

The Syntax and Semantics of Jussive Clauses in Korean

Abstract

One of the unique features of Korean is that it marks sentences used to promise with the same grammatical mechanism – a paradigm of sentence final particles – with which it marks other clause types, like declaratives, interrogatives, and imperatives. In this paper we investigate this cross-linguistically rare type of PROMISSIVES and argue that they are members of the broader clause type of JUSSIVES, along with imperatives and exhortatives. We examine the paradigm of sentence final particles and argue that they play two roles that must be distinguished both syntactically and semantically: they mark speech style and serve a clause-typing function. The grammatical representation of speech style, which expresses the relation between speaker and addressee and the degree of formality of the conversation, is restricted to root clauses. That of clause type is found both in root and embedded contexts and, in the case of jussives, it is achieved through a functional projection that expresses person features and enters a grammatical agreement relation with the subject. We outline a compositional semantic analysis to show how this grammatical representation can explain the discourse meanings of promissives, imperatives, and exhortatives.

1 Introduction: The clause type of promissives

It is extremely common – perhaps universal – for human languages to have a grammatical construction with the canonical function of placing a requirement on the addressee. Such sentences are, of course, known as IMPERATIVES. In contrast, it is very rare for languages to have a construction similarly associated with the function of placing a requirement on any other individual, i.e. the speaker or an individual who is neither the speaker nor the addressee. If we consider the case of the speaker, this function of “placing a requirement on the speaker” is more simply referred to as a promise. Though rare, PROMISSIVES do exist. In this paper, we will study the nature of promissive sentences in Korean. An example is given in (1).

(1) PROMISSIVE

Nayil cemsium-ul sa-**ma**.
tomorrow lunch-ACC buy-PRM

‘I will buy lunch tomorrow.’

Sentence (1) can only be used with the force of promising. Its status as a promissive is marked by the sentence-final particle (*-ma*), analogous to the sentence final particles in the examples below. In (2)-(5), we illustrate an imperative (marked by *-(e)la*), exhortative (*-ca*), declarative (*-ta*), and interrogative (*-ni*):

(2) IMPERATIVE

Cemsium-ul mek-**ela**.
lunch-ACC eat-IMP

‘Eat lunch!’

(3) EXHORTATIVE

Cemsiym-ul mek-**ca**.
lunch-ACC eat-EXH

‘Let’s eat lunch.’

(4) DECLARATIVE

Cemsiym-ul mek-ess-**ta**.
lunch-ACC eat-PAST-DEC

‘I ate lunch.’

(5) INTERROGATIVE

‘Cemsiym-ul mek-ess-**ni**?
lunch-ACC eat-PAST-INT

‘Did you eat lunch?’

Of course, it is not rare of a language to have sentences that can be used to make promises; in fact, the ability to promise using language is presumably universal. However, the promising function is typically served by the declarative clause type; in English, for example, we may promise with an explicit performative (*I promise to buy lunch tomorrow*) or a future tense sentence (*I will buy lunch tomorrow*). Korean is interesting because it marks the function of promising grammatically, through a sentence final particle, which is the same mechanism used to mark clause types that are universal, like the declarative and interrogative types.

The study of promissives can give us insight into the relationship between grammatical form and conversational function. In particular, we believe that an investigation of promissives can help us better understand the nature of what we call *JUSSIVE* sentences, that is, sentences with the canonical function of establishing in the conversational context a requirement or other expectation that some individual (or individuals) will do something (or avoid doing something). More precisely, in this paper we will argue for the following hypotheses:

1. Promissives, imperatives, and exhortatives in Korean are members of a single clause type, jussives.
2. The sentence final particles which mark a sentence as being promissive, imperative, or exhortative simply encode person features associated with the subject position.
3. The semantic contribution of these person features allows an explanation for why promissives, imperatives, and exhortatives have the conversational functions that they do.

Implicit in these three hypotheses is a negative claim: they express all there is to the marking of a Korean sentence as promissive, imperative, or exhortative. Crucially, our analysis does not make use of any grammatical objects like “Force Phrase” or “Illocutionary Force Feature”. In this respect, it follows the hypothesis outlined in Portner and Zanuttini (2000) and Zanuttini and Portner (2003) that clause typing involves the encoding in the syntax of primitive components of meaning of that clause type, and not of illocutionary force.

In arguing for the points outlined above, it will be necessary to make a start towards analyzing another difficult area of Korean grammar, the system of Speech Style Particles. As we will illustrate below, every root sentence in Korean must indicate the social relationship obtaining between the speaker and addressee in

the given conversation. It happens that a major component of the system for doing this, a set of speech style particles, is entwined with the system of marking clause types through particles like the ones mentioned above in (1)–(5). Therefore, in order to understand the role of sentence final particles in clause typing, our main goal, we will have to undertake some detailed discussion of speech style particles as well.

2 Jussive clauses

Across languages, the function of promising is typically carried out through the use of declarative clauses. In English, we may have the “direct speech act” with *promise* as a performative verb, as in (6), or a simple future tense sentence understood as an “indirect speech act”, as in (7):

(6) I promise to come to lunch tomorrow.

(7) I will come to lunch tomorrow.

Imperatives cannot be used to promise, as seen in (8a), except in the most round-about of ways, e.g. (8b):

(8) a. *I come to lunch!/#Come to lunch!

b. Believe me when I promise I’ll come to lunch!

As far as we can tell, the languages of the world overwhelmingly work like English in this respect. This fact leads us to investigate the status of promissives in Korean with respect to the clause type system. From a cross-linguistic perspective, we might expect that Korean promissives are generally like declaratives; however, this is not what we find. In this section we will show that promissives have much more in common with imperatives and exhortatives than they do with declaratives.¹ Once we have established this point, we will need to provide an explanation for why it should be so.

The structure of this section is as follows: In 2.1, we aim to familiarize the reader with the clauses that go under the label of “promissives” and to present the perspective present in the literature on their status within the clause types system. In section 2.2, we put forth and provide support for our view that promissives do not form a clause type of their own, but rather are a sub-type of the clause type that we label “jussives”.

