

CONTROL CONSTRUCTIONS IN KOREAN

by

Sean William Madigan

A dissertation submitted to the Faculty of the University of Delaware in
partial fulfillment of the requirements for the degree of Doctor of Philosophy with a
major in Linguistics

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ACKNOWLEDGMENTS

In my life I have climbed mountains, camped out in below zero degree weather and even quit smoking. Compared to all of these things, writing a dissertation was certainly more difficult, although a lot of parallels exist. Many times I felt as though the harder I worked, the slower things went. This feeling was not unlike climbing a mountain actually. In addition, there were many times I needed to re-group my efforts and start again, which is where I found myself many times when trying to quit smoking. Fortunately for me, there was a lot of help along the way that enabled me to get through it all and eventually complete the task at hand.

Before I present the long list of “people without whom this would not have been possible” that is to follow, I would first like to say something about the Linguistics Department at the University of Delaware. First of all, I have thoroughly enjoyed the last five years. The environment at the department is familial and inviting. There is also an ever-present and intense desire to learn about language from a variety of perspectives. When I first arrived, I was a gun-shy newbie, afraid to say anything for fear of sounding uninformed and being attacked by my upperclassmen and professors. However, my fear was unfounded and I soon learned that no matter how lost I was, there was always someone there to help, or to kick me in the butt when I needed it. Among the most influential to me in my early years at University of Delaware was

Chang-yong Sim, a fourth year graduate student at that time. Chang-yong encouraged everyone around him to do their best and push their limits. He spent hours and hours patiently helping us with our work and ideas, often to his own detriment through lack of sleep. I know I speak for all of our year when I say that Chang-yong was a godsend to us in those early days and to him we owe a debt we can never repay.

I also had the pleasure of having Julie Anne Legate as one of my advisors for a full academic year. Professor Legate is responsible for me growing up as a syntactician and a linguist. She taught me how to look beyond the data and find the most interesting way to approach it. In addition, she encouraged me to present and publish, and suffered through countless revisions of various papers and handouts.

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A very special thanks is owed to Benjamin Bruening. Professor Bruening has, above almost all others I have met, an intrinsic ability to find alternatives to any given theory. As I am sure all who have worked with him can attest to, Professor Bruening is nothing if not thorough! There comes a point in working with Professor Bruening when you enter his office one day and he says something like, “So, what if everything is exactly the opposite of what you think it is?” This question is often followed by a barrage of relevant and often complex ideas and examples that leave you

stunned like a deer in the headlights. I certainly have had my share of experiences like this with Professor Bruening. What this has done for me is force me to go back to my basic assumptions and re-examine *why* I assumed these things in the first place. Often, Professor Bruening's comments have led to drastic revisions in my work that have yielded far deeper conclusions than I could have ever reached on my own. For these reasons, I am extremely grateful to him.

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DEDICATION

I dedication this dissertation to my parents, my sister, my beautiful wife and our daughter we can't wait to meet, Cassidy.

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ABSTRACT

This dissertation outlines control constructions in Korean. First, I document and account for control in the Korean language in a systematic manner. Second, I show that Korean control data is integral to arriving at a complete understanding of control and sheds light on current issues in modern theorizing. In addition, I show that Korean provides evidence that control may not be a uniform phenomenon in all languages.

Chapter 1 outlines the main purposes of the dissertation. In addition, I provide an explanation of the theoretical framework I employ.

Chapter 2 examines and provides a definition of control and describes its empirical status in Korean. I also introduce the data pertaining to controlling overt material in Korean. In addition, I provide an appendix on the nature of *tolok* complements in control.

Chapter 3 discusses partial control, split control and the implications of these constructions for a theory of plurality. The conclusions are that partial control in Korean is different in that it allows the controlling of a syntactically plural controllee. I also show that split control is obligatory control. In addition, the partial and split control data leads to a discussion of the nature of plurality in Korean and how best to account for it. The conclusions are that the partial control reading in Korean is the

result of Kratzer's (2006) [*group*] feature and split control is a result of the feature [*sum*].

Chapter 4 provides an explanation for why certain matrix verbs select the controllers that they do. The conclusion is that there is actually an interaction between the meanings of embedded control-creating markers and the matrix predicates with which they combine. This chapter also provides an analysis based on the work of Pak (2004) and Pak et al. (2006) which is centered around employing To-Do List semantics in order to account for the class of *jussive markers*.

Chapter 5 provides a discussion of why it is that overt material may be controlled in Korean. The conclusion of this chapter is that Korean not only controls overt reflexives and various pronominal forms, but that controlling these elements also makes a focus reading available. From these observations, I provide a theory of how overt material is allowed and disallowed in various languages. My conclusion is that English is accounted for by examining values of tense and AGR (Landau 2006). Korean, however, allows overt DPs anywhere and any exceptions to this are the result of semantic constraints related to the possibility of a *de se* reading. This leads to the overarching conclusion that control can be arrived at in various ways in different languages.

Chapter 6 concludes the dissertation and summarizes the main points. As an extension of the work in this dissertation, I examine the partial control data as it

relates to *Inclusive Reference* (Madigan et al. 2007, 2008). In addition, I speculate on more general issues in control that are related to the analysis presented here.

Chapter 1

PURPOSE AND FRAMEWORK

1.1 General Introduction

There is a basic yet central observation in the linguistic study of sentence structure that all sentences must have subjects. While this intuitively seems correct, there do exist sentences, and sentences within other sentences, in natural language where there appears to be no subject at all. For example, in the sentence in (1) below there is an overt subject in the matrix clause: *John*. The embedded clause, however, lacks an overt subject, indicated by *e*.

- (1) **John** tried to *e* jump over the fence.

Intuitively, we know that the agent of the verb *try* in this sentence must be the same person as the person who is doing the jumping. In a very real sense, it seems as if there is an unpronounced or silent subject in the embedded clause that is somehow related to the matrix subject through some sort of identity function, yielding a meaning like ‘John tried so that he would jump over the fence,’ where *he* = *John*. These so-called *control* constructions have been at the center of linguistic theorizing

for many decades, starting with the work of Rosenbaum (1967). The reason for this is that attempts to model these constructions have had far reaching consequences in many different domains of the grammar. When attempting to describe or explain control, one can quickly find the need to refer to such topics as binding theory, case theory, theta-roles, verbal meaning and complement selection, just to name a few. In recent years, control has even become a way of examining the very basic notions of economy and reducing redundancy in the grammar - research ideals that are considered to be of central importance to the *Minimalist Program* (e.g. Chomsky 1995).

Particularly in the last 10 years, the study of control has seen major breakthroughs, many of which will be discussed in detail in the chapters that follow. In addition to the sheer volume of work being produced on control, and perhaps because of it, arguments about how best to characterize this phenomenon are often polemic in nature and extremely lively. This dissertation was written partially in response to the tumultuous nature of the theoretical study of control in generative grammar. In truth, the purpose of this dissertation is actually two-fold, both empirical and theoretical. First and foremost, this dissertation is an attempt to document and account for control in the Korean language in a systematic manner. This is not a simple matter, as the control facts in Korean are complex and quite different from what has been documented in other languages. Second, I wish to show that Korean control data is integral to arriving at a complete understanding of control and serves to shed light on some current issues in modern theorizing. As will be shown, Korean provides data that

many theories predict not to exist. In addition, the Korean data, when viewed in its entirety, provides evidence that control may not be a uniform phenomenon, in that one single theory may not be able to account for cases of control in all languages.

In the following section, I give a brief background of some of the important issues I attempt to resolve or provide insight into in this dissertation. Following that, in section 1.3, I provide an overview of the various technical machinery needed for my analysis. Finally, in section 1.4, I give an outline of the remaining chapters.

1.2 Main Issues

1.2.1 Does Korean Actually Exhibit Control?

As stated above, one main goal of this dissertation is to provide an empirical account of control constructions in Korean. In chapter 2, I provide a definition of control along the following lines:

- (2) Definition of Control : Let X be an NP in a sentence S, Y a subject NP in a sentence S' that is embedded under S, and R the predicate that selects Y. X and Y are in the control relation (or X controls Y) iff the property that corresponds to R is unambiguously attributed to the referent of X and the referent is aware of the attribution.

The example in (1) fits this definition. Plugging in the various parts of the sentence in (1) to the definition in (2), there is a subject *John*, in a sentence *John tried to jump over the fence*. There is also a subject *e*, in a sentence *e to jump over the fence* that is embedded under *John tried to jump over the fence*. There is also a predicate *jump* that selects *e* as a subject. *John* and *e* are in a control relation because the property that corresponds to *jump over the fence* is unambiguously attributed to the referent of *e* and that referent, *John*, is aware of this attribution.

A few examples of the type of Korean control sentences that I examine in this dissertation are given in (3) below.

- (3) a. Inho₁-ka PRO₁ kacok-ul sikhi-keyss-ta-ko tacim-ha-yess-ta.
I-NOM family-ACC protect-VOL-DC-C vow-PST-DC
‘Inho vowed to protect his family.’
- b. Inho₁-ka Hwun₂-eykey PRO_{*1/2} swuyeng-ha-la-ko mal-ha-yess-ta.
I-NOM H-DAT swim-do-IMP-C tell-do-PST-DC
‘Inho told Hwun to swim.’

The example in (3a) is termed *subject control* as the matrix subject DP controls the embedded silent subject, here called PRO. As per the definition above, what is meant by “controls” is that the null DP refers to the same individual as the overt DP and the property in the embedded clause is unambiguously attributed to that individual. In this

way, the matrix DP is said to *control* the covert embedded subject. The example in (3b) is termed *object control*, because the matrix object is the controller of the embedded empty subject.

The literature on Korean control is sparse and often contradictory. For example, it has been claimed that control exists in Korean (Yang 1984, 1985, Borer 1989, Madigan 2006a) while the possibility has also been suggested that control does not exist in Korean at all. For example, Choe (2006) leaves the question open as to whether or not subject control exists in Korean. However, she does claim that Korean does not employ object or backwards control at all. From this, she suggests the possibility that PRO may not exist in Korean. I believe that the last part of this argument might be true, as I discuss in chapter 2. However, I show throughout this dissertation that control, in all its forms, does in fact exist in Korean.

1.2.2 How to Characterize and Account for Control?

As mentioned in section 1.1, the current literature on control is in a state of intense and exciting debate. Among the many questions being asked by various researchers are: How do we describe what control is? Is control a syntactic or semantic phenomenon? If it is syntactic, how could it be best accounted for? In addition, there are even more fundamental questions to be addressed, such as: Have we accounted for all forms of control? What is even more interesting than any single one of these questions is that in addressing any one of them, reference to the others is often

necessary. In this dissertation, I attempt to illustrate how the Korean data helps us to clarify some of these issues.

As mentioned in the questions above, one major issue throughout the history of the study of control is whether control should be accounted for in the syntax or semantics. Some notable examples that investigate whether control should be accounted for in the syntax or semantics are: Williams (1980), Wurmbrand (2000) and Culicover and Jackendoff (2001, 2003). I show in this dissertation that the answer to such a question is not a simple one. My ultimate conclusion is that both are, in principle, possible. While some languages may employ syntactic measures in control, such as agreement between a controller and controllee, other languages may rely on more semantic measures to achieve control. Specifically, I show that in accounting for English one must make reference to syntax and morphosyntax to account for various control properties such as agreement facts and the lack of overt controllees. In Korean, however, I show that reference to the semantics of what I term embedded *Control Creating Markers* (CCMs) and their interactions with the contexts presented by the meanings of matrix predicates is necessary for a complete account. Furthermore, unlike English, reference to morphosyntactic criteria in order to explain controllee distribution seems to be unnecessary in Korean.

The questions above also relate to the tumultuous nature of the study of control. In the current literature, there is a renaissance of the study of control that arguably began with Hornstein (1999). Hornstein argued that PRO, as described by

Chomsky, does not exist; rather, he suggested that what we think of as PRO is in fact an NP trace of A-movement, much like that of raising constructions. This particular line of research forces one to reconsider a possible redundancy in the grammar - that control and raising are derived in the same way and that there is no separate control module. In addition, it forces a discussion of theta-roles and how to best represent them (i.e. as features to be checked, or not), Case theory, and a variety of other topics in various domains of inquiry. A polar opposite approach in the syntactic domain is that of Landau (2001), who suggested that control is actually a syntactic agreement process, and that PRO actually does exist as a lexical item. It will be seen in this dissertation that the examination of these theories in light of the Korean data help me establish the claims made above - that reference to the semantics in accounting for control is not only preferable, but necessary.

In addition to current theoretical concerns, there are issues in the study of control that are far more fundamental in nature. There are a number of conclusions about the basic properties and typology of control in the literature that have long had a suspicious grounding. For example, since at least Williams (1980), it has been said that the impossibility of split antecedents is indicative of obligatory control.

- (4) a. *Jim promised Mary to read to each other
- b. *Mary asked Monica to eat by themselves.

However, if one looks more closely, examples of split control are easy enough to find in English.

- (5) a. Jim proposed to Mary to perjure themselves.
 b. Mark proposed to Kathy to have sex with each other.

According to my judgment and that of many other native English speakers I have asked, the examples in (5a-b) have a split control reading, where both the matrix subject and object will undergo the event denoted by the verb in the embedded clause. While this in and of itself is interesting, when one looks at the Korean data, a more detailed picture of split control emerges. Consider (6a-b) below:

- (6) a. Jwuhi₁-ka Inho₂-eykey PRO₁₊₂ cip-ey ka-ca-ko
 J-NOM I-DAT home-LOC go-EXH-C
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘(lit.) Jwuhi persuaded Inho to go home together.’
- b. Chelswu₁-ka Hwun₂-ekey PRO₁₊₂ ilbon umsik-ul mek-ca-ko
 C-NOM H-DAT Japan food-ACC eat-EXH-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘(lit.) Chelswu said to Hwun to eat Japanese food together.’

In the Korean examples, the embedded exhortative marker *ca* is employed in the creation of these split control constructions. This marker has the meaning: let’s you and me do *x*. It is not hard to see that this marker carries a proposative meaning and plays an integral role in the construction of the meaning of split control sentences. This example is just one of many in this dissertation that show the importance of exploring the Korean data in constructing a proper typology of control as well as constructing a corresponding theory.

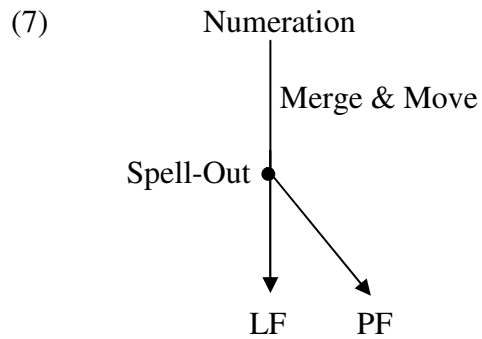
In addition to the above kinds of arguments, there is an overarching theme to this dissertation that relates to the goal of cross-linguistically accounting for control. That theme is that control is not simply a single grammatical process or structure.

Rather, I show that control is more like a state that is to be achieved via the proper combinations of various elements that may span from morphology to syntax and semantics. Seen in this light, not all languages achieve the control state in the same way. I show in this dissertation that the way in which control is instantiated in Korean is quite different from that of English. However, at the end of the day, both of these languages yield what appear to be control sentences on all known tests. The result is that our definition of how control is to be achieved in the grammar has to be broadened quite a bit.

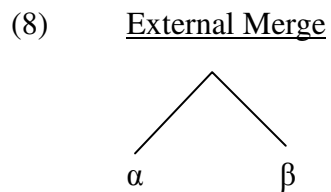
1.3 Theoretical Frameworks

1.3.1 The Syntactic Framework: Chomskian Generative Syntax

The syntactic framework I employ is Chomskian in nature and most closely aligned with the framework(s) associated with Chomsky (1998) to the present. As for the architecture of the grammar, I assume, following minimalist assumptions, that the traditional levels of deep structure (DS) and surface structure (SS) are not conceptually necessary levels (see Hornstein, Nunes and Grohmann 2005 for a convincing review). Instead, I assume the model in (7) below.

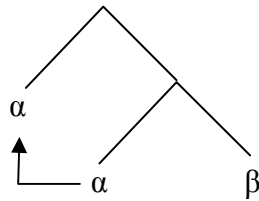


The above architecture functions as follows. Lexical items needed for computation are contained in the *Numeration*. The basic operation *Merge* selects two, and only two, elements from the *Numeration* and joins them together. This operation is called *External Merge*.



Movement operations, as they had previously existed in the Chomskian tradition are now viewed as a form of *Merge* which recombines an element with another element in the set. This operation is called *Internal Merge* and is illustrated in (9) below.

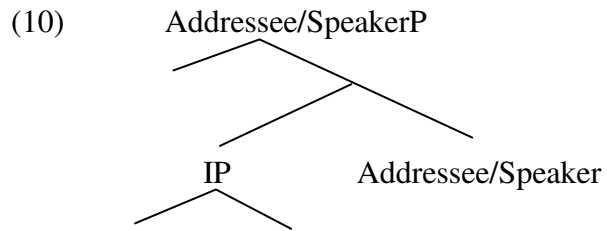
(9) Internal Merge



While I believe that the idea of Internal Merge is in fact correct, throughout this dissertation I often use the terms “move” and “movement” for ease of discussion. All instances of “movement”, however, are to be taken as instances of Internal Merge.

Spell-out is the point at which a *phase*, a *vP* or *CP*, is sent to the LF and PF interfaces which interface with the interpretive and phonological components respectively. Following Chomsky (1998, 2000), I assume that only the head of a phase and the phase’s specifier are visible for agreement operations. The exact mechanism of agreement I employ is *Agree* (see Chomsky 1999, 2000). *Agree* is an operation where a *probe*, which is a head, with a [-interpretable] feature attempts to agree with a *goal* which has a matching [+interpretable] feature, resulting in valuing the [-interpretable] features.

As for functional heads that will become necessary throughout this dissertation, I assume that there is a functional category *Speaker/Addressee* whose head is responsible for checking syntactic features *Speaker* and *Addressee*.



Speaker/Addressee Phrase (SAP) is a speech act phrase and functions as the domain in which reference to the speaker and addressee in a given discourse context is handled.

1.3.2 The Semantic Framework: Compositional and To-Do List Semantics

The basic semantic architecture I employ in this dissertation is that of Heim and Kratzer (1998). This is a truth-conditional, type-driven system that employs a small number of compositional operations. These basic interpretational rules and operations are listed below.

(11) a. **Terminal Nodes**

If α is a terminal node, $\llbracket \alpha \rrbracket$ (the semantic value of α) is specified in the lexicon.

b. **Non-Branching Node**

If α is a non-branching node, and β is its daughter node, then $\llbracket \alpha \rrbracket = \llbracket \beta \rrbracket$.

c. **Functional Application**

If α is a branching node, $\{\beta, \gamma\}$ is the set of α 's daughters, and $\llbracket \beta \rrbracket$ is a Function whose domain contains $\llbracket \gamma \rrbracket$, then $\llbracket \alpha \rrbracket = \llbracket \beta \rrbracket(\llbracket \gamma \rrbracket)$

(Heim and Kratzer, 1998: 43-44)

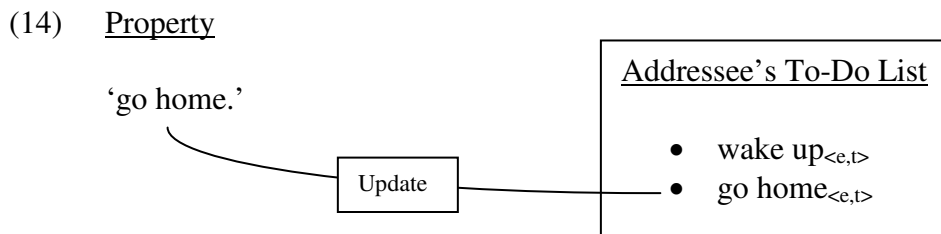
A simple example of how this system works is given below in (12).

- (12) a. $[[_{IP} [_{DP} \text{Monica}] [_{VP} \text{loves } [_{DP} \text{Sean}]]]]$.
- b. $[[\text{Monica}]] = \text{Monica}$
- $[[\text{loves}]] = \lambda x. \lambda y. \text{loves } (x)(y)$
- $[[\text{Sean}]] = \text{Sean}$
- $[[_{VP} \text{loves Sean}]] = [[\text{loves}]] ([[Sean]])$
- $= \lambda x. \lambda y. [\text{loves } (x)(y)] (\text{Sean})$
- $= \lambda y. \text{loves Sean } (y)$
- $[[_{IP} \text{Monica loves Sean}]] = [[\text{loves Sean}]] ([[Monica]])$
- $= \lambda y. [\text{loves Sean } (y)] (\text{Monica})$
- $= \text{loves Sean } (\text{Monica})$
- $= 1 \text{ iff Monica loves Sean}$

Another important semantic theory will be *To-Do List* semantics (Portner 2004). Portner suggests that the function of imperatives is to update an addressee's To-Do List. A To-Do List is essentially a list of properties that a speaker or addressee has to or is willing to do. Consider the example in (13) below.

- (13) Cip-ey ka-la!
- home-LOC go-IMP
- 'Go home!'

In Portner’s view, the imperative in (13) is essentially an instruction to the pertinent addressee to update his/her To-Do List with the property denoted by the verb. This is schematized in (14).



The above diagram shows that when a speaker makes an utterance as in (13), the imperative functions to update the speaker’s To-Do List with a property; in this case: $\lambda x. x$ will go home.

1.4 Dissertation Overview

In this section, I outline the remainder of this dissertation. Chapter 2 examines and provides a definition of control and describes its empirical status in Korean. As a preparatory measure for later chapters, I also introduce the data pertaining to controlling overt material in Korean, a fact not predicted by most theories of control. In addition, I provide an appendix on the nature of *tolok* complements in control and show that they are in fact more complicated than has been previously considered in the literature.

Chapter 3 discusses partial control, split control and the implications of these constructions for a theory of plurality as well as control. The conclusions are that partial control in Korean is different in that it allows the controlling of a syntactically plural controllee. I also show that split control is in fact obligatory control, contra current opinion. Both of these facts suggest a revision of the overall typology of control. In addition, these facts suggest that current theories of control need to be revised in order to account for the data. Finally, the partial and split control data leads to a discussion of the nature of plurality in Korean and how best to account for it. The conclusions are that the partial control reading in Korean is the result of Kratzer's (2006) [*group*] feature and split control is a result of the feature [*sum*].

Chapter 4 provides an explanation for why certain matrix verbs select the controllers that they do. The conclusion is that there is actually an interaction between the meanings of embedded control-creating markers and the matrix predicates with which they combine. With this analysis, I am able to provide a more concrete theory of complement selection in addition to a theory of how controller choice is arrived at in Korean. This chapter also provides my own analysis of control based on the work of Pak (2004) and Pak et al. (2006) which is centered around employing To-Do List semantics in order to account for the class of *jussive markers*.

Chapter 5 provides a discussion of why it is that overt material may be controlled in Korean. The conclusion of this chapter is that Korean not only controls overt reflexives and various pronominal forms, but that controlling these elements also

makes a focus reading available. From these observations, I provide a theory of how overt material is allowed and disallowed in various languages. My conclusion is that English is accounted for by examining values of tense and AGR (Landau 2006). My analysis for Korean, however, is quite different. I show that syntactically Korean allows overt DPs anywhere and that any exceptions to this are the result of semantic constraints related to the possibility of a de se reading. This leads to the overarching conclusion that control can be arrived at in various ways in different languages.

Chapter 6 concludes the dissertation and summarizes the main points. Also, as an extension of the work in this dissertation, I examine the partial control data as it relates to a more general phenomenon, namely *Inclusive Reference* (Madigan et al. 2007, 2008). In addition, I speculate on more general issues in control that are related to the analysis presented here.

Chapter 2

OBLIGATORY AND NON-OBLIGATORY CONTROL IN KOREAN

2.1 Introduction

The purpose of this chapter is to provide an empirical basis for the chapters that follow and to show how an examination of Korean data helps to form a more complete theory of control. First, I discuss what I consider to be a proper definition of obligatory control (OC). I show that a definition based solely on syntactic concerns is untenable and that reference to the semantics of control constructions must be made. I also give a preliminary discussion of how Korean helps us to re-examine some properties of control that have previously been considered to be characteristic of OC, namely the ban on split antecedents and the inability to control overt expressions. I discuss these topics in greater detail in chapters 3 and 5 respectively. Next, in preparation for chapter 4, I empirically outline control in Korean in some detail, illustrating that there are multiple components that go into creating what I call a *control environment*. I show that the main components in Korean control environments are embedded control creating markers and matrix predicates capable of control. Following this, I discuss the typology of control both within and across languages and begin a discussion of what the Korean data has to say about revising

that typology. Finally, in preparation for chapters 3 and 5, I provide a brief discussion of whether or not PRO exists in Korean.

2.2 What is Control?

In this section, I lay the foundation for the following chapters by examining what a proper definition of control should look like. As a starting point, I begin with a very simple definition provided by Landau (2001), given in (1) below.

- (1) Definition of control: "...control is the relation between some antecedent and (an) understood subject (p1)."

This definition focuses on two things: the nature of the controllee, and the relation between it and its antecedent. The controllee in this case is considered to be a special nominal termed PRO (see Chomsky 1981). In section 2.8, I provide an introductory discussion of whether or not this element actually exists regarding the Korean data. However, for the time being, I simply employ the use of the term PRO in order to signify the empty subject of the clauses in question. To flesh out the definition of control in (1) and categorize control as a distinct grammatical phenomenon, Landau employs the four properties listed in (2).

(2) Basic properties of obligatory control of PRO

- A. Arbitrary control of PRO is impossible in OC.
- B. Long-distance control of PRO is impossible in OC.
- C. Strict-reading of PRO is impossible in OC.
- D. De re reading of PRO is impossible in OC (only de se).

An interesting question with respect to the properties in (2) is which, if any, of the above diagnostics are crucial in determining control and only control? Note that these properties are centered around the relation between some antecedent and a particular element, PRO. It seems reasonable to ask what the diagnostics above have to say about other embedded subject pronominal and pronominal-type elements. In what follows, I explore this question in an effort to understand what control is.

First of all, the later half of Landau's definition in (1), which states that the antecede is an *understood* subject, may not be entirely correct.¹ That a control construction must necessarily contain an unpronounced embedded subject has been challenged (Korean - Yang 1984, 1985, Borer 1989, Madigan 2006; Zapotec - Boeckx, Hornstein and Nunes 2007; Serbo-Croatian - Zec 1987; Hungarian and Italian – Szabolcsi 2008). These studies show that in some languages, overt material may be controlled. This type of data is introduced later in this chapter for Korean and explored

¹ This fact was mentioned in Landau (2001) and Landau (2006). I discuss this later in this chapter and again in chapter 5. At this point, however, I am simply using this simplified definition for expository purposes.

in detail in chapter 5. Given the existence of overt controllees, I will begin my discussion of what control is with a more inclusive definition, as in (3).

- (3) Definition of Control (Version 1 - to be revised): Control is the referential/binding relation between some antecedent and an embedded subject.

Under this definition of control, constructions containing an embedded subject PRO, coreferential pronoun, or local reflexive in the subject of a finite clause, as in (4b-c) respectively, could also be construed as control relationships.

- (4) a. John₁ promised PRO₁ to go home.
 b. John₁ promised that he₁ would go home.
 c. Jwuhi₁-ka Inho₂-eykey cakicasin_{1/*2}-i cip-ey ka-lkela-ko
 J-NOM I-DAT self-NOM home-LOC go-FUT-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC
 ‘Jwuhi promised Inho that she would go home.’

In all of the sentences in (4a-c), there is a referential/binding relation between an antecedent and an embedded subject. Should we then consider all of these sentences to be control? If not, then what is the difference between them? Below I examine the four

properties of OC in (2) with respect to the sentences in (4a-c) in order to clarify both what control is, and what properties are crucial to defining it.

First, I consider the property that there is no arbitrary reading of PRO. In fact, an arbitrary reading a pronoun or a local reflexive is also not available. To make the possibility of arbitrary reference more plausible, I will change (4a-c) to (5a-c), where the pronominal elements are plural.

- (5) a. The boys₁ promised PRO_{1/*arb} to go home.
 b. The olympians₁ promised that they_{1/*arb} would get the medal.
 c. Ai₁-tul-i Inho-eykey cakicasin_{1/*arb}-tul-i cip-ey ka-lkela-ko
 child-PL-NOM I-DAT self-PL-NOM home-LOC go-FUT-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC
 ‘The children promised Inho that they would go home.’

The sentence in (5a) cannot mean that the boys promised that people in general would go home. (5b) cannot mean that the Olympians promised that people in general would win the medal. Finally, the Korean sentence with the embedded local reflexive *cakicasin* cannot mean that the children promised that children or people in general should or will go home. Given this data, it appears as though the diagnostic of no arbitrary interpretation of the controllee is not a sufficient test to distinguish these

sentences as distinct grammatical phenomena. However, what this property, and the others in (2), do help to define is the difference between OC and NOC. I discuss this in detail in section 2.3.

Moving on to the second property in (2), PRO is not able to take a long distance antecedent as shown in (6).

(6) Sean₁ thinks that Monica₂ promised him PRO_{*1/2} to feed the dog.

Pronouns, however, are able to take long distance antecedents relatively easily, as shown in (7).

(7) Sean₁ thinks that Bill₂ promised Carol that he_{1/2} would feed the dog.

Finally, the Korean local reflexive *cakicasin* is not able to take a long distance antecedent.

(8) Jwuhi₁-ka Hwun₂-i cakicasin_{*1/2}-i sang-ul pat-ass-ta-ko
 J-NOM H-NOM self-NOM prize-ACC receive-PST-DC-C
 sayngkak-ha-n-ta-ko mit-nun-ta.
 think-do-IND-DC-C believe-IND-DC
 ‘Jwuhi believes that Hwun thinks that he got the prize.’

It appears as though this particular property is in fact useful in distinguishing the sentences in (4a-c). This property shows us that control involves a *local* relationship between a controller and controllee. This effectively distinguishes the purported control case in (4a) from the pronoun sentence in (4b). However, given the properties up to this point, it seems as though the sentence in (4c), with the embedded local reflexive, may also be called a control sentence.

Moving on to the next property, it appears as though the ban on strict interpretations also helps to differentiate the sentences in (4a-c). Example (9) shows that only a sloppy interpretation is possible with PRO.

(9) Mary promised John PRO to go home and Bill did too.

***Strict Interpretation:** Mary promised John that she (Mary) would go home and Bill promised John the she (Mary) would go home.

Sloppy Interpretation: Mary promised John that she (Mary) would go home and Bill promised John the he (Bill) would go home.

However, with a pronominal, both strict and sloppy interpretations are readily available.

- (10) John promised that he would go home and Bill did too.

Strict Interpretation: John promised that he (John) would go home and Bill promised that he (John) would go home.

Sloppy Interpretation: John promised that he (John) would go home and Bill promised that he (Bill) would go home.

The possibility of both a strict and sloppy reading with elided pronouns has been attributed to a difference between a coreference and a bound variable interpretation respectively (e.g. Heim and Kratzer 1998). This idea seems to be correct. In cases involving quantified expressions and bound variable pronouns, only sloppy interpretations are available, as illustrated in (11).

- (11) Every upperclassman promised that he would go into the haunted house and every underclassman did too.

***Strict Interpretation:** For every upperclassman x , it is the case that x promised to go into the haunted house and for every underclassmen y it is the case that y promised that x would go into the house.

Sloppy Interpretation: For every upperclassman x , it is the case that x promised to go into the haunted house and for every underclassmen y it is the case that y promised that y would go into the house.

Finally, in (12), it can be seen that the embedded subject local reflexive also only receives a sloppy interpretation.

- (12) Inho₁-ka cakicasin*_{1/2}-i sang-ul pat-ass-ta-ko
 I-NOM self-NOM prize-ACC receive-PST-DC-C
 nolyek-ha-yess-ta. Hwun-to kuri-ha-yess-ta.
 try-do-IND-DC-C H-also same-do-PST-DC

‘Inho tried for himself to get the prize and Hwun did too.’

***Strict Interpretation:** Jwuhi tried for herself to get the prize and Hwun tried for Juwhi to get the prize.

Sloppy Interpretation: Jwuhi tried for herself to get the prize and Hwun tried for himself to get the prize.

The above data seems to point to the fact that PRO is simply a local bound variable and by extension, that control is simply a relation between a local bound variable and its antecedent. However, it should be noted that under the right circumstances a strict interpretation of *cakicasin* is possible. Consider (13) below:

- (13) Pil –un cakicasin-i pwuca-i-n kes-ul ala-yo.
 B-TOP self-NOM rich.person-NOM-RC thing-ACC know-POL.
 Kuliko wuli-to kulen kes-ul ala-yo.
 Also we-to that.kind.of thing-ACC know-POL.
 ‘Bill knows he is rich and we all do too.’

Strict Interpretation: Bill knows that he (Bill) is rich and we know that he (Bill) is rich.

***Sloppy Interpretation:** Bill knows that he (Bill) is rich and we know that we are rich.

In the example above, my informants were only able to obtain a strict interpretation, indicating that the local reflexive *cakicasin* does not always behave the same as OC PRO. Even with examples like (13), cases like (12), where a local reflexive must be construed as a bound variable are numerous, if not the majority. Given this, the question still remains: Is control simply a local reflexive relation that is obligatorily construed as a bound variable? In order to attempt to tease this issue apart, I now consider the final property in (2); no de re readings of PRO are possible, only de se.

Given the scenario in (14a), it can be seen that when a pronoun is used, as in (14b), then both a de re and de se reading are available. However, with PRO, only a de se reading is available, as shown in (14b).

- (14) a. “(There is) a war hero who suffers from amnesia and remembers nothing of his wartime experiences. Suppose this person (hereafter, “the unfortunate”) sees a TV program describing his own exploits, and is impressed with the courage exhibited by that person, who he does not know is himself.” (Hornstein 1999: 35-36)
- b. The unfortunate expects that he will get a medal.
- c. The unfortunate expects/wants PRO to get a medal.

Given the fact that the unfortunate is unaware that he is the person on TV, (14c) is false, as it would require a belief of self to make the sentence true, which the unfortunate does not have due to his amnesia. In this way, the scenario in (14a) helps to illustrate that this construction can only be read *de se*. Contrary to this, (14b), with the embedded pronoun, can be true with respect to the scenario above because the pronoun allows a *de re* reading, which does not require any knowledge of self. Under this reading, the unfortunate has a belief about someone other than himself winning the medal.

It is important to note that the *de re/de se* distinction cannot simply be reduced to a co-reference/bound variable distinction, as a bound variable can also be read *de re* (Lewis 1979, Schlenker 2003). Consider the scenario in (15) below:

(15) There is a group of boys who survived a war in their country, which they have blocked from their memory due to post-traumatic stress disorder. Some time later, the boys were watching a TV program that described how brave they were during their horrible ordeal.

Given a scenario like (15) above, consider the bound variable sentence in (16) below:

(16) Every boy thought that he was heroic.

On the *de se* reading of (16), the sentence is false with respect to the scenario, indicating that a *de se* reading of the bound variable exists in this construction, though not available at this time due to the post-traumatic stress disorder incurred by the boys. However, a *de re* reading, where each boy thinks another boy in the group is heroic, is possible, much like the pronoun example above. Given this, we can see that the tests for strict/sloppy and *de re/de se* do in fact test for different things and that it cannot simply be the case that control can be defined as a local bound variable relation between an antecedent and an embedded subject.

To make matters even more interesting, consider that the embedded local reflexive behaves exactly as the *PRO* example does. First, consider the scenario in (17a):

- (17) a. Jwuhi is a world renowned medical doctor specializing in premature births, who has suffered from amnesia. Jwuhi 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 an award for the person who had done the most research on premature birth.
- b. Jwuhi-ka PRO sang-ul pat-keyss-ta-ko yeysang-ha-yess-ta
J-NOM prize-ACC receive-VOL-DC-C expect-do-PST-DC
'Jwuhi expected to receive the prize.'
- c. Jwuhi-ka Inho-eykey cakicasin-i sang-ul pat-ulkela-ko
J-NOM I-DAT self-NOM prize-LOC receive-FUT-C
yaksok-ha-yess-ta.
promise-do-PST-DC
'Jwuhi promised Inho that she would receive the prize.'

Given the scenario, the sentence containing PRO in (17b) is false and so is the local reflexive sentence in (17c). Both of these sentences then require a de se interpretation. Before discussing the ramifications of this analysis, I present Table 1 below which summarizes the results thus far.

Table 1

Control Tests/Properties	PRO	Pronoun	Local Refl	Strict BV
No Arbitrary Interpretation	Pass	Pass	Pass	Pass
No LD Antecedents	Pass	Fail	Pass	Fail
No Strict Reading	Pass	Fail	Pass*	Pass
No De Re	Pass	Fail	Pass	Fail

*Only when construed as a bound variable.

The table above shows that the local reflexive, when construed as a bound variable, and PRO behave identically on all tests of so-called control structures. From the empirical analysis thus far, it seems as though PRO is simply a local reflexive interpreted as a bound variable in a subject position. Presumably this is not seen in English because there are no nominative local reflexives in the language. One conclusion that could be drawn from this is that control is simply a local binding relationship. While this is in fact true, it is only part of the definition of what control is. As I will discuss below, the sentences containing the local reflexive and PRO are only superficially similar and the evidence for distinguishing between the two lies elsewhere, namely in *how* that binding relation is established.

Before arriving at a final definition of control that distinguishes the sentences in (4a-c), I first consider what other factor(s) might tell us the difference. It has been claimed that an infinitival complement is necessary in control sentences

(Williams 1980). This would distinguish the PRO and local reflexive cases presented here, as the sentence containing the embedded local reflexive has a finite embedded complement. However, there is growing evidence that control into finite clauses is possible (Landau 2004a). For example, Landau (2004a) presents the following example from Hebrew.

- (18) Himlacti le-Gil₁ še-ec_{1/*} 2 yearšem la-xug
I-recommended to-Gil that-ec will-register.3sg.M to-the-department
 le-balšanut.
to-linguistics
 ‘I recommended to Gil to register to the linguistics department.’

Given this type of data, relying on the morphosyntactic criteria of embedded tense to define control seems inadequate.

Ultimately, we must say that control has something to do with the meaning of the matrix predicate, while the local reflexive sentences do not. It is true that the sentences we would call control in English all involve matrix predicates that have a complement where the doer of the action in the complement can be derived through some sort of entailment relation of the matrix meaning, as described by many authors who have taken a semantic approach to explaining control (e.g. Chierchia 1984, 1989, Culicover and Jackendoff 2001, 2003). For example, if Jim forced Mary to do

something, the very act of forcing Mary entails that she will be the one who will do the action denoted by the verb in the embedded clause. This is not a requirement for all matrix predicates that can take the local reflexive in the subject position of their complements.

- (19) Jwuhi-ka cakicasin-i cip-ey ka-lkela-ko sayngkak-ha-yess-ta.
 J-NOM self-NOM home-LOC go-FUT-C think-do-PST-DC
 ‘Jwuhi thought that she would go home.’

In the example in (19), there is nothing about the matrix predicate *sayngkak-ha-ta* ‘to think’ which entails that the thinker will do the action in the embedded clause. The binding relation between the reflexive *cakicasin* and its antecedent must, therefore, be syntactic in nature.² Furthermore, the embedded clause in (19) is a proposition, while the embedded clause in a control construction is arguable a property (see Chierchia 1984, 1989). In control structures then, what is crucial is the attribution of an embedded property to a matrix DP (or DPs in the case of split control).

The above leads to the definition of control in (20).

² The relation in (19) may indeed be described as semantic if one were to employ a Reinhart and Reuland (1993) style explanation of reflexives. If viewed this way, the local reflexive and PRO sentences would be said to be adopting two separate semantic processes to establish the relation with their antecedents. The point I am trying to make here is simply that the matrix predicate’s meaning is independent of the relation between the antecedent and antecedee in the reflexive constructions, but not in the PRO constructions.

