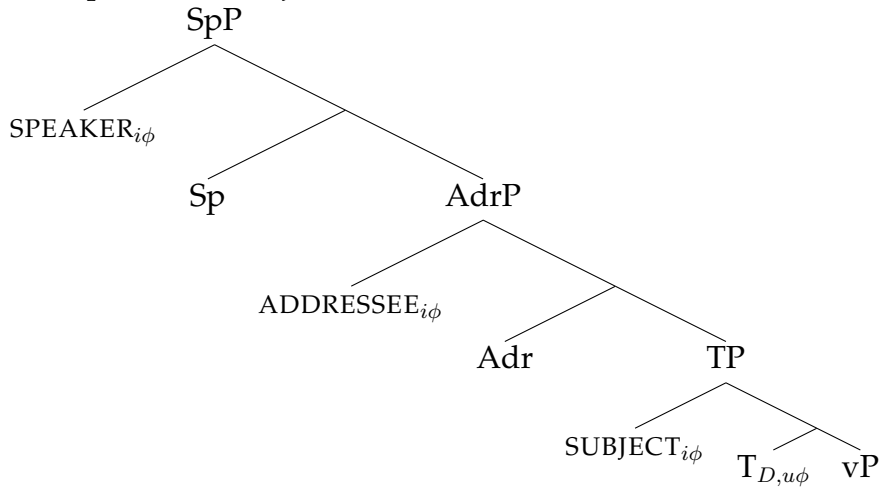
In this dissertation I use the Speech Act Projection , or saP for short, as a cover term for SpP and AdrP. It is the same as the common practice of taking Rizzi's (1977) FinP and ForceP as CP. This is purely for convenience purposes, as SpP and AdrP share many properties in common (see Section 2.2) and in many parts of this dissertation they are discussed next to each other. Despite the cover term, they should be considered as independent projections.

I take Sp to be structurally higher than Adr, and as a result, Sp poses selectional restrictions on Adr. In cases of monologues, where the addressee is the speaker, some Basque dialects allow allocutive agreement with the gender feature of the speaker (Bill Haddican, p.c). I argue that in this case the addressee is the first person reflexive bound by the speaker,[19] yet this account is only possible if the speaker asymmetrically c-commands the addressee, as per Binding Condition A (Section 2.0.1).

---

provide ways for the speaker to characterize themselves to the addressee. However, their expressive power should not in any way disqualify them from being syntactically relevant. Finally, for a recent discussion on Japanese honorification, see Ivana and Sakai (2007).

[19]If in a dialogue, a sentence S can be paraphrased as *I tell you S*, then a monologue roughly means *I tell myself S*.

Basque and Jingpo provide good evidence for situating the SpP and the AdrP in the CP domain. Oyharçabal (1993) notices that allocutive forms are banned in questions in Northeastern Basque, as illustrated below.

(83)   Northeastern Basque (Oyharçabal, 1993: 107–108)

    a.   *Lan egiten du-∅-ia   hire   lagunak?*
          work   AUX-3SG.ERG-Q your friend.ERG

          'Does your friend work?'

    b.   **Lan egiten di-∅-*n*-a   hire   lagunak?*
          work   AUX-3SG.ERG-**F**-Q your friend.ERG

          (Int.) 'Does your friend work?'

However, this generalization is not entirely true as in Batua Basque, another Basque dialect, allocutive forms are attested in interrogative clauses (84).

(84)   Batua Basque (Ane Odria, p.c.)

    a.   *Lan egiten al di-∅-**k**   hire   lagunak*
          work   Q AUX-3SG.ERG-**M** your friend.ERG

          'Does your friend work?'   (said to a male friend)

    b.   *Lan egiten al di-∅-**n**   hire   lagunak*
          work   Q AUX-3SG.ERG-**F** your friend.ERG

          'Does your friend work?'   (said to a female friend)

What is interesting about this dialect is that its Q-particle *al*, unlike the Q-particle *(i)a* in Northeastern Basque, is not suffixed to the allocutive verb. This contrast is illustrated in (85) below.

(85)   The placement of the Q-particle in two Basque dialects

    a.   *John ikusi **al** d-u-zu?*
          John see   Q 3.ABS-AUX-2SG.ERG

          'Have you seen John?'   (Batua Basque)

    b.   *John ikusi d-u-zu-**ia**?*
          John see   3.ABS-AUX-2SG.ERG-Q

          'Have you seen John?'   (Northeastern Basque)

I conclude that the lack of allocutive agreement in questions in Northeastern Basque is a result of the placement of its Q-particle. When the Q-particle merges above T, the auxiliary, it prevents T from probing into the CP domain. This is in contrast with Batua Basque, where the Q-particle is merged at a lower position, and is not in the way of allocutive agreement.

Some may raise the question why two related Basque dialects would allow distinct merge positions if the semantic composition of questions in the two dialects is identical. Linguists like Cable (2010) assume that Q-particles start out at a lower position and move to the CP-domain either covertly or overtly, by the end of the derivation. I assume that though Q-particles in the two dialects are externally merged to different positions (85), they both undergo covert movement and end up at the same height. As a result (85a) and (85b) receive the same interpretation at LF. Covert materials, however, do not block operations that happen in Narrow Syntax.

In Jingpo, the presence of a CP-level element also blocks the agreement with discourse participants. Zu (2011) claims that the evidential marker *da* is merged above TP. Although it can co-occur with the SFP that agrees with the subject (86a), it is incompatible with the SFP that agrees with the speaker (86b-c).[20]

(86) Blocking effects in Jingpo (Zu, 2015)

    a. *jongma du hkum mə̄-s-āi da.*
       student arrive complete **3PL**-COS-DECL EVID

       'The students have all arrived. (I heard it from someone.)'

    b. **jongma du hkum sə̋-kä́ʔ-āi da.*
       student arrive complete COS-**1PL**-DECL EVID

       (Int.) 'The students have all arrived. (I heard it from someone.)'

    c. **jongma du hkum da sə̋-kä́ʔ-āi.*
       student arrive complete EVID COS-**1PL**-DECL

       (Int.) 'The students have all arrived. (I heard it from someone.)'

---

[20]Recall from Section 2.1.2 that the *s* prefix marks the change-of-state aspect.

The structure in (82) allows the root clause auxiliary to agree with syntactic subjects as well as discourse participants. T starts out with uninterpretable features that need to be valued with DPs that have matching interpretable features.[21] In Jingpo there are three options. T can stay in situ. The subject is attracted to Spec,T to check both the D feature and ϕ-features. This gives rise to regular subject agreement.

(87) Subject agreement, T stays in-situ and attracts the subject to move to its specifier position

    a.   *(Anhte) masum lang hti*   ⎡*saga-ai*⎤

         we   three   time read 1PL-DECL

        'We have read (it) three times.'

    b.
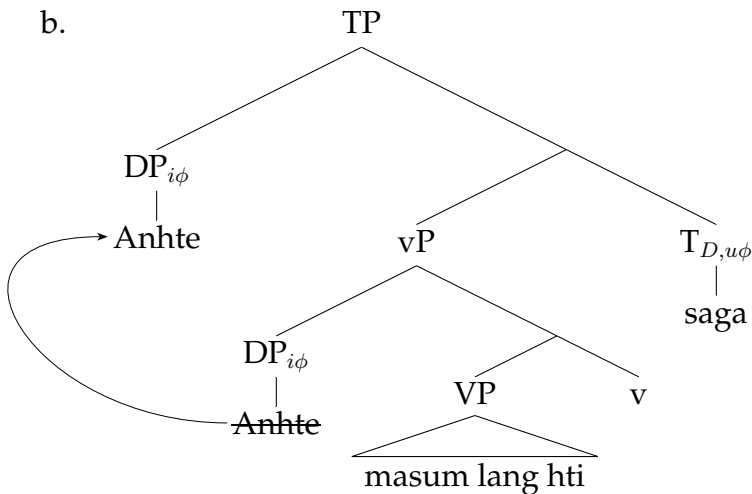
Before I present the derivations of speaker and allocutive agreement, a couple of assumptions are in order. First, I take movement to be a result of attraction. Instead of saying α moves to β, I take β as bearing certain features that attract α. Secondly, movement/attraction must be constrained by the Minimal Link Condition (MLC), as defined below.

---

[21]In this dissertation, I assume that agreement is evaluated from bottom up (Koopman, 2006; Zeijlstra, 2012). Alternatively, Miyagawa (2012) argues that the unvalued ϕ-features originate in a higher functional head and then percolate down to T.

(88) Minimal Link Condition (Chomsky, 1995: 311)

    a.   K attracts α only if there is no β, β closer to K than α, such that K attracts β.
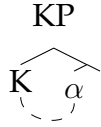
    b.   K attracts α c.   K does not attract α
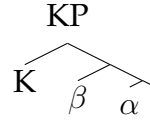
In the case of allocutive agreement, after the subject moves to Spec,T, checking off its D feature, T may move to Adr where it can value features with the addressee at Spec, Adr. This type of movement must be driven by discourse features, and have discourse-related consequences. Let's call the discourse feature in question Δ. Δ triggers the T-to-Adr movement. The raised T, still bearing unvalued ϕ-features, then has its features checked with the addressee.

(89) Addressee agreement, T moves to Adr and agrees with the addressee

    a.   *Hkying   gade   htu   sə-ta ?*
               time   how.many point 2SG-WH

        'What time is it?'

    b.

55
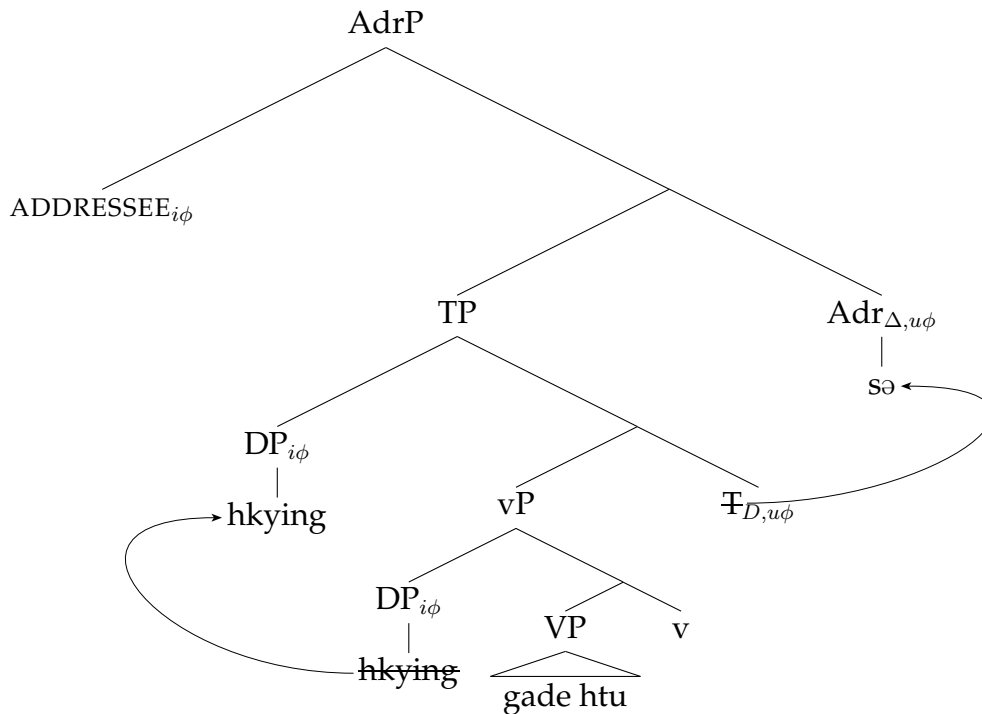
Finally, in the case of speaker agreement, Sp bears the Δ feature. As a result T moves all the way to Sp, agreeing with the speaker at Spec, Sp.

(90) Speaker agreement, T moves to Sp and agrees with the speaker

 a. *Jongma du hkum saga-ai*
   student arrive complete 1PL-DECL
   'The students have all arrived.'

 b.
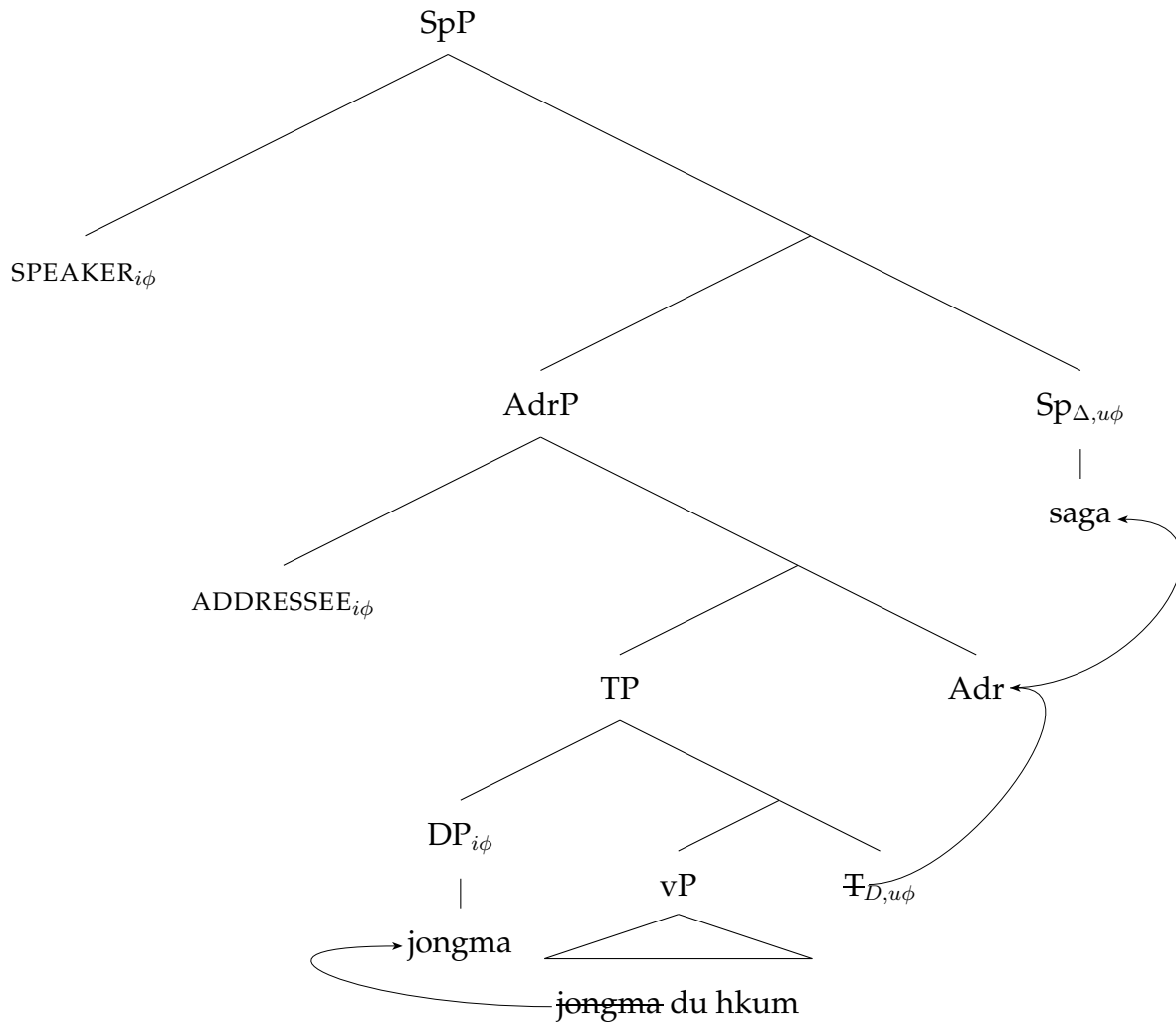
There is a consensus among syntacticians that linguistic derivations are subject to economic conditions. A point of disagreement, however, concerns the specfic principles of syntactic economy. Chomsky (1993) introduces contradictory economic requirements:

derivations should minimize the number of steps and the distance each step makes.[22]
Since I adopt the MLC (88) which prefers derivations of shorter links over derivations
of longer links, in this dissertation I make the shortest move requirement, not the fewest
steps requirement, a priority. The decision is solely driven by considerations of internal
consistency. In (90b) the T-to-Sp movement makes a pit stop at Adr to satisfy the shortest
move condition. Adr does not block the movement as it is featureless.

To summarize what we have seen so far, only agreement with the speaker and
addressee, not regular subject agreement, involves moving T to the CP domain. Such
movement is driven by the discourse feature Δ. This account makes two predictions.
First, movements driven by Δ-features, in contrast to other types of movement, yield
specific discourse functions. When Adr bears the Δ feature, the resulting derivation indi-
cates that the speaker wants to draw the addressee's attention. The addressee's existence
in the discourse is obligatory for the sentence (89a) to be felicitous. When Sp bears the
Δ feature, the resulting derivation cements a personal relationship between the speaker
and the subject. Such relationship is a necessary condition for the felicity of (90a). Sec-
ondly, my account predicts that the speaker and addressee agreement would be blocked
by a feature-bearing, intervening CP-level element such as the Q-particle in Northeastern
Basque (83) and the evidential marker *da* in Jingpo (86).

Do we have any empirical evidence to show that the speaker and addressee re-
side in the specifier position of some clausal functional head? I believe we do. Recall
that in Section 2.1.1 I demonstrate that speaker agreement and possessor agreement are
morphologically distinct, reproduced below.

---

[22]For more discussion of the two contradictory economic conditions, see Zwart (1996).

(91) Two types of agreement relations in Jingpo

    a.   *Jongma du hkum* $\boxed{saga\text{-}ai}$
         student arrive complete 1PL-DECL

       'The students have all arrived.'   (speaker agreement)

    b.   *Jongma du hkum* $\boxed{sali\text{-}ai}$
         student arrive complete 1SG(POSS)-DECL

       'My students have all arrived.'   (possessor agreement)

It should be noted that the distinct morphology is not based on specific grammatical functions of the targets, i.e., between being a speaker and being a possessor. Otherwise it would be surprising that the subject and the speaker trigger the same type of agreement. After all, Jingpo speakers should be able to tell that the speaker is not necessarily the subject. Nor is the choice between the two sets of agreement relations dictated by morphological case, i.e., the possessor is assigned Genitive case whereas the subject/speaker is not. A DP that is not assigned Genitive case may also trigger "possessor" agreement, as illustrated below.

(92) a.   *Shanhte-a mam mam go malala n gaja* $\boxed{malu\text{-}ai}$
        they-GEN rice paddy TOP very not good 3PL(POSS)-DECL

      'Their rice paddy is very bad.'   (Dai and Xu, 1992: 15)

    b.   *Shanhte hpai ai go li ai hkrai rai* $\boxed{malu\text{-}ai}$
        they carry DECL TOP heavy DECL all be 3PL(POSS)-DECL

      'What they carry is very heavy.'   (Dai and Xu, 1992: 283)

In both sentences, the SFP is *malu ai*. However, only in (92a) is the target of the agreement, namely *shanhte-a* 'their', the real possessor. The pronoun *shanhte* 'they' in (92b) is the subject of a (reduced) sentential subject *shanhte hpai ai go* 'what they carry', and as such cannot be attached with the Genitive case suffix *-a*.

    In Zu (2011) I argue that the two sets of agreement relations reflect distinct structural relations. More specifically, "subject" agreement is the result of a functional head

checking features with its specifier (93a), whereas "possessor" agreement is the result of a functional head agreeing with the specifier of its specifier (93b). This explains why both the possessor of a DP subject and the subject of a sentential subject trigger the same type of agreement.

According to van Koppen (2005), both XP and YP in (93b) are equidistant to the probe F, as a result YP is as good a goal as XP.

(93) a. "subject" agreement with XP   b. "possessor" agreement with YP
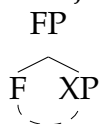
      FP   FP

     F XP   F   XP

                                          YP X
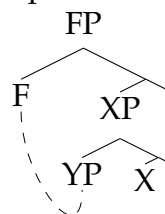
The fact that the speaker (91a) triggers the same agreement as the grammatical subject (94) naturally follows if the speaker occupies a comparable specifier position of a functional head along the clausal skeleton.

(94) *(Anhte) masum lang hti* | *saga-ai* |
      we   three   time read 1PL-DECL

    'We have read (it) three times.'   (Dai and Xu, 1992: 125)

2.2 Defining properties of the Speech Act Projection

Now that we have established the structure of the Speech Act Projection, this section addresses its two crucial properties, namely, its insensitivity to the declarative-interrogative distinction, and its unembeddability. These two play a pivotal role in Section 2.3 in motivating a separate projection in the discourse structure.

2.2.1 The saP is not sensitive to clause types

Though Haegeman and Hill's (2013) proposal is inspired by Speas and Tenny (2003), there is one crucial difference. Speas and Tenny (2003) argue that declarative and interrogative clauses are structurally different (95). More specifically, the addressee, or HEARER in (95), occurs in a low position that does not c-command the CP in declarative clauses (95a), and undergoes a dative-shift style movement in questions and imperative clauses (95b).

(95) Declaratives and the Interrogative Shift (Speas and Tenny, 2003: 320–321)

    a.   Declaratives
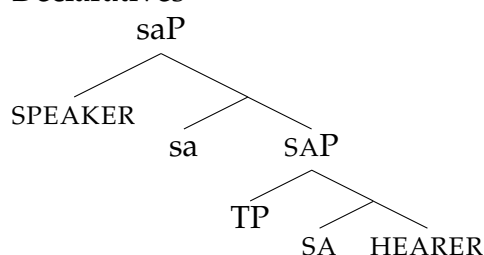
    b.   Interrogatives and imperatives
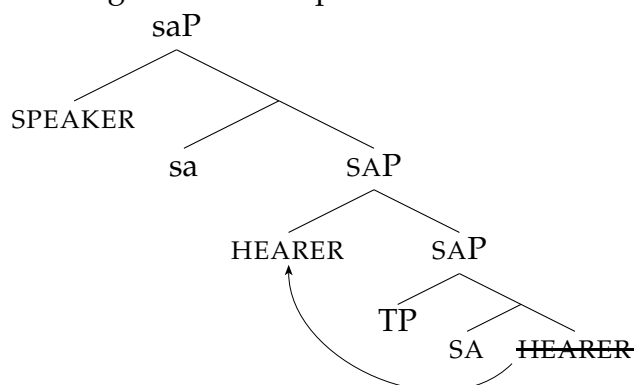
      I will argue in Section 2.3 that the two proposals differ in this way because they are designed to account for rather different phenomena. I propose that for cases of speaker and addressee agreement, Haegeman and Hill's structure is preferred, because the target of such agreement remains the same across clause types. We have already seen that in declarative clauses the addressee can be targeted for agreement, reproduced below.

(96) Allocutive agreement in Basque (Oyharçabal, 1993: 92-93)

    a.   *Pette-k*   *lan egin* $\boxed{di\text{-}k}$
          Peter-ERG worked 3.ERG-M

        'Peter worked.'   (said to a male friend)

    b.   *Pette-k*   *lan egin* $\boxed{di\text{-}n}$
          Peter-ERG worked 3.ERG-F

        'Peter worked.'   (said to a female friend)

This is not possible if we adopt the structure (95a) for declaratives, as Addressee, or HEARER in (95a), is structurally too low to be targeted for allocutive agreement. Recall from the previous section that the T-to-Adr movement is necessary for allocutive agreement. Such movement would have to proceed downwards given a structure like (95a), violating the Extension Condition, as defined below.

(97) The Extension Condition (Chomsky, 2004: 110)

    a.   Displacement from within α must be to the edge of α, yielding a new specifier.

    b.

    c.
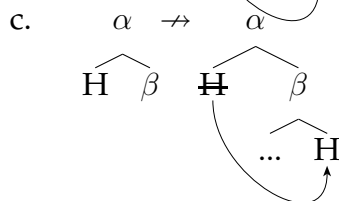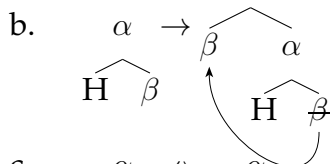
The Extension Condition requires both external and internal merge to extend the existing structure. In other words, the landing site of a moved element always asymmetrically c-commands its original position (97b). We cannot tuck H under β (97c) as such movement does not create a bigger phrase.

On the other hand, addressee is not necessarily the preferred target in interrogatives (98b) and imperatives (98a), contrary to what would be expected given (95b).

(98) Speaker agreement in Jingpo

    a. Scenario: a mother asks her son to keep still.

       Atsom sha dung $\boxed{ga}$

       well   sit   1PL:IMP

       'Sit still!'   (Dai, 2010: 6)

    b. Scenario: a pig owner asks someone if they know where his pig went.

       Wa ganang nga $\boxed{saga\text{-}ta}$?

       pig where exist 1PL-WH

       'Where has the pig gone?'

Since there is an abundance of evidence which suggests that the choice between speaker agreement and addressee agreement is not by any means tied to clause types, this dissertation departs from Speas and Tenny (2003) by making a strong claim—both the speaker and the addressee are syntactically represented in the same configuration in all clause types. Speaker agreement and addressee agreement carry different discourse functions. The choice between them is determined by the location of the discourse feature Δ, not derived by some clause-type changing movement.

2.2.2 The saP is not embeddable

Another property that characterizes the saP is that it is only present for root clauses. This is supported by the fact that agreement with the speaker and addressee only applies to root clause predicates. Oyharçabal (1993) notices that allocutive agreement cannot be embedded.[23] Take Basque as an illustration. The allocutive suffix *na*, indicating the addressee is female, cannot occur in subordinate clauses (99b). In contrast, the sentence is perfectly fine without allocutive agreement (99a).

---

[23]See Antonov (2015) for a recent survey of allocutivity across languages. According to him, the unembeddability of allocutive verbs is held across languages.

(99) Allocutive agreement is disallowed in complement clauses (Oyharçabal, 1993: 107)

    a.   *Ez   di-na-t*   *nahi [gerta   da-ki-o-n]*
        not AUX-1SG.ERG-F want happen AUX-3SG.ABS-3SG.DAT-COMP

        'I don't want it to happen to him.'

    b.   **Ez   di-na-t*   *nahi [gerta   di-aki-o-**na**-n]*
        not AUX-1SG.ERG-F want happen AUX-3SG.ABS-3SG.DAT-**F**-COMP

        (Int.) 'I don't want it to happen to him.'

    Zu (2015) also points out that in Jingpo agreement with discourse participants has not been attested in embedded clauses. In (100a) the complement of *nga tsun* 'say' is a full-fledged clause whose SFP agrees with its subject *ganu* 'mother.' No speaker agreement is allowed in this complement, even though its function is entirely conceivable. For instance, the speaker could use (100b) to indicate a warm relationship with Mala's mother, or alternatively, Mala could use the complement clause in (100c) to express a strong mother-son bond. However, neither option is possible in Jingpo.

(100) a.   *Mala [ganu   labu langai mi   mari ai]   nga tsun ai.*
           Mala mother skirt one   *indef* buy 3SG.DECL say   3SG.DECL

          'Mala said that (his) mother bought a skirt.'

    b.   **Mala [ganu   labu langai mi   mari ga-ai]   nga tsun ai.*
           Mala mother skirt one   *indef* buy 1PL.DECL say   3SG.DECL

          (Int.)'Mala said that (his) mother bought a skirt.'

    c.   **Mala [ganu   labu langai mi   mari ma-ai]   nga tsun ai.*
           Mala mother skirt one   *indef* buy 3PL.DECL say   3SG.DECL

          (Int.)'Mala said that (his) mother bought a skirt.'

    The above evidence suggests that the saP cannot appear in complement clauses. I take this as a natural consequence of Speas and Tenny's (2003) hypothesis that there is one and only one saP per sentence.

Before I conclude the discussion of this section, let me clarify what I mean by root clause and root clause phenomena. In this dissertation I use the term root clauses as defined by Emonds (1969).

(101)   Root (Emonds, 1969: 8)
A root will mean either the highest S in a tree, an S immediately dominated by the highest S, or the reported S in direct discourse.

In this dissertation I take main clauses as belonging to the first subcategory of root clauses. The term is exclusively reserved for the structurally highest clause in the tree.

Emonds (1969) identifies subject-auxiliary inversion as a typical root clause phenomenon, and observes that the inversion only appears in root clause environments as defined in (101). Specifically, the subject follows the auxiliary only when they appear in (i) the main clause (102a, 103a), (ii) the clause that is conjoined with the main clause (102b, 103b), or (iii) the direct quotation (102c, 103c). The inversion is disallowed in any other environments (102e, 103e).

(102) a.   Never had Joe been so confused.
b.   Joe didn't understand a word the attorney said, and never in his life had he been so confused.
c.   Joe said, "never have I been so confused."
d.   We talked about how Joe had never been so confused.
e.   *We talked about how never had Joe been so confused.

(103) a.   Why should Jill know the answer to that question?
b.   Jill didn't know the answer, but why should she?
c.   Jill asked, "how should I know?"
d.   Joe wonders why Jill should know the answer to that question.
e.   *Joe wonders why should Jill know the answer to that question.

Hooper and Thompson (1973) notice that Emonds's empirical generalization is not correct in English, as the negative constituents like *never* or *under no circumstances* can sometimes appear in embedded environments (Hooper and Thompson, 1973: 466, 480).

(104) a.   Alice vowed that under no circumstances would she loan me the key.

b.   I found out that never before had he had to borrow money.

They point out that some of the root clause phenomena identified by Emonds (1969) produce emphasis, and as such are restricted to asserted clauses, as opposed to non-asserted ones. In other words, the term root clause phenomena as proposed in Emonds (1969), is a misnomer. Phenomena such as negative constituent inversion, topicalization, and VP preposing, etc., should be more aptly named "asserted clause phenomena."

Though Emonds fails to identify the correct set of root clause phenomena, his original conception of root clause is nevertheless meaningful and should not be simply discarded. For one thing, he is correct about the distribution of subject-auxiliary inversion in questions (103). More intriguingly, Miyagawa (2012) presents data from Japanese to show that the definition of root clauses perfectly corresponds to the environments where a distinct set of phenomena have been attested.

One such example is the politeness marking *mas-* in Japanese (Miyagawa, 2012: 87,89). In formal speech, if the sentence only contains one clause, *mas-* is obligatory (105a,b). If the sentence consists of two or more clauses, one of which contains the others, *mas-* can only appear in the main clause, not in the embedded one(s) (105c,d).

(105) a.   *Dare-ga   ki-**mas**-u   ka?*
             who-NOM come-POL-PRES Q

       "Who will come?"

b.   **Dare-ga   kuru   ka?*
       who-NOM come:PRES Q

       (Int.) "Who will come?"

c.   **Hanako-wa   [dare-ga   ki-**mas**-u   ka] sitte   i-**mas**-u.*
       Hanako-TOP who-NOM come-POL-PRES Q   know   POL-PRES

       (Int.) "Hanako knows who is coming."

d. *Hanako-wa [dare-ga kuru ka] sitte i-**mas**-u.*
   Hanako-TOP who-NOM come:PRES Q know POL-PRES

   "Hanako knows who is coming."

Besides the main clause, *mas-* is allowed in two other envinronments (Harada, 1976), namely, the clause that expresses a direct quote (106a), and the clause that conjoins with the main clause (106b). These facts lead Miyagawa (2012) to conclude that Japanese politeness marking is a bona fide root clause phenomenon and is limited to the set of root clause environments conceived by Emonds (1969).

(106) a. *Taroo-wa [Hanako-ga ki-**mas**-i-ta to] it-ta.*
     Taro-TOP Hanako-NOM come-POL-PST C$_{nonfact}$ say-PST

     'Taro said, "Hanako came."'

   b. *Kesa Ueno Doobusuen-ni iki-**mas**-i-te, sukosi sanpo-o si-te*
     this morning Ueno zoo-to go-POL-and bit walk take
     *mairi-**mas**-i-ta.*
     went-POL-PST

     'This morning I went to the Ueno Zoo and took a short walk.'

The agreement with the discourse participants is a welcome addition to the revised catalog of root clause phenomena, as it is restricted to exactly the same environments as Japanese politeness marking. We have already seen plenty of examples of such agreement in the main clause. It is also allowed in the other two types of root clauses. Take Jingpo speaker agreement as an example.

(107) a. *nye shayi grai let ga-ai nta n-ga, grai shakut*
     my daughter very smart 1PL-DECL in addition very hardworking
     ga-ai.
     1PL-DECL

     'My daughter is not only very smart, she's also hardworking.'

   b. *jongma-hpe sara go, "nang grai shakut ga-ai" nga*
     student-OBJ teacher TOP you very hardworking 1PL-DECL said

     The teacher said to her student, "you are really hardworking."

In (107a), the speaker brags about her daughter, and the SFP in each conjunct agrees with the parent, not the daughter, in person feature. (107b) suggests that speaker agreement can be directly quoted along with the rest of the teacher's praise of her student. Since the agreement with discourse participants appears in exactly the same set of root environments as defined by Emonds's (1969), I take such agreement as a typical root clause phenomenon.[24]

In this dissertation I focus my attention on the description of a few specific root clause phenomena, such as agreement with discourse participants, and on the way they inform our understanding of the Speech Act domain. I will not explore reasons why certain phenomena are limited to the root environments while others are not. Lightfoot (2012) attempts to explain this discrepancy from the perspective of language acquisition. I refer interested readers to this text for more detail. In what follows, I take it as a fact that the saP only appears in root clauses.

2.3   Separating discourse anchors from perspective shifters

In Section 2.1.3, I have shown that Basque and Jingpo provide the most compelling evidence that (i) discourse participants, even when not pronounced, are present in the grammatical structure, and (ii) discourse participants and first/second person pronouns are morphologically indistinguishable. I have proposed that the speaker and the addressee occupy specifier positions of some clausal functional heads, analogous to the subject position. I call the two heads Sp and Adr, respectively. In Section 2.2 I have shown that these projections are only present in root clauses. Furthermore, I point out that the syntactic presence of the speaker and the addressee is not conditioned by specific clause types. The

---

[24]For more discussion of allocutive agreement as a root clause phenomenon, see Miyagawa (2012).

second property prefers Haegeman and Hill's (2013) structure over Speas and Tenny's (2003). However, it does not mean we should discard the latter proposal alltogether.

In this section I present a different set of data from Newari (Tibeto-Burman, spoken in Nepal) that favors an account that treats declarative clauses and interrogative clauses differently. I will show that the two types of context-dependent phenomena were not sufficiently separated in the previous syntax literature. While some of these phenomena can make direct reference to discourse participants, the others need to be mediated by perspectival expressions. Haegeman and Hill (2013) and Speas and Tenny (2003) were each designed to account for one type, and neither can be readily extended to data of the other type.

2.3.1   The conjunct-disjunct system in Newari

In Newari, the suffixes of finite verbs encode both tense [25] and the so-called conjunct-disjunct distinction.[26] Multiple factors conspire to determine the distribution of conjunct and disjunct marking, which I summarize as follows.

(108)   The choice between conjunct and disjunct forms depends on the following parameters
    a.   The reference of the subject,
    b.   The clause type,

---

[25]Newari morphologically distinguishes past tense from non-past tense. The latter is reserved for events taking place in times both present and future. The disjunct form may arguably encode aspect, too. Hargreaves (2005) reports that perfectivity is morphologically distinguished in the past disjunct verb, with *-a* encoding past perfective and a lengthened final vowel of the verb root encoding past imperfective. This distinction, however, is neutralized in past conjunct verbs and verbs denoting non-past. Since perfectivity is not morphologically marked in conjunct verbs or across disjunct verbs, and since our main focus here is the distribution of Newari conjunct verbs, I henceforth disregard the discussion of aspect.

[26]The terminology is directly borrowed from previous Newari field linguists (Hale, 1980; DeLancey, 1992; Hargreaves, 2005). Another pair of terms, namely, congruent and noncongruent verbs, has been coined in Dickinson (2000: 382-383) for "a similar, logophoric-like system" in Tsafiki (Barbacoan). The readers should be aware that there is no connection between the conjunct-disjunct system in Newari and the coordinating conjunctions *and*/*or* in natural or programming languages, despite their unfortunately similar-sounding names.

c. The type of the event denoted by the clause, and

d. The attitude ascription of the clause.

In this section I only describe the first two parameters, and delay the full picture of Newari conjunct constructions in Chapter 3.

In root clauses, the conjunct suffix typically[27] occurs with first person subject in declarative clauses (109a) and second person subject in interrogative clauses (110b),[28] whereas the disjunct suffix occurs elsewhere.

(109) a. *ji   ana   wan-ā   / wan-e*
    I.ABS there go-**PST.CONJ**   go-**NPST.CONJ**

    'I went/will go there.'

  b. *cha   ana   wan-a   / wan-i*
    you.ABS there go-**PST.DISJ**   go-**NPST.DISJ**

    'You went/will go there.'

  c. *wa   ana   wan-a   / wan-i*
    (s)he.ABS there go-**PST.DISJ**   go-**NPST.DISJ**

    '(S)he went/will go there.'

(110) a. *ji   ana   wan-a   / wan-i   lā*
    I.ABS there go-**PST.DISJ**   go-**NPST.DISJ** Q

    'Did/Will I go there?'

  b. *cha   ana   wan-ā   / wan-e   lā*
    you.ABS there go-**PST.CONJ**   go-**NPST.CONJ** Q

    'Did/Will you go there?'

---

[27]Since this section only focuses on the first two parameters in (108), I keep the other two parameters neutral for the ease of exposition. In other words, all the Newari clauses in this section depict the same type of event and *de se* attitude. I will delay a more comprehensive discussion of Newari conjunct marking to Chapter 3. This is by no means to trivialize the last two parameters. On the contrary, they are complicated topics and therefore constitute the subject matters of Chapters 4 and 5, respectively.

[28]In Newari, an optional particle *lā* indicates interrogative mood. It is not obligatory for question formation. The clause *wa ana wana* can be interpreted as a question "did s/he go there?" with a rising intonation. However, the presence of *lā* helps remove the ambiguity between questions and statements that otherwise obtains in the written form.

c. *wa   ana   wan-**a**   / wan-**i**   lā*
   (s)he.ABS there go-**PST.DISJ**   go-**NPST.DISJ** Q

   'Did/Will (s)he go there?'

The main-clause distribution of conjunct (boldfaced) and disjunct verbs is summarized in the following table.

Table 2.5: The Conjunct/Disjunct Marking in Newari Root Clauses

Local subject	Declarative	Interrogative
First person	**Conjunct**	Disjunct
Second preson	Disjunct	**Conjunct**
Third person	Disjunct	Disjunct

Although it is tempting to conclude that the conjunct verb co-varies with the person feature of its subject, this hypothesis has to be rejected upon further scrutiny. As has been pointed out in the previous field reports (Hale, 1980; DeLancey, 1992; Hargreaves, 2005), in complement conjunct constructions the embedded subject and the matrix subject are co-referential (111a), whereas the subject in complement disjunct constructions and the matrix subject can refer to different individuals (111b).[29] The embedded subject is a third person pronoun in both cases.[30]

(111) a. *wõ: [wa   ana   wan-**ā**   dhakā:] dhāla*
         (s)he.ERG (s)he there go-**PST.CONJ** that   said

         '(S)he$_1$ said that (s)he$_{1/*2}$ went there.'   (conjunct, co-reference)

   b. *wõ: [wa   ana   wan-**a**   dhakā:] dhāla*
         (s)he.ERG (s)he there go-**PST.DISJ** that   said

         '(S)he$_1$ said that (s)he$_{*1/2}$ went there.'   (disjunct, disjoint reference)

We have already established in the previous section that covert discourse participants are syntactically present at the left periphery. This allows us to provide a uniform

---

[29]As I will discuss in the next chapter, Newari disjunct marking only allows, does not force, disjoint reference.

[30]Newari allows pro drop. The subject is always optional as long as its reference is clear in the discourse. In (111) the embedded subject is not overt but can be present. As far as I can see, there are no interpretational differences between overt pronouns and their covert counterparts.

account for (108a) and (108b) in Newari—when the conjunct verb form is used its subject is co-indexed with a higher DP. The subject of an embedded conjunct verb needs to refer to the matrix subject (112b), whereas the subject of a main conjunct verb needs to be co-indexed with a discourse participant (112a).

(112)   Accounting for Newari conjunct morphology (first attempt)
   a.   Root clauses
        [$_{saP}$ Discourse participant$_i$ sa   [$_{TP}$ Main Subject$_i$ T$_{conj}$ ...
   b.   Attitude complements
        [$_{vP}$ Matrix subject$_i$ sa   [$_{TP}$ Embedded Subject$_i$ T$_{conj}$ ...

I take the disjunct marker as an "elsewhere" allomorph. It occurs whenever the conjunct form is not licensed. In Chapter 3 I will defend this claim by showing that the conditions for disjunct forms do not form a natural class.

(112) is not a complete picture. We also need a proposal that allows the subject of the conjunct verb to choose between the speaker and the addressee. One possibility would be to abandon the goal of uniformity, and assume that in Newari the speech act (sa) head only takes the speaker as its argument in declaratives and the addressee as its argument in interrogatives. This is not ideal. For one thing, the discourse participants are always determined by the extra-linguistic context. It is not clear why an utterance in any language would lack a speaker or an addressee for linguistic reasons.

Another possibility would be to assume that in Newari a mechanism similar to Speas and Tenny's "interrogative flip" is at play. Speas and Tenny (2003) propose a structural account for the asymmetry between declarative and interrogative clauses (113). More specifically, in declarative clauses the addressee is merged in a low position (113a). On the other hand, the interrogatives and the imperatives[31] undergo 'interrogative flip' (113b),

---

[31]In Newari the imperative form does not show overt conjunct and disjunct constructions. I will address this in Chapter 3.

whereby HEARER moves from a lower position to a position immediately c-commanding the TP.

(113)   Declaratives and the Interrogative Shift (Speas and Tenny, 2003: 320–321)

a.   Declaratives

```
              saP
           /     \
     SPEAKER      \
              sa    SAP
                   /   \
                 TP     \
                     SA   HEARER
```

b.   Interrogatives and imperatives

```
              saP
           /      \
     SPEAKER       \
              sa     SAP
                    /    \
              HEARER      SAP
                         /    \
                       TP      \
                            SA   HEARER
```
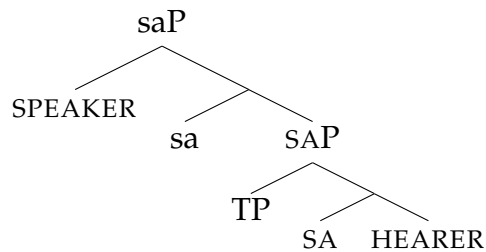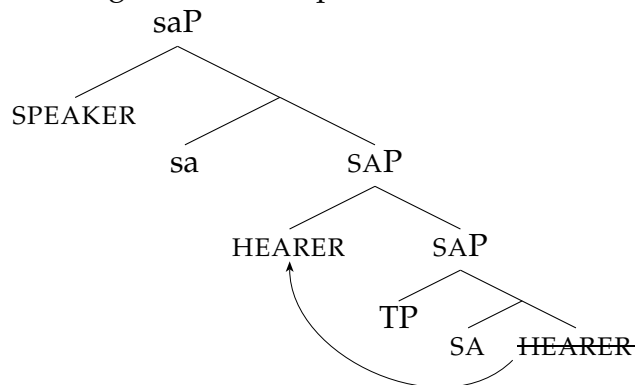
It has already been shown in Section 2.2.1 that in Basque and Jingpo the addressee must be base-generated above the main utterance TP. There is also evidence from Newari to suggest that the asymmetry of declarative and interrogative clauses is not structural, but interpretational. One piece of evidence comes from cases like rhetorical questions. When the speaker asks a rhetorical question as in (114), the subject of the conjunct verb is co-indexed with the speaker instead of the addressee. This cannot be easily accounted for by the "interrogative flip" account, as it would predict the addressee to be the closest c-commanding DP in rhetorical questions, similar to (113b). In Chapter 3 I present my own analysis by unifying declaratives and rhetorical questions with a semantic relation.

(114)   Rhetorical questions in Newari (Hale, 1980: 100)

a.   *ji ana   wan-ā*   / *wan-e*   *lā*
     I there go-PST.CONJ   go-NPST.CONJ Q

     'Did/Will I go there?' = 'Of course I did/will not.'

b.   *cha ana   wan-a*   / *wan-i*   *lā*
     you there go-PST.DISJ   go-PST.DISJ Q

     'Did/Will you go there?' = 'Of course you did/will not.'

In the next section I will maintain the intuition that the structure of the saP is universal and does not vary across clause types. I will demonstrate that the dilemma automatically disappears if we add a separate projection between the saP and the utterance TP.

2.3.2   The Sentience Projection

Alongside the saP, I propose an additional projection. Following Speas and Tenny (2003) I call this projection the Sen(tience)P, whose specifier hosts a perspectival expression. the resulting two-tiered structure is represented as follows. The next chapter is dedicated to examine the Perspective argument in greater detail.

(115)
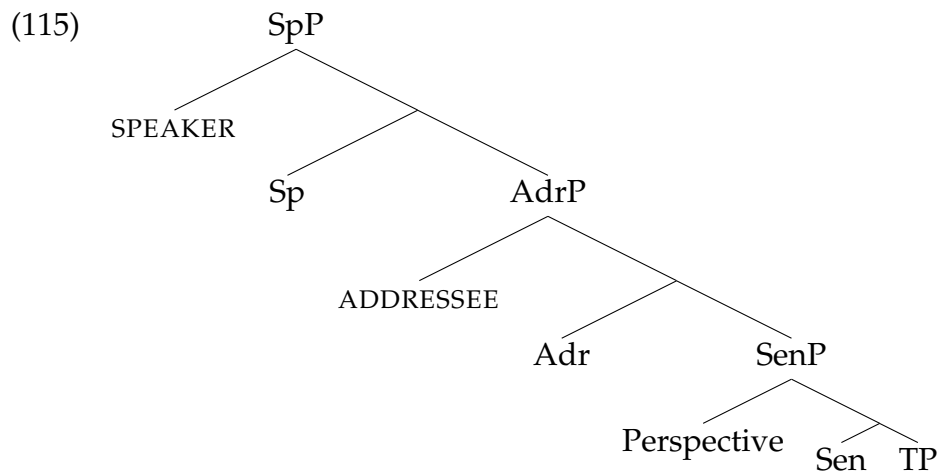
Although the present proposal adopts Speas and Tenny's terminology, they differ in at least two aspects. First, Speas and Tenny hypothesize that there is one and only

one saP per sentence. Since for them the SenP is dependent on the saP, this essentially means neither phrases can be embedded. However, in the present account, the SenP is embeddable, and occurs at the edge of attitude complements as well. As sketched in (116), the SenP is merged above TP. In root clauses it is the complement of the Adr head and the Perspective argument may be bound by Speaker or Addressee (116a). In attitude complements it is embedded under the attitude predicate, and accordingly, Perspective may shift its reference to the attitude holder (116b).

(116) a. $\overbrace{[\text{ SPEAKER } [\text{ Sp } [\text{ ADDRESSEE } [\text{ Adr }}^{\text{The Speech Act layer}}$ $\overbrace{[\text{ PERSPECTIVE } [\text{ Sen }}^{\text{The Sentience layer}}$ $\overbrace{[\text{ TP ...}}^{\text{root clause}}$

   b. $\overbrace{[\text{ Attitude holder } [\text{ v ...}}^{\text{root clause}}$ $\overbrace{[\text{ PERSPECTIVE } [\text{ Sen }}^{\text{The Sentience layer}}$ $\overbrace{[\text{ TP ...}}^{\text{complement clause}}$
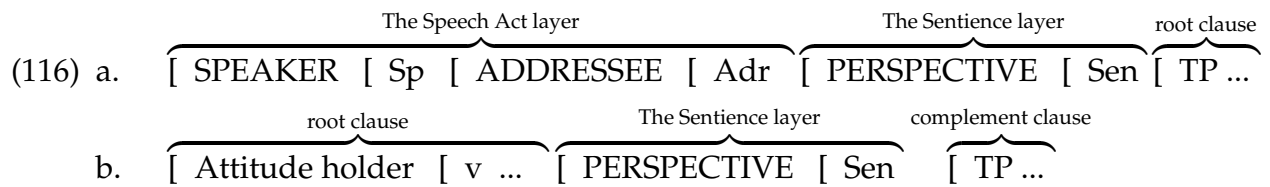
Second, both the speaker and addressee are base-generated above the SenP. In the previous section, I have shown that the conjunct verb form can be used when its subject is co-indexed with a discourse participant, more specifically, the speaker in declarative clauses, and the addressee in interrogative clauses. In the case of rhetorical questions (114), the subject of the conjunct verb needs to refer to the speaker instead of the addressee. This suggests that in certain interrogative clauses, the speaker is a possible candidate as the referent of the perspectival expression.

Some may argue that rhetorical questions are structurally different from regular questions. They may be declarative clauses in disguise, as rhetorical questions, by defini-tion, are used to make a statement, without expecting an answer. However, there is also evidence from bona fide questions where the conjunct morphology is compatible with a first person subject. Consider the following example.

(117) Scenario: A group of friends are playing a board game. Shyam's task is to find out who is the thief. Nearly to the end, he hasn't gained much ground. Poking fun at him, Laxmi says, "OK, just give it a try. What do you think? Did I steal the money?"

      jĩ: *dheba* *kuy-ā*   *lā?*
      I.ERG money steal-CONJ.PST Q

      'Did I steal the money?' (Have you figured out?)