2.1 Previous discussions of promissives

While imperatives and exhortatives are common cross-linguistically, promissives are rare, and mostly unfamiliar to speakers of Indo-European languages. Therefore, we devote this section to a brief discussion of their properties and of how they are treated in the existing literature on Korean.

As their name suggests, promissives convey that the speaker is promising to do what is denoted by the predicate – in the case exemplified in (1) above, buying lunch. Like promises in general, what the speaker is committing to do is assumed to be desired by the addressee(s). Promissive sentences marked with *-ma*, as in (1) above (also repeated in (9) below) are not used productively by Korean speakers of the younger generations, but they are commonly used by speakers of older generations.² The linguistics literature (Hong

¹Just like English, Korean also has declaratives that can be used with the function of promising. Such sentences are not relevant to our concerns here.

²Even among younger people, the promissive particle *-ma* is commonly used with the word *-cwu(ta)* ‘give’ as in *towa-cwu-ma* ‘promise to give help’, *cwukye-cwu-ma* ‘promise to kill’, *sata-cwu-ma* ‘promise to buy and give’, etc. These expressions are very frequently used. Promissives marked by another particle, *-lkkey*, are used by all generations; this particle will be discussed below.

(1947), Ko (1974), Martin (1992), Suh (1996) and Sohn (1994, 1999), among others) typically treats promissives as a clause type of its own. The reason for this is related to the properties of the sentence final particles that mark promissives. In Korean, all matrix clauses end with a sentence final particle. The literature has traditionally viewed these particles as having the function of marking the clause type to which the sentence belongs (cf. Ahn and Yoon (1989), Whitman (1989), and Brandner (2004), among others). Thus, in examples (1)-(3), repeated in (9), the sentence final particles *-ma*, *-la*, and *-ca* are viewed as marking that the sentences belong to three distinct clause types: promissives, imperatives, and exhortatives, respectively.

- (9) a. PROMISSIVE
 Nayil cemsiyim-ul sa-**ma**.
 tomorrow lunch-ACC buy-PRM
 ‘I will buy you lunch tomorrow.’
- b. IMPERATIVE
 Cemsiyim-ul mek-e-**la**.
 Lunch-ACC eat-IMP
 ‘Eat lunch!’
- c. EXHORTATIVE
 Cemsiyim-ul mek-**ca**.
 lunch-ACC eat-EXH
 ‘Let’s eat lunch!’

There is no consensus in the literature on exactly how many clause types should be distinguished in Korean; some proposals have suggested as many as ten, others as few as four. Suh (1996), for example, claims that Korean has five distinct clause types: declaratives, interrogatives, imperatives, exhortative, and promissives. Sohn (1999), in contrast, argues that there are four major clause types – declaratives, interrogatives, imperatives, exhortatives – and five minor ones – promissives, exclamatives, premonitives, permissives, and apperceptives.³ Despite the lack of consensus on this issue, the fact that promissives have a sentence final

³Premonitives, permissives, and apperceptives are not common clause types cross-linguistically. Premonitives are warnings, as exemplified in (ia). Permissives are sentences used to give permission (ib). Apperceptives express the speaker’s surprise about an event that is already known to the addressee (ic):

- (i) a. PREMONITIVE Tachi-**lla**
 Get hurt-PRE
 ‘(Be careful.) You may get hurt.’
- b. PERMISSIVE
 A: Kwaca mek-eto toy-yo?
 Cookie eat-? okay-INT
 ‘Is it okay to eat the cookies?’
 B. Ung, mek-**ulyum(una)**.
 Yes. Eat-PER
 ‘Yes. It is okay to eat.’
- c. APPERCEPTIVE
 John-i cip-ey ka-ass-**kwun-a**.
 John-NOM home-to go-PAST-APE-DEC
 ‘John went home.’

particle distinct from that of the other types just mentioned is taken as a first clue suggesting that promissives might be a clause type.

In addition to these points, the literature has noticed that, like other clause types, promissives are marked not by just one particle, but by a number of particles; these particles express a range of speech styles that are also expressed by the sentence final particles that mark the most uncontroversial clause types, declaratives and interrogatives. Korean is known to distinguish many speech styles or levels of speech; distinctions among speech styles concern the relation between the participants in the conversation, that is, the speaker and the addressee, and the level of formality of the situation (Martin (1992), Sohn (1999), among others). Martin (1992), for example, discusses six speech styles: plain, intimate, familiar, semiformal, polite and formal. The examples in (10) illustrate the six different speech styles that can be expressed by promissive clauses:⁴

- (10) a. Nay-ka ney cip-ey nayil tulu-**ma**. (plain style)
I-NOM your house-to tomorrow stop by-PROM
'I promise to stop by your house tomorrow.'
- b. Nay-ka ney cip-ey nayil tulu-**lkkey**. (intimate style)
I-NOM your house-to tomorrow stop by-PROM
'I promise to stop by your house tomorrow.'
- c. Nay-ka caney cip-ey nayil tulu-m-**sey**. (familiar style)
I-NOM your house-to tomorrow stop by-PROM
'I promise to stop by your house tomorrow.'
- d. Nay-ka tangsin cip-ey nayil tulu-**lita**. (semiformal style)
I-NOM your house-to tomorrow stop by-PROM
'I promise to stop by your house tomorrow.'
- e. Cey-ka sensayngnim cip-ey nayil tulu-lkkey-**yo**. (polite style)
I-NOM teacher house-to tomorrow stop by-PROM
'I promise to stop by your (teacher's) house tomorrow.'
- f. Cey-ka ku cip-ey nayil tulu-**olita**. (formal style)
I-NOM that house-to tomorrow stop by-PROM
'I promise to stop by the house tomorrow.'

The fact that promissives exhibit different particles for the different speech styles has been taken as evidence that they are not members of another clause type, but a clause type of their own.⁵

A final reason for viewing promissives as a distinct clause type is that they are found not only in matrix sentences, but also in embedded contexts – just as declaratives, interrogatives, imperatives, and exhortatives are. This is shown in the following examples from Suh (1996:344)); the examples in (11) show an embedded promissive, an embedded declarative and an embedded interrogative, while those in (12) an embedded promissives, imperative and exhortative.⁶

We're not certain whether some or all of these are distinct clause types in our sense, and for reasons of space we won't discuss them any further in this paper.