- (20) Definition of Control (Final) : The relation between an antecedent and a de se embedded subject that ensures the unambiguous attribution of a property to one or more matrix DPs.³

A more formal version of (20) is given in (21) below.

- (21) Definition of Control (Final): Let X be an NP in a sentence S, Y a subject NP in a sentence S' that is embedded under S, and R the predicate that selects Y. X and Y are in the control relation (or X controls Y) iff the property that corresponds to R is unambiguously attributed to the referent of X and the referent is aware of the attribution.

³ This definition is meant to describe sentence internal control relations. There do exist instances of control across sentential boundaries (Dowty 1989, Sag and Pollard 1991).

i) A: Jim₁ made a promise yesterday.

B: Really? What?

A: PRO₁ to quit smoking.

The definition in (20) is easily amendable to such cases:

- ii) Definition of Control (to include control relations across sentential boundaries): The relation between an antecedent and a de se subject that ensures the unambiguous attribution of a property to one or more matrix DPs.

Given the above definition, we can say that a control structure exists iff the embedded property is unambiguously attributed to one or more matrix DPs. In this way, the definition relies on the fact that the relation between the controller and controllee is not simply a matter of the syntax, as it is in the local reflexive case above. Rather, the relation must in some way be established with the meaning of the matrix predicate in mind. In chapter 4, I show that this is not the only way in which to establish this relation. In Korean, the meaning of what I call embedded *Control Creating Markers* conspires with the meanings of matrix predicates to determine the relation between the controller and controllee. This ultimately leads to the conclusion that different languages arrive at control in different ways. The way in which they differ is *how* the relation is established.

In summary, I have shown that the tests employed by Landau (2001) cannot be used in isolation to define what a control sentence is. Instead, reference to the semantics of matrix predicates must be made. However, these tests do serve to distinguish OC from NOC, as I illustrate in the next section.

2.3 Obligatory Control and Non-Obligatory Control

In the above section, I showed that the properties of obligatory control listed in (2) are not, in isolation, sufficient to explain what control is. Instead, some reference to the semantics of matrix predicates must be made. In section 2.4, I

While I will not discuss it in any depth here, I do, however, briefly discuss these

introduce the fact that in Korean one must also make reference to a certain class of embedded mood-type markers. In chapter 4, I explain this idea in its entirety. What the tests in (2) do show, however, is the difference between what has been called obligatory control (OC) and non-obligatory control (NOC) (Williams 1980, Koster 1984, Lebeaux 1984, 1985, Manzini 1983). In this section, I illustrate this point in English before moving on to control in Korean.

As shown in the previous section, arbitrary control is not allowed in OC structures but is allowed in NOC structures. I have provided another OC example of this in (21) below.

(21) The students₁ promised the TA₂ PRO_{1/*arb} to read their/*one's book.

In example (21), the only people who will be reading their books are the individuals represented by the matrix subject. This sentence, however, cannot mean that students in general will read books, as indicated by the ungrammaticality of *one's book*. In this way, an arbitrary reading is unavailable in OC structures. This is directly comparable to a NOC structure, such as in (22) below where the identity of the empty element can be almost anyone, depending on the context.

constructions in the concluding chapter of this dissertation.

(22) The spy showed (that) [$\text{pro}_{1/\text{arb}}$ keeping secrets could get one/him/her/you killed].

In the sentence in (22), the arbitrary reading that the spy showed that, in general, anyone who keeps secrets could get killed is available. I employ the use of *pro* (termed ‘little *pro*’) to represent the empty category in an NOC construction.

Again, reiterating from the previous section, the example in (23) below shows that long-distance control is also impossible in OC structures.

(23) Sean₁ thinks that Monica₂ promised him $\text{PRO}_{*1/2}$ to feed the dog.

In the above sentence, the only possible antecedent for *PRO* is the DP that is in a local relationship with it. For example, Monica is not only the one who did the promising, but also must be the individual who would be feeding the dog. The long distance matrix subject Sean cannot be a possible antecedent for *PRO*. In an NOC structure, however, long distance reference is indeed possible, as shown in (24) below.⁴

⁴ There are reported instances of some forms of long-distance antecedence of *PRO*, namely super equi NP deletion first noted by Grinder (1970).

- i) Eric₁ insisted that it would be ridiculous PRO_1 to call for help.

While these constructions are in and of themselves interesting, I will not consider them here in any depth as I have not been able to verify their existence in Korean, presumably due to the lack of an expletive.

- (24) Tim₁ heard that Masahiro₂ believes that pro_{1/2} studying phonology by himself is important.

Strict readings of PRO are also excluded from OC constructions. As a result, OC PRO can only be read in a sloppy manner, behaving much like a bound variable anaphor.

- (25) Mary promised John to go home and Bill did too.

***Strict Reading:** Mary promised John that she (Mary) would go home and Bill promised John that she (Mary) would go home.

Sloppy Reading: Mary promised John that she (Mary) would go home and Bill promised John that he (Bill) would go home.

In the above example, the only available reading is the sloppy one, where Bill promised that he himself would go home. In NOC sentences, however, both strict and sloppy readings are available. Consider (26) below:

(26) Tim believes that pro wearing sandals upsets Anna and Karthik does too.

Strict Reading: Tim believes that his (Tim's) wearing sandals upsets Anna and Karthik believes that his (Tim's) wearing sandals will upset Anna.

Sloppy Reading: Tim believes that his (Tim's) wearing sandals upsets Anna and Karthik believes that his (Karthik's) wearing sandals will upset Anna.

In the above sentence, both a strict and sloppy reading are available, as Karthik's belief may be either that it will upset Anna if anyone were to wear sandals

Finally, I consider the ban on de re readings of OC structures, which NOC structures do not have. I have re-listed the relevant scenario in (27) below.

(27) “(There is) a war hero who suffers from amnesia and remembers nothing of his wartime experiences. Suppose this person (hereafter, “the unfortunate”) sees a TV program describing his own exploits, and is impressed with the courage exhibited by that person, who he does not know is himself.” (Hornstein 2003: 35-36)

Given the fact that the unfortunate is unaware that he is the person on TV, (28b), the OC example, is false, as it would require a belief of self to make the sentence true, which the unfortunate does not have due to his amnesia. In contrast, the NOC example in (28a) is true with respect to the scenario in (27) because pro can be read de re,

which does not require any knowledge of self. In other words, the NOC sentence allows the reading where the unfortunate has the belief that the person on TV is someone else.

- (28) a. The unfortunate believes that *pro* getting a medal would be boring.
b. The unfortunate expects/wants *PRO* to get a medal.

In this section, I have shown that the diagnostics in (2), while they do not in isolation serve to distinguish control from other local binding relations, they do help to distinguish OC from NOC. Given the analysis in the last two sections, in order to tell whether an obligatory relation between some NP and an embedded subject is due to reasons of control, reference to the semantics of the matrix predicate must be made. However, the properties in (2) do illustrate that the control relation is local and involves a *de se* controllee. Following this, the diagnostics in (2) can be used to provide justification for the distinction between OC and NOC.

2.4 Other Suggested Diagnostics of OC

Landau (2001) excludes some diagnostics of obligatory control that prior to his work, were often considered to be central properties of OC. These are the ban on split antecedents and the ban on overt subjects in the embedded subject position. The diagnostic of split antecedents was previously considered to be negative proof of OC,

in that if it is possible, then the structure in question is not OC (e.g. Williams 1980), but rather NOC.

- (29) a. Jim₁ ordered Mary₂ PRO_{2/*1+2} to finish the paper.
 b. Matt₁ dared Patricia₂ PRO_{*1/2/1+2} to cheat on the exam.
 c. Misun₁ tried to make Sachie₂ PRO_{*1/2/*1+2} do homework.

The above examples do seem to imply that OC structures do not allow split antecedents. In (29a), for example, Mary must necessarily finish the paper, while Jim need not be involved in the process. If both Jim and Mary obligatorily had to finish the paper, then PRO would be considered to have split antecedents. Even so, as noticed by Landau (2001), there are cases of split control with verbs that often disallow it.

- (30) a. John₁ promised his son₂ PRO₁₊₂ to go to the movies together. (Landau 2001)
 b. John₁ persuaded Mary₂ PRO₁₊₂ to kiss in the library. (Landau 2001)

In chapter 3, I show that these types of examples do in fact exhibit true obligatory control. Briefly, it is obvious that there are some sort of pragmatic and/or semantic factors at play here. In particular, the meanings of the embedded clauses seem to play a key role. For example, in (30a), *go to the movies together* forces a reading where the

matrix subject and object will both perform the action in the embedded clause. Landau did not, however, provide a concrete analysis of split control. In fact, care must be taken with these types of sentences. For example, (30b) in my judgment does not necessarily need to mean that John and Mary will eventually kiss in the library. Consider the following situation in (31) below.

(31) John and his sister Mary were discussing her upcoming date with Dave. Even though Mary was reluctant, John persuaded Mary to kiss in the library.

In the example in (31), Mary and Dave will be the ones kissing, not John and Mary. Either way, one must consider the definition of OC very carefully when discussing these cases. If a basic characteristic of OC is that there is an NP, or NPs, in the sentence that *must obligatorily* antecede PRO, then, (29b) is not split OC, but rather partial control, which will be discussed in chapter 3. Even so, in recent years, split antecedence has been argued to be a true form of obligatory control (English and Korean - Madigan 2006b, 2008, Japanese - Fujii 2006), and I will continue that argumentation in this dissertation. In chapter 3, I show that the reason that split antecedents are allowed in Korean is mainly due to the semantics of matrix predicates and embedded control creating markers.

The second diagnostic rejected from the defining properties of OC by Landau is that of a lack of overt controllees. For example, one cannot say (32) in English.

(32) *Milford promised Mary Milford/he/himself to render the fat to make soap.

Contrary to the above example, several languages have been shown to be able to control overt material, such as Korean (Yang 1984, 1985, Boer 1989, Madigan 2006a, etc), Zapotec (Boeckx, Hornstein and Nunes 2007) and Serbo-Croatian (Zec 1987). I will explore these topics in more depth in chapters 3 and 5.

Another diagnostic that was previously employed in the definition of OC was that an infinitival complement is a necessity in an OC construction. I do not, however, require that an infinitival clause be present in order to have control in a given language. There is a growing body of evidence suggesting that this is not a necessity for control phenomena in all languages (Malagasy – Polinsky and Potsdam 2004; Hebrew, Persian and Balkan languages – Landau 2004a). Korean, as I show below, does not allow tense in the embedded clause of an OC construction: however, honorific agreement in the embedded clause is possible. Therefore, if we define infinitival as a lack of agreement and tense, then there is some reason to believe that Korean control complements are not in fact infinitival. I discuss this issue in more depth in chapters 4 and 5.

2.5 OC and NOC in Korean

Until very recently, the literature on Korean control was sparse and often the judgments that appeared were contradictory. In addition, Korean exhibits some peculiar properties, such as the ability to control overt material (Yang 1984) and no identifiable infinitival embedded clause. These were impossible to deal with under the frameworks of the day, i.e. Government and Binding, mainly due to issues of theoretical architecture, such as the distribution of PRO being driven by Case concerns. However, because of the varied nature of proposed theoretical solutions to control in the current literature, the time seems ripe to reconsider Korean in some detail. Given the messy nature of the literature, I will not formally review it in any one section, but rather bring up the relevant literature at crucial points throughout my own arguments. In the next subsection, I apply the argumentation of Landau (2001) for English to Korean and show that OC exists as a separate construction from NOC in Korean on these syntactic measures (Madigan 2006a). According to my definition and discussion of control in section 2.2, I stated that how the relation between the controller and controllee is established, and thus how the unambiguous attribution of the embedded property is achieved, may differ from language to language. I have re-listed my definition of control in example (33) below.

(33) Definition of Control (Final) : Let X be an NP in a sentence S, Y a subject NP in a sentence S' that is embedded under S, and R the predicate that selects Y. X and Y are in the control relation (or X controls Y) iff the property that corresponds to R is unambiguously attributed to the referent of X and the referent is aware of the attribution.

In this section, I show that how the embedded property in a Korean control construction is unambiguously attributed to a matrix DP involves both the meanings of matrix predicates and a class of embedded mood-type markers that I call *Control Creating Markers* (CCMs). This section is meant to be introductory and a full exposition of this data is given in chapter 4.

Before beginning the empirical analysis of Korean, I would like to make my terminology clear. Throughout this dissertation, I make reference to what I call *control environments*. The reason I choose this rather inclusive term is that, as will be shown over the course of this dissertation, the components that go into achieving a control reading in Korean are varied, spanning not only syntactic and morphological domains, but also the semantic domain. To be clear, what I mean by a “control reading” is simply that some determined NP, or NPs, in the sentence obligatorily refers to the subject of a control complement. What exactly I consider a “control complement” and how the controlling NP is “determined” will be explained as I proceed. This sort of approach has been termed, in passing, an “eclectic approach” by

Hornstein (2003), and it will become apparent that this term is quite suitable to the approach I have taken here.

With the above being said, control environments in Korean are, in their most basic form, the result of the combination of an embedded CCM and a matrix predicate capable of control. As will be seen throughout the course of this dissertation, the set of CCMs is comprised of both mood markers and what has been termed *jussive* clause typing markers (Pak 2004). Since these markers all conspire to create a control environment, I include them under the same rubric of control creating markers.

As a starting point, first consider the following pair of sentences in (34a-b). If I replace the volitional CCM *keyss* in (34a) with the present indicative, a marker that does not create control, in (34b) the control reading is lost.

- (34) a. Jwuh₁-ka Hwun₂-eykey *Mary-ka/PRO_{1/*2/*3} chayk-ul
 J-NOM H-DAT M-NOM book-ACC
 ilk-**keyss**-ta-ko yaksok-ha-yess-ta.
 read-VOL-DC-C promise-do-PST-DC
 ‘Jwuhi promised Hwun to read the book.’
- b. Jwuh₁-ka Hwun₂-eykey Mary-ka/pro_{1/2/3} chayk-ul ilk-**nun**-ta-ko
 J-NOM H-DAT Mary-NOM book-ACC read-IND-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC
 ‘Jwuhi promised Hwun that Mary/he/she would be reading the book.’

The embedded clause in (34a) employs the volitional mood marker *keyss*, triggering a control reading where only Jwuhi can be the agent of the action denoted by the embedded verb. On the other hand, (34b) uses the present indicative *nun*, which does not trigger control, and as a result the embedded subject can refer to anyone. In short, control environments in Korean are the result of the combination of a matrix predicate capable of control and an embedded CCM. A list of the possible control triggering embedded markers, their meanings and what type of control they produce appears in (35) below.

(35) *Korean Control Creating Mood Markers*

CCM	Meaning	Control Type
Keyss	‘volitional’	Subject
Ma	‘promisive’	Subject
Lye	‘intensive’	Subject
La	‘imperative’	Object
Ca	‘proposative/exhorative’	Split

(36) below shows another example with the volitional marker *keyss*, which restricts the agent of the verb it combines with to a volitional referent. This marker is only found in sentences that are traditionally classified as subject control.

- (36) Inho₁-ka PRO₁ kacok-ul sikhi-**keyss**-ta-ko tacim-ha-yess-ta.
 I-NOM family-ACC protect-VOL-DC-C vow-PST-DC
 ‘Inho vowed to protect his family.’

The promissive marker *ma*, as shown in (37), restricts the reference of the subject of the verb it combines with to a promising referent. When this CCM is used, it too yields a subject control sentence.

- (37) Eme-nim₁-kkeyse ai₂-eykey PRO₁ kongwen-ey ka-**ma**-ko
 mother-HON-NOM child-DAT park-LOC go-PROM-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘The mother promised the child to go to the park.’⁵

Another marker found in subject control constructions is the intensive marker *lye*, which designates that the subject of the verb it combines with be an intensive referent.

- (38) Nopyeng₁-i PRO₁ sang-ul patu-**lye**-ko nolyek-ha-yess-ta.
 Veteran-NOM prize-ACC receive-INT-C trial-do-PST-DC
 ‘The veteran tried to get the medal.’

As for object control, the imperative marker *la* is used in these constructions.

⁵ Most of my informants reported that the use of *-ma* in embedded contexts sounds somewhat archaic.

- (39) Inho₁-ka Jwuhi₂-eykey PRO_{*1/2} cip-ey ka-**la**-ko
 I-NOM J-DAT home-LOC go-IMP-C
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Inho persuaded Jwuhi to go home.’

La forces a reading where the subject of the verb it combines with must be an ordered referent. Finally, the exhortative marker *ca*, which restricts the reference of the subject of the verb it combines with to a speaker and addressee, can be used to create split control.

- (40) Jwuhi₁-ka Inho₂-eykey PRO₁₊₂ yenghwa-lul po-**ca**-ko
 J-NOM I-DAT movie-ACC see-EXH-C
 ceyan-ha-yess-ta.
 propose-do-PST-DC
 ‘Jwuhi proposed to Inho to go watch a movie together.’

Admittedly, the list in (35) is purposefully simplified. I show in chapter 4 that the markers *keyss* and *lye* are in reality much more varied in their possible structures and in fact can be considered a different subtype of CCM from the jussives *ca*, *la*, and *ma*. In chapter 4, I also give a formal account of the interaction of

embedded CCMs and matrix predicates. For introductory purposes, however, the above will suffice for now. Also, the marker *tolok*, which has been claimed to contribute to a control reading (Monahan 2003), is missing from the above table. This marker mainly creates object control, as shown in the following example.

- (41) Chelswu₁-ka Misun₂-eykey PRO_{*1/2} cip-ey ka-**tolok**
 C-NOM M-DAT home-LOC go-*tolok*
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Chelswu persuaded Misun to go home.’

In fact, control constructions involving *tolok* are much more complicated than they have been previously considered to be. I provide a discussion of the *tolok* data in the literature, as well as some speculations on a focus reading I have discovered in Appendix A of this chapter.

Some other basic characteristics of control sentences in Korean are as follows. First, consider that control complements in Korean appear to be full CPs. It has been claimed that in Japanese, a typologically similar language to Korean, control complements are VPs (Aoshima 2001). Consider (42a-b) below:

- (42) a. John₁-wa Bill₂-ga Mary₃-ni zibunzisin*_{1/2/*3}-o subete sasageta-to
 J-TOP B-NOM M-DAT self-ACC all devote-that
 omotta.
 thought
 ‘(lit.) John thought that Bill devoted all himself to Mary.’ (Aoshima 2001)
- b. John₁-ga Mary₂-niPRO₂ zibunzisin_{1/2}-o hinansuru-yooni tanonda.
 J-NOM M-DAT self-ACC criticize-to asked
 ‘(lit.) John asked Mary to criticize himself/herself.’ (Aoshima 2001)

In (42a), the local reflexive *zibunzisin* cannot have reference outside of the local clause in which it is contained. (42b) is a control sentence in Japanese. Here we can see that the local reflexive in the embedded “clause” can refer to the matrix subject. It is thus assumed that the control complements in Japanese are not CPs, but rather VPs.

In Korean, however, it can easily be shown using this same test that control complements are CPs.

- (43) a. Chelswu₁-ka Inho₂-ka **cakicasin*_{1/2}-ul** miwe-ha-n-ta-ko
 C-NOM I-DAT self-ACC hate-do-IND-DC-C
 sayngkak-ha-yess-ta.
 think-do-PST-DC
 ‘Chelswu thought Inho hated himself.’
- b. Inho₁-ka Hwun₂-eykey PRO₂ **cakicasin*_{1/2}-ul** salang-ha-la-ko
 I-NOM H-DAT self-ACC love-do-IMP-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘Inho told Hwun to love himself.’

The sentences in (43a-b) parallel those in (42a-b). In (43b), the local reflexive *cakicasin* cannot refer to the matrix subject. I therefore conclude that control complements in Korean are in fact CPs.

As noted above, it does not appear to be necessary to have an infinitival complement in order to have a control construction. In Korean, it is easy to show that control complements are at least non-finite in that they do not allow overt tense markers.

- (44) *Jwuhi₁-ka PRO₁ ttena-ss-keyss-ta-ko yaksok-ha-yess-ta.
 J-NOM leave-PST-VOL-DC-C promise-do-PST-DC
 ‘Jwuhi promised to have left.’

In (44), the past tense marker cannot be used with the control triggering volitional mood marker *keyss* in the embedded clause. In order to have an embedded clause in the past tense, the past tense marker *ess* must be used without any sort of CCM.

- (45) Jwuhi-ka pro ttena-ss-ta-ko yaksok-ha-yess-ta.
 J-NOM leave-PST-DC-C promise-do-PST-DC
 ‘Jwuhi promised that someone left.’

While Korean control complements are indeed non-finite, they may not be infinitival. If infinitival is to be defined as a lack of tense and agreement, then it is certainly possible that Korean control complements are not infinitival. The reason for this is that it is possible to have honorific agreement between the embedded verb and null subject, which is often considered to be syntactic agreement (Ahn 2002, Koopman 2005, Hasegawa 2005, Toribio 1990, Ura 1993).

- (46) Sensang₁-nim-kkeyse PRO₁ ithallia-ey kot ka-**si**-keyss-ta-ko
 Teacher-HON-NOM Italy-LOC soon go-HON-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-C
 ‘The teacher promised to go to Italy soon.’

In the example in (46), the obligatory use of the embedded honorific marker *si* is the result of agreement between the embedded verb and PRO. PRO is honorific because its controller, *sensangnim* ‘teacher’, is an honorific DP. If I consider honorific agreement to be true subject verb agreement, then embedded control clauses are not infinitival. I discuss this issue in more depth in Chapters 3 and 5.

In the following sections, I show that Korean exhibits true OC in a syntactic sense by employing the properties in (2) to illustrate an empirical distinction between OC and NOC.

2.5.1 Arbitrary Control is Impossible with OC PRO

I will begin with the first property of OC - that it is impossible to have an arbitrary interpretation. Consider the examples in (47a-c):

- (47) a. Jwuh₁-ka Inho₂-eykey **PRO**_{1/*2/*arb} ttena-keyss-ta-ko
 J-NOM I-DAT leave-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC
 'Jwuhi promised Inho to leave.'
- b. Inho₁-ka **PRO**_{1/*arb} chayk-ul patu-lye-ko nolyek-ha-yess-ta.
 I-NOM book-ACC receive-INT-C effort-do-PST-DC
 'Inho tried to read the book.'
- c. Kongcang kamtok₁-i notongca₂-eykey **PRO**_{*1/2/*arb} te
 factory directory-NOM worker-DAT more
 yelsimhi il-ha-la-ko myenglyeng-ha-yess-ta.
 diligently work-do-IMP-C order-do-PST-DC
 'The factory director ordered the workers to work harder.'

All of the above examples prohibit an arbitrary reading of PRO. For example, the only possible reading of (47a) above is that *Jwuhi* is the only person who could be leaving, as well as the only person who could possibly be promising. The arbitrary reading - that Jwuhi promised that people in general should or will leave is unavailable. This is in contrast to an NOC construction in Korean as illustrated in (48a-b) below.

- (48) a. *Jwuhi*₁-ka *pro*_{1/arb} cal ip-nun kes-ul wen-ha-n-ta.
 J-NOM well dress-RC thing-ACC want-do-IND-DC
 ‘Jwuhi wants someone/herself to dress well.’
- b. *Inho*₁-ka *pro*_{1/arb} sang-ul pat-nun kes-i
 I-NOM prize-ACC receive-RC thing-NOM
 uymi-eps-ta- nun kes-ul mit-nun-ta.
 meaning.not.exist-DC-RC thing-ACC believe-IND-DC
 ‘Inho believes that getting awards is meaningless.’

The examples above all allow arbitrary readings.⁶ In the NOC structure in (48a), the complement of *wen-ha-ta* ‘want’ is a nominal complement, as evidenced by the accusative marker *-lul/-ul*. In addition, the subject of that complement can refer to anyone in general, including *Jwuhi*. This sentence can have the interpretation that Jwuhi wanted people in general to dress well.

2.5.2 Long-distance control is impossible with OC PRO

(49a-c) below show that long distance control is not possible in Korean OC, as PRO cannot refer to the matrix subject *Jwuhi*.

⁶ Many of my informants found it difficult to obtain a true arbitrary reading of these examples and instead preferred an overt subject. While these speakers’ judgments do call into question whether or not NOC exists in Korean (at least for these speakers), it does not argue against OC as a real empirical phenomenon, as

- (49) Jwuhi₁-ka Inho₂-ka PRO_{*1/2} ttena-keyss-ta-ko yaksok-ha-yess-ta-ko
 J-NOM I-NOM leave-VOL-DC-C promise-do-DC-C
 sayngkak-ha-yess-ta.
 think-do-PST-DC
 ‘Jwuhi thought that Inho promised to leave.’

In an NOC construction, however, long-distance antecedents are possible, as shown in (50) below.

- (50) Jwuhi₁-nun Inho₂-ka pro_{1/2/3} swukcey-lul swipkkey ha-lsuiis-nun-
 J-TOP I-NOM homework-ACC easily do-can-IND-
 ta-ko mal-ha-nun kes-ul silhe-ha-yess-ta.
 DC-C say-do-RC thing-ACC hate-do-PST-DC
 ‘Jwuhi hates that Inho said that someone/he/she could do the homework easily.’

In the NOC example in (50), the long distance subject *Jwuhi* can function as the antecedent for *pro*.

the constructions claimed to be OC in this dissertation pass all relevant diagnostics of OC.

2.5.3 Strict-reading of PRO is Impossible in OC

Another property of obligatory control is that strict readings of PRO, as opposed to sloppy, are impossible. This behavior in Korean is exhibited below.

- (51) Monica-ka Wilson-eykey PRO ttena-keyss-ta-ko yaksok-ha-yess-ta.
M-NOM W-DAT leave-VOL-DC-C promise-do-PST-DC.
Bill-do kuri-ha-yess-ta.
Bill-also same-do-PST-DC

***Strict Reading:** Monica promised Wilson that she (Monica) would leave and Bill promised Wilson that she (Monica) would leave.

Sloppy Reading: Monica promised Wilson that she (Monica) would leave and Bill promised Wilson that he (Bill) would leave.

It can be seen above that the sloppy reading is possible, while the strict reading is not.

This is the same as in English obligatory control of PRO.

NOC, on the other hand can have both strict and sloppy interpretations.

- (52) Inho-ka ppalli kkuthney-ko siph-un kes-ul wen-ha-yess-ta.
 I-NOM quickly finish-C want-RC thing-ACC want-do-PST-DC
 Hwun-to kuli ha-yess-ta.
 H-also same do-PST-DC

‘Inho wanted to finish quickly and Hwun did to.’

Strict Reading: Inho wanted himself to finish quickly and Hwun wanted Inho to finish quickly.

Sloppy Reading: Inho wanted himself to finish quickly and Hwun wanted himself to finish quickly too.

Another, and perhaps more concrete way, to show the unavailability of strict readings in control constructions is by employing the use of *only*. Consider first the following sentence in English.

- (53) Only John planned to go to the party.

***Strict Reading:** John made the plan that he would go to the party, and no one else made the plan that John would go to the party.

Sloppy Reading: John made the plan that he would go to the party, and no one else made the plan that they would go to the party.

In the sentence above, a sloppy interpretation is the only available reading, where John is the only one who planned for John to go to the party. The strict reading, where John planned to go to the party and no one else planned for John would to go, is out. This can be compared to a NOC example where both the strict and sloppy readings are allowed, as shown in (54) below.

(54) Only Jim believes running is beneficial.

Strict Reading: Jim believes that running is beneficial to him and no one else believes that running is beneficial to Jim.

Sloppy Reading: Jim believes that running is beneficial to him and no one else believes that running is beneficial to them.

Analogous examples in Korean are given in (55a-b) below.

- (55) a. Hwun₁-man PRO₁ ilcik kkuney-lyeko nolyek-ha-yess-ta.
H-only early finish-INT try/effort-do-PST-DC
 ‘Only Hwun tried to finish early.’
***Strict Reading:** Hwun tried so that he would finish early and no one else tried so that Hwun would finish early.
Sloppy Reading: Hwun tried so that he would finish early and no one else tried so that they would finish early.
- b. Hwun-**man** pro ilcik kkuthney-nun kes-ul wen-ha-yess-ta.
H-only early finish-IND thing-ACC want-do-PST-DC
 ‘Only Hwun wanted to finish early.’
Strict Reading: Hwun wanted that he would finish early and no one else wanted that Hwun would finish early.
Sloppy Reading: Hwun wanted that he would finish early and no one else wanted that they would finish early.

As predicted, in the OC example in (55a) only a sloppy reading is available, while in the example in (55b), both the strict and sloppy readings are available.

2.5.4 De re Reading of PRO is Impossible in OC (only De se)

Finally, de re readings are also impossible in Korean OC constructions. Normally, tests of the de re/de se distinction are constructed using attitudinal verbs.

This is difficult in Korean, as most attitudinal verbs take NP complements. However, the verb *yeysang-ha-ta* ‘expect, forecast, anticipate’ does in fact select for a control complement, at least for some of my informants. Consider the following scenario in (56a).

- (56) a. Jwuhi is a world renowned medical doctor specializing in premature births, who has suffered from amnesia. Jwuhi 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 an award for the person who had done the most research on premature birth.
- b. Jwuhi₁-ka PRO₁ sang-ul pat-keyss-ta-ko yeysang-ha-yess-ta
 J-NOM prize receive-VOL-DC-C expect-do-PST-DC
 ‘Jwuhi expected to receive the prize.’

In the above context, if *Jwuhi* is indeed the researcher who has produced the most research on premature births, it is impossible to truthfully employ the sentence in (56b) to describe Jwuhi’s attitude at the time the award was announced. This is because control verbs like *yeysang-ha-ta* ‘expect, forecast’ require that the controller be able to have *de se* beliefs about self, which Jwuhi does not have due to her amnesia.

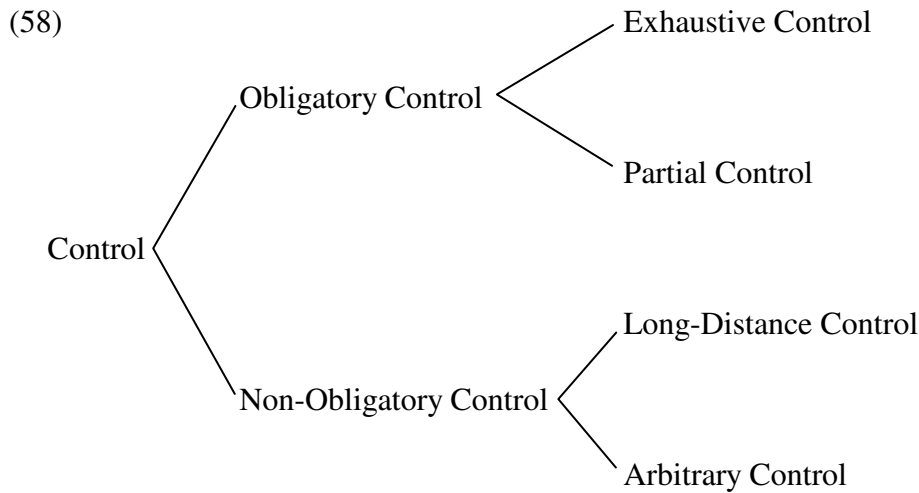
The following NOC continuation of the above scenario, however, can be true. This sentence is not a control construction and therefore can be read *de re*.

- (57) Jwuhi-ka pro sang-ul pat-nun kes-ul kitey-ha-yess-ta.
J-NOM prize-ACC receive-RC thing-ACC expected-do-PST-DC
'Jwuhi expected she would get the prize.'

In the above argumentation, I have shown that OC, as distinct from NOC, is an empirically relevant phenomenon in Korean. In addition, and in keeping with my definition of control, I introduced the idea that the controller/controllee relation is established in part by the meanings of the embedded CCMs. In the next section, I briefly consider the typology of control in preparation for chapter 3, which will examine the phenomena of split control and partial control in Korean.

2.6 The Internal and External Typology(ies) of Control

Chapter 3 of this dissertation illustrates that Korean provides us with examples of control that suggest that the typology of control needs to be expanded to cover a wider range of cases. In this section, I briefly introduce the typology of control presented by Landau (2001).



As represented above, OC falls into two categories, exhaustive control (EC) and partial control (PC). The category of EC pertains to the type of control sentences used thus far and specifically to those cases of OC where the controller and controllee obligatorily represent the same individual(s). In a PC construction, however, the individuals denoted by the controller are a subset of those denoted by PRO.

- (59) a. (EC) Jim₁ desired PRO₁ to quit doing linguistics.
b. (PC) Bill₁ promised PRO₁₊ to gather in the library at 12 o'clock.

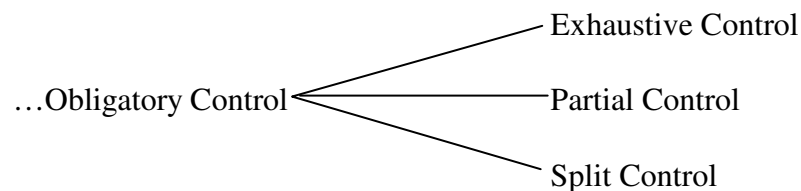
(59a) above is an example of an EC construction, while the example in (59b) is PC construction. In the PC case, the subscript 1+ represents the fact that PRO refers not only to the controller, *Bill*, but also to other contextually determined individuals with whom Bill will gather. What makes these constructions both OC is the fact that both

EC and PC construction all exhibit the same set of properties of OC examined in section 2.2. In chapter 3, I give a full exposition of this data. In addition, while the typology above does indeed represent the vast majority of cases, I show in chapters 3 and 4 that Korean forces us to expand this typology, namely by allowing split control to be a category residing under EC. Split control is a control construction where the controllee represents two separate NPs in the sentence.

(60) Jim₁ proposed to Mary₂ PRO₁₊₂ to have sex by themselves.

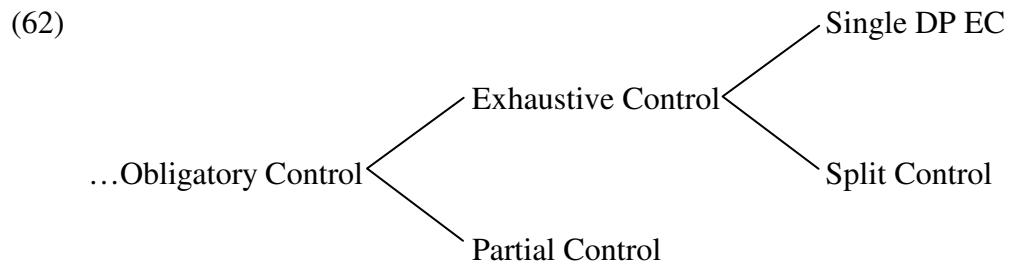
I also show in chapter 3 that split control is to be considered distinct from PC. The revised typology would be as follows.

(61)



It should be kept in mind that while the above seems to accurately describe the data, it may in fact be more descriptively adequate to have split control as a subclass of EC. If EC is to be defined as those cases of OC where the controller and controllee obligatorily represent the same individual(s), then split control fits this definition. In

the example in (60), the controllee obligatorily represents the same individuals denoted by the controllers. If this way of thinking is observed, then the typology would be something akin to (62) below.

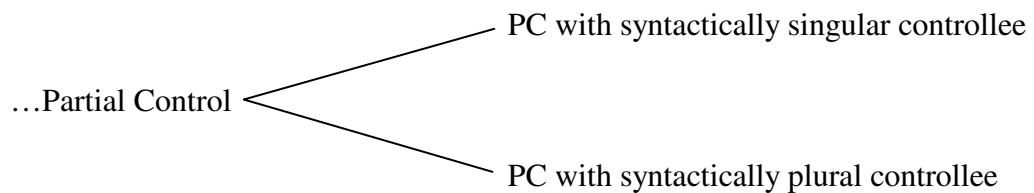


What the typology in (62) shows, is that EC is not one specific control structure, but rather another category of control under which split control and single DP control are both exhaustive types of control.

The argument that split control is obligatory control is an important one because the vast majority of the previous literature assumes it to reside under the category of non-obligatory, a classic example being Williams (1980). However, if I am correct, then this typology must be re-examined. In doing this, there are two possibilities: 1) All languages exhibit split control, and it falls under OC, or 2) split control is only OC in some languages and NOC in others. In chapter 3, I argue in favor of option 1, showing that those elements that go into creating a split control reading are as of yet poorly understood.

In addition, Korean also provides us with evidence that the typology of partial control may need to be further subdivided. In chapter 3, I show that PC in Korean behaves somewhat differently than English. While English does not allow partial control of syntactically plural controllees, Korean does in fact allow this option. This suggests a minor but important revision to the typology as illustrated in (63) below.

(63)



The above discussion serves to set the stage for an important point that will arise many times throughout the remainder of this dissertation. That point is that the Korean data is crucial to developing a more complete cross-linguistic picture of control.

2.7 Controlling Overt Material

As mentioned above, Korean does exhibit the property of being able to control overt material. Exactly what can be controlled, however, is a matter of some debate and I will consider it in detail in chapters 3 and 5. For the time being, however, it is fine to simply note that one can control the long distance reflexive *caki*.

- (64) a. Inho₁-ka Jwuhi₂-eykey **caki_{*1/2}-ka** cip-ey ka-la-ko
 I-NOM J-DAT self-NOM home-LOC go-IMP-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘(lit.) Inho₁ told Jwuhi₂ SELF_{*1/2} to go home.’
- b. Inho₁-ka Jwuhi₂-eykey **caki_{1/*2}-ka** ppalli il-ul
 I-NOM J-DAT self-NOM quickly work-ACC
 kkuthney-keyss-ta-ko yaksok-ha-yess-ta.
 finish-VOL-DC-C promise-do-PST-DC
 ‘(lit.) Inho₁ promised Jwuhi SELF to do the work quickly.’

The main issue with the type of data above in a Chomskyan framework is that one must account for the fact that in many languages, English being one, overt NPs are *not* allowed in the subject position of a control complement. Quite often this is characterized under the supposition that there can be no lexical material at all in the subject of a control complement (e.g. Chomsky 1981). Obviously, this does not work for Korean because a lexical subject is allowed.

To complicate matters, it is also true that in Korean control constructions, one cannot have a proper noun in the subject position of the embedded clause, just as in English OC sentences.

- (65) a. Jim tried to go home.
- b. *Jim tried Mary to go home.
- c. *Monica-ka Wilson-eykey Mary/Monica-ka ttena-keyss-ta-ko
M-NOM W-DAT M/M-NOM leave-VOL-DC-C
yaksok-ha-yess-ta.
promise-do-PST-DC
‘(lit.) Monica promised Wilson Mary/Monica to leave.’

In isolation, the paradigm in (65) seems to suggest that lexical NPs are not allowed in the subject position of control complements. However, as shown above, it is possible to replace PRO with the reflexive *caki*. It thus appears that only proper nouns are disallowed in the subject position of embedded clauses in control constructions in Korean. In chapter 5, I provide a full analysis of why this is so in Korean. The final conclusion is that some languages, such as English, place a morphosyntactic restriction on their embedded subjects. Other languages, such as Korean have no such restrictions and any disallowance of overt material is due to semantic reasons.

2.8 Is there PRO in Korean? A Brief Discussion

In chapter 5, I provide a complete discussion of the subjects of embedded control complements in Korean. In preparation for this and other chapters, I provide here a brief discussion on whether or not PRO exists in Korean.

The question of whether or not PRO exists in Korean is best answered by first examining the motivations for assuming that PRO exists at all.⁷ One of the original assumptions for the existence of PRO in generative syntax comes from Chomsky (1981). The reasons to assume the existence of PRO at that time, however, were largely theory internal. For instance, at that time, all nominals needed to receive Case in order to be legitimate NPs. The mechanism that ensured this was known as the Case Filter. It was therefore assumed that because one cannot pronounce a subject in the embedded subject position of a control complement, that the NP in question must not receive case. Since, case was assigned under government in this framework, PRO was assumed to be in an ungoverned position and not to receive Case; the only NP in the grammar that could do so. This was known as the PRO Theorem. Note that in order to explain the existence, or nonexistence, of PRO, reference to the morphosyntax of case (and arguably agreement) must be made.