(117) is not a rhetorical question. It does not constitute a statement. When Laxmi asks it, she does not reveal whether she is the thief; rather she expects a yes or no answer from Shyam. The difference between (117) and a normal information-seeking question lies in the fact that the question asker knows the correct answer to (117). I call this type of questions "quiz questions." When the speaker asks a regular information seeking question, he/she invites the addressee to update his/her belief set. On the other hand, when the speaker asks a quiz question, its answer is already in his/her belief set. The purpose of such a question is to test if the addressee has the same belief. (117) suggests that the reference of the perspectival expression is not syntactically determined, but knowledge-based. The next chapter will address this in more detail.

      The rest of this dissertation is dedicated to the syntax and semantics of the SenP. I will look into the distribution of Newari conjunct forms in finer detail, as well as the point of view phenomena in other languages. Before we move on, I present in the next section some of the advantages of the present framework. I argue that the separation of the discourse anchors and perspective shifters makes correct predictions about the behaviors of context-dependent expressions in other empirical domains.

2.4   Some immediate predictions

In this section I discuss some of the predictions the present account makes in other empirical domains. Here I focus on two discourse-related phenomena, namely, long-distance

reflexives and discourse particles. Both phenomena have been subject to extensive discussion in the literature. The goal of this section is not to provide a detailed analysis for each phenomenon. Rather, it suggests that the present account can throw new light on many observations made in the literature about these phenomena.

2.4.1   The blocking effect of exempt anaphors

It is shown in Section 2.0.1 that languages, such as English, Chinese and Turkish, allow anaphors to be bound from long distance.[32] (118) illustrates two examples with exempt anaphors in English.

(118)   Exempt anaphors in English (Charnavel, 2015a)

    a. Joe_1 was surprised that Mary was spreading rumors about $himself_1$.

    b. Joe_1 said that he would buy Mary's painting of $himself_1$.

    Charnavel (2015a) notices that the binding of exempt anaphors is blocked by an intervening first (119a) or second (119b) person pronoun. Replacing *Mary* with *I* or *you* would lead to ungrammatical sentences (119).

(119)   Blocking effects in English

    a.   *Joe was surprised that I was spreading rumors about himself.

    b.   *Joe said that he would buy your painting of himself.

    We have already shown in Section 2.1.3.1 that the non-thematic speaker and addressee are morphologically indistinguishable from thematic first and second person pronouns. If they are allowed to appear in non-root clauses, we would expect exempt anaphors to be blocked everywhere. That is, (118) would exhibit the same intervention effects as (119), as there would exist an intervening first or second person DP, namely, the speaker and addressee, in the left edge of the attitude complement.

---

[32]Note that exempt anaphors are not attested in every language. Hungarian, for instance, has no exempt anaphors (Anna Szabolcsi, p.c.) It is an interesting question to ask why grammars differ in this way. Answering this question, however, is beyond the scope of this dissertation.

(120) If the saP were embeddable, blocking effects would be expected everywhere.

    a.   Joe was surprised that [$_{SpP}$ SPEAKER Mary was spreading rumors about himself.

    b.   Joe said that [$_{AdrP}$ ADDRESSEE he would buy Mary's painting of himself.

Therefore, the intervention effects suggest that the saP cannot be embedded (Section 2.2.2).

    One question that immediately arises, is if the discourse participant are syntactically active and can serve as potential binders for reflexives like *myself* and *yourself*, what rules out (121b), as opposed to (121a) and (121c)?

(121) a.   [$_{SpP}$ SPEAKER$_1$ I$_1$ worked.

    b. *[$_{SpP}$ SPEAKER$_1$ Myself$_1$ worked.

    c.   [$_{SpP}$ SPEAKER$_1$ Many people, like *myself*$_1$, prefer a book to a movie.

The answer, I argue, lies in morphology. Following Kratzer (2009), I assume that bound pronouns are born without ϕ-features and later acquire ϕ-features from their binders. As such *I* in (121a) and *myself* in (121c) are essentially indistinguishable in terms of ϕ-features, as both are bound by the speaker. However, this is not to say *I* and *myself* are morphologically identical. They are not, as they have distinct case features. In (121c), *myself* is the object of the preposition *like*, whereas in (121a), *I* gets the Nominative case from T. The reason that (121b) is ruled out is because a first person nominative case-marked pronoun can only be spelled out as *I*, not *myself*.

    The intervention effects, as presented in (119), have also been observed in other languages that allow long-distance bound reflexives (Cole et al., 2000). In Chinese, for instance, the reflexive *zìjǐ* normally can be bound by the matrix subject (122a). However, if the local subject is a first (122b) or second (122c) person pronoun, the long distance binding is no longer possible.

(122)   Blocking effects in Chinese (Huang and Liu, 2000: 161-162)

a.   *zhāngsān   juéde   lǐsì   zài-pīpíng   zìjǐ.*
     Zhangsan think Lisi PROG-criticize self

     'Zhangsan thinks that Lisi is criticizing him/himself.'

b.   *zhāngsān   juéde   wǒ   zài-pīpíng   zìjǐ.*
     Zhangsan think I   PROG-criticize self

     'Zhangsan thinks that I am criticizing myself/*him.'

c.   *zhāngsān   juéde   nǐ   zài-pīpíng   zìjǐ.*
     Zhangsan think you PROG-criticize self

     'Zhangsan thinks that you are criticizing yourself/*him.'

There are attempts in the earlier literature, e.g., Huang and Tang (1991) among others, that reduce the aforementioned blocking effect to some version of locality constraints. Simply put, such an account takes the first and second person features as interveners for long-distance binding of exempt anaphors. The problem of such an analysis is that it lacks explanatory power. It is not clear why the first and second person features are singled out.

Harley and Ritter (2002) attribute the special status of the first and second person, as opposed to the third person, to "the fact that the reference of the former is determined by the changing discourse roles, whereas the reference of the latter is fixed" (Harley and Ritter, 2002: 487). This asymmetry is easily understood in the current framework. As discussed in Section 2.0.2, first and second person pronouns acquire their interpretation from discourse participants, whereas the antecedent of a bound third person pronoun is always overtly realized.

A more serious problem of the pure syntactic account for the blocking effect is that it confuses two types of locality conditions. den Dikken (2013) distinguishes absolute locality from relative locality. Absolute locality makes reference to an opaque domain

(e.g., phase) out of which a syntactic operation is no longer operative. In Minimalist Program, it takes the form of Phase Impenetrability Condition (Chomsky, 2004: 108).

(123) Phase Impenetrability Condition (PIC)

a.

```
        HP
       /  \
   edge    /\
         H   domain
```
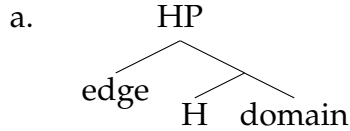
b. If HP is a phase, the domain of H is not accessible to operations, but only the edge of HP.

Relative locality is concerned with an intervening barrier which blocks an otherwise perfect syntactic operation. In Minimalist Program it takes the form of Minimal Link Condition, as defined earlier in Section 2.1.3.2.

Huang and Tang's locality-based account for the blocking effect is formulated in relative locality. That is, the first and second person pronouns always block the long-distance binding of *zìjǐ*. In what follows, I present empirical evidence to show that this is not the case. Absolute locality plays a major role in determining whether there is a blocking effect. A more accurate generalization is given in Anand (2006).

(124) The blocking effect (Anand, 2006: 129)
No first or second person elements within the scope of the attitude verb whose subject is the antecedent for *zìjǐ*.

According to (124), the first and second person pronouns intervene binding if and only if (i) they, along with *zìjǐ*, are in the semantic scope of an attitude verb,[33] and (ii) the potential binder appears in a higher clause, separate from the attitude complement.

If we only look at the linear order of the relevant parties in the following sentences, it seems that we have the same constellation as (122), i.e., *Zhangsan ... wǒ/nǐ ... zìjǐ*. However, there is no blocking effect in (125). This is because *wǒ/nǐ* is located in the matrix

[33]The term scope in (124) should be interpreted as semantic scope, not syntactic scope. C-command is not the relevant structural relation here. Rather, (124) says that *zìjǐ* and *wǒ/nǐ* must be part of the attitude complements that can be evaluated in the attitude worlds.

clause, not in the attitude complement. As such it does not interrupt the binding between *Zhangsan* and *zìjǐ*.

(125) No blocking effect if *wǒ/nǐ* is not in attitude complements (Pan, 2000: 301-302)

a. *zhāngsān   gàosù ⟨wǒ⟩ [zìjǐ méi bèi dàhuì   xuǎnshàng]*
    Zhangsan tell   I   self not by conference select

    'Zhangsan$_1$ told me$_2$ that he$_1$/*I was not selected by the conference.'

b. *Bill cóng ⟨nǐ⟩ nà   tīngshuō [Sue pīpíng-le zìjǐ]*
    Bill from you there heard   Sue criticize self

    'Bill$_1$ heard from you$_2$ that Sue$_3$ criticized him$_1$/*you$_2$/herself$_3$.'

Anand's generalization (124) predicts that if all three elements in *Zhangsan ... wǒ/nǐ ... zìjǐ* belong to the same clause, there is no blocking effect either. This is shown in (126).

(126) No blocking effect if there is only one clause (Huang and Liu, 2000: 167)

a. *zhāngsān   gàosù ⟨wǒ⟩ zìjǐ-de   fēnshù*
    Zhangsan tell   me self-POSS grade

    'Zhangsan$_1$ told me about his$_1$ grade.'

b. *tā xiàng ⟨nǐ⟩ tídào   zìjǐ-de   quēdiǎn   le   ma?*
    ta to   you mention self-POSS shortcoming PERF Q

    'Did he$_1$ mention his$_1$ shortcoming to you?'

Another prediction (124) makes is that if the main verb is not an attitude predicate, there would be no blocking effect. This prediction is also borne out, as illustrated in (127). The verbs *shēngpà* and *qǐng* are not attitude predicates. As argued in Anand (2006), replacing them with real attitude predicates such as *juéde* 'think' would make these sentences ungrammatical. Moreover, *zìjǐ* does not need to be read *de se* in (127). The *de se* interpretation is otherwise obligatory for long-distance reflexives under attitude predicates.[34]

---

[34]I will discuss the obligatory *de se* attitude of long-distance reflexives in Chapter 5.

(127) No blocking effect if there is no attitude predicate (Yu, 1992: 291)

    a. *lǐsì shēngpà* 〔*wǒ*〕 *chāoguò zìjǐ.*
        Lisi worry   I   surpass self

        'Lisi$_1$ was afraid that I$_2$ might surpass him$_1$.'

    b. *nǔwāng qǐng* 〔*nǐ*〕 *zuò zài zìjǐ-de   shēnbiān.*
        queen   ask   I   sit at self-POSS side

        'The queen$_1$ invited you$_2$ to sit by her$_1$ side.'

    In other words, while the first and second person pronouns do not block binding between a local subject and *zìjǐ*, they prevent the matrix attitude holder from binding into its complement. When we have two third person DPs separated in adjacent clauses (128), only the DP from the matrix clause produces the blocking effect.

(128) Blocking effects are conditioned by absolute locality (Pan, 2000: 300)

    a. *John shuō [Bill gěi* 〔*wǒ*〕 *kàn-guò zìjǐ-de   shū]*
        John say Bill to I   see-PERF self-POSS book

        'John$_1$ said that Bill$_2$ showed me his$_{*1/2}$ books.'

    b. *John shuō [Bill sònggěi-le* 〔*nǐ*〕 *yì-běn zìjǐ-de   shū]*
        John say Bill give-PERF you one-CL self-POSS book

        'John$_1$ said that Bill$_2$ gave you one of his$_{*1/2}$ books.'

    Finally, Anand's blocking principle predicts that a first or second person element below *zìjǐ* would also produce an intervention effect, as long as they both are in the scope of an attitude verb, separated from the matrix binder by a clause boundary. This is exemplified below. In (129a), *nǐ* is in a deeply embedded clause, lower than the clause with *zìjǐ*. In (129b), *nǐ* is part of the indirect object, and *zìjǐ* part of the direct object, of the ditransitive verb *gěi*. In neither case does *nǐ* c-command *zìjǐ*. Consequently, *nǐ* cannot be the binder of *zìjǐ* in (129). Interestingly, even if it is not in-between *zìjǐ* and the matrix subject, *nǐ* stills intervenes the binding of *zìjǐ* by the matrix subject.

(129) The intervener does not have to be a binder (Anand, 2006: 131)

a. *zhāngsān   zhīdào [Mary gēn   zìjǐ shuō-guò [nǐ xiǎng qù táiwān]]*
   Zhangsan know Mary with self say-EXP you want go Taiwan

   'Zhangsan knows that Mary told *him/herself that you want to go to Taiwan.'

b. *John shuō [Mary gěi   zìjǐ de   māma   nǐ   de   shū]*
   John say Mary give self POSS mother you POSS book

   'John said that Mary gave *his/her mother your books.'

I summarize what we have seen so far in (130). It can be concluded that the blocking effect is conditioned by absolute locality, with the relevant domain being the attitude complement. The first and second person pronouns do not intervene the binding of *zìjǐ* if the binder appears in the same attitude complement as them.

(130) a. [Zhangsan$_1$ ...   V$_{att}$ [Lisi$_2$ ...   *zìjǐ*$_{1/2}$ (no blocking)

b. [Zhangsan$_1$ ...   V$_{att}$ [*wǒ/nǐ*$_2$ ...   *zìjǐ*$_{*1/2}$ (blocking)

c. [Zhangsan$_1$ ...   V$_{non-att}$ [*wǒ/nǐ*$_2$ ...   *zìjǐ*$_{1/2}$ (no blocking)

d. [Zhangsan$_1$ ...   *wǒ/nǐ*$_2$ ...   *zìjǐ*$_{1/2}$ (no blocking)

e. [Zhangsan$_1$ ...   *wǒ/nǐ*$_2$ ... V$_{att}$ [*zìjǐ*$_{1/2}$ (no blocking)

f. [Zhangsan$_1$ ...   V$_{att}$ [Lisi$_2$ ...   *wǒ/nǐ*$_3$ ...   *zìjǐ*$_{*1/2/3}$ (blocking)

g. [Zhangsan$_1$ ...   V$_{att}$ [Lisi$_2$ ...   *zìjǐ*$_{*1/2}$ ...   *wǒ/nǐ*$_3$ (blocking)

We have seen that any account based entirely on relative locality does not work. Some may notice that the first/second person pronoun in (130d) and (130e) are not in a subject position, thus proposing a simpler alternative to Anand's generalization—*wǒ/nǐ* is only a possible intervener for the long distance binding of *zìjǐ* if they are subjects. However, the subject orientation account cannot be correct, as it would predict blocking in (130c) and no blocking in (130g).

It is thus not surprising that more recent work all incorporate discourse factors in their proposals for the blocking effect. Huang and Liu (2000) analyze *zìjǐ* as a logophoric

pronoun.[35] It cannot be bound long-distance in (130b) because that would result in two conflicting "logophoric centers." While the pronoun *wǒ* is interpreted as the speaker, the long-distance bound *zìjǐ* would be anchored to *zhāngsān*.

Anand (2006), on the other hand, analyzes *zìjǐ* on a par with shifted indexicals[36] and proposes the following condition on first and second person pronouns.

(131)   Indexical polarity (Anand, 2006: 131)
        wǒ and *nǐ* cannot be in the scope of a shifting operator.

Evaluating these proposals is beyond the scope of this dissertation. For our present purposes it is worth noting that both accounts, when analyzing the blocking effect in (130f) and (130g), rely on an implicit assumption that the local subject *Lisi* and the embedded first/second person subject have distinct status. For Huang and Liu (2000), pronouns like *wǒ* and *nǐ* are always associated with their own "logophoric centers." Even when they are embedded in an attitude complement, the logophoric center they provide can compete with the matrix attitude holder's. For Anand (2006), the first and second person pronouns are always anchored to the utterance context. Their existence is in conflict with a shifting operator at the edge of the attitude complement required for the long-distance binding of *zìjǐ*.

The assumption that the first and second person pronouns are interpreted at the root clause level naturally follows the current proposal that the saP is only present for root clauses and is not embeddable.

2.4.2   The ordering restrictions of discourse particles

In Sections 2.0 and 2.1 I have presented evidence from binding and agreement in support of a syntactic approach to the utterance context. Another line of research (Hill, 2013;

---

[35]Logophoric pronouns will be discussed in Chapter 5.
[36]I delay the discussion of shifted indexicals to Chapter 5.

Haegeman and Hill, 2013; Wiltschko and Heim, 2016) that addresses the structural representation of discourse participants concerns sentence-peripheral particles across languages. Sentence-peripheral particles, as the name suggests, are grammatical markers that typically occur in front of, or at the end of a sentence. They are especially prevalent in the colloquial varieties of natural languages. English, for instance, places a set of words sentence-finally as confirmationals. This is illustrated below.

(132)   Sentence-final confirmationals in English
   a.   So we're meeting at Malt House, right/yes?
   b.   That was crazy, huh?
   c.   Tom's the one who likes that Swedish death-metal shite, innit?   (Sailor, 2009: 9)
   d.   You have a new dog, eh?   (Wiltschko and Heim, 2016: 306)

Confirmationals are particles speakers use to check with the addressee to see if what precedes these particles is a correct statement. The choice of these particles usually reflects dialectal differences. For instance, *eh* is most famously associated with Canadian English.

Wiltschko and Heim (2016) observe that the confirmational particles have a similar function and distribution as question tags like *aren't we*?.

(133) a.   We're meeting at Malt House, right?
      b.   We're meeting at Malt House, aren't we?

Kayne (2016) also notices that just as question tags, the confirmational particle *right* cannot be embedded. Both are root clause phenomenon.

(134) a.   *I wonder whether we're meeting at Malt House, right/aren't we.
      b.   *That we're meeting at Malt House, right/aren't we, is a question.

In English the use of the confirmational particles indicates that the speaker expects the addressee to be in agreement with what has been said. The confirmationals in other languages may reflect more subtleties in their discourse functions. Cantonese, for instance, has two confirmational particles, namely, *me1* and *ho2*. While *ho2* are functionally

similar to the English confirmational *right* (135c) with which the speaker asks for the addressee's agreement, *me1* suggests that the speaker expects the addressee to reject what is said (135b). In other words, in contrast with the neutral statement in (135a), (135b) and (135c) indicate the speaker's negative and positive bias, respectively.

(135)   Sentence-final particles in Cantonese (Lam, 2014: 63)

    a.   *zi3ming4* *jau5* *fu6ceot1-gwo3* *si4gaan3*
           Jimmy   have devote-ASP   time

        'Jimmy has spend time (on the project).'

    b.   *zi3ming4* *jau5* *fu6ceot1-gwo3* *si4gaan3* *me1*
           Jimmy   have devote-ASP   time   Q-NEG

        'Jimmy hasn't spend time (on the project), has he?'

    c.   *zi3ming4* *jau5* *fu6ceot1-gwo3* *si4gaan3* *gaa3* *ho2*
           Jimmy   have devote-ASP   time   PRT Q-POS

        'Jimmy has spend time (on the project), right?'

Lam (2014) analyzes *ho2* as an addressee-oriented particle. With *ho2* the speaker asks the addressee if they agree with what is said in the utterance. *me1*, on the other hand, is analyzed as a speaker-oriented particle. With *me1* the speaker expresses her own attitude towards the utterance. In (135b) what is left unsaid by the speaker is roughly "I don't think so." I find such a characterization rather arbitrary. One could easily turn the tables around and analyze *me1* as addressee-oriented and *ho2* speaker-oriented. In this alternative analysis, *me1* is used to ask the addressee if they disagree with what is said in the utterance, and *ho2* is used to express the speaker's positive attitude towards the utterance.

What is interesting about Cantonese sentence-final particles, as Lam (2014) observes, is that *me1* and *ho2* can co-occur. When they do, there is a fixed ordering between them. Specifically, *ho1* must appear at the rightmost edge of a sentence. No sentence-final

particles can follow *ho1*. When *me1* appears in the same sentence, it must precede *ho1*.[37] This is illustrated in the following sentence.

(136) The ordering restrictions of Cantonese sentence-final particles (Lam, 2014: 64)

    a.   **daai6 seng1 zau6 dak1 gaa3 laa3 ho2 me1*
          big   voice then koay PRT PRT Q   Q

       (no immediate clear meaning)

    b.   Scenario: Jimmy is the first of a long taxi queue. A taxi is coming, but someone not from the queue opens the door of the taxi, saying loudly that he is in a hurry. Everyone in the queue is angry. Jimmy whispers to the second person in the queue.
       daai6 seng1 zau6 dak1 gaa3 laa3 me1 ho2
       big   voice then koay PRT PRT Q   Q

       'What, can one get by just by being loud? You'd agree it's a valid question, right?'

The ordering restriction illustrated in (136) motivates Wiltschko and Heim's (2016) claim that the speaker is merged lower than the addressee. Their main proposal is summarized as follows.

(137) a.   RespondP
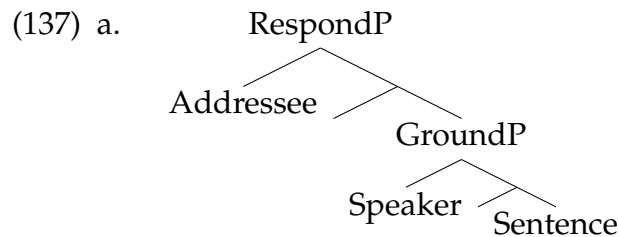
    b.   The responding layer (RespondP) is addressee-oriented. It calls on the addressee's attention to the proposition.

    c.   The grounding layer (GroundP) is speaker-oriented. It relates the speaker's attitude towards the proposition.

Wiltschko and Heim (2016) take the fixed ordering of *me1* and *ho2* as the empirical evidence for merging the RespondP (the addressee-oriented layer) above the GroundP (the speaker-oriented layer). However, as I have already critiqued, what counts as speaker-

---

[37]Cantonese, as well as other Chinese languages, are VO languages, but they typically observe the head-final order in the CP domain (Law, 2002; Paul, 2007). Therefore in terms of linear order, the rightmost edge of a sentence is considered structurally the highest.

oriented on the one hand and addressee-oriented on the other is theory-internal. As such the ordering restrictions of *me1* and *ho2* do not constitute good evidence for the relative position of the speaker and addressee.

There is an alternative interpretation of the Cantonese facts that is entirely compatible with the present framework. Specifically, *me1* is merged at the level of the SenP, whereas *ho2* is merged at the level of the saP. In other words, the responding layer and the grounding layer in Wiltschko and Heim's framework do not correspond to SpP and AdrP, rather, they correspond to the two tiers in my account. My interpretation of the ordering restrictions between *me1* and *ho2* is structurally represented in (138) below. Though I remain neutral in characterizing *me1* and *ho2* as speaker- or addressee-oriented for reasons mentioned earlier, such a characterization is remediable in (138). Lam's addressee-orientation would be a result of merging *ho2* in Adr, forming a Spec-Head configuration with the addressee. On the other hand, *me1* is merged in Sen whose specifier hosts a perspectival expression. The speaker-orientation of *me1* is a result of co-indexation between the perspective and the speaker.

(138)

SpP
├── SPEAKER$_1$
└── Sp ─ AdrP
     ├── ADDRESSEE
     └── Adr ─ SenP
          │   ├── PERSPECTIVE$_1$
          ho2 └── Sen ─ TP
                    │
                   me1
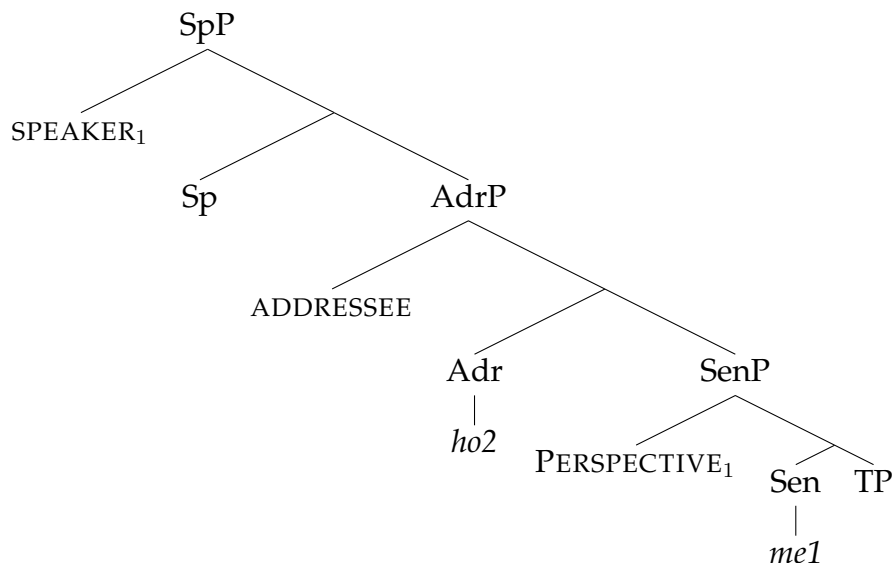
A question naturally follows this account is why the perspective must be understood as the speaker. Recall in Section 2.3 that unlike the discourse participants, the reference of the perspectival expression is not fixed, and is (partially) determined by the clause type. The same is true in Cantonese. The Perspective can shift its reference just like other point of view expressions. It is co-indexed with the speaker in (138) for the simple reason that the CP it selects is declarative. This is evidenced by the fact that *me1* is only compatible with the declarative mood. In contrast, *ho2* is not sensitive to clause types and can be used with interrogatives (139b) and imperatives (140b).

(139)   Interrogative + *me1/ho2* in Cantonese (Lam, 2014: 75)

    a.   **ting1jat6   wui5 m4 wui5 lok6 jyu5 le1 me1?*
        tomorrow will not will fall rain Q   Q-NEG

        (No immediate clear meaning)

    b.   Scenario: Jimmy and Mandy have been training for a marathon race that takes place tomorrow. Jimmy says this to Mandy.
        ting1jat6   wui5 m4 wui5 lok6 jyu5 le1 ho2?
        tomorrow will not will fall rain Q   Q-POS

        'Will it rain tomorrow? I assume you'd agree this is a valid question, right?'

(140)   Imperative + *me1/ho2* in Cantonese (Lam, 2014: 75)

    a.   **gam3 peng4, maai5 saai3 loeng5 deoi3 laa1 me1?*
        so   cheap buy all   two   pair PRT Q-NEG

        (No immediate clear meaning)

    b.   Scenario: Jimmy and Karl are in a shoe store, where a thanksgiving sale is taking place. Both of them find two pairs of shoes that they like. Karl says this to Jimmy.
        gam3 peng4, maai5 saai3 loeng5 deoi3 laa1 ho2?
        so   cheap buy all   two   pair PRT Q

        'It's so cheap. Buy both pairs, why don't you!'

My account predicts that in languages that allow stacking of multiple discourse particles, the particles that are insensitive to the declarative-interrogative distinction are always merged higher than the ones that are selective in sentence mood.

2.5 Mono-clausal or bi-clausal?

Before I close this chapter, I want to make a final note on Ross's (1970) Performative Hypothesis, for much of the most recent literature on discourse-related phenomena is descended in spirit from it. The goal of this section is to compare Ross (1970) with the so-called Neo-Performative Analysis (Speas and Tenny, 2003; Bianchi, 2003; Sigurðsson, 2004; Baker, 2008a; Haegeman and Hill, 2013; Wiltschko and Heim, 2016), and explain reasons why the current work sides with the latter camp.

As has been discussed in Section 2.0.1, Ross (1970) draws a parallelism between the first/second person anaphors in matrix clauses and the third person anaphors in embedded clauses. The argument goes like this: just as *himself* can be bound long distance by a matrix DP *Tad* (141b), *myself* is bound long distance by *I* (141a) from a higher clause (Ross, 1970: 232-233).

(141) a. This is a story about myself.
b. Tad knew that it would be a story about himself.

This leads to the once popular Performative Hypothesis according to which the root clause is embedded in a higher performative structure in its underlying repersentation that roughly takes the form *"I tell you ..."* which undergoes obligatory deletion, the so-called Performative Deletion, at a later stage.

Ross (1970) differs from its more recent successors in that it assumes a bi-clausal structure whereby the speaker and addressee locate in a separate clause from the main utterance. The major advantage of the bi-clausal account, as far as I can see, is that it achieves a perfect parallelism between root clauses (141a) and attitude complements (141b). Presumably, the anaphors *myself* and *himself* are bound in exactly the same distance, that is, both binding relations span over a clause boundary. There are, however,

many disadvantages to the Performative Hypothesis, some of which are not easy to overcome.

First, the bi-clausal account would make every statement a tautology (Lewis, 1970). This is because if a sentence S is equivalent in meaning to *I tell you S*, then S would be true by virtue of it being uttered by a speaker to an addressee.

Secondly, the covert performative structure and its overt counterpart differ in many ways (Fraser, 1974; Gazdar, 1979). For instance, overt performatives can be embedded (italicized below), even under non-performative verbs. There is no reason to believe that the embeddability extends to covert performatives.

(142) a. I regret to *inform* you that you have not been selected for interview.

b. Let me point out that I *admit* you're right. (Fraser, 1974: 4)

Thirdly, analyzing root clauses as being embedded under a performative verb would essentially minimize the differences between root clauses and non-root clauses. It is, therefore, difficult to explain why root clause phenomena, as defined in Section 2.2.2, would exist in so many languages in the first place.

Finally, Jingpo's unique agreement morphology (Section 2.1.2) provides empirical evidence against taking addressee as being the indirect object of a performative verb. Recall that the SFPs that agree with the addressee belong to the subject agreement paradigms (Section 2.1.2.2). This is illustrated below.

(143) Addressee agreement is morphologically identical to subject agreement in Jingpo

a. *Hkying gade htu* $\boxed{\textit{sə-ta}}$*?*
time how.many point 2SG-WH

'What time is it?' (Addressee agreement)

b. *nang gadai-hpe ya kau* $\boxed{\textit{sə-ta}}$*?*
you who-OBJ give AUX 2SG-WH

'To whom did you give (it) to?' (Subject agreement)

The SFPs that agree with the object of an overt verb, on the other hand, belong to the subject and object agreement paradigms (Section 2.1.2.3). In the following examples,[38] the second person pronoun *nang* serves as the indirect object of the main verb. It results in a different agreement morpheme *de*, as opposed to *sə* in (143).

(144) a. *ngai nang-hpe n   tsun dan de-ni?*
      I   you-OBJ not say AUX 1:2SG-Q

      'Did I not tell you (that)?'   (Dai and Xu, 1992: 310)

   b. *mana   ngai nang-hpe luidui si hkum gade   ya   de-ta?*
      last night I   you-OBJ orange CL   how many give 1:2SG-WH

      'How many oranges did I give you last night?'   (Xu et al., 1983: 112)

Since the disadvantages of Ross's bi-clausal account outweighs its advantages, this dissertation sides with the Neo-Performative Analysis and adopts the mono-clausal account. In the present framework, Sp and Adr are functional heads, not performative verbs. As a result, the Speech Act domain is situated at the same level as the root clauses.

2.6 Conclusion

In this chapter, I have reviewed and evaluated the motivations for two projections above the CP, namely, the saP and the SenP. I argue that they differ in at least two aspects. First, the SenP is embeddable whereas the saP is not; Second, the SenP, but not the saP, is sensitive to the declarative-interrogative distinction. These two properties crucially distinguish two types of discourse-related phenomena, which was overlooked in the previous syntax literature.

Having established the two-tiered structure of the discourse, I take a closer look at each tier. I present empirical evidence to show that covert non-thematic discourse participants are syntactically present, and carry the same set of morphological features

---

[38]Jingpo has two Q-particles, namely, *ni*, used in yes-no questions, and *ta*, used in *wh*-questions.

as their overt thematic counterparts. Both the speaker and the addressee can be targeted by binding and agreement. They are discourse anchors, and the choice between the two is not determined by specific clause types. This favors a uniform structure of the saP. The SenP, on the other hand, is motivated by Newari conjunct marking which is sensitive to the declarative-interrogative distinction. The next chapter examines the perspectival expression at Spec, SenP in greater detail. I will present an implicational hierarchy of three semantic relations that can help establish a crosslinguistic typology of perspectives.

The Implicational Hierarchy of Perspectives

3.0 The typology of perspectival expressions

In Chapter 2, I have presented a two-tiered structure of the utterance context. The top tier, i.e., the Speech Act Projection, is only present in root clauses and its specifier positions seat speech act participants such as the speaker and the addressee. It is responsible for root clause phenomena across languages. The second tier is the Sentience Projection, whose head takes a perspectival expression as its argument. This projection is independent from the Speech Act Projection. In attitude complements, it is selected by the attitude predicate, rather than by the Speech Act head. The Sentience Projection is sensitive to the mood of its complement clauses and is responsible for point-of-view phenomena. Depending on where the Sentience Projection is merged to, the perspectival expression in its specifier can be anchored to different levels and shift its reference accordingly.

Having identified the two tiers and reviewed their syntactic differences, in this chapter I zoom in on the perspective center in the specifier of the Sentience Projection. I return to Newari conjunct constructions for empirical support. In the next two chapters, I extend my proposal to point-of-view phenomena in other languages and show that the implicational hierarchy of perspectival expressions to be developed shortly makes nice cross-linguistic predictions.

Let me first define what I mean by implicational hierarchy. The word *implication* here should be understood as material implication, defined as follows.

(145) $P \to Q \Leftrightarrow \neg P \vee Q$

We say P implies Q if and only if when P is true, Q is also true. When P is false, however, Q is trivially true. This can be illustrated in the following truth table.

Table 3.1: The Truth Table for (Material) Implication

P	Q	$P \to Q$
1	1	1
1	0	0
0	1	1
0	0	1

When such an implicational relation holds between more than two entities, say, A, B, and C, we say we have an implicational hierarchy, schematically shown below.

(146) $A \to B \to C$

Implicational hierarchies like (146) are valuable when we characterize grammatical phenomena and make cross-linguistic generalizations as they greatly constrain the possible combinations of grammatical properties. For instance, (146) can be formulated in the following way: if a certain phenomenon exhibits property A, then it also exhibits properties B and C; if it exhibits property B, then it also exhibits property C.

Assuming A, B, and C are all binary parameters, without (146) we have 2^3 number of ways of combining all the potential parametric values. The hierarchy (146), how-

ever, can help reduce that number by half, as tabulated below. In the following tables, 1 indicates that the corresponding property holds for the given phenomenon, whereas 0 indicates the absence of such property.

Table 3.2: The Possible Combinations of Properties A, B, and C

	A	B	C
Phenomenon 1	1	1	1
Phenomenon 2	0	1	1
Phenomenon 3	0	0	1
Phenomenon 4	0	0	0

Table 3.3: The Impossible Combinations of Properties A, B, and C

	A	B	C
Illegitimate	1	1	0
Illegitimate	1	0	1
Illegitimate	1	0	0
Illegitimate	0	1	0

The implicational hierarchy may be reminiscent of Greenberg's (1963) implicational universals, but there is one caveat. The implicational universals are used to establish the typology of *languages*. For instance, languages with postpositions tend to have post-nominal genitives (Universal 2). What I aim to achieve in this dissertation is less ambitious. My goal is to establish a typology of point-of-view phenomena. Therefore the focus of interest is the hierarchical organizations of grammatical properties that are at work for point-of-view phenomena, instead of comparing languages with these phenomena to those without. Throughout the dissertation I remain agnostic about whether point-of-view phenomena are universal in human language, and if not, why not. Though these are interesting questions to address, in order to answer them we need to have a thorough grasp of the phenomena. However, our current understanding of such phenomena is quite limited. It is highly likely that we have yet to discover the majority of these phenomena, as well as the relevant properties that define them, in world's languages.

95

In this chapter I identify three properties that are crucial for understanding point-of-view phenomena, namely, knowledge, responsibility, and internal perspective, briefly defined as follows. They will be described in greater detail the next few sections.

(147) a. If a point-of-view construction exhibits the knowledge property, we say the perspective center in this construction coincides with the seat of knowledge. The seat of knowledge is defined as the individual whose beliefs are used to assess the truth of the complement proposition.

   b. If a point-of-view construction exhibits the responsibility property, we say the perspective center in this construction coincides with the responsibility holder. The responsibility holder is defined as the individual whose intention and discretion are required to bring about the complement event.

   c. If a point-of-view construction exhibits the internal perspective property, we say the perspective center in this construction coincides with the internal perspective. The internal perspective is defined as the true first-person perspective, from which the attitude holder self-ascribes as performing an action or experiencing an emotion or sensation denoted by the complement event.

Motivated by conceptual considerations, I present the following implicational hierarchy.

(148) Knowledge $\rightarrow$ Responsibility $\rightarrow$ Internal perspective

The hierarchy (148) defines four types of phenomena, as listed in the following table.

Table 3.4: The Typology of Point-of-View Phenomena

	Knowledge	Responsibility	Internal Perspective
Phenomenon 1	1	1	1
Phenomenon 2	0	1	1
Phenomenon 3	0	0	1
Phenomenon 4	0	0	0

I take Phenomenon 4 as the absence of a point-of-view expression and leave it out of the discussion. I consider the conjunct marking system in Newari as a typical case of Phenomenon 1. That is, all three properties conspire to determine the distribution of Newari conjunct verbs. The next two chapters address Phenomena 2 and 3, respectively.

It is mentioned in Chapter 2 that the distribution of the conjunct form in Newari is determined by multiple factors, summarized as follows.

(149)   The choice between conjunct and disjunct forms depends on the following param-
        eters

     a.   The reference of the subject,

     b.   The clause type,

     c.   The type of the event denoted by the clause, and

     d.   The attitude ascription of the clause.

In this chapter I take a closer look at these parameters. I argue that (149a) is re-ducible to the other three parameters, which in turn correspond to three important proper-ties underlying point-of-view phenomena across languages, namely, knowledge, respon-sibility, and internal perspective. They are the respective subjects of the following three sections.

3.1   Perspective center as the Seat of Knowledge

In Chapter 2 I have already described the interaction between the first two parameters in (149). The main descriptive generalization is repeated in (150).

(150)   The distribution of Newari conjunct verbs (first attempt)

     a.   In complement conjunct constructions, the subject of the conjunct verb is co-referential with the matrix subject.

     b.   In root clauses, the subject of the conjunct verb is first person in declaratives and second person in interrogatives.

The generalization (150) accounts for the distribution of the conjunct verbal suffix, as opposed to the disjunct suffix, in the following Newari sentences.

(151)   Conjunct vs. disjunct marking in main declaratives

     a.   *ji   ana   wan-ā   / wan-e*
        I.ABS there go-**PST.CONJ**   go-**NPST.CONJ**

        'I went/will go there.'

b. *cha   ana   wan-**a**   / wan-**i***
you.ABS there go-**PST.DISJ**   go-**NPST.DISJ**

'You went/will go there.'

c. *wa   ana   wan-**a**   / wan-**i***
(s)he.ABS there go-**PST.DISJ**   go-**NPST.DISJ**

'(S)he went/will go there.'

(152)   Conjunct vs. disjunct marking in main interrogatives

a. *ji   ana   wan-**a**   / wan-**i**   lā*
I.ABS there go-**PST.DISJ**   go-**NPST.DISJ** Q

'Did/Will I go there?'

b. *cha   ana   wan-**ā**   / wan-**e**   lā*
you.ABS there go-**PST.CONJ**   go-**NPST.CONJ** Q

'Did/Will you go there?'

c. *wa   ana   wan-**a**   / wan-**i**   lā*
(s)he.ABS there go-**PST.DISJ**   go-**NPST.DISJ** Q

'Did/Will (s)he go there?'

There are exceptions to the generalization (150). I have demonstrated that in rhetorical questions (153) and quiz questions (154) the perspective center refers to the speaker, not the addressee.

(153)   Rhetorical questions in Newari (Hale, 1980: 100)

a. *ji ana   wan-**ā**   / wan-**e**   lā*
I   there go-PST.CONJ   go-NPST.CONJ Q

'Did/Will I go there?' = 'Of course I did/will not.'

b. *cha ana   wan-**a**   / wan-**i**   lā*
you there go-PST.DISJ   go-PST.DISJ Q

'Did/Will you go there?' = 'Of course you did/will not.'

(154) Scenario: A group of friends are playing a board game. Shyam's task is to find out who is the thief. Nearly to the end, he hasn't gained much ground. Poking fun at him, Laxmi says, "OK, just give it a try. What do you think? Did I steal the money?"

jĩ: dheba kuy-ā lā?
I.ERG money steal-CONJ.PST Q

'Did I steal the money?' (Have you figured out?)

As shown in the above examples, there is a contrast between rhetorical questions (153) and quiz questions (154), on the one hand, and regular information-seeking questions (152), on the other, with respect to the distribution of the conjunct form. In Chapter 2 I have argued against a purely morphosyntactic approach to explain this contrast. The three types of questions are not morphologically distinguished in Newari. For instance, the same question particle *lā* is used throughout. Granted this particle is not required to form questions in Newari, but its optionality is consistent across different question types.

3.1.1 Defining Seat of Knowledge

Let us assume that for each conversation to happen, the speaker and the addressee share a set of beliefs. Call it the common ground (CG). The goal of a conversation, therefore, is to update this common ground. In addition, the speaker and the addressee also have their individual beliefs. Following Caponigro and Sprouse (2007) I assume the following set-up for the speaker's (SB) and the addressee's (AB) respective beliefs.

(155) The definition of individual beliefs (Caponigro and Sprouse, 2007: 130)
   a. SB = { p: p is a belief of the speaker }
   b. AB = { p: p is a belief of the addressee}

The common ground is the mutual beliefs shared by the speaker and the addressee, and is defined as follows.

(156)   CG = SB ∩ AB

With this set up, we can define various clause types in terms of interlocutors' beliefs. A declarative can be taken as an assertion of the speaker's beliefs. The speaker can lie, but when he lies, he knows what he says is not true.

(157)   Declarative p: $p \in SB \vee \neg p \in SB$

This can be formulated below.

(158)   CP is a declarative iff $[\![CP]\!]^w \in SB$

The answer to a sincere inquiry is not contained in the speaker's beliefs. Take polar questions as an example. When the speaker asks a genuine yes-no question, she has no idea whether the correct answer to that question is a yes or a no.

(159)   Canonical polar questions $?p$: $p \notin SB \wedge \neg p \notin SB$ (Korotkova, 2016: 246)

Therefore regular information-seeking questions are defined as follows.

(160)   CP is a genuine inquiry iff $[\![CP]\!]^w \notin SB$ (Caponigro and Sprouse, 2007: 130)

Rhetorical questions, on the other hand, do not have such uncertainty. For a rhetorical question to be successful, the speaker and the addressee must be able to share certain beliefs in common. If I say (161a) rhetorically, I clearly know whether p or $\neg p$, but my addressee needs to have this knowledge too.

(161) a.   Could they possibly love their president more?
      b. p = They love their president.
      c. $\neg p$ = They don't love their president.

Thus we say the answer to a rhetorical question is contained in the common ground.

(162)   CP is a rhetorical question iff $[\![CP]\!]^w \in CG$ (Caponigro and Sprouse, 2007: 131)

Because CG is a subset of SB (156), given the standard set theory, (163) below naturally follows from (162).

(163) If CP is a rhetorical question, then $[\![CP]\!]^w \in SB$

Finally, a quiz question is given by the speaker to question the addressee's beliefs. Take (164a) as an example. It is considered as a quiz question if the quizzer knows whether p or $\neg p$.

(164) a. Does one plus one really equal two?
       b. p = One plus one equals two.
       c. $\neg p$ = One plus one does not equal two.

The addressee's belief set does not define a quiz question. He may believe that one plus one equals two, or he may not. It is also likely that he hesitates between p and $\neg p$ and choose not to answer the question. The status of (164) being a quiz question would not change in any of these scenarios. Only the speaker's belief set can determine if a question is a quiz question. Thus we say quiz questions are questions whose answers are contained in the speaker's beliefs.

(165) If CP is a quiz question, then $[\![CP]\!]^w \in SB$

Now we can unify declaratives, rhetorical questions and quiz questions in terms of individual beliefs—these are the clauses whose truth conditions are part of the speaker's beliefs. Adopting Speas and Tenny's (2003) terminology, I call the individual whose beliefs are used to assess the truth of a proposition the seat of knowledge. In declaratives, rhetorical questions and quiz questions, the seat of knowledge must be the speaker. Given the definition of regular information-seeking question in (160), the seat of knowledge of a genuine inquiry must not be the speaker. In Chapter 2 I have defined perspective center as an obligatorily bound pronoun. In other words, the Sentience head in conjunct constructions cannot introduce a brand new perspective. Rather, its specifier always points to a higher DP within the same speech act domain. In root clauses, there are only two potential binders for the seat of knowledge (166), i.e., the speaker and the addressee. The addressee, as a result, must bind the seat of knowledge in information-seeking questions.

(166)

```
                    SpP
                   /    \
            SPEAKER      
                    /      \
                  Sp        AdrP
                           /    \
                ADDRESSEE         
                          /         \
                        Adr          SenP
                                    /     \
                      SEAT OF KNOWLEDGE    
                                         Sen   CP
```
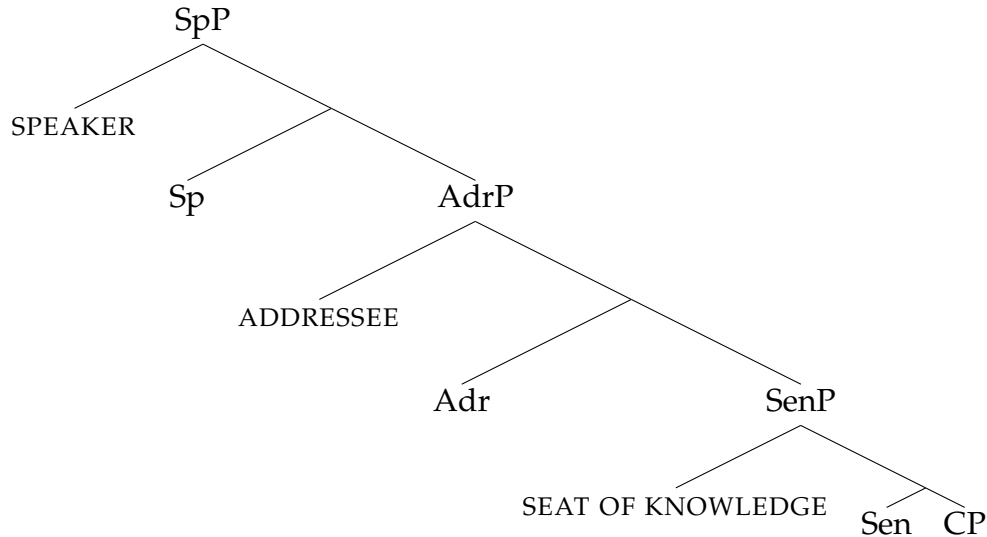
3.1.2   Seat of Knowledge in root clauses

Let us assume for now the conjunct verb requires its subject to be co-indexed with the seat

of knowledge. This is an oversimplification. I will return to the derivation of this relation

in the next chapter. In declarative clauses, rhetorical questions and quiz questions, the

speaker is the seat of knowledge. In information seeking questions, the addressee is the

seat of knowledge. The contrast in subject reference in different clause types is therefore

the result of the seat of knowledge being bound by different individuals. This three-way

identity is schematically illustrated below.

(167)   The seat of knowledge in root clauses

    a.   Declarative, rhetorical questions, quiz questions
        Speaker$_i$ ... Addressee ... The seat of knowledge$_i$ ... Subject$_i$ ... V$_{conj}$

    b.   Information seeking questions
        Speaker ... Addressee$_i$ ... The seat of knowledge$_i$ ... Subject$_i$ ... V$_{conj}$

    Although Speas and Tenny (2003) agree that the reference of the seat of knowledge

is not fixed, they do not elaborate on the specific mechanism involved. The syntax of the

SenP is fleshed out with more details in Tenny (2006). For her the seat of knowledge

mechanically checks features with the closest c-commanding discourse participants (be it the speaker or the addressee). I represent her analysis as follows.