⁴In Pak (2004, in prep) it is argued that among the six different sentence final particles in (10), only *-ma* and *-lkkey* should be seen as clause typing particles in the sense that they are unique to promissives, while the four others are not. We discuss the relationship between clause typing particles and speech style particles below.

⁵While promissives with *-ma* are less commonly used among younger generations, as mentioned in footnote 2, those with the intimate style particle *-lkkey* are used widely.

⁶Since English lacks promissives, and imperatives and exhortatives may not be embedded in English, the translations of some of these examples are awkward.

- (11) a. Ku sanay-nun jongkyo-lul miy^{tu}-**ma**-ko anay-ekey malhayss-ta.
That man-TOP religion-ACC believe-PROM-COMP wife-to said-DEC
'He said to his wife that he promises to become a believer.'
- b. Ku sanay-nun jongkyo-lul miyt^{nun}-**ta**-ko anay-ekey malhayss-ta.
That man-TOP religion-ACC believe-DEC-COMP wife-to said-DEC
'He said to his wife that he is a believer.'
- c. Ku sanay-nun jongkyo-lul miy^{tu}-**nya**-ko anay-ekey muless-ta.
That man-TOP religion-ACC believe-INT-COMP wife-to asked-INT
'He asked his wife whether she is a believer.'
- (12) a. Kuyi-ka na-lul towacwu-**ma**-ko malhayss-ta.
He-NOM me-ACC help-PROM-COMP said-DEC
'He said that he promises to help me.'
- b. Kuyi-ka na-lul towacwu-**la**-ko malhayss-ta.
He-NOM me-ACC help-IMP-COMP said-DEC
'He told (somebody) to help me.'
- c. Kuyi-ka na-lul towacwu-**ca**-ko malhayss-ta.
He-NOM me-ACC help-EXH-COMP said-DEC
'He told them to, with him, help me.'

If the sentence final particles found on promissives were simply marking speech style, they would not occur in embedded clauses, where speech style is not marked (this will be shown in section 3). This point, combined with the observation that they are different from the particles marking speech style in other clause types (like declaratives, interrogatives, and imperatives), has given further support to the conclusion that they indicate a distinct clause type, promissives.

2.2 Promissives as members of the jussive clause type

In contrast to the perspective prevalent in the literature, we do not view promissives as a distinct clause type. Rather, we argue that promissives, imperatives, and exhortatives are all members of a single clause type, which we label “jussives”. In this section, we provide five pieces of evidence in support of this claim. Before outlining our evidence, let us discuss briefly why, intuitively, it makes sense to group promissives together with imperatives and exhortatives. Just as imperatives are sentences aimed at creating a requirement or expectation that the addressee will do something, exhortatives are aimed at creating a requirement or expectation of both the speaker and the addressee, and promissives are sentences aimed at creating a requirement or expectation of the speaker him- or herself. So in the imperative in (9b), the addressee is to eat lunch; in the exhortative in (9c) both the speaker and addressee are to; and in the promissive in (9a), the speaker is to. This is, in essence, what these sentences share: they all convey that an action is to be performed by one (or more) of the participants in the conversation, speaker and/or addressee. Metaphorically, we can think of the set of actions which it is presupposed that some individual will perform as a “To-do List” (cf. Portner (2004)). Imperatives add a requirement to the addressee’s To-do List; exhortatives add a requirement to both the addressee’s and speaker’s To-do List; and promissives add a requirement to the speaker’s To-do List. We will discuss this notion of To-do List in more detail in section 4 below.

Empirical evidence for our proposal that imperatives, exhortatives and promissives are members of a single jussive clause type comes from the fact that they have a significant number of similarities (cf. Pak et al. (2004)). We will discuss five of them in turn.

1. As already noted above, all of the sentence final particles in (1)-(5) can be embedded. Embedded promissives, imperatives, and exhortatives are alike in that they can only have overt subjects in special circumstances, while the subjects of embedded declaratives and interrogatives can freely be overt or null. In (13a-c), we see promissive, imperative, and exhortative embedded clauses, while in (14a-b) we see declarative and interrogative ones:

(13) a. PROMISSIVE

John-i Tom-ekey [(**nay-ka*/**Mary-ka*) *nayil tasi o-ma*]-ko
 John-NOM Tom-DAT [(I/Mary-NOM) tomorrow again come-PRM]-COMP
mal-ha-ess-ta.
 say-do-PAST-DEC

(Intended meaning) ‘John promised Tom that he would come back tomorrow.’

b. IMPERATIVE

John-i Tom-ekey [(**Ney-ka*/**Mary-ka*) *cip-ey ka-la*]-ko
 John-NOM Tom-DAT [(you/Mary-NOM) home-to go-IMP]-COMP
mal-ha-ess-ta.
 say-do-PAST-DEC

(Intended meaning) ‘John ordered Tom to go home.’

c. EXHORTATIVE

John-i Tom-ekey [(**wuli-ka*) *cip-ey ka-ca*]-ko *mal-ha-ess-ta.*
 John-NOM Tom-DAT [(we-NOM) home-to go-EXH]-COMP say-do-PAST-DEC

(Intended meaning) ‘John said to Tom let’s go home.’ (indirect speech)

(14) a. DECLARATIVE

John-i Tom-ekey [*Mary-ka cip-ey ka-ess-ta*]-ko *mal-ha-ess-ta.*
 John-NOM Tom-DAT [*Mary-NOM home-to go-PAST-DEC*]-COMP say-do-PAST-DEC

‘John told Tom that Mary went home.’

b. INTERROGATIVE

John-i Tom-ekey [*Mary-ka cip-ey ka-ess-nya*]-ko *mwul-ess-ta.*
 John-NOM Tom-DAT [*Mary-NOM home-to go-PAST-INT*]-COMP ask-PAST-DEC

‘John asked Tom whether Mary went home.’