Perhaps the greatest opponent to the existence of PRO is the control as movement camp, with the most prominent examples being Hornstein (1999, 2001). This approach views control as A-movement and thus PRO is nonexistent and is

⁷ For a detailed look at this question see Landau (2006)

simply a trace of A-movement. The reasons that one cannot pronounce this trace are due to reasons of case not being available. Again, the solution, while different, is morphosyntactic in nature.

In the semantics tradition, PRO is actually not necessary at all in most frameworks. A notable example is Chierchia (1989), who notices that PRO can be assumed to exist or not in his framework with no direct consequences to his analysis.

In this dissertation, I provide no proof for whether PRO exists or not in English. Rather, I illustrate what it means to a typologically complete theory of control if we do assume that it exists. The question of whether or not PRO exists ultimately comes down to the question of why it is that overt subjects are disallowed in control structures in many languages. With this in mind, in chapter 5, I illustrate that if we assume that PRO exists in English, it is most likely due to morphosyntactic reasons along the lines of Landau (2006). I also show that there is actually no reason to assume that PRO exists in Korean as there are no morphological or syntactic reasons to disallow overt subjects. Rather, in Korean, any disallowance of overt subject appears to be semantic in nature. This will be explained in detail in chapter 5. However, for expository purposes in the chapters ahead I use PRO when discussing Korean control examples. The reader should consider this a label only until chapter 5.

2.9 Chapter 2 - Appendix A: *Tolok* Complements

2.9.1 *Tolok* in the Literature – 3 Kinds of Control

As noted above, the marker *-tolok* was left out of the table above that contains the various CCMs. The reason for this is that the literature on *-tolok* contains many conflicting comments. For example, *-tolok* has been claimed to:

1. Produce object control - Yang (1984, 1985), Madigan (2006a)
2. Produce both subject and object control (i.e. Equi NP Deletion) - Kim (1978)
3. Produce backwards control – Monahan (2003)
4. Produce no control at all – Choe (2006)

In short, *-tolok* has been said to give rise to almost every type of control relationship that exists. Predominantly, however, *-tolok* is cited as producing object control. It is very clear that any account of control will have a difficult time accounting for such variety. In this appendix, I present the evidence as it appears in the literature and discuss the various control readings. In addition, and perhaps more importantly, I provide some examples not yet discussed in the literature. These readings regard a focus/exclusivity reading of backwards control. Using this as well as evidence from possible case patterns, I show that there seems to be a strong correlation between causatives, tough constructions and *tolok* control sentences.

Consider first the following examples of object control with *-tolok* in (1a-b).

- (1) a. Inho₁-ka Jwuhi₂-lul/eykey PRO_{*1/2} cip-ey ka-tolok
 I-NOM J-ACC/DAT home-LOC go-*tolok*
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Inho persuaded Jwuhi to go home.’
- b. Misun₁-i Jwuhi₂-lul/eykey PRO_{*1/2} cemsim-ul sa-tolok
 M-NOM J-ACC/DAT lunch-ACC buy-*tolok*
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Misun persuaded Jwuhi to buy lunch.’

Most authors consider examples like those in (1a-b) grammatical (e.g. Yang 1984, Monahan 2003). Furthermore, the object in a *tolok* complement can have either accusative or dative case with no reported contrast in meaning. It is noteworthy that other control environments with other embedded markers do not allow an accusative

marker on the object. In fact, for many of my informants, accusative case on almost any object in a control sentence is sharply ungrammatical.⁸

- (2) a. Misun-i Jwuhi-*lul/eykey cemsim-ul sa-keyss-ta-ko
M-NOM J-ACC/DAT lunch-ACC buy-VOL-DC-C
yaksok-ha-yess-ta.
promise-do-PST-DC
‘Misun promised Jwuhi to buy lunch.’
- b. Misun-i Jwuhi-*lul/eykey cemsim-ul sa-la-ko
M-NOM J-ACC/DAT lunch-ACC buy-IMP-C
myenglyeng-ha-yess-ta.
order-do-PST-DC
‘Misun ordered Jwuhi to buy lunch.’
- c. Misun-i Jwuhi-*lul/eykey cemsim-ul sa-la-ko mal-ha-yess-ta.
M-NOM J-ACC/DAT lunch-ACC buy-IMP-C say-do-PST-DC
‘Misun told Jwuhi to buy lunch.’

This is in direct contrast to the *tolok* complements above. While the judgments are somewhat varied, both dative and accusative seem to be allowed on the direct object,

⁸ One older informant did however, find the accusative case object acceptable, but noted that the dative is much more acceptable.

with the accusative being the preferred choice by most of my informants. Below, I explain why this might be so, showing that *tolok* complement control constructions pattern with periphrastic causatives in this respect.

In addition to allowing accusative and dative Case on the object, nominative case is also a possibility. This creates an effect termed *backwards control*, where the embedded subject controls a null object argument in the matrix clause (Polinsky and Potsdam 2002, 2003, Monahan 2003).⁹

- (3) Inho₁-ka PRO*_{1/2} Jwuhi₂-ka cip-ey ka-tolok seltuk-ha-yess-ta.
 I-NOM J-NOM home-LOC go-*tolok* persuade-do-PST-DC
 ‘Inho persuaded Jwuhi to go home.’

There is good reason to believe that the NP *Jwuhi-ka* is indeed in the subject position of the embedded clause. I will not provide that argumentation here, but rather refer the reader to Monahan (2003) for a thorough empirical analysis. In a sentence like (3), we have a case where the embedded subject controls a null NP in the matrix clause in a

⁹ I am using the term PRO here for the sake of convenience. Most approaches to backwards control view the process as A-movement and PRO would therefore be just a trace of A-movement.

“backwards” fashion. While this is interesting in and of itself, some authors do not get a strict bound variable reading of (3), most notably Choe (2006).¹⁰

Finally, *-tolok* has also been reported to exhibit subject control (Kim 1978). This paper has been mentioned by many authors, but the subject control data has yet to be included in any detailed analysis of *tolok* constructions.

- (4) Masahiro₁-kaPRO₁ nonmwun-ul sicak-ha-tolok nolyek-ha-yess-ta.
M-NOM thesis-ACC start-do-*tolok* try/effort-do-PST-DC
‘Masahiro tried to start his dissertation.’

Kim (1978) draws the generalization that there are two sets of *tolok* complement predicates, which can be cleanly distinguished on a semantic basis.

¹⁰ Many, if not most of my informants did not get a bound variable interpretation of (3); however, there does seem to exist a group of speakers for whom this reading is truly bound.

(5) *Tolok* complement predicate sets:

1. **Orders, commands, requests and advice:** *chwungko-ha-ta* ‘advise, counsel’, *kwenko-ha-ta* ‘advise, urge, recommend’, *puthak-ha-ta* ‘ask, request’, *myenglyeng-ha-ta* ‘order’, *ceyan-ha-ta* ‘propose’, *cheng-ha-ta* ‘ask, demand’, *maynsey-ha-ta* ‘give oath, vow’, *yokwu-ha-ta* ‘demand, request’, *mal-ha-ta* ‘tell, say’, *seltuk-ha-ta* ‘persuade’.
2. **Attempt and assistance:** *ayssu-ta* ‘exert oneself, endeavor’, *swuko-ha-ta* ‘labor, work’, *nolyek-ha-ta* ‘try, effort’, *himtuli-ta* ‘make an effort’, *cwunpi-ha-ta* ‘to prepare’, *hyepco-ha-ta* ‘help, cooperate’, *top-ta* ‘help, be conducive to’, *hyeplyek-ha-ta* ‘cooperate, collaborate’.

Kim further notes the following properties of the predicates in Set 1: 1.) all take direct objects, 2.) strict object identity only, 3.) can take nominal *kes* complements. The properties of the second set of predicates are the following: 1.) no direct object allowed, 2.) strict subject identity, 3.) cannot take *kes* complements. What these properties boil down to is that the first set produce object control when combined with *tolok* and the second set produces subject control.

2.9.2 *Tolok*: the Basics

Before moving on to consider *tolok* as it relates to causative constructions, I first consider its main properties. Regarding the distribution of *tolok*, it cannot

proceed or follow a complementizer and is therefore categorized as a complementizer (Kim 1978).

- (6) a. *Jwuhi-ka Inho-eykey PRO ttek-ul mek-tolok-ko
 J-NOM I-DAT rice.cake-ACC eat-*tolok*-C
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Jwuhi persuaded Inho to eat the rice cake.’
- b. *Jwuhi-ka Inho-eykey PRO ttek-ul mek-ko-tolok
 J-NOM I-DAT rice.cake-ACC eat-C-*tolok*
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Jwuhi persuaded Inho to eat the rice cake.’

In addition, no tense markers are allowed to occur within a *tolok* complement.

- (7) *Jwhui-ka Inho-eykey PRO ttek-ul mek-ess-tolok
 J-NOM I-DAT rice.cake-ACC eat-PST-*tolok*
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Jwuhi persuaded Inho to have eaten the rice cake.’

As for the syntactic status of the *tolok* complement, it appears as though it is a full CP. When an embedded local reflexive, such as *cakicasin*, is employed, only the local PRO subject can be referenced. This is illustrated in (8) below.

- (8) Inho₁-ka Jwuhi₂-eykey PRO_{*1/2} cakicasin_{*1/2}-uy cip-ey ka-tolok
 I-NOM J-DAT self-GEN home-LOC go-*tolok*
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Inho persuaded Jwuhi to go to her house.’

In the sentence in (8), the only possible home to which Inho and Jwuhi will be going is Jwuhi’s, locally represented by PRO.

2.9.3 Tolok Constructions Behave like Causatives

Tolok can also be used with a simple light verb, such as *ha-ta* ‘to do’. This combination leads to a variety of meanings, but most importantly it has been cited as having a causative reading (e.g. Park 1989).

- (9) John-un Mary-lul ka-tolok ha-yess-ta.
 J-TOP M-ACC go-C do-PST-DC
 ‘John caused Mary to go.’

I believe that it is possible that the connection between *tolok* and periphrastic causative constructions might be closer than most authors working on its control properties have described. In Korean, there is a periphrastic causative form characterized by the use of *-key ha-ta*, which can roughly be described as a causative complementizer plus the light verb ‘do’. An example of this causative form is given in (10).

- (10) Misun-i tongsayng-eykey kongpwu-ha-key ha-yess-ta.
 M-NOM younger.sibling-DAT study-do-*key* do-PST-DC
 ‘Misun made her younger sibling study.’

In fact, for some of my informants, the same causative reading can be obtained by employing *-tolok* instead of *-key*.¹¹

- (11) Misun-i tongsayng-eykey kongpwu-ha-tolok ha-yess-ta.
 M-NOM younger.sibling-DAT study-do-*tolok* do-PST-DC
 ‘Misun made her younger sibling study.’

The above examples serve to show that *tolok* can indeed yield a causative reading.

¹¹ Some informants reported a stronger causal reading with *key ha-ta* versus the *tolok ha-ta* construction.

Having established that *tolok* yields causative readings in general with light verbs, I now show that *tolok* control constructions also share certain properties regarding case with causative constructions. First of all, reconsider that there are three possible Cases that can appear on the object, or rather the controller, of a *tolok* control construction: nominative, accusative and dative. The same can be said for *key ha-ta* constructions. Consider the following paradigm in (12a-c) noted by Song (2002).

- (12) a. Kiho-ka **Cini-ka** koail cep-ul masi-ke ha-yess-ta.
 K-NOM C-NOM fruit juice-ACC drink-COMP do-PST-DC
 ‘Keeho caused Jinee to drink the fruit juice.’ (Song 2002)
- b. Kiho-ka **Cini-lul** koail cep-ul masi-ke ha-yess-ta.
 K-NOM C-ACC fruit juice-ACC drink-COMP do-PST-DC
 ‘Keeho caused Jinee to drink the fruit juice.’ (Song 2002)
- c. Kiho-ka **Cini-eykey** koail cep-ul masi-ke ha-yess-ta.
 K-NOM C-DAT fruit juice-ACC drink-COMP do-PST-DC
 ‘Keeho caused Jinee to drink the fruit juice.’ (Song 2002)

The case pattern in the above examples are exactly like those observed for *tolok* control cases.

Also, consider that Korean tough constructions also have similar case alternation facts. The difference with these constructions is that they do not seem to allow a dative subject.¹²

- (13) a. **John-ul** soki-ki-ka elye-wess-ta.
 John-ACC trick-NML-NOM difficult-PAST-IND
 "It was difficult to trick John." (Yeo 2005)
- b. **John-i** soki-ki-ka elye-wess-ta.
 John-NOM trick-NML-NOM difficult-PAST-IND
 "John was difficult to trick." (Yeo 2005)

In (13a-b), I have shown that there is a similar case alternation that exists in both *tolok* control sentences and causatives with respect to accusative and nominative case. While the tough construction may seem somewhat far removed from causatives and object control, there is in fact a special reading with respect to the nominative subject in (13a) that makes them relevant. There is a similar reading of backwards control sentences that employ a nominative controller that has gone unnoticed in the literature and is actually more akin to a reading produced by tough construction with similar case facts. Consider the following sentence:

¹² The dative was possible for some informants, but not for others.

- (14) Inho-nun Chelswu-eykey kakey-ey ka-tolok seltuk-ha-yess-ta.
I-TOP C-DAT store-LOC go-*tolok* persuade-do-PST-DC
'Inho persuaded Chelswu to go to the store.'

When given this sentence with the two possible readings in (15a-b) below, my informants felt that both readings were possible.

- (15) a. Reading 1: Chelswu is one of a presupposed group of people that is going to the store, all of whom may have been persuaded to do so.
b. Reading 2: There is a presupposed group of people going to the store; however, Chelswu was the only one that was persuaded by Inho to do so.

While both of these readings are available, my informants reported to me that when the controller has nominative case, only reading 2 is allowed, as shown in (16) below.

(16) Inho-nun Chelswu-ka kakey-ey ka-tolok seltuk-ha-yess-ta.

I-TOP C-DAT store-LOC go-*tolok* persuade-do-PST-DC

‘Inho persuade Chelswu to go to the store.’

#Reading 1: Chelswu is one of a presupposed group of people that is going to the store., all of whom may have been persuaded do so.

Reading 2: There is a presupposed group of people going to the store; however, Chelswu was the only one that was persuaded by Inho to do so.

In short, the focus, or exhaustive, reading is one where there is a presupposed group of people and Inho picked Chelswu among them and persuaded him to go to the store.

This reading becomes more clear when the context of picking an individual out of a group is made more salient.

- (17) a. Inho-nun Chelswu-ka/#lul swuhak.tayhoi-ey naka-tolok
 I-NOM C-NOM/ACC math.contest-LOC go.out-tolok
 selktuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Inho persuaded Chelswu to enter the math contest.’¹³
- b. Exclusive Reading: There is a presupposed group of people who are all eligible to enter the math contest, but Inho persuaded Chelswu, not Changyong or Sean, to enter the math contest.

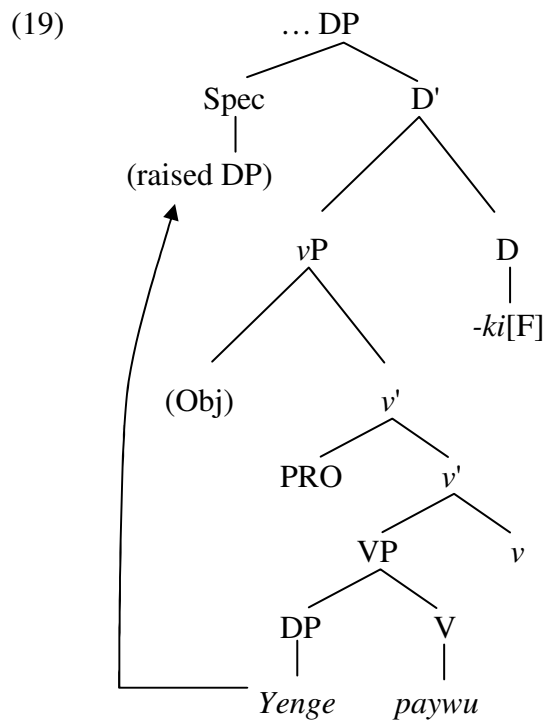
My informants told me that the exclusive reading is much stronger for example (17) than a non-presupposed group reading. In addition, the presupposed group reading is out if the controller is marked with accusative case. What this points to is that the constructions employing the nominative versus the accusative/dative case are *not* identical as has been previously presumed. To find an answer to this, I now present some similar data involving tough constructions. Consider the examples in (18a-b) as reported by (Yeo 2005):

¹³ Thanks to Min-Jeong Son for providing this example.

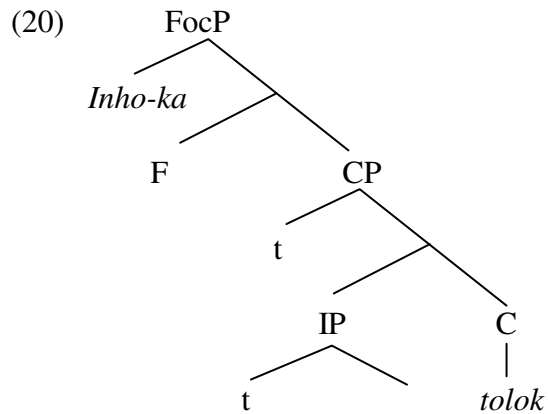
- (18) a. **Yenge-ka** paywu-ki-ka elye-wess-ta.
 English-NOM learn-NML-NOM difficult-PAST-IND
 ‘English is difficult to learn.’
- b. **Yenge-ul** paywu-ki-ka elye-wess-ta.
 English-ACC learn-NML-NOM difficult-PAST-IND
 ‘English is difficult to learn.’

It can be seen in the above examples that the subject of the tough construction has the same case alternation as the *tolok* examples above. Furthermore, Yeo reports that the nominative marked example in (18a) has a contrastive/focus reading that is absent in the accusative marked example. The reading in (18a) presupposes that there are other subjects that were under consideration, but that among these subjects, English is the difficult one and the others are easy. This reading is reportedly absent from the accusative marked sentence. So, it appears that the nominative marked DP is contrasted against a presupposed set of alternate propositions. If we consider the control examples above, we can see that when *Chelswu* is nominative, he is contrasted against a group of other individuals who might take the test but who were not persuaded. When it is accusative, this reading is unavailable. This is also particularly interesting, as tough constructions have also been argued to involve causative interpretations (e.g. Pestersky 1987, 1995).

To account for the focus reading in tough constructions, Yeo concludes that the nominative marked DP has raised to Spec of the nominalized DP and that this is a focus position. On the other hand, the accusative marked version DP stays in Spec vP .



Taking a similar kind of approach to backwards control constructions, it may be the case that the nominative controller is in fact in some specifier position that allows a focus reading. For illustrative purposes, I will assume this to be a FocP phrase located above CP.



In addition, it also might be that *tolok* is a kind of causative complementizer, just as *key* is in the periphrastic causative construction (see Lee 2007).

The purpose of the appendix is simply to show that *tolok* control structures are perhaps more varied and complicated than has been previously considered. In fact, *tolok* constructions might be better classified with causatives. Furthermore, I have shown that there is a close relationship between Korean tough constructions and *tolok* object control structures, in that there is a focus reading available when the nominative controller is used.

Chapter 3

PARTIAL CONTROL, SPLIT CONTROL AND ISSUES OF PLURALITY

3.1 Introduction

In this chapter, I present an empirical analysis of partial control (PC) in Korean as well as its theoretical implications for current generative theories of syntax. I show that the Korean data not only forces us to re-examine current theories of control, but also the typology of control. In addition, I outline split control as an obligatory phenomenon (Split OC), which until very recently (see Fujii 2006, and Madigan 2006b, 2008) has been seen as a form of non-obligatory control in the world's languages. Finally, I consider what the data means for current theories of plurality in Korean and propose a new theory employing Kratzer's (2006) [*group*] feature for partial control and the [*sum*] feature for split control. After having established the facts about control and plurality in this chapter, I provide a more detailed theory of control and controller choice in Korean in chapter 4.

3.2 PC in English and Korean

As stated in chapter 2, Landau (2001) claims that OC can be divided into two subcategories: 1) exhaustive control (EC), where the controller is identical to PRO

in all features, and 2) partial control (PC), where the controller is semantically and syntactically singular, but the controllee is semantically plural and syntactically singular. With respect to the properties that distinguish OC and NOC utilized in chapter 2, the two constructions are identical. The only difference between EC and PC is that in PC a singular controller controls a plural controllee. The following sentences are examples of PC in English.

- (1) a. John₁ desired PRO₁₊ to meet at the department.
 b. The chair₁ promised PRO₁₊ to gather without a concrete plan.

In the examples in (1a-b), PRO is a plural set of individuals that crucially must include the singular antecedent in its set of referents.

PC constructions can be constructed in Korean using collective verbs such as *moi-ta* ‘to gather’, or *manna-ta* ‘to meet’.

- (2) a. Jwuhi₁-ka PRO₁₊ yeses-si-ey moi-keyss-ta-ko yaksok-ha-yess-ta.
 J-NOM six-hour-at gather-VOL-DC-C promise-do-PST-DC
 ‘Jwuhi promised to gather at 6.’
- b. Jwuhi₁-ka PRO₁₊ yeses-si-ey manna-keyss-ta-ko yaksok-ha-yess-ta.
 J-NOM six-hour-at meet-VOL-DC-C promise-do-PST-DC
 ‘Jwuhi promised to meet at 6.’

In the examples in (2a-b), PRO’s reference includes not only the matrix subject *Jwuhi* but also those with whom she will gather or meet. This illustrates one way to form PC constructions: using embedded collective predicates. An important question is whether the embedded predicates in (2) obligatorily take plural subjects. The following data shows that this is true, as *manna-ta* ‘to meet’ or *moi-ta* ‘to gather’ cannot take a singular subject such as *Chelswu*.¹⁴

¹⁴ Some of my informants do not get the collective reading of *manna-ta* ‘to meet’. Instead, they seem to interpret the sentence with a null prepositional object (i.e. *with friends* as in (i) below).

- i) Inho-ka (chinkwu-tul-ul) manna-ass-ta.
 I-NOM friend-PL-ACC meet-PST-DC
 ‘Inho met (with his friends)’

These speakers cannot obtain a PC reading with these verbs, as they are not collective predicates in their individual grammars. These same speakers do, however, obtain PC readings with other collective verbs like *moi-ta* ‘to gather’.

(3) #Chelswu-ka tosekwan-eyse moi/manna-yess-ta.

C-NOM library-LOC gather/meet-PST-DC

‘Chelswu gathered/met in the library.’

(Kim 2004)

Another way to form a PC construction is by using a collective adverb like *hamkkey* ‘together’ with a non-collective embedded predicate.

(4) Jwuhi₁-ka PRO₁₊ hamkkey ka-keyss-ta-ko yaksok-ha-yess-ta.

J-NOM together go-VOL-DC-C promise-do-PST-DC

‘(lit.) Jwuhi promised to go together.’

The question that remains is what type of plurality exists in PC constructions- syntactic or semantic. Before addressing this question, however, I first provide empirical evidence that PC in Korean is OC as opposed to NOC.

Using the criteria in chapter 2, I now show that Korean PC exhibits all of the properties that EC does. This provides evidence that PC and EC are both forms of OC and not NOC.¹⁵ In (5) below, I have relisted the empirical properties of OC PRO.

¹⁵ This argument has been made for English (Landau 2001) and I adopt that argumentation here for Korean.

(5) Basic properties of obligatory control of PRO

- A. Arbitrary Control is impossible with OC.
- B. Long-Distance Control is impossible in OC.
- C. Strict-reading of PRO is impossible in OC.
- D. De re reading of PRO is impossible in OC (only de se is possible).

3.2.1 Arbitrary Control is Impossible with OC PRO

Just as with regular EC constructions, PC PRO cannot have arbitrary reference.

- (6) a. Jwuhi₁-ka Inho-eykey [**PRO**_{1+/*arb}hamkkey ttena-keyss-ta]-ko
J-NOM I-DAT together leave-VOL-DC-C
yaksok-ha-yess-ta.
promise-do-PST-DC
'(lit.)Jwuhi promised Inho to leave together.'
- b. Jwuhi₁-ka **PRO**_{1+/*arb} yeses-si-ey moi-keyss-ta-ko
J-NOM six-hour-at gather-VOL-DC-C
yaksok-ha-yess-ta.
promise-do-PST-DC
'Jwuhi₁ promised to gather at 6.'

In (6a-b) the individual denoted by the antecedent must always be identified intrasententially. The people with whom *Jwuhi* is gathering or leaving are always contextually determined. For example, in (6b), any contextually determined set of individuals may gather with *Jwuhi* at 6:00, such as a group of students, provided that *Jwuhi* is included in that group. The arbitrary reading, however, is not available. For example, in (6b), the arbitrary reading - where *Jwuhi* promised that people in general should, or would, gather - is strictly out.

In contrast to the OC examples above, I have provided an NOC example below in (7).

- (7) Sachie₁-ka pro_{1+/arb} tosekwan-eyse moi-nun kes-ul
 S-NOM library-LOC gather-RC thing-ACC
 wen-ha-yess-ta.
 want-do-PST-DC
 ‘Sachie wanted (someone) to gather in the library.’

In the above example, an arbitrary reading of the embedded null subject is possible. In other words, this sentence may mean that Sachie wants specific group of people, or people in general, to gather.

3.2.2 Long-distance Control is Impossible with OC PRO

(8) shows that PC PRO cannot have a long distance controller.

- (8) Inho₁-ka Jwuhi₂-ka **PRO**_{*1+/2+} yeses-si-ey moi-keyss-ta-ko
I-NOM J-NOM six-hour-at gather-VOL-DC-C
yaksok-ha-yess-ta-ko sayngak-ha-yess-ta.
promise-do-PST-DC-C think-do-PST-DC
'Inho thought that Jwuhi promised to gather at 6.'

In (8) above, the only possible antecedent is the closest one, *Jwuhi*. The long distance matrix subject *Inho* is ungrammatical. In an NOC environment, however, it is possible to have long distance antecedents, as illustrated in (9) below.

- (9) Inho₁-nun Suthibu₂-ka pro_{1+/2+/3+} tosekwan-eyse moi-nun kes-ul
I-TOP S-NOM library-LOC gather-RC thing-ACC
wen-ha-yess-ta-ko sayngkak-ha-yess-ta..
want-do-PST-DC-C think-do-PST-DC
'Inho thought that Steve wanted (someone) to gather in the library.'

In the example in (9), the embedded null subject can refer to any contextually salient group, suggesting that (9) is an NOC structure.

3.2.3 Strict-reading of PRO is Impossible in OC

Just as in EC cases in Korean, (10) shows that in PC cases, strict readings of PC PRO are impossible.

- (10) Jwuhi₁-ka **PRO** yeses-si-ey moi-keyss-ta-ko yaksok-ha-yess-ta.
J-NOM six-hour-at gather-VOL-DC-C promise-do-PST-DC
Pil-to kuri ha-yess-ta.
Bill-also same do-PST-DC

‘Jwuhi promised to gather at 6 and Bill did too.’

***Strict Reading:** Jwuhi promised that they (Jwuhi and others) would gather at 6 o’clock and Bill promised that they (Jwuhi and others) would do the same.

Sloppy Reading: Jwuhi promised that they (Jwuhi and others) would gather at 6 o’clock and Bill promised that they (Bill and others) would do the same.

The relevant NOC structure, having both a strict and sloppy reading is as follows.

- (11) Sachi-ka pro tosekwan-eyse moi-nun kes-ul wen-ha-yess-ta.
 S-NOM library-LOC gather-RC thing-ACC want-do-PST-DC
 Inho-tokuri-ha-yess-ta
 I-also same-do-PST-DC
 ‘Sachie wants (someone) to gather in the library and Inho does too.’
Strict Reading: Sachie wants for her and her group to gather in the library and
 Bill wants for Sachie and her group to gather in the library.
Sloppy Reading: Sachie wants for her and her group to gather in the library
 and Bill wants for him and his group to gather in the library.

In the example above, both the strict and sloppy readings are available, which is in keeping with an NOC structure.

In chapter 2, I employed the use of *only* in showing that only sloppy readings were possible in regular OC constructions. In (12) below, I use the same test to show the same in PC.

(12) Masahiro-man PRO moi-keyss-ta-ko huymang-ha-yess-ta.

M-only gather-VOL-DC-C hope-do-PST-DC

‘Only Masahiro hoped to gather.’

***Strict Reading:** Masahiro hoped that he and his group would gather and no one else hoped that Masahiro and his group would gather.

Sloppy Reading: Masahiro hoped that he and his group would gather and no one else hoped that their group would gather.

In the example above, the only possible reading is where Masahiro and his group would gather, regardless of who is hoping they will gather.

Finally, an NOC example involving binding of *only* follows. As expected, both the strict and sloppy interpretations are available.

(13) Masahiro-man pro moi-lkela-ko mal-ha-yess-ta.

M-only gather-FUT-C said-do-PST-DC

‘Only Masahiro said (someone) would gather.’

Strict Reading: Masahiro said that he and his group would gather and no one else said that Masahiro and his group would gather.

Sloppy Reading: Masahiro said that he and his group would gather and no one else said that their group would gather.

3.2.4 De re Reading of PRO is Impossible in OC (only De se is Possible)

Finally, de re readings are impossible in Korean PC constructions.

Consider the following scenario and its continuation in (14a-b).

(14) a. ‘Jwuhi had been teaching a class on obstetrics for years before she acquired amnesia. Every year the students would all gather at her house and have a party for the class. On the usual day of the party, Jwuhi was sitting on her porch as the students came down the street. However, the students were going to their new professor’s house which was a few houses down.’

b. Jwuhi₁-ka PRO₁₊ caki-uy cip-eyse moi-keyss-ta-ko
J-NOM self-GEN home-LOC gather-VOL-DC-C
yeysang-ha-yess-ta.
expect-do-PST-DC
‘Jwuhi expected to gather at her house.’

It is impossible to truthfully employ the sentence in (14b) to describe Jwuhi’s attitude with respect to the context in (14a). In other words, it would be impossible for Jwuhi to expect that the students would gather at her house due to her amnesia. As for the de re reading, the context allows this possibility, as Jwuhi could expect that the students would gather at someone else’s house. The OC sentence in (14b) does not allow this

reading. However, with an NOC continuation of the above scenario, then the de re reading is possible. This is illustrated in (15) below.

- (15) Olhey Jwuhi-ka pro moi-nun kes-ul kitay-ha-yess-ta.
 this.year J-NOM gather-RC thing-ACC expect-do-PST-DC
 ‘Jwuhi expected gathering this year.’

In the example in (15), the complement of *kitay-ha-ta* ‘to expect’ is not a control complement and therefore does not force a de se reading. Instead, the matrix subject, Jwuhi, is able to have beliefs about others in this construction, hence a de re reading is possible.

3.2.5 Syntactic Versus Semantic Plurality- Is PC PRO Syntactically Plural in Korean?

Landau (2001) explicitly states that PC PRO *must* agree in syntactic number with its controller and shows that, in English, PC PRO is semantically plural but syntactically singular. However, PC PRO seems to be syntactically plural in Korean, hence Landau’s claim that PRO must agree in syntactic number with its controller in PC constructions is false for Korean. Landau’s generalization for PC is as follows:

(16) Landau's PC Generalization:

In tensed complements, PRO inherits all phi features from the controller including semantic plurality, but not necessarily semantic singularity.

Below I explain what “tense” means for Landau. What is important at this point is that the generalization in (16) states that PC PRO must agree in all features with its controller.

The facts I have shown for Korean PC are inconsistent with only one part of this generalization: that PRO inherits *all* phi features from its controller. In this section, I show that Korean PC PRO is in fact syntactically plural. This being true, PRO can have a different number than its controller.

For Landau, PRO in PC constructions is only *semantically* plural and functions as any morphologically overt group name would. His evidence for this is based on the tests in the table below:

Table 1

	Semantic Plurality	Syntactic Plurality
Test	Lexically collective verbs	Plural inflection
	<i>Together</i>	Non-singular anaphor
		Floating quantifier

Table 1 illustrates that to test for semantic plurality, those nouns allowed to occur with collective predicates or predicates supported by *together* are semantically plural. It is important to note that they may also be syntactically plural. However, those plural nouns that are allowed with plural verbal inflection, non-singular anaphors, and floating quantifiers must be syntactically plural. In what follows, I employ Landau's argumentation to explore Korean and show that PRO in PC contexts in Korean is syntactically plural.

3.2.6 Group Names in Korean

Landau's claim is that PC PRO is semantically plural but syntactically singular. This boils down to PC PRO being a group name. Given this, I first establish that Korean actually has nouns that function as group names in the sense that English does. Consider the following tests of semantic plurality in (17); namely occurrence with a collective predicate in (17a) and *together* in (17b).

- (17) a. Wiwenhoy-ka moi-ess-ta.
 Committee-NOM gather-PST-DC
 'The committee gathered.'
- b. Wiwenhoy-ka hamkkey ttena-ass-ta.
 Committee-NOM together leave-PST-DC
 'The committee left together.'

The readings in (17) were reported to me to be for one group and *not* a number of different groups/committees. However, both of these tests also allow syntactically plural subjects. Consider the following fact: plural markers are in most cases optional in Korean (Song 1975), but plural markers are obligatory with the demonstrative *ku*, meaning ‘that’.

- (18) a. Ku wiwenhoy-tul-i moi-ess-ta.
 DEM committee-PL-NOM gather-PST-DC
 ‘Those committees gathered.’
- b. Ku wiwenhoy-tul-i hamkkey ttena-ass-ta.
 DEM committee-PL-NOM together leave-PST-DC
 ‘Those committees left together.’

In the examples above, there is a forced reading of syntactic plurality and the only available reading is one where there is more than one committee gathering or leaving.

As stated previously, the above tests for semantic plurality can also take syntactically plural NPs. Therefore, it is necessary to test for syntactic plurality to tease the two apart.

- (19) a. *Wiwenhoy-ka selo ttena-ass-ta.
 committee-NOM each.other leave-PST-DC
 ‘(lit.) The committee left with each other.’
- b. *Wiwenhoy-ka sey-myeng-i ttena-ass-ta.
 committee-NOM 3-CLS-NOM leave-PST-DC
 ‘The three committee members left.’

The examples above show that *Wiwenhoy* ‘committee’ cannot be modified by *selo* ‘each other’ or the classifier *myeng*. This is evidence that *Wiwenhoy* is functioning as a group name and is semantically plural and syntactically singular. These modifiers can only be used with syntactically plural NPs. To show that this is true, I provide the examples in (20) below, which employ syntactically plural NPs in the subject position.

- (20) a. Wiwenhoy-tul-i selo ttena-ass-ta.
 committee-PL-NOM each.other leave-PST-DC
 ‘The committees left with each other.’
- b. Wiwenhoy-tul-i sey-key-ka ttena-ass-ta.
 committee-PL-NOM 3-CLS-NOM leave-PST-DC
 ‘The three committees left.’

What this data shows, is that Korean has group names in the same sense as English.

I have established that there are group nouns in Korean that are syntactically singular and semantically plural. These are exactly the properties of English PC PRO as reported by Landau (2001). Having established that group nouns exist in Korean, I show in the next section that PC PRO in Korean is *not* a group noun.

3.2.7 PC in Korean and the Syntactic plurality of PRO

If PC PRO is semantically plural, then it should not be able to combine with *selo* ‘each other’ or any classifier. In fact, I have found that it can, indicating that PC PRO is actually syntactically plural.

- (21) Chelswu-ka Inho-eykey PRO **hamkkey/selo/motu/kakca** moi-la-ko
 C-NOM I-DAT together/each other/all/each gather-IMP-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘(lit.) Chelswu told Inho to (all) gather together/with each other.’

To be clear, PRO is not syntactically plural because of some property of the embedded predicate *moi-ta* ‘to gather’. This predicate can in fact take overt group nouns, and in addition, these nouns cannot be distributed over by *selo* ‘each other’. This is shown in (22) below.

- (22) *Wiwenhoy-ka selo moi-yess-ta.
 committee-NOM each.other gather-PST-DC
 ‘(lit.) The committee gathered with each other.’

As for classifiers, some consultants found them slightly odd as shown in (23a), while most found them grammatical, thus indicating syntactic plurality. All consultants agreed that (23b) was certainly grammatical.

- (23) a. ?Chelswu-ka Inho-eykey PRO sey **myeng-i** moi-la-ko
 C-NOM I-DAT 3 CLS-NOM gather-IMP-C
 mal-ha-yess-ta.
 say-do-PST-DC
 ‘(lit.) Chelswu told Inho to, the three of them, gather.
- b. Chelswu-ka Inho-eykey PRO sey **myeng-man** moi-la-ko
 C-NOM I-DAT 3 CLS-only gather-IMP-C
 mal-ha-yess-ta.
 say-do-PST-DC
 ‘(lit.) Chelswu told Inho to, the three of them only, gather.

I conclude from the data above that PRO in PC contexts is syntactically plural in Korean. This is the opposite pattern of English as observed by Landau (2001).

What the above argumentation points to is a need to revise the typology of PC. The typology must be revised to allow the option of languages having PC with syntactically plural PC PRO and those without.

An additional test for syntactic plurality employs non-nominal *-tul*. As is well known, Korean can overtly mark plurality by attaching the marker *-tul* to a noun (Ramstedt 1939, Song 1975).

- (24) Ku salam-**tu**l-i sakwa-**tu**l-ul mek-ess-ta.
DEM person-PL-NOM apple-PL-ACC eat-PST-DC
'Those people ate the apples.'

However, there is another use of the plural marker *-tul*. This marker is called “non-nominal *-tul*” by Kim (2005) and can be attached to a variety of categories, including locatives. Non-nominal *-tul* is so called because of its appearance outside of the dative marker. Its function is to distribute over an antecedent which c-commands it. I have provided an example of this in (25) below.

- (25) Haksayng-*(**tul**)-i ku ai-tul-eykey-**tul** phyenci-lul ponay-ess-ta.
 student-**PL**-NOM DEM child-PL-DAT-**NNT** letter-ACC send-PST-DC
 ‘The students sent a letter/letters to those children.’ (Kim 2005)

The reading of (25) is that each of the students sent a letter to the children. Furthermore, (25) illustrates that unless the antecedent *haksayng* ‘student’ is marked plural, the sentence is ungrammatical, showing that non-nominal *-tul* requires a plural antecedent.

Given that non-nominal *-tul* distributes over its antecedent, it is predicted that a group noun cannot antecede it. This prediction is borne out as shown in (26) below.

- (26) *Thim-un tosekwan-eyse-**tul** yelsimhi kongpwu-ha-yess-ta.
 group-TOP library-LOC-**NNT** diligently study-do-PST-DC
 ‘The group/team studied diligently at the library.’

Applying this to a PC context, I am able to show that PRO in PC contexts is plural using non-nominal *-tul*.

- (27) Jwuhi₁-ka **PRO**₁₊ tosekwan-eyse-**tul** moi-keyss-ta-ko
 J-NOM library-LOC-**NNT** gather-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do- PST-DC
 ‘Jwuhi promised to gather at the library.’

The example in (27) further illustrates that PC PRO must be syntactically plural and cannot be a group noun.

In section 3.2 below, I examine the ramifications of the analysis presented thus far for current theories of control. Following this, I discuss split control and how it relates to current theories of control. Finally, I present an analysis of plurality in Korean control constructions employing the work of Kratzer (2006) and the idea of a [*group*] feature.