(168) a. Declaratives

saP
- SPEAKER$_{1st}$
- sa
- SAP
  - SenP
    - SEAT OF KNOWLEDGE$_{1st}$
    - Sen
    - CP
  - SA
  - ADDRESSEE$_{2nd}$

b. Interrogatives

saP
- SPEAKER$_{1st}$
- sa
- SAP
  - ADDRESSEE$_{2nd}$
  - SA
  - SenP
    - SEAT OF KNOWLEDGE$_{2nd}$
    - Sen
    - CP
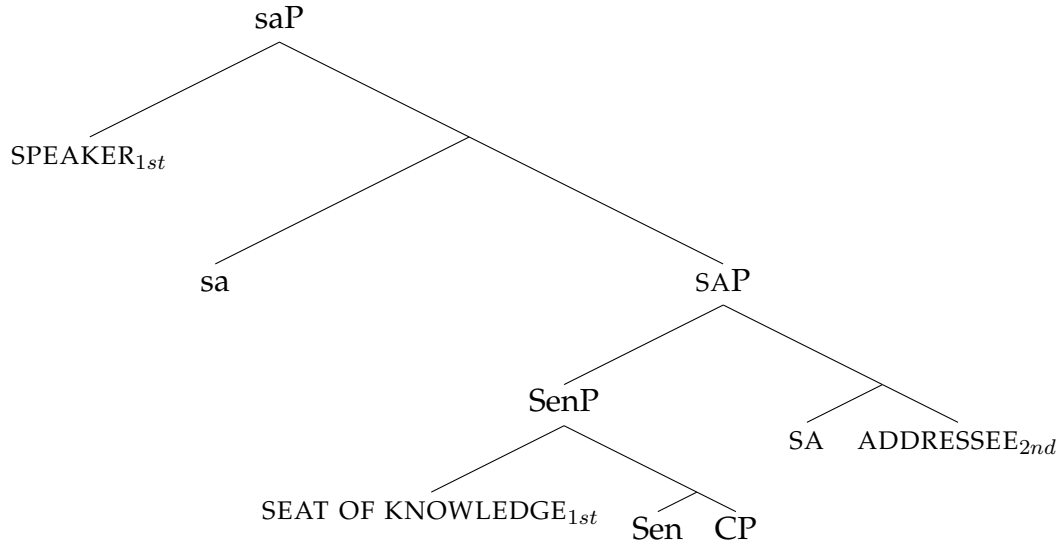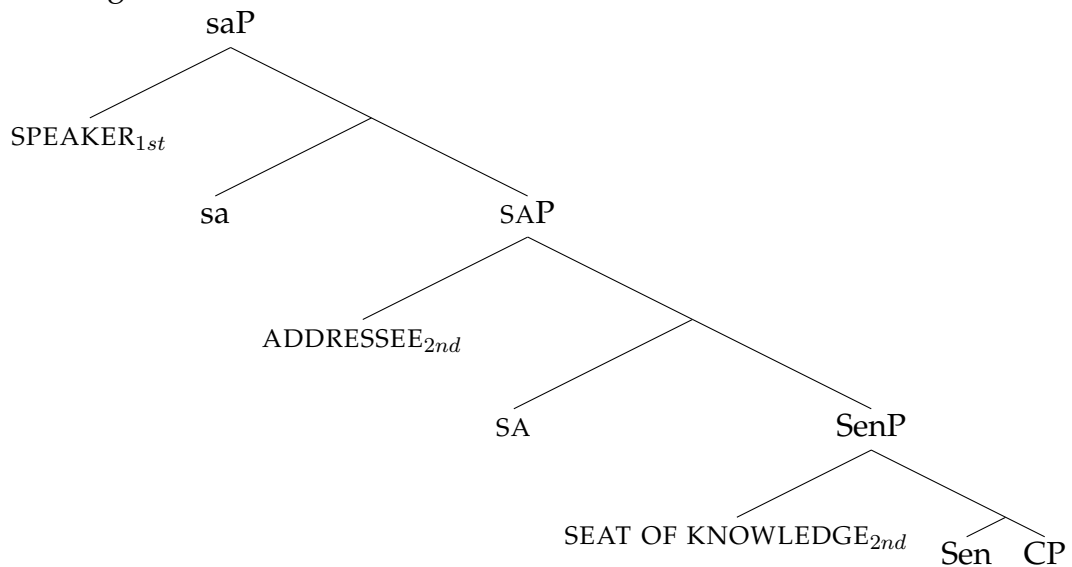
In declaratives (168a), the addressee is base-generated in a lower position than SenP and does not c-command the seat of knowledge. The speaker is the only potential candidate to check features with the seat of knowledge. As a result the seat of knowledge is understood as the speaker. In questions (168b), the addressee undergoes "interrogative flip"

and moves immediately above SenP, but crucially below saP. As such it becomes the closest c-commanding DP that the seat of knowledge can check its features with. Thus the seat of knowledge is interpreted as the addressee in this case.

This structure-based account is problematic. Conceptually if the seat of knowledge co-varies with the structurally closest discourse participant, it remains unclear what motivates the senP in the first place. Why do we need an intermediary if the subject simply agrees with whichever discourse participant that comes first? Empirically, Tenny's feature checking account would not predict the asymmetry between rhetorical/quiz questions and genuine inquiries.

3.1.3   Seat of Knowledge in relative clauses

Now let us turn to complex sentences. In (169), the main verb in both examples, *wona*, is in the disjunct form. In the present account, this is easy to understand. Because both sentences are declarative, the seat of knowledge is the speaker. The matrix subject, however, is a third person. Recall that the conjunct verb requires its subject to be co-referential with the seat of knowledge. Since this co-reference does not obtain, *wona* is in the disjunct form. What distinguishes (169a) and (169b) is the subject of the embedded clause and the morphology of the embedded verb.

(169) a. *Shyam [jĩ: cwan-ā   gu] chẽ   won-a.*
           Shyam I.ERG stay-PST.CONJ REL house go-PST.DISJ

           'Shyam went to the house I stayed at last year.'

       b. *Shyam [wõ: cwã: gu] chẽ   won-a.*
           Shyam (s)he.ERG stay-PST.DISJ REL house go-PST.DISJ

           'Shyam$_i$ went to the house he$_i$ stayed at last year.'

In (169a), the embedded subject is the first person pronoun and is co-indexed with the seat of knowledge, which in turn is bound by the speaker, the person restrictions of

the conjunct form is thus fulfilled. In contrast, the embedded subject of (169b) is a third person. It is co-indexed with the matrix subject *Shyam*. However, the seat of knowledge is the speaker, not Shyam. When the speaker utters (169b), she has at least two beliefs: (i) Shyam stayed at a house last year; and (ii) he went to the same house at a later time. Although Shyam may have both (i) and (ii) in his belief set, that is not necessary for the sentence to be true. (169b) is still true even if Shyam does not remember both trips and as a result is incapable of assessing the truth of either belief.

The structures for (169a) and (169b) are represented below. The seat of knowledge in both cases is the speaker of the utterance. In (170), the conjunct marker is possible because the embedded subject also refers to the speaker. In (171) the seat of knowledge, being the speaker, is not co-indexed with the embedded subject, thus a disjunct marker is used instead.

(170)

SpP
├─ SPEAKER₁
└─
   ├─ Sp
   └─ AdrP
      ├─ ADDRESSEE₂
      └─
         ├─ Adr
         └─ SenP
            ├─ KNOWLEDGE₁
            └─
               ├─ Sen
               └─ CP (RC)
                  Shyam₃ ... jĩːₐ₁ cwan-ā gu
                  'that **I** stayed'

106

(171)

SpP
SPEAKER₁
Sp   AdrP
ADDRESSEE₂
Adr   SenP
KNOWLEDGE₁
Sen   CP
RC
Shyam₃   …
wõ:₃ cwã: gu

'that **he** stayed'
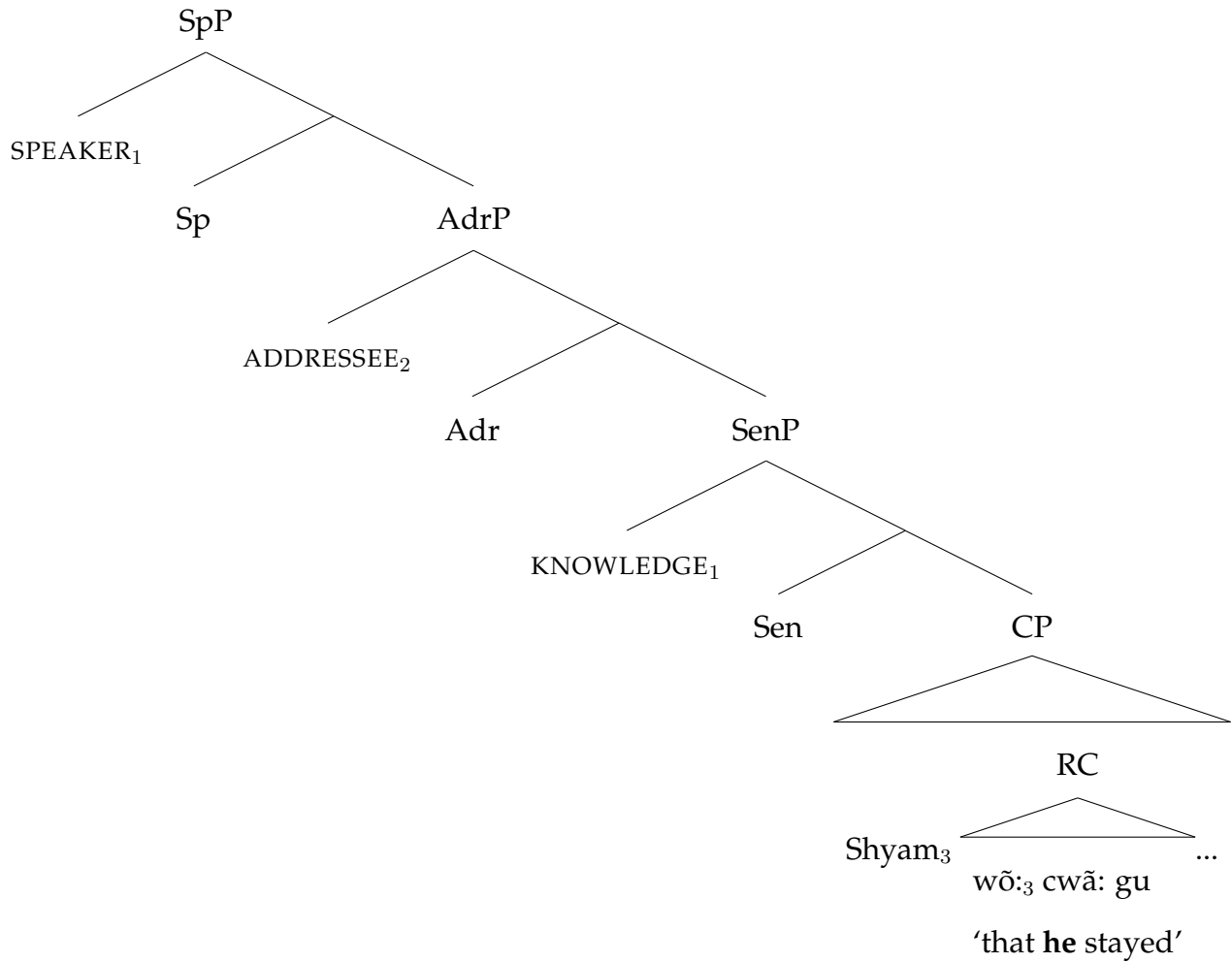
My analysis predicts that the second person subject of a relative clause is compatible with a conjunct verb only when the matrix clause is an information-seeking question. In this case, the addressee binds the seat of knowledge and as a result is co-referential with the local subject. This three-way identity guarantees the use of the conjunct form in the relative clause (172a). This is in contrast with (172b). Though the embedded subject is co-indexed with the addressee in (172b), the addressee cannot be the seat of knowledge in declaratives.
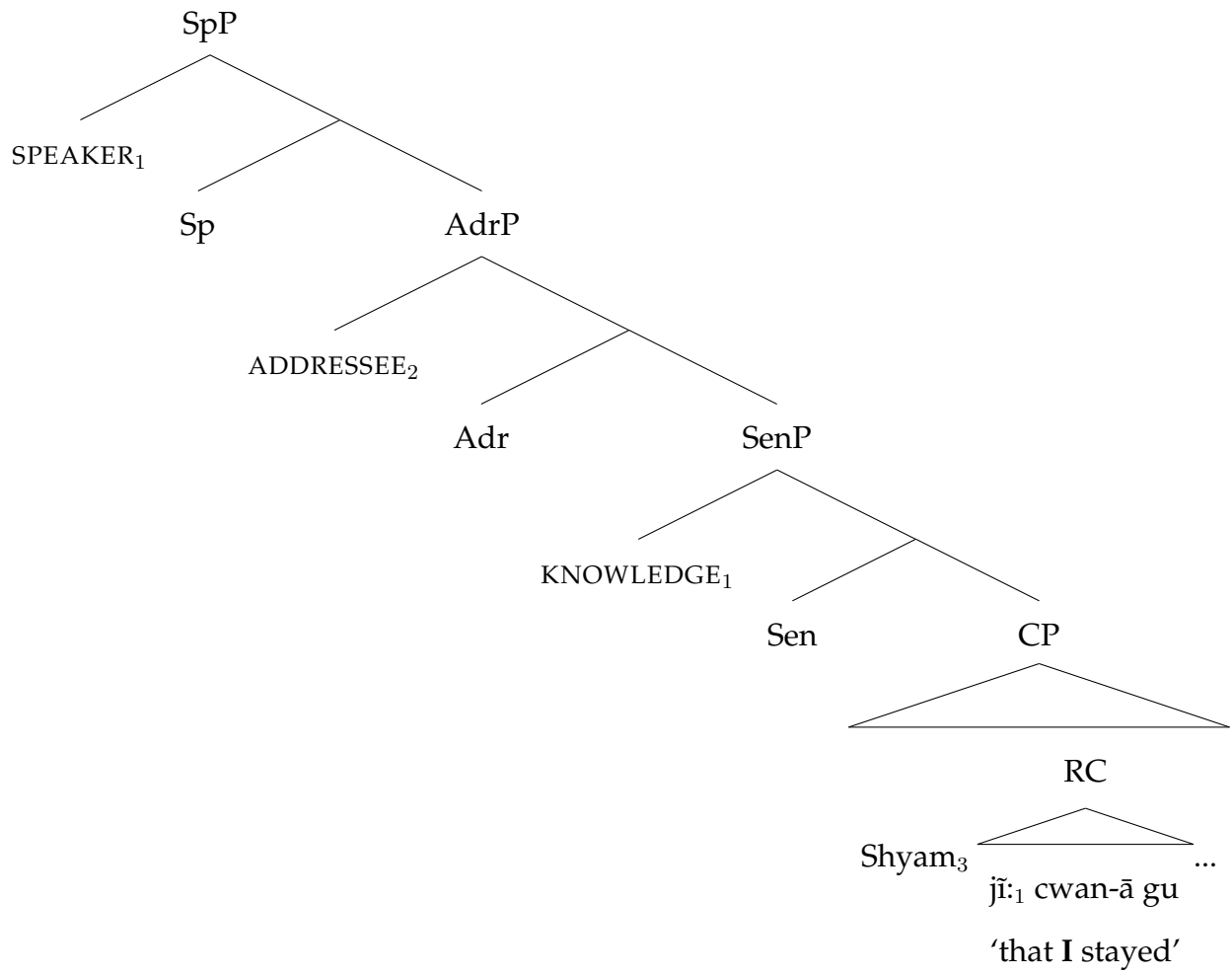
107

(172) a. *Shyam [chã: cwan-ā   gu] chẽ   won-a   lā*
Shyam you.ERG stay-PST.CONJ REL house go-PST.DISJ Q

'Did Shyam go to the house you stayed at last year?'

b. *Shyam [chã: cwã: gu] chẽ   won-a.*
Shyam you.ERG stay-PST.DISJ REL house go-PST.DISJ

'Shyam$_i$ went to the house you stayed at last year.'

The structures for (172a) and (172b) are schematically represented below.

(173) a. Speaker$_1$ ... Addressee$_2$ ... Knowledge$_2$ ... Shyam$_3$ ... V$_{disj}$ [$_{RC}$ you$_2$ ... V$_{conj}$]

b. Speaker$_1$ ... Addressee$_2$ ... Knowledge$_1$ ... Shyam$_3$ ... V$_{disj}$ [$_{RC}$ you$_2$ ... V$_{disj}$]

3.1.4   Seat of Knowledge in attitude complements

We have discussed the conjunct-disjunct marking in root clauses and relative clauses. What has been left out is the conjunct-disjunct distinction in attitude complements (174). The readers should be familiar to the descriptive facts now. In complement clauses when the conjunct verb form occurs the embedded subject and the matrix subject are co-referential (174a). They can refer to different individuals only when the disjunct form is used (174b).

(174) a. *Shyam-a   [wa ana wan-ā   dhakā:] dhāla*
Shyam.ERG (s)he there go-**PST.CONJ** that   said

'Shyam$_1$ said that (s)he$_{1/*2}$ went there.'   (conjunct, co-reference)

b. *Shyam-a   [wa ana wan-a   dhakā:] dhāla*
Shyam.ERG (s)he there go-**PST.DISJ** that   said

'Shyam$_1$ said that (s)he$_{*1/2}$ went there.'   (disjunct, disjoint reference)

In my account the senP is embeddable, and is present in attitude complements. When it is embedded, it is independent from the saP. The seat of knowledge in (174) is bound by the matrix attitude holder Shyam. This directly follows from our definition of the seat of knowledge—in this case the truth of the attitude complement is part of Shyam's belief set. In (174a) there is a three-way identity relation between the matrix

holder, the seat of knowledge and the embedded subject. The condition for the use of the conjunct verb is therefore satisfied. In (174b), however, the embedded subject and the seat of knowledge, i.e., Shyam, are disjoint in reference. As a result, the disjunct form is used instead. The contrast is illustrated below.

(175) a. Shyam$_1$ ... V$_{att}$ [$_{SenP}$ The seat of knowledge$_1$ he$_1$ ... V$_{conj}$]

b. Shyam$_1$ ... V$_{att}$ [$_{SenP}$ The seat of knowledge$_1$ he$_2$ ... V$_{disj}$]

My analysis assumes that the seat of knowledge must find its antecedent within the same speech act domain. One immediate prediction can be made from this. If the subject of the attitude complement is co-referential with the speaker, rather than the matrix attitude holder, the disjunct verb must be used in the complement clause.

(176) a. *Shyam-a*   *[ji   ana   wan-a   dhakā:] dhāla*
         Shyam.ERG (s)he there go-**PST.DISJ** that   said

         'Shyam$_1$ said that I$_2$ went there.'

b. *Shyam-a   *[ji   ana   wan-ā   dhakā:] dhāla*
         Shyam.ERG (s)he there go-**PST.CONJ** that   said

         (Int.) 'Shyam$_1$ said that I$_2$ went there.'

In (177) below I list two attempts of analyzing (176). One is plain wrong, and the other favors the use of a disjunct verb in the attitude complement. In the first analysis (177a), the embedded seat of knowledge is bound in long distance by the speaker of the utterance. This goes against our assumption that the seat of knowledge must be bound locally. Let us turn to the second analysis (177b). Recall that the conjunct verb is used only when its subject is co-indexed with the seat of knowledge. We can conclude from (176) that the condition for conjunct marking must be satisfied locally as well. If the subject is co-referential with the matrix seat of knowledge, i.e., the speaker, but disjoint in reference with the local seat of knowledge, i.e., Shyam, the conjunct form cannot be used.

(177) a. *Speaker$_1$ ... [$_{SenP}$ Knowledge$_1$ [Shyam$_2$ ... V$_{att}$ [$_{SenP}$ Knowledge$_1$ I$_1$ ... V$_{conj}$

b. Speaker$_1$ ... [$_{SenP}$ Knowledge$_1$ [Shyam$_2$ ... V$_{att}$ [$_{SenP}$ Knowledge$_2$ I$_1$ ... V$_{disj}$

Let me conclude this section by revising our generalization for the distribution of Newari conjunct verbs as follows.

(178)   The distribution of Newari conjunct verbs (second attempt)
When the conjunct verb is used, its subject is co-referential with the seat of knowledge in the same speech act domain. If this condition does not obtain, the disjunct verb is used instead.

In root clauses, when the speaker can evaluate the truth of the complement proposition of the Sen head, the seat of knowledge is the speaker; otherwise, the seat of knowledge is the addressee. In attitude complements, the matrix attitude holder is the most local antecedent for the seat of knowledge inside the complement clause.

The revised generalization (178) explains why the subject of the conjunct verb receives different interpretations in different types of clauses. This generalization, however, is in need of further revisions, as two other factors also play an important role in determining the distribution of Newari conjunct verbs. They will be addressed in the next two sections.

3.2   Perspective center as the responsibility holder

In Newari, when the embedded event is a state, the subject of disjunct verb may be co-indexed with the matrix subject. In fact, most state-denoting predicates, such as *ciku:* 'be cold' and *siu:* 'know', do not have a conjunct form in Newari.

(179) a.   *Shyam-a   dhāl-a   ki   [wa-ta   ciku:]*
           Shyam-ERG say-PST.DISJ that s/he-DAT cold.be.DISJ

           'Shyam$_1$ said that he$_{1/2}$ is cold.'

    b.   *Shyam-a   dhāl-a   ki   [wõ: siu:]*
           Shyam-ERG say-PST.DISJ that s/he.ERG know.DISJ

           'Shyam$_1$ said that he$_{1/2}$ knew.'

The disjunct marking in (179) is not predicted by (178). In both attitude complements of (179), the embedded seat of knowledge is bound by the matrix subject Shyam. Our generalization would predict that if the embedded subject is also co-indexed with Shyam, the conjunct verb is preferred over the disjunct verb. However, this prediction is not borne out. The reason, as I will show in this section, is that the conjunct verb is only compatible with a specific type of events.

3.2.1 Introducing the RESP relation

Farkas (1988) proposes a two-place relation, RESP, short for responsibility. RESP(i,s) holds between an iniatior i and a situation s just in case i brings about s. For Farkas, this relation is independently motivated and plays a key role in many constructions.[1] For instance, to use the *in order to* clause (180), the event denoted in the root clause must be something that can be brought about. (180c) is odd because resembling his father is not a situation John or anyone can hold a RESP relation with.

(180) a.　Joe trained every day in order to improve his performance.
     b.　In order to get into that club, you need to have inherited a lot of money.
     c.　#John resembles his father in order to annoy his grandmother. (Farkas, 1988: 36)

The RESP relation is not an agentivity requirement. The predicate may (180a) or may not require (180b) an agent. An individual bears a RESP relation to an event as long as said invidivual causes the event to come about.

For Farkas (1988) the RESP relation plays a crucial role in determining which predicates are excluded from imperatives. This explains why we have a contrast in acceptabil-

---

[1]Most notably the RESP relation is the defining property that separates the so-called canonical control and non-canonical control constructions. I will delay the discussion of this distinction in Section 4.3.

ity of imperatives between stage-level predicates (181a) and individual-level predicates (181b).[2]

(181)   Imperatives and the RESP requirement (Farkas, 1988: 36)

    a.   Be careful/polite/on time

    b.   #Be blue-eyed/tall/male

    Now let us return to the Newari examples (179). I propose that the same RESP relation holds between the perspective center and the conjunct constructions. That is, the perspective center must be able to bring about the event denoted by the conjunct constructions. In Newari, the predicates such as *ciku:* 'be cold' and *siu:* 'know' lack conjunct forms. This is easy to understand, as across languages, these are the predicates that are less acceptable in imperatives and are reluctant to take a rationale adjunct clause.

(182)   a.   *Know the answer!

    b.   *I know the time in order to be punctual.

    c.   *Be cold today!

    d.   *I'm cold in order to call in sick.

When accounting for the distribution of conjunct marking, Hale (1980: 96-97) makes this observation about Newari, "Significantly, those verbs which lack personal conjunct forms also lack normal imperatives." This becomes straightforward in my analysis as the RESP relation plays a key part in both imperatives and conjunct constructions.

    Though some predicates are inherently stative and non-volitional, many other predicates are lexically ambiguous. In Newari, the verb *tā* can be paraphrased as "listen" or "hear" in English, depending on the context. The conjunct-disjunct marking helps disambiguate between these two lexical meanings.

---

[2]We should distinguish predicates like *be tall* and predicates like *need to be tall*. The latter is acceptable in constructions that typically require the RESP relation. For instance, *One needs to be tall in order to see over that fence* (Richard Kayne, p.c.). As I will discuss in Section 3.2.3, the RESP relation is not lexically determined. The modal *need* can help coerce a non-RESP inducing predicate into a RESP inducing one. This dissertation, however, will not further explore the underlying reasons why adding the modal would make a difference.

(183) a. *Shyam-a   dhāla ki   wõ: sa: tāy-ā/*tāl-a.*
       Shyam-ERG said that s/he.ERG noise hear/listen-PST.CONJ/DISJ

       'Shyam$_1$ said that he$_1$ listened to the noise.'

   b. *Shyam-a   dhāla ki   wõ: sa: tāl-a/*tāy-ā.*
       Shyam-ERG said that s/he.ERG noise hear/listen-PST.DISJ/CONJ

       'Shyam$_1$ said that he$_1$ heard the noise.'

I argue that the RESP relation lies at the heart of the difference between listening and hearing. When you hear a sound, it is because the sound is being made and comes into your ears. When you listen to a sound, however, you pay attention to that sound using your ears. As effortless as listening may seem to you, you are still required to act a certain way in order for there to be such an event. Hearing, in contrast, is truly effortless. One does not, and in fact, cannot, prepare to hear a sound. You do not bring about a hearing event. It happens to you. This is why *hear* cannot be used in (184). Both sentences indicate that a certain degree of effort has been made.

(184) a. Your should listen to/*hear my advice.
   b. I lay in bed listening to/*hearing music.

Let me summarize what we have concluded so far with regard to the perspective center in Newari.

(185) a. The perspective center in Spec, SenP needs to be bound by an antecedent within the same speech act domain.
   b. The conjunct verb requires that its subject be co-indexed with the perspective center.
   c. The perspective center coincides with the seat of knowledge.

Given what we have seen in this section, we can achieve the following generalization.

(186) The perspective center is the individual that holds a RESP relation with the complement event.

Putting (185) and (186) together, we reach the inevitable conclusion that in Newari the perspective center must be both the seat of knowledge and the responsibility holder.

In the conjunct construction (183a), the verb *tā* must be interpreted as listening. The matrix subject Shyam is the seat of knowledge for the attitude complement. Since he is also responsible for bringing about the listening event, the conditions for conjunct marking are satisfied. In contrast, no RESP relation holds between Shyam and the hearing event. In this case Shyam is only the seat of knowledge, not a responsibility holder. Thus when the verb *tā* is interpreted as hearing, only the disjunct form is possible.

3.2.2 Refining responsibility

In this section I take a closer look at the RESP relation. Farkas (1988) defines RESP(i,s) as a semantic relation held between a situation s and an individual i that brings about s. This definition is sufficient when analyzing imperatives and rationale clauses, both of which by definition requires an effort of will. However, once we move beyond these two constructions, it becomes abundantly clear that the individual's determination to bring about s is as relevant as her ability when we determine whether there exists a RESP relation between i and s.

Barker (2002) discusses the various presuppositions different adjectives associate with their subjects when taking infinitive complements. The adjective *lucky*, for instance, requires a sentient subject (187a). We do not talk about how lucky an inanimate being is. The adjective *stupid*, too, takes a sentient subject, but this subject also needs to have the power to bring about the event denoted by the infinitive (187b). Finally, *smart* is the restrictest of all. Its subject needs to be sentient, capable and intentional when bringing about the complement event (187c).

(187) a. The children were lucky to survive the fire.
b. Joe is stupid to get involved in this.
c. Jill is smart to wait for a week.

To account for these subject-oriented presuppositions, Barker (2002) introduces three concepts, namely, sentience, discretion and intentionality, defined as follows.

(188)   Volitionality Presuppositions (Barker, 2002: 22)

   a.   SENTIENCE: the subject must be capable of volition

   b.   DISCRETION: it is within the power of the subject to choose to bring about the situation described by the infinitive

   c.   INTENTIONALITY: the subject intends for the situation described by the infinitive to come about

Unlike SENTIENCE which is defined as a property of an individual, both DISCRETION and INTENTIONALITY are defined as relations between an individual and a situation.

Discretion is roughly equivalent to Farkas's RESP relation. It has already been discussed in the previous section that conjunct constructions are sensitive to this property. The subject of the conjunct verb must be an individual with the ability and right to decide whether to bring about a certain event denoted by the complement clause. For instance, being sick is not something the subject can exercise his discretion on. This explains the following contrast.

(189) a.   *Shyam-a   dhāl-a   ki   [wa birāmi juy-ā].
           Shyam-ERG say-PST.DISJ that he   ill   become-PST.CONJ

           (Int.) 'Shyam$_1$ said that he$_1$ became ill.'

   b.   Shyam-a   dhāl-a   ki   [wa birāmi jul-a].
        Shyam-ERG say-PST.DISJ that he   ill   become-PST.DISJ

        'Shyam$_1$ said that he$_1$ became ill.'

Besides disrection, Newari conjunct morphology is subject to a strong condition of intentionality, as illustrated in (190). An individual may have discretion to bring about a situation but choose not to. When the event eventually happens, it is carried out by accident. In Newari, these events are not compatible with conjunct morphology, either.

(190) a. *Shyam-a   dhāl-a   ki   wa   masika   lakha-e   dun-ā.*
          Shyam-ERG say-PST.DISJ that s/he accidentally water-LOC submerge-PST.CONJ

          (Int.) 'Shyam$_i$ said that he$_i$ accidentally sank into the water.'

     b.   *Shyam-a   dhāl-a   ki   wa   masika   lakha-e   dun-a.*
          Shyam-ERG say-PST.DISJ that s/he accidentally water-LOC submerge-PST.DISJ

          'Shyam$_i$ said that he$_i$ sank into the water.'

In (190) the use of the adverb *masika* "accidentally" forces the unintentional reading. Without *masika*, (190a) becomes acceptable but the complement event obligatorily denotes a purposeful action.

In this dissertation I define responsibility as a conjunction of Barker's DISCRETION and INTENTIONALITY. In Newari the responsibility holder must be the individual that intentionally brings about the complement event. Once again our generalization for the distribution of Newari conjunct verbs needs to be revised.

(191) The distribution of Newari conjunct verbs (third attempt)

   a. When the conjunct verb is used, its subject is co-referential with the seat of knowledge in the same speech act domain. If this condition does not obtain, the disjunct verb is used instead. The seat of knowledge is defined as the individual whose beliefs are used to determine the truth conditions of the complement proposition. The speaker is the default seat of knowledge, unless the truth of the proposition is not contained in his beliefs.

   b. When the conjunct verb is used, its subject is co-referential with the responsibility holder. If this condition does not obtain, the disjunct verb is used instead. Responsibility holder is defined as the individual who intentionally brings about the complement event.

3.2.3 Coercing responsibility

Having identified responsibility as a key property in Newari conjunct constructions, our next step is to show that responsibility is a semantic relation and cannot be reduced to a purely syntactic account. My main objection against a purely structural account lies in the

fact that responsibility is not lexically determined and can be coerced given appropriate context.

In many languages, it is possible to coerce a typically non-volitional predicate to a volitional one. For instance, English passives generally do not occur in imperatives (Aikhenvald, 2010: 149), as exemplified in (192). This is easily understood given our current definition of responsibility as the subject of a passive is usually an individual to whom the event denoted by the passive verb happens. Such an individual does not bring about the event.

(192) a.   *George, be taken to church by your sister!
       b.   *Be helped by Jill.

As Birjulin and Xrakovskij (2001: 17) note, "there is no impenetrable wall between controllable and uncontrollable actions." In many cases of passives, the responsibility relation can be coerced between the subject and the event. The following sentences (Aikhenvald, 2010: 149) are more acceptable than (192). In each case the passive predicate denotes an event the passive subject can bring about. For instance, by uttering (193a) the speaker asks the patient to actively see a doctor and get a check-up. The most natural interpretation of (193b), on the other hand, is that the speaker asks the addressee to "act as flattered."

(193) a.   Be checked over by a doctor, then you'll be sure there's nothing wrong.
       b.   Be flattered by what he says, it'll make his day.

Farkas's analysis of imperatives seems to face some challenges in the world of advertising. The following sentence comes from a real estate agent.

(194)   Be surprised by the size!   (Aikhenvald, 2010: 150)

I do not think the addressee of (194) holds any responsibility relation with the event of being surprised. Such a construction is quite limited in its use. To understand it better

one would need to collect more data and closely examine the situations they are used. This dissertation, unfortunately, is not where the endeavor begins.

Now let us return to Newari conjunct constructions. Hargreaves (2005) describes one peculiar case when the conjunct verb can be used on a par with its disjunct counterpart. In (195a), with the disjunct verb, the sentence indicates that being a doctor is something that comes naturally to *Shyam*. He may be naturally gifted, or grew up in a family of doctors. The use of the conjunct verb in (195b), on the other hand, emphasizes "the personal ambitions and initiative" that brought *Shyam* to the finishing line. This contrast can be easily explained with the asymmetry in the existence of the responsibility relation in the two cases. Only in (195b) does *Shyam* has the power and determination to become a doctor.

(195) a. *Shyam-a*   *[wa*   *dāktar*   *jul-a*   *dhakā:]*   *dhāla.*
Shyam-ERG (s)he.ABS doctor become-PST.DISJ that   said

'Shyam said that he was made to become a doctor.'

   b. (?)*Shyam-a*   *[wa*   *dāktar*   *juy-ā*   *dhakā:]*   *dhāla.*
Shyam-ERG (s)he.ABS doctor become-PST.CONJ that   said

'Shyam said that he has worked to become a doctor.'

It is significantly less natural if we replace *dāktar* with *po* 'janitor, cleaning person.' Again, with the responsibility relation, this is easily understood. Becoming a janitor is less of a choice than becoming a doctor.

(196) ?? *Shyam-a*   *[wa*   *po*   *juy-ā*   *dhakā:]*   *dhāla.*
Shyam-ERG (s)he.ABS janitor become-PST.CONJ that   said

'Shyam said that he has (worked to) become a janitor.'

It is difficult to see how any account without resorting to the responsibility relation would predict such a contrast.

3.3 Perspective center as the true first person

Our revised generalization (191), as it stands now, is yet to account for the full range of data. In this section I introduce the final piece of the puzzle. In Newari conjunct constructions, the perspective center must be the individual that takes a true first-person perspective, or internal perspective, of the complement event.

3.3.1 Internal vs. external perspectives

Before we continue, let us think for a moment, what are the conceptual reasons to postulate the Sentience domain in the first place. Why do we structurally represent perspective centers?

We have clear evidence that many grammatical forms, such as Newari conjunct verbs, agree with the individual whose point of view is reflected in the sentence. If each sentence involves one and only one sentient individual, our task is straightforward. That individual will be the one that dictates the form of Newari verbs. However, life is never simple. All sentences have at least a speaker. Some of them also involve an addressee. There is virtually no limit for the number of sentient individuals one can explicitly talk about in any given sentence. When we speak, there is a constant need to choose among a handful of potential candidates whose point of view we are making reference to at the moment. The function of the Sentience Projection is thus to keep a log of the point of view in the stream of utterances.

In the previous sections, I have shown that the perspective center is a cover name for both the seat of knowledge and the responsibility holder. Abstracting away from the specifics of knowledge and responsibility, we can think of the perspective center as the "mind" being reported in the complement CP. In (197), there are two overt sentient individuals, i.e., Joe and Jill. The sentence (197) tells us what is in Joe's mind. Though Jill

is also part of the sentence, we know virtually nothing about what she thinks. We say Joe is the point of view of the infinitive complement.[3]

(197)   Joe wants to find out what Jill's plan is.

If we are to reconstruct Joe's desire, it would be something as the following.

(198)   I will find out what Jill's plan is.

The Sentience domain provides us with a concrete means to locate the mind being reported in the complement CP. In other words, to report on what is in Joe's mind, we first promote Joe to be the perspective center of the report.

When we speak our minds, there are generally two options. We can put ourselves back to the established scenario and visualize everything from a true first person perspective. I call this internal perspective. Alternatively, we can play the role of a narrator and describe the scenario as if it is someone else's experience or thoughts. This is what I call the external perspective.

Let us take the following sentence as an illustration.

(199)   Just imagine yourself driving around town in this car.

I may have two types of visual in mind when hearing (199). In the first one, I can picture myself sitting in the driver's seat. I have my hands on the wheel and right foot on the gas. This is what Williams (1976) calls "kinaesthetic imagery." I am the driver and I share the same bodily sensations as the driver. Sitting in the driver's seat I see only what is in the driver's range of vision. In the second type of visual, I take a spectator's perspective, watching myself from the sidelines. I see the driver in my outfit, with my hairstyle and facial features. I recognize the driver. It is me. I also see many things one could not from the driver's perspective. The wind is ruffling my hair from the back of my head. My eyes are shining with excitement. By observing the driver that is myself, I seem to really

---

[3]I will delay the discussion of control constructions and English infinitives to Chapter 4.

enjoy driving that car. But I do not know that for sure, because as a spectator, I do not experience the driver's feelings, even though we are technically the same person.

Vendler (1982) observes that the null subject (i.e., PRO) of the gerundive complement of *imagine* can only be interpreted one way but not the other. The following sentence only yields internal perspective.

(200) Just imagine PRO driving around town in this car.

Upon hearing (200), I have to put myself on the driver's seat, picture myself roaming the streets and watching various parts of the town disappearing in my rear-view mirror. (200) does not produce the spectator's perspective in which I visualize from outside the figure that is myself.

3.3.2   Conjunct constructions ascribe internal perspective

Newari conjunct verbs require the attitude holder to take the true first person perspective, portraying exactly what she sees or experiences as the event unfolds. In the following context, the individual identity holds between baby Shyam, the toy breaker, and adult Shyam, the attitude holder. Shyam is both the seat of knowledge and the responsibility holder for the attitude complement. But the adult Shyam is not reporting his in-body experience of the toy-breaking event, rather, he takes a spectator's perspective as if he is watching someone else breaking the toy. In this context, the use of the conjunct verb is not appropriate (201a).

(201) Scenario: Shyam is watching baby videos of himself. In one video, the six-month-old Shyam throws his toy truck to the wall and as a result the toy truck breaks into pieces. He says to his wife, "I really was a trouble maker. *I broke a toy* just like that."

   a. *Shyam-a   [wã: nheba tachyan-ā   dhakā:] dhāla.
       Shyam-ERG (s)he.ERG toy   break-PST.CONJ that   said

       'Shyam₁ said that he₁ broke a toy.'

b. *Shyam-a*   *[wã:*   *nheba tachyat-a*   *dhakā:] dhāla.*
Shyam-ERG (s)he.ERG toy   break-PST.DISJ that   said

'Shyam₁ said that he₁ broke a toy.'

Now let me state what I think the correct generalization is.

(202) The distribution of Newari conjunct verbs (final attempt)

a. When the conjunct verb is used, its subject is co-referential with the seat of knowledge in the same speech act domain. If this condition does not obtain, the disjunct verb is used instead. The seat of knowledge is defined as the individual whose beliefs are used to determine the truth conditions of the complement proposition. The speaker is the default seat of knowledge, unless the truth of the proposition is not contained in his beliefs.

b. When the conjunct verb is used, its subject is co-referential with the responsibility holder. If this condition does not obtain, the disjunct verb is used instead. Responsibility holder is defined as the individual who intentionally brings about the complement event.

c. When the conjunct verb is used, its subject takes an internal perspective of the complement event. If this condition does not obtain, the disjunct verb is used instead. The internal perspective is defined as the true first-person perspective, from which the attitude holder self-ascribes as performing an action or experiencing an emotion or sensation denoted by the complement event.

It is worth noting that the conjunct verb can be used only when all three conditions in (202) are satisfied. In Chapter 4 I argue that the disjunct form is the default and appears if any of these requirements fails. In Chapter 5 I present my syntactic analysis of Newari conjunct constructions, whereby the Sentience domain consists of three functional projections whose specifiers are the seat of knowledge, responsibility holder, and internal perspective, respectively. The coreference between the three Sentience specifiers in Newari conjunct constructions is analyzed as a result of agreement.

3.4 The implicational hierarchy of perspectival expressions

Now we have all the tools at our disposal to posit an implicational hierarchy for perspectival expressions. I have shown that three grammatical properties are critical in determining the distribution of Newari conjunct verbs, namely, knowledge, responsibility, and internal perspective. The conjunct form can be attached to a verb only when its subject is capable of evaluating the truth of the CP that contains the verb, can intentionally bring about the event denoted by the VP that contains the verb, and takes an internal perspective of the said event. In other words, the same individual plays a triple role in conjunct constructions.

The next question we ought to address is the relation between knowledge, responsibility, and internal perspective. Though Newari is a helpful language to look at when we zoom in and scrutinize each individual property, it cannot help us determine the hierarchy between these properties. Recall that we say P implies Q if whenever P is true, Q is also true. The definition of implication is very straightforward. But if we are told that both P and Q are true, there is not enough information for us to determine which one is the antecedent and which one the consequent. This is exactly what happens in Newari, since the three properties always go hand in hand.

In the next two chapters I will discuss point-of-view phenomena that only make reference to a subset of these properties. But before we move on to novel data, let us have a brief look at two familiar constructions that motivate responsibility and internal perspective, respectively.

The first one is imperatives. In Farkas's (1988) proposal, the RESP relation always holds between the subject of the imperative, i.e., the addressee, and the event denoted by the imperative predicate. Imperatives always encode responsibility. Now we can ask two

questions. Do imperative subjects always take an internal perspective of the event? Are imperative subjects the seat of knowledge?

The answer to the first question is a resounding yes. When Joe says to Jill, *Leave!*, it is simply unimaginable that upon hearing it, Jill can perform the action of leaving without having any direct perception of her leaving.[4]

The second question is slightly trickier. Our definition of the seat of knowledge is contigent on the sentence having truth conditions. Intuitively speaking, imperatives do not feel true or false. After all, when Joe says to Jill, *Leave!*, Jill can either say yes or no to the request, but she cannot follow Joe's request with *That is false!*. Charlow (2014) argues that this is so because we confuse truth in natural language with truth in the theorist's metalanguage. It is possible to talk about truth conditions in the latter sense.

There are a lot of attempts in the literature to provide truth-conditional semantics for imperatives. They generally fall in two camps. Lewis (1972) analyzes imperatives as explicit performatives. According to this analysis, the truth condition of (203a) is no different from that of (203b). They both denote the set of worlds in which the speaker orders the addressee to leave at the time and place in which the sentence is uttered. The modal analysis of imperatives (Portner, 2007; Kaufmann, 2011), on the other hand, holds that the LFs of imperatives are given by modal sentences. In this view (203a) and (203c) would have roughly the same meaning.

(203) a. Leave!
    b. I order you to leave. (Imperatives as explicit performatives)
    c. You must leave. (Imperatives as modals)

I do not attempt to decide between these two analyses. Our goal is to find out which individual can evaluate the truth of (203a), not what the truth codnition of (203a)

---

[4]Here I exclude any events that are carried out under hypnosis, which is peculiar on many levels.

is. Shared by the two analyses is the view that imperatives express propositions.[5] When the speaker says (203a) to the addressee, the proposition it expresses becomes part of the common ground. Recall that we define common ground as the intersection of the speaker's and the addressee's beliefs. Thus according to these analyses, both the speaker and the addressee can assess the truth of (203a). However, only the speaker can be the seat of knowledge in this case. In this dissertation, speaker is defined as the default antecedent for the seat of knowledge. The addressee only binds the seat of knowledge when the truth of the proposition is not part of the speaker's beliefs.

Now we have a situation where the seat of knowledge and the responsibility holder refer to different individuals. As we have seen so far, the subjects of the imperatives are determined by the responsibility holder, not by the seat of knowledge.

Next let us discuss another construction—gerundive complements of verbs such as *imagine* and *remember*, which are used in the previous section to motivate the distinction between internal and external perspective. We know the PRO subject of the gerundive complement must take an internal perspective. Responsibility, however, is not a relevant property in this construction. The antecedent of PRO does not need to hold the responsibility relation with the gerundive complement. The gerund can be a stative predicate (204a), or denote an unintentional event (204b).

(204) a. Imagine PRO being the U.S. president surveying the Gulf oil spill. What would you do? (Anand, 2011)

b. I remember PRO falling downstairs. (Higginbotham, 2009: 231)

Our next question is what is the seat of knowledge of the gerundive complements. Higginbotham (2009) demonstrates that the gerundive complements of *remember* and *imagine*, unlike their finite counterparts, denote events, not propositions. This explains the following contrast. While (205a) sounds self-contradictory, (205b) is not a paradox.

---

[5]This is not a view held by everyone. Barker (2012a), for instance, argues that imperatives express actions.

(205)   Finite complements vs. gerundive complements (Higginbotham, 2009: 218)

    a.   I used to remember that I walked to school in the fifth grade, but I no longer remember it.

    b.   I used to remember walking to school in the fifth grade, but I no longer re-member it.

Being events, gerundive complements are not truth-bearers. I argue that the seat of knowledge in both sentences in (204) locates in the root clause and does not affect how PRO is interpreted. In (204a), the PRO subject is controlled by the addressee, but the seat of knowledge is the speaker. This is a case in which internal perspective and the seat of knowledge are separated. It is clear that knowledge is not a relevant property for the reference of the PRO subject in gerundive complements.

We can summarize the three types of point-of-view phenomena we have seen so far in the following table. I use 1 to indicate that the corresponding property is at work for the given phenomenon.

Table 3.5: Three Types of Point-of-View Phenomena (First Look)

	Knowledge	Responsibility	Internal Perspective
Newari conjunct marking	1	1	1
Imperatives	0	1	1
Gerundive complements	0	0	1

The above table suggests the following hierarchy.

(206)   Knowledge $\rightarrow$ Responsibility $\rightarrow$ Internal Perspective

In the next two chapters I will discuss other point-of-view phenomena. It will become clear that all these phenomena fall in one of the three types listed in Table 3.5, which further corroborates our hierarchy (206).

3.5 Conclusion

In this chapter I take a closer look at the perspective center in the Sentience domain. There are three types of semantic relations the perspective center can hold with respect to the complement of Sen, namely, knowledge, responsibility and internal perspective. This chapter has addressed each of these relations in detail. I have also presented empirical evidence to show that in Newari conjunct constructions, the perspective center must simultaneously be the seat of knowledge of the complement proposition, the responsibility holder of the complement situation, and the person who takes an internal perspective of the complement event.

Additionally, I have hypothesized an implicational hierarchy among knowledge, responsibility and internal perspective (206). The advantage of such a hierarchy is that it predicts a highly constrained typology of point of view phenomena that can be found in the world's languages. In the next two chapters I show that unlike Newari conjunct constructions, many point of view phenomena are only sensitive to one or two of the semantic properties, conforming to our typology in Table 3.5.

Control and Controllability

4.0   Bridging matrix and embedded clauses

In Chapter 2, I have presented an articulated structure for the utterance context. My proposal divides the discourse into two structural domains. The top domain is the Speech Act Projection, which consists of two functional heads Sp and Adr whose specifier positions seat the speaker and addressee, respectively. It is responsible for root clause phenomena such as allocutive agreement. The lower domain is the Sentience Projection whose head takes a perspectival expression as its argument. This projection is what helps bridge matrix and embedded clauses. As shown below, the SenP is selected by the Adr head in root clauses (207a), and by the attitude predicate, i.e., the little v, in attitude complements (207b).

(207) The two-tiered structure of discourse

a. Root clauses

$$\overbrace{[\text{ SPEAKER } [\text{ Sp } [\text{ ADDRESSEE } [\text{ Adr }}^{\text{The Speech Act layer}} \overbrace{[\text{ PERSPECTIVE } [\text{ Sen }}^{\text{The Sentience layer}} \overbrace{[\text{ TP ...}}^{\text{root clause}}$$

b. Attitude complements

$$\overbrace{[\text{ Attitude holder } [\text{ v } ...}^{\text{root clause}} \overbrace{[\text{ PERSPECTIVE } [\text{ Sen}}^{\text{The Sentience layer}} \overbrace{[\text{ TP ...}}^{\text{complement clause}}$$

   The SenP differs from the saP in two major aspects. First of all, unlike the saP, the SenP can be embedded. Depending on where the SenP is merged to, the perspectival expression in Spec, SenP can be anchored to different levels and shift its reference accordingly. This projection, I argue, lies at the heart of point-of-view phenomena across languages. Secondly, the senP serves as an interface between the context (the saP or the matrix vP) and the proposition (the TP). Unlike the saP, the senP is immediately accessible to the embedded TP. Consequently, it shows sensitivity to specific semantic properties of the complement clause. In Chapter 3, I have examined one such point-of-view phenomenon—Newari conjunct constructions, and identified three semantic properties perspectival expressions may be sensitive to, namely, knowledge, responsibility, and internal perspective. Additionally, I have hypothesized an implicational hierarchy among the three properties. I argue that one major advantage of this hierarchy is that it can help establish the following typology of point-of-view phenomena.

Table 4.1: The Typology of Point-of-View Phenomena

	Knowledge	Responsibility	Internal Perspective
Type 1	✓	✓	✓
Type 2	—	✓	✓
Type 3	—	—	✓

   Since Newari conjunct constructions exhibit all three properties, they belong to the first type of the point-of-view phenomena. In this chapter, I turn to the second type—canonical control constructions.

Section 4.1 sets the stage by presenting a taxonomic view of control constructions. It is a common practice for linguists to distinguish obligatory control from non-obligatory control (Williams, 1980). The former, according to Landau (2013a), can be further subdivided into predicative control and logophoric control. Unlike predicative control, logophoric control applies in attitude contexts, and subsumes both canonical and non-canonical control.

In Chapter 3 I have introduced the semantic property—responsibility which, according to Farkas (1988, 1992), is what separates canonical control from non-canonical control. Landau (2013a) explicitly rejects Farkas's RESP account because it is syntactically unrestricted and thus fails to produce the locality of obligatory control. In Sections 4.2 and 4.3, I present empirical evidence to show that the split between canonical and non-canonical control is necessary and that responsibility plays a key role in separating the two types of control. My account solves the locality problem by making the SenP a structural correlate of the responsibility holder. In other words, the responsibility relation must hold between the Perspective in Spec, SenP, and the proposition/event denoted by the complement of the Sen head. The last section concludes this chapter.

4.1 A quick survey of control constructions

Though Control Theory is one of the pillars of the Government and Binding framework (Chomsky, 1981), to my knowledge there does not exist a standard definition for control constructions. The term control was originally used as a verb. The empty subject PRO is always determined, or as syntacticians say, *controlled* by some other expression in the context. Later on as a common practice, syntacticians simply call the clause in which PRO appears a control construction. The following sentences all involve control.