The jussive examples in (13) show that embedded imperatives, exhortatives, and promissives typically have a null subject; in contrast, as seen in (14), embedded declaratives and interrogatives may have an overt subject. The declaratives and interrogatives may have a null subject as well, in which case it is co-referential with the indirect object in the matrix clause.

In jussives clauses, an overt embedded subject is possible only in special circumstances. In promissives, it is possible only when it is a (heavily stressed) reflexive pronoun in combination with an overt focalizer, as in (15a).⁷ In imperatives and exhortatives, because the subjects are co-referential with the matrix indirect object, and not with the matrix subject, a reflexive embedded subject is not possible. In these clauses, an overt subject can only refer to a subset of the indirect object, and in addition must be combined with the topic marker *-(n)un*, as in (15b-c):

⁷A null subject is possible, in fact preferred, in (15a); it would be co-referential with the matrix subject. Therefore, the presence of an overt subject in (15a), the honorific variant of *caki* ‘self’ is redundant and that very fact gives the focused interpretation, with or without the actual stress on the word.

(15) a. PROMISSIVE

Sensayngnim-kkeyse haksayngtul-ekey [tangsin-i ttekpokki-lul sa-ma]-ko
Teacher-NOM students-DAT [self-FOC rice cake-ACC buy-PRM]-COMP
malssum ha-si-ess-ta
say do-HON-PST-DEC

‘The teacher said to the students that he promise to buy rice cake.’

b. IMPERATIVE

John-i haksayngtul-ekey [swukcey-lul ta han salamtul-un cip-ey
John-NOM students-DAT [homework-OBJ all finish people-TOP home-to
ka-la]-ko mal-ha-ess-ta.
go-IMP]-COMP say-do-PAST-DEC

(Intended meaning) ‘John told the students that those who had finished their homework should go home.’

c. EXHORTATIVE

John-i haksayngtul-ekey [ttekpokki-lul mekko sip-un salam-un katti
John-NOM students-DAT [rice cake-ACC eat want-PRES person-FOC together
ka-ca]-ko mal-ha-ess-ta
go-EXH]-COMP say-do-PAST-DEC

‘John said to the students that those people who want to eat rice cake go with him.’

One might attempt to attribute the fact that the embedded promissive, imperative, and exhortative in (13) cannot have an overt subject – while the embedded declarative and interrogative in (14) can – to the fact that the embedded clauses in (13) lack a tense marker, while those in (14) have one. However, there are two reasons not to accept this view. First, the embedded verbal forms in (13) are identical to those which may occur in root clauses with overt subjects; this is seen in (16):

(16) a. PROMISSIVE

Nay-ka nayil tasi o-**ma**.
I-NOM tomorrow again come-PRM

‘I promise to come again tomorrow.’

b. IMPERATIVE

Ney-ka cip-ey ka-**la**.
You-NOM home-to go-IMP

‘You go home!’

c. EXHORTATIVE

Wuli-ka cip-ey ka-**ca**.
We-NOM home-to go-EXH

‘Let’s you and I go home.’

And second, nonfinite clauses in Korean can have overt subjects, as seen in the following causative constructions:

(17) a. John-i [Mary-ka phati-ey ka-key] ha-ess-ta.
John-NOM [Mary-NOM party-to go-CAU] do-PAST-DEC

‘John made Mary go to the party.’

- b. John-i [Mary-ka phati-ey ka-tolok] towacu-ess-ta.
 John-NOM [Mary-NOM party-to go-CAU] help-PAST-DEC
 ‘John helped Mary to go to the party.’

Thus it seems that the lack of embedded subjects in (13) is not simply due to the lack of tense marking on the verb. Rather, it appears that the subjects of jussives have a common property that distinguishes them from the subjects of declaratives and interrogatives: while they may be overt in general, there are stringent restrictions on when they may be overt in embedded clauses.

2. Korean has a number of particles that express mood distinctions concerning, for example, the kind of evidence on which knowledge is based (e.g., “retrospective”-*te*, “apperceptive”-*kwun*), or whether or not that knowledge is presupposed (e.g. “suppositive”-*ci*, and “apprehensive”-*ney*). These may be labeled evidential and evaluative particles, respectively (following Cinque’s 1999 terminology). All of these mood particles can occur in declarative clauses, and the retrospective *-te* and the suppositive *-ci* are also allowed in interrogatives.⁸ But none of them can occur in promissives, imperatives, or exhortatives:

(18) a. PROMISSIVE

*Nay-ka nayil cemsium-ul sa-te/kwun/-ci/-**ney-ma**.
 I-NOM tomorrow lunch-ACC buy-RTR/APE/SUP/APR-PRM

b. IMPERATIVE

*Ne cemsium-ul mek-te/kwun/-ci/-**ney-la**.
 you lunch-ACC eat-RTR/APE/SUP/APR-IMP

c. EXHORTATIVE

*Wuli cemsium-ul mek-te/kwun/-ci/-**ney-ca**.
 we lunch-ACC eat-RTR/APE/SUP/APR-EXH

3. In addition to the ordinary negative marker *ani-*, Korean also has a negative marker *mal-* which, in declaratives and interrogatives, only occurs in the presence of deontic modality (Han and Lee (2002), (3)).

- (19) a. Cey-ka hakkyo-ey ka-ci **mal**-kkayo?
 I-NOM school-to go-CI NEG-Q
 ‘Should I not go to school?’

⁸Here are some examples of mood particles in declaratives and interrogatives:

- (i) a. John-i cemsium-ul mek-ess-**tey-yo**.
 John-NOM lunch-ACC eat-PAST-RTR-SFP
 ‘John ate lunch./Did John eat lunch?’
 b. John-i cemsium-ul mek-ess-**ci-yo**.
 John-NOM lunch-ACC eat-PAST-SUPP-SFP
 ‘(Of course,) John ate lunch./John ate lunch, right?’
 c. John-i cemsium-ul mek-ess-**kwun-yo**.
 John-NOM lunch-ACC eat-PAST-APPE-SFP
 ‘(Ah,) you ate lunch./*Did John eat lunch?’
 d. John-i cemsium-ul mek-ess-**ney-yo**.
 John-NOM lunch-ACC eat-PAST-APPR-SFP
 ‘John ate lunch./Did John eat lunch?’