3.3 PC and Generative Analyses- Problems and Solutions

In this section, I review two possible analyses that are prevalent in the current literature and compare how they account for the above data: 1) An OC-as-A-movement account (Hornstein 1999 and subsequent) and 2) An OC-as-Agree account (Landau 2001 and subsequent). It will be shown that both approaches are lacking in light of the PC data in Korean.

3.3.1 Basic Movement Account – Hornstein (1999, 2001)

Hornstein's basic movement account of control is that OC PRO and NP-trace are not distinct; they are both residue of movement. As for NOC, he stipulates that the empty category in question is pro. The basic theoretical assumptions needed for a movement account of subject and object OC are listed below (Hornstein 2001).

- (28)
- a. θ -roles are features on verbs.
 - b. Greed is Enlightened Self-Interest.¹⁶
 - c. A DP/NP “receives” a θ -role by checking a θ -feature of a verbal/predicative phrase that it merges with.
 - d. There is no upper bound on the number of θ -roles a chain may have.

An example derivation is as follows:

- (29)
- a. John hopes to leave.
 - b. $[_{IP} \text{John } [_{VP} \text{John } [_{\text{hopes}} [_{IP} \text{John } [_{VP} \text{John } \text{leave}]]]]]]]$

The derivational steps for the above example are listed below.

- (30)
- 1. 'John' merges with the V-bar 'leave', checks θ -role feature on the verb.
 - 2. 'John' moves to the embedded Spec IP to check the D-feature of I' .
 - 3. 'John' moves to Spec VP of 'hope' to check θ -role feature of verb.
 - 4. 'John' moves to matrix Spec IP to check Case and EPP/D-features.

¹⁶ This states that Greed requires at least one element in a checking relation to check a feature, so that if A and B enter into a checking relation, either A or B must check a feature off, but both need not do so.

One final component of the A-movement approach is the reinstitution of Rosenbaum's (1970) original Minimal Distance Principle (MDP).

- (31) The Minimal Distance Principle (MDP): α is a controller for PRO iff α c-commands PRO and for all β different than α that c-command PRO, β c-commands α .

Hornstein reduces the MDP to the Minimal Link Condition (MLC), or Shortest Move, and thus derives the MDP from his movement based approach, which is in fact a desirable consequence. This principle defines subject versus object control in terms of shortest movement.¹⁷

Below I outline the problems that an A-movement account of control has with respect to the Korean data. The first issue is in accounting for partial control at all. Any attempt in the movement camp to look at these constructions as NOC fatally misses the point that empirically, PC and EC show the same properties. These empirical properties *are* what define OC.¹⁸ Other movement approaches regard PC as OC but they complicate the grammar by assuming the controllee comes into the

¹⁷ Well known cases such as *promise* violating the MLC are said to be marked cases by Hornstein (2001).

¹⁸ For a rather convincing critique of Hornstein's objections to PC see Landau (2004b).

derivation with a second empty category (e.g. Rodrigues 2005). In addition, one of Hornstein's major motivations is to collapse raising with control and thus simplify the grammar. A big issue, then, is that if partial control exists, then partial raising is predicted to exist. However, this predication is not borne out as shown in (32).

(32) *The chair is likely to gather at 6 o'clock.¹⁹

Finally, Korean creates a serious problem for movement based approaches, as there exists the fact that PC PRO in Korean has a different syntactic number feature than its controllers. For this, a movement approach must say:

1) PC is not OC.

or

2) PC exists, but a chain can have more than one number.

Perhaps option 1 could somehow be proven correct, but option 2 seems to be insoluble as a chain of movement cannot have more than one number in any theory that I am aware of to date.

¹⁹ Thanks to a Benjamin Bruening for providing this example.

3.3.2 Basic OC-as-Agree Analysis (Landau 2001)

In this section, I examine Landau's (2001) analysis of OC and see how it can account for the Korean data examined thus far. The basic assumptions for this analysis are as follows:

- (33)
- a. PRO enters the derivation with valued phi-features.
 - b. Functional heads enter the derivation with unvalued phi-features.
 - c. Semantic Plurality (SP) is a syntactic feature: +/- on DP, +/-/ $\emptyset$ on functional heads.
 - d. Matching of features: $\emptyset$ and [-SP] are nondistinct on functional heads.
 - e. PRO and infinitival Agr are anaphoric (in the sense of Borer 1989).
 - f. PRO, being anaphoric, cannot value unvalued functional heads.

According to Landau, PRO comes in two flavors: plus semantically plural [+SP] and minus semantically plural [-SP]. F, some functional head (T for subject control, *v* for object control), and Agr come into the derivation as [$\emptyset$ SP]- unspecified for semantic plurality. Matrix F and Agr receive their value via Agree with the controller DP. F then Agrees with PRO via T-Agr for PC or directly for EC, effectively establishing control.

Landau also assumes that F Agrees with T-Agr in PC and not EC. This stems from the fact that Landau assumes, following Pesetsky and Torrego (2001), that

there is obligatory T-to-C movement to check off an uninterpretable tense feature on C. This mechanism is assumed only to occur in PC constructions, as EC complements are not tensed. The term “tensed” is meant to refer to whether a clause carries its own semantic tense or not. Landau shows this by assuming that if a sentence tolerates a mismatch of tense between the embedded clause and the matrix clause, then the embedded clause must not be dependent on the matrix tense and thus must have its own tense operator. His example is as follows:

- (34) a. *Yesterday, John began to solve the problem tomorrow. = untensed (EC)
 b. Yesterday, John hoped to solve the problem tomorrow.
 = tensed (PC capable)

This same fact is true in Korean of PC constructions.

- (35) Ecey-nun Inho-ka PRO neyil moi-keyss-ta-ko
 Yesterday-TOP I-NOM tomorrow gather-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC
 ‘Yesterday, Inho promised to gather tomorrow.’

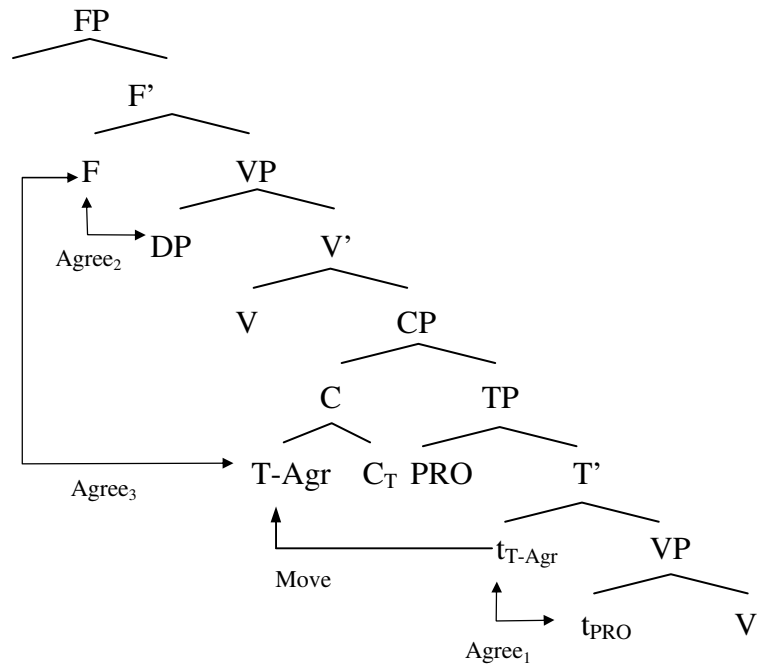
The above example indicates that the PC embedded clause carries its own tense in Korean, just as in English, as it can differ from that of the matrix clause. Landau uses this fact about PC complements in his technical analysis of English OC and makes the assumption that T-Agr moves to C (a la Pesetsky and Torrego 2001) in PC contexts only.

How the above assumptions adhere together to account for OC are best illustrated with sample derivations. With regards to PC in English, Landau needs to account for the following sentences:

- (36)
- a. The chair₁ decided [PRO₁ to wear a T-shirt].
 - b. The committee₁ decided [PRO₁ to gather during the strike].
 - c. The chair₁ decided [PRO₁₊ to gather during the strike].
 - d. *The committee₁ decided [PRO₁₋ to wear a T-shirt]. (Landau 2001)

(37) shows the necessary operations for a PC derivation.

(37) PC representation (Where FP = TP):



The derivation of the PC case of (37c) is outlined below:

(38) The chair₁ decided [PRO₁₊ to gather during the strike].

Agree1: [+SP] PRO agrees with T-Agr [ØSP]

Move: T-Agr moves to C to check off uninterpretable tense feature.

Agree2: F Agrees with controller DP [-SP] and becomes [-SP].

Agree3: F then Agrees with T-Agr which is still [ØSP] after Agree1. Since T-Agr is unspecified [ØSP], and the features [ØSP] and [-SP] are said to be nondistinct, the derivation converges.

The fact that T-Agr comes into the derivation unspecified and that PRO cannot value it, coupled with the stipulation that [$\emptyset$ SP] and [-SP] features are “nondistinct”, allows PRO to have a different semantic number than its controller.

The normal EC derivation is the same as the above. However, for EC predicates that do not take tensed complements, T-Agr does not raise to C as discussed above. The derivation for an EC case of this type, as in (39), would be as follows:

(39) The chair₁ dared [PRO₁ to wear a pink T-shirt].

Agree1: PRO comes into the derivation as [-SP].

Agree2: F Agrees with controller DP [-SP] and becomes [-SP].

Agree3: [-SP] F then Agrees directly with [-SP] PRO. Since the features match, the derivation converges.

The derivation thus converges with a semantically singular controller and controllee. It should be noted that since T-Agr does not raise in these constructions, the *Phase Impenetrability Condition* (PIC) as proposed by Chomsky (1999), is violated. I discuss this below.

Finally, I also give the derivation for (37d), where a plural controller may not control a singular controllee.

(40) *The committee₁ decided [PRO₁ to wear a T-shirt].

Agree1: PRO comes into the derivation as [-SP].

Agree2: F Agrees with controller DP [+SP] and becomes [+SP].

Agree3: [+SP] F then Agrees with [-SP] PRO, since the features do not match, the derivation crashes.

There are two main theoretical issues and one empirical issue that I see as undesirable for the OC-as-Agree approach as it pertains to the Korean PC facts. First, for regular EC cases, Landau has to make serious modifications to his theory in order to get things to work properly. In EC, the control complement is not tensed so there is no reason for T-Agr to move to C. In this way, F has to agree directly with PRO, which is in Spec TP. This is an obvious violation of the PIC. In an attempt to deal with this, Landau “relaxes” the PIC in order to fix his analysis. This is undesirable, as the PIC should be salvaged if at all possible on grounds of parsimony. To create the notion of an impenetrable phase that works in so many situations only to show that it can be penetrated is not desirable. Also, allowing modifications of this sort to the PIC moves away from the notion of local agreement.

Secondly, and I think more importantly, there is no necessary logical connection between the controller and the controllee in PC, or the lack thereof in EC, that would warrant T-Agr being integral to the Agree process of controllers controlling controllees. It is true that taking tensed complements is a property of PC verbs, but

there is no reason to assume that tense somehow mediates the construal relationship between two DPs in any way.

Even if these problems can be overcome, or end up being inconsequential, the OC-as-Agree approach still has a problem in accounting for Korean. Recall that in the Korean PC case there is a mismatch between the controller and PRO in terms of syntactic number. The problem in deriving this will be a mismatch in number between the controller and T-Agr, which will have to Agree with PC PRO in syntactic number. This will create a mismatch in number when [+PL] T-Agr, after having moved to C, is probed by the matrix functional head T which will be [-PL] after having Agreed with the controller DP.

In this section, I have simply pointed out the problems that exist for current popular theories of control with regards to the Korean PC data. In section 3.5, I show even more issues regarding split control. However, in the next section, I will first give a semantic account of PC PRO as it will be an integral part of the ultimate account of PC in Korean.

3.4 PC and Plurality: Minimal Pronouns and Associative Plurality.

In this section, I provide a theory of plurality in Korean control constructions that accounts for PC effects. I will not, however, provide a theory of how the controller and controllee establish their relationship. This will be covered in chapter 4. The question I will attempt to answer is how the plural reading in PC is

achieved. Crucially, I employ the work of Kratzer (2006), and her analysis of minimal pronouns and the plural [*group*] feature. This is in fact not a new idea and was first suggested in a manuscript by Ussery (2006) for English and indirectly indicated as a possibility by Madigan et al. (2007), who attempted to account for a broader range of cases termed *Inclusive Reference* phenomena, which will be discussed in chapter 6. In what follows, I first provide a brief review of Kratzer's (2006) pronominal system, followed by Ussery's treatment of PC in English and show that it cannot account for Korean. From this, I draw the conclusion that a modified version of Ussery's analysis is better suited to Korean and that English PC has to do with the semantics of group nouns. Finally, I give the modifications needed to account for PC in Korean.

3.4.1 Minimal Pronouns and the [*group*] Feature

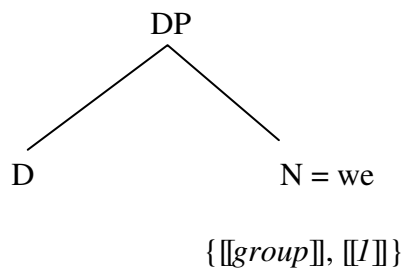
According to Kratzer (2006), bound variable pronouns, or *minimal pronouns*, come into a derivation with minimal feature specifications. They acquire their features via local chains of agreement with their antecedents. Furthermore, she assumes that pronominal features have meaningful denotations that introduce presuppositions. In this system, bound variable pronouns are built compositionally from the feature set in (41) below.

(41)

Pronominal Features	Examples	Semantic Type
Index features	Numerals (3, 4, 5, etc.)	e
Descriptive features	$\lambda x. x$ is female	$\langle e, t \rangle$
Definiteness feature	$\lambda P. \sigma x P(x)$	$\langle \langle e, t \rangle, e \rangle$
Participant features	1st = the speaker(s) in c	e
Group features	$\lambda x. x$'s group for c	$\langle e, e \rangle$
Sum features	+	$\langle e, \langle ee \rangle \rangle$

In combination with PF spell-out rules, the features above combine in various ways to produce the pronouns in a given pronominal paradigm. For example, to create the 1st person plural pronoun in English, the derivation of the DP would be as in (42).

(42)



$[[[I]]]$ = the speaker in c $\langle e \rangle$
 $[[[group]]]$ = $\lambda x. x$'s group in c $\langle e, e \rangle$
 $[[N]]$ = $[[PRO]]$ = $[[DP]]$ = $[\lambda x. x$'s group for $c]$ (the speaker)
 $\langle e \rangle$
 $\langle e \rangle$
 $\langle e \rangle$

Given the derivation above, the spell out rule for the 1st person plural pronoun in English would be as in (43)

(43) **Spell Out Rule:**

$[1^{st}] [group] \longrightarrow we$

Since pronouns are of type e, any combination of features that lead to type e in the table in (41) is predicted to lead to a possible pronominal form. Given the type-driven nature of this system, it becomes a highly restrictive and predictive theory of what types of pronominal systems should, or should not, occur in natural language. How this system works will become clear as I describe the construction of PC PRO in Korean below.

As for Ussery's (2006) account of plurality in OC constructions, her working hypothesis is that the plural reading of PC PRO is due to the *[group]* feature listed in the table above. Therefore, PC PRO is actually a variable which combines with the feature *[group]*. One crucial aspect of her analysis that will become an issue in accounting for Korean PC is that her version of the PC *[group]* feature produces a controllee that is a singleton set consisting of one atomic individual; i.e. a *bunch* (Schwarzschild 1991). This leads to the prediction that all PC constructions should lack a distributive reading. This is fine in the case of English because PC PRO is a group noun and therefore cannot be distributed over. However, as shown above for

Korean, distribution over PC PRO is in general possible. To be more precise, in English PC constructions such as the one below in (44), a distributive reading is not possible.

(44) The teacher promised the students to gather in the library.

The sentence above cannot mean that each student will gather with the teacher independently. This is not true of Korean however, as shown above in example (45).

(45) Chelswu-ka Inho-eykey PRO **hamkkey/selo/motu/kakca** moi-la-ko
 C-NOM I-DAT together/each other/all/each gather-IMP-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘(lit.) Chelswu told Inho to (all) gather together/with each other.’

Given English data like that in (44), Ussery draws the conclusion that the [*group*] feature that combines with PRO returns a collective individual, giving the denotation in (46) below. This differs from Kratzer’s denotation which does not require the group to form a collective individual.

(46) $[[[group]]]^{g,c} = \lambda x. \text{the group of } x \text{ for } c \text{ **and } x \text{ and } x\text{'s group are a collective individual.}**$

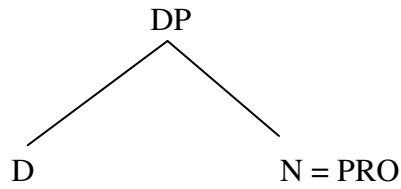
Thus, there are in fact two group features, as we still need the group feature listed in the table above to account for bound associative plurals that do not form a collective individual.

(47) I think that we each love and hate linguistics.

In the example above, it is easy to distribute over the 1st person plural pronoun *we*, giving the meaning that each person in the group *I* belongs to hates and loves linguistics. Therefore, the *[group]* feature as it stands above is necessary, and in order to account for PC effects, we need a second group feature to account for PC PRO in English that defines the group as a collective individual, or a bunch.

As for Korean PC, I think that Ussery's basic idea can be employed rather easily for Korean PC effects. The difference is that I assume that the group feature employed in Korean PC is the original group feature as Kratzer described. A computation of the DP is given in (48) below.

(48)



$\{\llbracket group \rrbracket, \llbracket I \rrbracket\}$

$\llbracket [I] \rrbracket = g(1)$ $\langle e \rangle$

$\llbracket [group] \rrbracket = \lambda x. x's \text{ group for } c$ $\langle e, e \rangle$

$\llbracket N \rrbracket = \llbracket PRO \rrbracket = \llbracket DP \rrbracket = [\lambda x. x's \text{ group for } c] (g(1))$

$= g(1)'s \text{ group for } c$ $\langle e \rangle$

In the derivation above, an index feature, which will eventually be bound by the controller, combines with the *[group]* feature. This combination yields the final denotation of PC PRO which is essentially a bound variable with an associative reading. I will define an associative reading along the same line as Maravcsik (2003), as shown in (49) below.²⁰

(49) Associative plural reading: *x* and those associated to *x*, where *x* and *x*'s associates are human.

²⁰ See Corbett & Mithun (1996), Corbett (2000) and Maravcsik (2003) for a thorough review of associative plurality.

In terms of a control reading, the variable x in (49) would be identified with the controller. The difference, then, between English PC PRO and Korean PC PRO is the ability, or inability, to distribute over the individuals represented by PRO.

As a brief aside, Korean also allows us to explore another aspect of Kratzer's system: minimal pronouns are born without features and inherit them from their binder. First, consider that Korean exhibits a complex, morphologically-realized, system of honorification whose proper usage is dependent on the pragmatic context a given utterance is situated in. For my purposes, what is relevant is the honorific marker *si*, which must be used on a verb whose subject is a person of honorific status relative to the speaker. Consider (50) below:

- (50) Cikum sensayng-nim-un tosekwan-ey kyey-**si**-ta.
 now teacher-HON-TOP library-at stay-HON-DC
 'The teacher is now in the library.'

In the above example, the honorific form of the verb *kyey-ta* 'to stay' must be used as teachers are to be respected. This honorific form is made by adding the marker *si*.

Applying this to our cases where PRO has a controller of honorific status, (51) illustrates the honorific form in the embedded clause of a control construction.

- (51) Sensayng-nim₁-i haksayng-tul-eykey PRO₁yeses-si-ey ttena-**si**-keyss-
 teacher-HN-NOM student-PL-DAT six-hour-at leave-HON-VOL-
 ta-ko yaksok-ha-si-yess-ta.
 DC-C promise-do-HON-PST-DC
 ‘The teacher promised the students to leave at 6.’

In this construction, the embedded verb must be marked with the honorific marker. Honorific markers indicate that the subjects of the verbs they combine with are of honorific status. Presumably, PRO’s honorific feature is inherited from its controller *sensayng-nim* ‘teacher’. In fact, if PRO is a minimal pronoun, then it is expected that it would inherit these kinds of features from its controller.

Extending this analysis to PC constructions, consider (52) below.

- (52) Sensayng-nim₁-un PRO₁₊ yeses-si-ey moi-*(**si**)-keyss-ta-ko
 teacher-HON-TOP six-hour-at gather-HON-VOL-DC-C
 yaksok-ha-si-yess-ta.
 promise-do-HON-PST-DC
 ‘(lit.) The teacher promised to gather at 6.’

In this example, not only is the honorific marker obligatory, but the only possible reading is one where the group denoted by the embedded predicate consists solely of

people with honorific status (e.g. a group of teachers). The sentence is odd if the group gathering consists of, for example, students plus the teacher. This makes sense under my analysis of PC PRO above. I propose that an honorific feature is simply another pronominal feature inherited from its controller given in (53) below.²¹

$$(53) \quad [[hon]]_{\langle e,t \rangle} = \lambda x. x \text{ is of honorific status in context } c$$

Given a denotation as in (53), the entire group of individuals represented by PC PRO in a sentence like (52) would be of honorific status.

In this section, I have explored the nature of plurality regarding PC PRO in English and Korean. In English, PC PRO is the combination of an [*index*] feature and a [*group*] feature that forms a collective individual (a la Urssery 2006). Korean PC PRO, however, is the combination of an [*index*] feature and a [*group*] feature that does not form a collective individual.

²¹ Kratzer's (2006) pronominal system also needs honorific features as well as *humble* features. There are honorific and humble pronominal forms in Korean. For example, *cey* 'my (humble)', *ce* 'I (humble)', *pwun* 'him/her (honorific)', etc.. Like the honorific feature above, these should also be type $\langle e,t \rangle$.

i.) $[[hum]]_{\langle e,t \rangle} = \lambda x. x \text{ is of humble status in context } c.$

3.5 Obligatory Split Control into Exhortative Complements

In this section, I argue that in Korean, split control into exhortative complements is obligatory control (OC). Until very recently, almost all analyses of split control in English have characterized the existence of split control as a defining factor of non-obligatory control (NOC) (e.g. Williams 1980, Hornstein 1999). However, some authors, namely Madigan (2006b, 2008) and Fujii (2006), have argued that these constructions are, in fact, obligatory control.

3.5.1 Split Control in the Literature

It has long been assumed that, in English, split control is a form of NOC and is a property which negatively defines OC, with the most notable early example being Williams (1980). In short, if a control verb does not allow split antecedents, then it is an OC verb. For instance, one supposedly cannot say:

(53) *Jim₁ promised Mary₂ PRO₁₊₂ to go home together/with each other.²²

Some authors, most notably Landau (2001), have recognized this diagnostic as somewhat problematic. Landau provides the following examples of possible split control structures with well known OC verbs.

²² I find this example completely acceptable, but the majority of speakers I have asked do not.

- (54) a. John promised his son to go the movies together. (Landau 2001)
b. John persuaded Mary to kiss in the library. (Landau 2001)

Noting this, he points out that there is no consistent correlation between split control and OC to be found and hypothesizes that there are most likely pragmatic reasons for why and where split OC is allowed.

An even more important question that arises from Landau's work is whether it is possible to unify the notions of PC and split control. He notes the following restriction with PC, but not split OC.

- (55) a. *John told Mary that he preferred PRO to meet each other at 6.
b. John proposed to Mary PRO to meet each other at 6.

In the PC example in (55a), it is not possible to distribute over the plural PRO. However, in the split control example in (55b), it is possible to distribute over PRO. While he does not pinpoint this difference, I believe it is due to the nature of the plurality of split OC PRO versus PC PRO. In the section below on the plurality of split control, I provide an account of this difference.

Even with the cursory evidence put forth by Landau (2001), most researchers continue to view split OC as a negative diagnostic for OC. Hornstein

(2003), for example, cites split OC as being too variable and inconsistent among speakers. For example, Hornstein claims that even for those who find (56a) acceptable, they reject it when *themselves* is replaced with a reciprocal.

(56) a. John persuaded Mary to get themselves a car. (Hornstein 2003)

b. *John persuaded Mary to get each other a car. (Hornstein 2003)

Hornstein's intuition, I believe is correct, as I show below that true cases of split OC in English exist only in contexts of proposal. He does mention the verb *suggest*, which might be construed as a verb of proposal.

(57) *Did you suggest to Mary to get each other a new car? (Hornstein 2003)

I find this example acceptable, and so do a number of my informants. As will be shown below, there are a number of examples in English that show true obligatory split control where speaker variation is minimal.

3.5.2 Split Control is Obligatory: the Case of English and Korean

As far as I am able to ascertain, there are two authors who have made an attempt to empirically illustrate that split control can be obligatory control: Fujii (2006) for Japanese, and Madigan (2006b, 2008) for English and Korean.

Madigan (2008) shows that split OC *does* exist in English as well as Korean. While, as Hornstein has made clear, the split OC data in English is somewhat variable, if one confines one's inquiry to verbs of proposal, the data is much clearer. For example, many speakers, including myself, find (58a-f) perfectly acceptable.

- (58) a. Jim proposed to Mary to go to the movies by themselves/with each other.

(Madigan 2008)

- b. Tim suggested to Masahiro to introduce themselves (to each other).

(Madigan 2008)

- c. John proposed to Mary to help each other. (Koster and May 1982)

- d. Milford proposed to Mildred to have sex with each other.

- e. Mary's advancement to Bill to shoot each other to get out of jury duty surprised us all.

- f. Bill introduced the idea to Mary to go to the funeral by themselves.

The above examples show that there are a number of cases of split control in English in both the nominal and verbal domains. The question is whether this control is obligatory or non-obligatory, as I will explore below.

Before discussing split control in Korean, first reconsider the English *propose* case:

- (59) a. Monica proposed to Sachie to help each other.
 b. Monica proposed to Sachie, “Let’s help each other.”

(59b) is a natural paraphrase to (59a) and provides a clue as to where one might look to find more productive forms of split OC in other languages: propositive structures. The propositive reading (henceforth exhortative) of “let’s do action *x*” that goes along with split control readings can be achieved in Korean through the use of the exhortative marker *ca*. Consider first the monoclausal example in (60):

- (60) Cikum ttena-ca.
 now leave-EXH
 ‘Let’s (you and I) leave now.’

The exhortative marker *-ca* in (60) forces a reading where the speaker and hearer must be the ones who will leave.

The marker *-ca* can also be used in embedded complements to create control contexts much like those in the English examples. In these constructions, there is a split control relationship between the matrix subject and direct object and the plural PRO controllee. The examples in (61a-d) illustrate split control into exhortative complements with four different verbs.

- (61) a. Jwuhi₁-ka Inho₂-eykey PRO₁₊₂ cip-ey ka-ca-ko
 J-NOM I-DAT home-LOC go-EXH-C
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘(lit.) Jwuhi persuaded Inho to go home together.’
- b. Chelswu₁-ka Hwun₂-eykey PRO₁₊₂ ilbon umsik-ul mek-ca-ko
 C-NOM H-DAT Japan food-ACC eat-EXH-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘(lit.) Chelswu said to Hwun to eat Japanese food together.’
- c. Hwun₁-i Inho₂-eykey PRO₁₊₂ kongbwu-ha-ca-ko yaksok-ha-yess-ta.
 H-NOM I-DAT study-do-EXH-C promise-do-PST-DC
 ‘(lit.) Hwun promised Inho to study together.’
- d. Jwuhi₁-ka Inho₂-eykey PRO₁₊₂ yenghwa-lul po-ca-ko
 J-NOM I-DAT movie-ACC see-EXH-C
 ceyan-ha-yess-ta.
 propose-do-PST-DC
 ‘Jwuhi proposed to Inho to go watch a movie together.’

As noted by Pak (2004), *-ca* is a marker whose presence indicates the sentential force of an act of proposing. In this way, one would expect that, when embedded, *ca* can

only be used with matrix verbs of proposal. Admittedly, this is a far looser possibility in Korean than it is in English. Perhaps the presence of an overt marker of proposal allows the speaker to construe the matrix predicates in such a way as to extract any hint of proposal meaning. Either way, when verbs may not carry any sort of proposative meaning, the embedded use of *ca* is strictly ungrammatical. For example, one cannot use *myenglyeng-ha-ta* ‘to order’ with an embedded *-ca* marker.

- (62) *Inho-ka Hwun-eykey swukcey-lul ha-ca-ko myenglyeng-ha-yess-ta.
 I-NOM H-DAT homework-ACC do-EXH-C order-do-PST-DC

This implies that the meaning of split OC constructions in Korean is not solely dependent on the embedded marker *ca*, but it must also include the meaning of the matrix verb. Therefore, any theory of split control in Korean must account for PRO having split antecedents, and additionally, *why* it seems to only be possible with verbs that allow some sort of proposal meaning. In chapter 4, I show that this has to do with the availability of the willful speakers and addressees found in proposal contexts.

It remains to be seen, however, whether the English and Korean examples are OC on an empirical level. In what follows, I show that the examples above are indeed OC. In doing so, I employ the now familiar diagnostics of control used in chapter 2, shown again in (63).

(63) Basic properties of obligatory control of PRO

- E. Arbitrary control is impossible in OC.
- F. Long-distance control is impossible in OC.
- G. Strict-reading of PRO is impossible in OC.
- H. *De re* reading of PRO is impossible in OC (only *de se* is possible).

Example (64a-b) below illustrates that an arbitrary reading of split PRO is not available. Instead, PRO must refer to the matrix subject and object. This is true for both English (64a) and Korean (64b).

- (64) a. Jim₁ proposed to Mary₂ PRO_{1+2/*arb} to perjure themselves.
- b. Jwuh₁-ka Inho₂-eykey PRO_{1+2, *1+3, *2+3, *3+4, *arb} ka-ca-ko
J-NOM I-DAT go-EXH-C
seltuk-ha-yess-ta.
persuade-do-PST-DC
'Jwuh₁ persuaded Inho to (Jwuh₁ and Inho only) go.'

The sentences in (65a-b) illustrate that long-distance control is also impossible in Korean and English split control.

- (65) a. Bill₁ thought that Jim₂ proposed to Mary₃ PRO_{*1+2/*1+3/2+3} to hug each other.
- b. Hwun₁-i Jwuhi₂-ka Inho₃-eykey PRO_{*1+2,*1+3, 2+3} cip-ey ka-ca-ko
 H-NOM J-NOM I-DAT home-LOC go-EXH-C
 seltuk-ha-yess-ta-ko sayngkak-ha-yess-ta.
 persuade-do-PST-DC-C think-do-PST-DC
 ‘Hwun thought that Jwuhi persuaded Inho to go home.’

While somewhat difficult to construct examples for, it is also clear that under ellipsis, a strict-reading of split PRO is impossible.

- (66) Jim proposed to Mary PRO to leave themselves open to criticism and Bill did too.

***Strict Reading:** Jim proposed to Mary that they (Jim and Mary) would leave themselves open to criticism and Bill proposed to Mary that they (Jim and Mary) would leave themselves open to criticism.

Sloppy Reading: Jim proposed to Mary that they (Jim and Mary) would leave themselves open to criticism and Bill proposed to Mary that they (Bill and Mary) would leave themselves open to criticism.

Given the English example in (66), only the sloppy reading where *Bill and Mary* will leave themselves open to criticisms is available. A sloppy reading is also the only one available in Korean split OC as shown in the examples in (67a-c) below.

- (67) Jwuhi₁-ka Inho₂-eykey PRO cip-ey ka-ca-ko seltuk-ha-yess-ta.
 J-NOM I-DAT home-to go-EXH-C persuade-do-PST-DC
 Chelswu-to kuri-ha-yess-ta.
 C-also same-do-PST-DC

‘Jwuhi persuaded Inho to let’s go home and Chelswu did too.’

***Strict Reading:** Jwuhi persuaded Inho that they (Jwuhi and Inho) would go home and Chelswu persuaded Inho that they (Jwuhi and Inho) would go home.

Sloppy Reading: Jwuhi persuaded Inho that they (Jwuhi and Inho) would go home and Chelswu persuaded Inho that they (Chelswu and Inho) would go home.

Finally, regarding the test for the inability of *de re* readings of split PRO, consider a situation like the following:

(68) A man with amnesia, Bill, is watching television with his friend Mary. They are presently watching a program where Bill and Mary are shown in a current and 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...

Given this scenario, the sentence in (68), if used as a continuation of the above story, would be false, as the complements of *propose* require *de se* beliefs.

(69) #Bill proposed to Mary to perjure themselves.

As with the English *propose* case above, in Korean split OC constructions only *de se* readings are available. This is shown by the fact that (70) is false as a continuation of the story in (70).

(70) #Pil₁-i meyli₂-eykey PRO₁₊₂ wicung-ha-ca-ko ceyan-ha-yess-ta.
 Bill-NOMMary-DAT perjure-do-EXH-C propose-do-PST-DC
 ‘Bill proposed to Mary to perjure themselves.’

In this subsection, I have shown that split control exists in both English and Korean. In English, it appears as though split OC is limited to those constructions

involving verbs like *propose*. In Korean any verb even remotely capable of being construed as having some sort of proposal meaning can be employed to create a split OC construction. Given this, I conclude that split control in English and Korean is indeed OC with respect to these verbs.

Before moving on, it should be made clear that the above examples are not simply direct quotes. As argued in a footnote in Madigan (2008), split OC complements have been shown not to be direct quotes. I briefly re-capitulate that argument here. First of all, consider that Korean has another way of marking direct quotes using the marker *lako*.

- (71) Jwuhi-ka Inho-eykey "kongbwu ha-ca" **lako** mal-ha-yess-ta.
 J-NOM I-DAT study do-EXH **DQ** tell-do-PST-DC
 'Jwuhi said to Inho, "Let's study!"'

If I question a direct quote in English as in (72a) below, I cannot obtain the reading where the question pertains to where it is that Mary would like to study. However, as shown in (72b&c), this is perfectly acceptable with regular complements.

- (72) a. Where did Mary say "Let's study"?
 b. Where did Mary say to study?
 c. Where did Mary propose to study?

With respect to questioning the embedded clause in Korean, direct quotation examples like (73b) below behave differently from true control exhortative constructions like (73a).

- (73) a. Jwuhi-ka Inho-eykey edi-eyse kongbwu
 J-NOM I-DAT where-LOC study
 ha-ca-ko mal-ha-yess-ni?
 do-EXH-C tell-do-PST-Q
 '(lit.) Where did Jwuhi say to Inho to study?"
- b. *Jwuhi-ka Inho-eykey edi-eyse kongbwu ha-ca lako
 J-NOM I-DAT where-LOC study do-EXH DQ
 mal-ha-yess-ni?
 say-do-PST-Q
 'Where did Jwuhi say to Inho, "Let's study!" ?' (Where *edi* = the place of study)

In (73a), material from the embedded clause can be questioned, suggesting that the complement is indeed a true embedded clause. (73b), however, shows that questioning the embedded (quoted) verb is impossible. I, therefore, conclude that the complements that produce split control readings are not, in fact, direct quotes.

3.5.2 What Does the Split OC Data Mean for Current Theories of Control?

As I discussed in the section on partial control, there are two prominent theories in the current syntactic literature on control: 1) OC-as-movement (Hornstein 1999 and subsequent) and 2) OC-as-Agree (Landau 1999 and subsequent). In this section, I will supply some brief comments on some of the obstacles these theories face with regards to accounting for the Korean data.

The control-as-A-movement approach cannot, in its current incarnation, account for split control in Korean as an obligatory phenomenon. There is no way to begin with one plural DP, which represents the controller/controllee, and end up with two separate DPs in the matrix clause as controllers. This impossibility has been noted, with reference to English, by proponents of this approach (Hornstein 2003).

On the other hand, an OC-as-Agree approach, which is a syntactic Agree relationship between the controller and the controllee, might be able to account for the data (as noted by Landau 2004). However, there are many questions regarding how to make this possible and whether or not the modifications would be reasonable. One issue is that there must be two instances of Agree with a single goal. It is difficult to imagine why the goal, PRO in this case, would become active twice. Perhaps the largest issue is that split OC PRO, unlike partial control PRO, can be syntactically plural in English, as evidenced by its ability to combine with *each other*.

(74) Bill proposed to Mary to help each other.

The question then, is how to design an Agree system that will allow a syntactically singular controller to establish an Agree relationship with a syntactically plural controllee. However, there is at least some reason to believe that split OC involves some sort of agreement. Possible split control structures in languages like Hebrew exhibit feature agreement in person and gender between the embedded clause and the controllers.

(75) Rina hici'a le-Ruti lihyotnezirot/*nezirim.

Rina.F proposed to-Ruti.F to-b nuns.F/*monks.M

'Rina proposed to Ruti to be nuns/*monks.'²³

If the above example proves to be true split OC, then indeed there may be some sort of agreement relationship between *ca* or PRO and the two matrix controllers.

In Serbo-Croatian, as shown by Zec (1987) there is plural agreement on the embedded verb in split control sentences.

²³ Thanks to an anonymous LI reviewer for this sentence.

- (76) Petar je naterao Mariju da PRO
 Petar(Nom) AUX advised(3/sg) Marija(Acc) C
 zajedno pobegnu.
 together escape(3/PL)
 ‘Peter advised Mary that (they) escape together.’

Finally, even in Korean, where agreement is limited to honorifics, there do seem to be split control examples where honorifics are obligatory. Consider (77) below:

- (77) Kimsensayng-nim-i Pak sensayng-nim-eykey tungsan-ul
 Kimteacher-HON-NOM Pak teacher-HON-DAT mountain.climb-ACC
 ha-si-ca-ko ceyan-ha-si-yess-ta.
 do-HON-EXH-C propose-do-HON-PST-DC
 ‘Professor Kim proposed to Professor Pak to go mountain climbing.’

In the above example, both the matrix subject and object are of honorific status. Therefore, the embedded verb must be marked with the honorific marker *si*.

The above examples all seem to indicate that there is at least some sort of agreement between the matrix subject and object and the embedded verb. In the following section, I show that Kratzer’s (2006) pronominal system actually predicts a

split PRO to exist. If this is true, and minimal pronouns do indeed inherit features from their controllers, then some sort of agreement can be said to exist in split control.

3.6 The Plural Semantics of Split OC

The analysis of split control as an obligatory phenomena begs the question of what the ultimate difference between PC and split OC is. I suggest in this section that the difference lies in the nature of the plurality of the controllees. In essence, I suggest that the difference is that in partial control in Korean, PC PRO is derived via the [*group*] feature and that split OC is derived via the [*sum*] feature.

The essential difference between split and PC PRO in terms of plurality in English is that split PRO can be distributed over, while PC PRO may not. (76a-c) illustrate this point again.

- (78)
- a. Bill proposed to Mary to drink wine with dinner.
 - b. Bill proposed to Mary to order separately.
 - c. *Bill promised the students to meet each other at the library.

The embedded predicates in (78a-c) are inherently distributive. These are fine with a split OC reading but not on a PC PRO reading. So, Split PRO in English is different than PC PRO in this way. As stated above, the reason for this is that I consider PC PRO to be a collective minimal pronoun in English. As for split PRO, I employ the use

of Kratzer's *[sum]* feature in (79a) which she mentions could be employed to arrive at a split antecedence of overt pronouns, as in (79b).

- (79) a. $\llbracket [sum] \rrbracket = \lambda x. \lambda y. x+y$
 b. Each of the cats chased each of the dogs before **they** curled up with each other. (Kratzer 2006)

Korean would then work the same as English with respect to achieving plurality in split control. A derivation is illustrated in (80) below.