130

(208) a.   Joe$_1$ spoke loudly, PRO$_1$ waving his arms around like a madman.

b.   Jill cannot play soccer herself, but she$_1$ enjoys PRO$_1$ watching the game and PRO$_1$ talking to people.

c.   During the Great Recession, many companies$_1$ were forced PRO$_1$ to close doors.

Recall that bound pronouns also require an antecedent. Within Government and Binding Theory, binding and control are dealt with in separate modules. The former is conditioned by the Binding Principles (Section 2.0.1). In contrast, the distribution of PRO follows from the PRO Theorem (Chomsky, 1986b: 183). This theorem states that PRO is unable to appear in governed positions, which include the subject position of a tensed clause (209a), the object positions of VP (209b) and PP (209c).

(209) a.   *I think PRO heard something.

b.   *Joe saw PRO.

c.   *Jill bought a car from PRO.

Since the only ungoverned position is the subject of the non-finite clause, many syntacticians use non-finite clauses and control constructions almost interchangeably.

Non-finiteness and nullness are perhaps the two properties most often associated with PRO. However, neither properties hold cross-linguistically, which makes providing a precise definition for PRO and control a real challenge. Languages like Hungarian (Toth, 2000), Welsh (Tallerman, 1998), and Brazilian Purtugese (Modesto, 2011) allow PRO to appear in semi-finite or even finite complements. Szabolcsi (2009) also present data from a wide range of languages to show that the infinitival subjects can be overtly realized.

Despite the lack of a standard definition for control, it has been widely accepted that control subsumes two subgroups, namely, obligatory control (OC) and non-obligatory control (Williams, 1980). Arbitrary control is a case of non-obligatory control (NOC). As its name suggests, it occurs when the controlled element receives an arbitrary interpretation. That is, in the following sentences, the PRO is understood as anyone in general.

(210)   Arbitrary control

   a.   PRO Making a large profit requires PRO exploiting the tenants.   (Lebeaux, 1984: 260)

   b.   It is dangerous for babies PRO to smoke around them.   (Kawasaki, 1993: 28)

Non-obligatorily controlled PRO can receive specific interpretations, too. PRO in adverbial adjuncts (211a) or free modifiers (211b), for instance, may be controlled by the matrix subject.

(211)   Non-obligatory control with specific interpretation

   a. Joe_1 walked away without PRO_1 saying a word.

   b. $Jill_1$ stared at him, not knowing whether PRO_1 to believe it or not.

   What separates obligatory control from non-obligatory control is the use of a control predicate. Obligatory control must be introduced by a control predicate. Landau (2015) provides the following taxonomy for control predicates. For him obligatory control can be further subdivided into two cases, i.e., predicative control and logophoric control, selected by different types of control predicates.

(212)   Predicative control predicates (Landau, 2015: 6)

   a.   Implicative: *avoid, bother, compel, condescend, dare, decline, fail, force, forget, get, make sure, manage, neglect, refrain, remember, see fit*

   b.   Aspectual: *begin, continue, finish, resume, start, stop*

   c.   Modal: *have, is able, may, must, need, should*

   d.   Evaluative: *bold, cowardly, crazy, cruel, (im)polite, kind, modest, rude, silly, smart*

(213)   Logophoric control predicates (Landau, 2015: 7)

   a.   Propositional: *affirm, assert, believe, claim, declare, deny, imagine, pretend, say, suppose, think*

   b.   Desiderative: *afraid, agree, arrange, aspire, choose, decide, demand, eager, hope, intend, mean, offer, plan, prefer, promise, ready, refuse, resolve, strive, want, yearn*

   c.   Interrogative: *ask, contemplate, deliberate, find out, grasp, guess, inquire, interrogate, know, unclear, understand, wonder*

   d.   Factive: *dislike, glad, hate, like, loathe, regret, sad, shocked, sorry, surprised*

Landau proposes that logophoric control predicates (213) are attitude predicates. Consequently the split between the two types of OC corresponds to the dichotomy between non-attitude complements and attitude complements. This explains why, among other things, the antecedent of the logophorically controlled PRO must be a human, while predicative control is compatible with an inanimate controller (214).

(214)   PRO in predicative control allows inanimate controller
   a.   The letter$_1$ failed PRO$_1$ to arrive.
   b.   The car$_1$ began PRO$_1$ to move forward.
   c.   The engine$_1$ needs PRO$_1$ to be checked.

For Landau (2015), predicative control is established via simple predication, whereas logophoric control must apply in attitude contexts. Since attitude holders are humans by definition, logophorically controlled PRO is therefore only compatible with human controllers.

Whether the two labels, i.e., logophoric control predicates and attitude predicates, are indeed equivalent is still open to deable. Pearson (2015a), for instance, identifies only propositional (what she calls communication verbs) and desiderative predicates (what she calls verbs of mental attitudes) as attitude verbs. Since there is more consensus on the classification of the first two subcategories in (213) as attitude predicates, in what follows I limit my discussion to just these predicates.

I have been using the word *attitudes* without much explanation. An attitude is either a mental state or a communicative act of an individual. The individual who bears the said attitude towards a proposition is also known as *the attitude holder*. I will refer to the proposition that expresses the said attitude as *the attitude report*.

The goal of this chapter is to explore the structural representation of the SenP. As I have discussed in Chapter 3, the SenP is only present in root clauses and attitude complements. By our definition, both environments can be taken as attitude reports. In other

words, a simple root clause such as *Hamilton is the best musical ever* expresses what the speaker believes, i.e., her attitude. For this reason, I will focus on logophoric control only. From here on, unless otherwise specified, all the mentions of control refer exclusively to logophoric control introduced by propositional and desiderative predicates.

4.2   Control, obviation and their (near-)complementarity

In many European languages including both Western Romance languages such as French, Italian and Spanish (Ruwet and Goldsmith, 1991; Costantini, 2005; Kempchinsky, 2009: among others) as well as Eastern European languages such as Russian, Hungarian and Polish (Antonenko, 2008; Szabolcsi, 2010; Citko, 2012: among others), there is a systematic contrast between control and the so-called obviation. In these languages the subject of an embedded clause must be co-indexed with the matrix subject when the embedded clause is in the infinitive (215a), as opposed to the subjunctive (215b). The disjoint reference effect typically associated with the subjunctives is known as obviation. It should be noted that there are important exceptions to the obviation effect in subjunctive clauses. In Section 4.2.3 I discuss those exceptions.

(215) a. $[_{TP}$ ... Subject$_1$ ... $[_{TP}$ PRO$_1$ T-INF ...]]   (infinitive, control)

   b.   *$[_{TP}$ ... Subject$_1$ ... $[_{TP}$ Subject$_1$ T-SBJV ...]]   (subjunctive, obviation)

   The control-obviation contrast is illustrated below in both French (216) and Hungarian (217).[1] In both languages the subject of an infinitive must, and the subject of a subjunctive must not, be co-indexed with the matrix subject.[2] In (216b) the subject of the

---

[1]Note that the examples in Hungarian are not exact minimal pairs. Different verbs are used, namely, *szeretne* 'would like' and *akar* 'want', in non-negated sentences, for independent word order reasons. The same verb *akar* is used in negated examples. See Koopman and Szabolcsi (2000) for a detailed discussion on this.

[2]When the matrix verb takes only two arguments, namely, an attitude holder DP and a complement clause, the controlled subject always refers to the attitude holder, whereas the subject of the subjunctive must not be co-indexed with said DP. Things get more complicated when the matrix verb is a three place

subjunctive, the leaver, must refer to a different person from the matrix subject, the wan-
ter. In (217b) the co-reference of the matrix subject and the embedded one leads to an
ungrammatical sentence.

(216)   Control vs. obviation in French (Ruwet and Goldsmith, 1991: 2)

    a.   *On dirait qu'il veut partir*
       It   seems that.he wants leave.INF

       'It seems like he wants to leave.'

    b.   *On dirait qu'il veut qu'il parte*
       It   seems that.he wants that.he leave.SBJV

       'It seems that he$_1$ wants for him$_{*1/2}$ to leave.'

(217)   Control vs. obviation in Hungarian (Szabolcsi, 2010: 3)

    a.   *Szeretném meglátogatni Marit.*
       would like.1SG visit.INF   Mary.ACC

       'I would like to visit Mary.'

    b.   #*Akarom, hogy meglátogassam Marit.*
       want.1SG that visit.SBJV.1SG Mary.ACC

       (Int.) 'I want for me to visit Mary.'

Since the present-day English does not morphologically mark subjunctives, the
subjunctives in French and Hungarian are translated in terms of *for*-infinitives. When
he translates Ruwet (1984) in English, John Goldsmith notices that the *for*-infinitive is a
productive equivalent of the subjunctive in French. Section 4.3.1 addresses *for*-infinitives
in more detail.

4.2.1   Two approaches to obviation

In the literature there are generally two ways to approach obviation. The Competition
approach recognizes the apparent complementarity between the conditions that apply

---

predicate. I will leave the discussion of controller choice to Section 4.3.3. In this section I look exclusively at
cases in which only one potential antecedent is available in the matrix clause.

to control and those that apply to obviation. According to this view, bound subjunctive subjects are in competition with, and less preferable than, PRO (Bouchard, 1982; Farkas, 1992; Schlenker, 2005). Roughly, the infinitive form is used when its subject is co-indexed with the matrix subject (218a), whereas the subjunctive form is used when its subject is disjoint in reference with the matrix subject (218b).

(218)   The Competition account for the control-obviation contrast illustrated in the rule-formation format
    a.   visit Mary → to visit Mary ╱ I want PRO __   (*I want to visit Mary*)
    b.   visit Mary → visit.SBJV Mary ╱ elsewhere   (*I want that John visit Mary*)

The Domain Extension approach, on the other hand, considers obviation as a consequence of Principle B violation (Picallo, 1985; Raposo, 1986; Suñer, 1986; Kempchinsky, 1987; Rizzi, 1990; Progovac, 1993; Avrutin and Babyonyshev, 1997). Advocates of this view make additional assumptions about the subjunctive mood to the effect that the binding domain for subjunctive clauses must be extended to the matrix clause. As illustrated in (219), the extended binding domain, indicated by the brackets, end up containing a bi-clausal structure. Binding Principle B dictates that pronouns must be free in this domain, which essentially rules out the co-indexation between the two adjacent subjects (219b).

(219)   The Domain Extension account for obviation
    a.   [I_1 want that John$_2$ visit Mary]
    b. *[I_1 want that I_1 visit Mary]

The Domain Extension approach does not relate the obviation facts to the control facts. Rather, they are derived by separate modules of the grammar and conditioned by separate sets of rules. The Competition account, in contrast, draws an explanatory connection between control and obviation, and does not rely on specific stipulations about subjunctives. Everything else being equal, Occam's razor should follow its usual course. However, as many rightfully point out, it is not always the case that the infinitive and the subjunctive are in complementary distribution. For example, Szabolcsi (2010) observes

that the disjoint reference requirement can be lifted in certain Hungarian subjunctive clauses. (220) illustrates one of the instances where the control-obviation contrast disappears.

(220) Control and exemption from obviation in Hungarian (Szabolcsi, 2010: 4)

    a.   *Nem akarok   PRO leugrani*
           not   want.1SG   down.jump.INF

          'I don't want to jump down.'

    b.   *Nem akarom,   hogy leugorjak*
           not   want.1SG that down.jump.SBJV.1SG

          'I don't want that I jump down.'

The collapse of the contrast has been considered by many (Picallo, 1985; Suñer, 1986; Costantini, 2005) as a major problem for the Competition approach.

I argue in this chapter that it is premature to reject the Competition approach or the insights it reflects based on the above examples. First of all, as I will show shortly, the superficial exceptions, upon closer scrutiny, form a coherent class. This would seem odd if obviation is independent from control. Moreover, it is not immediately clear how the alternative approach would account for examples like (220). The Domain Extension account still needs to stipulate additional conditions under which subjunctives turn opaque for binding. Specifically this account would have to explain why the binding domain of the subjunctive subject in (220b) is smaller than that in (217b). Finally, unlike the early work referred to, I do not focus only on the infinitive-subjunctive distinction in European languages. As has been extensively discussed in Chapter 3, Newari conjunct-disjunct constructions exhibit the same control-obviation contrast. Therefore, any existing theories on obviation that rely heavily on the idiosyncrasies of subjunctives would not be able to account for the full range of data.

In the rest of this chapter I take a closer look at the control-obviation contrast, and motivate an account for obviation that makes reference to control. More specifically, I

show that control and obviation are indeed in complementary distribution and that the environments where the complementarity breaks down are highly predictable. In other words, if we can capture the fine-grained interpretive and distributional distinctions of these two, the counterexamples would support, not refute, an analysis that derives them in a single module.

4.2.2 Conjunct constructions manifest obligatory control

Landau (2013a) proposes that all obligatory control constructions share the following properties.

(221) The OC signature (Landau, 2013a: 29)
    a.   The controller must be the co-dependent(s) of OC.
    b.   The subject of OC must be interpreted as a bound variable.

The first clause of (221) dictates that the controller of PRO must be local[3] (222), and in a c-commanding position (223).

(222) a.   Joe$_1$ said [that the boss$_2$ decided [PRO$_{*1/2}$ to give him a raise]].
    b.   Joe$_1$ witnessed [that Jill$_2$ tried [PRO$_{*1/2}$ to lose weight]].
    c.   The defendant$_1$ realized [that Jill$_2$ wanted [PRO$_{*1/2}$ to perjure herself]].

(223) a.   Joe's$_1$ boss$_2$ decided PRO$_{*1/2}$ to give him a raise.
    b.   Joe's$_1$ wife$_2$ tried PRO$_{*1/2}$ to lose weight with no success.
    c.   The defendant's$_1$ witness$_2$ wanted PRO$_{*1/2}$ to perjure herself.

The second clause of (221) essentially says that PRO is necessarily a subject (224) and can only act as bound variables (225).

---

[3]I distinguish absolute locality from relative locality (den Dikken, 2013), as defined in Section 2.4.1. Absolute locality makes reference to an opaque domain (e.g., phase) out of which a syntactic operation is no longer operative. Relative locality is concerned with an intervening barrier which blocks an otherwise perfect syntactic operation. Control is famously flexible with relative locality. An intervening barrier does not necessarily block control, e.g, *Joe$_1$ promised Jill$_2$ PRO$_{1/*2}$ to be on time.* I delay the discussion of controller choice in Sections 4.3.3 and 5.4.4. Absolute locality, by contrast, is religiously observed by control.

(224) a. *Jill₁ hoped (for Joe) to kiss PRO₁.

b. *Joe hoped for PRO's best friend to kiss Jill.

c. *Jill hoped to kiss PRO's best friend.

(225) a. Only Jill hopes to kiss Joe.
 i. Bound. Jill is the only x such that x hopes that x kisses Joe.
 ii. *Free. Jill is the only x such that x hopes that Jill kisses Joe.

b. Joe hopes to kiss Jill. John does too.
 i. Bound. Joe₁ hopes PRO₁ to kiss Jill. John₂ hopes PRO₂ to kiss Jill.
 ii. *Free. Joe₁ hopes PRO₁ to kiss Jill. John also hopes Joe to kiss Jill.

Although in Newari the subjects of conjunct verbs can be overt and always appear in fully tensed clauses, they share with PRO all the properties summarized in (221). To begin with, both PRO and the subject of conjunct verb (227) must find their antecedents in the immediately higher clause. When the conjunct verb is used, its subject must be co-indexed with the subject of the next clause up (226a). The disjunct verb, on the other hand, occurs when the co-indexation is not local (226b).

(226) a. *thanedara   dhāl-a   ki   [Shyam-a   swikareyat-a   ki   [wa*
 policeman.ERG say-PST.DISJ that Shyam-ERG admit-PST.DISJ that s/he
 daa   kuy-ā]].
 money steal-PST.CONJ

 'The policeman₁ said Shyam₂ admitted that he$_{*1/2/*3}$ stole the money.'

b. *thanedara   dhāl-a   ki   [Shyam-a   swikareyat-a   ki   [wa*
 policeman.ERG say-PST.DISJ that Shyam-ERG admit-PST.DISJ that s/he
 daa   kut-a]].
 money steal-PST.DISJ

 'The policeman₁ said Shyam₂ admitted that he$_{1/*2/3}$ stole the money.'

Secondly, both PRO and the subject of conjunct verb (227) need to be c-commanded by its antecedent. When the conjunct verb is used, its subject must be co-indexed with the matrix subject, rather than with a subpart of that subject (227a). The co-indexation with the latter would trigger disjunct marking instead (227b).

(227) a. *Shyam-ya   baa-na   dhāl-a   ki   [wõ: daa   kuy-ā].*
Shyam-GEN father-ERG say-PST.DISJ that s/he.ERG money steal-PST.CONJ

'Shyam's$_1$ father$_2$ said that he$_{*1/2/*3}$ stole the money.'

b. *Shyam-ya   baa-na   dhāl-a   ki   [wõ: daa   kut-a].*
Shyam-GEN father-ERG say-PST.DISJ that s/he.ERG money steal-PST.DISJ

'Shyam's$_1$ father$_2$ said that he$_{1/*2/3}$ stole the money.'

Thirdly, both PRO and the subject of conjunct verb must be interpreted as a bound variable. This leads to the truth-conditional differences in (228a) and (228b). Consider a scenario where Ram and Laxmi also confessed that Shyam was the thief, (228b) is false but (228a) remains true.

(228) *Scenario: during interrogation, Shyam, Ram and Laxmi all admitted that he (Shyam) stole the money.*

a. *Shyam jaka dhāl-a   ki   [wõ: daa   kuy-ā].*
Shyam only say-PST.DISJ that s/he.ERG money steal-PST.CONJ

'Only Shyam$_1$ said that he$_1$ stole the money.'   (True)
Shyam = only x such that x said that x stole the money.

b. *Shyam jaka dhāl-a   ki   [wõ: daa   kut-a].*
Shyam only say-PST.DISJ that s/he.ERG money steal-PST.DISJ

'Only Shyam$_1$ said that he$_1$ stole the money.'   (False)
Shyam = only x such that x said that Shyam stole the money.

Finally, in the same way as PRO is limited to the subject position across languages, in Newari the comparable dependency relation only holds between the subject, not the object, of a conjunct verb and a matrix antecedent. In other words, only the interpretation of the subject, not the object (229) or part of the subject (230), determines the choice between conjunct and disjunct marking.

(229) a. *Shyam dhāl-a ki [Laxmi wa-yāta penk-ā].
Shyam say-PST.DISJ that Laxmi s/he-DAT kick-PST.CONJ

(Int.) 'Shyam$_1$ said that Laxmi kicked him$_{1/2}$.'

b. Shyam dhāl-a ki [Laxmi wa-yāta penk-ala].
Shyam say-PST.DISJ that Laxmi s/he-DAT kick-PST.DISJ

'Shyam$_1$ said that Laxmi kicked him$_{1/2}$.'

(230) a. *Shyam-a dhāl-a ki wa-yu baa-na Laxmi-yāta
Shyam-ERG say-PST.DISJ that s/he-POSS father-ERG Laxmi-DAT
penk-ā.
kick-PST.CONJ

(Int.) 'Shyam$_1$ said that his$_1$ father kicked Laxmi.'

b. Shyam-a dhāl-a ki wa-yu baa-na Laxmi-yāta
Shyam-ERG say-PST.DISJ that s/he-POSS father-ERG Laxmi-DAT
penk-ala.
kick-PST.DISJ

'Shyam$_1$ said that his$_1$ father kicked Laxmi.'

We can therefore conclude that conjunct constructions manifest obligatory control, and the subject of the conjunct verb syntactically behaves like an obligatorily controlled PRO. Unlike PRO, the subject of the conjunct verb can be overtly realized. The overt pronoun, however, must be co-indexed with the matrix subject.

(231) a. jĩ: ji ana wan-ā dhakā dhāl-ā
I.ERG I there go-PST.CONJ that say-PST.CONJ

'I said that I went there.'

b. wõ: [wa ana wan-**ā** dhakā:] dhāla
(s)he.ERG (s)he there go-PST.CONJ that say-PST.DISJ

'(S)he$_1$ said that (s)he$_{1/*2}$ went there.'

Though the subjects of obligatory control are null across languages (Landau, 2013b), a number of languages (Cardinaletti, 1999; Belletti, 2005; Szabolcsi, 2009; Barbosa, 2009), including Hungarian, Italian, and European Portuguese, allow an overt Nominative pro-

noun to alternate with the silent pronoun PRO in the same context. These overt pronouns can be modified by focus particles like *also* (232a) and *only* (232b), as exemplified below.

(232) Overt Nominative subjects in Hungarian control (Szabolcsi, 2009: 10-11)

    a.   *Szeretnék   én is   magas lenni*
         would like.1SG I   too tall   be.INF

        'I want it to be the case that I too am tall.'

    b.   *Szeretnék   csak én lenni   magas*
         would like.1SG only I   be.INF tall

        'I want it to be the case that I am the only one who is tall.'

The conjunct constructions in Newari are finite. But since Newari is a pro drop language. The overt subject of the conjunct verb is always optional as long as its reference is clear in the discourse. An interesting question to address is in what way the emphatic subjects in Hungarian and the subjects of conjunct verbs in Newari are similar. However, this will not be addressed in this dissertation.

    I have argued in Chapters 2 and 3 that the co-reference between the embedded subject and the matrix attitude holder in (231a) and (231b) is mediated by perspectival expression. In Newari, the conjunct form requires its subject, a spelled out PRO, to be co-indexed with Perspective. The disjunct verb, on the other hand, does not pose restrictions on its subject. Consequently its subject behaves like regular pronouns.

4.2.3 Exemption from obviation

In Section 4.2.2 I have established that conjunct constructions pattern with obligatory control in many important ways. In this section I make the connection between disjunct contructions and subjunctive clauses. I have already shown that the subjects in both constructions are obviative. They are disjointed in reference with the matrix subject. I repeat the illustrative examples in (233) and (234), respectively.

(233) Conjunct vs. disjunct constructions in Newari

    a. *wõ:*   *[wa* *ana* *wan-ā*   *dhakā:] dhāla*
       (s)he.ERG (s)he there go-PST.CONJ that   said

       '(S)he$_1$ said that (s)he$_{1/*2}$ went there.'   (conjunct, co-reference)

    b. *wõ:*   *[wa* *ana* *wan-a*   *dhakā:] dhāla*
       (s)he.ERG (s)he there go-PST.DISJ that   said

       '(S)he$_1$ said that (s)he$_{*1/2}$ went there.'   (disjunct, disjoint reference)

(234) Infinitive vs. subjunctive in Hungarian (Szabolcsi, 2010: 3)

    a. *Szeretném*   *meglátogatni Marit.*
       would like.1SG visit.INF   Mary.ACC

       'I would like to visit Mary.'   (infinitive, co-reference)

    b. #*Akarom,* *hogy meglátogassam Marit.*
       want.1SG that visit.SBJV.1SG Mary.ACC

       (Int.) 'I want for me to visit Mary.'   (subjunctive, disjoint reference)

We have already seen that infinitives and conjunct constructions manifest obligatory control. However, there is no analogous category that subsumes subjunctive clauses and disjunct constructions. As a result we do not have a set of standard diagnosis readily applicable to draw the parallelism between subjunctive clauses and disjunct constructions. This is in fact expected for the Competition account, as subjunctives (and the disjunct suffixes) are the default form that arises only when the conditions for obligatory control fail to apply. They simply indicate the absence of obligatory control.

In the previous section I have briefly mentioned that subjunctive clauses can be exempted from obviation on certain conditions. The connection between subjunctive clauses and disjunct constructions can be established if we can demonstrate that under the same circumstances the subject of the disjunct verb is allowed to refer to the matrix subject.

Szabolcsi (2010) scrutinizes Hungarian subjunctives[4] and makes the following descriptive observation.

(235)   Exemption from obviation happens
     a.   when the embedded verb denotes a state,
     b.   when the embedded verb denotes an unintentional action, or
     c.   when the embedded verb denotes an action that is beyond the subject's control.

In what follows I draw a point by point comparison between Newari disjunct constructions and Hungarin subjunctive clauses and show that (235) can be extended to predict the distribution of disjunct verbs in Newari.

Before we continue, a clarification is in order. In the previous section, I have shown that Newari conjunct constructions manifest obligatory control. That is not the same as saying Newari conjunct constructions are equivalent to obligatory control. I have provided empirical evidence in Chapter 3 that Newari conjunct constructions show sensitivity to knowledge, responsibility, and internal perspective. One of the three semantic properties, i.e., knowledge, is not relevant for control constructions. Recall that the seat of knowledge is the individual who can evaluate the truth of a proposition. Control constructions, unlike Newari conjunct constructions, denote events or desires, not propositions. In what follows, I show that the second semantic properties, namely, responsibility, plays a key role in both constructions. In order to present the parallelism in a clearer light, I keep the seat of knowledge in Newari conjunct constructions in this section constant. That is, it is always co-indexed with the matrix subject.

---

[4]Ruwet and Goldsmith (1991) notice that in French bound subjunctive subjects become slightly better in a similar set of environments. However, the judgment in French is not as crisp as it is in Hungarian (Szabolcsi, 2010). Szabolcsi (2010) has demonstrated that Russian, Polish and to a good extent Romanian work crisply like Hungarian. Interested readers should see the original text for relevant data and discussion.

In Hungarian, when the embedded verb denotes a state, obviation does not obtain in subjunctives. For instance, being healthy is a stative predicate. It is possible for its subject to be bound (236b).

(236) Exemption from obviation in Hungarian (Szabolcsi, 2010: 4)

    a.   *Szeretnék egészséges lenni*
        like.1SG healthy   be.INF

        'I would like to be healthy.'

    b.   *Akarom, hogy egészséges legyek*
        want.1SG that healthy   be.SBJV.1SG

        'I want for me to be healthy.'

In Newari, when the embedded event is a state, the subject of disjunct verb may be co-indexed with the matrix subject. In fact, most state-denoting predicates, such as *ciku:* 'be cold' and *siu:* 'know', do not have a conjunct form in Newari.

(237) Exemption from obviation in Newari

    a.   *Shyam-a   dhāl-a   ki   [wa-ta   ciku:]*
        Shyam-ERG say-PST.DISJ that s/he-DAT cold.be.DISJ

        'Shyam$_1$ said that he$_{1/2}$ is cold.'

    b.   *Shyam-a   dhāl-a   ki   [wõ: siu:]*
        Shyam-ERG say-PST.DISJ that s/he.ERG know.DISJ

        'Shyam$_1$ said that he$_{1/2}$ knew.'

Exemption from obviation also happens when the complement event denotes a mistake, an accident, etc. The bound subjunctive subject in (238b) is acceptable, but the sentence only has the reading *I don't want to accidentally shoot someone*. In contrast, the embedded event in (238a) does not need to be interpreted as an accidental act. It is worth noting that when (238a) is interpreted as intentional, the positive polarity item (PPI) *valakit* 'someone' in the embedded clause must scope over the matrix negation. The interaction between intentionality and the scope of PPI holds in English infinitives too. This will be discussed in Section 4.3.1.

(238)   Exemption from obviation in Hungarian (Szabolcsi, 2010: 7)

    a.   *Nem akarok   lelöni   valakit.*
         not   want.1SG shoot.INF someone.ACC

         'I don't want to shoot someone.'

    b.   *Nem akarom,   hogy lelöjek   valakit.*
         not   want.1SG that   shoot.SBJV.1SG someone.ACC

         'I don't want for me to shoot someone.'

Similarly, the disjunct constructions are exempted from obviation when the event is not carried out intentionally (239b). The use of an overt adverb *masika* "accidentally" makes disjunct marking obligatory (239a).

(239)   Exemption from obviation in Newari

    a.   **Shyam-a   dhāl-a   ki   [wõ: masika   shun*
         Shyam-ERG say-PST.DISJ that s/he.ERG accidentally someone
         nāpalāt-ā]
         meet-PST.CONJ

         (Int.) 'Shyam$_1$ said that he$_1$ accidentally ran into someone.'

    b.   *Shyam-a   dhāl-a   ki   [wõ: masika   shun   nāpalāt-a]*
         Shyam-ERG say-PST.DISJ that s/he.ERG accidentally someone meet-PST.DISJ

         'Shyam$_1$ said that he$_1$ accidentally ran into someone.'

Finally, when the complement denotes an action which its subject has no direct control over, such as "receiving good grades", "getting a good job," etc., the subjunctive subject can be co-indexed with the matrix subject. In (240b), the accomplishment of my will to receive good grades rests on the will of someone else, such as the grader.

(240)   Exemption from obviation in Hungarian (Szabolcsi, 2010: 4)

    a.   *Szeretnék jó   jegyeket   kapni*
         like.1SG   good grades.ACC receive.INF

         'I would like to receive good grades.'

    b.   *Akarom, hogy jó   jegyeket   kapjak*
         want.1SG that good grades.ACC receive.SBJV.1SG

         'I want for me to receive good grades.'

The subject of disjunct verb can be bound in this case as well. For instance, sickness is simply not a matter of one's own choice, as a result (241b) is compatible with a co-indexed subject. The conjunct marking, again, is not acceptable (241a).

(241)   Exemption from obviation in Newari

    a. *_Shyam-a   dhāl-a   ki   [wa birāmi juy-ā]._
        Shyam-ERG say-PST.DISJ that he   ill   become-PST.CONJ

        (Int.) 'Shyam₁ said that he₁ became ill.'

    b. _Shyam-a   dhāl-a   ki   [wa birāmi jul-a]._
        Shyam-ERG say-PST.DISJ that he   ill   become-PST.DISJ

        'Shyam₁ said that he₁ became ill.'

What distinguishes the infinitive-subjunctive contrast from the conjunct-disjunct contrast, therefore, is the strictness of complementarity between two competing expressions. In Newari, if the disjunct verb can be used, it must be used. In Hungarian, both the infinitive and subjunctive forms are acceptable in the exemption-from-obviation cases. This is summarized in the following table.

Table 4.2: The Strict Complementarity Between Conjunct and Disjunct marking

Complement denotes:	Infinitive	Subjunctive	Conjunct	Disjunct
state	✓	✓	*	✓
unintentional action	✓	✓	*	✓
uncontrollable action	✓	✓	*	✓
elsewhere (see below)	✓	*	✓	*

4.2.4   Where the complementarity breaks down

As shown in Table 4.2, Newari conjunct and disjunct forms are in complementary distribution. There is little doubt that they should be derived from a single underlying element. In languages like Hungarian, however, both the infinitives and the subjunctives are avail-

able in certain environments, which as I will show shortly, can be well captured by an independently motivated concept—non-canonical control (Farkas, 1988, 1992).

In Chapter 3, I have introduced the semantic property—responsibility, first proposed by Farkas (1988, 1992) and later refined by Barker (2002). As a two-place relation, responsibility holds between an individual and a situation iff that individual intentionally brings about that situation. This relation helps distinguish two types of (logophoric) control (Farkas, 1992). Canonical control arises when the controller bears the responsibility relation to the complement situation. This guarantees that the subject of canonical control is the agent of a free-will, non-accidental action. Non-canonical control arises when there is no responsibility relation between the controller and the complement situation.

Given the distinction of canonical and non-canonical control, I propose that the interpretations available to the subject of a conjunct verb are a proper subset of those available to PRO, graphically represented below (242).

(242) The typology of bound pronouns
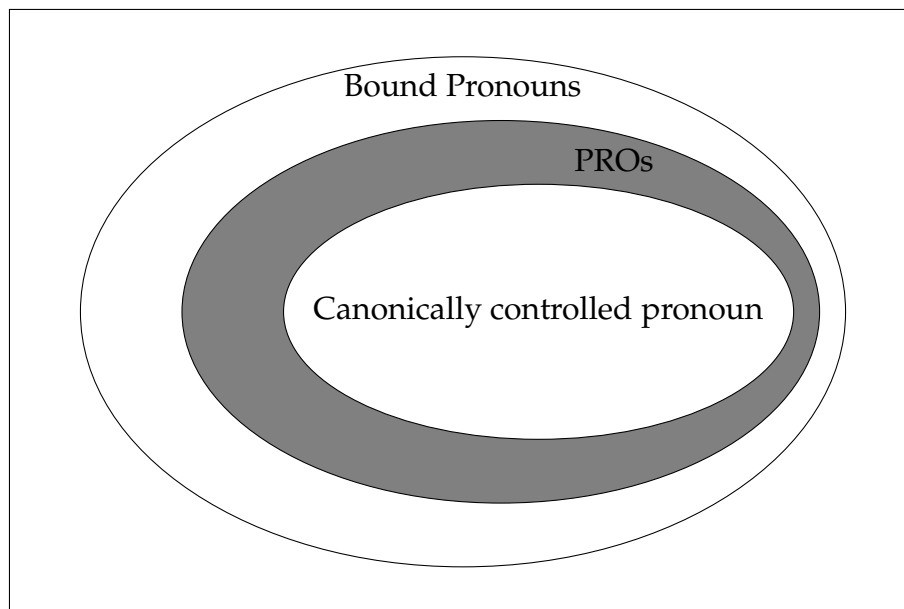
In Newari, canonical control requires conjunct marking and vice versa. The subject of

conjunct verb is always a canonically controlled pronoun. The two verb forms are thus in complementary distribution. In Hungarian, canonical control requires infinitives but not the other way round. Infinitives are compatible with both canonically controlled pronouns and non-canonically controlled pronouns, whereas the subjunctive subjects, when they are bound, must be non-canonically controlled pronouns. The complementarity between infinitives and subjunctives breaks down in precisely the environments where non-canonical control obtains, as indicated by the shaded region.

4.3   Canonical vs. non-canonical control

In the previous section, empirically I have brought together data on control/obviation in Hungarian and data on conjunct/disjunct marking in Newari. Theoretically I have defended an approach to obviation that brings control into the equation. My central claim is that the exceptions to the complementarity between control and obviation form a coherent class. That is, they are cases of non-canonical control where the attitude holder does not bear the responsibility relation to the complement situation. Control and obviation are thus better derived in the same module.

Conjunct constructions differ from infinitives in that the former grammaticizes canonical control. Conjunct marking occurs in canonical control circumstances, and disjunct marking occurs elsewhere. In Hungarian subjunctives are used when canonical control does not obtain. Infinitives, however, are applicable in both canonical and non-canonical control circumstances. This is summarized as follows.

(243) a.   Conjunct constructions manifest canonical control.
b.   Disjunct constructions manifest non-canonical control and non-control.
c.   Infinitives manifest canonical and non-canonical control.
d.   Subjunctives manifest non-canonical control and non-control.

Together (243a) and (243b) account for the complementary distribution between conjunct and disjunct verbs in Newari. Following the Competition account, I argue that they share the same underlying form. The conjunct form surfaces when canonical control obtains, and the disjunct form is used elsewhere. Infinitives (243c) and subjunctives (243d), on the other hand, are not in complementary distribution. While subjunctives, like disjunct verbs, can appear when canonical control is not possible, infinitives do not require canonical control.

Farkas (1988) identifies a group of control verbs, such as *order, persuade* and *promise*, under which the responsibility relation seems to always hold with the infinitive. These verbs are called RESP-inducing verbs. Their infinitive complements always denote canonical control. The use of a stative predicate or nonvolitional predicate is quite odd with these verbs.

(244) Non-canonical control is incompatible with RESP-inducing verbs (Farkas, 1988: 41,45)
     a. #John convinced Pete to resemble Bill.
     b. #John persuaded Pete to get struck by lightning.
     c. #John requested Pete to be tall/intelligent.
     d. #John ordered Pete to receive a letter.
     e. #John promised Pete to be blue-eyed.
     f. #John required Pete to (not) bleed.
     g. #John helped Pete to be allowed to leave.

Crucially, not all control verbs belong to this group. Verbs like *like, hope* and *want* are perfectly happy with stative and nonvolitional predicates.

(245) Non-canonical control is compatible with non-RESP-inducing verbs
     a. John likes to be tall/intelligent/blue-eyed.
     b. John hopes to be allowed to leave.
     c. John wants to receive a letter/get struck by lightning.

Farkas argues that the control verbs in (245), which she calls "verbs of evaluation" (Farkas, 1988: 52), involve a different relation, that is, the *about* relation. This relation also holds between an individual and a situation, just in case the situation "must crucially involve" the individual. She does not provide a full discussion of this relation and it is not clear what "crucial involvement" means. For Farkas the responsibility relation is not induced in cases like (245).

What remains unsaid in her account is how she analyzes the following sentences where agentive predicates appear in the infinitive complements of "verbs of evaluation." Does the RESP relation obtain in this case? Do they exhibit canonical control?

(246)   Canonical control is compatible with non-RESP-inducing verbs
   a.   Joe likes to run away from his responsibilities.
   b.   Joe hopes to study law at Harvard.
   c.   Joe wants to buy another iPhone.

There are two ways to approach this. Either we say the infinitives under "verbs of evaluation" are vague and simply not sensitive to the canonical vs. non-canonical distinction, or we take these infinitives as structurally ambiguous between the two types of control. In the next section I argue that there are good reasons to support the latter view.

4.3.1   Infinitives are structurally ambiguous

It is a well known fact that positive polarity items (PPIs) such as *something* take a wide scope over negation. For instance, (247a) cannot mean *you didn't see anything*. The only available reading for (247a) is *there is a specific something that you didn't see*. This anti-licensing requirement is lifted if the negation resides in a separate clause. (247b) can be interpreted as *Bill didn't say that you saw anything*.

(247) The anti-licensing of PPIs (Giannakidou, 2008: 1698-1699)

    a.   You didn't see something.   (*¬ > ∃)

    b.   Bill didn't say that you saw something.   (✓¬ > ∃)

   Szabolcsi (2010) points out that in infinitives voluntary and involuntary actions behave quite differently when it comes to the anti-licensing of PPIs. In both English (248) and Hungarian (249) the PPI in the infinitives can scope below the matrix negation when the complement denotes an involuntary action (248b, 248d, 249b), but not when the complement event is carried out willingly or intentionally (248a, 248c, 249a).[5] In other words, the lack of the responsibility relation between the subject PRO and the infinitive complement somehow rescues an otherwise illegitimate constellation.

(248) Canonical vs. non-canonical control in English (Szabolcsi, 2004: 417)

    a.   I wouldn't want to eat something.   (RESP, ??¬ > $[_{CP/IP}$ ∃])

    b.   I wouldn't want to break something.   (non-RESP, ✓¬ > $[_{CP/IP}$ ∃])

    c.   I wouldn't want to call someone.   (RESP, ??¬ > $[_{CP/IP}$ ∃])

    d.   I wouldn't want to offend someone.   (non-RESP, ✓¬ > $[_{CP/IP}$ ∃])

(249) Canonical vs. non-canonical control in Hungarian (Szabolcsi, 2010: 7)

    a.   You can trust me with a gun, because ...
        Nem akarok   lelöni   senkit/*valakit.
        not   want.1SG shoot.INF anyone/someone

        'I don't want to shoot anyone/*someone.'   (RESP, *¬ > $[_{CP/IP}$ ∃])

    b.   Take this gun from me, because ...
        Nem akarok   lelöni   *senkit/valakit.
        not   want.1SG shoot.INF anyone/someone

        'I don't want to shoot *anyone/someone.'   (non-RESP, ✓¬ > $[_{CP/IP}$ ∃])

This suggests that though canonical and non-canonical control can both appear in infinitives, they involve different structures.

---

[5]It should be noted that it is possible to rescue the narrow scope PPI reading in some of these sentences. For example, (248c) may be a continuation of this sentence, *Let me move my phone to my front pocket.* In this case, (248c) can be interpreted as "I don't want to butt-dial anyone" and the action becomes involuntary.

Another piece of evidence concerns *for*-infinitives. In English the subjunctive is not morphologically distinct from the indicative and is not as prevalent as its counterparts in many other European languages. The *for*-infinitive is used to introduce an overt subject in the complement clause. This construction exhibits the same obviation effect as subjunctives in European languages. In *for*-infinitives, the overt pronouns generally do not like to be bound by a local antecedent.[6]

(250) a.   I want for you to come back in my life.

     b.   I want for her to call me every week.

     c. *I want for me to call my mom.

     d. *I want for me to eat Shepherd's Pie.

However, when the infinitive complement denotes a state (251a), an accident (251b), an action that the subject cannot directly bring about (251c), an action whose accomplishment has to rely on other people's good will (251d), or an accident whose success depends on a lot more than the subject's own will and effort (251e), the obviation effect is weakened. That is, when the responsibility relation does not hold, the subject of the *for*-infinitive can be co-indexed with the matrix attitude holder.[7]

(251) a. (?)I want for me to be in shape for tomorrow's game.

     b. (?)I wouldn't want for me to forget to give my mom a call.

     c. (?)I want for me to be buried in the village of my birth.

     d. (?)I would like for me to already be gone.

     e. (?)I would really like for me to lose some weight.

Since both the PPI anti-licensing and the condition B effect make reference to syntactic configurations, the examples in this section suggest that infinitives are structurally

---

[6](250c) and (250d) can be rescued with special contexts. For instance, if the speaker is an actress, it is possible for her to use these sentences to discuss with the director or the screenwriter what she wants to happen in a movie or play. *In the next scene I want for me to eat Shepherd's Pie.* However, these contexts are designed in a way such that the subject no longer holds the responsibility relation with the complement.

[7]Admittedly there is inter-speaker variation when it comes to the judgment of these sentences. However, from what I gather, there is a clear contrast in the degree of acceptability between sentences like (250c) and (250d) on the one hand, and the sentences in (251) on the other.

ambiguous between the two types of control. Specifically, the PPI anti-licensing require-ment and the condition B effect are lifted in the cases of non-canonical control.

Following Bobaljik and Wurmbrand's (2013) domain suspension hypothesis, in the next section I argue that the syntactic domain of canonical control is extended to the ma-trix clause whereas non-canonical control forms its own syntactic domain. This explains the contrast between the two types of control with respect to pronominal binding and PPI anti-licensing described in this section.

4.3.2 The syntax of canonical control

In Chapter 2 I have proposed a Sentience projection at the periphery of attitude comple-ments, whose specifier can accommodate a perspectival expression. I argue that Perspec-tive is a bound pronoun pertaining to the mental perspective of a matrix attitude-holder (DP1). In the conjunct construction, the subject of the conjunct verb (DP2) is always con-trolled by Perspective which in turn is co-indexed with the matrix subject DP1 (252a). In disjunct constructions, the lower DP is either free (252c) in cases of non-control, or bound by Perspective if it bears no responsibility relation to the complement situation (252b).

(252) a. Canonical control:
$[_{CP1}$ DP1$_1$ $[_{SenP}$ Perspective$_1$ DP2$_1$ ... V-conj $]$ ... $]$ (RESP)

b. Non-canonical control:
$[_{CP1}$ DP1$_1$ $[_{SenP}$ Perspective$_1$ DP2$_1$ ... V-disj $]$ ... $]$ (no RESP)

c. Non-control:
$[_{CP1}$ DP1$_1$ $[_{SenP}$ Perspective$_1$ DP2$_2$ ... V-disj $]$ ... $]$

In Newari, the two types of control differ in the verb morphology. The conjunct form is used in canonical control constructions, while a disjunct form is used elsewhere. We have seen that in Hungarian and English, the same infinitive form is used for both canonical control and non-canonical control. Despite the lack of morphological distinctions, it is shown in the previous section that the two types of control are structurally distinct.

154

At least three things can be concluded about canonical control so far. First, the local subject (DP2) bears the responsibility relation with the embedded event. Second, there is a three-way identity relation between DP1, Perspective and DP2. Third, it belongs to the same syntactic domain as the matrix clause. In order to derive these properties, I adopt the following hypothesis.

(253)   Domain suspension (Bobaljik and Wurmbrand, 2013: 187)
In the following configuration (linear order irrelevant), where the projection of Y would normally close off a domain, formation of such a domain is *suspended* just in case Y depends on X for its interpretation.

a.   YP is a phase: XP
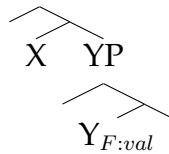
b.   YP is not a phase: XP
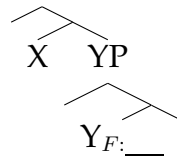
In other words, impenetrable domains like phases are not fixed and can be determined on a case by case basis. If a certain feature remains unchecked ($Y_{F:\_\_}$) at a traditionally considered phase edge, i.e., YP in (253b), this phase would remain open for further operations. F's search for a goal with matching features would continue in this case. Following Bobaljik and Wurmbrand (2013) I assume that feature valuation is sensitive to domain extension.

Readers should not confuse the Domain Extension account to obviation rejected in Section 4.2, and the domain suspension hypothesis I adopt here. If anything they make exactly opposite predictions about the impenetrable domain of infinitives. Advocates of the Domain Extension account claim that subjunctives have a bigger binding domain than their infinitival counterparts. In contrast, I argue that the syntactic domain of the sub-

junctives is fixed ($Y_{F:val}$), whereas one type of infinitives, i.e., the one involves canonical control, ($Y_{F:\_\_}$) can search outside its own clause (YP) for its interpretation.

As an illustration, take the following canonical control construction.

(254)   The derivation of canonical control

a.   I want PRO to behave myself.

b.
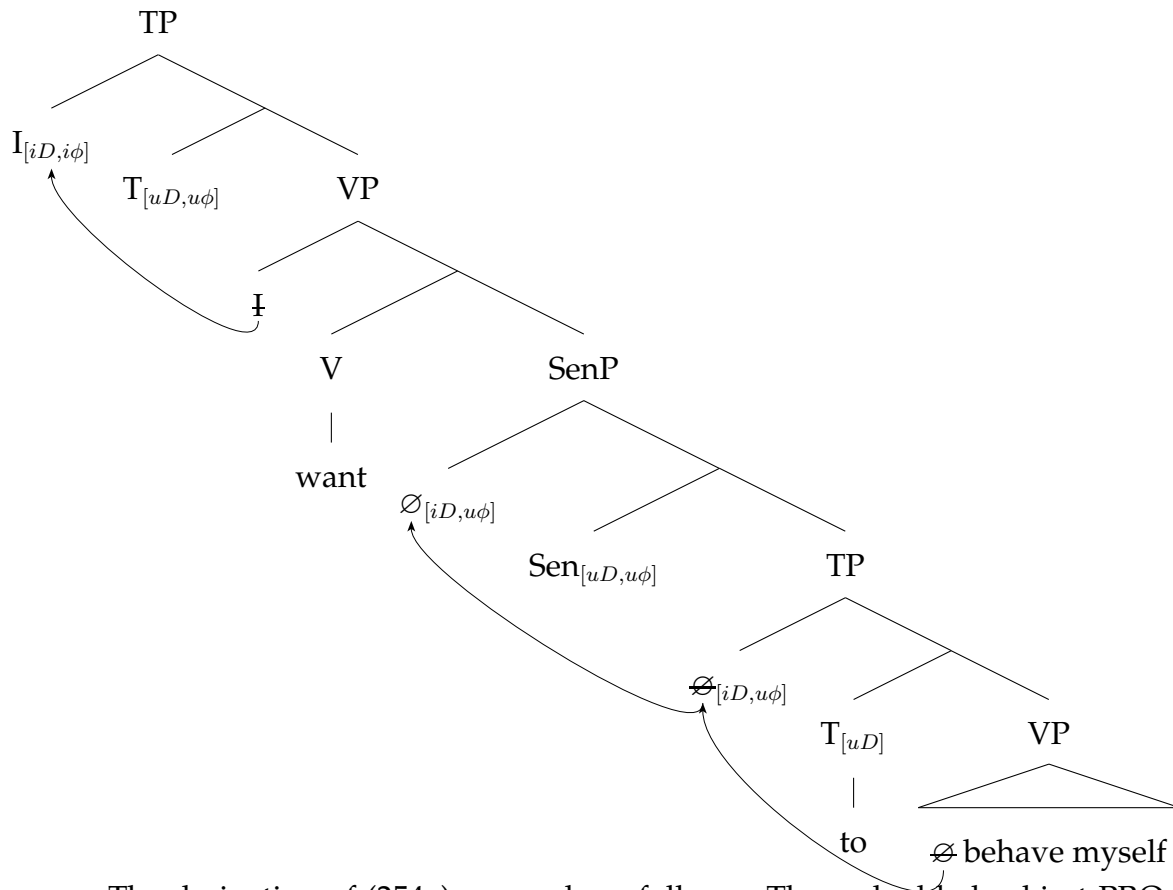
The derivation of (254a) proceeds as follows. The embedded subject PRO enters the derivation with an interpretable D-feature and uninterpretable ϕ-features. It is the DP2 in (252a). Since PRO is a minimal pronoun (Kratzer, 2009), I represent it as $\varnothing$. The infinitive head T enters the derivation with an uninterpretable D-feature. Attracted by T's [uD] feature, PRO moves to Spec, TP. The TP merges with the Sen head that has both uninterpretable D-feature and ϕ-features. Its [uD] feature attracts the PRO subject to

its specifier. At this point of derivation, both heads agree with their specifiers via Spec-Head agreement. The Sen head, heading a CP-level projection, can be taken as the phase head. However, we cannot close off the CP phase at this point, as the Sen head contains unchecked ϕ-features.

After the embedded SenP merges with the matrix predicate, a DP with interpretable ϕ-features finally enters the derivation. It is the DP1 in (252a). As a final step, the ϕ-features of the matrix subject *I* percolate down to every link of the agreement chain. At LF PRO can have its ϕ-features unified with its binder *I*. Having acquired the first person singular feature from *I*, the canonically controlled subject can then serve as an antecedent for the reflexive *myself* in (254a).