- b. Na-nun hakkyo-ey ka-ci **mal**-ayakeyss-ta.
I-TOP school-to go-CI NEG-should-DECL
'I should not go to school.'
- c. Inho-nun hakkyo-ey ka-ci **mal**-aya ha-n-ta.
you-TOP school-to go-CI NEG-should do-PRES-DECL
'Inho should not go to school.'
- d. *Inho-nun hakkyo-ey ka-ci **mal**-n-ta.
Inho-TOP school-to go-CI NEG-PRES-DECL
'Inho does not go to school.'

The declarative sentences in (19) show that the negative marker *mal-* is used only in co-occurrence with an overt deontic modal.

As seen in (20), in promissives, imperatives, and exhortatives the negative marker *mal-* can occur without an overt element expressing deontic modality. This is yet another property shared by promissives, imperatives, and exhortatives that sets them apart from declaratives and interrogatives:

- (20) a. PROMISSIVE
Mek-ci **an(i)h/mal**-u-ma.
eat-NOM NEG(+do)-u-PRM
'I promise not to eat.'
- b. IMPERATIVE
Mek-ci ***an(i)/mal**-a-la.
eat-NOM NEG-a-IMP
'Do not eat.'
- c. EXHORTATIVE
Mek-ci ***an(i)/mal**-ca.
eat-NOM NEG-EXH
'Let's not eat.'

Our main point is simply that these three clause types differ from declaratives and interrogatives in that they allow *mal-* in the absence of a deontic modal. However, it is noteworthy that promissives also allow *ani-*, while imperatives and exhortatives do not, a difference that deserves some attention. While there is a lot of variation in the use of *mal-* and *ani-* in promissives, making this case hard to study, our speculation is that this pattern can be explained by the hypothesis that one uses *mal-* not in just any deontic sentence, but more specifically when the modality is based on an external compulsion.⁹ When an imperative is used, the property is added to the addressee's to-do list by someone else's speech act (regardless of whether the addressee wants it on his/her to-do list). Because they involve the addressee, exhortatives are like imperatives in this respect. Conversely, with a promissive it is typically the speaker's speech act that puts the property on his/her own to-do list; that is, there is not necessarily any external compulsion. However, in some cases the speaker can be seen as promising what has been implicitly required by someone else or by the external situation. The following context provides an example of such a situation: a mother is bringing six pieces of cake for dessert for guests and family members. Because there are actually seven people, the mother tells her child not to eat,

⁹As is well known, there is a variety of sub-categories of modality; a distinction between internal and external obligation or necessity is one of them, as discussed in Palmer (1986).

so that others (older people) can have one piece each. The child looks at the grandmother who has always yielded everything to him. Now, the grandmother says “No, I won’t eat!”, as in (21); that is, she promises that she won’t eat, in order to solve the problem of being short one slice.

- (21) Anita, *nay-ka mek-ci mal-u-ma!*
 No, I-NOM eat-CI NEG-u-PRM
 ‘No, I won’t eat’

This case uses *mal-*, not *ani-*. Thus the use of *mal-* in promissives seems to fit our characterization of it as marking the presence of an external compulsion; in this case, the external constraint is that there is one slice too few, and this leads the speaker to promise that she will not eat. To determine whether this is the right way of looking at things, of course, we need to look at examples with overt modals, such as Han & Lee’s data, and at other examples with promissives. We leave a more extensive investigation of this issue as a task for future research.

4. Promissives, imperatives and exhortatives are also alike in not allowing tense markers, as shown in (22):

- (22) a. PROMISSIVE
 **Mek-ess-/ul/-nun-u-ma*
 eat-PAST/FUT/PRES-PRM
 b. IMPERATIVE
 **Mek-ess-/ul/-nun-e-la*
 eat-PAST/FUT/PRES-SP-IMP
 c. EXHORTATIVE
 **Mek-ess-/ul/-nun-ca*
 eat-PAST/FUT/PRES-EXH

It has been pointed out that the progressive marker *-ko-iss* is allowed in these clauses, as shown below:

- (23) a. PROMISSIVE
Mek-ko-iss-uma
 Eat-PROG-PRM
 ‘I promise to be eating.’
 b. IMPERATIVE
Mek-ko-iss-ela
 Eat-PROG-IMP
 ‘Be eating.’
 c. EXHORTATIVE
Mek-ko-iss-ca
 Eat-PROG-EXH
 ‘Let’s be eating.’

However, we don’t think that this affects the validity of the statement that promissives, imperatives and exhortatives do not allow tense markers. This is because *ko-iss* is best analyzed as an aspect marker, both on semantic grounds and because it can co-occur with tense markers like *-ess* ‘past’:

- (24) a. John-i kongpwu-lul ha-**ko-iss-ess-ta**.
John-NOM study-OBJ do-PROG-PAST-DEC
'John was studying.'
- b. John-i ca-**ko-iss-ess-ta**.
John-NOM sleep-PROG-PAST-DEC
'John was sleeping.'