- (80)
- $$\begin{array}{c}
 \text{DP} \\
 \swarrow \quad \searrow \\
 \text{D} \qquad \text{N} = \text{PRO}
 \end{array}$$
- $\{ \llbracket [sum] \rrbracket, \llbracket [I] \rrbracket, \llbracket [2] \rrbracket \}$
- | | |
|--|--|
| $\llbracket [I] \rrbracket = g(1)$ | $\langle e \rangle$ |
| $\llbracket [2] \rrbracket = g(2)$ | $\langle e \rangle$ |
| $\llbracket [sum] \rrbracket = \lambda x. \lambda y. x+y$ | $\langle e \langle e, e \rangle \rangle$ |
| $\llbracket N \rrbracket = \llbracket PRO \rrbracket = \llbracket DP \rrbracket = [\lambda x. \lambda y. x+y] (g(1)) (g(2))$ | |
| $= [\lambda y. g(1)+y] (g(2))$ | |
| $= g(1) + g(2)$ | $\langle e \rangle$ |

With the above computation, I am able to arrive at the peculiar meaning that PRO has two separate referents. Note too, that at the end of the composition, we should end up with a set of atomic individuals, for example {Jwuhi, Inho}, and *not* a collective group. This is evidenced by the fact that we can distribute over split PRO using *selo* ‘each other’.

- (81) Inho-ka Misun-eykey PRO selo top-ca-ko ceyan-ha-yess-ta.
 I-NOMM-DAT e.o. help-EXH-C propose-do-PST-DC
 ‘Inho proposed to Misun to help each other.’

An interesting observation about the existence of English split OC PRO is that it tells us that if a plural PRO does indeed exist, it comes in two varieties: split and partial. If this is true, one has to wonder *why* you cannot select a partial control PRO in a split OC derivation. In chapter 4, I make this clear by showing that in order to account for any control configuration, the matrix verb and the embedded clause modality must be allowed to interact. In short, *propose* in (81) creates a context where the only possible embedded event is one where the speaker and addressee will do the action that is denoted by the embedded verb.

Chapter 4

CONTROLLER CHOICE AND THE SEMANTICS OF CONTROL

4.1 Introduction

Chapters 2 and 3 developed the empirical basis of control in Korean and pointed out a number of issues that Korean creates for the typology of control, current theories of control and theories of plurality. In this chapter, I develop a new theory of control in Korean based on the work of Pak (2004) and Pak et al. (2006), who examined the nature of a class of markers termed *jussives*. I show that by examining and accounting for controller choice in this language, a large portion of a theory of control can be constructed. More specifically, I show that the meanings of a certain class of embedded markers, when looked at in conjunction with the contexts created by matrix predicates, dictate controller choice. Stemming from this analysis, I show that a more solid semantics of control can be constructed, as well as provide some insight into understanding complement selection in general.

As stated in chapter 1, one of the main goals of this dissertation is to illustrate that control may be instantiated differently in different languages. This chapter provides the basic justifications for such claims and sets the stage for a more

thorough discussion of this idea presented in chapter 5, which uses a discussion of overt controlled material to flesh this notion out.

The organization of this chapter is as follows. In section 4.2, I provide the basic empirical argument that the meanings of embedded CCMs in Korean dictate controller choice. One welcome and notable outcome of this analysis is that I am able to derive why *yaksok-ha-ta* ‘promise’ is a subject control verb. In section 4.3, I present a brief review and discussion of previous attempts at accounting for controller choice and show where they are lacking in light of the Korean data. In section 4.4, I present a formal semantics of controller choice in Korean and argue that, in Korean at least, a solely syntactic solution is untenable. This approach is based on the work of Pak (2004) and Pak et al. (2006). In addition, I show how this analysis helps illuminate a more concrete theory of control complement selection.

4.2 Embedded Markers Help Determine Controller Choice

As noted in chapter 2, there have been a few studies outlining control phenomena in a detailed way in the Korean language: Yang (1984, 1985), Borer (1989), Madigan (2006 and subsequent). These studies have done much to describe the empirical and syntactic nature of these constructions. However, none have ever provided a truly predictive and explanatory theory of controller choice in Korean. In this section, I show that controller choice is the result of an interaction of the meanings

of a class of markers I call embedded *control creating markers* (CCMs) and matrix control predicates.

As a starting point for this discussion, first recall the formal definition of control I provided in chapter 2, restated in (1).

- (1) Definition of Control: Let X be an NP in a sentence S, Y a subject NP in a sentence S' that is embedded under S, and R the predicate that selects Y. X and Y are in the control relation (or X controls Y) iff the property that corresponds to R is unambiguously attributed to the referent of X and the referent is aware of the attribution.

Recall also that in chapter 2, I suggested the possibility that not all languages arrive at control readings in the same manner. In this chapter, I show that one thing that varies from language to language is the way in which the unambiguous attribution of a property to one or more matrix DP(s) is achieved. While in English, this is achieved via the meaning of the matrix predicate, in Korean, I show that this is achieved by a combination of two things: CCMs and matrix predicate meanings.

To be a bit more precise, in Korean control constructions, embedded CCMs play an integral role in the creation of what I call *control environments*. Simply put, a control environment is the combination of those things necessary to achieve a control reading. Obviously, to create a control environment, one needs a matrix

predicate capable of a control reading. In addition, in Korean at least, an embedded CCM is also needed. The necessity of these markers in creating a control environment can be seen by interchanging them. This has the effect of either creating a control reading, as in (2a) or destroying it as in (2b).

- (2) a. Inho₁-ka Hwun₂-eykey PRO_{*1/2/*3} swuyeng-ha-**la**-ko mal-ha-yess-ta.
I-NOM H-DAT swim-do-IMP-C tell-do-PST-DC
‘Inho told Hwun to swim.’
- b. Inho₁-ka Hwun₂-eykey pro_{1/2/3} swuyeng-ha-**n-ta**-ko mal-ha-yess-ta.
I-NOM H-DAT swim-do-IND-DC-C tell-do-PST-DC
‘(lit.) Inho told Hwun that (someone) is swimming.’

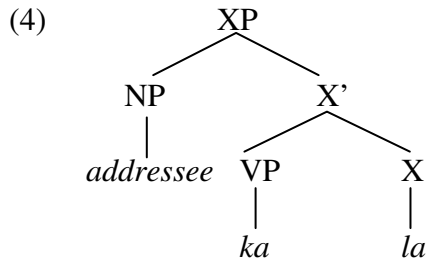
The sentences above are nearly identical. The difference is that there is an imperative embedded marker in (2a) and an indicative present tense marker in (2b). In addition, since all embedded clauses in Korean are typed in one way or another (cf. Pak 2004), the declarative marker *ta* is used in (2b) in addition to the present tense indicative mood marker (*n*)*un*. In (2a), both the mood and clause type are subsumed under the imperative marker *la*. When the indicative marker is used, the doer of the action in the embedded clause can be anyone in the given context, while when the imperative is used only an object control reading is available. Given this simple fact, I assume that

what is responsible for triggering the control reading of the matrix predicate in (2a) is the embedded imperative marker *la*.

The above observation is only half of the picture. In addition, my claim is that these embedded CCMs in fact help to determine controller choice. In terms of the definition in (1) above, these markers serve to establish the unambiguous attribution of a property to one or more matrix DPs. In order to see this, first consider the basic non-embedded meaning of the imperative marker *–la*.

- (3) Ka-la!
 go-IMP
 ‘(you) go!’

In the construction in (3), the only person who will undergo the act of going is the addressee in the context in which the sentence in (3) was uttered. Syntactically, the ordered addressee is the subject of the clause containing the verb marked by *la*, as shown in (4). In section 4.3, I give a more detailed structure. At this point, however, I simply label this phrase as XP in order not to complicate matters.



We might assume a meaning of *la* as in (5) below, which is nearly identical to meaning of *la* suggested by Pak (2004).

$$(5) \quad [[ka-la]] = \lambda w. \lambda x: x = \text{ordered addressee}(\text{context}) . x \text{ goes in } w$$

The only difference between the definition in (5) and Pak's (2004) version is that I have added that the addressee must be ordered. The reason for this will be clear in the final section of this chapter and pertains to correctly predicting controller choice with all matrix predicates. In fact, Pak shows that *la* belongs to the class of so-called *jussive* markers, which includes imperative *la*, promissive *ma* and exhortative *ca*. As will be shown throughout this chapter, the analysis of the behaviors of the class of jussives in Pak (2004) and Pak et al. (2006) goes along way towards developing a theory of control in Korean. As will become apparent, I consider the jussive markers to be a subclass of the CCMs. In their study of the jussives, however, Pak et al. (2006) do not assume or show that jussive markers contribute to creating control environments. In addition, if one does indeed extend their analysis to be a mechanism of control, as I

will here, the theory is not fine-grained enough to account for all control properties. One example of this is a lack of a fine-grained set of discourse features needed for a complete theory of controller choice. In section 4.4, I employ a modified analysis of Pak et al. (2006) to account for not only the control producing properties of the class of jussives, but also for the other CCMs *keyss* and *lye*.

With the above meaning of *la* in mind, consider that Korean, unlike the vast majority of languages, can embed the imperative marker.²⁴ As was shown above in (2), the use of the imperative marker has the effect of creating a control environment. The assumption is that the meaning of this marker dictates object control. Consider the sentences in (6a-c):²⁵

²⁴ Whether or not the embedded version of the imperative marker in Korean is actually an imperative marker is a matter of some debate in recent literature. For example, Han (1998) maintains that the embedded marker is not truly imperative based on the fact that it has a phonologically triggered morphological alternation (*ula* vs. *la*), while the matrix marker does not (*la*). However, what is not discussed is that the semantics of the embedded markers is essentially the same as their matrix counterparts, only with respect to embedded speech acts. I therefore assume that these are indeed embedded imperative markers and I provide no discussion of why Korean may be allowed to have embedded imperatives.

²⁵ In this section, all examples termed OC can be assumed to possess all of the properties of OC presented in chapter 2.

- (6) a. Inho₁-ka Hwun₂-eykey PRO_{*1/2} chayk-ul ilk-**ula**-ko
 I-NOM H-DAT book-ACC read-IMP-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘Inho told Hwun to read the book.’
- b. Chelswu₁-ka haksayng₂-eykey PRO_{*1/2} mence tuleka-**la**-ko
 C-NOM student-DAT first enter-IMP-C
 myenglyeng-ha-yess-ta.
 order-do-PST-C
 ‘Chelswu ordered the student to go in first.’
- c. Sensayng₁-nim-i haksayng₂-eykey PRO_{*1/2} yaksok-ul
 teacher-HON-NOM student-DAT appointment-ACC
 cikhi-**la**-ko yokwu-ha-si-ess-ta.
 Keep/adhere-IMP-C require-do-HON-PST-DC
 ‘The teacher required the students to adhere to the appointment.’

All of the sentences above exhibit object control. In addition, they all employ the marker *la*. Given the meaning of *la* in (5), the subject of *ka-la* in (6a), which is PRO in this case, must be someone who is an ordered addressee. In the context of the reported speech act in (6a), *Hwun* is the only person who is being ordered and addressed. Thus, this is the only possible controller choice that will align with the meaning of *la* in (5).

In other words, *la* requires that whoever is the subject of the verb *la* combines with should be ordered to do the action of that verb. I therefore conclude that the meaning of *la* dictates that object control is the only possible choice.

While I referred to the examples in (6a-c) as object control, this is somewhat of a misnomer for this type of control. Specifically, the controllers in the examples above are all addressees. In fact, when *la* is employed in the embedded clause, the controller is always the addressee regardless of whether or not it is a subject or an object. In the passive example in (7) below, the addressee controller is actually a subject, as shown by its nominative case marking.

- (7) Inho₁-ka PRO₁ cip-ey ka-la-ko myenglyeng-pat-ass-ta.
 I-NOM home-LOC go-IMP-C order-PAS-PST-DC
 ‘Inho was ordered to go home.’

Given examples like this, a more descriptive term than object control is *addressee control*. As further evidence that *la* creates addressee control, consider that the verb *tut-ta* ‘to hear’ can select a complement containing *la* to function as a control verb. In these constructions, the nominative subject functions as the addressee controller.

- (8) Inho₁-ka PRO₁ chayk-ul ilk-ula-ko tul-ess-ta.
 I-NOM book-ACC read-IMP-C hear-PST-DC
 ‘Inho heard the order to read the book.’

The above argument provides supporting evidence that addressee control is a more descriptively accurate term than object control. From this point on, I will employ this term when discussing Korean control. In section 4.2.4 illustrate that what has been termed ‘subject control’ in Korean is better termed *speaker control*.

At this point, it is important to show that *la* is indeed responsible for assigning these addressees as controllers. In order to do this, I need to rule out the possibility that it is simply the matrix verbs that dictate controller choice. To do this, it is crucial to examine whether *la* can create addressee control with a verb that can also take other CCMs and form other types of control. Verbs of saying provide just the sort of environment to do this. As shown in (4) above, when *la* combines with the matrix verb *mal-ha-ta* ‘say, tell’, addressee control is created. However, in (7a-b) below, when the markers *keyss* or *ca* are employed, subject and split control are created respectively.

- (9) a. Inho₁-ka Hwun₂-eykey PRO_{1/*2/*3} swuyeng-ha-**keyss**-ta-ko
 I-NOM H-DAT swim-do-VOL-DC-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘Inho said to Hwun that he (Inho) will go swimming.’
- b. Inho₁-ka Hwun₂-eykey PRO_{1/*2/*3} swuyeng-ha-**ca**-ko mal-ha-yess-ta.
 I-NOM H-DAT swim-do-EXH-C tell-do-PST-DC
 ‘Inho said to Hwun that they (Inho and Hwun) should go swimming.’

What the above examples illustrate is that it cannot be the case that the meanings of matrix predicates alone are responsible for controller choice. Instead, the embedded CCMs must play an integral role.

La is not the only marker that creates control environments. In fact, the analysis above makes numerous predictions about which markers will create which type of control.

(10) **Predictions:**

1. Any mood markers that require the verbs they combine with to have speaker subjects will create subject control.
2. Any mood markers that that require the verbs they combine with to have addressee subjects will create addressee control.
3. If a marker indicates both a speaker and addressee subject for the verbs they combine with, split control is predicted to arise.

Indeed, all of the above predictions are borne out. In what follows, I will consider each CCM in turn. The table below lists those markers that create control environments.

(11) *Korean Control Creating Mood Markers*

Mood Marker	Meaning → Subject's θ-role/Discourse Features	Control Type
Keyss	'volitional' → Speaker	Speaker
Ma	'promissive' → Speaker	Speaker
Lye	'intensive' → Speaker	Speaker
La	'imperative' → Addressee	Addressee
Ca	'proposative/exhorative' → Speaker&Addressee	Split

In what follows, I first explain the meanings of the rest of the class of jussives and how these meanings derive controller choice. Following that, I describe the meaning of intensive *lye* and volitional *keyss* and how their meanings help to achieve controller choice.

4.2.1 Promissive *ma*

In this section, I describe the promissive marker *ma*. According to my informants, this marker seems to be rather archaic sounding and is not frequently used, especially among the younger generations of Korean speakers. Regardless of this, the promissive marker *ma*, can create a control environment. First consider the matrix usage in (12).

- (12) Neyil kathi ka-ma.
 tomorrow together go-PROM
 ‘I promise we will go together tomorrow.’

In (12), *ma* marks that the speaker is promising some addressee that they will go somewhere together. Given this requirement of speakerhood, the meaning of *ma* is as in (13).

- (13) $[[ka-ma]] = \lambda w.\lambda x: x = \text{speaker}(\text{context}) \cdot x \text{ goes in } w$

The meaning in (13) dictates that when one embeds this marker, speaker control should be the only possible choice, as shown in (14).

- (14) Eme₁-nim-kkeyse ai₂-eykey PRO_{1/*2} kongwen-ey ka-**ma**-ko
 mother-HON-NOM child-DAT park-LOC go-PROM-C
 yaksok-ha-si-yess-ta.
 promise-do-HON-PST-DC
 ‘The mother promised the child to go to the park.’

Care must be taken when interpreting the sentence above. Given the context, it is easy to obtain the reading where both the mother and child are going to the park, indicating split control. However, this sentence would only be true split control if both the mother and child definitely have to go. However, it is possible to construe a reading of the above sentence where only the Mother is going to the park, perhaps to pick up a toy her child left behind. In this sense, (14) is a speaker control sentence.

It will be noted, that, just as with the imperative above, a meaning along the lines of Pak’s as in (13) directly picks out the controller. However, Pak (2004) and Pak et al. (2006) do not claim that jussives create control environments, as I do here. The facts are that with regards to the empirical analysis in chapter 2, the class of jussives do create control environments when embedded. My contribution to the analysis of jussives by Pak et al. is that the mechanisms they describe, along with some

modifications which will be detailed in section 4.4, actually serve to establish control environments and controller choice. In addition, as will be shown below, this analysis can be extended to the entire range of CCMs.

4.2.2 Exhortative *ca*

In chapter 3, I argued that embedded exhortative complements create obligatory split control structures. In this section, I briefly discuss the semantics of *ca* complements with respect to controller choice.

Recall that the exhortative marker *ca* is used in a matrix situation when a speaker wishes to set forth a proposal to an addressee that they should do something together.

- (15) Mek-ca.
eat-EXH
'Let's eat.'

In (15), it must be the case that those who will eat are, at least, the speaker and the addressee. Therefore, the general meaning, again along the lines of Pak (2004), of *ca* is as in (16).

- (16) $[[mek-ca]] = \lambda w.\lambda x: x = \text{speaker and addressee(context)} \cdot x \text{ goes in } w$

Given the meaning in (16), it is predicted that, when embedded, *ca* should create a control environment where those people undergoing the action denoted by the embedded predicate should be the speaker and addressee. This is exactly what is achieved, as shown in (17).

- (17) Jwuhi₁-ka Inho₂-eykeyPRO₁₊₂ yenghwa-lul po-**ca**-ko ceyan-ha-yess-ta.
 J-NOM I-DAT movie-ACC see-EXH-C propose-do-PST-DC
 ‘Jwuhi proposed to Inho to go watch a movie together.’

In (17), *ca* requires that those who will be seeing the movie should be the speaker and addressee. In the reported speech act context in (17), this corresponds to the matrix subject and object, effectively creating split control. What this example does not exclude, however, is the possibility that controller choice could simply stem from the meaning of *ceyan-ha-ta* ‘propose’. In other words, a proposal entails that two people, usually the speaker and addressee, will do the action that is proposed. Therefore, controller choice could simply be a matter of this entailment. For example, as shown in Chapter 3, English, which lacks an overt exhortative marker, still achieves split control with verbs such as propose and suggest.

- (18) a. Bill₁ proposed to Carol₂ PRO₁₊₂ to go camping by themselves.
 b. Monica₁ suggested to Sachie₂ PRO₁₊₂ to perjure themselves.

However, *ca* can be combined with a number of matrix verbs that have only the slightest hint or possibility of being construed as some sort of proposition. Consider the following examples in (19a-b).

- (19) a. Jwuh₁-ka Inho₂-eykey PRO₁₊₂ cip-ey ka-ca-ko
 J-NOM I-DAT home-LOC go-EXH-C
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘(lit.) Jwuh₁ persuaded Inho₂ to go home together.’
- b. Chelswu₁-ka Hwun₂-ekey PRO₁₊₂ ilbon umsik-ul mek-ca-ko
 C-NOM H-DAT Japan food-ACC eat-EXH-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘(lit.) Chelswu₁ said to Hwun₂ to eat Japanese food together.’
- c. Hwun₁-i Inho₂-eykey PRO₁₊₂ kongbwu-ha-ca-ko yaksok-ha-yess-ta.
 H-NOM I-DAT study-do-EXH-C promise-do-PST-DC
 ‘(lit.) Hwun₁ promised Inho₂ to study together.’

The matrix predicates in (19a-c) do not necessarily imply, in and of themselves, that the speaker and addressee will do the action denoted in the embedded clause. In these

cases, it must be that the meaning of *-ca* is responsible for dictating that the matrix subject and object will be the doers of the embedded action.

Having shown how the meaning of the jussive markers serves to establish controller choice, I will now move on to another sub-class of CCMs that are more modal in nature: volitional *keyss* and intensive *lye*. In the following sections, I show that not only do the meanings of these markers serve to establish controller choice, but also the context these markers find themselves in is also extremely important.

4.2.3 Intensive *lye*

The marker *lye* is mainly used in matrix situations with the light verb *ha-ta* ‘to do’. Its usage indicates that the speaker has a strong intention to do the action of the verb it combines with. An example of such a usage is given in (20).

- (20) Honca swukcey-lul ha-lye-ko ha-eyo.²⁶
 alone homework-ACC do-INT-C do-POL
 ‘I intend to do the homework alone.’

In addition, this marker can be used to question or talk about a 2nd or 3rd person subject’s intention of doing something.

²⁶ Traditional grammarians such as Sohn (1999) treat *ley-ko* as one marker, *lyeko*. I however, I consider it to be the combination of an intensive mood marker *lye* and the quotative complementizer *ko*. I draw this conclusion because *ko* is in general optional.

- (21) a. Ni-ka honca swukcey-lul ha-lye-ko ha-ni?
 2nd-NOM alone homework-ACC do-INT-C do-POL-Q?
 ‘Do you intend to do the homework alone?’
- b. Kunye-ka cip-ey ka-lye-ko ha-yess-ta
 3rd-NOM house-LOC go-INT-C do-PST-DC
 ‘She intended to go home.’

Given the above, the meaning of *lye* would be as follows:

- (22) $[[ka-lye]] = \lambda w. \lambda x: x = \text{intensive speaker}(\text{context}) . x \text{ goes in } w$

The meaning in (22), predicts that the controller in a *lye* construction will be the intensive person in the context. For example, consider that when *lye* is embedded under certain verbs like *nolyek-ha-ta* ‘to make an effort/try’, speaker control obtains.

- (23) Inho₁-ka PRO_{1/*2} wenswu-lul cwuki-lye-(ko) nolyek-ha-yess-ta.
 I-NOM enemy-ACC kill-INT-C try-do-PST-DC
 ‘Inho tried to kill the enemy.’

The example in (23) is strictly speaker control and PRO cannot have extrasentential reference. The reason for this is that *Inho* is the only available intensive DP. This is so because the act of trying entails that the person who is the agent of the trying event will undoubtedly be the person who will be the agent of the embedded event of killing.

4.2.4 Volitional (and Non-volitional) *keyss*

It has been noted in the literature for some time that the meaning of *keyss* is essentially volitional (cf. Kim 1996). What this would appear to mean is that the doer of the action of the verb *keyss* combines with must be a willful agent of that action. Consider the matrix usage of *keyss* in (24).

(24) Cey-ka ka-keyss-eyo.

1st-NOM go-VOL-POL

‘I will go.’

Given (24), the meaning of *keyss* is given below.

(25) $[[ka\text{-}keyss]] = \lambda w.\lambda x: x = \text{volitional speaker}(\text{context}) . x \text{ goes in } w$

Some examples of *keyss* in control environments are given in (26a-c).

- (26) a. Inho₁-ka Hwun₂-eykey PRO_{1/*2} cip-ey ka-**keyss**-ta-ko
 I-NOM H-DAT home-to go-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC
 ‘Inho promised Hwun to go home.’
- b. Kyumin₁-i hapetu₂-ey PRO_{1/*2} ka-**keyss**-ta-ko
 K-NOM Harvard-LOC go-VOL-DC-C
 kyelceg-ha-yess-ta.
 decide-do-PST-DC
 ‘Kyumin choose to go to Harvard.’
- c. Jwuhi₁-ka uyhak₂-ul PRO_{1/*2} yenkwu-ha-**keyss**-ta-ko
 J-NOM medical-ACC research-do-VOL-DC-C
 mal-ha-yess-ta.
 say-do-PST-DC
 ‘Jwuhi said she would do medical research.’

In the context of the reported speech act in (26a), *Inho* is the only person who is both a speaker and a volitional agent. Given this, the only possible controller choice that will align with the meaning of *keyss* is the matrix subject. This effectively creates a subject control construction, or a speaker control construction as will be discussed below.

Even stronger evidence that *keyss* always selects a speaker controller can be seen when it combines with matrix predicates of recommendation or suggestion. The Korean verb *ceyan-ha-ta* ‘to recommend, propose, suggest’, when combined with the embedded marker *keyss*, can only be subject control as shown in (27) below.

- (27) Inho₁-ka Hwun₂-eykey PRO_{1/*2} swukcey-lul ha-keyss-ta-ko
 I-NOM H-DAT homework-ACC do-VOL-DC-C
 ceyan-ha-yess-ta.
 suggest-do-PST-DC
 ‘Inho suggested to Hwun that he (Inho) will do the homework.’

The example stands in contrast to an analogous English sentence that is strictly object control.

- (28) Jim₁ recommended/suggested to Mary₂ PRO_{*1/2} to do the homework.

Given contrasts like this, when speaking of Korean subject control, it is more accurate to use the term *speaker control*. In fact, there are convincing reasons to believe that this term is more fitting to Korean control cases than English ones. For example, in English, it has long been known that one cannot passivize subject control verbs.

(29) *Jim was promised by Mary to feed the dog.

While the example in (29) is ungrammatical in English, it is acceptable in Korean, as illustrated in (30) below.

(30) Inho₁-ka Jwuhi₂-hanthey PRO_{*1/2} cip-ey ka-keyss-ta-ko
I-NOM J-DAT home-LOC go-VOL-DC-C
yaksok-pat-ass-ta.²⁷
promise-PAS-PST-DC
'(lit.) Inho was promised by Jwuhi to go home.'

In the example in (30) the by-phrase *Jwuhi-hanthey* 'by Jwuhi' represents the speaker of the promise. In addition, this phrase is the controller of the embedded null subject. It seems then that Korean and English behave rather differently with respect to so-called subject control. From this point on, I will employ the use of the term *speaker control* to describe the behavior of control environments created by embedded *keyss*.

At this point, there is one important restriction that should be mentioned regarding *keyss* in embedded clauses. While the subject of the embedded verb that *keyss* combines with is a speaker, it cannot be the speaker of the utterance. For

²⁷ My informants all preferred the use of the more colloquial dative marker *-hanthey*, as opposed to the more formal *-eykey*.

example, if *Chelswu* utters the sentence in (27) above, this cannot mean that Inho suggested to Hwun that Chelswu do the homework. This is true of all speaker control inducing markers, such as *lye* and *ma*. In section 4.3 below, I employ the use of quantifying over contexts, suggested by Schlenker (2003), to achieve the proper semantics to rule this out. This was suggested by Pak et al. (2006) for the class of jussives and I extend the use of this mechanism to the entire class of CCMs.

While the above analysis certainly seems simple and intuitive, it is unfortunately rather incomplete as the semantics of *keyss* is much more complex than I have presented thus far. While in the matrix position, *keyss* often refers to a 1st person/speaker subject; this is not, however, always the case. In fact, the semantics of *keyss* changes depending on what discourse context it finds itself in. As pointed out by Kim (2002), *keyss* not only refers to volitional future like in the examples with a speaker subject above, it also may refer to a predictive future with an animate 2nd person, 3rd person or inanimate subject.

- (31) a. Neyil pi-ka o-keyss-ney!
tomorrow rain-NOM come-*keyss*-DC
'It's going to rain tomorrow!'
(Kim 2002)
- b. Po-a-ni Minswu-ka neyil ci-keyss-ta.
see-since M-NOM tomorrow lose-*keyss*-DC
'As I see it, (I predict) Minswu will lose tomorrow.'
(Kim 2002)
- c. Cosimhay-la! Ne namwu-eyse tteleci-keyss-ta.
watch.out-IMP you tree-from fall-*keyss*-DC
'Watch out! You will fall down from the tree.'
(Kim 2002)

Given examples like (31a-c) above, I cannot simply say that *keyss* requires a volitional first person speaker subject in all circumstances. The subject in (31a) is inanimate and the subjects in (31b-c) are third and second person respectively.

- (32) a. **Keyss 1** - If there exists a context where willful action is possible, the subject of the verb that *keyss* combines with is a speaker and a willful agent of doing the action denoted by that verb.
- b. **Keyss 2** - If there exists a context where the speaker is in a position to make a prediction, then the subject of the verb that *keyss* combines with is someone whom the speaker is making predictions about.

With the restrictions on the reference of the subject of the verb that *keyss* combines with outlined in (32a-b), I am able to predict how *keyss* should behave in an embedded context and, furthermore, which controllers should be chosen. The function of *keyss* in (32a) dictates speaker control as the restriction requires the subject of the verb it combines with to be a speaker subject. This can be shown even in root clauses, as my informants found it ungrammatical for a speaker to make a remark about someone else's will or volition.

- (33) a. *Ni-ka swukcey-lul ha-keyss-ta.
 2nd-NOM homework-ACC do-VOL-DC
 'You will do the homework.'
- b. *Ku-ka swukcey-lul ha-keyss-ta.
 3rd-NOM homework-ACC do-VOL-DC
 'He will do the homework.'

The restriction in (32b) predicts speaker, addressee or non-obligatory control should obtain depending on the context created by the matrix predicate and embedded event. In other words, if the speaker is making a prediction about himself, speaker control will obtain. If the speaker is making a prediction about the addressee, addressee control will obtain. Finally, if the speaker is making a prediction about someone else or people in general, non-obligatory control will obtain. In summary, the predictions for what type of control will or can be created are based on the functions of *keyss* as they interact with the contexts set up by the various matrix predicates. The predictions are as follows:

Prediction 1: When *keyss* is embedded under a matrix predicate that creates a context where there is the possibility of a willful act, speaker control will obtain.

Prediction 2: When *keyss* is embedded under a matrix predicate that creates a context where there is the possibility of the speaker predicting, speaker, addressee, or non-obligatory control may obtain.

Prediction 1 is borne out in the case of examples like (26a) above that include a matrix verb that provides a promising context. In a promising context, there is no other possible meaning than that a willful act will be done. In other words, promising entails that the promised action will be done volitionally. In addition, it does not entail any sort of prediction. In a sentence such as (26a), the only willful speaker is the matrix subject.

In order to test prediction 2, I now examine verbs of saying and the embedded CCM *keyss*. Consider the example in (34a) below, which in fact is three-way ambiguous, depending on the contexts in (34b-d).

- (34) a. Inho-ka Jwuhi-eykey sihem-ey tteleci-keyss-ta-ko
 I-NOM J-DAT test-LOC drop/fail-*keyss*-DC-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘(lit.) Inho told Jwuhi he/she/someone else would fail the test.’

- b. **Context A:** Inho is a good student, but he wanted to fail the test so he would not embarrass his brother.

Reading of (34a): Yesterday, Inho told Jwuhi that he (Inho) would willfully fail the test.

- c. **Context B:** Jwuhi is a bad student and Inho predicts that Jwuhi will fail on the upcoming test.

Reading of (34a): Yesterday, Inho told Jwuhi that he predicts that she will fail the test.

- d. **Context C:** Inho and Jwuhi are talking about Chelswu, who is a bad student.

Reading of (34a): Inho told Jwuhi that he (Inho) predicts that Chelswu will fail.

The context in (34b) is one that elicits a willful volitional reading, in that the matrix subject, *Inho*, has a reason for which he willfully wants to do poorly. This context elicits a speaker control reading.

The reading in (34c), is one where the matrix subject *Inho* is in a position to predict something about the direct object *Jwuhi*. This corresponds to an addressee control sentence. However, note that one could also have a speaker control predictive reading, where *Inho* is predicting to *Jwuhi* that he himself will fail. Verbs of saying allow all of these types of contexts.

Finally, (34c) is an instance of non-obligatory control as set up by the context, where the matrix subject is in a position to predict something about someone else. In addition, it should be noted that my informants preferred an overt subject in the embedded clause.

- (35) Inho-ka Jwuhi-eykey **Chelswu-ka** sihem-ey tteleci-keyss-ta-ko
 I-NOM J-DAT C-NOM test-LOC lose-keyss-DC-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘Inho told Jwuhi that Chelswu would fail the test.’

The example above is interesting, in that it allows an overt referential subject. In chapter 2, I noted that, normally, embedded *keyss* complements do not allow such

things in Korean. I will discuss this in detail in the following chapter. For the time being, however, what is relevant from the above discussion is that I cannot simply rely upon the meanings of embedded CCMs to determine controller choice. Instead, controller choice must be an interaction of the meanings of embedded CCMs and matrix predicates capable of control. *Keyss* provides us with an extraordinary example of this in that *keyss* only induces speaker control when it is situated in a context where there is the possibility of willful action or prediction about self.

One may be tempted to draw the conclusion from the above examples that the example and contexts in (35a-d) show that constructions involving *keyss* really do not exhibit control at all, since under a certain context NOC obtains. However, this conclusion is misguided in the following way. First of all, with a context such as (35b), the sentence in (35a) passes all tests of OC presented in chapter 2. It is only when the context changes that the example in (35a) begins to show properties of being an NOC structure, such as the availability of an arbitrary reading with the context in (35d). In section 4.3, I provided a more formal analysis of how the interaction of context and CCMs determines controller choice.

There is another important aspect of viewing *keyss* as a marker that restricts the reference of the verb it combines with to a speaker, under the proper context. When the role of *keyss* is viewed in this way it solves a long-standing problem in the study of control; namely, why is it that verbs such as *promise* are subject control? According to syntactic theories of control based on ideas such as the Minimal

Link Condition (MLK) or the Minimal Distance Principle (MDP) (e.g. Rosenbaum 1970, Hornstein 1999), *promise* should be an object control verb, as the object is “closer” to the controlled element. Theories like this often resort to saying that these structures are in fact marked, citing Chomsky’s (1969) evidence of late acquisition of these verbs as evidence. However, under my analysis, why *promise* is subject control is rather straightforward, at least for Korean. When *keyss* combines with a verb that provides a context where volitional will over the action denoted by the embedded verb is possible, such as in a promise-context, then subject control, or speaker control rather, is predicted to exist. Furthermore, if a predictive reading is not available, also as in a promise-context, addressee control is predicted *not* to exist. In short, *promise* is speaker control in Korean, because of the interaction between the requirements of the embedded marker and the matrix predicate. When these things combine properly, a control environment is created. In this case, speaker control is created. Admittedly, however, in English one cannot have a predictive reading of *promise* in a control clause, as opposed to a finite clause, as shown below.

- (36) a. If you do that, I can promise you that you will fail.
 b. #If you do that, I can promise you PRO to fail.²⁸

²⁸ Thanks to Benjamin Bruening for this example.

In this case, the reason for *promise* being subject control remains a mystery, as there is no overt marker such as *keyss* to indicate that it would be. For Korean, however, the data is very clear.

4.3 Theoretical Accounts of Controller Choice

In this section, I begin to explore how to best theoretically model the interpretation of the empirical analysis given above. First, I examine some of the more seminal works on controller choice and attempt to make clear how the Korean data makes obvious the flaws in these theories. In section 4.4, I present a new approach based on the work of Pak (2004) and Pak et al. (2006).

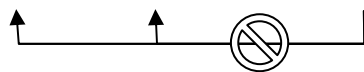
4.3.1 Syntactic Accounts: From Rosenbaum to Hornstein

First of all, it should be obvious at this point that a solely syntactic solution will not do. At their extremes, syntactic explanations of control rely on one thing: structure. Given this, one should be able to determine controller choice simply by examining the syntactic structure of a control construction. The most popular and detailed syntactic theory of control in the literature is that of Hornstein (1999). As already detailed in chapter 3, in this approach, control is reduced to raising and is simply A-movement. In a control construction, a controller begins its derivational life in the embedded clause, checks a theta-role feature with the embedded verb and then moves to the matrix clause to check another theta-role feature. Where this DP can or

cannot move to is directly dictated by the Minimal Link Condition (MLC). As a result, the MLC is solely responsible for determining controller choice. In short, if there is an object position, the DP must move there creating object control. If there is no object, then it is subject control. This sort of approach is not new, in fact, and dates back to Rosenbaum (1970), who predicted controller choice using the Minimal Distance Principle.

The issues with this type of approach regarding Korean are as follows. First of all, and perhaps most difficult to deal with, there is simply no way to account for the two separate controllers in split control constructions in Korean (Madigan 2006b, 2008). The difficulty lies in explaining how a DP could begin as a single plural DP and split into two separate DPs in the matrix clause.

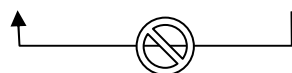
(37) Inho-ka Jwuhi-eykey [Inho+Jwuhi cip-ey ka-ca]-ko ceyan-ha-yess-ta.



In fact, the impossibility of this theory accounting for such structures has been noted by its proponents (Hornstein 2003).

Second, as mentioned above, *promise* is predicted to be object control.

(38) Jim promised Mary [Jim to go to Namdaymwun].



Finally, as shown above, verbs such as *mal-ha-ta* ‘to say/tell’ can be subject, object, or split control. There is simply no way to derive this solely from the MLC. First of all, the controller, in this theory, moves to check off an EPP feature. How far it moves is governed solely by the MLC. The sentence in (39) has a volitional marker in the embedded clause and therefore dictates speaker control. However, just as in the *promise* case in (38), the MLC is violated if *Inho* moves over the object.

- (39)
- Inho-ka Jwuhi-eykey Inho cip-ey ka-keyss-ta-ko mal-ha-yess-ta.
 I-NOM J-DAT I home-to go-VOL-DC-C tell-do-PST-DC
 ‘Inho said to Jwuhi that he would go home.’

The issue is made worse when we consider that if *la* or *ca* is used in the embedded clause addressee or split control obtains, respectively. The information given by the CCM is crucial to deriving whether speaker, addressee or split control will obtain in combination with the verb *mal-ha-ta* ‘to say, tell’. Under the movement approach, we have no way of accessing this information.

Given the inability of a solely syntactic approach to account for the data at hand and the necessary reference to the meanings of CCMs in Korean to explain controller choice, I draw the conclusion that a semantic solution, at least in part, is necessary. In the following section, I discuss some previous approaches to control that

are more semantic in flavor. Finding these theories somewhat lacking, I then suggest an extension of Pak's analysis of Korean jussive markers to control.

4.3.2 Semantic Accounts: Chierchia (1984, 1989)

In Chierchia's (1984, 1989) approach, the formula in (40a) in combination with the thematic hierarchy in (40b), is used to create an entailment predication that determines controller choice.

(40) Jim tried to swim.

(41) a. $E(\beta_r[P]) \rightarrow E(\beta_r[P/P^*(\theta(\beta))])$

b. Th > Go > Ag ... (Chierchia 1989)

To determine controller choice in (40), (41a) states that there is an eventuality of type-r (e.g. a try-eventuality) which takes P as an argument (i.e. the infinitival 'to swim'). θ is a partial function from eventualities to participants. In addition, the constituent P undergoes a substitution operation where it is replaced with a minimally different constituent that has a theta-role associated with it from the r-eventuality. The theta-role to be chosen depends on the thematic hierarchy.

The issues with this approach are as follows:

- 1.) The thematic hierarchy is somewhat stipulative.

- 2.) Obligatory split control is ruled out.
- 3.) Marked verbs are not derivable- *promise* is predicted to be an object control verb by the hierarchy.
- 4.) The substitution operation is poorly justified.

In the following, I examine a possible solution to the problems above. First of all, it is obvious that the thematic hierarchy is stipulative in that it is not derived from anything else. It might be possible, however, to do away with the thematic hierarchy altogether. This information could be encoded in the substitution portion of the formula by having the form of the partial function θ dictated by the meaning of the embedded CCM. Consider the derivation of (42) in (43).

- (42) Inho₁-ka Hwun₂-eykey PRO_{*1/2/*3} swuyeng-ha-**la**-ko mal-ha-yess-ta.
 I-NOM H-DAT swim-do-IMP-C tell-do-PST-DC
 ‘Inho told Hwun to swim.’

- (43) a. $E(<\text{tell}', I, H, \text{swim}'>)$
 b. $E(\beta_{\text{tell}}[P]) \rightarrow E(\beta_{\text{tell}}[P/P^*(\text{Theme}/\text{Addressee}(\beta))]) \quad \leftarrow \text{As dictated by } la$
 c. $E(<\text{tell}', I, H <\text{swim}', H>>)$

Controller choice in (42) would be computed in the following way. First of all, the embedded CCM *la* dictates that its subject be an ordered addressee. Taking this into

account, the formula used to create the entailment predication would be as in (43b). The meaning of the actual sentence, achieved through the formula in (43b) is as in (43a). In addition, (43a) carries with it the entailment that Inho is the theme/addressee of Hwun's direction/telling and as a result he is trying to bring about a situation where he swims. Put another way, knowing that Hwun was told to swim entails his attempting to bring about a situation where he swims.