The non-canonical control construction is crucially different from canonical control in the featural make-up of the sen head. The derivation of the infinitive complement of (255a) is represented in (255b).

(255) The derivation of non-canonical control
    a.   I want [PRO to be tall].
    b.
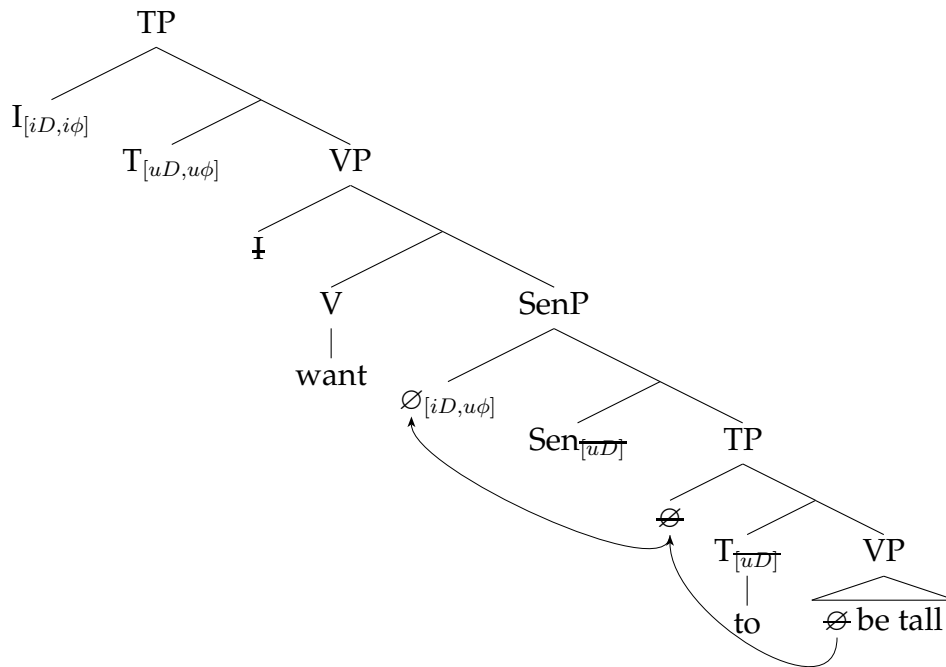
Specifically, Sen enters the derivation with only the unvalued D feature which attracts the PRO subject to move all the way to its specifier. The PRO subject has a matching interpretable D feature. Once it lands in Spec, SenP, Sen's [uD] feature gets valued and then eliminated. At this point of derivation, SenP is ready to close off its domain. The only element with unchecked features is the moved subject. However, since it sits in the edge of the phase, it is able to escape and has its ϕ-features checked against the matrix subject *I* in the next phase.

I have argued that the Sentience Projection is present in all attitude complements, but the Sen head may be featurally different from one instance to another. In canonical control, it enters the derivation with uninterpretable ϕ-features that must be checked against a contextually salient individual. The central player in canonical control is the Sen head. It introduces a perspective shifter whose reference is contextually determined. In non-canonical control, however, the Sen head enters the derivation with no ϕ-features.

The difference in PPI anti-licensing between canonical control (254b) and non-canonical control (255b) can therefore be reduced to absolute locality. In canonical control, the embedded SenP fails to close off its domain and as a result we have one expanded phase. Assuming PPI anti-licensing effect is phase-bound, *someone* must take a wide scope over its phase-mate negation. In non-canonical control, on the other hand, the embedded SenP constitutes a complete phase. The PPI can take narrow scope as there is no negation in the same phase.

(256) a. $[_{phase1}$ I don't want to call someone].   (*$[_{phase}$ not $>$ some)

     b. $[_{phase1}$ I don't want $[_{phase2}$ PRO to offend someone]].   (✓ not $>$ $[_{phase}$ some)

In other words, the contrast in (256) is of the same nature as the contrast below.

(257) a. You didn't see something. (*[*phase* not > some)

     b. Bill didn't say that you saw something. (✓ not > [*phase* some)

      Finally, for a complete paradigm, the derivation of non-control is sketched as follows. The Sen head in non-control does not have uninterpretable features. It may have interpretable ϕ-features and allow a pronoun with matching features to be merged in its specifier. Crucially no feature valuation is required at this level. The subject of non-control is less restricted because we do not pose any constraint on what interpretable features Sen can be born with.

(258)   The derivation of non-control

     a. I hope that [she be happy].

     b.
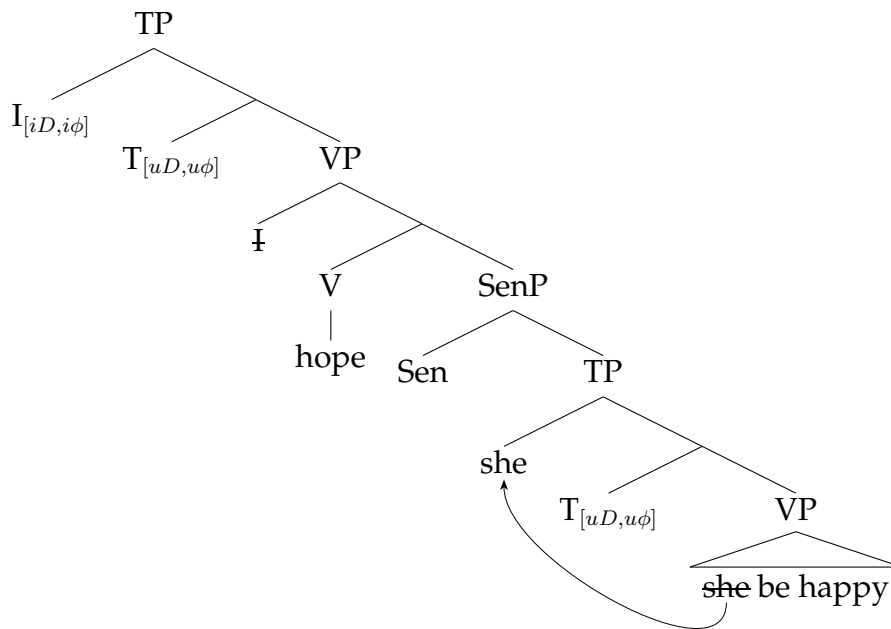
4.3.3   Perspective shift and controller choice in attitude complements

In this section, I demonstrate how the responsibility relation can help account for the choice of perspective shifters. It has long been observed that the choice of controller seems to be determined on a case by case basis. As Landau (2013a) points out, at least four possibilities of controller choice have been attested in language after language. The

sole matrix argument always controls the PRO (259a), but when the matrix verb takes two arguments, either or both arguments may serve as the potential controller (259b-d).

(259) a. Joe_1 decided PRO_1 to go to Hawaii for holidays.   (Subject control)

 b. Joe_1 promised $Jill_2$ PRO_1 to go to Hawaii for holidays.   (Subject control)

 c. Joe_1 persuaded $Jill_2$ PRO_2 to go to Hawaii for holidays.   (Object control)

 d. Joe_1 proposed to $Jill_2$ $PRO_{1/2/1+2}$ to go to Hawaii for holidays.   (Fluid)

Farkas (1988) employs the responsibility relation to account for the controller choice in (259). The default controller is always the individual that is directly responsible for bringing about the event denoted in the infinitive. The reason that crosslinguistically the *promise*-type verbs are prototypically subject control, and the *persuade*-type verbs are prototypically object control, lies in the different placement of the responsible party in promising and persuading. When x promises y to perform a certain action, x promises that he will carry out that action. On the other hand, when x persuades y to perform a certain action, x convinces y to bring about the said action. Though Farkas does not discuss verbs like *propose*, the same reasoning can be easily extended to it. When x proposes to y to perform a certain action, both x and y could stand in the responsibility relation with the infinitive.

In my framework, there is a SenP at the periphery of each attitude complement, whose specifier hosts a perspectival expression. The controller choice in (259) can be rephrased as follows. The subject of the infinitive (DP3) must be bound by Perspective, which is always identified as the individual that bears the responsibility relation with its complement situation. When Perspective is co-indexed with the matrix subject DP1, we have subject control (260a). When it is co-indexed with the matrix indirect object DP2, we have object control (260b).

(260) a. $DP1_1$ ... $DP2_2$ ... $[_{SenP}$ $Perspective_1$ ... $[_{TP}$ $DP3_1$ ... V_{inf} (Subject control)

 b. $DP1_1$ ... $DP2_2$ ... $[_{SenP}$ $Perspective_2$ ... $[_{TP}$ $DP3_2$ ... V_{inf} (Object control)

Now let us turn to the attitude complements in Newari. As repeatedly shown, when the matrix verb takes only one sentient argument, i.e., the matrix subject, the subject of the embedded conjunct verb must be bound by that argument. In this section we consider cases where there are two sentient DPs in the matrix clause. This is illustrated below.

(261) a. *Shyam-a   Lexmi-ta   [wo   ana   wan-e   dhakā] dhāla*
        Shyam-ERG Lexmi-to   s/he.ABS there go-NPST.CONJ that   said

   'Shyam$_1$ told Laxmi$_2$ that he'll$_{1/*2/*3}$ go there.'

   b. *Shyam-a   Lexmi-ta   [wo   ana   wan-i   dhakā] dhāla*
        Shyam-ERG Lexmi-to   s/he.ABS there go-NPST.DISJ that   said

   'Shyam$_1$ told Laxmi$_2$ that she'll$_{*1/2/3}$ go there.'

In (261a) the subject of the embedded verb is co-indexed with the matrix subject *Shyam*. The embedded verb takes the conjunct form. This is equivalent to the subject control case (259b). In (261b) the embedded subject is not bound by *Shyam*. It can be interpreted as either referring to *Laxmi* or some third individual. The embedded verb takes the disjunct form.

From the data I have collected in my fieldwork, I conclude that the subject of the embedded conjunct verb is always co-indexed with the matrix argument. Unlike in English where the controller choice is determined by specific attitude verbs, the choice of the attitude verb does not seem to affect the subject reference. In the next chapter I will review other phenomena that pattern closely with Newari conjunct constructions. In these constructions, the embedded subject can be co-indexed with the matrix indirect object when the embedded clause is a question. Unfortunately I have not successfully elicited embedded questions in Newari. For unclear reasons the sentences my consultants provide are always direct quotations (*Shyam asked Laxmi, "will you go there"?*). I will leave

the discussion of object control to the next chapter and argue that the controller choice in these languages is determined by sentence mood, not the choice of the attitude verb.[8]

For the time being I focus on the fact that in Newari the subject of embedded conjunct verb is always co-indexed with the matrix subject, not the matrix indirect object (262).

(262) $DP1_1$ ... $DP2_2$ ... $[_{SenP}$ Perspective$_{1/*2}$ ... $[_{TP}$ $DP3_1$ ... V_{conj} (Subject control)

When Shyam tells Laxmi what he was about to do, Shyam bears the responsibility relation to his future actions (261a). In contrast, when Shyam tells Laxmi what she might be doing, Laxmi is not necessarily responsible for what is about to happen (261b). She may not feel obliged at all (i.e., lack of intention), or she may not be able to do it (i.e., lack of discretion). In other words, though the complement clause in (261a) conveys Shyam's determination to bring about a certain event, the complement clause in (261b) is merely a prediction in which case Laxmi's own volition is hardly relevant.

4.4 Conclusion

In this chapter, I have drawn a point by point comparison between conjunct constructions and infinitival complements, and suggested that they both manifest obligatory control. I have also proposed that the theory of control should make reference to obviation, the disjoint reference effect observed for subjunctive subjects. The major challenge for deriving control and obviation in the same module of grammar is the fact that the conditions that license them are not always in complementary distribution. I argue that this is not a problem as the environments where the complementarity between obviation and control

---

[8]In Ross's (1970) performative hypothesis, the sentence mood is determined by attitude verbs, or in his words, performative verbs. A declarative clause like *Joe went to work*, according to Ross, is embedded under a performative layer, roughly, *I tell you that...* A question, on the other hand, is embedded under *I ask you ...*

breaks down are highly predictable. That is, the conditions for obviation fail to apply in subjunctives, resulting in a lack of complementarity.

Unlike in Newari, the complementarity between control and obviation in Hungarian and English breaks down in cases of non-canonical control, which indicates the lack of a responsibility relation between the individual subject and the event denoted by the complement TP. Although English does not grammaticize the contrast between canonical and non-canonical control, I have provided evidence to show that the two types of control are structurally distinct in English.

In the next chapter I turn to the third type of point-of-view phenomena—event *de se* expressions. One thing that I have not touched upon about logophoric control is its obligatory *de se* interpretation. I will show that the structural approach to discourse can help achieve a finer-grained understanding of *de se* interpretations.

Disentangling De Se

5.0 Towards a principled typology of *de se* expressions

Having seen bountiful examples of ways in which natural languages employ special grammatical means to make reference to the utterance context, in parallel with the linguistic context, we have reached two major conclusions. First, the discourse participants, namely, the speaker and addressee are syntactically present and can be targeted for syntactic operations. They are anchored in the root clause and play a similar role to the clause as attitude holders to their complement clause. Second, it is necessary to separate discourse participants from perspective shifters. While each clause can have its own perspective center, the speaker and addressee of an utterance remain consistent until the turn of speech. This separation is reflected in the present account with a two-tiered structure of the discourse domain. Unlike the previous attempts that encode the discourse information in syntax, most notably Speas and Tenny (2003), I argue in Chapter 2 that the

projection which hosts the speaker and addressee, and the one which hosts the perspective center are entirely independent from one another and do not necessarily coincide.

The rest of this dissertation focuses on the syntax of perspective shift. In short the perspective center is analyzed as a bound pronoun whose reference co-varies with a matrix antecedent. The choice of antecedent is determined in reflection of some salient semantic relations. Two such relations have been explored in finer detail—knowledge (Chapter 3) and responsibility (Chapter 4).

This chapter addresses the third relation—internal perspective. In our previous discussions of Newari conjunct constructions and control constructions, we have left out one crucial characteristic of these phenomena—they must ascribe *de se* attitudes. Rather than treating the *de se* ascription as a side issue, I argue in this chapter that it is pivotal to our understanding of internal perspective.

5.0.1   On *de se* and self-ascription

Everybody has a sense of self. We are conscious of ourselves as an individual, separated from the environment and other individuals. Such self-awareness affects the way we entertain thoughts. Consider the following sentence for example.

(263)   Joe thinks that he will win the sushi-making contest.

The sentence may have depicted a confident contestant who has enormous faith in his own sushi-making skills (*de se* attitudes). Alternatively, if Joe is in a blindfolded sushi tasting challenge, he may love his sushi without realizing he made it (non-*de se* attitude). In the latter case, (263) can be truthfully uttered even if Joe believes, incorrectly, the sushi he loves the most is made by someone else.

We are able to linguistically distinguish *de se* beliefs from the beliefs that we are unaware that we have about ourselves. Certain sentences can only be interpreted as hav-

ing a *de se* attitude. For instance, it has long been observed that the understood subject in obligatory control (henceforth OC) constructions must be interpreted *de se* (Morgan, 1970; Chierchia, 1984). For the following sentence to be true, Joe must hope for himself, not just whoever made the sushi he loves the most during blindfolded tasting, to win the challenge.

(264)   Joe hopes PRO to win the sushi-making contest.

The understood subject of the infinitive is known as PRO. One property that separates it from overt pronouns is its reluctance to take on non-*de se* readings. In a context where self-identity between the antecedent and the bound element fails to be established, for instance, in the aforementioned blindfolded sushi tasting context, the use of PRO (264) leads to a false statement, whereas the use of a regular pronoun (263) would make the sentence true. In other words, while overt pronouns in English are ambiguous between *de se* and non-*de se* readings, only the *de se* interpretation is available for PRO in attitude complements.[1]

One question naturally arises—Is *de se* an intrinsic part of the meaning of some special pronominal form, in this case PRO? If we only look at English, the answer is not straightforward, because English infinitives and non-infinitives differ in many important ways, including both the finiteness of the verb and the overtness of the pronoun. What relations do *de se* expressions bear to the choice of pronouns, and to the form of the main verb? As I will point out in this chapter, this question is not trivial. The syntax of *de se* expressions is closely associated with their semantics.

---

[1]Landau (2013a) observes that *de se* is only obligatory for logophorically controlled PRO. It is not inherent to PRO in non-attitude contexts. As I have discussed in the previous chapter, PRO in predicative control is compatible with inanimate controllers. Given the lack of an attitude holder in this case, *de se* is simply irrelevant.

Another question we ought to ask is what kinds of selves are ascribed by *de se* attitudes. Williams (1976) distinguishes different kinds of selves. Take the following sentence as an illustration.

(265)   Just imagine yourself driving around town in this car.

I may have two types of visual in mind when hearing (265). In the first one, I can picture myself sitting in the driver's seat. I have my hands on the wheel and right foot on the gas. This is what Williams calls "kinaesthetic imagery." I am the driver and I share the same bodily sensations as the driver. Sitting in the driver's seat I see only what is in the driver's range of vision. Let us call this type of self internal perspective. In the second type of visual, I take a spectator's perspective, watching myself from the sidelines. I see the driver in my outfit, with my hairstyle and facial features. I recognize the driver. It is me. I also see many things one could not from the driver's perspective. The wind is ruffling my hair from the back of my head. My eyes are shining with excitement. By observing the driver that is myself, I seem to really enjoy driving that car. But I do not know that for sure, because as a spectator, I do not experience the driver's feelings, even though we are technically the same person.

Not all linguistic expressions are ambiguous between these two types of selves. Vendler (1982) observes that the null subject (i.e., PRO) of the gerundive complement of *imagine* can only be interpreted one way but not the other. The following sentence only yields internal perspective.

(266)   Just imagine PRO driving around town in this car.

Upon hearing (266), I have to put myself on the driver's seat, picture myself roaming the streets and watching various parts of the town disappearing in my rear-view mirror. (266) does not produce the spectator's perspective in which I visualize from outside the figure that is myself.

Given the linguistic relevance of different selves, should we expect a fine-grained representation of *de se* attitudes? Anand (2011) argues against this view by pointing out two problems of attributing the internal perspective reading to obligatory control. First, sentences like (266) could still be ambiguous despite the fact that the internal perspective reading is really strong. Second, the internal perspective reading seems to be subject to other factors such as the choice of the attitude verb. In this chapter I contend that neither of these problems persist across languages and across constructions. In other words, they are not real counter-arguments. A finer-grained distinction of *de se* attitudes is necessary because many languages only grammaticize one type of *de se* but not the other.

In what follows I identify a group of *de se* expressions that are distinct from *de se* pronouns and analyze the *de se* attitudes that are ascribed using these expressions. The objective here is by no means to provide an exhaustive list. Rather, it aims at setting the wheels in motion by providing a concrete measure to categorize a variety of *de se* expressions, as well as ushering in phenomena that so far have been left entirely outside the discussion of *de se*.

Looking beyond English, the linguistic expressions that obligatorily trigger *de se* interpretation generally fall in two types. Most of the literature has been focusing on *de se* pronouns. They are either lexically different from regular pronouns (e.g., logophoric pronouns), or are regular pronouns used in a non-canonical way (e.g., shifted indexicals and long distance reflexives). In both cases the verb takes the same form as it would with a non-*de se* pronoun. On the other hand, there are languages that mark *de se* on the verb. These verbal *de se* expressions, however, have not received much attention in the literature and thus deserve a closer examination. In this section I identify the conjunct verbal marking in Newari, the jussive mood in Japanese and Korean, the volitional modal in Korean, and predicates of direct experience in Japanese, as belonging to this category.

5.0.2 Nominal *de se* expressions

5.0.2.1 Logophoric pronouns

English pronouns are generally ambiguous between *de se* and non-*de se* readings (263). However, a pronoun designated to *de se* interpretation, also known as the logophoric pronoun, has been attested in a group of West African languages,[2] such as Bafut (Kusumoto, 1998), Yoruba (Anand, 2006) and Tangale (Haida, 2009). In Bafut (Niger-Congo), for instance, the logophor *yu* must be read *de se* (Schlenker, 2003b: 60). It cannot be used in a situation where the attitude holder is not aware of his own participation in the complement event (S2).

(267) S1: John's pants are on fire. He thinks to himself, "I'm going to seriously get burnt."
S2: John is looking at a mirror from a distance and sees a man in the mirror. He notices that the man's pants are on fire. In fact, the man he sees in the mirror is John himself, but he doesn't realize it. He thinks to himself, "That guy's going to get burnt."

  *John wà?àtð mð **yu** ká khi*
  John thinks that LOG will burn

  'John$_1$ thinks that he$_1$ is going to get burnt.'   (Bafut, ✓S1, * S2)

  In Tangale (Haida, 2009: 4, Afro-Asiatic), similarly, the logophor *yi* can only occur in a situation where the attitude holder would express the same thought with a sentence containing the first person pronoun (S1).

(268) S1: Awang sees himself reflected in a window. Seeing his clothes seem to be dirty, he says: "I'm wearing dirty clothes."
S2: Awang sees, reflected in a window, the image of a man whose clothes seem to be dirty. It is Awang's mirror image, but he doesn't recognize the man as himself.

---

 [2]Pearson (2015b) has scrutinized the distribution of the logophoric pronoun *yè* in Ewe (Niger-Congo), and she points out that though *yè* is always compatible with *de se* beliefs it can also be read *de re*. For a better understanding of logophors across languages, there needs to be a careful study of the relevant semantic facts in each language that are reported to have logophoric pronouns. For the time being it is premature to conclude that logophors are universally interpreted *de se*. It is entirely possible that the behavior of logophoric pronouns can vary in interesting and nuanced ways across languages, even across languages that are closely related.

Pointing to his mirror image, he says, "That guy is wearing dirty clothes."

Awaŋ   gá: yi   tashin landa-n   kudek-kudek.
Awang say LOG wear   cloth-LNK black-black

'Awang₁ said that he₁ is wearing dirty clothes.'   (Tangale, ✓S1, * S2)

5.0.2.2 Long-distance reflexives

In English reflexives like *himself* must find their antecedents within the confines of the clause boundary, with the exemption of exempt anaphors. However, it has long been observed that many languages, such as Italian (Chierchia, 1989), Mandarin (Pan, 1997), Japanese (Oshima, 2004), and Icelandic (Anand, 2006), allow reflexives to be bound from a distance, in apparent defiance of Principle A. Chierchia notices a distinctive property of these so-called long-distance reflexives (henceforth LDRs). That is, they are only used with *de se* attitudes. The following pair of examples illustrate such contrast between regular pronouns (269a) and LDRs (269b) in Italian (Chierchia, 1989: 24), where only regular pronouns are allowed in a non-*de se* context.

(269)   Scenario: Pavarotti sees a man in the mirror from a distance. He notices that the man's pants are on fire, but he hasn't realized that it is his mirror image.

   a.   *Pavarotti crede   che i suoi pantaloni siano in fiamme.*
        Pavarotti believes that his   pants   be   on fire

        'Pavarotti₁ believes that his₁ pants are on fire.'   (regular pronoun)

   b.   #*Pavarotti crede   che i propri pantaloni siano in fiamme.*
        Pavarotti believes that his own pants   be   on fire

        'Pavarotti₁ believes that his₁ pants are on fire.'   (LDR)

In Mandarin, similarly, when *zìjǐ* "self" is bound long distance, its antecedent must be conscious of that identity (Pan, 1997). As demonstrated below (Huang and Liu, 2000: 158), the LDR is not preferred in a non-*de se* context (270b), making a contrast with a regular pronoun bound by the same antecedent (270a).[3]

---

[3]Some linguists (Pollard and Xue, 1998; Cole et al., 2001) challenge the generalization that Mandarin LDR forces a *de se* interpretation. However, as Anand (2006) persuasively argues, their counter-examples

(270) Scenario: Zhangsan sees a pickpocket running away with his purse without re-
alizing it's his own purse. He kindly reports the theft to the police. The speaker,
who knows that the purse actually belongs to Zhangsan, can report on Zhangsan's
deed as follows.

    a.   *zhāngsān   shuō páshǒu   tōu-le   tā-de   píbāo.*
       Zhangsan say   pickpocket steal-PERF s/he-POSS purse

      'Zhangsan said that the pickpocket stole his purse.'   (regular pronoun)

    b.   #*zhāngsān   shuō páshǒu   tōu-le   **zìjǐ**-de   píbāo.*
       Zhangsan say   pickpocket steal-PERF self-POSS purse

      'Zhangsan said that the pickpocket stole his purse.'   (LDR)

5.0.2.3 Shifted indexicals

In many languages indexicals are directly referential, à la Kaplan (1989b). Language users
pick out the reference of the indexicals in their immediate surroundings such that *I* is inter-
preted as the speaker of the utterance and *now* is interpreted as the time of the utterance.
However, in languages like Navajo (Speas, 1999), Amharic (Schlenker, 2003b), Zazaki &
Slave (Anand and Nevins, 2004), Catalan Sign Language (Quer, 2005), Nez Perce (Deal,
2012), Mishar Tatar (Podobryaev, 2014), Turkish (Özyildiz, 2012), and Uyghur (Sudo,
2016), *inter alia*, the reference of indexicals is not fixed by the actual speech act. Rather,
when they occur in attitude and speech reports, they can be interpreted in a manner that
are referential to the attitude holder. This is also known as indexical shifting. In Zazaki
(Anand, 2006: 79, Indo-European), for instance, when the first person pronoun *ɛz* is inter-
preted as the matrix antecedent, in this case Hesen, it is obligatorily read *de se* (S1).

(271) S1: Hesen tells his boss, "I'm sick."
S2: Hesen, at the hospital for a checkup, happens to glance at the chart of a pa-
tient's blood work. Hesen, a doctor himself, sees that the patient is clearly sick,
but the name is hard to read. He says to the nurse when she comes in, "This guy

---

are either lack of an attitude predicate in the root clause, or confounded by the presupposition of certain
factive verbs.

is really sick." He does not realize that he's looking at his own chart.

Heseni   va   kɛ   ɛz   newɛsha
Hesen.OBL said that I   be.sick.PRS

'Hesen₁ said that he₁ was sick.' (Zazaki, ✓S1, * S2)

The shifted first person pronoun in Uyghur (Altaic), too, must be interpreted *de se* (Sudo, 2012: 224). In a context where the attitude holder *Ahmet* misidentifies himself as someone else (S2), the indexical pronoun *men* cannot be shifted.

(272) S1: Ahmet is a narcissist. One day he said, "I'm very smart."
S2: Ahmet took an exam, and later saw the top 10 scorers with the respective ID numbers. He forgot his own ID number, so didn't know who is who. Pointing to the top score, he remarked "This guy is very smart!" But it turned out that he was talking about himself.

*Ahmet **men** bek   aqriliq di-di.*
Ahmet 1SG very smart say-PST.3

'Ahmet₁ said that he₁ is very smart.' (Uyghur, ✓S1, *S2)

5.0.2.4 The empirical landscape of *de se* ascriptions in the literature

Anand (2006) takes stock of the linguistic expressions that have been reported to be tied with *de se* attitudes, all of which are pronominal, and classifies them into three subgroups, replicated in the following table.

Table 5.1: Anand's (2006:11) Classification of *de se* Pronouns

CLASS	METHOD	MEMBERS
Default	*de re* ascription	pronouns
Semantic	context-overwriting	shifted indexicals, LDRs
Syntactic	binding by operator	logophoric pronouns, LDRs, OC PRO

According to Anand, regular pronouns with optional *de se* interpretation (263) are a special case of *de re* attitudes. The expressions that are obligatorily interpreted *de se* are either analyzed as binding by a syntactically active operator, which may be blocked by an intervening binder, or as context shifting at LF, which is not sensitive to syntactic intervention.

Following Chierchia et al. (1989), Anand (2006) analyzes OC PRO on a par with logophoric pronouns, that is, as being bound by an operator in the syntax. Though I acknowledge that shifted indexicals and logophoric pronouns are different in meaningful ways, I will argue in the next section that they are more similar to each other than to OC PRO. In Section 5.3 I will further claim that the syntactic differences between OC PRO on the one hand, and shifted indexicals and logophoric pronouns on the other, correlate closely to their respective semantics.

Before we move on, some clarification is in order. In languages with rich verb agreement morphology, or in languages where pronouns are cliticized to the verb, it is possible to find markings on the verb that seem to correspond to the *de se* interpretation. One example comes from Amharic (Schlenker, 2003b: 68, Afro-Asiatic), where the shifted first person pronoun appears as an inflectional morpheme suffixed to the verb.

(273)   *ǧon   ǧəgna   nə-**ññ***   *yil-all.*
John   hero   be.PERF-**1SG**   3.say-AUX.3MASC

    i. Shifted. 'John says that he is a hero.'   (Amharic, ✓ *de se*, *non-de se)
    ii. Non-shifted. 'John says that I am a hero.'

It is important to note that, the first person pronoun does not have to shift in (273). The verb is suffixed with the same morpheme (glossed as 1SG) with or without indexical shifting. In other words, there is no one-to-one correspondence between the morphological form of the verb and the interpretation of its subject in Amharic.

The interpretable/uninterpretable asymmetry comes to mind (Chomsky, 1995) when distinguishing true verbal *de se* expressions from nominal *de se* expressions disguised as

agreement morphemes or pronominal clitics that are attached to the verb. The agreement morphemes, or pronominal clitics, do not contribute to the meaning any more than the noun they agree with do. On the other hand, verb affixes that mark tense, aspect, mood, etc., have intrinsic meanings/features and these meanings/features do not co-vary with the choice of the subject. In this dissertation I make the similar distinction. As will be seen shortly, in true verbal *de se* expressions, the verb form helps bring out the *de se* interpretation of the pronoun.[4]

5.0.3   Verbal *de se* expressions

5.0.3.1   Conjunct constructions in Newari

By this point the readers should be fairly familiar with the basic facts of Newari conjunct-disjunct marking. To recap, in root clauses the conjunct suffix occurs with first person subject in declarative clauses and second person subject in interrogative clauses, whereas the disjunct suffix occurs elsewhere. This is summarized in Table 2.2, repeated below.

Table 5.2: The Conjunct/Disjunct Marking in Newari Root Clauses

Local subject	Declarative	Interrogative
First person	**Conjunct**	Disjunct
Second preson	Disjunct	**Conjunct**
Third person	Disjunct	Disjunct

In complement clauses when the conjunct verb form occurs the embedded subject and the matrix subject are co-indexed (274a), whereas when the disjunct verb form occurs they can refer to different individuals (274b).

---

[4]Gokana (Niger-Congo, spoken in Nigeria) allows the so-called logophoric verbal affix (Curnow, 2002). However, it is impossible to conclude whether these affixes are pronominal clitics or true auxiliaries because the descriptions of the facts were sporadic. I leave this question open for future field linguists.

(274) a. *wõ:*   *[wa   ana   wan-ā*   *dhakā:] dhāla*
        (s)he.ERG (s)he there go-**PST.CONJ** that   said

        '(S)he$_1$ said that (s)he$_{1/*2}$ went there.'   (conjunct, co-reference)

     b. *wõ:*   *[wa   ana   wan-a*   *dhakā:] dhāla*
        (s)he.ERG (s)he there go-**PST.DISJ** that   said

        '(S)he$_1$ said that (s)he$_{*1/2}$ went there.'   (disjunct, disjoint reference)

In Chapter 3 I take a step further and claim that coindexation between the matrix subject and the subject of the complement clause is necessary, but not sufficient, for the distribution of conjunct verbs. In addition to the knowledge and responsibility requirement, the conjunct verb occurs when the attitude holder is not mistaken or underinformed about being identical to the subject of the complement. In other words, the subject of the conjunct verb must be *de se*. In non-*de se* contexts such as (275) and (276), the use of the conjunct form leads to a false statement.

(275)   Scenario: A teacher spots a giant pile of students' exam papers at the corner of his office. He thought his assistant graded them, when in fact he was the one who did the grading. He points at the papers and says to his colleague, "The grader worked very hard"

     a. #*guru   dhāl-a*   *ki   wa parisram yan-ā*
        teacher say-PST.DISJ that s/he work.hard do-**PST.CONJ**

        'The teacher said he worked hard.'   (False, only *de se*)

     b. *guru   dhāl-a*   *ki   wa parisram yat-a*
        teacher say-PST.DISJ that s/he work.hard do-**PST.DISJ**

        'The teacher said he worked hard.'   (True, non-*de se*)

(276)   Scenario: Shyam is a frequent drunk and often blacks out from drinking. One day he rolls back the security tape and sees someone jumped in the well in his backyard. It was too dark and the quality of the video is not good, so he couldn't tell it was him who did the act. He tells his wife, "There was this guy in our backyard last month. He jumped in our well."

     a. #*Shyam-a   dhāl-a*   *ki   wa kuwe lom wan-ā*
        Shyma-ERG say-PST.DISJ that he well jump-**PST.CONJ**

        'Shyam said that he jumped in the well.'   (False, only *de se*)

b. *Shyam-a   dhāl-a   ki   wa kuwe lom wat-**a***
   Shyma-ERG say-PST.DISJ that he well jump-**PST.DISJ**

   'Shyam said that he jumped in the well.'   (True, non-*de se*)

Following Wechsler's (2010) and Roberts's (2015) proposal that indexicals like *you* and *I* are intrinsically *de se*, the distribution of conjunct verbs in Newari can be nicely captured. In both root clauses and embedded clauses, the conjunct verb appears when its subject is interpreted *de se*. However, it should be noted that this is not the same as calling the subject of the conjunct verb a *de se* pronoun. In Newari, the *de se* interpretation of a pronoun is not determined by its own form, as evidenced in (275) and (276); rather, it is tied with the form of the verb that the pronoun is a subject of. Therefore I consider Newari conjunct constructions verbal *de se* expressions.

5.0.3.2   The jussive mood in Japanese and Korean

The jussive refers to a grammatical mood that is associated with issuing orders, urging, or making suggestions, promises and decisions (Pak et al., 2004, 2008). Verbs in English are not morphologically marked for this mood, but in many languages they do. Korean, for instance, morphologically distinguishes imperative (277a), exhortative (277b), and promissive[5] (277c) mood, as illustrated below.

(277)   Jussive clause types in Korean (Zanuttini et al., 2012: 1234)

a. *cemsim-ul sa-**la***
   lunch-ACC buy-IMP

   'Buy lunch!'   (Imperative)

---

[5]Madigan (2008a: 176) notices that for his informants, the promissive marker "seems to be rather archaic sounding and is not frequently used, especially among the younger generations of Korean speakers." I have received similar comments from my consultants (aged from 25 to 35). They are especially inclined to reject its use in embedded clauses. For that reason I limit the discussion of the promissive mood to the minimum in this dissertation.

b. *cemsim-ul sa-**ca***
lunch-ACC buy-EXH

'Let's buy lunch.' (exhortative)

c. *cemsim-ul sa-**ma***
lunch-ACC buy-PRM

'I will buy lunch.' (Promissive)

Japanese, on the other hand, morphologically distinguishes imperative (278a) and decisive (278b) mood.

(278) Jussive clause types in Japanese (Fujii, 2010: 215)

a. *beeguru-o tabe-**ro***
bagel-ACC eat-IMP

'Eat bagels!' (Imperative)

b. *beeguru-o tabe-**yoo***
bagel-ACC eat-DEC

'I'll eat bagels.' (Decisive)

The imperative mood marker helps form commands, requests, or permissions. Just as in English, imperatives in Japanese and Korean imply a second person subject. The exhortative mood and decisive mood are used to persuade, and express decisions, respectively. Neither is widely attested across languages, and is translated with either imperatives (*Let's...*) or simple declarative sentences with future tense (*I'll...*). However, these irealis moods pattern with imperatives in many grammatical aspects, as Pak et al. (2004) convincingly argue. For one thing, just like imperatives, they all pose person restrictions on the subjects they take. The subject of the decisive mood must be a first person, whereas the exhorative mood requires its subject to be an inclusive *we*, that is, both first and second person included (indicated with the plus sign). The person restrictions of various jussive moods are tabulated below.

Table 5.3: The Jussive Mood Marking in Root Clauses

Local Subject	Promissive (K)	Decisive (J)	Imperative (J/K)	Exhortative (K)
First person	✓	✓	*	+
Second person	*	*	✓	+
Third person	*	*	*	*

It has been argued by many such as Platzack and Rosengren (1998) that crosslinguistically the imperative mood is limited to root clauses. Han (2000) notices, however, that Japanese imperatives can be embedded. Fujii (2010) later observes that the embeddability also applies to the decisive mood. Similarly, Pak et al. (2004) observe that Korean allows embedded imperatives and exhoratives.

What is relevant to our purpose is the fact that when embedding, the person restrictions of the jussive mood remain in effect. The subject of the embedded imperative in Japanese (279a) must be co-indexed with the indirect object of the matrix clauses, while the subject of the embedded decisive (279b) must refer back to the matrix subject.

(279)   Embedded jussives in Japanese (Fujii, 2010: 216)

a.   *Taro-wa   Hiroshi-ni   boku-no beeguru-o   tabe-**ro**-to   meireisita.*
     Taro-TOP   Hiroshi-DAT   my   bagel-ACC   eat-**IMP**-COMP   ordered

'Taro$_1$ ordered Hiroshi$_2$ PRO$_2$ to eat my bagel.'   (Imperative)

b.   *Taro-wa   boku-no beeguru-o   tabe-**yoo**-to   keikakusita.*
     Taro-TOP   my   bagel-ACC   eat-**DEC**-COMP   planned

'Taro$_1$ planned PRO$_1$ to eat my bagel.'   (Decisive)

In Korean, similarly, the subject of the embedded imperative mood must be the indirect object of the matrix clause (280a). The embedded exhortative mood, just like its root clause counterpart, requires a plural antecedent which, in this case, must include both the matrix subject and the matrix indirect object (280b).

(280) Embedded jussives in Korean (Zanuttini et al., 2012: 1268)

a. *Emma-ka   Inho-eykey kongpuha-**la**-ko   hasiess-ta.*
    mother-NOM Inho-DAT   study-IMP-COMP   said:HON-DECL

    'Mother$_1$ told Inho$_2$ PRO$_2$ to study.'   (Imperative)

b. *Emma-ka   Inho-eykey kongpuha-**ca**-ko   hasiess-ta.*
    mother-NOM Inho-DAT   study-EXH-COMP   said:HON-DECL

    'Mother$_1$ exhorted Inho$_2$ PRO$_{1+2}$ to study together.'   (Exhortative)

It is clear that the jussive mood dictates the interpretation of its subject in both Japanese and Korean. More specifically, it has been reported that in both languages the jussive is obligatorily interpreted *de se*. As an illustration, the exhortative mood in Korean can only be felicitously used to report a *de se* attitude (S1). It does not support a non-*de se* interpretation (S2) whereby Bill is unaware that he is talking about himself (Madigan, 2008b: 498).

(281) S1: Bill told Mary, "If we don't perjure ourselves, we'll go to jail."
       S2: A man with amnesia, Bill, is watching television with his friend Mary. They are watching a program where they are shown in an ongoing courtroom case. Furthermore, it seems as if both of them may go to jail. Suddenly, Bill has the thought that Mary and the man on TV, who he does not know is himself, should lie in order to not go to jail. So Bill told Mary, "I think you and this guy should lie."
       *Pil-i   Meyli-eykey wicung-ha-**ca**-ko   ceyan-ha-yess-ta.*
       Bill-NOM Mary-DAT   perjure-do-EXH-COMP   propose-do-PST-DECL

       'Bill$_1$ proposed to Mary$_2$ to perjure themselves$_{1+2}$.'   (Korean, ✓S1, *S2)

For another example, the Japanese decisive mood can only express a *de se* attitude. In a scenario when the attitude holder mistakes himself for someone else, as in (282a), the use of the decisive mood marker *(y)oo* gives rise to a false statement (Fujii, 2010: 221). This is in stark contrast with a sentence where the simple present tense morpheme *u* is used instead (282b).

(282) Scenario: Hiroshi plans to go abroad. He had already got his passport and recently obtained a visa. One day, he goes drinking and comes home very drunk. He finds the passport on the table, and does not remember that it is his passport with his picture, along with the visa he had gotten from the embassy. Looking at the picture, he thinks: "I don't know who this guy is, but he seems to be going abroad soon."

    a. #*Hiroshi-wa*   *gaikoku-ni*   *ik-**oo**-to*   *omotteiru.*
        Hiroshi-TOP foreign.country-to go-DEC-COMP thinks

       'Hiroshi$_1$ thinks he$_1$ will go abroad.'   (False, only *de se*)

    b. *Hiroshi-wa*   *gaikoku-ni*   *ik-u-to*   *omotteiru.*
        Hiroshi-TOP foreign.country-to go-PRS-COMP thinks

       'Hiroshi$_1$ thinks he$_1$ will go abroad.'   (True, non-*de se*)

The obligatory *de se* ascription is the key to a unified treatment of root clause jussives and embedded jussives in Japanese and Korean. The subject of the jussive mood always receives a *de se* interpretation, not because it is a special *de se* pronoun, but because the jussive mood says so. In other words, I take a what-you-see-is-what-you-get approach to analyze contrasts like (282a) and (282b). There is no principled distinction[6] between the two covert pronouns in these examples. The only difference between the two sentences lies in their respective verb forms. The jussive mood, not the present tense, manifests a verbal *de se* expression.

5.0.3.3 The volitional modal in Korean

In the previous two sections, I have shown that morphemes that encode tense and mood could be manifestations of verbal *de se* expressions. In this section I move on to modals, and use the Korean modal suffix *keyss* as an illustration. The first thing that is noteworthy about *keyss* is that it has both epistemic use and root modal use (Kim, 2012: 16). When *keyss* is used epistemically, it conveys a strong conjecture or prediction (283a); whereas when it is used as a root modal, it expresses the subject's intention (283b). Note that unlike

---

[6]Fujii (2010), in contrast, analyzes the respective subjects in (282) as PRO and *pro*. Since both pronouns are covert, such a distinction is not supported by morphological evidence.

the jussive mood markers in Korean, *keyss* occurs before, not in lieu of, the declarative mood marker.

(283) a. *Nayil   Seoul-ey   pi-ka   manhi o-**keyss**-e.*
     tomorrow Seoul-LOC rain-NOM much come-MOD-DECL

     '(It is certain that) it will rain a lot in Seoul tomorrow.'   (Conjectural)

   b. *Nay-ka 2 si-kkaci   Akhateymi kukcang-ey ka-**keyss**-ta.*
     I-NOM 2 o'clock-by Academy theater-LOC go-MOD-DECL

     'I will go to the Academy theater by 2 o'clock.'   (Volitional)

The ambiguity *per se* is not unexpected, considering modal auxiliaries come in different flavors cross-linguistically (Hacquard, 2006).

(284) a. You must have been upset. (It surely looks so.)   (Epistemic)

   b. You must be patient. (Or else you'll drive yourself crazy.)   (Root)

     What is interesting about *keyss*, however, is that its two modal flavors are in complementary distribution (Koo and Lehmann, 2010). Korean speakers do not use *keyss* to report the intention or volition of just anyone. In main declarative clauses, the volitional reading of *keyss* is not compatible with a second person (286a) or third person (286b) subject (Madigan, 2008a: 189). Compare (285) with the sentences in (286).

(285) *na-nun swukcey-lul   ha-**keyss**-ta.*
    I-TOP homework-ACC do-MOD-DECL

   'I will do the homework.'

(286) a. **ni-ka   swukcey-lul   ha-**keyss**-ta*
    you-NOM homework-ACC do-MOD-DECL

    (Int.) 'You will do the homework.'

   b. **ku-ka   swukcey-lul   ha-**keyss**-ta*
    s/he-NOM homework-ACC do-MOD-DECL

    (Int.) 'He will do the homework.'

     The sentences in (286) are ungrammatical if they depict willful actions. In contrast, the epistemic use of *keyss* is perfectly fine with a second person (287a) or third person

(287b) subject (Kim, 2002: 40). The following sentences do not indicate the subject's intention to carry out a certain action (volitional). Rather, they convey the speaker's prediction given the available evidence (conjectural).

(287) a. *(Cosimhay-la!)   Ne   namwu-eyse tteleci-**keyss**-ta.*
          watch.out-IMP you tree-from   fall-MOD-DECL

          '(Watch out!) You will fall down from the tree.'

     b. *(Po-a-ni) Minswu-ka   neyil   ci-**keyss**-ta.*
          see-since Minswu-NOM tomorrow lose-MOD-DECL

          '(As I see it,) Minswu will lose tomorrow.'

Kwon (2012) attempts a unified account for *keyss* by analyzing it as the "the experiential origo's presumption of an irrealis event." Framework-specific details aside, the experiential origo roughly corresponds to the speaker in declarative clauses. According to his analysis, when the syntactic subject coincides with the experiential origo, the volitional interpretation occurs; when it does not, the sentence is left with the epistemic reading. In both cases, *keyss* delivers a presumption based on some evidence obtained by the speaker. The volitional reading arises because when the speaker happens to be the syntactic subject, aka the event participant, the speaker's own determination naturally becomes the strongest evidence.

For a more complete paradigm, in main interrogative clauses (Koo and Lehmann, 2010: 92-93) the volitional use of *keyss* is only possible with a second person subject (288b). When its subject is first person (288a) or third person (288c), the sentence is always interpreted as a prediction.

(288) a. *ilen sanghwang-eyse nay-ka cip-ey   ka-**keyss**-e?*
          this situation-LOC   I-NOM home-LOC go-MOD-Q

          'Will I go home in this situation? (What do you think?)'   (conjectural)

     b. *ney-ka   keki-ey   ka-**keyss**-ni?*
          you-NOM there-LOC go-MOD-Q

          'Will you go there?'   (volitional)

    c.   *Swuni-ka   cikum cip-ey   ka-**keyss**-ni*
          Swuni-NOM now   home-LOC go-MOD-Q

        'Will Swuni go home now? (What do you think?)'   (conjectural)

We have seen that the two uses of the modal suffix *keyss* are strongly associated with both the choice of its subject and the clause type, as summarized in the following table. The volitional reading of *keyss* appears when coupled with first-person subjects in declarative clauses and second-person subjects in interrogative clauses. The epistemic use of *keyss* occurs elsewhere.

Table 5.4: The Interpretation of *keyss* in Root Clauses

Local subject	Declarative	Interrogative
First person	**Root, volitional**	Epistemic, Conjectural
Second preson	Epistemic, Conjectural	**Root, volitional**
Third person	Epistemic, Conjectural	Epistemic, Conjectural

When *keyss* is embedded under an attitude verb, the reference of its subject is a direct result of its modal flavor. In embedded declarative clauses (Madigan, 2008a: 191), when *keyss* acts as a root modal, its subject must be co-indexed with the matrix subject. According to this reading of (289), Inho could be an ace student but for some reason he tells Jwuhi that he decides to intentionally fail the upcoming test. When *keyss* is used as an epistemic modal, on the other hand, (289) has a very different meaning. In this scenario, Inho predicts that Jwuhi, being a bad student, is not going to pass the upcoming test.

(289) *Inho-ka   Jwuhi-eykey sihem-ey tteleci-**keyss**-ta-ko   mal-ha-yess-ta.*
       Inho-NOM Jwuhi-DAT   test-LOC drop/fail-MOD-DECL-COMP tell-do-PST-DECL

    i. Inho$_1$ told Jwuhi$_2$ he$_{1/*2/*3}$ would willfully fail the test.   (volitional)
    ii. Inho$_1$ told Jwuhi$_2$ she$_{*1/2/3}$ would quite likely fail the test.   (conjectural)

It is also worth noting that the epistemic use of *keyss*, but not its root modal use, allows the embedded subject to be directly referential. The following sentence is minimally different from (289) in the presence of a third proper name *Chelswu*, but crucially it is not ambiguous (Madigan, 2008a: 192).

(290) *Inho-ka   Jwuhi-eykey Chelswu-ka   sihem-ey tteleci-**keyss**-ta-ko*
Inho-NOM Jwuhi-DAT Chelswu-NOM test-LOC drop/fail-MOD-DECL-COMP

mal-ha-yess-ta.
tell-do-PST-DECL

'Inho told Jwuhi that Chelswu would fail the test.'   (conjectural, *volitional)

The sentence can only be interpreted as Inho making a prediction about Chelswu's test result (conjectural). It cannot mean that Inho informs Jwuhi of Chelswu's willful decision to fail the test (volitional).

In other words, when *keyss* is volitional, its subject must be bound. In embedded declaratives, it is bound by the matrix subject. In embedded questions, it is bound by the matrix indirect object (291a). The latter is illustrated below (Koo and Lehmann, 2010: 99).

(291) a. *Swuni-nun na-hante (nay-ka) keki-ey   ka-**keyss**-ta-ko   mwul-ess-ta.*
Swuni-TOP I-DAT   I-NOM   there-LOC go-MOD-DECL-COMP ask-PST-DECL

'Swuni asked me if I will go there.'   (Volitional)

b. *Swuni-nun na-hante caki-ka   keki-ey   ka-**keyss**-ta-ko   mwul-ess-ta.*
Swuni-TOP I-DAT   self-NOM there-LOC go-MOD-DECL-COMP ask-PST-DECL

'Swuni$_1$ asked me if she$_1$ will likely go there.'   (Conjectural)

The long-distance reflexive *caki* in (291b) is also bound, but it has to be bound by the matrix subject *Swuni*, not the first person pronoun. This is because *caki* is subject-oriented (Lee, 1973; Chang, 1977) in Korean.[7] This binding relation is incompatible with the volitional use of *keyss* as the latter poses its own interpretive restrictions on its subject. As a result (291b) can only be interpreted as non-volitional.