5. The fifth property that promissives, imperatives and exhortatives share is that they can be conjoined by *-ko* 'and' and *-kena* 'or', coordinators that can only conjoin clauses of the same type:^{10,11}

- (25) a. Declaratives with *-ko*
John-un ca-**ko** Inho-nun kongpwuhayss-ta
John-TOP sleep-and Inho-TOP studied-DEC
'John slept and Inho studied.'
- b. Declaratives with *-kena*
John-i Inho-ekey cenhwahayss-**kena** Inho-ka John-ekey cenhwahayss-ta
John-NOM Inho-to telephoned-or Inho-NOM John-to telephoned-DEC
'Either John called Inho or Inho called John.'
- c. Interrogatives with *-ko*
John-un ca-**ko** Inho-nun kongpwuhayss-ni?
John-TOP sleep-and Inho-TOP studied-INT?
'Did John sleep and Inho study?'
- (26) a. Declarative and interrogative with *-ko*
*John-un sakwa-lul mek-ess-**ko** ne-nun pay-ul mek-ess-ni?
John-FOC apple-ACC eat-PAST-and you-FOC pear-ACC eat-PAST-INT
(Intended meaning) 'John ate an apple and did you eat a pear?'
- b. Imperative and interrogative with *-kena*
*John-un sakwa-lul mek-**kena** pay-ul mek-ess-ni?
John-FOC apple-ACC eat-or pear-ACC eat-PAST-INT
(Intended meaning) 'John eat an apple or did he eat a pear?'
- (27) a. Imperative and promissive with *-ko*
Ne-nun sakwa-lul mek-**ko** na-nun pay-lul mek-u-ma
you-FOC apple-ACC eat-and I-FOC pear-ACC eat-u-PRM
'You eat an apple and I promise to eat a pear.'

¹⁰Both declaratives and interrogatives can be conjoined by *-ko*. However, only declaratives can be conjoined by *-kena*.

¹¹Not all Korean coordinators are restricted to conjoining only clauses of the same type. For example, *-nuntey* 'and' can conjoin two different clause types as in (i) below:

- (i) Minsoo-nun cakoiss-ess-nuntey ne-nun mwues-ul hakoiss-ess-ni?
Minsoo-TOP sleeping-PAST-but you-TOP what-ACC doing-PAST-INT
'Minsoo was sleeping and what were you doing?'

- b. Imperative and exhortative with *-ko*

Minwoo-nun cip-ey ka-**ko** Yenghee-wa na-nun hakkyo-ey ka-ca.
Minsoo-FOC home-to go-and Yenghee-and I-FOC school-to go-EXH

‘Minwoo go home and Yenghee and I, let’s go to school.’

- c. Imperative and exhortative with *-kena*

John, cip-ey honca ka-**kena** animyun na-lang tosekwan-ey ka-ca
John, home-to alone go-or if not I-with library-to go-EXH

‘John, either you go home by yourself or let’s go to the library with me.’

It is not known precisely what two clauses must share in order to be conjoined by *-ko* and *-kena*. But the fact that declaratives can be conjoined with other declaratives and interrogatives with interrogatives suggests that clause type, or some feature closely associated with clause type, is crucial. In this context, the fact that promissives, imperatives, and exhortatives can be conjoined by these coordinators suggests that they have something in common connected to clause typing. For example, it could be a structural commonality (such as lacking or having a particular functional projection, or feature); or it could be that they all have directive force (i.e. they are all used to update someone’s To-do list). But the point is that promissives, imperatives and exhortatives share the property required in order to be conjoined by *-ko* and *-kena*.

In sum, in this section we have seen that promissives in Korean do not resemble declaratives, as might be expected from the fact that across languages promising is typically achieved through the use of declarative clauses. Rather, promissives share many important properties with imperatives and exhortatives, and these properties differentiate them from declaratives and interrogatives. In order to capture these similarities, we hypothesize that promissives, imperatives and exhortatives are members of a single “jussive” clause type. We thus depart from the existing literature, which views promissives as forming a clause type of their own. All jussive clauses share the same function, namely they are used to update some individual’s To-do list. In our view, the key difference among the members of this type is the interpretation of their subjects: promissive subjects are associated with the speaker, imperative subjects with the addressee, and exhortative subjects with both the speaker and the addressee. The subject of a jussive indicates the individual(s) whose To-do List is updated.

In the next section we will investigate the syntax of jussive clauses in more detail; in particular, after examining the class of sentence final particles in Korean in general, we will focus on the nature of the jussive particles. We will argue that they express the person features of the subject. As an implementation of this idea, we propose that the jussive particles head a functional projection, which we label “Jussive Phrase”, and agree with the subject in person features. Then in Section 4, we will present an explanation for how this syntactic analysis ties in to the semantics and pragmatics of jussive clauses.

3 The Syntax of Jussive Particles

The particles that mark a clause as jussive are members of a broader class of particles, commonly referred to as sentence final particles, or sentence enders. Sentence final particles include all of the particles we’ve discussed so far which indicate some combination of the clause type of the sentence (declarative, interrogative, promissive, imperative, or exhortative) and speech style. In this section, we’ll begin with a general discussion of sentence final particles with the goal of better understanding the syntax of jussive particles. Section 3.1 contains a description of sentence final particles, arguing that two distinct notions are involved:

speech style and clause type. In section 3.2 we discuss the notion of speech style, while in section 3.3 we address how individual particles, in particular the jussive particles, encode clause type. Section 3.4 discusses how the marking of speech style and clause type can be combined. Finally, section 3.5 presents a syntactic analysis of jussive particles and discusses how the individual jussive particles mark sentences as imperatives, promissives and exhortatives.

3.1 Speech style and clause typing: distinct and independent grammatical notions

All root clauses in Korean must end with one of a large number (roughly 50) of sentence final particles. Some examples can be seen above in (1)-(5); some others that show different properties are given below (the gloss SFP stands for Sentence Final Particle):

- (28) a. Na-nun cemsiyim-ul mek-ess-**ta**.
I-TOP lunch-OBJ eat-PAST-SFP
'I ate lunch.'
- b. Ce-nun cemsiyim-ul mek-ess-**supnita**.
I(honorific)-TOP lunch-OBJ eat-PAST-SFP
'I ate lunch.'
- c. Ce-nun cemsiyim-ul mek-ess-**eyo**.
I(honorific)-TOP lunch-OBJ eat-PAST-SFP
'I ate lunch.'
- d. John-un cemsiyim-ul mek-ess-**eyo**?
I-TOP lunch-OBJ eat-PAST-SFP
'Has John eaten lunch?'
- e. John-un cemsiyim-ul mek-ess-**supnikka**?
John-TOP lunch-OBJ eat-PAST-SFP
'Has John eaten lunch?'
- f. John-un cemsiyim-ul mek-ess-**e**?
I-TOP lunch-OBJ eat-PAST-SFP
'Has John eaten lunch?'
- g. John-un cemsiyim-ul mek-ess-**e**.
I-TOP lunch-OBJ eat-PAST-SFP
'John ate lunch.'
- h. *Na-nun cemsiyim-ul mek-(ess).
I-TOP lunch-OBJ eat-PAST