As stated above, Chierchia's approach predicts split control not to exist. This is mainly due to the nature of the thematic hierarchy. Again, by replacing the hierarchy function in controller choice with the meanings of the CCMs, we can resolve this issue. In obligatory split control, the embedded exhortative marker *ca* restricts the reference of PRO to the matrix subject and object.

- (44) Jwuhi₁-ka Inho₂-eykey PRO₁₊₂ cip-ey ka-ca-ko seltuk-ha-yess-ta.
J-NOM I-DAT home-to go-EXH-C persuade-do-PST-DC
'Jwuhi persuaded Inho to go home.'

We can account for this structure by changing the replacement portion of the formula with that in (45b) which restricts the theta-roles associated with the embedded event with the *speaker* and *addressee* (i.e. the matrix subject and object).

- (45) a. $E(\langle \text{persuade}', J, I, \text{go-ca}' \rangle)$
 b. $E(\beta_{\text{persuade}}[P]) \rightarrow E(\beta_{\text{persuade}}[P/P^*(\text{Speaker}(\beta) \wedge \text{Addressee}(\beta))]) \leftarrow \text{by } ca$
 c. $E(\langle \text{persuade}', I, H \langle \text{go-ca}', H^I \rangle \rangle)$

Through the formula in (45b), we create the entailment that: knowing that Jwuhi persuaded Inho to go together (45a) entails that Jwuhi and Inho will try to bring about the situation where they will go together (45c).

As for the problem of *yaksok-ha-ta* ‘promise’ being predicted to be addressee control, the solution would be the same, namely change the partial function from eventualities to participants from being dictated by a hierarchy to being dictated by the meaning of *keyss*.

- (46) Jwuhi-ka PRO ttena-keyss-ta-ko yaksok-ha-yess-ta.
 J-NOM leave-VOL-DC-C promise-do-PST-DC
 ‘Jwuhi promised to leave.’

- (47) a. $E(\langle \text{promise}', J, I, \text{leave}' \rangle)$
 b. $E(\beta_{\text{promise}}[P]) \rightarrow E(\beta_{\text{promise}}[P/P^*(\text{Agent/Speaker}(\beta))]) \leftarrow \text{As dictated by } keyss$
 c. $E(\langle \text{promise}', J, I, \text{leave}' \rangle)$

Given the derivation in (47), we end up with the entailment in which knowing that Jwuhi promised to leave entails that Jwuhi will bring about a situation where she will willfully go. While this approach is fine, given the simple definition of *keyss* employed in (47), it is not at all clear how to account for the context influences on controller choice outlined in the previous section.

While the above fixes to Chierchia's analysis might do the job, a number of questions remain. First, what "sets off" or triggers the entailment predication? In other words, the crucial component to this theory is the substitution operation that associates a given matrix argument as the doer of the embedded action. There is really no grammatical or computational reason to assume this happens, nor is there any independent evidence that such an operation exists, that I am aware of.

Second, how do we account for context effects on control readings involving *keyss* described above? Recall that *keyss* needs to find itself in a volitional context to create subject control. There is no way to access this information under Chierchia's theory.

Also, how do we account for selectional restrictions between matrix predicates and embedded CCMs? As I explore in some detail in section 4.5, there are many restrictions on which markers can appear with which matrix verbs. Any theory of control in Korean should be able to account for these facts. Under Chierchia's system, it appears that there is no answer, other than to suggest stipulative subcategorizational rules.

4.3.3 Sag and Pollard (1991) – Semantics and Controller Shift

Before moving on to my theoretical account of the Korean data, I first explore a proposal in the tradition of *Head-driven Phrase Structure Grammar* that is very similar to my way of viewing the control data, namely Sag and Pollard (1991). The basic argument of this work is that controller choice is “... (the) interaction of semantically based principles of controller assignment and the principles that determine the distribution of anaphors and pronominals” (p63).

This work is essentially an extension of Jackendoff’s (1972) semantic view of controller choice. Jackendoff’s theory is simply that subcategorizations of the “same” verb always apply the same thematic role to the controller. For example, verbs like *promise* and *try* always have agent controllers and verbs like *order* and *persuade* always have theme controllers. Sag and Pollard (1991) take this analysis further and account for not only why certain verbs behave this way, but also their nominal counterparts. In achieving this, Sag and Pollard describe the following semantically based principles of controller assignment. Order/permit-type verbs describe a state of affairs (SOA) of the INFLUENCE type and involve three semantic roles, namely INFLUENCE (i.e. the influencer), INFLUENCED and SOA-ARG (the action the influenced is to perform, or not perform). Promise-type verbs describe a SOA of the COMMITMENT type which involves two obligatory roles, COMITTOR and SOA-ARG, as well as one optional role, that of the COMISSEE. Finally, want/expect-type verbs describe a SOA termed ORIENTATION, to mean that this SOA describes a

desire or wish. This relation consists of two somatic roles, an EXPERIENCER and SOA-ARG

The above generalizations about the various control verb classes allow Sag and Pollard (1991) to make the following semantic generalizations about controller choice.

(48) Given a nonfinite VP or predicative complement C, whose semantic content C' is the soa-arg of a soa s whose relation is R, the unexpressed subject of C is linked to:

- a. the influenced participant of s, if R is of influence type
- b. the committer participant of s, if R is of the commitment type
- c. the experiencer participant of s, if R is of the orientation type

(Sag and Pollard 1991)

One bonus of the above approach is that it accounts for the fact that controller choice appears to be the same across the nominal and verbal domains. Consider the following paradigm.

- (49)
- a. Milford appealed to the court to be set free.
 - b. Milford's appeal to the court to be set free fell on deaf ears.

(49a-b) both describe SOA's of the INFLUENCE type. As such, the controller is the INFLUENCER in both cases regardless of nominal or verbal domains. In this way, controller choice is related to the soas rather than to linguistic expressions themselves.

The issues with the above approach are as follows. First, Sag and Pollard do not account for split control. There is, however, nothing about the architecture of the theory that would disallow its inclusion as far as I can ascertain. What is needed is an SOA of the PROPOSAL type with three semantic roles: a PROPOSER, a PROPOSSEE, and an SOA-ARG. This becomes difficult, however, when one considers the range of predicates that can be used with exhortative complements. *Sayngkak-ka-ta* 'to think', for example, is not a control predicate and is clearly not a verb of proposal. However, when followed by an exhortative complement, split control is created. Therefore, the meaning of the embedded marker must be included in how a control reading is arrived at.

The second problem is a similar one, and simply speaks to the need to include the embedded meanings in a theory of controller choice. The fact is that this approach cannot account for control in verbs of speaking in Korean. As I presented above, when combined with the various CCMs, verbs of speaking can create speaker, addressee or split control. Sag and Pollard would have to postulate that this verb is somehow transparent enough to have all of the above SOA's. This might be acceptable, but it does not explain why this option is not allowed in languages like English. This is exemplified in (50) below.

(50) Milford₁ told Mary₂ PRO_{*1/2/*1+2} to go home.

As can be seen, all but an object control reading is ruled out in these types of sentences. This is predicted under Sag and Pollard's theory as *tell* in this case is an SOA of the INFLUENCE type. As shown above, this does not, however, carry over to a language like Korean with a rich set of embedded CCMs. The ideal approach, then is to allow the embedded meanings to interact with the matrix meanings.

Sag and Pollard do not completely ignore the meaning of the embedded clause, however. In examining cases of control shift, they state that "...control shift is closely tied to interpretation of the embedded complement, rather than syntactic property. Controller shift happens when the complements content does not satisfy the semantic demands of the relation it is an argument of." (p82) In order to solve this dilemma, they attempt to draw the conclusion that control shift is a coercion of meaning. For example, they suggest that the sentence in (51a) underlying means (51b), successfully allowing the meaning of the complement to meet the semantic demands of the relation it is an argument of.

- (51) a. Jim promised Mary to be allowed to go.
b. Meaning: Jim will perform the action that allows Mary to go.

The above argument is fairly weak. It is much more straightforward in my approach shown below, where the meaning of the embedded clause is allowed to interact with the matrix predicate directly.

4.4 Controller Choice: A New Approach

4.3.1 Extending Pak (2004) and Pak et al. (2006)

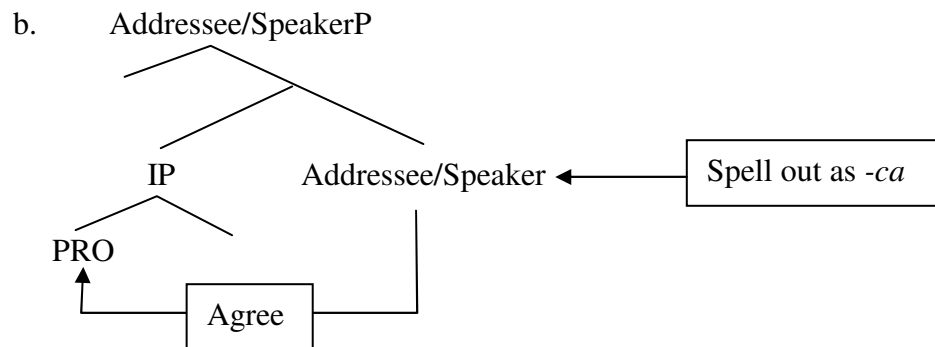
In this section, I give a detailed account of a new analysis of controller choice in Korean based on the work of Pak (2004) and Pak et al. (2006). The focus of Pak's work is not control, but rather it is an attempt to account for the set of so-called *jussives*: the markers *ca*, *la*, and *ma* and their clause-typing properties. However, as I have shown here, the markers she examines do always create control. In addition, I believe that with some modification, the extension of this analysis to the other control creating markers *keyss* and *lye* is rather straightforward.

In what follows, I first give an illustrative analysis of split control constructions involving *ca*. Having described the theory in its entirety through explaining a split control example, I then move on to show how the other markers are analyzed.

In Pak's original analysis, jussive markers are represented through a speech act phrase, i.e. a Speaker/Addressee Phrase that is headed by an addressee/speaker head that binds the empty subject (PRO in my analysis).

Furthermore, she assumes that, since this is semantic binding, that there is a “vacuous agreement” between the subject and the jussive marker. However, for reasons that will become clear below, I assume that there is a syntactic agreement relationship between the Speaker/Addressee head and PRO. Furthermore, Speaker/Addressee carries the presuppositional features *speaker* and *addressee* which can be shared with PRO via agreement. An OC derivation, split in this case, in Korean would proceed as follows.

- (52) a. Jwuhi₁-ka Inho₂-eykey PRO₁₊₂ cip-ey ka-ca-ko
 J-NOM I-DAT home-to go-EXH-C
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Jwuhi persuaded Inho to go home.’



In keeping with my analysis of split control PRO in chapter 3 as a minimal pronoun, which utilized Kratzer's (2006) pronominal system, I assume that PRO enters an Agree

relationship with the Addressee/Speaker head and inherits the [+addressee] and [+speaker] features. The derivation of split PRO then would be as follows:

(53)

$$\begin{array}{c}
 \text{DP} \\
 \swarrow \quad \searrow \\
 \text{D} \qquad \text{N} = \text{PRO}
 \end{array}$$

{ [[*sum*]], [[*1st*]], [[*2nd*]] }

[[*1st*]] = the speaker in c <e>

[[*2nd*]] = the addressee in c <e>

[[*sum*]] = $\lambda x. \lambda y. x, \text{ the speaker} + y, \text{ the addressee}$ <e <e,e>>

[[N]] = [[PRO]] = [[DP]] = $[\lambda x. \lambda y. x + y] (g(1)) (g(2))$

$= [\lambda y. g(1) + y] (g(2))$

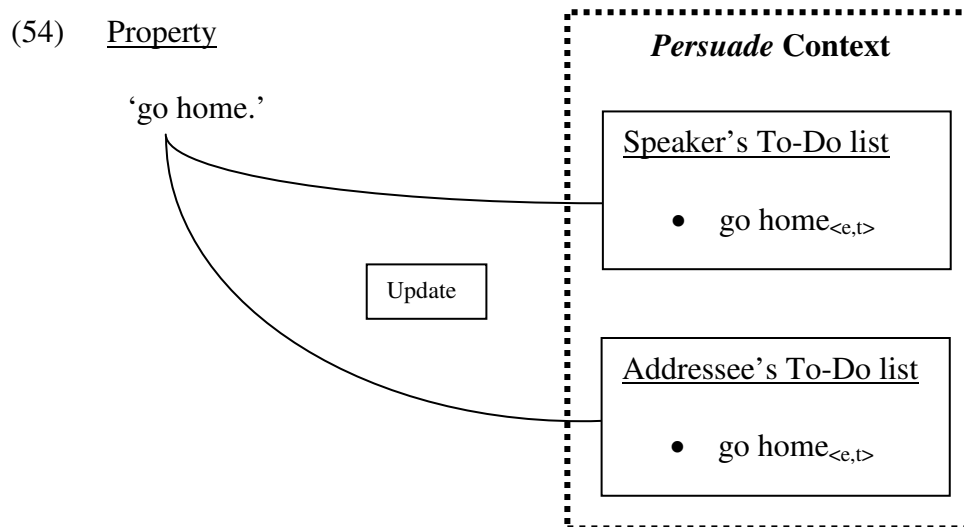
= the speaker and hearer in c <e>

It should be noted that the terms speaker and addressee here need to be understood in a more abstract sense with regards to embedded clauses. These features are meant to be speaker and addressee in the discourse context of a reported speech act. PRO now has speaker and addressee features and is encoded to refer to these in the context set up by the matrix predicate. In other words, at this point in the computation, controller choice is decided in conjunction with the matrix predicate.

As can be seen above, Pak et al. (2006) suggested that what is checked in derivations like the one above is 1st and 2nd person features that induce presuppositions

of *speaker* or *addressee* respectively (cf. Heim and Kratzer 1998). Furthermore, these presuppositional features guide which individual's To-Do list is to be updated in the discourse context. A To-Do list is a list of discourse properties that a participant is willing to have or do (cf. Portner 2004). Extending Pak's work to control, I suggest that controller choice is essentially derived through the interaction of the matrix predicates and embedded CCMs as they conspire to update the To-Do lists of various individuals in the discourse context. The controller (or controllers) would then be that DP, or those DPs, in the discourse context whose To-Do list(s) is/are to be updated.

Continuing with my analysis of the split control sentence in (50a) above, the embedded marker *ca* which has been encoded to refer to addressee and speaker, is situated under the matrix predicate *persuade*. Now, the Addressee/Speaker head, to be spelled-out as *ca*, indicates that we should update the speaker and addressee's To-Do list with the property *go home*. This is illustrated below in (54).



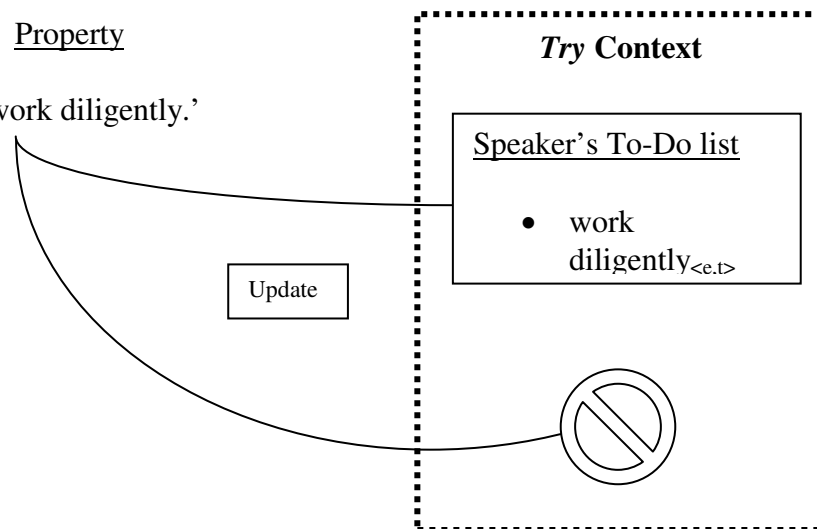
In the context of persuading, as given by the matrix predicate, the speaker and addressee are *Jwuhi* and *Inho* respectively. Through this mechanism, controller choice is determined. While the idea of To-Do lists was first suggested by Pak for jussives, the notion that when a jussive marker is embedded the matrix verb's meaning creates a context in which the jussive may interact is new. The need to account for the context created by the matrix verb can be seen if we try to embed *ca* under a verb without an addressee, such as *try*.

(55) a. **Inho-ka yelsimhi ha-ca-ko nolyek-ha-yess-ta.*

I-NOM diligently do-EXH-C try-do-PST-Dc

b. Property

‘work diligently.’



In the above example, the context provided by *try* does not have an available addressee, therefore *ca* cannot combine with the matrix predicate *nolyek-ha-ta* ‘try’ to create a control environment. This type of restriction will be explored in more detail in

the following section. However, before moving to that, I first give derivations for the rest of the CCMs.

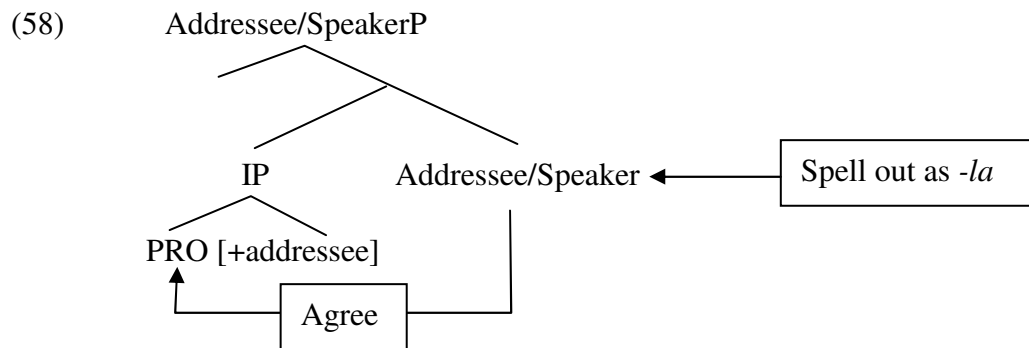
For the rest of the jussive markers, *la* and *ma*, there is a one-to-one relationship between the meaning of the marker and the choice of whose To-Do list is to be updated, and hence which DP will be the controller. Reconsider the restrictions on the subject of the verb these markers combine with.

- (56) a. Function of *la* = The subject of the verb combined with must be an ordered addressee.
- b. Function of *ma* = The subject of the verb combined with must be a promising speaker.

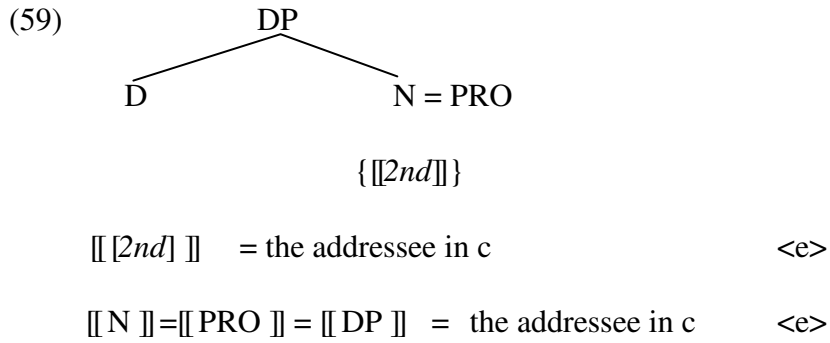
In (56a), the function of *la* dictates that there is some addressee who is ordered in the discourse context, and furthermore that this addressee will be undergoing the action of the verb *la* combines with. I assume that this meaning functions to update the addressee's To-Do list in the discourse context. In an embedded context, this amounts to addressee control. A concrete example is as follows in (57).

- (57) Inho₁-ka Jwuhi₂-eykey PRO_{*1/2} swukcey-lul ha-la-ko
 I-NOM J-DAT homework-ACC do-IMP-C
 myenglyeng-ha-yess-ta.
 order-do-PST-DC
 ‘Inho ordered Jwuhi to do the homework.’

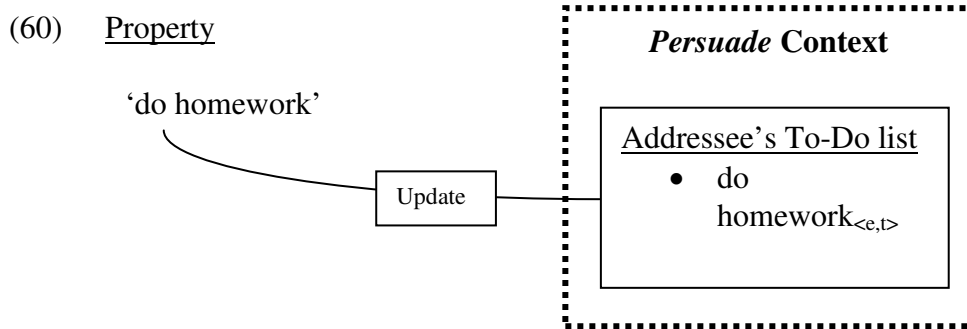
In the example in (57), the embedded imperative marker *la* requires that whoever is the subject of doing the homework must be an ordered addressee. This is achieved via the agreement system as outlined above for *-ca*.



The derivation for PRO in this case would be as follows.



As a result, the property ‘do homework’ is added to an available addressee’s To-Do list in the discourse context. This corresponds to the matrix object *Jwuhi*. In this way, addressee control is achieved.

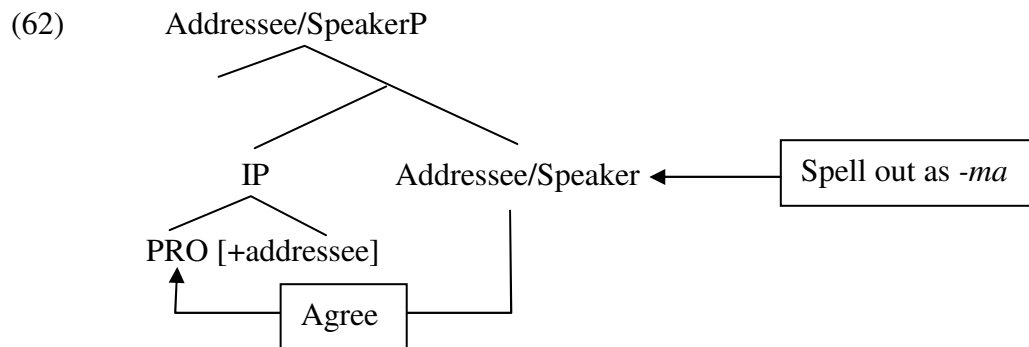


On a preemptive note, the astute reader may notice that this system will overgenerate, as all that is required is an addressee’s To-do list to update. For example, if the context was a *promise* context, an addressee would be available in that context. I address this in section 4.5 below.

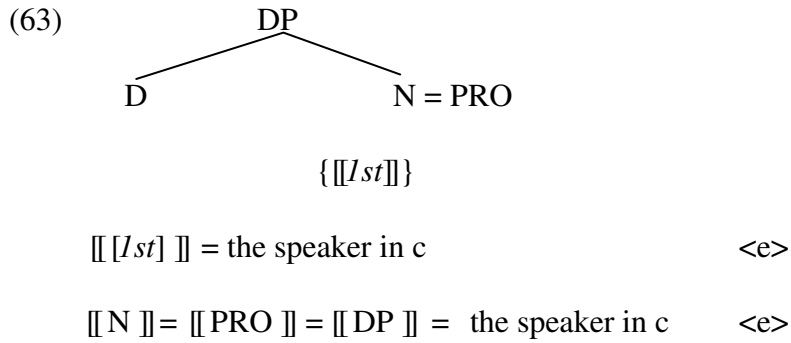
Ma works in an analogous way to *ca* and *la*. The difference is that *ma* serves to update a speaker's To-Do list, thus choosing a speaker controller. Consider the sentence below.

- (61) Inho₁-nun Cheslwu₂-eykey PRO_{1/*2} talamci-lul cap-ma-ko
 I-TOP C-DAT squirrel-ACC catch-PROM-C
 yaksok-ha-yess-ta
 promise-do-PST-DC
 'Inho promised to trap the squirrel.'

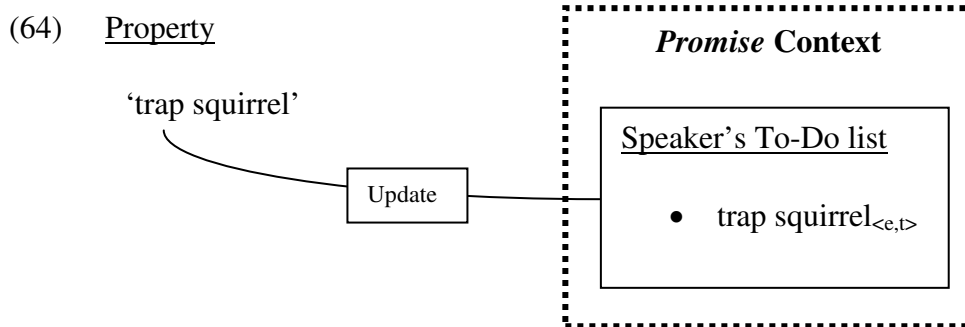
Next, PRO is encoded with [+speaker] and *ma* spells out.



The derivation for PRO in this case would be as follows.



As a result, the property ‘trap squirrel’ is added to an available speaker To-Do list in the discourse context. This corresponds to the matrix subject *Inho*. In this way, speaker control is achieved.



One main issue in attempting to modify and apply the work of Pak et al. to control is that they only discuss the jussives: *la*, *ma*, *ca*. However, I assume that all embedded markers that create control also have associated with them a functional projection that checks for these kinds of presupposition inducing features, which in turn guides which To-Do list to update. I assume that the markers *lye* and *keyss* do check presuppositional features of person, but which features these are depends on the

context these markers find themselves in, as shown in the analysis above in section 4.2.

Beginning with *keyss*, I assume that it checks for speaker in a context with the possibility for a willful act. The first thing that needs to be considered is that this marker has a different syntactic distribution than the jussives. The jussives are clause-typing markers and occur after a verb, but before a complementizer. An example with *ca* is given below.

- (65) ka-ca-ko...
go-EXH-C

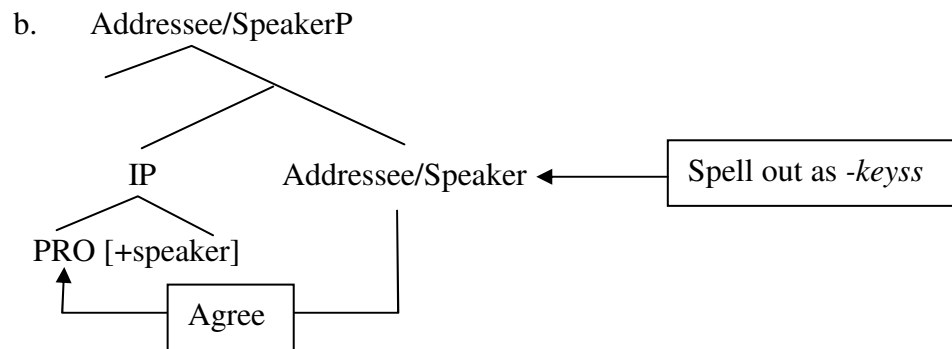
The marker *keyss*, however, occurs after a verb and before a declarative clause-typing marker.

- (66) ka-keyss-ta-ko
go-VOL-DC-C

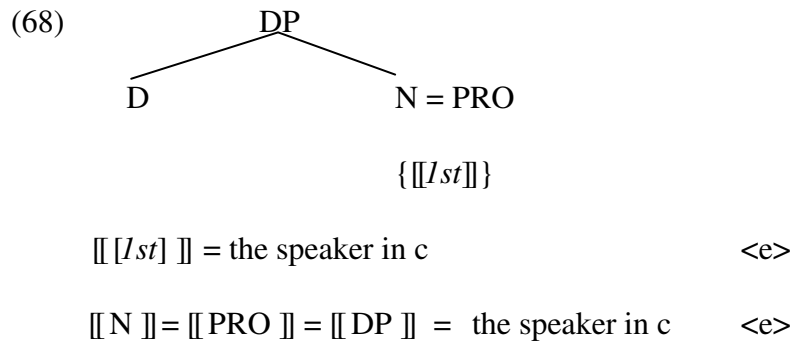
Following Whitman (1989) I assume that the declarative *-ta* functions to mark sentential force and heads some sort of functional phrase in which to accomplish this goal. However, he also assumes that *la*, *ca*, and *ma*, also function in the same way. I agree with Pak (2004) who argues that *la*, *ca*, and *ma* function in a much different

manner than *ta* and head a speech act phrase. If I assume that *keyss* too can head a speech act phrase which checks for person features, major problems arise. Consider (67b) below, which is the derivation of the embedded clause for (67a).

- (67) a. Jwuhi₁-ka Hwun₂-eykey PRO_{1/*2/*3} ceyk-ul ilk-**keyss**-ta-ko
 J-NOM H-DAT book-ACC read-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC
 ‘Jwuhi promised Hwun to read the book.’



The derivation for PRO in this case would be as follows.



One major issue for this approach is that there is no way for the grammar to know whether to spell out *keyss* or *ma*, as the spell-out rules are ambiguous.

(69)

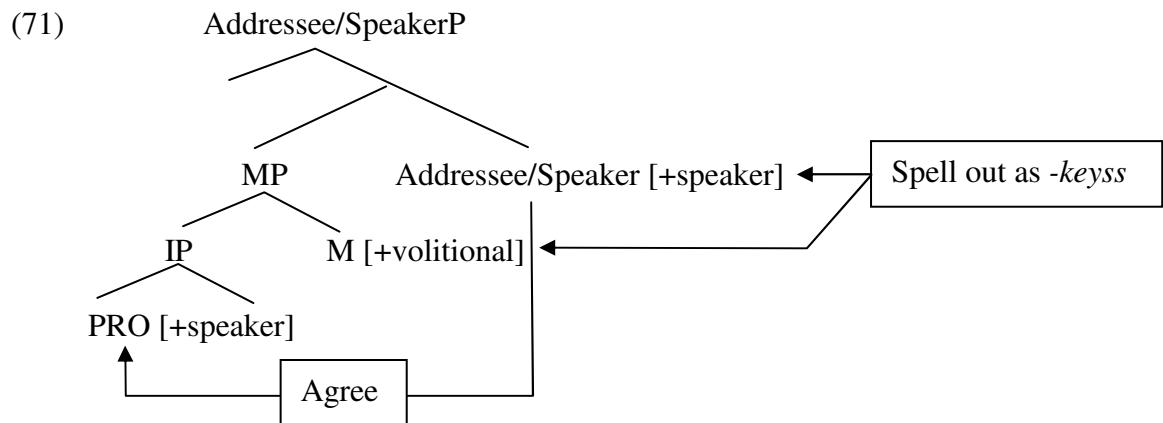
<u>Addressee/speaker</u>		<u>Spell-out</u>
[+speaker]	→	<i>keyss</i>
[+speaker]	→	<i>ma</i>

The fact is that *keyss* not only selects for a speaker, it selects for a *volitional* speaker. If we included this kind of feature as a possibility under the Addressee/Speaker phrase, then I am able to clarify this issue.

(70)

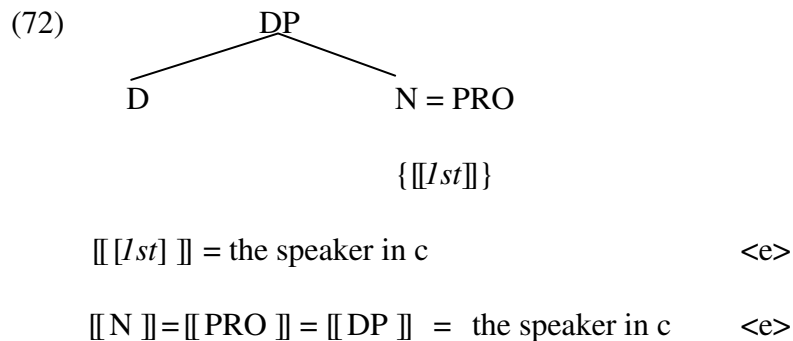
<u>Addressee/speaker</u>		<u>Spell-out</u>
[+speaker, +volitional]	→	<i>keyss</i>
[+speaker]	→	<i>ma</i>

The remaining issue is that it does not seem desirable to include features such as volitional in the set of features that are passed on to PRO through agreement. I say this because there are no overt pronominal forms which mark for such a thing that I know of. This would muddle Kratzer's (2006) system quite a bit and take away from its predictive power. Therefore, I assume that there is a separate Mood Phrase (MoodP) that markers like *keyss* head. This phrase is part of an expanded Addressee/Speaker Phrase, if you will, that contributes to the spell-out procedure as well as to To-Do list updating. PRO, however, only agrees with those features in the head of Addressee/Speaker; the [+speaker] feature in the case of *keyss*.

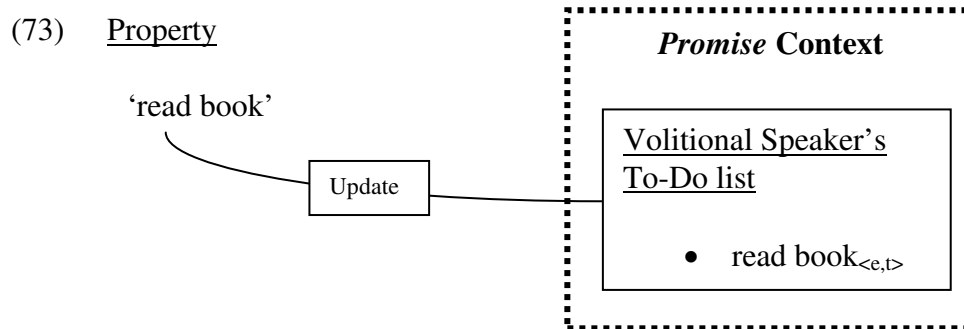


In the following section, I present a detailed theory of the features available in Addressee/Speaker with regards to control. For now, simply noting the above as a possibility will suffice.

Given the amendments above, I can now account for a speaker control sentence involving *keyss* in the example above. The derivation of the embedded clause is as in (71) above, and the derivation of PRO would be as in (72) below.

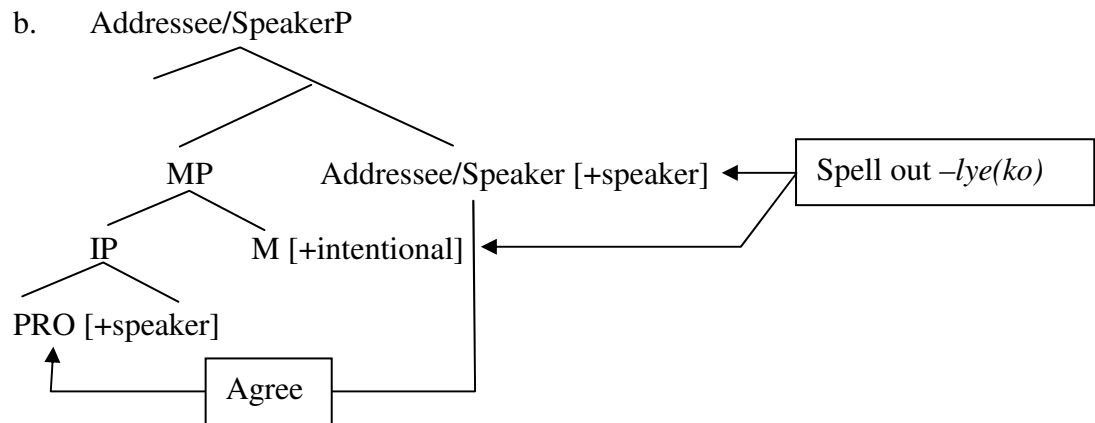


Finally, since the Speaker/Addressee Phrase complex is [+speaker, +volitional], *keyss* is spelled out and a [+speaker, +volitional] To-Do list is updated in the context created by the matrix verb *promise*.

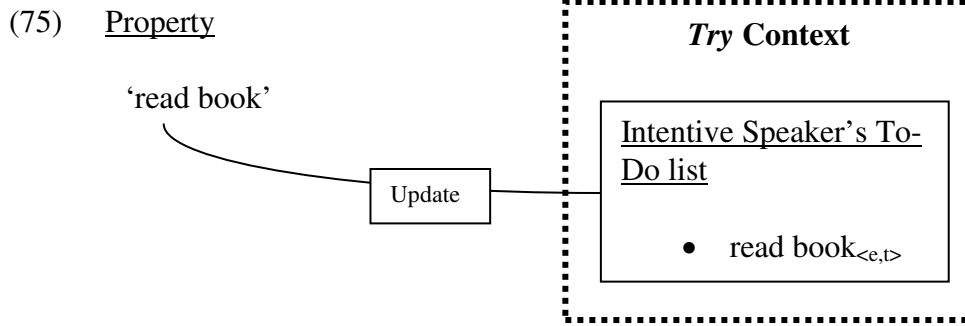


Turning now to *lye* complements, recall that these markers require an intensive speaker to be the subject of the verb they combine with. Given a sentence like (74a) below, the derivation of the embedded clause would be as in (74b).

- (74) a. Hwun-i PRO chayk-ul ilk-ulye-ko nolyek-ha-yess-ta.
 H-NOM book-ACC read-INT-C try-do-PST-DC
 ‘Hwun tried to read the book.’



The computation of PRO would be exactly the same as *keyss*, because PRO is simply a [+speaker] minimal pronoun. The controller would be chosen via the fact that the Addressee/Speaker complex indicates to update a [+intensive, +speaker] To-Do list.



In this section, I have provided an account for control and controller choice using the work of Pak (2004) and Pak et al. (2006) as a starting point. Through the use of Kratzer’s (2006) minimal pronoun system, To-Do list semantics and Speech Act Phrases with expanded featural systems, I am able to account for the complex interactions between the embedded CCMs and the contexts created by the matrix verb that go into determining controller choice. In the next section, I provide an explanation of how to restrict the reference of embedded controllees to matrix speakers and addressees.

4.4.2 Schlenker (2003) and the Semantics of Korean Control

As mentioned above, while CCMs restrict the reference of the verbs they combine with to speakers and addressees (and sometimes both) when embedded, these subjects may not refer to the speakers and addressees of the actual utterance context. Rather, the only context available to these markers is that of the reported speech act. In order to account for this, as does Pak et al. (2006), I employ the use of Schlenker

(2003) and quantification over contexts. The difference is that I employ this for the entire class of CCMs and not just the jussives.

First, note that in English, an embedded indexical cannot refer to the speaker of the reported speech act. This is shown in (76) below:

(76) *John_i said I_i want to be a hero. (Schlenker 2003)

The 1st person indexical in the sentence above can only refer to the speaker of the utterance and not to the speaker of the reported speech act. As Schlenker points out, however, this is possible in languages like Amharic:

(77) Jon jegna ne-nn yil-all
 John hero be.PRT-1sO 3M.say-AUX.3M
 ‘John says that he is a hero.’
 (lit. John_i says that I_i am a hero.) (Schlenker 2003)

In the example above, the embedded indexical is *shifted* in that it refers to the speaker of the reported speech act and not to the speaker of the utterance. In order to account for this, Schlenker proposes that attitude verbs are in essence operators that quantify over contexts. In addition, he proposes that quantifiers are tuples of the form <agent, time, world>. The logical structure of a sentence like (77) would be as follows:

(78) SAY_{<John,now,actually>} c_i be-a-hero (agent(c_i), time(c_i), world(c_i))

(Schlenker 2003)

The variable c_i is bound by the attitude verb and agent(c_i) thus refers to speaker of the reported speech act: *John*. In English, the indexical is treated as non-shiftable, thus ruling out any reading like the Amharic one and only picks out the speaker of in the actual utterance context.