At this point it probably comes as no surprise that the subject of volitional *keyss* not only is bound, but also has to be read *de se*. In the following non-*de se* context (Madigan, 2008a: 78-79), where Jwuhi has amnesia and does not know she has produced the most

---

[7]Worth noting is that the rule of subject orientation is not without exceptions. Many linguists observe that it might be mitigated by other factors such as the choice of the attitude verbs or the evidential source (Han and Storoshenko, 2012). It is entirely likely that subject orientation of *caki* is less of a grammatical requirement than a condition derivable from other properties of logophoricity. In this dissertation I keep an open mind on that topic. Suffice it to say that in (291b) the antecedent of *caki* is the matrix subject.

research on premature births, one cannot truthfully utter (292a) as Jwuhi has no *de se* belief of herself being rewarded. Without *keyss* (292b) makes a true statement.

(292)   Scenario: Jwuhi is a world renowned medical doctor specializing in premature births, who has suffered from amnesia. She was taken to an awards benefit in her honor for outstanding medical researchers. The time came in the course of the evening where they were about to announce the award. Jwuhi knows that the person who had done the most research on premature birth will be honored with the award, but unbeknownst to her, she is the leading expert in that field.

a. #*Jwuhi-ka   sang-ul   pat-**keyss**-ta-ko   yeysang-ha-yess-ta*
   Jwuhi-NOM prize-ACC receive-MOD-DECL-COMP expect-do-PST-DECL

   'Jwuhi$_1$ expected PRO$_1$ to receive the prize.'   (False, only *de se*)

b. *Jwuhi-ka   sang-ul   pat-nun   kes-ul   kitey-ha-yess-ta*
   Jwuhi-NOM prize-ACC receive-REL thing-ACC expected-do-PST-DECL

   'Jwuhi$_1$ expected that she$_1$ would get the prize.'   (True, non-*de se*)

To conclude, despite the morphological identity, the two uses of *keyss* behave differently in both syntax and semantics. The volitional modal *keyss* requires a *de se* subject. In root clauses, that subject is either a first person pronoun in declaratives or a second person pronoun in questions, whereas in embedded clauses its subject is bound by a matrix argument with a *de se* belief. In contrast, the conjectural *keyss* allows its subject to be directly referential (290) or even not referential at all (283a). In this dissertation I consider only the volitional *keyss* to be a verbal *de se* expression.

5.0.3.4   The experiencer predicates in Japanese

The final group of verbal *de se* expressions that I identify in this chapter appears as the main predicate. In Japanese, there is a class of predicates, the so-called predicates of direct experience (Tenny, 2006), that poses strict person constraints on their subjects. In root clauses, they must appear with first person subjects in declaratives and second person subjects in interrogatives, as shown in the following table.

Table 5.5: The Distribution of Predicates of Direct Experience in Root Clauses

Local subject	Declarative	Interrogative
First person	✓	*
Second preson	*	✓
Third person	*	*

These predicates are "adjectives of sensation and emotion" (Hashimoto, 2015), such as *samui* 'cold' and *sabishii* 'lonely', illustrated as follows (Tenny, 2006: 247).

(293) a. *Watashi-wa samui/sabishii desu.*
　　　 I-TOP　　　 cold/lonely　COP:PRES

　　　 'I am cold/lonely.'

　 b. **Anata-wa samui/sabishii desu.*
　　　 you-TOP　cold/lonely　COP:PRES

　　　 '(Int.) You are cold/lonely.'

　 c. **kare-wa　　samui/sabishii desu.*
　　　 s/he-TOP　cold/lonely　COP:PRES

　　　 '(Int.) S/he is cold/lonely.'

(294) a. **Watashi-wa samui/sabishii desu ka?*
　　　 I-TOP　　　 cold/lonely　COP　Q

　　　 '(Int.) Am I cold/lonely?'

　 b. *Anatai-wa samui/sabishii desu ka?*
　　　 you-TOP　cold/lonely　COP　Q

　　　 'Are you cold/lonely?'

　 c. **Kare-wa　　samui/sabishii desu ka?*
　　　 s/he-TOP　cold/lonely　COP　Q

　　　 '(Int.) Is s/he cold/lonely?'

In other words, the predicates of direct experience are reserved for the speaker or the addressee to express their own feelings. They cannot be directly employed to psycho-analyze a non-discourse participant. If the need for such use arises, extra morphology is required. One common strategy is to add an evidential marker such as *ni tigainai* 'there's

no doubt that' or *gatte* 'it seems that', depending on how much confidence the speaker has towards the statement.

(295) a. *Mary-wa sabishii ni tigainai.*
     Mary-TOP lonely no doubt

    'Mary must be lonely.'   (Tenny, 2006: 249)

    b. *Mary-wa sabishi-gatte-iru-yo.*
       Mary-TOP lonely-appear-PRS-SFP

     'Mary appears to be lonely.'   (Tenny, 2006: 249)

Sometimes different (yet related) lexical meanings of the same predicate would lead to different syntactic behaviors. For instance, in many East Asian cultures, bad jokes are also called "cold jokes."[8] With this background, the following sentence is acceptable with the specific reading that Taro is not funny.

(296) *Taroo-wa samui-desu.*
     Taro-TOP cold-COP:PRS

    (Lit.) 'Taro is cold.'

The acceptance of (296) is not unexpected because the derived meaning of *samui*, unlike its literal meaning, is speaker-oriented. When we say *Todd is cold*, *cold* is subject-oriented. The sentence addresses the subject's physical experience with cold temperature. In contrast, *funny* and *corny* are speaker-oriented. They are called "predicates of personal taste" (Lasersohn, 2005). When the speaker says *Todd is funny/corny*, she is not talking about Todd's feeling or experience, rather her own feeling towards Todd.[9]

The person constraint on subjects also applies when the predicates of direct experience are embedded (Fujii, 2006a: 160). In embedded declaratives, the subject needs to

---

[8]Bad jokes, just as cold temperature, can make one shiver.

[9]Predicates of personal taste are famously known as exhibiting similar interpretation restrictions (Lasersohn, 2005; Stephenson, 2009; Pearson, 2013). For instance, when I say *Snowboarding is fun*, I mean snowboarding is *fun* for me, the speaker. When I ask *Is snowboarding fun?* I am asking whether you, the addressee, consider snowboarding a fun activity. We say the interpretation of *fun* is speaker/addressee-dependent. However, unlike verbal *de se* expressions, predicates of personal taste do not pose person restrictions on the grammatical subject.

be co-indexed with the matrix subject (297a), whereas in embedded questions, the subject must be co-indexed with the matrix indirect object (297b).

(297) a. *Taro-wa   Atsuko-ni   watasi-no tomodati-ga nikurasi-i-to   itta.*
        Taro-TOP Atsuko-DAT I-POSS   friend-NOM hate-PRS-COMP said

   'Taro$_1$ said to Atsuko$_2$ that he$_{1/*2}$ hated my friend.'

   b. *Taro-wa   Atsuko-ni   watasi-no tomodati-ga nikurasi-i-ka kiita.*
        Taro-TOP Atsuko-DAT I-POSS   friend-NOM hate-PRS-Q asked

   'Taro$_1$ asked Atsuko$_2$ if she$_{*1/2}$ hated my friend.

Finally, just as for all the other verbal *de se* expressions, the subjects of experiencer predicates must be interpreted *de se*. In a context where Mari has no *de se* belief (Fujii, 2006a: 162), it is false to use the experiencer predicate *nikurasi* 'hate' (298a). The adjective *kibisi* 'hard', on the other hand, is speaker-oriented, not a direct address of the subject's feelings. As a result, it is compatible with the non-*de se* context (298b).

(298)   Scenario: Mari wrote nasty things about Taro in her diary. One day she read them when she was completely drunk. Without knowing that it was written by her, she thought: "This girl is quite hard on Taro. I guess she really hates him."

   a. #*Mari-wa   Taro-o   nikurasi-i-to   omotta.*
      Mari-TOP Taro-ACC hate-PRS-COMP thought

   'Mari thought that she really hated Taro.'   (False, only *de se*)

   b. *Mari-wa   Taro-o   kibisi-i-to   omotta.*
      Mari-TOP Taro-ACC hard-PRS-COMP thought

   'Mari thought that she was really hard on Taro.'   (True, non-*de se*)

5.0.3.5   Interim review

So far we have seen that in Newari, Japanese, and Korean, *de se* may be obligatorily marked on the verb (Japanese predicates of direct experience) or the verb suffix that simultaneously denotes tense (Newari conjunct morpheme), modal (Korean volitional modal *keyss*), or mood (Japanese imperative and decisive mood, Korean imperative and exhorta-

tive mood). In the next section I compare verbal and nominal *de se* expressions in terms of their syntactic and semantic behaviors. But before we proceed, the readers should know that this section does not aim to exhaust the world's verbal *de se* expressions. This chapter focuses on only three languages because of their accessibility—the author has access to the speakers of these languages and the linguistic literature of the phenomena in question. In Tsafiki (Barbacoan), the conjunct-disjunct marking system has been discussed under a different name (Dickinson, 2000). In Jingpo (Tibeto-Burman), the modal auxiliary *sana* shows analogous distribution as Korean volitional modal *keyss* (Zu, 2011). Kaufmann (2014) provides a summary of languages that allow embedded imperatives and she observes that the subject of embedded imperatives are referenced to the addressee of the reported context (i.e., the indirect object of the matrix clause). All of these phenomena are potential candidates for verbal *de se* expressions, but we cannot be sure without detailed linguistic data.

5.1   Verbal vs. nominal *de se* expressions: A comparison

As we have seen so far, natural languages employ at least two ways[10] to ascribe *de se* attitudes, either via a special verb form (verbal *de se* expression) or via a special pronominal form (nominal *de se* expression). Both nominal and verbal *de se* expressions express *de se* attitudes. Both occur within the scope of a propositional-attitude verb. Both involve a

---

[10]There is potentially a third group, which I call "perspectival *de se* expressions," that subsumes spatial and temporal deictic expressions such as *here* and *now* (Fillmore, 1971), tense shift (Partee, 1973), evaluative adjectives and epithets such as *damned* and *bastard* (Potts, 2005; Harris and Potts, 2009), predicates of personal taste like *fun* and *disgusting* (Stephenson, 2009; Pearson, 2013), evidential adverbs and evidential shift (Woods, 2014; Korotkova, 2016), and the motion verb *come* (Barlew, 2017). However, this group is a medley of expressions of disparate grammatical categories which, accordingly, show vastly different grammatical behaviors from one another. As such it is difficult to characterize them in a coherent way, hence the decision to leave them out in this dissertation.

human antecedent. Do the morphological differences between the two have any syntactic and semantic correlates?

In this section I argue that though the two types of *de se* expressions share many things in common, they differ in at least two aspects.

(299) a. Verbal *de se* expressions are more restricted structurally than nominal *de se* expressions.

b. Verbal *de se* expressions are more selective in the types of events they are compatible with than nominal *de se* expressions.

I have shown in Section 4.2.2 that Newari conjunct constructions manifest obligatory control. The embedded jussive mood in Japanese and Korean, the volitional modal in Korean, and the predicates of direct experience in Japanese have also been independently diagnosed as obligatory control (Madigan, 2008a,b; Fujii, 2006a, 2010). In what follows I will briefly review the relevant facts by adopting the same diagnostic tests I used in Section 4.2.2. I repeat the defining properties of OC as follows.

(300) The signature properties of OC (Landau, 2013a)
a. Non-c-commanding control is impossible.
b. Long-distance control is impossible.
c. The controlled pronoun is necessarily the subject.
d. The controlled pronoun only receives bound variable reading.

Recall that logophoric control is obligatory control in attitude contexts (Section 4.1). Since all the aforementioned phenomena are obligatorily interpreted *de se*, it naturally follows that they are all attitude reports. If we can prove that they also observe the OC signature properties in (300), we can conclude that the verbal *de se* expressions manifest logophoric control.

I will demonstrate that the syntactic properties in (300), besides diagnosing obligatory control, also differentiate nominal *de se* expressions from verbal *de se* expressions.

190

5.1.1 Verbal *de se* expressions as obligatory control

In this section I go through the four properties one at a time to demonstrate how verbal *de se* expressions systematically behave as obligatory control. Worth emphasizing is that although I can only provide specific examples from individual languages, the properties these examples illustrate hold across the board.

First, the subject of all the verbal *de se* expressions must be controlled by an antecedent from an immediately higher clause. In Japanese, the subject of the decisive mood must be bound locally. The sentence (301a) is ungrammatical because the reciprocal *otagai* "each other" requires a plural antecedent, which is not in the immediately higher clause.

(301)   Locality in Japanese decisive constructions (Fujii, 2006b: 82)

   a.   *karera-wa   [Taro-ga   [otagai-o   suisensi-a-oo-to]*
        they-TOP   Taro-NOM   each.other-ACC   recommend-RECP-DEC-COMP
        keikakusita-to]   omotta.
        planned-COMP   thought

        (Int.) They$_1$ thought that Taro$_2$ planned for them$_1$ to recommend each other.

   b.   *Taro-wa   [karera-ga   [otagai-o   suisensi-a-oo-to]*
        Taro-TOP   they-NOM   each.other-ACC   recommend-RECP-DEC-COMP
        keikakusita-to]   omotta.
        planned-COMP   thought

        Taro$_1$ thought that they$_2$ planned PRO$_2$ to recommend each other.

Korean exhortatives exhibit what we may call split control. The two antecedents of the subject of the embedded exhortative, however, must be the co-arguments from the next clause up.

(302)   Locality in Korean exhortative constructions (Madigan, 2008b: 497)
        Hwun-i   [Jwuhi-ka   Inho-eykey [cip-ey   ka-ca-ko   seltuk-ha-yess
        Hwun-NOM   Jwuhi-NOM   Inho-DAT   home-LOC   go-EXH-COMP   persuade-do-PST
        -ta-ko]   sayngkak-ha-yess-ta].
        -DECL-COMP   think-do-PST-DECL

        'Hwun$_1$ thought that Jwuhi$_2$ persuaded Inho$_3$ PRO$_{*1+2,*1+3,2+3}$ to go home.'

191

Similarly, the subject of the volitional modal *keyss* (303) and the subject of the ex-priencer predicate *natukasi* 'nostalgic' (304) must be bound by the most local antecedents.

(303)   Locality in Korean volitional constructions (Madigan, 2008a: 73)
Jwuhi-ka   *[Inho-ka*   *[teena-keyss-ta-ko*   *yaksok-ha-yess-ta-ko]*
Jwuhi-NOM   Inho-NOM   leave-VOL-DECL-COMP   promise-do-DECL-COMP

   sayngkak-ha-yess-ta]
   think-do-PST-DECL

'Jwuhi$_1$ thought that Inho$_2$ promised PRO$_{*1/2}$ to leave.'

(304)   Locality in Japanese experiencer predicate constructions (Fujii, 2006a: 162)
Mari-wa   *Hiroshi-ni*   *[[ano mati-o*   *natukasi-i-to]*   *omotte]* *hosikatta.*
Mari-TOP   Hiroshi-DAT   that   town-ACC   nostalgic-PRS-COMP   think   wanted

'Mari$_1$ wanted Hiroshi$_2$ to think that he$_{*1/2}$ missed that town.'

Second, the subject of all the verbal *de se* expressions must be c-commanded by its antecedent. The Japanese sentence (305a) is ungrammatical due to the contradictory requirements posed by the reciprocal *otagai* and the imperative mood marker *e*. The reciprocal requires a plural antecedent, in this case *hutago* "twins", while the imperative mood must be controlled by a c-commanding DP, which is *hahaoya* "mother". Without the imperative mood, *hutago* becomes a possible antecedent (305b).

(305)   C-command in Japanese imperative vs. declarative constructions (Fujii, 2010: 217)

   a.   **Taro-wa*   *sono* *hutago-no*   *hahaoya-ni*   *[otagai-o*   *sonkeisi-a-e*
         Taro-TOP   the   twins-POSS   mother-DAT   each.other-ACC   respect-RECP-IMP
            -to]   *itta.*
            -COMP   said

      (Int.) 'Taro told the twins' mother they should respect each other.'

   b.   *Taro-wa*   *sono* *hutago-no*   *hahaoya-ni*   *[otagai-o*   *sonkeisi-a-u*
         Taro-TOP   the   twins-POSS   mother-DAT   each.other-ACC   respect-RECP-PRS
            -bekida-to]   *itta.*
            -should-COMP   said

      'Taro told the twins' mother they should respect each other.'

Similarly, the subject of the volitional modal *keyss* (306) and the subject of the experiencer predicate (307) require a c-commanding antecedent.

(306) C-command in Korean volitional constructions
John-uy   pwuin-i   ku-ka   nayil   tolao-keyss-ta-ko
John-POSS   wife-NOM   s/he-NOM   tomorrow   come.back-VOL-DECL-COMP
  mal-ha-ess-ta
  say-do-PST-DECL

'John's$_1$ wife$_2$ promised that s/he$_{*1/2}$ will come back tomorrow.'

(307) C-command in Japanese experiencer predicate constructions (Fujii, 2006a: 161)
Hiroshi-no   zyosyu-wa   Atsuko-o   nikurasi-i-to   omotta.
Hiroshi-POSS   assistant-TOP   Atsuko-ACC   hate-PRS-COMP   thought

'Hiroshi's$_1$ assistant$_2$ thought that he$_{*1/2}$ hated Atsuko.'

Third, the control relation is always held between a matrix antecedent and a local subject. Across languages the person restrictions of the jussive mood only pertain to the subject (Zanuttini et al., 2012; Alcázar and Saltarelli, 2014). Fujii (2007) called predicates of direct experience in Japanese "subject experiencer adjectives" for precisely the reason that they pose person restrictions on and only on their subjects. In Korean, likewise, the covert pronoun that receives *de se* interpretation must be the grammatical subject of the verb that *keyss* attaches to.

(308) a. **Suzy-ka   John-i   kyelhonha-keyss-ta-ko   mal-ha-ess-ta*
    Suzy-NOM   John-NOM   marry-VOL-DECL-COMP   say-do-PST-DECL

    (Int.) 'Suzy$_1$ said that John will marry PRO$_1$'

  b. **John-i   pwuin-i   sakwahal-keyss-ta-ko   yaksokha-ess-ta*
    John-NOM   wife-NOM   apologize-VOL-DECL-COMP   promise-PST-DECL

    (Int.) 'John$_1$ promised that PRO's$_1$ wife will apologize.'

Finally, the subject of all the verbal *de se* expressions must be interpreted as bound variables. As an illustration, the embedded decisive (309a), the embedded imperative (309b) and predicates of direct experience (310) in Japanese yield only bound variable readings.

(309)　Bound variable in Japanese decisive and imperative constructions (Fujii, 2010: 219-220)

    a.　*Hiroshi-dake-ga　siai-ni　kat-oo-to　kangaeteiru.*
       Hiroshi-only-NOM　game-DAT　win-DEC-COMP　thinks

       'Only Hiroshi thinks of winning the game.'
       i. ✓Bound: Hiroshi is the only x such that x thinks that x will win the game.
       ii. *Strict: Hiroshi is the only x such that x thinks that Hiroshi will win the game.

    b.　*John-wa　Taro-dake-ni　Izu-ni　ik-e-to　itta.*
       John-TOP　Taro-only-DAT　Izu-DAT　go-IMP-COMP　said

       'John told only Taro that he should go to Izu.'
       i. ✓Bound: Taro is the only x such that John told x that x should go to Izu.
       ii. *Strict: Taro is the only x such that John told x that Taro should go to Izu.

(310)　Bound variable in Japanese experiencer predicate constructions (Fujii, 2006a: 162)
    Hiroshi-dake-ga　Mari-no　koto-o　nikurasi-i-to　omot-tei-ru
    Hiroshi-only-NOM　Mari-POSS　thing-ACC　hate-PRS-COMP　think-ASP-PRS

    'Only Hiroshi$_1$ thinks that he$_1$ hates Mari.'
    i. ✓Bound: Only Hiroshi is an x such that x thinks that x hates Mari.
    ii. *Strict: Only Hiroshi is an x such that x thinks Hiroshi hates Mari.

The embedded exhortative mood in Korean also requires a bound variable pronoun as its subject. (311) exemplifies a dialogue between two people, A and B. The embedded subject elided in B's reply has only bound variable interpretation.

(311)　Bound variable in Korean exhorative constructions (Madigan, 2008b: 498)

    a.　*Jwuhi-ka　Inho-eykey cip-ey　ka-ca-ko　seltuk-ha-yess-ta.*
       Jwuhi-NOM　Inho-DAT　home-LOC　go-EXH-COMP　persuade-do-PST-DECL

       'Jwuhi persuaded Inho to go home (together).'

    b.　*Chelswu-to　kuri-ha-yess-ta.*
       Chelswu-also　same-do-PST-DECL

       'Chelswu did too.'
       i. ✓Bound: Chelswu persuaded Inho that Chelswu and Inho would go home together.
       ii. *Strict: Chelswu persuaded Inho that Jwuhi and Inho would go home together.

Similarly, the embedded subject in (312) is disambiguated with the presence of Korean volitional modal *keyss*.

(312) Bound variable in Korean volitional modal constructions (Madigan, 2008a: 74)
Monica-ka   Wilson-eykey   ttena-keyss-ta-ko   yaksok-ha-yess-ta
Monica-NOM Wilson-DAT leave-VOL-DECL-COMP promise-do-PST-DECL

  Bill-do   kuri-ha-yess-ta
  Bill-also same-do-PST-DECL

  ✓Bound: 'Monica promised Wilson that she would leave and Bill promised Wilson that he would leave.'
  *Strict: 'Monica promised Wilson that she would leave and Bill promised Wilson that she would leave.'

It is clear that verbal *de se* expressions pattern closely with obligatory control in terms of (300). By contrast, I claim that nominal *de se* expressions do not show all these properties. They do have to be bound by a c-commanding antecedent, but that is hardly surprising, considering the c-command requirement applies not only to control, but to pronominal binding. In Chapter 2 I have provided the following working definition for binding.

(313) α binds β iff:

  a. α bears the same ϕ-features and index as β, and

  b. α c-commands β.

Since *de se* pronouns/reflexives are bound pronouns, the c-command requirement is expected to hold. In the next subsection, I demonstrate that nominal *de se* expressions are less restrictive in terms of the other three syntactic properties we have reviewed above.

5.1.2   Nominal *de se* expressions $\neq$ OC PRO

First off, whereas OC PRO must be bound by a local antecedent, the clause boundary does not delimit the binding of the nominal *de se* expressions. The indices in the following

examples illustrate the options each nominal *de se* expression has—being bound locally, or picking a remote antecedent.

(314) Tangale logophor (Haida, 2009)
Malaŋ yim-go ká: Awaŋ ne: ká: yi ŋa mana-m kude.
Malang think-PERF that Awang say that LOG PROG-have house-LNK big

'Malang$_1$ thinks that Awang$_2$ said that he$_{1/2}$ has a big house.'

(315) Mandarin long-distance reflexive (Anand, 2006: 121)
John zhīdào Bill rènwéi Mary zuò zài zìjǐ-de pángbiān.
John know Bill think Mary sit at self-POSS side

'John$_1$ knows that Bill$_2$ thinks that Mary sat right next to him$_{1/2}$.'

(316) Zazaki shifted indexical (Anand and Nevins, 2004: 30)
Ali mɪ-ra va kɛ Hɛseni Fatima-ra va ɛz braye Rojda-o.
Ali me-to said that Hesen Fatima-to said I brother Rojda-POSS

'Ali$_1$ said to me that Hesen$_2$ said to Fatima that he$_{1/2}$ is Rojda's brother.'

Secondly, as is already seen in (315), nominal *de se* expressions are not necessarily the subject.[11] The literature is abundant in evidence supporting this observation. Nominal *de se* expressions appear in all sorts of places where regular pronouns are attested, as subjects, objects, or even part of a grammatical function, such as the possessor of the subject (319), the possessor of the object (317-318) or the possessor of a prepositional object (315).

(317) Yoruba logophor (Anand, 2006: 57)
Olu so pé oun r'ɪ bàbá òun.
Olu say that LOG see father LOG.POSS

'Olu$_1$ said that he$_1$ has seen his$_1$ father.'

---

[11]Curnow (2002: 5), when providing a typology of verbal logophoricity in African languages, provides the following observation, "[w]hile logophoric pronouns can always be found as subject pronouns [...], [they] are also commonly used in other grammatical functions, especially as objects and as possessive forms. Logophoric cross-referencing, on the other hand, is seldom found marking anything other than subjects[.]" The logophoric cross-referencing, according to his description (Curnow, 2002: 3), is "a verbal affix, contrasting with (other) person-marking affixes, used for indicating logophoricity." It is possible that verbal logophoricity markers are distinct from logophoric pronouns in the same way as verbal *de se* expressions differ from nominal *de se* expressions. Of course, without detailed linguistic data, it is not possible to draw any decisive conclusions.

(318) Mandarin long-distance reflexive (Huang and Liu, 2000: 19)
zhāngsān   shuō pášhǒu   tōu-le   zìjǐ-de   píbāo
Zhangsan say   pickpocket steal-PERF self-POSS purse

'Zhangsan$_1$ said that the pickpocket stole his$_1$ purse.'

(319)   Zazaki shifted indexical (Anand, 2006: 88)
Rojda va   kɛ braya   mɪ   dewletia.
Rojda say.PERF that brother I.POSS rich.be

'Rojda$_1$ said that her$_1$ brother was rich.'

The last property that separates the two types of de se expressions concerns the availability of strict reading for nominal *de se* expressions. This one is less conclusive, as testing the bound/strict distinction requires speakers' subtle, context-dependent intuitions, which is hard to get by simply looking at previous descriptive data elicited for other purposes. Without original fieldwork in each language in question, it is impossible to see a general trend. With that being said, the following data is at least suggestive. In (320), both bound variable reading (320b) and strict reading (320c) are possible for the long-distance reflexive in Mandarin.

(320) a.   *zhǐyǒu zhāngsān   shuō pášhǒu   tōu-le   zìjǐ-de   píbāo*
              only   Zhangsan say   pickpocket steal-PERF self-POSS purse

              'Only Zhangsan$_1$ said that the pickpocket stole his$_1$ purse.'
       b.   No one else said that the pickpocket stole their own purse.   (✓Bound)
       c.   No one else said that the pickpocket stole Zhangsan's purse.   (✓Strict)

5.1.3   Predicates excluded from verbal *de se* expressions

Having established that verbal *de se* expressions manifest logophoric control and that nominal *de se* expressions are not logophorically controlled PRO, we can reach a couple conclusions.

The first one, possibly minor, is that verbal *de se* expressions are syntactically different from nominal *de se* expressions. This should be expected, considering they are of different syntactic categories.

More significantly, the subject of verbal *de se* expressions, being a regular pronoun in Newari or a covert pronoun in Japanese and Korean, though nominal in nature and interpreted *de se*, is syntactically different from nominal *de se* expressions. The argumentation is quite straightforward. Since verbal *de se* expressions are logophoric control constructions, their subjects should be treated in a similar way. That is, the subject of the conjunct verb and the subject of the jussive mood are the counterparts of logophorically controlled PRO in finite clauses. Nominal *de se* expressions, in contrast, do not share much in common with logophorically controlled PRO in terms of syntactic behaviors. This is rather surprising, especially considering the literature assumes this parallelism by default, with one notable exception—Landau (2015), which I will get back to shortly.

The differences between the two types of *de se* expressions are not limited to the syntactic behaviors of their respective pronouns. In this section I show that the predicates that can appear in verbal *de se* expressions are very selective. I am not aware of any such literature that has reported similar selective restrictions on the predicates for nominal *de se* expressions.

In Chapter 3 I have shown that Newari conjunct constructions require a responsibility relation to be held between the matrix subject and the embedded event. In (321), for instance, *Shyam* cannot determine whether or not he hears a noise, or senses the earthquake. Therefore, the conjunct form, a verbal *de se* expression, cannot be used.

(321)   Scenario: Laximi and her husband Shyam are sitting in their living room watching
        TV. Suddenly she hears some noise from the dining room. So she asks if Shyam
        hears the same thing. Shyam confirms that he has heard the same noise. It turns
        out the noise came from the dining room lights bumping into one another. It's an
        earthquake. Shyam screams, "Babe, I felt our house is shaking!"

   a.   *Shyam-a   dhāla ki   wõ: sa: tāl-a/*tāy-ā.*
        Shyam-ERG   said   that s/he.ERG noise hear-PST.DISJ/CONJ

        'Shyam$_1$ said that he$_1$ heard that noise.'

   b.   *Shyam-a   dhāla ki   wa   chẽ   kha:-gu   cāl-a/*cāy-ā.*
        Shyam-ERG   said   that s/he.ABS house shake-NMLZ feel-PST.DISJ/CONJ

        'Shyam$_1$ said that he$_1$ felt the house shaking.'

In Newari, when the predicate denotes non-volitional events, the disjunct form is chosen

instead (321). The context here makes it clear that the attitude holder *Shyam* is fully aware

of his participation in both embedded events. Though conjunct morphology always en-

tails that there is no mistaken identity between the attitude holder and the embedded

subject, the reverse is not true.

The parallel between conjunct marking and imperatives can be made because the

imperative mood, too, is notoriously selective about its predicate (Sadock and Zwicky,

1985). It has been a well established fact that there is a crosslinguistic restriction in the

type of predicates imperatives select. As Birjulin and Xrakovskij (2001: 17) put it, im-

perative verbs "must denote controllable actions, i.e., actions which, in a given situation,

can be performed (or not performed) in a controlled manner by any given person based

on his/her own or somebody else's experience." This typically keeps stative and non-

volitional predicates from being used in imperatives, as evidenced by the oddness of the

following sentences (Farkas, 1988: 39).

(322) a.   #Be tall!
      b.   #Resemble your father!
      c.   #Receive a present!

What is compelling about the generalization that imperative verbs must denote controllable actions is the fact that it applies far beyond imperatives. To begin with, it can be extended to other jussive clause types. In Japanese, where jussives are morphologically marked, stative and non-volitional predicates such as *konomu* 'like' and *mieru* 'be visible' have no imperative and decisive form. In Korean, too, the imperative and the exhortative form can only be used with verbs that denote a change of state that one can bring about. Verbs like *al* 'know' and *coh* 'like' are not compatible with jussives.

In addition, Farkas (1988: 41,45) observes that the use of a stative or non-volitional predicate in obligatory control constructions is quite odd with certain control verbs, such as *order, persuade* and *promise*.

(323) a. #John ordered Pete to be tall.
    b. #John persuaded Pete to resemble Bill.
    c. #Jill promised Mary to receive a letter.

It is tempting to attribute the selectional restrictions to the function of jussives and control on the basis of the above data. Imperatives are used to issue a command or request for the addressee. It does not make a lot of sense to order someone to do something they have little control over. This also holds true for other jussive types. We cannot make a decision to bring about something we have no authority to. One can argue that stative and non-volitional predicates have no decisive and exhortative form in Japanese and Korean for the same reason that the following sentences sound odd.[12]

(324) a. #I decided to be tall/resemble Angelina Jolie/receive a present.
    b. #Let's be tall/resemble Angelina Jolie/receive a present.

The same reasoning can be extended to obligatory control under verbs that would lead to a change of decision (323).

---

[12]There are ways to improve some of these examples in English. For instance, they may be uttered by a writer who pictures herself as the main character in a story, in which case the actions would become controllable by the writer.

The problem with this account is that it cannot capture the predicate choice in all verbal *de se* expressions. Take Korean modal *keyss* for example (Koo and Lehmann, 2010: 86). As previously mentioned, *keyss* is volitional when coupled with first person subject in declaratives. One caveat I have yet to mention is that the verb it attaches to must denote controllable actions (325a). When *keyss* is suffixed to a non-volitional predicate, it stops marking the speaker's determination, and instead expresses the speaker's prediction about himself (325b).

(325) a.   *na-nun nayil   ttena-keyss-ta.*
           I-TOP   tomorrow   leave-MOD-DECL

           'I will leave tomorrow.'   (controllable, volitional)

    b.   *nay-ka   michi-keyss-ta.*
           I-NOM   be.insane-MOD-DECL

           'I think I will become insane.'   (stative, conjectural)

Note, however, there are neither control verbs nor jussive mood in (325). The modal *keyss* can sit comfortably in main declaratives. Yet changing the choice of the predicate dissolves the otherwise expected volitional reading.

It is increasingly difficult to resort to specific clause types or the choice of control verbs when we consider the distribution of Newari conjunct morphology. The conjunct-disjunct distinction is morphologically realized as the tense suffix. That is to say, all finite clauses involve either a conjunct verb or a disjunct verb.[13] Regardless of its clause type or how deeply it is embedded, whether the verb denotes a controllable action or not is almost always relevant. Therefore, I argue that it is inadequate to reduce verbal *de se*

---

[13]The literature on conjunct-disjunct morphology is focused on declaratives and interrogatives in Newari (Hale, 1980; DeLancey, 1992; Hargreaves, 2005). In imperatives, the conjunct-disjunct distinction is not morphologically marked. However, this is not a true exception to the generalization that Newari finite verbs come in either conjunct or disjunct forms. Newari imperatives, just as the imperatives in other languages, always imply a second person subject and are only compatible with predicates that denote controllable actions. In other words, there could be a different interpretation that is entirely compatible with the available facts, that is, the imperative mood is always in the conjunct form.

expressions' selectional restrictions to the type of clauses they appear in or the type of verbs they are embedded under. This is a unique property for verbal *de se* expressions.

The responsibility property does not account for the event sensitivity of all verbal *de se* expressions. Predicates of direct experience, for instance, are associated with state. It is possible to argue that some of those predicates, such as *uresi* 'happy' is well within one's discretion. In English, for instance, *be happy* is acceptable as an imperative. However, some experiencer predicates can only be used to describe spontaneous or reflexive events, such as *sabisii* 'lonely' and *samui* 'cold.'

The inventory of predicates that can appear in such constructions is nevertheless highly selective. They are limited to "adjectives of sensation and emotion" (Hashimoto, 2015). When I, the speaker, say *I am lonely*, I can sense and experience my own loneliness (326a). The predicate *sabishi* 'lonely' as a verbal *de se* predicate requires a *de se* subject. This rules out (326b).

(326)   Predicates of direct experience in Japanese

    a.   *watashi-wa sabishi-i.*
        I-TOP   lonely-PRS

        'I am lonely.'

    b. *Mary-wa   sabishi-i.*
        Mary-TOP lonely-PRS

        (Int.) 'Mary is lonely.'

In contrast, other adjectives, such as *omo* 'heavy,' are not verbal *de se* predicates and thus allow a proper name (327a) or even an inanimate object (327b) to appear in the subject position. They pose no *de se* requirement.

(327) a. *Taro-wa   omo-i.*
     Taro-TOP heavy-PRS

     'Taro is heavy.'

   b. *sono taburetto-wa omo-i.*
     that   tablet-TOP   heavy-PRS

     'That tablet is heavy.'

In this section, I have shown that verbal *de se* expressions are different from nominal *de se* expressions on both syntactic and semantic fronts. Verbal *de se* expressions are syntactically diagnosed as obligatory control, while nominal *de se* expressions and their antecedents exhibit more flexibility in their placement. In addition, verbal *de se* expressions are very selective in the type of events they denote. I have no knowledge of any nominal *de se* expressions that pose analogous restrictions on their predicates.

In the rest of this chapter I address two questions that naturally follow from the separation of verbal and nominal *de se* expressions. The next three sections are in answer to the following questions.

(328) a. What is the nature of *de se* interpretations that underlie both verbal and nominal *de se* expressions?
   b. Why are verbal *de se* expressions syntactically more restrictive than nominal *de se* expressions?

5.2   Event *de se* vs. individual *de se*

In this section I address the obligatory *de se* interpretation, the property that connects verbal *de se* expressions with nominal *de se* expressions. From what we see in Section 5.1, the subjects of verbal *de se* expressions are syntactically distinct from nominal *de se* expressions. The remaining question, however, is whether they are also semantically distinct. My answer to the question is not a simple yes or no. I will argue below that the two are related by the same underlying mechanism. In both cases the attitude holder

203

ascribes a certain property to herself. The devil, however, is in the details. For nominal *de se* expressions the attitude holder self-ascribes the property of being identical with a certain individual (i.e., individual *de se*). For verbal *de se* expressions things are a bit more complicated. They are read *de se* with respect to both the individual argument and the event argument (i.e., event *de se*). In this section I examine the semantics of verbal *de se* expressions we have identified, and show the event *de se* vs. individual *de se* split (Schlenker, 2005) can nicely capture the semantic differences between verbal and nominal *de se* expressions.

5.2.1 Two types of selves

It has long been argued that more than one type of selves are involved in *de se* ascription. While most bound pronouns are generally vague about which self they invoke, PRO under attitude verbs such as *imagine* and *remember* is only associated with one specific kind. A classical example comes from Vendler (1982: 161).

> We are looking down upon the ocean from a cliff. The water is rough and cold, yet there are some swimmers riding the waves. "Just imagine swimming in that water" says my friend, and I know what to do. "Brr!" I say as I imagine the cold, the salty taste, the tug of the current, and so forth. Had he said "Just imagine yourself swimming in that water" I could comply in another way to: by picturing myself being tossed about, a scrawny body bobbing up and down in the foamy waste. In this case, I do not have to leave the cliff in imagination: I may see myself, if I so choose, from the very same perspective. Not so in the previous case: if I indeed imagine being in the water, then I may see the cliff above me, but not myself from it.

I call the two types of selves internal and external perspective, respectively. As we have seen from the contrast between (329a) and (329b), only internal perspective is involved when interpreting PRO.

(329) a. Just imagine PRO swimming in that water.   (✓internal, *external)
     b. Just imagine yourself swimming in that water.   (✓internal, ✓external)

Higginbotham (2009: 216) also notices that the two types of selves lead to different truth conditions. In the real world, (330b) is clearly false as no one else but Churchill could possibly have the first person memory of Churchill's original experience. Everyone else who remembers that speech has to take an external perspective. In contrast, (330a) is true as long as Churchill is able to bring to mind some part of the experience of giving that speech.

(330) a. Only Churchill remembers PRO giving the speech (about blood, toil, tears, and sweat).
     b. Only Churchill remembers his giving the speech (about blood, toil, tears, and sweat).

Let us give (330b) the following vanilla semantics.

(331) $(\forall x \neq \text{Churchill}) \neg (\exists e)$ Remember[x,e, $^{\wedge}(\lambda e')$ give(x, the speech, e')]

For Higginbotham (2009: 233), the internal perspective (330a) is minimally different from (330b) in the semantic contribution of PRO, roughly sketched as follows.

(332) $(\forall x \neq \text{Churchill}) \neg (\exists e)$ Remember[x,e, $^{\wedge}(\lambda e')$ give(σ(e)&θ(e'), the speech, e')]

Higginbotham's analysis relies on the thematic roles (σ and θ) that PRO and its antecedent bear with the speech event and the thought event, in this particular case, the event of remembering (e) and the event of giving the speech (e'). (332) can be roughly paraphrased as "Churchill is the only one that is an agent of his remembering who remembers being an agent of giving the speech." In order for (330a) to be true, σ(e)&θ(e') must be true. That is to say, Churchill must bear relevant thematic roles with both events.

Such an analysis invests heavily in the semantics of PRO because it assumes that PRO gives rise to the internal perspective reading. This is problematic because, as Landau (2013a) rightfully points out, *de se* is not inherent to PRO. In non-attitude contexts, PRO does not receive obligatory *de se* reading (Landau, 2013a: 32-33).

(333) *Scenario:* John's computer has been hacked, and some secret files have been copied from it by a business competitor. John's company holds an urgent meeting to decide on the necessary measures. John has no idea that his own computer was the one that was hacked, but he is determined to punish any careless workers who failed to protect their computers against malicious attacks.
John$_i$ was furious mad [despite PRO$_i$ being the careless worker himself].

It is clear in this specific context, *John*, the controller of PRO, does not take an internal perspective of the adjunct control construction.

In the next section I show that the assumption that Higginbotham rests on is invalid, and is confounded by the juxtaposition of nominal and verbal *de se* expressions in the literature. In particular, I argue that the internal perspective reading is unique to verbal *de se* expressions. (330a) invokes internal perspective not because of the existence of PRO in the embedded clause but because the embedded clause manifests a verbal *de se* expression.

5.2.2 Verbal *de se* expressions ascribe internal perspective

I have shown that verbal *de se* expressions, like nominal *de se* expressions, must be interpreted *de se*. However, this relation is only uni-directional. Having no mistaken identity does not guarantee the use of verbal *de se* expressions. Schlenker (2011: 1596) observes that infinitives (334a), but crucially not indicatives (334b), obligatorily ascribe internal perspective in French. In the following context, the speaker recognizes herself as the one who shivers, but this identity is not obtained from an internal perspective.

(334) Scenario: I see myself in a mirror, realize that this is me, and get the impression that the person I see is shivering.

    a.   *J'ai   l'impression   de greloter.
          I have the impression to shiver

        'I have the impression to shiver'   (French infinitive)

    b.   J'ai   l'impression   que je grelotte.
          I have the impression that I shiver

        'I have the impression that I shiver'   (French indicative)

In other words, when uttering (334a), not only I have to be the experiencer of both the shivering event and the impression-having event, the experience I have must be gained first-hand. I must feel my body trembling via my own sensations, not by looking at a mirror. The indicatives (334b) do not have such a requirement.

The other verbal *de se* expressions I have identified in this chapter systematically encode the same internal perspective as French infinitives. I will present three examples from Newari, Korean and Japanese, respectively, to illustrate this point. It is worth emphasizing that the examples that follow are not a result of cherry-picking. The internal perspective requirement is very robust for verbal *de se* expressions.

As a first example, Newari conjunct verbs require the attitude holder to be the first-person narrator, portraying exactly what she sees or experiences as the event unfolds. In the following context, the individual identity holds between baby Shyam, the toy breaker, and adult Shyam, the attitude holder. But the adult Shyam is not reporting his in-body experience of the toy-breaking event, rather, he takes a spectator's perspective as if he is watching someone else breaking the toy. In this context, the use of the conjunct verb is not appropriate (335a).

(335) Scenario: Shyam is watching baby videos of himself. In one video, the six-month-old Shyam throws his toy truck to the wall and as a result the toy truck breaks into pieces. He says to his wife, "I really was a trouble maker. *I broke a toy* just like that."

    a. *Shyam-a   [wã: nheba tachyan-ā   dhakā:] dhāla.*
       Shyam-ERG (s)he.ERG toy   break-PST.CONJ that   said

       'Shyam$_1$ said that he$_1$ broke a toy.'

    b. *Shyam-a   [wã: nheba tachyat-a   dhakā:] dhāla.*
       Shyam-ERG (s)he.ERG toy   break-PST.DISJ that   said

       'Shyam$_1$ said that he$_1$ broke a toy.'

In Korean, the volitional modal *keyss* is restricted with the internal perspective reading. In the following context, I am not reporting my desire to carry out a certain event, rather, I am reporting my observation of that event as it unfolds. The volitional reading is not compatible with this scenario (336a). To the extent that the use of *keyss* is possible in such a context, the sentence must be interpreted as a prediction, in which case the subject can be overtly realized as a third person.

(336) Scenario: I am watching a baby video of myself. In the video, it is obvious that the baby, who is me, does not look happy and is about to throw a tantrum. The baby me suddenly lifts a toy truck in the air. Having watched that scene multiple times in the past, I say to my friend, 'I'm about to break that toy.'

    a. *Na-nun cangnankam-ul pwuswu-keyss-ta*
       I-TOP   toy-ACC   break-MOD-DECL

       'I will break the toy.'   (root, volitional)

    b. *(cy-ay) cangnankam-ul pwuswu-keyss-ta*
       that-kid toy-ACC   break-MOD-DECL

       'That kid will break the toy.'   (epistemic, conjectual)

Finally, predicates of direct experience also require that the attitude holder takes an internal perspective for the complement event. In a context where I do not directly feel cold, but deduce that feeling from seeing myself in a mirror trembling, I cannot truthfully utter (337a). Extra verb morphology, such as the evidential marker *sou*, 'it looks like' is necessary in this case (337b).

(337) Scenario: I see myself in a mirror, realize that it's me. The person I see in the mirror is shivering. So I say, "I am cold."

    a.   *_watashi-wa samui_
        I-TOP   cold

        'I am freezing.'

    b.   _watashi-wa samu-sou_
        I-TOP   cold-EVID

        'I look freezing.'

5.2.3   Event _de se_ can be grammatically encoded

Anand (2011) proposes two major concerns of decomposing _de se_ attitudes. First, he takes the internal perspective reading of the gerundive complements, e.g., _Just imagine swimming in that water_, as merely a tendency, not a grammatical condition. Second, he observes that the internal perspective reading is only available under particular attitude verbs like _imagine_ and _remember_.

It is worth highlighting that the two observations are only valid in specific languages and for specific constructions, and as such do not refute the finer-grained distinction of _de se_. At best they show the distinction in question is not relevant in all languages and across all constructions. I have already shown in the previous section that some natural languages grammaticize the internal perspective reading. This alone necessitates a separation of distinct _de se_ attitudes. Furthermore, the fact that the internal perspective requirement can appear in root clauses, like (336) and (337), serves as a rebuttal of Anand's second observation.

In Section 5.4, I argue that the two types of _de se_ expressions are semantically distinct in terms of the Sentience projection, whose head abstracts over an event argument in verbal _de se_ expressions. For individual _de se_, the attitude holder self-identifies as the individual about whom she has the reported belief. For event _de se_, the attitude holder self-

209

locates in the event about which she has the reported belief. Both indicate self-ascription, with the difference lying in the specific property being self-ascribed. With individual *de se*, the attitude holder self-ascribes as being identical with an embedded individual. With event *de se*, the attitude holder self-ascribes as performing an action, or in the case of Japanese experiencer predicates, as experiencing an emotion or sensation, denoted by the embedded event. In (335a), the presence of the conjunct suffix essentially means Shyam self-ascribes the "break a toy" property. Suppose Shyam sees a toy and consequently breaks it, he is well aware of his role in the toy-breaking event. This is quite different from (335b), where Shyam reports as being involved in a toy-breaking event.

5.3   Previous accounts

In Section 5.1 I have reviewed the syntactic differences between verbal and nominal *de se* expressions and showed that verbal *de se* expressions are syntactically more restrictive than nominal *de se* expressions. More specifically, I have demonstrated that verbal *de se* expressions (i) require a bound pronoun in its subject position, (ii) must be bound locally, and (iii) receive only bound variable reading. An adequate syntactic account for verbal *de se* expressions should at least be able to derive these three properties. In the following subsections I review two syntactic proposals (Zanuttini et al., 2012; Landau, 2015) that do just that. However, since both proposals only aim to account for specific phenomena, they fall short of a unified account for verbal *de se* expressions. Moreover, I have demonstrated that verbal *de se* expressions are more selective in the types of events they are compatible with than nominal *de se* expressions. For both Zanuttini et al. (2012) and Landau (2015), the event *de se* interpretation shared by all verbal *de se* expressions, as discussed in Section 5.2, is quite unexpected. In the next section I present my own agreement-based analysis

that derives all the syntactic properties of verbal *de se* expressions and is also compatible the event *de se* ascription.

5.3.1 The syntax of jussives (Zanuttini et al., 2012)

Zanuttini et al. (2012) focus on the interpretive restrictions on the subjects of jussives. To recap what we have learned so far, I summarize the subject reference of the three jussive types—decisives, imperatives and exhortatives—in the following table.

Table 5.6: The Subject Reference of Jussives in Root Clause and Attitude Complements

	Decisives	Imperatives	Exhortatives
Root clause	Speaker	Addressee	Speaker+Addressee
Attitude complements	Matrix subj	Matrix indirect obj	Matrix subj+matrix IO

Their main claims can be outlined in (338). Needless to say this is an oversimplified representation of their proposal. Interested readers are referred to the original text for details.

(338) a. A functional projection JussiveP is present on top of TP in all and only jussive clauses.

   b. The Jussive head is born with interpretable person features. It bears a first person feature in decisives,[14] second person feature in imperatives, and a first person inclusive feature[15] in exhortatives.

   c. The Jussive head is an abstraction operator that binds the argument it agrees with.

According to this account, the interpretive restrictions on the jussive subject are a direct result of the Spec-Head agreement with the specific Jussive head. For instance,

---

[14]Zanuttini et al. (2012) only examine Korean jussives. For them the jussive head that bears first person feature is the promissive mood. I have avoided discussing promissives in this dissertation for the reason that they are not quite acceptable for my consultants. Since Zanuttini's et al analysis is meant to be extended to jussives crosslinguistically, replacing Korean promissives with Japanese decisives should lead to the same conclusion.

[15]This feature is designed to explain why the subject of exhortative refers to both the speaker and the addressee. However, it is not the person feature we typically see in the literature.

(339b) is the structural representation (Zanuttini et al., 2012: 1249) of the simple impera-tive (339a). The T head bears only uninterpretatble case feature, and moves up to merge with the Jussive head that has an interpretable person feature. Together they bundle as one unit (T-Jussive) with both features. The subject enters the derivation with an unin-terpretable case feature and person feature, forming an agreement relation with T-Jussive. Once the Spec-Head agreement is formed, the case feature is valued as Nominative and thereby eliminated. The agreement relation then guarantees that the subject and the Jus-sive head share the same person feature. As a result, the subject of imperatives are always interpreted as the second person.