In example (28a) the sentence final particle *-ta* indicates that the sentence is a declarative; in (28b) *-supni-ta* marks it as a declarative, signals the speaker's deferential attitude toward the addressee and expresses a rather high degree of formality; in (28c-d) *-eyo* indicates the speaker's polite attitude towards the addressee and is compatible with both declarative and interrogative sentence type; in (28e) *-supni-kka* conveys deferential attitude, like *-supni-ta*, but it marks the clause as interrogative; in (28f-g) *-e* signals the close relationship between speaker and addressee (what is called "half talk style"), and is compatible with both declarative and interrogative type. (28h) shows that a sentence with no sentence final particle is ungrammatical.

This brief, informal description of the particles in (28) makes it clear that an analysis of sentence final particles such as these needs to make use of two notions: speech style and clause type. We argue that these two are not only conceptually distinct, but also syntactically and semantically independent. There are two arguments for this point:

1. The first argument for the grammatical independence of speech style and clause type is morphological: some sentence final particles contain an overt morpheme for each component. For example, the deferential declarative particle in (28b) combines the declarative morpheme *-ta* in (28a) with *-supni*, a morpheme indicating that the addressee is higher than the speaker in terms of the relevant social hierarchy.¹² Another example is the imperative particle *-e-la*, which combines a marker of imperatives, *-la*, with a particle indicating that the speaker is superior to the addressee and that the situation is informal, *-e*.¹³
2. The second argument for the grammatical independence of clause type and speech style comes from the difference between root and embedded clauses. As we'll see in section 3.3, not all sentence final particles occur in embedded clauses, and those that do fail to express speech style when embedded. This leads us to hypothesize that the grammatical structure relevant for expressing speech style is not present in embedded clauses. Such an analysis is only possible if clause typing can be syntactically independent of the expression of speech style.

In order to give a detailed syntactic analysis of jussive clauses, we will need a good general understanding of sentence final particles. Thus, in the next section we'll discuss the concept of speech style and then we'll return to clause typing in section 3.3. This will allow us to return to our main theme of the nature of the jussive clause type, in sections 3.4 and 3.5.

3.2 Speech style morphemes

As we have mentioned, in Korean every clause must end with a sentence final particle. In matrix clauses, these particles often seem to express both speech style and clause type, whereas in embedded clauses they only mark clause type (as will be discussed in section 3.3). The notion of speech style that is relevant for these particles comprises two sub-components: One is the relation between the person uttering the sentence, i.e. the speaker, and the person(s) to whom the sentence is addressed, i.e. the addressee. This relation is defined along social dimensions such as age and social status. In matrix clauses, a sentence final particle conveys whether speaker and addressee are equal along these dimensions, or whether one is "superior" or "inferior" to the other. For example, the particle *-supni-* that we find in *-supnita* and *-supnikka* conveys that the speaker is inferior to the addressee along one or both of these dimensions. Consequently, it can properly be used by a speaker who is younger than the addressee (e.g. a child addressing a parent) or by a speaker with lower social status than the addressee (e.g., a student addressing a teacher, or a subordinate addressing his/her superior in a corporate environment).

The other sub-component encoded in the speech style particles is the level of formality that characterizes the relationship between speaker and addressee, and/or the situation in which the sentence is used. There are many styles (or levels) discussed in the Korean literature, and simplifying grossly, we can say that a speech

¹²*-Supni* comprises two morphemes: *-sup*, the addressee honorific marker, and *-ni*, the indicative morpheme. Together, *-supni* indicates deference and formality toward the addressee.

¹³In the literature, *-e-la* is generally viewed as a one morpheme, instead of two, *-e* and *-la*. For the reasons we will discuss below we propose that *-e* and *-la* are independent morphemes carrying distinct roles and meanings. It is tempting to view the *-e* in *-e-la* as a manifestation of the half-talk particle, but the two are different because the half-talk style may be used by a socially inferior speaker, but *-e-la* cannot (on this, see also note 16).

style particle conveys whether the style is very formal (e.g. a professional context, like a lecture or an official meeting), semi-formal/polite (e.g. any context where one wants to show politeness towards the addressee), or informal (as between close friends or family members in non-professional contexts).¹⁴ For example, the particle *-eyo* is used when the speaker is lower than or equal to the addressee along the dimensions of age or social status; but unlike *-supni-*, which is used to signal a formal style, *-eyo* signals a semi-formal or polite style, in the terminology of Pak (2004) and Martin (1992). The following sentences exemplify these styles:

- (29) a. Ce-nun cemsiyim-ul mek-ess-**supni-ta**. (formal)
 I (humble)-TOP lunch-OBJ eat-PAST-SFP
 ‘I ate lunch.’
- b. Na-nun cemsiyim-ul mek-ess-**eyo**. (semi-formal)
 I-TOP lunch-OBJ eat-PAST-SFP
 ‘I ate lunch.’

Sometimes the level of formality obliterates the distinctions brought in by age and social status. For example, close friends or family members who hold a close relationship (like mother and daughter) may use the particle *-e* that signals informal style. While this style is normally used by a speaker who is higher than or equal to the addressee, it can be adopted by a speaker who is lower in terms of age and/or social status than the addressee if the relationship between the two is close. In the terminology of Pak (2004) and Martin (1992), this particle is referred to as an “intimate style” or “half-talk” style particle.¹⁵

- (30) John-un cemsiyim-ul mek-ess-**e**. (“half-talk” or intimate style)
 I-TOP lunch-OBJ eat-PAST-SFP
 ‘John ate lunch.’