As previously mentioned, when embedded, the Korean CCMs restrict the reference of the verb they combine with to speakers and addressees of the reported speech act only and not of the actual utterance context. This is the exact same behavior we see in the Amharic examples involving shiftable indexicals. Therefore, I assume that Korean control verbs are also operators that quantify over contexts. The remaining issue then, is how to interface the embedded CCMs with the choice of agent. As explained above, I assume that the embedded CCMs update a To-Do list in the reported speech context. I now assume that those individuals in the context whose To-do lists have been updated are the ones who will be interpreted as the agent, or agents, of the embedded verb. In other words, the quantification over contexts limits the available discourse context to the reported speech act and as a result only the To-Do lists of those individuals in that context may be updated. An example of a split control sentence involving *ca* is as follows:

- (79) a. Jwuhi₁-ka Inho₂-eykey PRO₁₊₂ cip-ey ka-ca-ko
 J-NOM I-DAT home-to go-EXH-C
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Jwuhi persuaded Inho to go home.’
- b. Logical Structure:
 ceyan-ha-yess-ta <Inho+Hwun> c_i cip-ey ka-**ca**-ko (agent(c_i))

In the above example, the verb *ceyan-ha-ta* ‘to propose’ is an operator that quantifies over the context variable. This effectively limits the domain of possible To-Do lists to those found in the reported speech act. Therefore, agent(c_i) is interpreted as Jwuhi and Inho, or the speaker and addressee, respectively, as *ca* can only serve to update the To-Do lists of those individuals in the reported speech act. The remaining CCMs would work in an analogous fashion.

In the next section, I provide an extension of this theory by examine the nature of the added features one needs to derive a complete theory of complement selection in Korean control.

4.5 Extending the Theory

While the question of which and what kinds of verbs create control sentences has been rather prominent throughout the history of the study of control, the

question of why these verbs select the complements they do has been much less discussed. In this section, I provide a suggestion that is in some ways an opposite approach. My suggestion is that these verbs do not necessarily select for their complements at this level of detail. Rather, the meanings of the embedded clause must align with the meanings of matrix verbs as a requirement of the embedded CCM. In other words, the meanings of the CCMs must “fit” with the meanings of the matrix predicates. In what follows, I explain this in more detail in the Korean language.

To begin with, any theory of complement selection must account for the following:

1. Why do certain matrix predicates select for the types of complements that they do?
2. Why do certain matrix predicates *not* select for other complements?

I am sure that some of the answers to the above questions lie in a historical account. However, there is much to be explained by examining the nature of embedded CCMs as their meanings interact with matrix predicates.

As an arbitrary starting point, consider first the following ill-formed sentence.

- (80) *Inho-ka Chelswu-eykey hakkyo-ey ka-la-ko yaksok-ha-yess-ta.
 I-NOM C-DAT school-LOC go-IMP-C promise-do-PST-DC

The reason the sentence in (80) is ill-formed is that it appears that *la*-complements cannot combine with *promise*-type verbs.

Secondly, notice that *keyss*-complements cannot combine with order-type verbs.

- (81) a. *Inho-ka Chelswu-eykey hakkyo-ey ka-keyss-ko
 I-NOM C-DAT school-LOC go-VOL-C
 myenglyeng-ha-yess-ta.
 order-do-PST-DC

Finally, notice that only verbs that can possibly be construed as allowing some act of proposal can be combined with *ca*-complements. This is evidenced by the inability to combine with matrix verbs of order, such as *myenglyeng-ha-yess-ta* ‘to order’.

- (82) a. *Inho-ka Chelswu-eykey hakkyo-ey ka-ca-ko
 I-NOM C-DAT school-LOC go-EXH-C
 myenglyeng-ha-yess-ta.
 order-do-PST-DC

The three facts above can be described by simply listing out the subcategorization frames for these types of verbs in a list, as in (83).

- (83)
1. *promise*-type: +vol, *imp, *exh
 2. *order*-type: *vol, +imp, *exh
 3. *proposal*-type: +vol, *imp, +exh

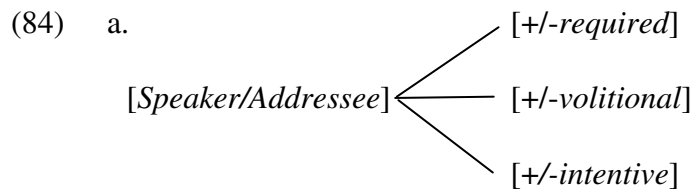
The list in (83), while providing an accurate description of the facts, provides no real explanatory value. However, if one focuses on the CCMs, as I did above in deriving controller choice, *why* the combinations are as they are in (83) is quite simple to explain.

First reconsider that *la*-complements cannot combine with promise-type verbs. The meaning of *promise* is that there is some speaker *x* that promises someone *y* to do something. Furthermore, *la* requires a subject that is an addressee of being ordered to do something. In this way, the meaning of *promise* would never align with the meaning of *la*, as there is no one who is ordered this way in the meaning of *promise*. The meaning of the matrix predicate will not align with *la* as there is no addressee who is ordered in the context of a promise.

It should be noted at this point that according to a strict interpretation of a Pak-type approach as outlined above, all one needs is an addressee subject for *la*. The issue is that there *is* an addressee in a promise-type context. Crucially, *la* requires an

addressee who is *ordered*, or more generally a *required* individual, not just any addressee. It must be, then, that the theta-roles assigned to the matrix DP arguments are richer than I have shown until now. In short, perhaps speaker/addressee features are richer than those employed by Pak. I suggest the following possible mood-type features that might reside under Speaker/Addressee.

Proposed Features:



b. **Definitions:**

- A *+required* individual would be ordered or directed to do something (to update their To-Do list). A *–required* individual would not be.
- A *+volitional* individual would have some volition over the action represented by the property on the updated To-Do list. A *–volitional* individual would not.
- A *+intensive* individual would intentionally perform the action represented by the property on the To-Do list. A *–intensive* individual would not.

Given this sort of feature system, *la* could never serve to update the addressee’s To-Do list in a promise-type context. This is because the addressee in these contexts is a -

required addressee (i.e. a simple passive listener to the speakers intentions) and *la* requires a +*required addressee*.

The second fact given at the beginning of this section was that *keyss*-complements cannot combine with *order*-type verbs. Given the approach thus far, the reason for this is that *keyss* signals to update a -*required*, +*volitional*, *speaker*'s To-Do list. These types of speakers are not found in the meanings of *order*-type verbs.

Finally, the third fact I gave was that only verbs of proposal can be combined with *ca*-complements. The reason for this is that *ca* requires two discourse entities to represent its plural subject that are both +*volitional* and -*required*. This essentially limits the domain of possible matrix predicates to verbs of proposal.

In this section, I have shown that if one considers the detailed meaning of embedded CCMs as they interact with the meanings of matrix predicates, a more complete explanation of control complement selection emerges.

Chapter 5

CONTROLLING OVERT MATERIAL

5.1 Introduction

In this chapter, I provide an account of what it means to control overt material in a given language. In the first section, I examine the claims in the Chomskian generative tradition that the lack of overt controllees in English is closely tied to morphosyntactic features and/or Case. In section 5.3, I illustrate that some languages, like Korean, do in fact allow overt controllees. I show that the range of allowable controllees is limited to those controllees that are aware of the attribution of the property denoted by the embedded clause to themselves, as per the definition of control in Chapter 2. In short, overt controllees must be capable of being read in a *de se* manner. In addition, an important empirical finding to emerge is that these controllees in fact exhibit focus readings. In section 5.4, I provide a theoretical account of overt controllees. One important conclusion that I draw in providing this account is that all languages do not necessarily arrive at control readings in the same manner. In this way, control is seen as not one specified mechanism in every language, but rather as a state to be achieved by various means, depending on a given language.

5.2 The Lack of Overt Controllees in English

Throughout the history of the study of control, it has largely been assumed that overt material *cannot* be controlled. For example, one cannot say the sentences (1a-c) in English.

- (1) a. *Buford promised Milford [Mary to go home].
 b. *Buford persuaded Milford [Milford to go home].
 c. *Buford asked Mary [he/him to leave the party].

The sentence in (1b) might be easy to explain by making reference to some notion of condition C, which states that an R-expression must be free everywhere, i.e. not bound by a c-commanding antecedent. However, (1a) and (1c) are more difficult to explain so simply.

In the traditional GB explanation of the sentences in (1a-c), the issue has to do with case assignment in one form or another. Initially, this explanation arose from theory-internal reasons. Specifically, it arose from the advent of the PRO theorem (Chomsky 1981) and later from null Case (Chomsky and Lasnik 1993). In a standard GB-style grammar, all DPs must be licensed somehow and this was assumed to happen via Case. However, as overt lexical items cannot appear in the subject of an infinitival clause, Chomsky made the assumption that in these environments Case is not assigned. Also at that time, Case was assumed to be assigned under government.

Given this, PRO was assumed to be in an ungoverned position; i.e. the subject of an infinitival clause. Later, Chomsky and Lasnik (1993) argued that PRO did in fact receive Case, but that infinitival *to* was assigned a special Case, termed *null Case*. There are numerous arguments for why this is probably not the case, most coming from arguments that PRO does in fact have Case (e.g. Icelandic - Sigurdsson 1991, Russian - Franks and Hornstein 1992, Latin and Italian - Cecchetto and Oniga 2004).

More recent approaches to explaining why PRO is null have taken a somewhat different turn. Movement approaches account for the data in (1a-c) under the fact that, in those theories, PRO is simply a trace of movement and therefore unpronounceable. Still other explanations exist, most notably Landau (2006) who derives the distribution of PRO as an “elsewhere” case wherever referential NPs cannot exist.

Even though there is a long tradition of attempting to explain why it is that a control structure cannot have an overt subject in the embedded clause, the initial assumption that overt controllees are not possible is simply not empirically adequate.²⁹ In fact, as mentioned in chapter 2, there are languages that do allow overt material to be controlled. Among these languages that have been reported to allow control of overt material are Zapotec (Boeckx, Hornstein and Nunes 2005), Serbo-Croatian (Zec 1987)

²⁹ Szabolcsi (2008) has also found evidence of overt controllees in Hungarian and Italian, and possibly in Spanish, Brazilian Portuguese, Romanian and Modern Hebrew. As Szabolcsi’s work is still ongoing I will not provide a detailed review or consideration of her data here. I simply refer the reader to her ongoing work.

and Korean (Yang 1984, Madigan 2006a).³⁰ In addition, as I will show below, Mandarin Chinese is also capable of controlling overt material.

The old idea that the subjects of infinitival clauses must be unpronounced is tied to Case and the inability of infinitival complements to assign that Case; or in the null Case explanation, the inability to assign any other case but null Case. Landau (2006), however, argues that the distribution of PRO should be divorced from the notion of Case altogether. His empirical arguments are that PRO has been shown in many languages to receive Case and that, theoretically, abstract Case is itself an unnecessary concept. Instead, the main claim of Landau (2006) is that PRO bears structural case and that its distribution can be derived from values of the embedded AGR and T (semantic tense as discussed in chapter 3) on INFL and C in combination with a *referential* feature [R]. In short, if INFL = [+T, +AGR], hence a true finite embedded clause, then overt nominals that are [+R] are allowed. These would be any referential nouns. However, any negative values of these features requires a [-R] DP for INFL to agree with. Since PRO is [-R], any complement that is [-T, +AGR], [+T, -AGR], or [-T, -AGR] will have PRO as the subject of the control complement and no overt material will be allowed. This system is outlined in (2) below:

³⁰ In addition, Sag and Pollard (1991) cite in footnote 30 that Halkomelem Salish also allows controlling of overt pronominal, a la personal communication with Gerdt.

(2) Values on INFL INFL must Agree with

[+T, +AGR] [+R]

[-T, +AGR] [-R]

[+T, -AGR] [-R]

[-T, -AGR] [-R]

In addition, it is assumed that PRO is unvalued for phi-features and receives its values from its controller via a functional head (*v* for object control and T for subject control). This analysis accounts easily for English, as well as more difficult languages such as the Balkan languages which allow control into subjunctives.

The point here is that all explanations of the lack of overt controllees in English at some point must make reference to the morphosyntax. While this works fine for English, I show in the following section that this cannot be possible for Korean. Instead, I make the claim that any DP which is not allowed as a controllee in Korean is a DP that cannot be read in a *de se* manner.

5.3 Controlling Overt Material in Korean

In this section, I show that, unlike English, overt material can be controlled in Korean. However, not just any material can function as a controllee. Specifically, only those DPs which can be read *de se* can be controllees.

5.3.1 Overt Controllees in Korean

In this section, I first illustrate what DPs can be controlled in Korean. In addition, I attempt to clear up some issues regarding overt controllees in Korean that have existed in the literature for some time. Following this, I show which DPs cannot be controlled in Korean, and I show that the reasons for this are necessarily semantic in nature unlike in English.

5.3.1.1 Controlling *Caki*

As was made clear in the previous section, English does not allow overt controllees. However, in Korean, it is quite easy to find grammatical examples of control sentences with overt controllees. As a starting point, consider the example below in (3).

- (3) Inho₁-ka Jwuhi₂-eykey **caki_{1/*2}-ka** cip-ey ka-keyss-ko
I-NOM J-DAT self-NOM home-LOC go-VOL-C
yaksok-ha-yess-ta.
promise-do-PST-DC
'(lit.) Inho₁ promised Jwuhi₂ SELF_{1/*2} to go home.'

The overt controllee in example (3) is the long distance reflexive *caki*. The only possible reading of (3) is where Inho promised Jwuhi that Inho would go home. In

short, *caki* may only refer to the matrix subject. While this data has gone relatively unnoticed in the mainstream literature on control,³¹ it has been known for some time that the long-distance reflexive *caki* can be controlled (Yang 1984, 1985, Borer 1989, Madigan 2006a).

In order to claim that the long distance reflexive in (3) is actually controlled, it is necessary to illustrate how controlled *caki* differs from one that is not controlled. In fact, the example in (3) stands in stark contrast to most usages of *caki*. The exact distribution of the Korean reflexive *caki* has been a matter of debate for some time. *Caki* has been claimed to be a pronoun by some (Cole et al. 1990). Others have claimed that it can be bound locally (Cho 2000). It has also been claimed to be a LD anaphor, in that there are robust cases where *caki* violates Chomsky's (1981) Condition A by being bound outside of its local domain (Yang 1985, Progovac 1993, etc.). Finally, *caki* is also capable of being discourse-bound with no intra-sentential antecedent (see Progovac 1993). What is agreed upon by all researchers, however, is that *caki* is indeed capable of taking long-distance antecedents. In contrast to English reflexives, which are subject to Condition A of the Binding Theory³² as shown in (4a), the Korean reflexive *caki* is capable of being bound outside of its local domain (4b).

³¹ Notable exceptions are Landau (2001), who notes the issue but provides no explanation, and Landau (2006).

³² Condition A: A reflexive must be bound in its local binding domain.

- (4) a. Bill₁ said that Jim₂ likes *himself*_{*1/2}.
 b. Bill₁-ka Jim₂-ka *caki*_{1/2}-lul coa-ha-n-ta-ko mal-ha-yess-ta.
 B-NOM J-NOM self-ACC like-do-IND-DC-C say-do-PST-DC
 ‘(lit.) Bill₁ said that Jim₂ likes SELF_{1/2}.’

In (4a) above, the English reflexive can only be bound by the local antecedent *Jim*, and not by the matrix subject *Bill*. In the Korean example (4b), however, the LD reflexive *caki* can be bound by either the matrix or the embedded subject.

In fact, LD *caki* is also able to be bound by an antecedent even further away than in (4b). Consider the following data:

- (5) Jwuhi₁-ka Inho₂-ka *caki*_{1/2}-ka kong-ul tenci-ess-ta-ko
 J-NOM I-NOM self-NOM ball-ACC throw-PST-DC-C
 mal-ha-yess-ta-ko cwucang-ha-yess-ta.
 tell-do-PST-DC-C assert-do-PST-DC
 ‘(lit.) Jwuhi₁ claimed/asserted that Inho₂ said that SELF_{1/2} threw the ball.’

In the example above, *caki* can be bound by either *Jwuhi* or *Inho*, which are two and one clauses away, respectively. Some authors have even claimed that one can extend this domain even further. Park (1985) gives the following example in (6).³³

- (6) Fred₁-nun John₂-i Mary₃-ka caki_{1/2/3}-ka ttokttok-ha-ta-ko
 F-TOP J-NOM M-NOM self-NOM smart-do-DC-C
 mal-ha-n-kes-ul siin-ha-ta-ko sayngkak-ha-yess-ta.
 speak-do-thing-ACC admit-do-DC-C think-do-PST-DC
 ‘(lit.) Fred₁ thought that John₂ admitted that Mary₃ said that SELF_{1/2/3} is smart.

Given this type of data, researchers have concluded that (7) below is the proper formulation of the overall distribution of long-distance *caki*.

- (7) *Caki* can be bound by any c-commanding subject (Yang 1985).

The formulation in (7) correctly describes the behavior of *caki* in (3), as the only other possible antecedent is an object. However, when a control sentence like (3) is embedded in yet another sentence, long-distance subjects are strictly out.

³³ There are obviously some processing limitations here. Some informants found (6) simply too difficult to process. However, all agreed that (5) was processable.

- (8) Jwuh₁-ka Inho₂-ka caki-ka*_{1/2} ttena-keyss-ta-ko yaksok-ha-yess-ta-ko
 J-NOM I-NOM self-NOM leave-VOL-DC-C promise-do-DC-C
 sayngkak-ha-yess-ta.
 think-do-PST-DC
 ‘(lit.) Jwuh₁ thought that Inho₂ promised SELF*_{1/2} to leave.’

In (8), *caki* is not able to be bound by the matrix subject *Jwuh₁*, which is predicted to be a possible antecedent by (7). What is different about this case is that *caki* is the subject of an embedded clause which is the complement of a control verb.

As mentioned above, the fact that *caki* can be controlled has been noted before by Yang (1984, 1985). Yang’s analysis is that the reflexive *caki* in a sentence like (8) still adheres to the binding theory as far as its relationship with the controller is concerned. In other words, as long as the antecedent (the controller in this case) is legitimate in terms of the binding theory (i.e. c-commanding subject), then control may apply. In this way, control is superimposed on the controllee. Once control is superimposed, thus limiting the set of potential antecedents, then those possible antecedents left for the controllee should adhere to the specifications in (7). While Yang’s account works fine for this instance of controlled *caki*, addressee control sentences where the addressee is an object crucially show that Yang’s explanation is untenable.

Another salient property of LD *caki* outlined in (7) is that *caki* takes only subject antecedents. The examples in (9) show that this appears to be true.

- (9) a. Chelswu₁-ka Yengswu₂-eykey caki_{1/*2}-ka kong-ul tenci-ess-ta-ko
 C-NOM Y-DAT self-NOM ball-ACC hit-PST-DC-C
 mal-ha-yess-ta.
 tell-do-PST-DC
 ‘(lit.) Chelswu₁ told Yengswu₂ that SELF_{1/*2} hit the ball.’
- b. John₁-i Bill₂-eykey caki_{1/*2}-ka ttokttok-ha-ta-ko mal-ha-yess-ta.
 J-NOM B-DAT self-NOM smart-do-DC-C tell-do-PST-DC
 ‘(lit.) John₁ told Bill₂ that SELF_{1/*2} was smart.’
- c. John₁-i Bill₂-eykey caki_{1/*2}-lul po-i-e-cwu-ess-ta.
 J-NOM B-DAT self-ACC see-CAUS-e-give-PST-DC
 ‘(lit.) John₁ showed himself_{1/*2} to Bill₂ (in the mirror).’

In the examples in (9a-c), *caki* is incapable of taking the dative object as a controller.

Given the above, the following example is unexpected.

- (10) Inho₁-ka Jwuhi₂-eykey **caki**_{*1/2}-ka cip-ey ka-la-ko mal-ha-yess-ta.
 I-NOM J-DAT self-NOM home-LOC go-IMP-C tell-do-PST-DC
 ‘(lit.) Inho₁ told Jwuhi₂ SELF_{*1/2} to go home.’

Yang’s account does not predict *caki*’s behavior in (10). According to Yang, one would not expect *Jwuhi* to be a legitimate controller for *caki*, as it does not meet the requirements for a potential antecedent as outlined in (7). I make the claim that the distributional anomalies outlined thus far, restricted potential antecedents and object antecedents, are easy to account for if one views *caki* as simply adhering to the processes of control. In other words, in examples like (10), *caki* is overt controlled material.

At this point, one caveat is important. Not all researchers agree that *caki* can *ever* take a dative controller, even in OC contexts. Yang (1984) gives the following example as proof that *caki* cannot take a dative controller.

- (11) Inho₁-ka Jwuhi₂-eykey PRO_{*1/2}/**caki**_{*1/*2}-ka ttena-tolok
 I-NOMJ-DAT self-NOM leave-C
 seltuk-ha-yess-ta.
 persuade-do-PST-DC
 ‘Inho persuaded Jwuhi to leave.’

In (11), Yang's judgment is that *caki* cannot be used in place of PRO. He generalizes this to all object control constructions. However, it can be shown that Yang's judgments are simply initial reactions to this type of sentence. In fact, all of my informants either considered *caki* completely acceptable in (11), or at the least marginally acceptable.

Furthermore, the example in (11) is just one matrix predicate/embedded CCM combination which is capable of creating a control environment. By employing an imperative complement with a matrix verb of telling, object control of *caki* becomes more natural.

- (12) Inho₁-ka Jwuhi₂-eykey **caki**_{*1/2}-ka cip-ey ka-la-ko mal-ha-yess-ta.
 I-NOM J-DAT self-NOM home-LOC go-IMP-C tell-do-PST-DC
 '(lit.) Inho₁ told Jwuhi₂ SELF_{*1/2} to go home.'

Regarding (12), all of my informants obtained the reading where the object *Jwuhi* is the controller, even those who found (11) to be marginal.

Finally, and perhaps most importantly, by adding the adverb *cikcep* 'directly', even those few informants who were strongly biased towards *caki* being exclusively a subject oriented reflexive accepted that *caki* must take an object antecedent in the above examples.

- (13) Inho₁-ka Jwuhi₂-eykey caki_{*1/2}-ka **cikcep** cip-ey ka-la-ko
 I-NOM J-DAT self-NOM directly home-LOC go-IMP-C
 mal-ha-yess-ta.
 say-do-PST-DC
 ‘(lit.) Inho₁ told Jwuhi₂ SELF_{*1/2} directly to go home.’

In summary, while normally LD *caki* is an anaphor which is long distance and subject-oriented, there exist cases where something seems to override these tendencies. It would appear, then, that OC *caki* is behaving as OC PRO would in these cases. In fact, Madigan (2006a) made the claim that OC *caki* was an overt form of OC PRO. However, as I will show in section 4.3, the case is not so simple.

5.3.1.2 What about *ku*?

It has also been claimed in the literature that the so-called personal pronoun *ku* is allowed in place of PRO in Korean (Yang 1984, 1985). While this is not necessarily crucial to the analysis at hand, I present my findings regarding this marker here in order to clear up any issues regarding the judgments of control sentences containing *ku*.

- (14) a. Hwun₁-i Syan₂-eykey **ku₁*/??2-ka** ttena-keyss-ta-ko yaksok-ha-yess-ta.
H-NOM S-DAT he-NOM leave-VOL-DC-Cpromise-do-PST-DC
‘Hwun promised Sean to leave.’
- b. Hwun₁-i Syan₂-eykey **ku₁*/??2-ka** ttena-tolok seltuk-ha-yess-ta.
H-NOM S-DAT he-NOM leave-C persuade-do-PST-DC
‘Hwun persuaded Sean to leave.’

However, none of my informants *fully* accepted *ku* in these positions. While the majority thought it blatantly ungrammatical, some did find it marginally acceptable.

In cases where informants thought *ku* might be grammatical in the above sentence, the use of *caki* was always preferred. Furthermore, these informants all felt that they were pausing significantly before *ku* just to make the sentence grammatical-almost as if they were attempting to make two sentences. I will therefore assume that the third person pronoun *ku* is in fact not naturally acceptable in these positions

In addition, it has been mentioned by native Korean linguists that *ku* itself sounds odd regardless of its context. Park (1985) notes that *ku* often sounds, “...alien to the ears of Koreans” (p128). Park notes this fact in non-control environments, showing exactly those judgments I elicited for parallel control environments.

- (15) John₁-un pro₁/caki₁-ka/?ku₁-ka Mary-lul po-ass-ta-ko
 J-TOP self-NOM/he-NOM M-ACC see-PST-DC-C
 mal-ha-yess-ta.
 say-do-PST-DC
 ‘(lit.) John₁ said that *e*₁/SELF₁/he₁ saw Mary’

Park notes that his informants split into two groups: those that said *ku* was ungrammatical, and those that said it was acceptable but not as good as *caki*. All agreed, however, that *caki* was better than *ku*. Park’s final conclusion on the oddness of *ku* pertains to the influence of English on Korean and the purposeful introduction of third person pronouns by various scholars. I refer the reader to his work for a more detailed explanation of his reasoning. Given the special status of *ku*, I assume that it is generally not possible as the subject of a true control complement. Even if it indeed turns out that *ku* is acceptable, there is no doubt that *caki* is more acceptable. This is not the case, however, with pronominal forms in the 1st and 2nd person, which I show in the following subsection.

5.3.1.3 *Na, ne, casin*

While 3rd person *ku* may not be acceptable, most other pronouns can be controlled. Below in (16a-b), I provide examples of controlled 1st and 2nd person pronouns.

- (16) a. Na-nun Inho-eykey **ney-ka** cip-ey ka-keyss-ta-ko
 1st-TOP I-DAT 1st-NOM home-LOC go-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC
 ‘I promised Inho that I would go home.’
- b. Ne-nun Inho-eykey ni-ka ilccik ttena-keyss-ta-ko
 2nd-TOP I-DAT 2nd-NOM early leave-VOL-DC-C
 kocip-ha-yess-ta.
 insist-do-PST-DC
 ‘You insisted to Inho that you would leave early.’

Also, in addition to *caki*, the long distance reflexive *casin* can also be controlled, as shown in (17).

- (17) Inho-ka Hwun-eykey casin-i mal-ul cosim-ha-la-ko
 I-NOM H-DAT self-NOM words-ACC care-do-IMP-C
 chwungko-ha-yess-ta.
 advise-do-PST-DC
 ‘Inho advised Hwun to watch his words.’

Finally, it should be noted that there cannot be a mismatch of person features between the controller and the controllee. For example, *caki* can only be controlled by a 3rd person subject, as shown in (18) below.

- (18) *Ney₁-ka ne-lul caki₁-ka ilccik cip-ey o-keyss-ta-ko
 1st-NOM 2nd-ACC self-NOM early home-LOC come-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC

In summary, it appears as if there is a wide variety of pronominal-type material that can be controlled in Korean. In section 5.5, I show that the reason for this is the ability of these elements to be read in a *de se* manner. In the next section, I explore the fact that these elements have a focus reading.

5.4 On the Focus Reading of Controlled Material

It was previously argued by Madigan (2006a) that *caki* is actually an overt form of PRO. The reasons for this were that, when controlled, *caki* behaves exactly as PRO does on all tests for obligatory control. Quite often, my informants responded that a control sentence with *caki* as the controllee sounds redundant. While it still may be the case that *caki* is an overt form of PRO, what has not been concentrated on in the literature is that if one constructs the proper environment for controlled *caki*, a focus-

type reading becomes apparent. I refer to these readings as *exhaustive* readings. When the context is such that the controller must undergo a certain event by him or herself, then overt material or adverbs of exhaustivity can be used to more forcefully express this concept.

Beginning with subject controlled *caki*, consider the context below where Inho wants to do his homework with his friend, but his teacher opposes this idea.

(19) **Context 1**

Korean: Inho-nun caki-uy chinkwu-wa kathi swukcey-lul
 I-TOP self-GEN friend-and together homework-ACC
 ha-ko siph-untey sensayngnim- un simhakey
 do-C want-but teacher-TOP extremely
 pantey-ha-si-ess-ta.
 oppose-do-HON-PST-DC

English: Inho wanted to do the homework with his friend, but the teacher
 strongly opposed.

Given this context, a continuation as in (20) below is infelicitous. As the presupposition about Inho's doing the homework alone is not present.

(20) **Continuation 1a**

#kulayse Inho-ka sensayngnim-kkey **PRO** swukcey-lul
therefore I-NOM teacher-DAT self-NOM homework-ACC
ha-keyss-ta-ko yaksok-ha-yess-ta.
do-VOL-DC-C promised-do-PST-DC

‘Therefore, Inho promised the teacher to do the homework.’

However, if the continuation contains a controlled *caki* in the subject position, then it becomes felicitous.

(21) **Continuation 1b**

kulayse Inho-ka sensayngnim-kkey **caki-ka** swukcey-lul
therefore I-NOM teacher-DAT self-NOM homework-ACC
ha-keyss-ta-ko yaksok-ha-yess-ta.
do-VOL-DC-C promised-do-PST-DC

‘Therefore, Inho promised the teacher to do the homework alone.’

In short, what the above examples show is that with a controlled *caki* comes the ability to have an exhaustive reading.

The examples below illustrate the same sort of phenomenon in addressee control. Given the same context in (19), only the continuation in (22b) is acceptable.

(22) **Continuations**

- a. #kulayse sensayngnim-i Inho-eykey **PRO** swukcey-lul
therefore teacher-NOM I-DAT homework-ACC
ha-la-ko myenglyeng ha-yess-ta.
do-IMP-C order do-PST-DC
‘Therefore, the teacher ordered Inho to do the homework.’
- b. ?kulayse sensayngnim-i Inho-eykey **caki-ka** swukcey-lul
therefore teacher-NOM I-DAT self-NOM homework-ACC
ha-la-ko myenglyeng-ha-yess-ta.
do-IMP-C order-do-PST-DC
‘Therefore, the teacher ordered Inho to do the homework.’

In the examples above, given the context, *caki* must be used in order to achieve a focus reading. While some informants found it a bit odd to employ *caki* to achieve the focus reading, the use of the adverb *honca* ‘alone’ clarified the exhaustive reading, as shown in (23) below.

- (23) kuleyse sensayngnim-i Inho-eykey **caki-ka** **honca** swukcey-
therefore teacher-NOM I-DAT self-NOM alone homework-
lul ha-la-ko myenglyeng-ha-yess-ta.
ACC do-IMP-C order-do-PST-DC
‘Therefore, the teacher ordered Inho to do the homework alone.’

The above example makes sense as the adverb *honca* ‘alone’ yields an exhaustive reading. I imagine that the resistance to having just *caki* in an addressee control sentence where the addressee is an object is due to the strong tendency of *caki* to be subject oriented. The use of the focus adverb overrides this tendency.

Having established that an exclusivity reading becomes available with *caki*, it should also be possible to achieve a similar reading with PRO and an adverb. Indeed this is the case as shown in (24) below.

- (24) kulayse sensayngnim-i Inho-eykey **PRO honca** swukcey-lul
therefore teacher-NOM I-DAT alone homework-ACC
ha-la-ko myenglyeng-ha-yess-ta.
do-IMP-C order-do-PST-DC
‘Therefore, the teacher ordered Inho to do the homework alone.’

Korean is not the only language which has the option to control overt material. In addition, Japanese also shows this behavior. Consider the examples in (25a-b) below.

- (25) a. Sachie₁-ga Karthik₂-ni PRO_{*1/2}/zibun_{*1/2}-ga shukudai-o
 S-NOM K-DAT self-NOM homework-ACC
 shi-ro-to meeree-shi-ta.
 do-IMP-C order-do-DC
 ‘Sachie ordered Karthik to do the homework.’
- b. Taro-wa PRO/zibun-ga boku-no beeguru-o tabe-yoo-to
 Taro-Top self-NOM my bagel-Acc eat-YOO-C
 keikakusita.
 planned
 ‘Taro planned to eat my bagel.’

Just as in Korean, there are contexts where an overt controllee is less natural at first.

- (26) Sachie-ga PRO/?zibun-ka shukudai-o shi-ro-to
 S-NOM self-NOM homework-ACC do-IMP-C
 Karthik-o settoku-shi-ta.
 K-ACC persuade-do-DC
 ‘Sachie persuaded Karthik to do the homework.’

However, when an adverb like *alone* is employed or a context which makes clear an embedded focus reading is provided, *zibun* becomes acceptable. This fact runs parallel with the Korean data above.

- (27) Sachie-wa zibun-ga **hitoride** shukudai-o shi-ro-to
 S-TOP self-NOM alone homework-ACC do-IMP-C
 Karthik-o settoku-shi-ta.
 K-ACC persuade-do-DC
 ‘Sachie persuaded Karthik to do the homework.’

Chinese also allows control of a long distance reflexive. As the literature on Chinese control is somewhat sparse, I give some basic control sentences in Chinese in (28a-b) below.

- (28) a. Zhangsan₁ shefa PRO₁ bangmang wo
 Zhangsan try help I
 ‘Zhangsan tried to help me.’
- b. Zhangsan₁ bi Lisi₂ PRO_{*1/2} yonggong
 Zhangsan force Lisi diligent
 ‘Zhangsan forced Lisi to work hard.’

In (29a-b) below, I show that when the long distance reflexive *ziji* is controlled in an object control sentence, it must refer to the matrix object.

- (29) a. Zhangsan₁ bi Lisi₂ ziji_{*1/2} yonggong
 Zhangsan force Lisi diligent
 Zhangsan forced Lisi to work hard.
- b. Zhangsan₁ bi Lisi₂ PRO_{*1/2} /ziji_{*1/2} xie zuoye
 Zhangsan force Lisi write homework
 ‘Zhangsan forced Lisi to do the homework.’

All of my informants easily obtained the focus reading of the *ziji* version of the sentences above and provided contexts along the lines of those in (30) below.

- (30) a. With *ziji*: Lisi does the homework by himself. The focus is on Lisi doing the homework alone
- b. Without *ziji*: Lisi is doing the homework (maybe other people helping, maybe not).

Another example is given in (31a-c) below.

- (31) a. Zhangsan₁ shefa PRO / *ziji*_{1/*2} bang wo.
 Zhangsan try help I
 'Zhangsan tried to help me.'
- b. With *ziji*: only Zhangsan helping (or the main helper).
- c. Without *ziji*: Zhangsan has to be involved in helping but the only helper (or not the main helper).

Finally, it has also been reported in the literature that Serbo-Croatian allows control of overt pronominals in controlled subjunctives. Zec (1987) notes that this yields a focus-type reading.

(32) Ana je naterala Mariju₁ da ona₁ dodje

Ana(Nom) aux forced M C she come.

‘Ana forced Mariju that *she* would come.’

(Zec 1987)

Given that there seem to be a number of languages that allow controlling of overt focused material, the issue that remains is why it is impossible to do so in English.

Before moving on to a theoretical analysis of overt controllees, it will be noted that the story grows even more interesting when we look at PC and focus effects. Particularly, when *caki-tul/caki-ney* is partially controlled, the dative object cannot be included in the group denoted by the controlled *caki*, but it can be included with only PRO.

(33) a. Jwuhi₁-ka Chelswu-eykey PRO/caki-tul-i yeses-si-ey

J-NOM C-DAT sel-PL-NOM six-time-at

moi-keyss-ta-ko yaksok-ha-yess-ta.

gather-VOL-DC-C promise-do-PST-DC

‘Jwuhi promised to gather at 6.’

b. With *caki-tul*: Chelswu may be included in the group who will gather.

c. Without *caki-tul*: Chelswu may not be included in the group who will

gather.

While at first glance, the above seems a rather odd fact, it is in fact intuitive. Take for example, the finite paraphrase of (33a) in English below.

(34) Jim promised Mary that *they* would gather at 6.

My intuition of the above reading is that the object, *Mary*, is excluded from the group of people who will gather, which may include the promiser, *John*. It becomes clear that part of the meaning in focusing is to contrast against the object. In (34), an exhaustive reading of gathering is achieved in contrast to the objects exclusion.

What the above points to, is that controlled overt material is in essence focused material. In section 5.5, I show how this fact plays an important role in determining why it is that PRO is often not overt.

5.5 A Theoretical Account of Controlling Overt Material

In this section, I give a formal account of overt controlled material. Given the above empirical description of the facts, any theory of overt

controlled nominals needs to account for the following questions:

- (35)
1. Why is overt material focused and pronounceable?
 2. Why is it impossible to control overt material in English?
 3. Why can overt material be controlled in Korean?
 4. Why is it only possible to control focus pronominal-types of DPs?
 5. Why is the overt nominative *referential* DP in backwards control allowed and why does it have a focus reading?

In developing an explanation for why overt material may or may not be controlled, I draw a rather different conclusion from what has been previously suggested in the literature on control up to this point. I suggest that the distribution of PRO in a number of languages, including English, is as described by Landau (2006), who attributes the existence of PRO to tense and agreement features. Thus the solution for English is morphosyntactic in nature. For languages like Korean, however, I show that whether or not overt material is allowed is due to a combination of both the syntax and semantics of these constructions.

5.5.1 Focus, Referential Features and Overt Material

As shown above, in Korean, PRO and *caki* may alternate. Landau (2006) made the suggestion that this may be due to the fact that *caki* is to be considered [-R] under his theory. Specifically, he suggests that, *caki* might be able to alternate with PRO because it lacks a person specification and is therefore [-R]. However, the

assumption that *caki* lacks a person specification may not be true, as a first person antecedent for *caki*, controlled or not, is ungrammatical, suggesting that *caki* comes into the derivation with a 3rd person feature.

- (36) *Ney-ka caki-ka cencayng-ul sicak-ha-lye-ko nolyek-ha-yess-ta.
 1st-NOM self-NOM war-ACC start-do-INT-C effort-do-PST-DC
 ‘(lit) I tried self to start a war.’

In addition to the above, it is in fact possible to control a focused proper name+*casin* 3rd person DP.

- (37) Inho-ka Jwuhi-eykey Inho-casin-i ocinge-lul mek-keyss-ta-ko
 I-NOM J-DAT I-self-NOM squid-ACC eat-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC
 ‘(literal translation) Inho promised Jwuhi to focus his will on the task of eating
 the squid.’

If we assume that *caki*, and *Inho-casin* do indeed have person features, under Landau’s theory they should be [+R]. However, given Landau’s (2006) theory, embedded infinitival T agrees with a [-R] element only. In the embedded complements in (42-

43), INFL is [-T, +AGR] and should never allow an overt subject. This is contrary to the facts presented above. Given this, it appears as though Landau's account cannot work for Korean.

On the other hand, it has been argued that 3rd person features are not actually person features at all (Forcheimer (1953), Benveniste (1966), Zwicky (1977), Harley & Ritter (2002)) Seen in this way, the presence of controlled *caki* may still be explainable under Landau's theory, in that *caki* is still [-R] because it has no person features and can thus agree with T which is also [-R]. Even if this were true, the fact remains that overt 1st and 2nd person pronominals may also be controlled in Korean. There is no arguing that these are real features that certainly make them [+R] under Landau's theory. In this way, they should never be allowed to appear in the embedded subject position of a control complement as embedded T requires that subject to be [-R].

In addition to the above, the embedded control-creating markers *keyss* and *lye* can also have an overt referential subject under the proper contexts. This certainly should not be possible as these complements are [-T, +AGR] and should therefore not allow overt controllees. This will be discussed in more detail below.

The ultimate conclusion I wish to draw is that these embedded clauses in Korean are simply not creating OC in the way described by Landau (2006). As a result of this, the allowance or disallowance of various nominals in the embedded subject position varies in these languages.

First of all, consider the class of jussives: *-ca*, *-la* and *-ma*. Pak et al. (2006) claim that the reason overt embedded subjects are not allowed is due to the same reason that matrix imperatives disallow overt subjects. Crucially, and in line with my presentation of the Korean data, Pak et al. notes that overt material is allowed in a matrix sentence only when it is focused, this is illustrated in (38a-b).