(339) a. *cemsim-ul   sa-la*
          lunch-ACC buy-IMP

       'Buy lunch!'   (Imperative, 2nd person subject)

   b.
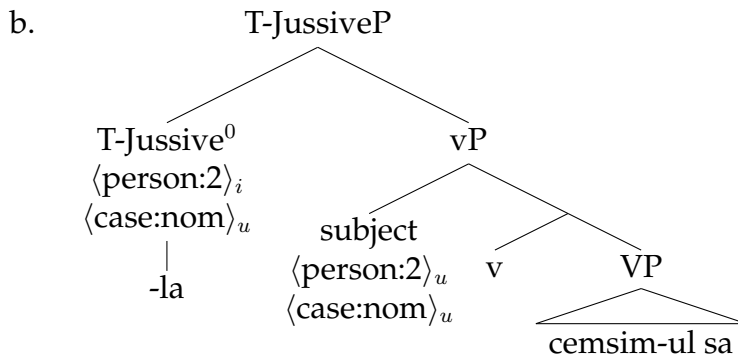
A similar derivation is proposed for decisives and exhortatives, with the only difference being the person feature that the Jussive head enters the derivation with.

   Since the interpretive restrictions of the jussive subjects rely on the Spec-Head agreement with the Jussive head, the special nature of the subject position is therefore expected. More specifically, the local subject is always the first active goal in the Jussive head's c-command domain. As soon as the subject DP has its person feature valued, it gets spelled out at the next phase edge (i.e., the smallest CP that contains the jussive clause), as a result, the clause boundary delimits the binding of jussive subjects. Finally,

in this framework the subject is a variable dependent on the operator it agrees with for reference. All three properties shared by verbal *de se* expressions can find their roots in this analysis.

Directly adapting Zanuttini's et al account for all verbal *de se* expressions, however, faces many challenges. First of all, they take the person restrictions of the Jussive head as unique for jussives. This is too narrow as many of the verbal *de se* expressions (e.g., Newari conjunct morpheme, Korean volitional modal and Japanese experiencer predicates) appear in non-jussive clauses. If we assume a functional head analogous to Jussive in declaratives and interrogatives, we lose the contrast between verbal *de se* expressions and their non-*de se* counterparts. If a Jussive-style head shows up in all sentences, verbal *de se* expressions would be everywhere. The functional projection we postulate may interact with certain sentence mood, but does not have to.

Secondly, as I have repeatedly shown in the previous section, the subject of each verbal *de se* expression is interpreted in a very specific way. The following table[16] serves as an addition to Table 5.6.

Table 5.7: The Person Restrictions on Subjects of Verbal *de se* Expressions

	Conjunct verbs	Volitional modals	Experiencer predicates
Main declaratives	Speaker	Speaker	Speaker
Main interrogatives	Addressee	Addressee	Addressee
Embedded declaratives	Matrix subj	Matrix subj	Matrix subj
Embedded questions	—	Matrix ind. obj	Matrix ind. obj

This is not predicted in their account. The Jussive head bears different person features resulting in different interpretive restrictions on the subject, but in their account the person features of each Jussive head is determined by the interpretive restrictions on the subject. This is rather circular and loses sight of some important generalizations.

---

[16]None of the Newari speakers I have consulted with like embedded questions.

What is more, Zanuttini et al. (2012) do not examine the interpretive restrictions of embedded jussives. It is of course possible to propose a Jussive head for embedded jussives by the same token, but it is not clear what person features it should bear. For instance, compare the following embedded imperatives in Japanese.

(340) a. *Taro-wa   Hiroshi-ni   soozi si-ro-to   itta.*
      Taro-TOP Hiroshi-DAT clean make-IMP-COMP said

   'Taro$_1$ told Hiroshi$_2$ PRO$_2$ to clean.'

   b. *Taro-wa   anata-ni soozi si-ro-to   itta.*
      Taro-TOP you-DAT clean make-IMP-COMP said

   'Taro$_1$ told you$_2$ PRO$_2$ to clean.'

The embedded subjects of the two examples are interpreted quite differently. The null subject refers to Hiroshi in (340a) but to the addressee in (340b). In both cases the Jussive head is imperative, but one would have a third person feature, whereas the other a second person feature. This is rather ad hoc. The reality is, the subject of the imperative agrees with whichever person feature the matrix indirect object has, the Jussive head, if it exists at all, does not have a readily available person feature before the matrix indirect object enters the derivation.

Last but not least, it is not clear how their account would derive the obligatory *de se* reading of the jussive subjects, let alone of the subjects of other verbal *de se* expressions.

## 5.3.2   The syntax of logophoric control (Landau, 2015)

Landau (2015) aims to offer a syntactic analysis for logophoric control. The standard semantic analysis of logophoric control, as he correctly points out, does not predict (i) PRO is necessarily a subject, (ii) the control of PRO is local, and (iii) PRO inherits morphological features from its controller, among other things. To tackle this problem, he adopts the

following assumptions, all of which are independently motivated in the previous litera-

ture.

(341) a. The complementizer of an attitude complement introduces context coordinates.

b. The context coordinates are structurally represented in the left periphery of the attitude complement.

c. The controller binds a variable, a minimal pronoun in the sense of Kratzer (2009), among the context coordinates.

d. In logophoric control, FinP, selected by the complementizer, is a predicate that needs to be saturated by a pronominal variable.

In this framework, the derivation of a loghophoric control construction (342a) can

be sketched out in (342b).

(342) a. Joe asked to see the doctor.

b.
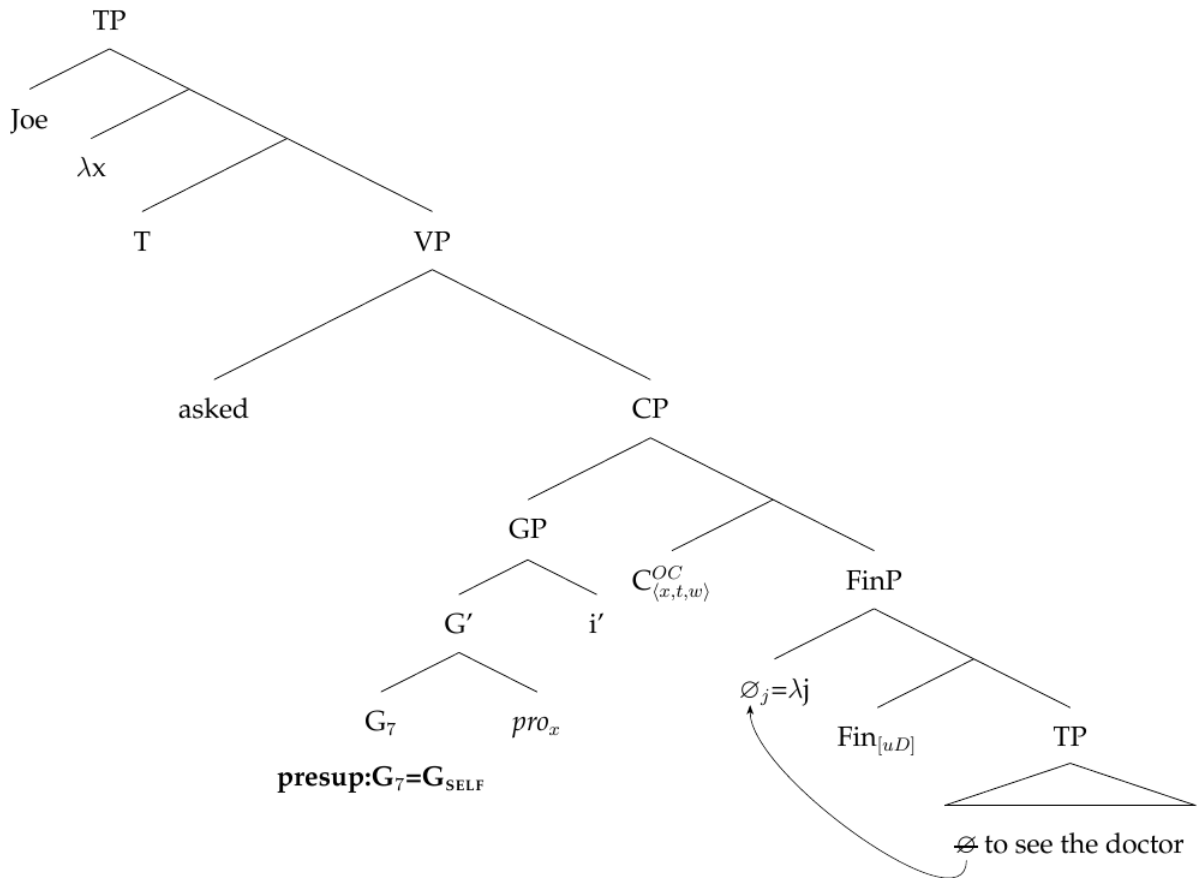
PRO enters the derivation as a minimal pronoun, a variable. When it merges with the Fin head, it moves to Spec, FinP, triggered by Fin's unvalued D-feature, and turns into a λ-operator. Next, FinP merges with the attitude complementizer C^{OC} which projects in syntax the context coordinates that indicate the speaker and addressee of the attitude context. In this particular case, in the left periphery of the attitude report, as a bare minimum we have an individual variable *pro*, which is itself a minimal pronoun. At this point in the derivation, PRO as an operator abstracts over its trace. The FinP predicate is saturated by the output of applying the concept generator function G_{SELF}, to be discussed shortly, to *pro* and the reported context. In effect, FinP is saturated by the AUTHOR of the reported context, i.e., the matrix subject. In other words, the binding of PRO is a two step process—the controller *Joe* binds *pro* via variable binding and *pro* binds PRO via predication.

Since the Fin head searches in its domain for an interpretable D-feature, the subject is always the first DP it attracts. Therefore PRO is necessarily the subject. The bound variable reading of PRO is automatically derived as PRO is designed to co-vary with its matrix controller. To account for the obligatory *de se* reading of logophoric control, Landau proposes a concept generator function G_{SELF}, posited by Percus and Sauerland (2003), as part of the lexical entry of the attitude complementizer C^{OC}. The G_{SELF} function applies to the pronominal variable *pro* and maps it to the AUTHOR function. For an attitude context c', essentially we have $G_{SELF}(g(x))(c')=$AUTHOR(c'). As a result, the author of the attitude report, aka the controller, self-identifies as the person *pro* refers to, deriving the *de se* interpretation. The locality of logophoric control is also derived. Since predication must be saturated by its own arguments, both the G_{SELF} function and the FinP predicate must apply to a local variable. The controller is local to *pro* which in turn is local to PRO.

Although Landau does not directly address root clause verbal *de se* expressions, it is possible to extend this analysis to them. In his view, first and second person pronouns simply denote the AUTHOR and ADDRESSEE functions which yield *de se*. There is no need

in an additional concept generator to introduce these functions. Indexical pronouns, unlike PRO, simply have that meaning built into them.

There is one challenge that Landau's analysis shares with Zanuttini et al. (2012) when extending it to other verbal *de se* expressions. That is, it cannot predict the specific way in which the subject of the verbal *de se* expression shifts its reference, as summarized in Tables 5.6 and 5.7. Landau intentionally keeps the core grammar (i.e., the syntax and the LF) neutral in the issue of controller choice and leaves the controller choice to "post-LF interpretive processes" due to "the considerable cross-speaker variability in judgments on control shift" (Landau, 2015: 76). Such treatment, regretfully, lets the set pattern we have observed from language to language fall between the cracks.

A more serious problem of Landau's account is his adoption of the concept generator function. The concept generator, at its inception, is designed for pronouns that are ambiguous between *de se* and *de re* readings, as illustrated in (263), repeated in (343) below. The idea, per its inventors (Percus and Sauerland, 2003), is to give different yet related LFs for *de se* and *de re* attitudes.

(343)   Joe thinks that he will win (the sushi-making contest).

A formal review of concept generator is far beyond the scope of this dissertation. The basic idea is this: the attitude verb such as *think* or *believe* has as its internal argument a function from concept-generators to propositions, i.e., of type $\langle\langle e, \langle s, e\rangle\rangle, \langle s, t\rangle\rangle$. The concept-generator function, in turn, is a function from individuals to concepts/descriptions, i.e., of type $\langle e, \langle s, e\rangle\rangle$.

In more concete terms, there exists a description that characterizes the bound pronoun *he* in (343). Percus and Sauerland (2003) calls this description an "acquaintance-based concept" C. For (343) to be true, the following must be true.

(344) $\exists C$ for x in w such that $\forall \langle y, w' \rangle \in$ beliefs(x,w), C(w') will win in w'.

For instance, in the blind tasting scenario, Joe's *de re* belief is something like *the person who has made this sushi* will win the contest. In plain English, the *de re* reading of (343) is a result of the following truth conditions. First, in the actual world w, Joe is the one who has made the winning sushi. Second, for all possible worlds w' compatible with Joe's belief, the individual who has made the winning sushi in w' will win in w'. In other words, the identity between *Joe* and *he* is recognized in the actual world, not in Joe's mind.

What happens with the *de se* reading, then? Anand (2006) considers it as a special case of *de re*. Specifically, the *de se* reading is a result of the attitude holder bearing a reflexive acquaintance relation with the embedded context. In his proposal, C is a function from contexts to entities, i.e., of type $\langle \kappa, e \rangle$ instead of $\langle s, e \rangle$. The resulting attitude complement is, accordingly, of type $\langle \langle e, \langle \kappa, e \rangle \rangle, \langle \kappa, t \rangle \rangle$. Simply put, C maps contexts to context tuples. For Anand (2006), there is no dedicated *de se* LF. The truth condition for the *de se* reading of (343) can be sketched below.

(345) $\exists C$ for x in w such that $\forall \langle y, i' \rangle \in$ beliefs(x,w), C(i') will win in w'
       where C(i') = AUTHOR(i')

With this reading, the identity between *Joe* and *he* is recognized in Joe's mind. His belief is something like *the person who is me* will win the context.

Anand treats PRO as a variable with the following presupposition (Anand, 2006: 29). The obligatory *de se* interpretation of logophoric control arises as the existence of PRO dictates that the concept C is identity.

(346) $[\![PRO_i]\!] = \lambda G : G(g(i)) = author.g(i)$

While Anand's proposal can account for the obligatory *de se* interpretation of nominal *de se* expressions, it does not discriminate nominal *de se* expressions from verbal ones. As repeatedly demonstrated in this chapter, in many languages *de se* is grammatically en-

coded on the verb. The contrast between the two types of *de se* expressions is reproduced below.

(347)   Long-distance reflexives vs. regular pronouns in Mandarin (Huang and Liu, 2000: 158)

    a. *zhāngsān shuō páshǒu   tōu-le   **zìjǐ**-de   píbāo.*
        Zhangsan say   pickpocket steal-PERF self-POSS purse

        'Zhangsan said that the pickpocket stole his purse.'   (only *de se*)

    b. *zhāngsān shuō páshǒu   tōu-le   tā-de   píbāo.*
        Zhangsan say   pickpocket steal-PERF s/he-POSS purse

        'Zhangsan said that the pickpocket stole his purse.'   (*de se*, non-*de se*)

(348)   Conjunct vs. disjunct marking in Newari

    a. *guru   dhāl-a   ki   wa   parisram   yan-**ā***
        teacher say-PST.DISJ that s/he work.hard do-**PST.CONJ**

        'The teacher said he worked hard.'   (only *de se*)

    b. *guru   dhāl-a   ki   wa   parisram   yat-**a***
        teacher say-PST.DISJ that s/he work.hard do-**PST.DISJ**

        'The teacher said he worked hard.'   (*de se*, non-*de se*)

It is plausible to assign distinct semantics for the LDR *zìjǐ* and the regular pronoun *tā* in (347). Extending the same analysis to (348) would result in a rather unwelcome conclusion—Newari pronouns are always lexically ambiguous between a *de se* pronoun and a regular pronoun. It makes no predictions about the distribution of the conjunct forms. What is more, such a treatment would lose sight of a special semantic property shared by all verbal *de se* expressions, i.e., the attitude holder of verbal *de se* expressions must always take an internal perspective of the complement situation (Section 5.2).

Now that we have seen the pros and cons of two earlier proposals, in the next section I present my own syntactic analysis of verbal *de se* expressions.

5.4 Analyzing verbal *de se* expressions

In this section I present my own analysis. I borrow two important insights from the previous accounts. Following Zanuttini et al. (2012) I argue that the interpretive restrictions on subjects of verbal *de se* expressions are a result of Spec-head agreement with a functional head in the Sentience domain. My analysis of verbal *de se* expressions is based on the structure of the Speech Act domain developed in Chapter 2. In order to unify root clauses and attitude complements, I assume that each root clause is embedded under a performative layer, the saP, where the speaker and addressee act as syntactic arguments. A separate projection, the senP, is present in the left periphery of every clause, and its argument, a perspectival expression, may receive interpretation from higher arguments. It can be considered as a "hyperlink"[17] to matrix arguments. In the present framework, the subject and indirect object of root clauses with propositional attitude verbs play the same roles with respect to attitude reports as speech participants do with respect to root clauses. Both can provide reference for the perspective shifter in Spec, SenP. In Landau's (2015) proposal, the attitude complementizer C^{OC} projects an individual variable in its specifier and abstracts over contexts. It is roughly equivalent to the Sen head in my analysis. The main difference is that in my analysis, the matrix arguments not only are projected in syntax, they are also structurally organized (Section 2.1.3.2). For Landau, as far as I can see, the context coordinates have a rather flat structure.

5.4.1 The fine structure of the Sentience Projection

In Chapter 3 I have reviewed three semantic properties that help determine the choice of the perspective, namely, knowledge, responsibility and internal perspective. In addition, I have hypothesized the following implicaitonal hierarchy.

---

[17]This analogy is credited to Craige Roberts (p.c.).

(349) Knowledge → Responsibility → Internal perspective

The hierarchy (349), if it holds, means that crosslinguistic variation of point-of-view phenomena is highly constrained. Note that this is not to say there are only three types of point-of-view phenomena. It is entirely possible that there are more semantic properties crucial to our understanding of point-of-view expressions that are left uncovered.

So far I have compiled a list of point-of-view phenomena, which I call verbal *de se* expressions. Given the differences in their sensitivity to the semantic properties, we can classify them as follows.

Table 5.8: Three Types of Point-of-View Phenomena (Final version)

|		Knowledge	Responsibility	Internal Perspective
I	Newari conjunct marking	✓	✓	✓
	Korean volitional modal	✓	✓	✓
II	Canonical control	—	✓	✓
	Jussives	—	✓	✓
III	Gerundive complements	—	—	✓
	Predicates of direct experience	—	—	✓

We have already seen in Section 5.2 that the subjects of all verbal *de se* expressions must take an internal perspective of the complement event. While Newari conjunct marking and Korean volitional modal are sensitive to all three properties, canonical control constructions and jussives are not affected by the seat of knowledge. This is because canonical control and jussives denote desires and actions, not propositions (Section 3.4). There are no truth conditions in these constructions for anyone to assess. Finally, as I have shown in various places of this dissertation, responsibility plays a key role in Newari conjunct constructions (Section 3.2), canonical control constructions (Section 4.3), Korean volitional modal constructions and Japanese/Korean jussives (Section 5.1.3). The subjects of predicates of direct experience, such as *sabisii* 'lonely' and *samui* 'cold,' are not actively responsible for, but merely reactive to, events and situations. Similarly, no responsibility

requirement is posed on the gerundive complements of verbs like *imagine* and *remember*. As illustrated in the following examples, the gerund can be a stative predicate (350a), or denote an unintentional event (350b).

(350) a. Imagine PRO being the U.S. president surveying the Gulf oil spill. What would you do? (Anand, 2011)

    b. I remember PRO falling downstairs. (Higginbotham, 2009: 231)

In this dissertation I take a feature geometric approach (Harley and Ritter, 2002) to the structural organization of these semantic properties. Specifically, I argue that the Sentience domain consists of three functional projections, each corresponding to a semantic property in (349). The implication relation is captured through structural dependence. This is schematically represented below.

(351) The fully articulated Sentience Projection
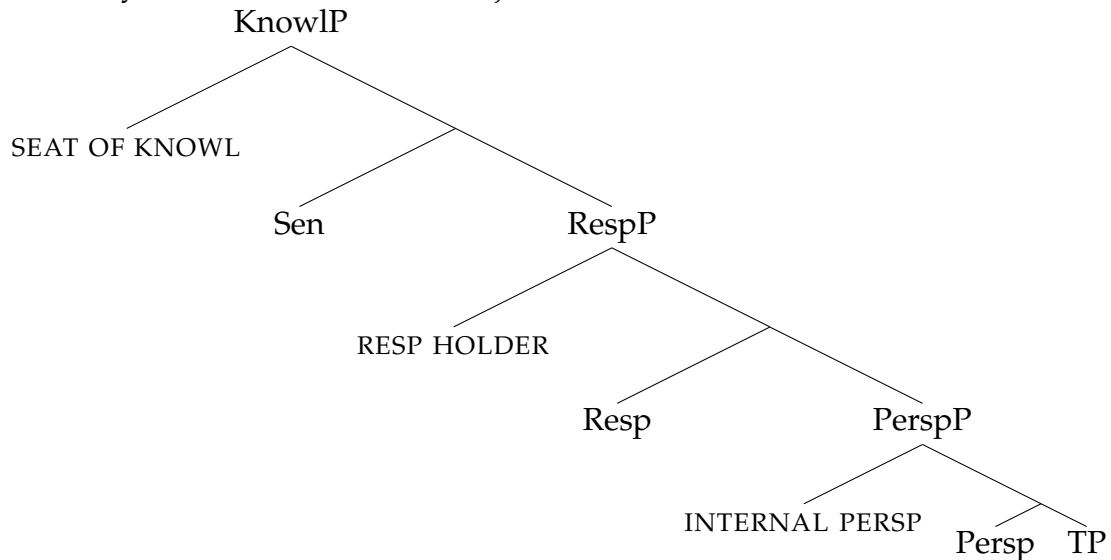
This fully articulated structure is only relevant in Type I point-of-view phenomena, namely, Newari conjunct constructions and Korean volitional modal constructions. The KnowlP is not present for jussives and canonical control constructions. For the third type of point-of-view phenomena in Table 5.8, the Sentience domain contains PerspP only.

5.4.2 Deriving event *de se*

The grammatical mechanisms I use to derive verbal *de se* expressions are defined as follows (Kratzer, 2009: 195-197).

(352) a. Feature Transmission under Binding
The ϕ-feature set of a bound DP unifies with the ϕ-feature set of the verbal functional head that hosts its binder.

b. Predication (Specifier-Head Agreement under Binding)
When a DP occupies the specifier position of a head that carries a λ operator, their ϕ-feature sets unify.

c. Agree
The ϕ-feature set of an unindexed head α that is in need of ϕ-features (the probe) unifies with that of an item β (the goal) if β is the closest element in α's c-command domain that has the needed features.

Following Kratzer (2009) I assume the feature agreement between the binder and the bindee is mediated by a verbal functional head. Call it F. The operator-variable agreement is a three-step process, as illustrated below. First, the functional head F serves as a λ-abstractor and binds a variable x. Next, F agrees with the DP in its specifier in terms of ϕ-features. Finally, F transmits the newly acquired ϕ-features to the bound variable x under binding.

(353) Operator-variable agreement
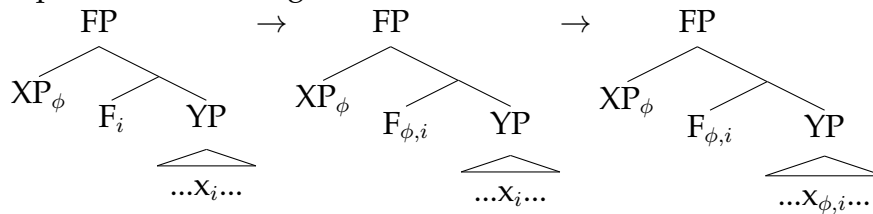
With this setup, let me start with the simplest case—the gerundive complement.

(354) a.   I remember PRO falling downstairs.   (Higginbotham, 2009: 231)

   b.
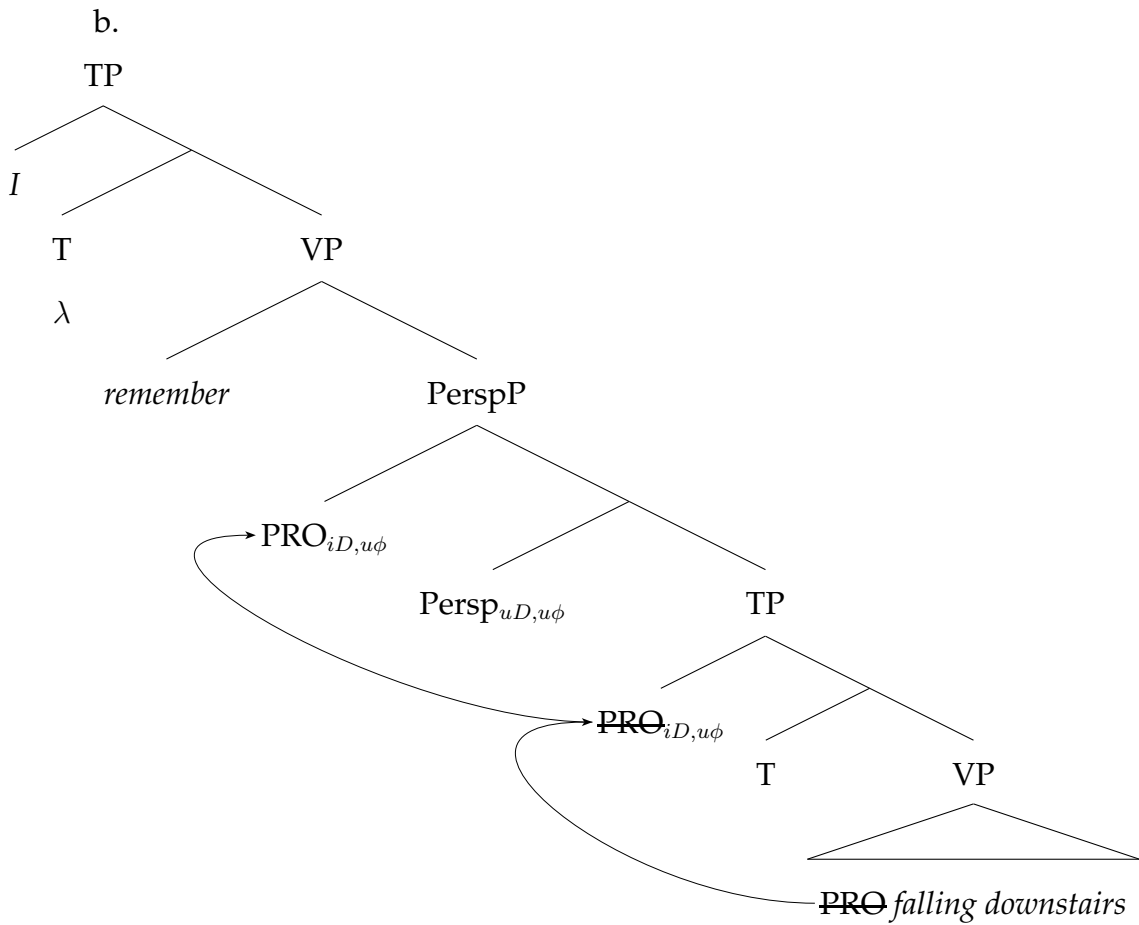
The PRO subject of the gerundive complement enters the derivation with an interpretable D feature and uninterpretable ϕ-features. Triggered by T's uninterpretable D feature, PRO moves to Spec,TP. In search of a goal with matching ϕ-features, PRO further moves to the edge of the PerspP. The matrix T, being a λ-abstractor, binds the variable PRO. Having established this binding relation, T acquires its subject's ϕ-features, in this case, first person singular, and then transmits them to PRO. As a result, PRO is interpreted as *I* in (354a).

The Persp head is also a λ-operator. Unlike the matrix T, Persp abstracts over both an individual variable (x', i.e., PRO) and an event variable (e'). It maps the event variable

e' in the attitude complement to the speech event e in the matrix clause, and the individual variable x' to the argument of the speech event, i.e., x. This is schematically represented as follows.

(355) $[\![\mathrm{Persp}]\!]^{e,x}([\![TP]\!]) = \lambda e'.\lambda x'.[\![TP]\!]^{[e\rightarrow e', x\rightarrow x']}$

This analysis derives the syntactic properties shared by all the verbal *de se* expressions. The subject position is special because it contains the closest DP to the Persp head. Since it is born as a minimal pronoun, devoid of ϕ-features, it always acts as a bound variable dependent on its local binder for interpretation. The antecedent of the verbal *de se* expressions is necessarily local, as the Persp operator must be saturated by the most local context.

The Persp head is the key that helps distinguish verbal *de se* expressions from nominal *de se* expressions. While both are read *de se* with respect to the individual argument, verbal *de se* expressions are also read *de se* with respect to the event argument. Recall in Section 5.2 that all verbal *de se* expressions are read event *de se*. In the present account this is because the SenP that is present in all point-of-view expressions minimally contains the PerspP.

The goal of this chapter is to set up the stage for more productive discussion of event *de se*. I have shown that Schlenker's (2011) intuition of the contrast between individual *de se* and event *de se* is reaffirmed in language after language. The traditional way of proposing various lexical semantics for the subject PRO *per se* is unlikely to explain this contrast. I do not take it as a coincidence that event *de se* is marked on verbs or verbal functional heads. In this chapter I try to steer the focus from pronominals to functional heads, with the hope that a step towards this direction would bring us closer to a full account for event *de se*.

5.4.3 Deriving responsibility

Now let us turn to the jussives. As an illustration, I use Korean root imperatives.

(356) *cemsim-ul   sa-la*
      lunch-ACC buy-IMP

    'Buy lunch!'   (Imperative, 2nd person subject)
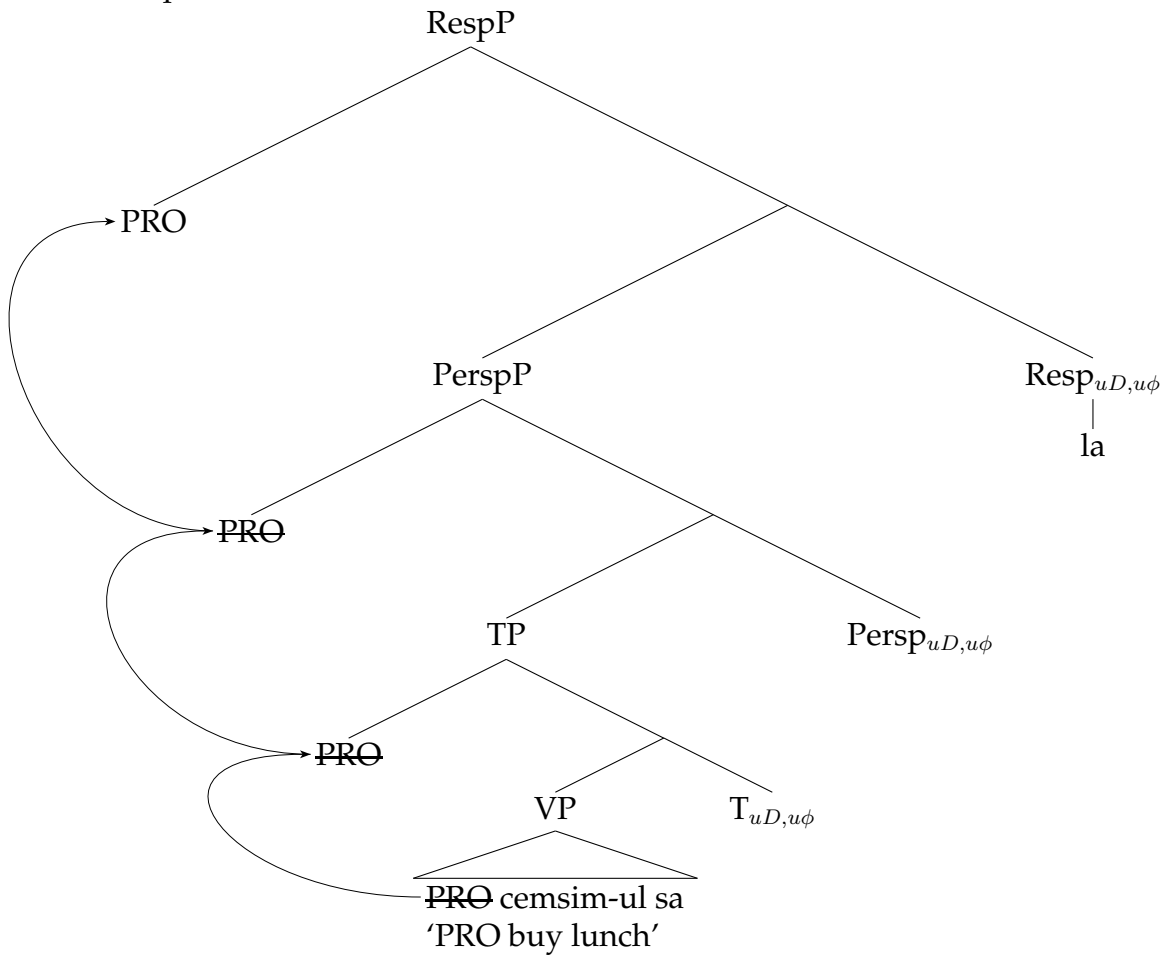
I assume that the imperative mood morpheme *la*, along with other jussive mood morphemes, are merged at the head of RespP. It is structurally analogous to Zanuttini et al.'s JussiveP, with three notable differences.

(357) a.   The RespP is not unique to jussive clauses and is present across clause types. Consequently, what differentiates jussive clauses from non-jussive ones is not the presence of the RespP, but the morphological make-up of its head. Specifically, it has uninterpretable ϕ-features that are in need of valuation.

     b.   The Resp head of jussive clauses is not borne with interpretable person features. It enters the derivation with uninterpretable ϕ-features and only receive its interpretation after feature evaluation.

     c.   The Resp head always selects the functional projection PerspP, as discussed in previous sections. This selectional restriction is determined by the implicational hierarchy developed in Chapter 3.

With this setup, the derivation of the root clause imperative (356) is represented below. Recall in Chapter 2 that each root clause consists of a Speech Act layer (SpP and AdrP) and a Sentience layer (SenP). The second layer in this case consists of a RespP and a PerspP.

(358)   The derivation of Korean root-clause imperatives

a.   Step 1

RespP
- PRO
- PerspP
  - PRO
  - TP
    - PRO
    - VP
      - PRO cemsim-ul sa
        'PRO buy lunch'
    - $T_{uD,u\phi}$
  - $Persp_{uD,u\phi}$
- $Resp_{uD,u\phi}$
  - la

b. Step 2

```
                              SpP
                 ┌─────────────┴──────────────────┐
          SPEAKER                                  │
                               ┌──────────────────┴──────┐
                            AdrP                          Sp
                   ┌─────────┴──────────┐
        ADDRESSEE_iφ                     │
                          ┌─────────────┴────────┐
                       RespP                    Adr_iφ
                ┌────────┴───────┐                λ
            PRO_iφ                │
                        ┌────────┴────────┐
                     PerspP              Resp
                  ┌────┴────┐             │
              PRO cemsim-ul sa           la
              'PRO buy lunch'
```
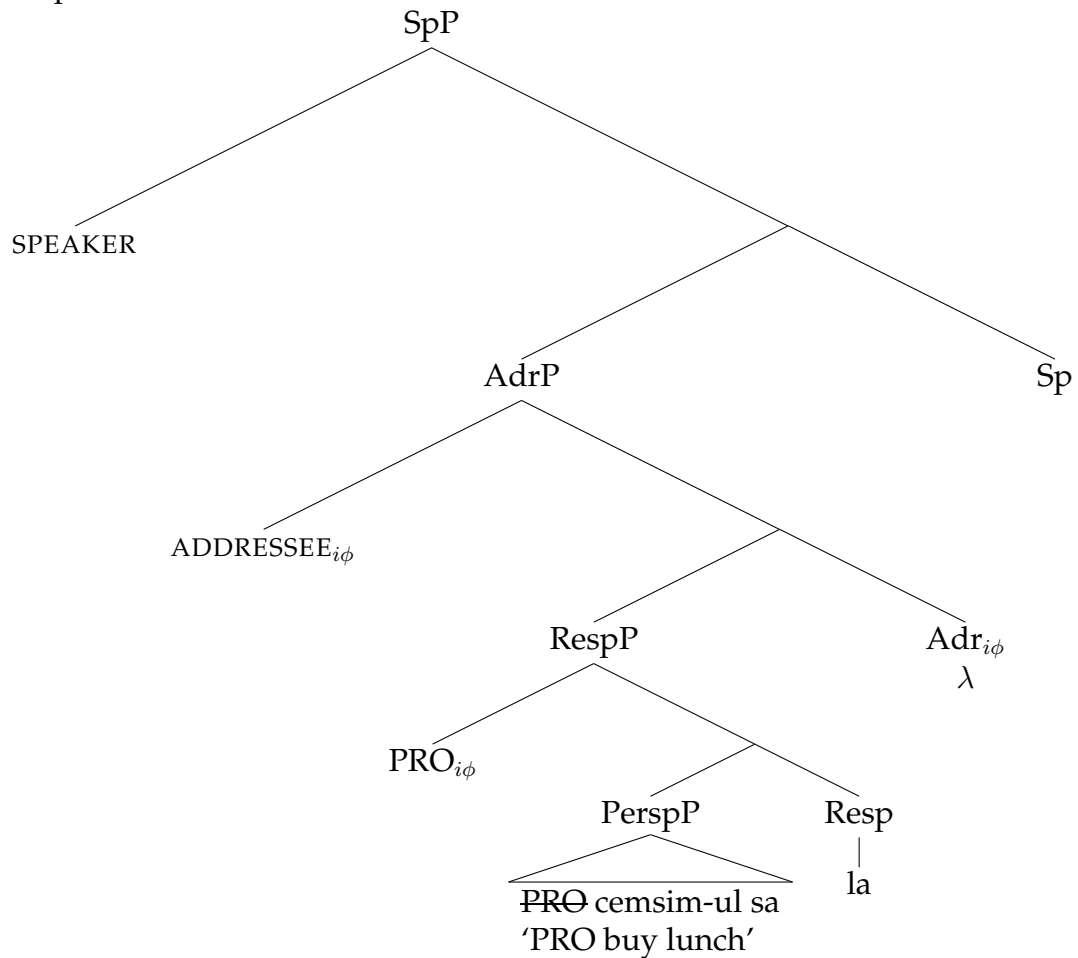
The readers should be familiar with the derivation in (358a). The PRO subject of the imperatives, attracted by uninterpretable D features of a series of functional heads, moves all the way up to Spec,RespP. At this point of derivation (358b), PRO is facing two potential goals that can check its ϕ-features, the speaker at Spec,SpP and the addressee at Spec,AdrP. We know that in imperatives, the perspective is addressee-oriented. PRO ends up getting ϕ-features from the addressee via operator-variable agreement with the Adr head. The question is what determines the choice of perspective?

For Zanuttini et al. (2012), the Resp head (i.e., the Jussive head in their framework) is borne with interpretable ϕ-features. The imperative morpheme *la* is intrinsically second person. The most serious problem of this account, as I argue in Section 5.3.1, is that it

predicts no perspective shifting in embedded jussives. Below I repeat the key pair of examples.

(359) a. *Taro-wa   Hiroshi-ni   soozi si-ro-to   itta.*
Taro-TOP Hiroshi-DAT clean make-IMP-COMP said

'Taro$_1$ told Hiroshi$_2$ PRO$_2$ to clean.'

b. *Taro-wa   anata-ni soozi si-ro-to   itta.*
Taro-TOP you-DAT clean make-IMP-COMP said

'Taro$_1$ told you$_2$ PRO$_2$ to clean.'

As we can see from (359), the subject of the imperative is not necessarily a second person. Rather, it agrees in person with the addressee of the imperative clause. It just happens to be the case that the addressee of a root imperative is always a second person.

To solve this problem, I assume that the Resp head introduces a controller choice function that maps Perspective to the appropriate attitude holder. Following Uegaki (2011) I define the controller choice function $\mathscr{F}$ as follows.

(360) $\mathscr{F} \in \{\lambda\langle w, x, y\rangle.\langle w, x\rangle, \lambda\langle w, x, y\rangle.\langle w, y\rangle, \lambda\langle w, x, y\rangle.\langle w, x \oplus y\rangle\}$

a. $\lambda\langle w, x, y\rangle.\langle w, x\rangle$: *de me* function
the attitude holder center is the individual argument of the complement

b. $\lambda\langle w, x, y\rangle.\langle w, y\rangle$: *de te* function
the addressee center is the individual argument of the complement

c. $\lambda\langle w, x, y\rangle.\langle w, x \oplus y\rangle$: *de nos* function
the attitude holder + addressee center is the individual argument of the complement

In Korean and Japanese, the jussive mood has distinct morphological realizations. I argue that the jussive morphology in these languages corresponds to different controller choice functions, as tabulated below. As a result, there is a one-to-one mapping between the jussive type and the choice of perspective.

Table 5.9: Explaining the Interpretive Restrictions on Jussive Subjects

Jussive Type	$\mathscr{F}$ Function	Root Subject	Embedded Subject
Decisive	*de me*	Speaker	Matrix Subject
Imperative	*de te*	Addressee	Matrix Indirect Object
Exhortative	*de nos*	Speaker+Addressee	Matrix Subject+Indirect Object

In English control constructions, any choice of the controller choice function is possible for $\mathscr{F}$. Consequently, PRO may be interpreted in more than one way. This account predicts that English more readily allows shifting prespectives, especially so for the class of so-called "fluid" control predicates, such as *propose*. When the control construction is embedded under *propose*, the sentence is three-way ambiguous (361). The PRO subject can be interpreted either as *Joe* the matrix subject, *Jill* the matrix indirect object, or the two of them together.

(361)   Joe$_1$ proposed to Jill$_2$ PRO$_{1/2/1+2}$ to go to Hawaii for holidays.

In my analysis the three interpretations of (361) have almost identical structures. They minimally differ from each other in the controller choice function the Resp head introduces. When the Resp head introduces the *de me* function, PRO is subject-controlled. When it introduces the *de te* function, PRO is object-controlled, and so on and so forth.

In the next section I review a structural approach to the choice of perspective. I will present empirical evidence to show that the perspective center in verbal *de se* expressions cannot be reducible to purely syntactic means.

5.4.4   An alternative approach to controller choice

There exists a purely syntactic account for controller choice for Japanese jussives. Fujii (2010), when analyzing the controller choice of Japanese embedded jussive mood, resorts to a locality-based account instead. He examines the four logical possibilities of controller choice and notices that the promissive mood is crucially not attested in Japanese (362b).

(362) a. DP$_1$ [PRO$_2$ ... Mood C] think/decide/plan/say (decisive)

b. DP$_1$ DP$_2$ [PRO$_1$ ... Mood C] promise (promissive, unattested)

c. DP$_1$ DP$_2$ [PRO$_2$ ... Mood C] say/order (imperative)

d. DP$_1$ DP$_2$ [PRO$_{1+2}$ ... Mood C] say/propose (exhortative)

The embedded imperative mood correlates with object control (362c). The embedded decisive mood correlates with subject control when there is only one matrix argument (362a). Below I repeat relevant examples from Section 5.0.3.2.

(363) a. *Taro-wa Hiroshi-ni boku-no beeguru-o tabe-ro-to meireisita.*
Taro-TOP Hiroshi-DAT my bagel-ACC eat-DEC-COMP ordered

'Taro$_1$ ordered Hiroshi$_2$ PRO$_2$ to eat my bagel.' (Imperative)

b. *Taro-wa boku-no beeguru-o tabe-yoo-to keikakusita.*
Taro-TOP my bagel-ACC eat-DEC-COMP planned

'Taro$_1$ planned PRO$_1$ to eat my bagel.' (Decisive)

When there are two matrix arguments, however, the same decisive mood marker exerts split control (362d). This is illustrated below (Fujii, 2010: 226). The sentence essentially means Taro said to Hanako, "Let's eat the bagel!" Fujii calls this exhortative mood.

(364) *Taro-wa Hanako-ni boku-no beeguru-o tabe-yoo-to teiansita.*
Taro-TOP Hanako-DAT my bagel-ACC eat-DEC-COMP proposed

'Taro$_1$ proposed to Hanako$_2$ PRO$_{1+2}$ to eat my bagel.'

Fujii argues that the controller choice in Japanese jussive mood constructions is determined by the Principle of Minimal Distance (Rosenbaum, 1967). The reason the promissive mood is unattested is because it would allow the subject of the embedded clause to be bound by the matrix subject, skipping over the indirect object, violating the PMD (365a). The exhortative mood is minimally different from the unattested promissive mood in that the second matrix argument is part of the controller, thus not an intervening element (365b).

(365) a. DP$_1$ $\boxed{\text{DP}_2}$ [PRO$_1$ ... Mood C] promise (promissive, unattested)

b. DP$_1$ DP$_2$ [PRO$_{1+2}$ ... Mood C] say/propose (exhortative)

For Fujii, the PMD, though not being able to serve its original purposes, given the existence of subject control verbs like *promise*, may correctly predict the controller choice in Japanese embedded jussives. There are a couple problems with this account. The first one concerns its extremely limited explanatory power. It cannot be extended to other verbal *de se* expressions. For instance, the subject pronoun of the volitional modal can and must be bound by the matrix subject. The presence of a second argument in the matrix clause does not intervene.

(366) *Inho-ka   Jwuhi-eykey sihem-ey tteleci-keyss-ta-ko   mal-ha-yess-ta.*
Inho-NOM Jwuhi-DAT test-LOC drop/fail-MOD-DECL-COMP tell-do-PST-DECL

Inho$_1$ told Jwuhi$_2$ he$_{1/*2/*3}$ would willfully fail the test. (volitional)

Furthermore, given the locality account, it seems rather accidental that *kekakusita* 'planned' can only introduce the decisive mood construction, whereas *meireisita* 'ordered' introduces only the imperative mood constructions. In reality this correlation is systematic. The following examples with the Japanese experiencer predicate *nikurasi* 'hate' show clearly that controller choice is determined by the choice of the attitude verb.

(367) a. *Taro-wa   Atsuko-ni   watasi-no tomodati-ga nikurasi-i-to   itta.*
Taro-TOP Atsuko-DAT I-POSS   friend-NOM hate-PRS-COMP said

'Taro$_1$ said to Atsuko$_2$ that he$_{1/*2}$ hated my friend.'

b. *Taro-wa   Atsuko-ni   watasi-no tomodati-ga nikurasi-i-ka kiita.*
Taro-TOP Atsuko-DAT I-POSS   friend-NOM hate-PRS-Q asked

'Taro$_1$ asked Atsuko$_2$ if she$_{*1/2}$ hated my friend.

It is clear that the controller choice is not constrained by locality, but by the specific control verb. Landau (2015) distinguishes two types of concept generator functions G$_{\text{SELF}}$ and G$_{\text{THOU}}$ for subject control and object control, respectively. For him the choice between the two is determined post-LF. In the present account, the controller choice is determined

by selectional restrictions of the attitude verb in syntax. More specifically, the verb *itta* 'said' selects a RespP with the *de me* function, whereas *kiita* selects the *de te* function in the left periphery of its complement.
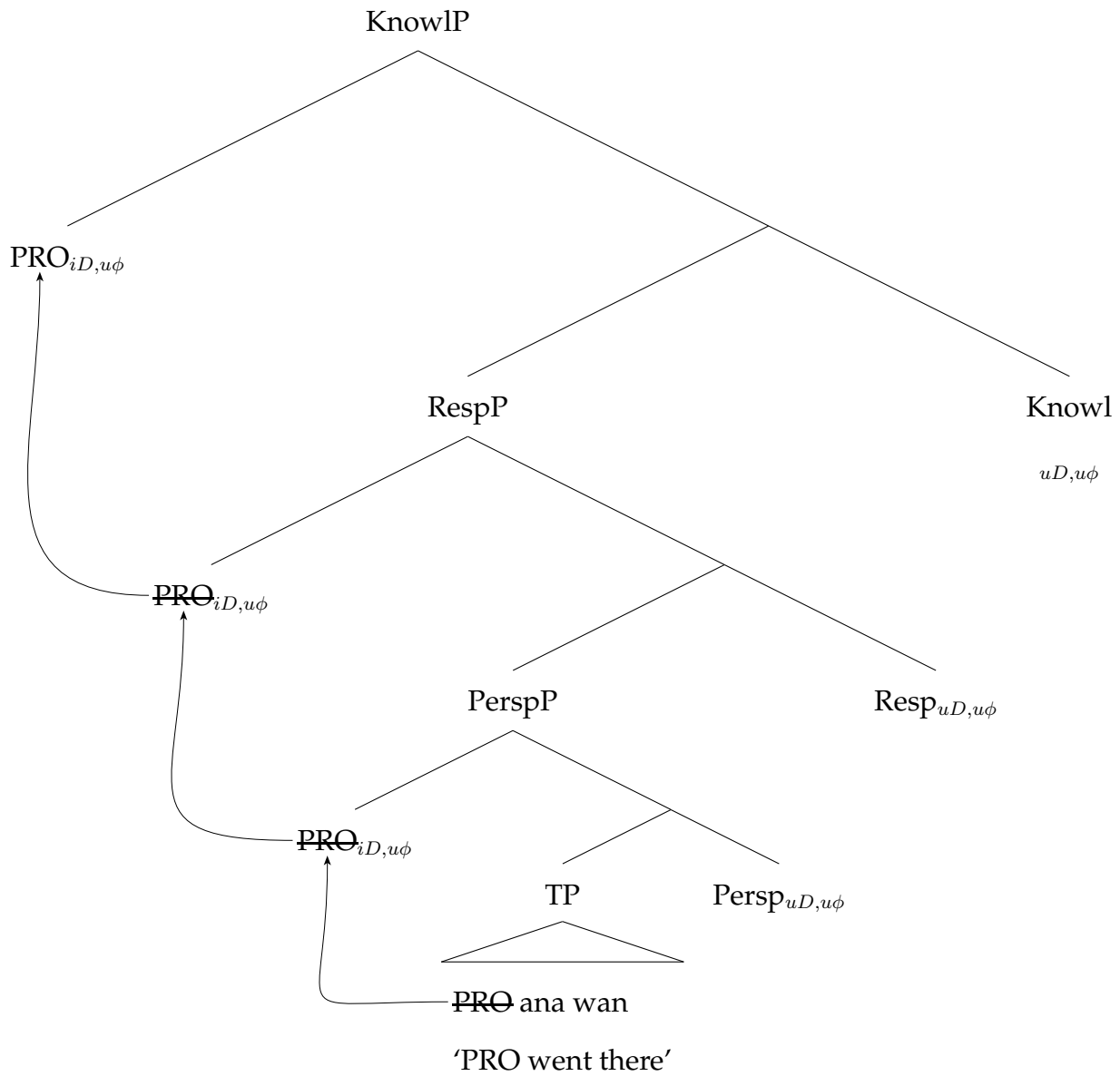
5.4.5 Deriving knowledge

Finally, let us turn to Newari conjunct constructions. The derivation of (368a) proceeds as follows.