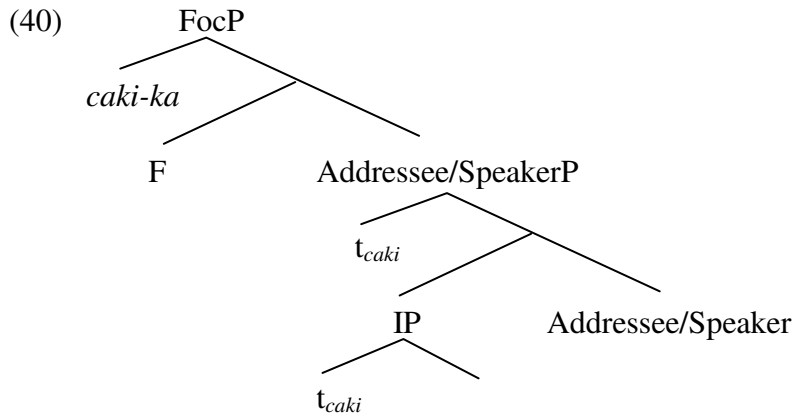
- (38) a. **Ne-ka* *ttuy-e-la!*
 2nd-NOM run-IMP
 ‘You run!’
- b. *Ne-ka* *ttuy-e-la!*
 2nd-NOM run-IMP
 ‘You (as opposed to others) run!’

Carrying this over to embedded contexts, they are able to say that whatever prevents an overt subject in matrix position is also responsible for not allowing overt material in an embedded jussive clause. These same arguments are easily made for the other jussives *ca* and *ma*, which also do not allow overt, unfocused, subjects in matrix position. This is shown in (39a-d) below.

- (39) a. *Wuri-ka ka-ca.
 we-NOM go-EXH
 ‘(lit.) We let’s go.’
- b. *Wuri-ka* ka-ca.
 we-NOM go-EXH
 ‘(lit.) We let’s go.’
- c. *Ney-ka nayil o-ma.
 i-NOM tomorrow come-PROM
 ‘I promise to come tomorrow.’
- d. *Ney-ka* nayil o-ma.
 i-NOM tomorrow come-PROM
 ‘I promise to come tomorrow.’

The authors give no concrete evidence for why only focused material is allowed in matrix jussives. I, too, will avoid providing an explanation as it would take me too far from the subject at hand. What is important is that there is some property of the jussive markers that disallows non-focused material. I will simply provide the admittedly descriptive analysis below that when an NP raises to Spec of FocP, it becomes pronounceable.³⁴

³⁴ If as Kayne (2005) suggests, material in the specifier of a phase is not pronounceable, then it is perhaps possible that PRO in these cases, FP is above the



Pak et al.'s purpose is to explore the nature of imperatives and clause typing. However, what they do not notice is that their conclusion turns out to be tremendously important to the study of control. In English, a control construction can *never* allow overt referential material in the embedded clause. As described above, this is due to the morphosyntactic nature of T and AGR in that language. However, overt controllees are possible in Korean. The restrictions on overt subjects in jussives comes from the general restrictions of these markers against having nonfocused material as the subject of the verb they combine with. Furthermore, after considering the markers *keyss* and *lye* below, it will become increasingly clear that it is the semantics of these markers in combination with the context set up by the matrix predicates that restricts overt controllees. This turns out to be a very strong conclusion that forces us to look at

phase. This would explain why it is that only focused material is allowed. Further research is needed to determine whether this is a real possibility.

control in a very different way. Control is not a single set grammatical processes in all languages, but rather it is a state that is achieved when various processes combine in order to yield sentences that obey the now familiar diagnostics Landau (2001) made clear: no arbitrary reference, no *de re* readings, no sloppy readings and no long distance antecedents. My conclusion will be that while in English overt material is simply not allowed, in Korean, overt material is *always* pronounceable and any restrictions on overt subjects are due to extraneous factors that are semantic in nature.

Moving on from the class of control-creating jussives, in chapter 4 I showed that when a predictive context is available, overt R-expression subjects with *keyss* in embedded clauses are possible. However, overt referential expressions are not allowed in volitional contexts. Consider (41) below:

- (41) Inho-ka Jwuhi-ekey (*Inho-ka)/(*Hwun-ka) ocinge-lul mek-keyss-ta-ko
 I-NOM J-DAT I-NOM/H-NOM squid-ACC eat-VOL-DC-C
 yaksok-ha-yess-ta.
 promise-do-PST-DC

In (41) above, neither a copy of the controller nor an extra-sentential controllee may appear in the subject of the embedded clause. The reason that the extra-sentential NP cannot appear is due to the restrictions placed on the embedded subject position as

described in chapter 4. The volitional *keyss* marker requires the volitional speaker of the context set up by the matrix predicate to be the subject. This speaker is *Inho*.

However, as also shown in (41), an overt copy of the controller is in general not possible. In order to understand why, first consider the definition of control I provided in chapter 2, re-listed in (42) below.

- (42) Definition of Control : Let X be an NP in a sentence S, Y a subject NP in a sentence S' that is embedded under S, and R the predicate that selects Y. X and Y are in the control relation (or X controls Y) iff the property that corresponds to R is unambiguously attributed to the referent of X and the referent is aware of the attribution.

The crucial part of the above definition with respect to this issue is the last part - that the referent is aware of the unambiguous attribution of the embedded property to him or herself. What this corresponds to is the fact, as shown in chapter 2, that OC PRO can only be read *de se*. The issue with controlling an overt copy of a controller then, is that a *de se* reading of proper names is in general not possible. Consider the following scenario, adapted from Chierchia (1989). A man named Karthik has lost his memory and is looking at himself in the mirror. It just so happens that Karthik's pants are on fire. Now consider the continuations of this scenario in (43).

- (43) a. Karthik believes his pants are on fire. (*de re* or *de se*)
b. Karthik believes his own pants to be on fire (*de se*)
c. Karthik believes Karthik's pants are on fire. (*de re*)

If used as a continuation of the scenario above, (43a) can only be read *de re*. In other words, Karthik has no knowledge of self and therefore cannot have a belief about himself, which would be a *de se* reading. Sentence (43b), however, is completely infelicitous, as it can only be read in a *de se* manner and Karthik has no knowledge of self. Example (43c), in my judgment, is acceptable on the *de re* reading that Karthik believes that the man's pants in the mirror, who is also named Karthik, are on fire. Crucially, if Karthik is attempting to refer to himself, the continuation in (43c) would be infelicitous, as a *de se* interpretation is unavailable.

It is important to note that I cannot simply derive the inability to have an overt referential subject in the embedded clause to the matrix usage of *keyss*, as is possible with the jussives. As was shown in chapter 4, overt subjects in matrix clauses containing *keyss* are quite acceptable, even on a non-focused reading. Therefore, the only possible conclusion is that it is the semantics of *keyss* and the matrix predicate that are responsible.

The same argument as I made for *keyss* above can easily be carried over to *lye*. As shown in (44) below, the facts are the same in that an extra-sentential proper

name, as well as a copy of the controller are not allowed in the embedded subject position.

- (44) *Inho-nun Inho-ka/Hwun-i nonmwun-ul kkuthney-lye-ko
 I-TOP I-NOM/H-NOM thesis-ACC finish-INT-C
 nolyek-ha-yess-ta.
 try-do-PST-DC
 ‘Inho tried to finish the thesis.’”

The reason that Hwun is not allowed in the embedded subject position is that the embedded marker *lye* requires that the subject of the verb it combines with should be an intensitive speaker in the immediate discourse context set up by the matrix predicate. In this context, however, Inho is the only available intensitive speaker. Therefore, Hwun is not allowed. The reason that a copy of Inho is not allowed is the same as with *keyss* above, proper names do not allow de se readings and this control environment requires the embedded subject to be able to have a de se reading.

In summary, what I have attempted to show above is that the reasons that English and Korean allow or disallow overt controllees are rather different. In English, the reason is morphosyntactic in nature and crucially must have something to do with the features of tense and AGR in the embedded clause. In Korean, however, the reasons are due to the semantics of the embedded control markers in combination with

the meanings of the matrix predicates. At the end of the day, however, both languages exhibit control on all known measures. What this implies is that what we call control is not one set grammatical process. Rather, control is a type of reading we get from a sentence and may be arrived at in various ways in different languages.

Chapter 6

CONCLUSION

6.1 What Korean Tells Us about Control: Typology, Theory and *Control* vs. *Kontrol*

In chapter 1, I stated that there were two general purposes to this dissertation. The first purpose was to provide a documentation and empirical analysis of control in Korean. The second purpose was to show that the Korean data is crucial to developing a proper theory and typology of control. In this section, I summarize the relevant findings of this dissertation with respect to these purposes and provide some speculations that go beyond my current analyses.

As noted in chapter 2, the literature on control in Korean is sparse. I hope to have provided a reference of sorts that other Korean linguists may utilize in order to address more specific questions about control in Korean. One issue that the Korean data raise over and over is that the typology of control may not be as previously assumed. First of all, the array of available CCMs in Korean that play a direct role in control structures has not yet been reported for any other language to the best of my knowledge. Among the questions that I did not approach that would require a more complete picture of the typology of these markers are: *Why* is it that Korean grammar

allows the use of these embedded CCMs? Do other languages have CCMs? If so, what are the crucial properties of those languages that employ the use of CCMs in creating control as opposed to those languages that do not? Investigation into these questions could provide interesting insights into the true role of CCMs and their behaviors in control constructions.

Another point raised by the Korean data pertains to the range of possible control structures. This was made clear in chapter 3, as I argued that split control is an obligatory phenomenon, contrary to popular assumption. An extremely interesting question that remains unanswered regarding these constructions is why obligatory split control is so productive in Korean, yet so limited in English. Recall that in Korean, one can employ a wide range of matrix predicates in creating a split control sentence, while in English possible predicates are strictly limited to verbs with a clear proposal meaning. In my opinion, this fact brings about two interesting possibilities. First, I believe that this productivity in Korean points to the fact that there are no covert versions of these markers in English. If there were, it seems to me that one would be able to create split control with a wide variety of predicates by simply employing the covert embedded CCM. Secondly, this adds to the notion that control is perhaps arrived at in different ways in different languages. An interesting question which stems from this line of thinking is: Are there more ways in which to achieve control constructions in the world's languages?

Also in chapter 3, I discussed the relevance of Korean to the typology and theoretical analysis of PC. I also discussed the implications of this construction (and split control) for a theory of Korean plurality. The main finding was that PC in Korean allows the controlling of a syntactically plural controllee. This runs contrary to the facts about English PC, where PC PRO is semantically plural but syntactically singular. Again, this adds to the evidence that the typology of control may not be complete and requires further detailing and possible expansion. I showed that the partial and split control data have much to say about the nature of plurality in Korean. I employed the use of Kratzer's (2006) [*group*] feature to account for PC effects. I also showed that Kratzer's [*sum*] feature could be employed to account for split control. In fact, her system actually predicts such a controllable element to exist.

Another large difference between English and Korean control was outlined in chapter 5, which examined control of overt DPs. The conclusions of this chapter had far reaching consequences for the theory of control and the possibility of variations of how to attain control readings in different languages. While accounts of English's lack of overt nominals seem to stem from morphosyntactic reasons, Korean control constructions seem to allow overt DPs anywhere, and the exceptions to this were shown to be the result of semantic constraints. Questions for further research regarding this topic are numerous. For example, does the analysis I proved for Korean extend to other languages that allow overt controllees, such as Chinese, Japanese, Italian, etc.? Also, it would be very interesting to see if the reasons for allowing overt

controllees in languages without CCMs are different from Korean, or if there is one universal way to explain why a grammar allows an overt nominal to be controlled.

One possible suggestion that I would like to make regarding the summary of the relevant issues and questions for future research given above is terminological in nature. It is obvious at this point that Korean and English control are different creatures. In addition, as will be mentioned in section 6.2.2 below, there may even be reason to believe that English-like control may exist in Korean after all in purpose clauses and adjunct control. Therefore, I believe that it may be better to term control in Korean created with the use of CCMs as *Kontrol*.³⁵ In this way, not only can the difference between English and Korean be captured as Control vs. Kontrol, but if English-like control does exist in Korean, then it can be said that Control and Kontrol may exist in one language. This would have the effect of keeping the terminology clear and allow for easy comparison of the two types of control.

6.2 Extensions and Remaining Issues

In this section, I provide insight into some possible extensions of this dissertation and the issues that arise from them. In addition, I explain a number of remaining issues that remain for future research into control in Korean.

³⁵ Thanks to Satoshi Tomioka for suggesting this term.

6.2.1 PC as a More General Phenomenon

In chapter 3, I mentioned the possibility that the PC effects seen in Korean might actually be a more general phenomenon that extends beyond control environments, namely *Inclusive Reference*. In this section, I illustrate this possibility in more detail and provide some questions that looking at the data in this way presents.

Inclusive Reference (IR) constructions are those constructions in which an anaphoric element overlaps in reference with its antecedent, resulting in a surface singular/plural dependency (den Dikken et al. 2001). An example of this in Japanese is given below in (1a).

- (1) a. Sachie-ga zibun-tati-o hihan-shi-ta.

Sachie-NOM self-PL-ACC criticize-do-PST

‘(lit.) Sachie criticized themselves.’ (Madigan et al. 2007)

- b. Meaning: Sachie criticized herself and those who are associated to her.

In the example above, the plural long-distance reflexive *zibun-tati* is anteceded by a singular noun, *Sachie*. The meaning is as in (1b), where Sachie criticizes herself as well as those in her group. In this way, there is surface singular/plural dependency where the anaphoric element overlaps in reference with its antecedent. This is precisely the configuration defined as an IR construction. This construction is not limited to Japanese, however. Using den Dikken et al.’s (2001) observation that

Hungarian seems to exhibit IR, Madigan and Yamada (2007) showed that IR is productive across the world's languages and provide examples from Indonesian, Kuching Malay, Mandarin and Korean.

- (2) a. Chinese: Ta you zaikuanjiang ta-men-ziji la.
3sg again at praise 3-PL-self ASP
'(lit.) (s)he is praising themselves again.' (Huang 2001)
- b. Kuching Malay: Kameq sukah diri kameq orang semua.^{36,37}
1sg like self.1pl
'(lit.) I like ourselves.'

³⁶ These forms are known as pseudo-reflexives (see Cole et al. (2003) for other Malay forms, Kotani et al. (2006) for Kuching Malay). In short, pseudo-reflexives may refer to any NP in a sentence or outside of a sentence. The judgments given are on the reflexive reading of these forms.

³⁷The literal translation of the Kuching Malay plural reflexive *diri kameq orang semua*, is as in (i).

- i) diri kameq orang semua
self 1st person all

I assume the following structure, where *orang* and *semua* combine to form a plural marker.

- ii) diri kameq orang.semua
self 1st PL

c. Indonesian: Yassir bangga pada diri mereka.

Y be.proud of self.3pl

‘(lit.)Yassir is proud of themselves.’

d. Korean: Inho-ka caki-tul-ul piphan-ha-yess-ta.

Inho-NOM self-PL-ACC criticize-do-PST-DC

‘Inho criticized himself and his associates.’

While the wide spread existence of singular/plural dependencies is interesting in and of itself, what concerns us here is the Korean example above. In the IR example in (2d), there is a singular/plural dependency between *Inho* and the plural long-distance reflexive *caki-tul*. What is striking about this is that this is exactly the same dependency we see in PC constructions. In fact, as pointed out in chapter 3, elements such as *caki-tul* can be controlled. This provides for directly analogous examples of IR and PC. Consider the following examples in (3a-b)

(3) a. **Partial Control**

Jwuhi₁-ka caki-tul-i₁₊ yeses-si-ey moi-keyss-ta-ko
J-NOM self-PL-NOM six-time-at gather-VOL-DC-C
yaksok-ha-yess-ta.
promise-do-PST-DC
'Jwuhi promised to gather at 6.'

b. **Inclusive Reference**

John₁-i caki-tul-i₁₊ iki-ess-ta-ko mal-ha-yess-ta.
J-NOM self-PL-NOM win-PST-DC tell-do-PST-DC
'John₁ said that they₁₊ won.' (Cho 1996)

The examples above exhibit the exact same relation between a singular antecedent and a plural long-distance antecede *caki-tul*. What this suggests is that the peculiar binding relation between a singular antecedent and a plural antecede is not necessarily restricted to control. Instead, it is a more general phenomenon that has more to do with the nature of anaphoric relationships and plurality than with control.

6.2.2 Work to be Done: Remote Control, Nominal Control, Adjunct Control, Purpose Clauses, etc.

In this dissertation, I provided the basic groundwork necessary for a study of the major control structures (i.e. subject control, object control, etc.). There remains

a good deal of work that still needs to be done, as the range of possible control structures is much more numerous than presented here. For example, one fact I did not cover in this dissertation is that CCMs seem to be able to be used to create control across sentential boundaries. These types of situations have been called *remote control* (see Dowty 1989, Sag and Pollard 1991). Consider the following example in Korean, shown in (4) below.

(4) Speaker Control

A: Inho₁-ka Hwun-hanthey etten kes-ul yaksok-ha-yess-e.
 I-NOM H-DAT some thing-ACC promise-do-PST-INTM
 ‘Sandy promised Tracy something.’

B: Mwentey?
 what
 ‘What was it?’

A: Ama PRO₁ phathi-ey ilccik ttena-keyss-ta-nun
 perhaps party-LOC early leave-VOL-DC-RC
 yaksok-i-ess-e
 promise-be-PST-INTM
 ‘I think it was to leave the party early.’

The example above exhibits speaker control across sentential boundaries. The referent of PRO in the final sentence is unambiguously *Inho* who was mentioned in the first sentence. These kinds of situations can also be used with the CCM *la* to create addressee control, as shown in (5) below.

(5) Addressee Control

A: Inho₁-ka Hwun-hanthey etten kes-ul myenglyeng-ha-yess-e.

I-NOM H-DAT some thing-ACC order-do-PST-INTM

‘Inho ordered Mary to do something.’

B: Mwentey?

what

‘What was it?’

A: PRO₁ ilccik ttena-la-ta-nun myenglyeng-i-ess-e

early leave-IMP-DC-RC order-be-PST-INTM

‘(lit.) It was an order to leave early.’

As with the speaker control example, the referent of PRO in example (5) is to be found across sentential boundaries. While this raises obvious issues for syntactic theories of control, I think that under my theory presented here, the analysis would be rather straightforward. What the above examples show is that controllers do not necessarily need to be located in the same sentence as the CCM. Exactly why and

how the unambiguous relation between the controller and controllee is established I will leave open to future research. However, I do think that a proper starting place has to do with the inclusion of Schlenker's quantification over contexts in chapter 4. Recall that quantification over contexts was employed in order to limit the domain of possible contexts in which to choose controllers to that of the reported speech act. In situations like (4-5) above, the semantics would have to be changed in order to allow for the context variable to be quantified over sentential boundaries. I leave exactly how to do this for future research.

In addition to control across sentential boundaries, control inside nominals is also possible in Korean. Some examples are provided below:

(6) **Speaker Control**

Pil-i	PRO ₁	ttena-keyss-ta-nun	meyli ₁ -uy	yaksok-ul
Bill-NOM		leave-VOL-DC-RC	M-GEN	promise-ACC
pat-un	kes-ul	ecey-i-ess-ta.		
receive-RC	thing-ACC	yesterday-be-ess-ta		

'Bill heard/received Mary's promised to leave yesterday.'

(7) **Addressee Control**

Bill₁-i Fred₂-eykeyse pat-un PRO_{1/*2} cikum cuksi
 B-NOM F-from receive-RC now immediately
 ttena-la-nun myenglyeng-un ecey naylye-ci-n
 leave-IMP-RC order-TOP yesterday come.down-become-n
 kes-i-ta.³⁸
 thing-be-DC

‘As for the order to leave immediately from Fred that Bill received, it came yesterday.’

There is still much work to be done to establish whether these are true control structures and what sorts of variations on the structure of these nominals might be possible. However, what is interesting about these examples is that it seems that the semantics of controller assignment behaves exactly the same in the nominal domain as in the verbal domain, a point noted and illustrated in detail in English by Culicover

³⁸ Some informants found the following sentence much more natural:

- i) Bill-i [Mary-ka cikum cuksi ttena-la]-nun Fred-uy myenglyeng-ul
 B-NOM M-NOM now immediately leave-IMP-RC F-GEN order-ACC
 pat-un kes-un ecey-i-ess-ta.
 receive-RC thing-TOP yesterday-be-PST-DC
 ‘As for the Fred’s order to leave immediately, it came yesterday.’

and Jackendoff (2003). Given this, one would hope that the semantics presented in chapter 4 would map directly to the nominal domain.

Perhaps the most important remaining issue that was not covered in this dissertation is that of purpose clauses and adjunct control in Korean, both of which, if they are truly control, do not employ the use of CCMs. An example of a purpose clause in Korean is as follows:

- (8) Inho₁-ka kongpwu-ha-le PRO₁ tosekwan-ey ka-ass-ta.
 I-NOM study-do-in.order.to library-LOC go-PST-DC
 ‘Inho went to the library in order to study.’

In example (8) above, the clausal connective *le* is used to create a purpose reading. It can be seen from the indexing that *Inho* must be the one who will go to the library. What is interesting regarding the theory of Korean control presented in this dissertation is that there is no CCM in these sentences. This raises a number of possible questions for future research. Among them are: Are sentences like (8) truly control? If so, how are they instantiated in the grammar? Would this mean that all languages that have CCMs also allow other ways in which to create control? Given the new terminology suggested above, can Kontrol and Control exist in the same language?

Parallel to the issue of purpose clauses is the possible existence of adjunct control in Korean. A possible example is given in (9) below:

- (9) Inho₁-ka cwicik-ha-ki cen-ey PRO₁ nonmwun-ul
 I-NOM find.job-do-NML before-LOC dissertation-ACC
 kuthnay-ess-ta.
 finish-PST-DC
 ‘Inho finished his dissertation before finding a job.’

In the example in (9), the controller of PRO is *Inho*, and just as with the purpose clauses, there is no overt CCM to establish this relation. Perhaps, as suggested above, it is possible that Korean exhibits *two* forms of control: 1) *Control* which may be arrived at in a manner similar to English purpose clauses, adjunct clauses, etc., and 2) *Kontrol* which would include those cases of control that involve the use of CCMs to establish the relation between controller and controllee. Further research is required in order to flesh out whether these types of sentence should be considered control in Korean and if so, what the ramifications are to the analysis presented in this dissertation.

REFERENCES

- Ahn, Sung-Ho. 2002. Honorification and AgrP. Handout, Linguistic Society of Korea, Seoul National University.
- Aoshimia, Sachiko. 2001. Obligatory control constructions in Japanese. *The Report of the Special Research Project of the Typological Investigation of Languages and Cultures of the East and the West*. University of Tsukuba.
- Benveniste, Émile. 1966. *Problèmes de linguistique générale*. Paris: Gallimard.
- Boeckx, Cedric, Hornstein, Norbert and Jairo Nunes. 2007. Overt copies in reflexive and control structures. In: A. Conroy, C. Jing, C. Nakao and E. Takahashi (eds.), *University of Maryland Working Papers in Linguistics 15*, College Park, MD: UMWPiL, 1-46.
- Borer, Hagit. 1989. Anaphoric AGR. In: Jaeggli, Osvaldo and Kenneth J. Safir (eds.), *The null subject parameter. (Studies in natural language and linguistic Theory 15)*, Dordrecht, The Netherlands: Kluwer, 69-109.
- Cecchetto, Carlo and Renato Oniga. 2004. A challenge to null case theory. *Linguistic Inquiry* 35, 141-149.

- Chierchia, Gennaro. 1984. *Topics in the syntax and semantics of infinitives and gerunds*. Doctoral dissertation, University of Massachusetts, Amherst.
- Chierchia, Gennaro. 1989. Structured meanings, thematic roles and control. In: Chierchia, Gennaro, Barbara Hall Partee, and Raymond Turner (eds.), *Properties, types and meanings, II: semantic issues. (Studies in linguistics and philosophy 38-39)*, Dordrecht, The Netherlands: Kluwer, 131-166.
- Cho, Dong-In. 1996. Anaphor or pronominal? *Language Research* 32, 621-636.
- Cho, Sook Whan. 2000. *Caki* ('self') as a Jekyll and Hyde. In: Susumo Kuno et al. (eds.), *Harvard studies in Korean linguistics VIII*, Seoul: Hanshin Publishing Co, 252 –265.
- Choe, Hyon Sook. 2006. On (backward) object control in Korean. *Harvard studies on Korean linguistics XI*, Kyunggi: Publishing Co, 373-386.
- Chomsky, Carol. 1969. *The acquisition of syntax in children from 5 to 10*. MIT Press, Cambridge, MA.
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris.
- Chomsky, Noam. and Howard Lasnik. 1993. The theory of principles and parameters. In: Joachim Jacobs, arnim von Stechow, Wolfgang Sternefeld, and Theo Vennemann (eds.), *Syntax: An international handbook of contemporary research*, Berlin: Walter de Gruyter, 506-569.
- Chomsky, Noam. 1995. *The minimalist program*. MIT Press, Cambridge, MA.

- Chomsky, Noam. 1998. Minimalist inquiries: the framework. *MIT Occasional Papers in Linguistics* 15, MITWPL.
- Chomsky, Noam. 1999. Derivation by phase. *MIT Occasional Papers in Linguistics* 18, MITWPL.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In: R. Martin, D. Michaels, and J. Uriagereka (eds.), *Step by Step. Essays on Minimalist Syntax in Honor of Howard Lasnik*, MIT Press: Cambridge MA, 1-59.
- Cole, Peter, Hermon, Gabriella and Li-May Sung. 1990. Principles and parameters of long-distance reflexives. *Linguistic Inquiry* 21, 1-22.
- Cole, Peter, Hermon, Gabriella, Kim, Chonghyuck, Sim, Chang-Yong. and Yaping Tsai. 2003. Anaphoric expressions in Javanese. In *Proceedings of AFLA VIII: the Eighth Meeting of the Austronesian Formal Linguistics Association*, MIT Working Papers in Linguistics #44, Cambridge, Mass: MIT, 107-121.
- Comorovsky, Ileana. 1985. Control and obviation in Romanian. In: Choi Soonja, Dan Devitt, Wynn Janis, Terry McCoy, and Zheng-sheng Zhang (eds.), *Proceedings of the Eastern States Conference on Linguistics*, Ohio State University, OH, 47-56.
- Corbett, Greville. 2000. *Number*. Cambridge: Cambridge University Press.
- Corbett, Greville and Mithun, Marianne. 1996. Associative forms in a typology of number systems: evidence from Yup'ik. *Journal of Linguistics* 32, 1-17.

- Culicover, Peter W., and Ray Jackendoff. 2001. Control is not movement. *Linguistic Inquiry* 32, 493–512.
- Culicover, Peter W., and Ray Jackendoff. 2003. The semantic basis of control in English. *Language* 79, 517-556.
- den Dikken, M., Liptak, A. and Zsófia Zvolenszky. 2001. On inclusive reference anaphora: new perspectives from Hungarian. *SCCFL 20 Proceedings*.
- Dowty, David R. 1985. On recent analyses of the semantics of control. *Linguistics and Philosophy* 8, 291-331.
- Dowty, David R. 1989. On the semantic content of the notion ‘thematic role’. In: Chierchia et al. (eds.), *Properties, types, and meanings* 2, Dordrecht: Reidel, 69-130.
- Forchheimer, Paul. 1953. *The category of person in Language*. Berlin: de Gruyter.
- Franks, Steven and Norbert Hornstein. 1992. Secondary predication in Russian and proper government of PRO. In: R.K. Larson, S. Iatridou, U. Lahiri and J. Higginbotham (eds.), *Control and Grammar*, Kluwer Academic Publishers, 1-50.
- Fujii, Tomohiro. 2006. *Some theoretical issues in Japanese control*. Doctoral dissertation, University of Maryland, College Park.
- Grinder, John T. 1970. Super equi-NP deletion. In *Papers from the Sixth Regional Meeting of the Chicago Linguistic Society*, Chicago: University of Chicago, Chicago Linguistic Society, 297–317.

- Han, Chung Hye. 1998. *The structure and interpretation of imperatives: mood and force in Universal Grammar*. Doctoral dissertation, University of Pennsylvania.
- Harley, Heidi and Ritter, Elizabeth. 2002. Person and number in pronouns: a feature-geometric analysis. *Language* 78, 482-526.
- Heim and Kratzer. 1998. *Semantics in generative grammar*. Blackwell.
- Hornstein, Norbert. 1999. Movement and control. *Linguistic Inquiry* 30, 69-96.
- Hornstein, Norbert. 2001. *Move! A minimalist theory of construal*. Oxford: Blackwell.
- Hornstein, Norbert. 2003. On control. In: R Hendrick (ed.), *Minimalist Syntax*, Blackwell, Oxford, 6-81.
- Hornstein, Norbert, Jairo Nunes, and Kleanthes K. Grohmann. 2005. *Understanding minimalism*. Cambridge University Press.
- Jackendoff, Ray S. 1972. *Semantic interpretation in generative grammar*. Cambridge, MA: MIT Press.
- Kayne, Richard. 2005. On parameters and on principles of pronunciation. ms, New York University.
- Kim, Chonghyuck. 2004. *The Korean plural marker tul and its implications*. Doctoral Defense Presentation, University of Delaware.
- Kim, Chonghyuck. 2005. *The Korean plural marker tul and its implications*. Doctoral Dissertation, University of Delaware.

- Kim, Nam-Kil. 1978. *Tolok* sentential complements in Korean. In *Papers in Korean Linguistics: Proceedings of the Symposium on Korean Linguistics*, Hornbeam Press, Columbia, SC, 137-147.
- Kim, Nam-Kil. 1996. The use of keyss in Korean. *The International Journal of Comparative Korean Studies* 2, USC Department of East Asian Languages and Cultures, 1-26.
- Kim, Nam-Kil. 2002. On the expression of ‘imminence’ in Korean. *Eoneohag* 32, 39-59.
- Koopman, Hilda. 2005. Korean (and Japanese) morphology from a syntactic perspective. *Linguistic Inquiry* 36, 601–633.
- Koster, Jan, and Robert May. 1982. On the constituency of infinitives. *Language* 58, 116–143.
- Koster, Jan. 1984. On binding and control. *Linguistic Inquiry* 15, 417-459.
- Kotani, Sachie, Madigan Sean and Masahiro Yamada. 2006. The reflexive and pronominal system of Kuching Malay. Presentation given at The 10th International Symposia on Malay/Indonesian Linguistics.
- Kratzer, Angelika. 2006. Minimal pronouns: fake indexicals as windows into the properties of bound variable pronouns. ms. University of Massachusetts, Amherst.
- Landau, Idan. 1999. *Elements of control*. Doctoral dissertation, MIT, Cambridge, Mass.

- Landau, Idan. 2001. *Elements of control: structure and meaning in infinitival constructions*. Dordrecht: Kluwer Academic.
- Landau, Idan. 2004a. The scale of finiteness and the calculus of control. *Natural Language and Linguistic Theory* 22, 811-877.
- Landau, Idan. 2004b. Movement-resistant aspects of control. ms. Ben Gurion University.
- Landau, Idan. 2006. Severing the distribution of PRO from case. *Syntax* 9/2, 153-170.
- Lebeaux, David. 1984. Anaphoric binding and the definition of PRO. In: Jones, Charles and Peter Sells (eds.), *NELS 14*, GLSA Publications, UMASS, Amherst, MA, 253-274.
- Lebeaux, David. 1985. Locality and anaphoric binding. *The Linguistic Review* 4, 343-363.
- Lee, Doo-Won. 2007. Two kinds of causee in the periphrastic causative: ACC and DAT causees. *Journal of Language Sciences* 14-2, 217-238.
- Lewis, David. 1979. Attitudes *De Dicto* and *De Se*'. *The Philosophical Review* 88, 513-543.
- Madigan, Sean. 2006a. Exhaustive and partial control in Korean: controlled caki as an overt form of PRO. In *Harvard studies in Korean Linguistics 11*. Cambridge, MA: Harvard University Department of Linguistics.

- Madigan, Sean. 2006b. Split control is obligatory control: evidence from Korean. Presented at the 15th International Conference on Korean Linguistics (ICKL), Universidad Autonoma de Guadalajara, Jalisco, Mexico.
- Madigan, Sean. 2007. Explaining semantic selection in Korean control complements. ms. University of Delaware.
- Madigan, Sean. 2008. Split control is obligatory control: evidence from Korean. *Linguistic Inquiry* 39(3), 493–502.
- Madiagn, Sean, and Masahiro Yamada. 2007. Asymmetry in anaphoric dependencies: a cross-linguistic study of inclusive reference. In the *Proceedings of 30th Penn Linguistics Colloquium, Penn Working Papers in Linguistics*.
- Madigan, Sean, Peng, Anne and Masahiro Yamada. 2008. Inclusive reference in Korean and its implications for a theory of plurality. To appear in the *Proceedings of the 12th Harvard International Symposium on Korean Linguistics XII*, Harvard, MA.
- Manzini, Ritta M. 1983. On control and control theory. *Linguistic Inquiry*, 14, 421-446.
- Monahan, Philip J. 2003. Backward object control in Korean. In: ed. G. Garding and M. Tsujimura (eds.), *WCCFL 22 Proceedings*, Somerville, MA: Cascadilla Press, 356-369.
- Moravcsik, Edith. 2003. A semantic analysis of associative plurals. *Studies in Language*, 27, 469-503.

- Pak, Miok. 2004. Agreement of sentence final particles in jussive clauses. Presented at The Western Conference on Linguistics (WECOL), University of Southern California, Los Angeles, California.
- Pak, Miok. 2006. Jussive clauses and agreement of sentence final particles in Korean. In: ed. Vance, Timothy Vance (ed.), *Japanese/Korean Conference 14*, Stanford, CA: CSLI Publications, 295-306.
- Pak, Miok, Portner, Paul and Raffaella Zanuttini. 2006. The syntax and semantics of jussive clauses in Korean. ms. Georgetown University.
- Park, Sung-Hyuk. 1985. *Pronominal and anaphoric elements in Korean*. Doctoral Dissertation, University of Texas at Austin.
- Pesetsky, David. 1987. Binding problems with experiencer verbs. *Linguistic Inquiry* 18, 126-140.
- Pesetsky, David. 1995. *Zero syntax*. Cambridge: MIT Press.
- Pesetsky, David and Torrego, Esther. 2001. T-to-C movement: causes and consequences. In: Michael Kenstowicz (ed.), *Ken Hale: A Life in Language*. Cambridge: MIT Press.
- Polinsky, Maria and Eric Potsdam. 2002. Backward control. *Linguistic Inquiry* 33, 245-282.
- Polinsky, Maria and Eric Potsdam. 2003. Backward control: evidence from Malagasy. In: A. Rakowski and N. Richards (eds.), *Proceedings of the Eighth Meeting of*

the Austronesian Formal Linguistics Association, MITWPL, Cambridge, MA,
257-272.

Portner, Paul. 2004. The semantics of imperatives within a theory of clause types. In:
Kazuha Watanabe and Robert B. Young (eds.), *The Proceedings of SALT 14*,
Ithaca, NY: CLC Publications.

Progovac, Ljiljana. 1993. Long-distance reflexives: movement-to-Infl versus
relativized SUBJECT. *Linguistic Inquiry* 24, 755-772.

Ramstedt, Gustaf. J. 1939. *A Korean grammar*. Suomalais-Ugrilainen Seura, Helsinki.
Reprinted 1968 by Anthropological Publications, Oosterhout N.B.

Reinhart, Tanya and Eric Reuland. 1993. Reflexivity. *Linguistic Inquiry*, 24, 657-720.

Rodrigues, Cilene. 2005. Agreement and floatation in Romance control configurations.
Poster presented at the New Horizons in the Grammar of Raising and Control
LSA Institute Workshop. Harvard, MA.

Rosenbaum, Peter. 1967. *The grammar of English predicate complement
constructions*. MIT Press: Cambridge, Mass.

Rosenbaum, Peter. 1970. A principle governing deletion in English sentential
complementations. In: R. Jacobs and P. Rosenbaum (eds.), *Readings in English
Transformational Grammar*, Ginn, Waltham, MA, 20-29.

Sag, Ivan and Carl Pollard. 1991. An integrated theory of complement control.
Language 67, 63-113.

Schlenker, Philippe. 2003. A plea for monsters. *Linguistics and Philosophy* 26, 29-120

- Schwarzchild, Roger. 1991. *On the meaning of definite plural noun phrases*. Doctoral Dissertation, University of Massachusetts.
- SigurDsson, Halldor. 1991. Icelandic case-marked PRO and the licensing of lexical arguments. *Natural Language and Linguistic Theory* 9(2), 327-364.
- Song, Jae Jung. 2002. The –ke ha causative construction in Korean – causative or not?: A crosslinguistic perspective. *Eoneohag* 32, 121-146.
- Song, Seok C. 1975. Rare plural marking and ubiquitous plural marker in Korean. *Ohak yon'gu* 11(1), 77-86.
- Sohn, Ho-min. 1999. *The Korean language*. Cambridge: Cambridge University Press.
- Suh, Jung Soo. 1990. *Kwuke mwunpep-uy yeonkwu [A Study of Korean Grammar II]*. Seoul: Hankwuk Publishing Co.
- Szabolcsi, Anna. 2008. Hidden in plain sight: overt subjects in infinitival control and raising complements. ms. New York University.
- Toribio, Jacqueline. 1990. Specifier-head agreement in Japanese. In: A. Halpern (ed.), *Proceedings of WCCFL*, Vol. 9. CSLI, Stanford Linguistics Association, 535–548.
- Ura, Hiroyuki. 1993. L-relatedness and parametric variation. In: Colin Phillips (ed.), *Papers on Case and Agreement I*. (MIT Working Papers in Linguistics Vol. 18), Dept. of Linguistics, MIT, 377–399.
- Ussery, Cherlon. 2006. [plural] is not ornamental. ms. Amherst: University of Massachusetts.

- Williams, Edwin. 1980. Predication. *Linguistic inquiry* 11, 203-238.
- Wurmbrand, Susanne. 2002. Syntactic versus semantic control. In: C. J.-W. Zwart and W. Abraham (eds.), *Studies in Comparative Germanic Syntax: Proceedings of the 15th Workshop on Comparative Germanic Syntax*, John Benjamins, Amsterdam, 95-129.
- Yang, Dong-Whee. 1984. The extended control theory. *Language Research* 20(1), 19-30.
- Yang, Dong-Whee. 1985. On the integrity of control theory. *Papers in Korean Linguistics: Commemorating the 18th Birthday of Prof. Hyonggi Kim*. Research Society of Omun. Taejeon, Korea.
- Yeo, Seungju. 2005. The syntax of *tough*-construction. In *Korean Studies in Generative Grammar* 15(1), 77-95.
- Yoon, Pyong-hyun. 1989. *Kwuke-uy cepsok uymi yeonkwu* [A study of connecting particles in Korean]. Seoul: Hanshin Publishing Co.
- Zec, Draga. 1985. Control and complementation in Serbo-Croatian. ms. Department of Linguistics, Stanford University. Stanford, Ca.
- Zec, Draga. 1987. On obligatory control in clausal complements. In: Iida, Masayo, Stephen Wechsler, and Draga Zec (eds.), *Working papers in grammatical theory and discourse structure: Interactions of morphology, syntax, and discourse*. (CSLI lecture notes 11) Stanford, Ca.: Center for Study of Language and Information, 139-68.

Zwicky, Arnold. 1977. Hierarchies of person. In: Woodford A. Beach, Samuel E. Fox and Shulamith Philosoph (eds.), *Papers from the Thirteenth Regional Meeting of the Chicago Linguistics Society*, Chicago: Chicago Linguistics Society, 714-33.