(368) a. *ji   ana   wan-**ā***
   I.ABS there go-**PST.CONJ**

    'I went there.'

b. Step 1

KnowlP

PRO$_{iD,u\phi}$

RespP

Knowl
$uD,u\phi$

PRO$_{iD,u\phi}$

PerspP

Resp$_{uD,u\phi}$

PRO$_{iD,u\phi}$

TP

Persp$_{uD,u\phi}$

PRO ana wan

'PRO went there'

To begin with, the subject enters the derivation as a minimal pronoun (PRO), with an interpretable D-feature and uninterpretable ϕ-features. Attracted by T's [uD] feature, PRO moves to Spec, TP. A series of Sentience heads then enter the derivation one after another with uninterpretable ϕ-features. This is a departure from both Zanuttini et al. (2012) and Landau (2015). Zanuttini et al. (2012) assumes the function head is base-generated with full-fledged ϕ-features, and Landau (2015) assumes that binding is a relation between two DPs, without the mediation of a functional head. PRO then moves all the way up till the edge of the Sentience domain, making a stop at the specifier position of each Sentience head. We hence have an agreement chain linking T all the way up to PRO at Spec,KnowlP.

After the existing structure (368b) merges with the Adr head, the projection of which in turn merges with the Sp head, we finally have two DPs with interpretable ϕ-features in the derivation.

(369) Step 2

235
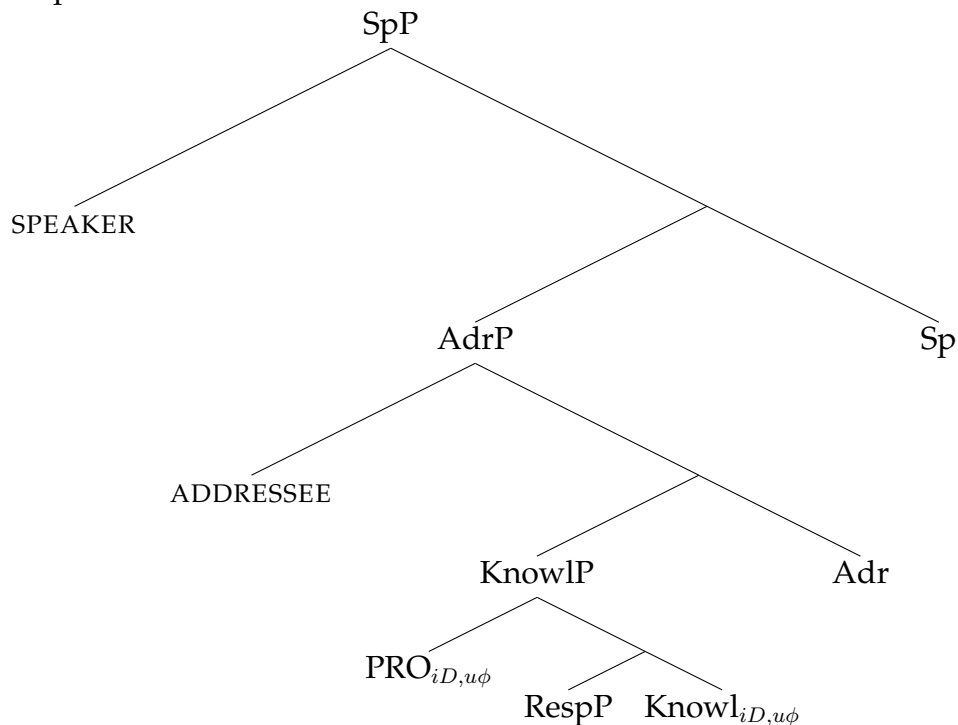
The Knowl head must be bound by the seat of knowledge, defined in Section 3.1 as the individual whose beliefs are used to determine the truth conditions of the complement proposition. The speaker is the default seat of knowledge, unless the truth of the proposition is not contained in her beliefs, in which case the addressee becomes the seat of knowledge. In this particular case, between the two potential goals for PRO, Knowl must pick SPEAKER over ADDRESSEE as the seat of knowledge.

As a final step, the ϕ-features of the speaker percolate down to every link of the agreement chain. The minimal pronoun PRO has its features unified with its binder and is spelled out as a first person pronoun at PF. This agreement chain is important for Newari conjunct constructions. The functional heads of the Sentience Domain each pose a distinct semantic requirement for its specifier. The Knowl head, for instance, requires its specifier to be able to assess the truth conditions of the complement proposition. The agreement chain ensures that in Newari conjunct constructions, the seat of knowledge is always the responsibility holder of the complement situation, who must also take an internal perspective of the embedded event.

The disjunct construction is crucially different from verbal *de se* expressions in the featural make-up of the Sentience heads. More specifically, any of the Sentience heads may enter the derivation with full-fledged features in place and transmits them to its subject pronoun. The subject of the disjunct construction is less restricted because we do not pose any constraint on what person features can be based-generated.

In this section, I have proposed an agreement-based account for verbal *de se* expressions. The subject of a verbal *de se* expression agrees with a series of verbal functional heads in the Sentience domain and acquires its ϕ-features from a context variable. Besides the individual argument, the Sen head simultaneously binds an event argument. The binding of nominal *de se* expressions, in contrast, is not mediated by a Sentience head with uninterpretable features. The syntactic disparity between nominal and verbal *de se*

236

expressions leads to semantic consequences. In the case of nominal *de se* expressions, only individual variables, not event variables, are abstracted over, yielding only individual *de se* interpretations.

5.5 Conclusion

This chapter concerns a point of intersection between *de se* attitudes and point-of-view phenomena. Empirically it is argued that *de se* expressions may come from domains other than pronouns, and the properties that can be self-ascribed may be beyond individual identity. For a better understanding of the linguistic substance of *de se*, linguists must look beyond *de se* pronouns and start addressing the following questions.

(370) a.   What kind of linguistic expressions trigger *de se* interpretations?

     b.   What sorts of selves are encoded in the representations of *de se* attitudes?

Even though *de se* as a subject matter has been discussed extensively in the semantic and philosophical literature, to my knowledge these questions are rarely addressed, let alone answered, in previous work.

I have divided *de se* expressions into two major classes, i.e., nominal and verbal *de se* expressions. I have demonstrated that verbal *de se* expressions manifest logophoric control and systematically encode internal perspective of the embedded event. Accounting for the syntactic and semantic differences between the two types of *de se* expressions, I propose an agreement-based account for verbal *de se* expressions. The syntactic differences, in turn, reflect different *de se* relations. Borrowing Schlenker's (2005, 2011) terminology, I call the two *de se* relations individual *de se* and event *de se*. I compare the two and argue that the obligatory *de se* interpretation that they both produce is a result of the attitude holder's self-ascription of different properties.

Conclusion

6.0   Context matters

In this dissertation I have developed a two-tiered structure for the utterance context. The top tier, i.e., the Speech Act Projection, is only present in root clauses and its specifier positions seat speech act participants such as the speaker and the addressee. It is responsible for root clause phenomena across languages. The second tier is the Sentience Projection, whose head takes a perspectival expression as its argument. This projection is independent from the Speech Act Projection. In attitude complements, it is selected by the attitude predicate, rather than by the Speech Act head. The Sentience Projection is what unifies the utterance context and the linguistic context. It is responsible for point-of-view phenomena. Depending on where the Sentience Projection is merged to, the perspectival expression in its specifier can be anchored to different levels and shift its reference accordingly.

(371) The two-tiered structure of discourse

a. Root clauses

$$\underbrace{[\text{ SPEAKER }\ [\text{ Sp }\ [\text{ ADDRESSEE }\ [\text{ Adr}}_{\text{The Speech Act layer}}\ \underbrace{[\text{ PERSPECTIVE }\ [\text{ Sen}}_{\text{The Sentience layer}}\ \underbrace{[\text{ TP ...}}_{\text{root clause}}$$

b. Attitude complements

$$\underbrace{[\text{ Attitude holder }\ [\text{ v }\ ...}_{\text{root clause}}\ \underbrace{[\text{ PERSPECTIVE }\ [\text{ Sen}}_{\text{The Sentience layer}}\ \underbrace{[\text{ TP ...}}_{\text{complement clause}}$$

The saP differs from the SenP in two aspects: (i) the SenP, not the saP, can be embedded, and (ii) the SenP, not the saP, is sensitive to the mood, modality, or event type of its complement.

There are a couple of distinctive properties of the present theory. First of all, the separation of discourse anchors and perspective shifters can help account for the asymmetry between root clause phenomena on the one hand, and point of view phenomena on the other. Second, it provides concrete measures that can be used to make falsifiable predictions about natural languages.

6.1 Discourse anchors and perspective shifters

The root clause phenomena I focused on are from three empirical domains. I first take a look at facts from anaphora and indexicality, mainly in English, which favor an approach that treats the speaker and addressee as syntactic binders. Then I present data from two less familiar languages, Basque and Jingpo, to show that the speaker and addressee can be targeted for morphosyntactic agreement. The agreement with the speaker and addressee not only serves as the strongest evidence for the syntactic presence of discourse participants, it also provides a lot of useful clues that can be used to fine-tune the syntactic structure of the utterance context.

For point of view phenomena I began with a focused study of Newari conjunct construction. I analyzed the subject reference in this construction as a result of the per-

spective shift in Spec, SenP. In particular, I have argued that three semantic properties conspire to determine the choice of perspective. The perspective center in Newari conjunct construction must be identified as the individual whose beliefs are used to assess the truth of the complement proposition of SenP (knowledge), who intentionally brings about the event denoted by the complement of SenP (responsibility) and who takes a true first-person perspective as the said event unfolds (internal perspective).

These three properties are not equally relevant across point-of-view phenomena. If we allow each construction to set different values for these properties, the collection of point-of-view phenomena I have included in this dissertation fall in one of three types.
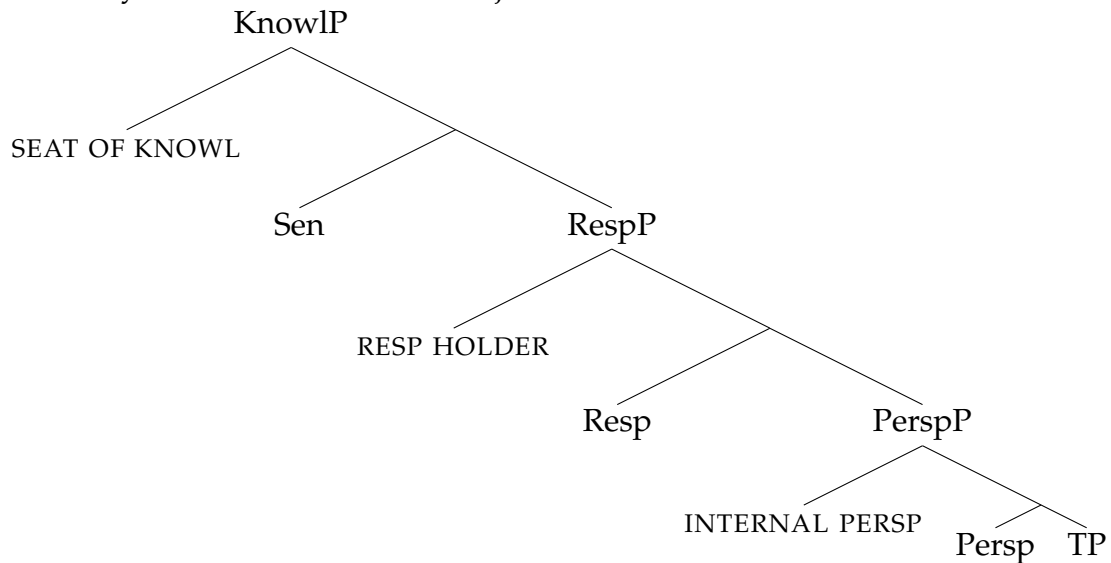
Table 6.1: Three Types of Point-of-View Phenomena

		Knowledge	Responsibility	Internal Perspective
I	Newari conjunct marking	✓	✓	✓
	Korean volitional modal	✓	✓	✓
II	Canonical control	—	✓	✓
	Jussives	—	✓	✓
III	Gerundive complements	—	—	✓
	Predicates of direct experience	—	—	✓

Given the highly constrained parametric differences, I have developed the following implicational hierarchy of the three properties.

(372) Knowledge → Responsibility → Internal perspective

The implication relation is captured through structural dependence in my framework. The three types of point-of-view phenomena in Table 6.1 structurally differ from each other in the number of functional heads contained in the Sentience domain. While Type I phenomena require all three functional projections, for Type III phenomena Persp is the only Sentience head available in the structure.

(373) The fully articulated Sentience Projection

```
                          KnowlP
                  ╱───────────┴───────────╮
          SEAT OF KNOWL
                          Sen          RespP
                              ╱─────────┴─────────╮
                      RESP HOLDER
                                  Resp          PerspP
                                          ╱───────┴───────╮
                                  INTERNAL PERSP
                                                  Persp    TP
```

6.2 Beyond discourse participants

In this dissertation I have limited my discussion of the context to individuals and their perspectives. Admittedly, context is a lot more than the individuals involved in a conversation. Among other things, time and space are important contextual information and are of great interest to linguists. In the same way as our interpretations of *I* and *you* vary from context to context, the reference of *this room* and *last month* also shifts from utterance to utterance.

This brings up an interesting empirical and theoretical issue for future research aimed to understand and verify the linguistic representation of the context. Should we extend the same structural approach to time and space, and if so, how?

There are good reasons to answer positively to the first half of the question. Let us imagine we are tasked to describe Johannes Vermeer's painting *The Music Lesson*, in which a young woman, facing away from the audience, stands in front of a virginal, and

behind her back a viola da gamba is placed on the floor. In this scenario, both of the following sentences are acceptable (Charnavel, 2015a).

(374) a. The woman$_1$ is standing in the background with the viola da gamba behind her$_1$.

    b. The woman$_1$ is standing in the background with the virginal behind her$_1$.

Though the above sentences minimally differ from each other in the names of the instruments described, they are uttered from distinct reference points. While the viola da gamba is behind the young woman no matter how we look at the picture, from the woman's perspective the virginal is in front of, not behind, her. The sentence (374b) only makes sense from the standpoint of the speaker.

Once we replace the bound pronoun *her* with the reflexive *herself*, however, we immediately obtain the following contrast (Charnavel, 2015a). In other words, we must take the woman's standpoint, not the speaker's, to interpret the locations of the instruments in (375).

(375) a. The woman$_1$ is standing in the background with the viola da gamba behind herself$_1$.

    b. *The woman$_1$ is standing in the background with the virginal behind herself$_1$.

An interesting parallel observation concerns the temporal interpretation. The following sentence, for instance, is ambiguous.

(376) John believed that Mary was pregnant.

In the first reading, Mary's pregnancy precedes the time of John's belief, in which case the embedded past tense is interpreted with respect to the tense in the matrix clause. Alternatively, Mary may have been pregnant at the time of John's belief. In the latter case, John's belief is *Mary is pregnant* rather than *Mary was pregnant*.

If we switch the embedded tense from past to present, however, the sentence has only one peculiar interpretation. In this case, Mary's pregnancy must hold both at the

time of John's belief and at the utterance time. This is the so-called Double Access Reading (Abusch, 1997).

(377)   John believed that Mary is pregnant.

The lesson we can draw from these facts is this. Our choice of perspective (e.g., speaker's standpoint vs. subject's standpoint, utterance time vs. matrix event time) not only determines the interpretation of many spatial and temporal expressions, it is also reflected in the pronominal (*behind her/herself*) or verbal (*is/was pregnant*) morphology. For this reason, time and space are better analyzed as part of the syntactic representation of the context. While I cannot incorporate this line of inquiry in my dissertation given its limited scope, I hope my structural approach to context, as well as the separation of discourse anchors from perspective shifters, would prove useful for future researchers interested in these topics.

Bibliography

Abusch, Dorit. 1997. Sequence of tense and temporal de re. *Linguistics and Philosophy* 20:1–50.

Ahn, Byron Thomas. 2015. Giving reflexivity a voice: Twin reflexives in english. Doctoral Dissertation, University of California, Los Angeles.

Aikhenvald, Alexandra Y. 2010. *Imperatives and commands*. Oxford University Press.

Alcázar, Asier, and Mario Saltarelli. 2014. *The syntax of imperatives*, volume 140. Cambridge University Press.

Anand, Pranav. 2006. De De Se. Doctoral Dissertation, Massachusetts Institute of Technology.

Anand, Pranav. 2011. Suppositional projects and subjectivity. Ms., University of California at Santa Cruz.

Anand, Pranav, and Andrew Nevins. 2004. Shifty operators in changing contexts. In *Proceedings of SALT XIV*, ed. Robert B. Young, 20–37. Ithaca, NY: CLC Publications.

Antonenko, Andrei. 2008. The nature of russian subjunctive clauses. Ms. Stony Brook University.

Antonov, Anton. 2015. Verbal allocutivity in a crosslinguistic perspective. *Linguistic Typology* 19:55–85.

Avrutin, Sergey, and Maria Babyonyshev. 1997. Obviation in subjunctive clauses and Agr: Evidence from Russian. *Natural Language and Linguistic Theory* 15:229–262.

Bach, Emmon, and Barbara H. Partee. 1980. Anaphora and semantic structure. In *Papers from the Parasesion on Pronouns and Anaphora*, ed. Jody Kreiman and Almerindo E. Ojeda, 1–28. Chicago Illinois: University of Chicago.

Baker, Mark. 2008a. *The syntax of agreement and concord*. Cambridge, UK: Cambridge University Press.

Baker, Mark C. 2008b. On the nature of the Antiagreement effect: Evidence from wh-in-situ in Ibibio. *Linguistic Inquiry* 39:615–632.

Barbosa, Pilar. 2009. A case for an agree-based theory of control. Ms. Universidade do Minho/CEHUM.

Barker, Chris. 2002. The dynamics of vagueness. *Linguistics and Philosophy* 25:1–36.

Barker, Chris. 2012a. Imperatives denote actions. In *Proceedings of sinn und bedeutung*, volume 16, 57–70.

Barker, Chris. 2012b. Quantificational binding does not require c-command. *Linguistic inquiry* 43:614–633.

Barker, Chris, and David Dowty. 1993. Non-verbal thematic proto-roles. In *Proceedings of the North East Linguistic Society 23*, ed. Amy J. Schafer, 49–62. University of Ottawa: Graduate Linguistic Student Association.

Barlew, Jefferson. 2017. The semantics and pragmatics of perspectival expressions in english and bulu: The case of deictic motion verbs. Doctoral Dissertation, The Ohio State University.

Belletti, Adriana. 2005. Extended doubling and the VP periphery. *Probus* 17:1–35.

Bevington, Barbara. 1998. Indexical expressions: Syntax and context. Doctoral Dissertation, City University of New York.

Bianchi, Valentina. 2003. On finiteness as logophoric anchoring. *Temps et point de vue/Tense and point of view* 213–246.

Birjulin, Leonid A, and Viktor S Xrakovskij. 2001. Imperative sentences: theoretical problems. In *Typology of imperative constructions*, 3–50. Lincom.

Bobaljik, Jonathan David, and Susi Wurmbrand. 2013. Suspension across domains. In *Distributed morphology today: Morphemes for morris halle*, ed. Ora Matushansky and Alec Marantz, 185–198. MIT Press Cambridge, MA.

Bobaljik, Jonathan David, and Kazuko Yatsushiro. 2006. Problems with honorification-as-agreement in Japanese: A reply to Boeckx and Niinuma. *Natural Language and Linguistic Theory* 24:355–384.

Bouchard, Denis. 1982. On the content of empty categories. Doctoral Dissertation, Massachusetts Institute of Technology.

Cable, Seth. 2010. *The grammar of Q: Q-particles, Wh-Movement and Pied-Piping*. Oxford University Press.

Caponigro, Ivano, and Jon Sprouse. 2007. Rhetorical questions as questions. In *Proceedings of Sinn und Bedeutung*, volume 11, 121–133. Universitat Pompeu Fabra Barcelona.

Cardinaletti, Anna. 1999. Italian emphatic pronouns are post-verbal subjects. In *Working Papers in Linguistics*, volume 9.

Chang, Sun. 1977. Korean reflexive pronoun caki and its referent np's point of view. *Language Research* 13:35–48.

Charlow, Nate. 2014. The meaning of imperatives. *Philosophy Compass* 9:540–555.

Charnavel, Isabella. 2015a. Point of view on Condition A. URL https://drive.google.com/file/d/0B0XvDcwWoAzdR2RNdl9aX1oxOW8/view, Talk given at NYU Syntax Brown Bag.

Charnavel, Isabelle. 2015b. Let you be bound to me (and me to you). In *Proceedings of the Poster Session of the 33rd West Coast Conference on Formal Linguistics (WCCFL)*, 18–27.

Charnavel, Isabelle, and Dominique Sportiche. 2016. Anaphor binding: What french inanimate anaphors show. *Linguistic Inquiry* 47:35–87.

Chierchia, Gennaro. 1984. Topics in the syntax and semantics of infinitives and gerunds. Doctoral Dissertation, University of Massachusetts, Amherst.

Chierchia, Gennaro. 1989. *Anaphora and attitudes de se*.

Chierchia, Gennaro, Barbara Hall Partee, and Raymond Turner. 1989. *Properties, types and meaning*. Dordrecht ; Boston: Kluwer Academic Publishers.

Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht, The Netherlands: Foris.

Chomsky, Noam. 1986a. *Barriers*. Cambridge, Massachusetts: MIT Press.

Chomsky, Noam. 1986b. *Knowledge of language*. New York, New York: Praeger Publishers.

Chomsky, Noam. 1993. A minimalist program for linguistic theory. In *The view from Building 20*, ed. Ken Hale and Jay Keyser, 1–52. Cambridge, Massachusetts: MIT Press.

Chomsky, Noam. 1995. *The minimalist program*. Cambridge, Massachusetts: MIT Press.

Chomsky, Noam. 2004. Beyond explanatory adequacy. In *Structures and beyond: The cartography of syntactic structures*, ed. Adriana Belletti, volume 3, 104–131. Oxford: Oxford University Press.

Chung, Sandra, William A. Ladusaw, and James McCloskey. 1995. Sluicing and Logical Form. *Natural Language Semantics* 3:239–282.

Citko, Barbara. 2012. Control and obviation: A view from Polish. Ms. University of Washington.

Cole, Peter, Gabriella Hermon, and C-T James Huang. 2000. *Long distance reflexives*. Brill.

Cole, Peter, Gabriella Hermon, and Cher Leng Lee. 2001. Grammatical and discourse conditions on long distance reflexives in two chinese dialects. In *Long-distance reflexives*, ed. Peter Cole, Gabriella Hermon, and C.-T. James Huang, 1–46. Academic Press.

Collins, Chris, and Paul Postal. 2012. *Imposters: A study of pronominal agreement*. Cambridge, UK: MIT Press.

Cooper, Robin. 1983. *Quantification and syntactic theory*. Reidel.

Costantini, Francesco. 2005. On obviation in subjunctive clauses. Doctoral Dissertation, University of Venice.

Curnow, Timothy Jowan. 2002. Three types of verbal logophoricity in african languages. *Studies in African Linguistics* 31:1–26.

Dai, Qingxia. 1996. Zai lun jingpoyu de juweici [once again on the sentence final auxiliaries in the jingpo language]. *Minzu Yuwen [Minority languages of China]* 61–70.

Dai, Qingxia. 2003. Jingpoyu juweici xingcheng de jiegou jizhi [structural mechanism of the sentence final auxiliaries in jingpo language]. *Zhongyang Minzu Daxue Xuebao [Journal of the Central University for Nationalities]* 120–124.

Dai, Qingxia. 2010. *Zangmian yuzu yuyan yanjiu [Research on Tibeto-Burman languages]*, volume 5. Yunnan Minzu Chubanshe.

Dai, Qingxia, and Xijian Xu. 1992. *Jingpoyu yufa [The grammar of Kachin]*. Zhongyang Minzu Xueyuan Chubanshe.

Deal, Amy Rose. 2012. Nez perce embedded indexicals. In *Proceedings of the Seventh Conference on the Semantics of Under-Represented Languages in the Americas*, volume 7.

DeLancey, Scott. 1992. The historical status of the conjunct/disjunct pattern in Tibeto-Burman. *Acta Linguistica Hafniensia: International Journal of Linguistics* 25:39–62.

DeLancey, Scott. 2008. Nocte and Jinghpaw: morphological correspondences. Handout of a talk given at The 3rd International Conference of the Northeast Indian Linguistic Society, January 22, Gauhati University.

Dickinson, Connie. 2000. Mirativity in tsafiki. *Studies in language* 24:379–421.

den Dikken, Marcel. 2013. *The cambridge handbook of generative syntax*. Cambridge University Press.

Emonds, Joseph. 1969. Roots and structure-preserving transformations. Doctoral Dissertation, MIT.

Farkas, Donka F. 1988. On obligatory control. *Linguistics and Philosophy* 11:27–58.

Farkas, Donka F. 1992. On obviation. In *Lexical matters*, ed. Ivan A. Sag and Anna Szabolcsi, 85–110. Stanford, California: Center for the Study of Language and Information.

Fiengo, Robert, and Robert May. 1994. *Indices and identity*. Cambridge, Massachusetts: MIT Press.

Fillmore, Charles J. 1971. Lectures on deixis. Ms. University of California, Berkeley.

Fraser, Bruce. 1974. An examination of the performative analysis. *Research on Language & Social Interaction* 7:1–40.

Fujii, Tomohiro. 2006a. Evidentiality and the distribution of oc pro. In *Proceedings of the 25th West Coast Conference on Formal Linguistics*, 159–167. Citeseer.

Fujii, Tomohiro. 2006b. Some theoretical issues in japanese control. Doctoral Dissertation, University of Maryland.

Fujii, Tomohiro. 2007. Controlling japanese experiencer. *Nanzan Linguistics: Special Issue* 1:1–17.

Fujii, Tomohiro. 2010. Split control and the principle of minimal distance. In *Movement theory of control*, ed. Norbert Hornstein and Maria Polinsky, 211–244. Amsterdam, The Netherlands: John Benjamins.

Gazdar, Gerald. 1979. *Pragmatics: Implicature, presupposition, and logical form*. Academic Press New York.

Giannakidou, Anastasia. 2008. Negative and positive polarity items: Variation, licensing, and compositionality. In *Semantics: An international handbook of natural language meaning*, 1660–1712. Mouton de Gruyter.

Giorgi, Alessandra. 2010. *About the speaker: Towards a syntax of indexicality*. Oxford University Press.

Greenberg, Joseph H. 1963. Some universals of grammar with particular reference to the order of meaningful elements. In *Universals of language*, ed. Joseph Greenberg, 40–70. Cambridge, Massachusetts: MIT Press.

Hacquard, Valentine. 2006. Aspects of modality. Doctoral Dissertation, Massachusetts Institute of Technology.

Haddican, Bill. 2015. A note on Basque vocative clitics. Ms. City University of New York, Queens College and Graduate Center.

Haegeman, Liliane, and Virginia Hill. 2013. The syntacticization of discourse. In *Syntax and its limits*, ed. Raffaella Folli, Christina Sevdali, and Robert Truswell, 370–390. Oxford University Press.

Haida, Andreas. 2009. (Proto-)logophoricity in Tangale. In *NELS 40 Special Session Semantics Workshop*. MIT.

Hale, Austin. 1980. Person markers: Finite conjunct and disjunct verb forms in Newari. *Papers in South-East Asian Linguistics* 7:95–106.

Han, Chung-hye. 2000. *The structure and interpretation of imperatives: mood and force in universal grammar*. Psychology Press.

Han, Chung-hye, and Dennis Ryan Storoshenko. 2012. Non-subject antecedent potential of caki in korean. In *Proceedings of the 21st Japanese/Korean Linguistics Conference*.

Harada, S-I. 1976. Honorifics. In *Japanese generative grammar*. Academic Press.

Hargreaves, David. 2005. Agency and intentional action in Kathmandu Newar. *Himalayan Linguistics* 5:1–48.

Harley, Heidi, and Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78:482–526.

Harris, Jesse A, and Christopher Potts. 2009. Perspective-shifting with appositives and expressives. *Linguistics and Philosophy* 32:523–552.

Hashimoto, Masashi. 2015. Experiencing in Japanese: The experiencer restriction across clausal types .

Heal, Jane. 1977. Ross and lakoff on declarative sentences. *Studies in Language Groningen* 1:337–362.

Heim, Irene. 2008. Feature on bound pronouns. In *Phi theory*, ed. Daniel Harbour, David Adger, and Susana Béjar, 35–56. Oxford: Oxford University Press.

Heim, Irene, and Angelika Kratzer. 1998. *Semantics in generative grammar*. Malden, MA: Blackwell.

Higginbotham, James. 2009. *Tense, aspect, and indexicality*, volume 26. OUP Oxford.

Hill, Virginia. 2007. Vocatives and the pragmatics–syntax interface. *Lingua* 117:2077–2105.

Hill, Virginia. 2013. *Vocatives: How syntax meets with pragmatics*. Brill.

Hooper, Joan B., and Sandra A. Thompson. 1973. On the applicability of root transformations. *Linguistic inquiry* 4:465–499.

Hsieh, Feng-Fan. 2005. Winners take all: Missing paradigms in jinghpo: to appear in the. In *Proceedings of Western Conference on Linguistics 2006*, 196–207.

Huang, C.-T. James, Y.-H. Audrey Li, and Yafei Li. 2009. *The syntax of Chinese*. Cambridge: Cambridge University Press.

Huang, C-T James, and C-S Luther Liu. 2000. Logophoricity, attitudes, and ziji at the interface. *Syntax and semantics* 33:141–195.

Huang, C.-T. James, and C.-C. Jane Tang. 1991. The local nature of the long-distance reflexive in Chinese. In *Long-distance anaphora*, ed. Jan Koster and Eric Reuland, 263–282. Cambridge: Cambridge University Press.

Ivana, Adrian, and Hiromu Sakai. 2007. Honorification and light verbs in Japanese. *Journal of East Asian Linguistics* 16:171–191.

Kaplan, David. 1989a. Afterthoughts. In *Themes from kaplan*, ed. Joseph Almog, John Perry, and Howard Wettstein, 565–614. Oxford: Oxford University Press.

Kaplan, David. 1989b. Demonstratives: An essay on the semantics, logic, metaphysics, and epistemology of demonstratives and other indexicals. In *Themes from kaplan*, ed. Joseph Almog, John Perry, and Howard Wettstein, 481–564. Oxford, UK: Oxford University Press.

Kastner, Itamar, and Vera Zu. 2017. Blocking and paradigm gaps. *Morphology* 27:643–684.

Katz, Jerrold J., and Paul Postal. 1964. *An integrated theory of linguistic descriptions*. Cambridge, Massachusetts: MIT Press.

Kaufmann, Magdalena. 2011. *Interpreting imperatives*, volume 88. Springer Science & Business Media.

Kaufmann, Magdalena. 2014. Embedded imperatives across languages: Too rare to expect, too frequent to ban. Ms. University of Connecticut.

Kawasaki, Noriko. 1993. Control and arbitrary interpretation in english. Doctoral Dissertation, University of Massachusetts Amherst.

Kayne, Richard S. 1994. *The antisymmetry of syntax*. Cambridge, Massachusetts: MIT Press.

Kayne, Richard S. 2002. Pronouns and their antecedents. In *Derivation and explanation in the minimalist program*, 133–166. Blackwell Publishing.

Kayne, Richard S. 2016. The silence of heads. *Studies in Chinese Linguistics* 37:1–37.

Kehler, Andrew. 2002. *Coherence, reference, and the theory of grammar*. Stanford University: CSLI Publications.

Kempchinsky, Paula. 1987. The subjunctive disjoint reference effect. *Studies in Romance languages* 25:123–140.

Kempchinsky, Paula. 2009. What can the subjunctive disjoint reference effect tell us about the subjunctive? *Lingua* 119:1788–1810.

Kim, Jinung. 2012. Korean evidentials in discourse. Doctoral Dissertation, The University of Texas at Austin.

Kim, Namkil. 2002. On the expression of 'imminence' in Korean. *Eoneohag* 32:39–59.

Koo, Myung-Chul, and Christian Lehmann. 2010. Modality in the korean suffix *-keyss*. *Language Research* 46:83–102.

Koopman, Hilda. 2006. Agreement configurations: in defense of "spec head". In *Agreement systems*, ed. Cedric Boeckx, 159–199. John Benjamins.

Koopman, Hilda Judith, and Anna Szabolcsi. 2000. *Verbal complexes*. Cambridge, Massachusetts: MIT Press.

van Koppen, Marjo. 2005. One probe - two goals: Aspects of agreement in Dutch dialects. Doctoral Dissertation, Leiden University.

Kornfilt, Jaklin. 2001. Local and long-distance reflexives in turkish. *Long-distance reflexives* 33:197–226.

Korotkova, Natasha. 2016. Heterogeneity and uniformity in the evidential domain. Doctoral Dissertation, University of California, Los Angeles.

Kratzer, Angelika. 2009. Making a pronoun: Fake indexicals as windows into the properties of pronouns. *Linguistic Inquiry* 40:187–237.

Kuno, Susumu. 1987. *Functional syntax: Anaphora, discourse and empathy.*. University of Chicago Press.

Kusumoto, Kiyomi. 1998. Tenses as logophoric pronouns. In *Hand-out of talk given at the MIT/UConn/UMass Semantics Workshop*.

Kwon, Iksoo. 2012. Viewpoints in the korean verbal complex: Evidence, perception, assessment, and time. Doctoral Dissertation, University of California, Berkeley.

Lam, Zoe Wai-Man. 2014. A complex ForceP for speaker-and addressee-oriented discourse particles in Cantonese. *Studies in Chinese Linguistics* 35:61–80.

Landau, Idan. 2013a. *Control in generative grammar: A research companion*. Cambridge, UK: Cambridge University Press.

Landau, Idan. 2013b. *Control in Generative Grammar: A research companion*. Cambridge, United Kingdom: Cambridge University Press.

Landau, Idan. 2015. *A two-tiered theory of control*. Cambridge, Massachusetts: MIT Press.

LaPolla, Randy J. 2003. Overview of sino-tibetan morphosyntax. In *The sino-tibetan languages*, ed. Graham Thurgood and Randy J. LaPolla, 22–42. London: Routledge.

Lasersohn, Peter. 2005. Context dependence, disagreement, and predicates of personal taste. *Linguistics and Philosophy* 28:643–686.

Law, Ann. 2002. Cantonese sentence-final particles and the cp domain. In *UCL Working Papers in Linguistics*, volume 14, 375–398.

Lebeaux, David. 1984. Anaphoric binding and the definition of pro. In *Proceedings of NELS*, volume 14, 253–274.

Lee, Chung-Lee. 1973. Abstract syntax and korean with reference to english. Doctoral Dissertation, Indiana lIniversity.

Lees, Robert. 1963. *The grammar of English nominalizations*. The Hague: Mouton.

Lewis, David. 1970. General semantics. *Synthese* 22:18–67.

Lewis, David. 1972. General semantics. In *Semantics of natural language*, 169–218. Reidel Publishing Company.

Lightfoot, David. 2012. Explaining matrix/subordinate domain discrepancies. In *Main clause phenomena: New horizons*, 159–176. John Benjamins.

Madigan, Sean. 2008a. Control constructions in korean. Doctoral Dissertation, University of Delaware.

Madigan, Sean. 2008b. Obligatory split control into exhortative complements in Korean. *Linguistic Inquiry* 39:493–502.

Matthewson, Lisa. 2004. On the methodology of semantic fieldwork. *International journal of American linguistics* 70:369–415.

Merchant, Jason. 2001. *The syntax of silence: sluicing, islands, and the theory of ellipsis*. Oxford: Oxford University Press.

Miyagawa, Shigeru. 2012. Agreements that occur mamain in the main clause. In *Main clause phenomena: New horizons*, ed. Lobke Aelbrecht, Liliane Haegeman, and Rachel Nye, 79–111. Amsterdam: John.

Modesto, Marcello. 2011. Finite control: Where movement goes wrong in brazilian portuguese. *Journal of Portuguese Linguistics* 10.

Morgan, Jerry. 1970. On the criterion of identity for noun phrase deletion. In *Sixth Regional Meeting, Chicago Linguistic Society*, 380–389.

Oshima, David Y. 2004. Zibun revisited: empathy, logophoricity, and binding. *Proceedings of the 20th NWLC* 23:175–190.

Oyharçabal, Bernard. 1993. Verb agreement with nonarguments: On allocutive agreement. In *Generative stuides in basque linguistics*, ed. José Ignacio Hualde and Jon Ortiz de Urbina, 89–114. Amsterdam, The Netherlands: John Benjamins.

Özyildiz, Deniz. 2012. When I is not me: A preliminary case study of shifted indexicals in Turkish. In *The 5th California Universities Semantics and Pragmatics*. University of California, San Diego.

Pak, Miok, Paul Portner, and Raffaella Zanuttini. 2004. Deriving clause types: Focusing on korean. In *Proceedings of the Linguistic Society of Korea 2004*, 359–368.

Pak, Miok, Paul Portner, and R Zanuttinli. 2008. Agreement and the subjects of jussive clauses in korean. In *PROCEEDINGS-NELS*, volume 37, 127.

Pan, Haihua. 1997. *Constraints on reflexivization in mandarin chinese*. Routledge.

Pan, Haihua. 2000. Why the blocking effect. In *Long-distance reflexives*, ed. Peter Cole, Gabriella Hermon, and C-T James Huang, volume 33, 279–316. Brill.

Partee, Barbara. 1973. Some structural analogies between tenses and pronouns in English. *Journal of Philosophy* 70:601–609.

Partee, Barbara. 1989. Binding implicit variables in quantified contexts. In *Papers from the 25th Regional Meeting of the Chicago Linguistics Society, Part One*, ed. Caroline R. Wiltshire, Randolph Graczyk, and Bradley Music, 342–365. Chicago Linguistics Society, Chicago Illinois: University of Chicago.

Paul, Waltraud. 2007. The fine structure of the (right) periphery in mandarin chinese. Ms. CRLAO, CNRS–EHESS.

Pearson, Hazel. 2013. A judge-free semantics for predicates of personal taste. *Journal of Semantics* 30:103–154.

Pearson, Hazel. 2015a. Attitude verbs. Ms. Queen Mary University of London.

Pearson, Hazel. 2015b. The interpretation of the logophoric pronoun in ewe. *Natural Language Semantics* 23:77–118.

Percus, Orin, and Uli Sauerland. 2003. Pronoun movement in dream reports. In *PROCEEDINGS-NELS*, volume 33, 265–284.

Picallo, Carmen. 1985. Opaque domains. Doctoral Dissertation, CUNY.

Platzack, Christer, and Inger Rosengren. 1998. On the subject of imperatives: A minimalist account of the imperative clause. *The Journal of Comparative Germanic Linguistics* 1:177–224.

Podobryaev, Alexander. 2014. Persons, imposters, and monsters. Doctoral Dissertation, Massachusetts Institute of Technology.

Pollard, Carl, and Ivan A. Sag. 1992. Anaphors in English and the scope of binding theory. *Linguistic Inquiry* 23:261–304.

Pollard, Carl, and Pin Xue. 1998. Chinese reflexive ziji: Syntactic reflexives vs. nonsyntactic reflexives. *Journal of East Asian Linguistics* 7:287–318.

Portner, Paul. 2007. Imperatives and modals. *Natural Language Semantics* 15:351–383.

Potts, Christopher. 2005. *The logic of conventional implicatures*. Oxford: Oxford University Press.

Progovac, Ljiljana. 1993. Subjunctive: The (mis) behavior of anaphora and negative polarity. *The Linguistic Review* 10:37–60.

Quer, Josep. 2005. Context shift and indexical variables in Sign Language. In *Proceedings of SALT XV*, ed. Effi Georgala and Jonathan Howell, 152–168. Cornell University, Ithaca, NY: CLC Publications.

Raposo, Eduardo. 1986. Some asymmetries in the binding theory in Romance. *The Linguistic Review* 5:75–110.

Reinhart, Tanya. 1983a. *Anaphora and semantic interpretation*. Chicago, Illinois: University of Chicago Press.

Reinhart, Tanya. 1983b. Coreference and bound anaphora: A restatement of the anaphora questions. *Linguistics and Philosophy* 6:47–88.

Reinhart, Tanya, and Eric Reuland. 1993. Reflexivity. *Linguistic Inquiry* 24:657–720.

Reuland, Eric. 2011. *Anaphora and language design*. Cambridge, Massachusetts: MIT Press.

Rizzi, Luigi. 1990. On the anaphor agreement effect. *Rivista di Grammatica Generativa* 2:27–42.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar*, ed. Liliane Haegeman, 281–337. Dordrecht: Kluwer Academic Publishers.

Roberts, Craige. 2015. Indexicality: de se semantics and pragmatics. Ms, Ohio State University.

Rosenbaum, Peter S. 1967. *The grammar of English predicate complement constructions*. Cambridge, Massachusetts: MIT Press.

Ross, John R. 1970. On declarative sentences. In *Readings in English transformational grammar*, ed. Roderick A. Jacobs and Peter S. Rosenbaum, 222–277. Waltham, Massachusetts: Ginn.

Ruwet, Nicolas. 1984. Je veux partir/* je veux que je parte. a propos de la distribution des complétives à temps fini et des compléments à l'infinitif en français. *Cahiers de grammaire* 75–138.

Ruwet, Nicolas, and John Goldsmith. 1991. *Syntax and human experience*. Chicago, Illinois: University of Chicago Press.

Sadock, Jerrold M, and Arnold M Zwicky. 1985. Speech act distinctions in syntax. In *Language typology and syntactic description*, ed. Timothy Shopen, volume 1, 155–196. Cambridge University Press.

Safir, Ken. 2004. *The syntax of anaphora*. Oxford University Press.

Sag, Ivan. 1976. Deletion and logical form. Doctoral Dissertation, Massachusetts Institute of Technology.

Sailor, Craig. 2009. Tagged for deletion: a typological approach to vp ellipsis in tag questions. Master's thesis, University of California, Los Angeles.

Schlenker, Philippe. 2003a. Clausal equations (a note on the connectivity problem). *Natural Language and Linguistic Theory* 21:157–214.

Schlenker, Philippe. 2003b. A plea for monsters. *Linguistics and Philosophy* 26:29–120.

Schlenker, Philippe. 2005. The lazy frenchman's approach to the subjunctive. *Romance Languages and Linguistic Theory* 269–309.

Schlenker, Philippe. 2011. Indexicality and de se reports. In *Semantics: An international handbook of natural language meaning*, ed. Claudia MLA Maienborn, Klaus von Heusinger, and Paul Portner, volume 2, 1561–1604. Berlin, Germany: Mouton de Gruyter.

Sigurðsson, Halldór Ármann. 2004. The syntax of Person, Tense, and speech features. *Italian Journal of Linguistics* 16:219–251.

Speas, Margaret. 1999. Person and point of view in navajo direct discourse complements.

Speas, Margaret, and Carol Tenny. 2003. Configurational properties of point of view roles. In *Asymmetry in grammar*, ed. Anna Maria DiSciullo, 315–344. Amsterdam, The Netherlands: John Benjamins.

Sportiche, Dominique. 2013. Binding theory—structure sensitivity of referential dependencies. *Lingua* 130:187–208.

Stechow, Arnim von. 2003. Feature deletion under semantic binding. In *Proceedings of the North East Linguistics Society*, ed. Makoto Kadowaki and Shigeto Kawahara, volume 33, 377–403. Graduate Linguistic Student Association, Amherst, Massachusetts: University of Massachusetts at Amherst.

Stephenson, Tamina C. 2009. Towards a theory of subjective meaning. Doctoral Dissertation, Massachusetts Institute of Technology.

Sudo, Yasutada. 2012. On the semantics of phi features on pronouns. Doctoral Dissertation, Massachusetts Institute of Technology.

Sudo, Yasutada. 2016. Person indexicals in uyghur indexical shifting. In *Proceedings of the 36th Annual Meeting of the Berkeley Linguistics Society*, volume 36. Berkeley Linguistics Society.

Suñer, Margarita. 1986. On the referential properties of embedded finite clause subjects. *Generative studies in Spanish syntax* 183–196.

Szabolcsi, Anna. 2004. Positive polarity – negative polarity. *Natural Language and Linguistic Theory* 22:409–452.

Szabolcsi, Anna. 2009. Overt nominative subjects in infinitival complements cross-linguistically: Data, diagnostics, and preliminary analyses. In *NYU working papers in linguistics*, ed. Patricia Irwin and Violeta Vázquez Rojas Maldonado, volume 2. NYUWPL.

Szabolcsi, Anna. 2010. Infinitives vs. subjunctives: What do we learn from obviation and from exemptions from obviation? URL http://goo.gl/c16gIP, ms. New York University.

Tallerman, Maggie. 1998. The uniform case-licensing of subjects in welsh. *The Linguistic Review* 15:69–133.

Tenny, Carol L. 2006. Evidentiality, experiencers, and the syntax of sentience in Japanese. *Journal of East Asian Linguistics* 15:245–288.

Toth, Ildik. 2000. Inflected infinitives in hungarian. Doctoral Dissertation, Tilburg University.

Uegaki, Wataru. 2011. Controller shift in centered-world semantics. In *Workshop on Grammar of Attitudes, DGfS*, volume 33.

Vendler, Zeno. 1982. Speaking of imagination. *Language, Mind, and Brain* 35–43.

Wechsler, Stephen. 2010. What 'you' and 'i' mean to each other: Person indexicals, self-ascription, and theory of mind. *Language* 86:332–365.

Williams, Bernard. 1976. Imagination and the self. In *Problems of the self: Philosophical papers 1956-1972*, ed. Bernard Williams. Cambridge University Press.

Williams, Edwin. 1977. Discourse and logical form. *Linguistic Inquiry* 8:101–139.

Williams, Edwin. 1980. Predication. *Linguistic Inquiry* 11:203–238.

Wiltschko, Martina, and Johannes Heim. 2016. The syntax of confirmationals: A neo-performative analysis. In *Outside the clause: Form and function of extra-clausal constituents*, volume 178, 303–340. John Benjamins Publishing Company.

Woods, Rebecca. 2014. The syntax of orientation shifting evidence from english high adverbs. *Proceedings of ConSOLE XXII* 205:205–230.

Xu, Xijian, Jiacheng Xiao, Seng Hkum N, and Qingxia Dai. 1983. *Jing Han cidian [The Jingpo-Chinese dictionary]*. Yunnan Minzu Chubanshe.

Yu, William XF. 1992. Challenging chinese reflexive data. *The Linguistic Review* 9:285–294.

Zanuttini, Raffaella, Miok Pak, and Paul Portner. 2012. A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects. *Natural Language & Linguistic Theory* 30:1231–1274.

Zeijlstra, Hedde. 2012. There is only one way to agree. *The Linguistic Review* 29:491–539.

Zu, Vera. 2011. An investigation of the structure of CP and DP in Jingpo. Master's thesis, The Chinese University of Hong Kong.

Zu, Vera. 2015. Probing for conversation participants: The case of Jingpo. In *Proceedings of The 49th Annual Regional Meeting of Chicago Linguistic Society*, ed. Helena Aparicio Terrasa, Katie Franich, Gallagher Flinn, Asia Pietraszko, and Tamara Vardomskaya, 379–389. Chicago Linguistic Society.

Zwart, C. Jan-Wouter. 1996. "shortest move" versus "fewest steps". In *Minimal ideas*, ed. Werner Abraham, Samuel David Epstein, Hóskuldur Thráinsson, and C. Jan-Wouter Zwart, 329–346. Amsterdam: John Benjamins Publishing Company.