Finally, some particles have two distinct usages. For example, in one usage, the declarative particle *-ta* may be used by close friends and by an older person to a younger person. The other range of contexts in which it can be used consists of written texts, such as newspapers, academic writings, and personal diaries; in such cases, there is no specific addressee, hence the relationship between speaker and addressee is neutral along the dimensions of age and social status. In Pak (2004) and Martin (1992), these particles are labeled “plain style” particles.¹⁶ (31) illustrates an example of the particle *-ta*:

- (31) Na-nun cemsiyim-ul mek-ess-**ta**. (plain style)
 I-TOP lunch-OBJ eat-PAST-SFP
 ‘I ate lunch.’

¹⁴The number of speech style distinctions proposed in the literature varies; some linguists make more distinctions while others fewer (cf. Pak (in prep) for a full discussion). For example, Pak (2004), Martin (1992) and Sohn (1999) discuss six speech styles. Martin (and following Martin, Pak) distinguish among plain, intimate, familiar, polite, semi-formal and formal styles. Sohn argues for plain, intimate, familiar, polite, blunt and deferential style. In contrast, Kwon (1992) argues for three speech styles (“Hierarchy 1, 2 and 3”), and Nam (2001) proposes four speech levels (very polite, polite, low and very low). For the purposes of our paper, exactly how many speech styles need to be distinguished does not matter; we mention four simply to allow a discussion of the nature of speech styles and give some examples to illustrate the kind of distinctions that are drawn.

¹⁵The polite particle *-eyo* provides another example of a case in which the level of formality obliterates distinctions brought in by age and social status. Though it is typically used by a younger or socially lower individual, it may be used by a socially higher individual who is trying to be polite.

¹⁶Though the plain styles and half talk styles are similar in many ways, one prominent difference exists between the two: the half talk style can be used by a younger person to an older person, or by a socially lower person to a higher person if they are close enough to be on the half talk style basis; in contrast, the plain style cannot be used by a younger or socially lower person to an older or socially higher person, no matter how close they are.

Based on this discussion, we can summarize the speech styles indicated by the particles mentioned above as in (32), where the relation between speaker and addressee is represented with the symbols > (“higher than”), < (“lower than”), ≥ (“higher than or equal to”), and ≤ (“lower than or equal to”); *u* stands for the unmarked relation; and the level of formality is simply indicated using one of the labels used in Martin (1992) and Pak (2004):¹⁷

- | | | | |
|------|----|--|----------------|
| (32) | a. | [Speaker] < [Addressee], [Formal] → <i>-supnita</i> | “Formal style” |
| | b. | [Speaker] ≤ [Addressee], [Semi-formal] → <i>-eyo</i> | “Polite style” |
| | c. | [Speaker] <i>u</i> [Addressee], [Informal] → <i>-e</i> | “Half talk” |
| | d. | [Speaker] ≥ [Addressee], [Informal] → <i>-ta</i> | “Plain style” |
| | e. | (no specific addressee) → <i>-ta</i> | “Plain style” |

Two more observations are in order, before we turn to a brief discussion of the syntactic representation of speech style particles. The first is that, as pointed out in Kim-Renaud and Pak (2005), vocatives in Korean are marked by a series of morphemes that expresses the same notions expressed by the speech style particles: the relation between speaker and addressee along the dimension of age and social class, and the level of formality of the interaction. Thus the relation between speaker and addressee manifests itself in at least two ways in the grammar of Korean. The second observation is that the range of distinctions in (32) occurs not only in declarative clauses, but also in interrogatives (33) and imperatives (34) as well, as shown in the examples below from Pak (2004). This provides further support for our claim that the notion of speech style needs to be kept separate from that of clause typing.¹⁸

- | | | | |
|------|----|---|----------------|
| (33) | a. | Tangsin-un cemsiyim-ul mek-ess- supnikka ?
You-TOP lunch-ACC eat-PST-SFP
'Did you eat lunch?' | (formal style) |
| | b. | Tangsin-un cemsiyim-ul mek-ess- eyo/nayo/-nun-ka-yo ?
You-TOP lunch-ACC eat-PST-SFP
'Did you eat lunch?' | (polite style) |
| | c. | Ne-nun cemsiyim-ul mek-ess- e ?
I-TOP lunch-ACC eat-PST-SFP
'Did you eat lunch?' | (half-talk) |
| | d. | Ne-nun cemsiyim-ul mek-ess- ni/-nya ?
You-TOP lunch-ACC eat-PST-SFP
'Did you eat lunch?' | (plain style) |
| (34) | a. | Cemsiyim-ul tu- sipsio .
Lunch-ACC eat-SFP
'Eat lunch!' | (formal style) |
| | b. | Cemsiyim-ul mek- eyo .
Lunch-ACC eat-SFP
'Eat lunch!' | (polite style) |

¹⁷(32) can be extended to other clause types in Korean, as these speech styles exist not only for declaratives but also for other clause types.

¹⁸Pak (2004), in the context of an extensive discussion of sentence final particles in Korean, points out that some particles only express speech style, others speech style and clause typing, and yet others speech style and mood. That paper, like this one, takes the position that these notions are conceptually and syntactically independent, and just happen to be conflated by the morphology.

- c. Cemsiyim-ul mek-**e**.
Lunch-ACC eat-SFP
'Eat lunch!' (half-talk)
- d. Cemsiyim-ul mek-**e-la**.
Lunch-ACC eat-SFP
'Eat lunch!' (plain style)

Let us now turn briefly to the syntactic representation of the speech style particles. So far, we have followed the literature in observing that they revolve around the notions of speaker and addressee, expressing their relation in terms of age, social status, and level of formality. Moreover, we have argued that they are not just conceptually, but also syntactically and semantically independent of clause typing particles. Now we must incorporate these ideas into a grammatical model. Our first step is to hypothesize that the notions of speaker and addressee are represented in the syntax (and thus do not belong exclusively to the pragmatic component). This is not entirely novel, as there already exists a family of proposals along these lines (cf. Cinque (1999), Tenny (2000), Speas (2004), Haegeman (2006), Baker (to appear), among others). Though the details of each of these proposals are different, they all converge on the idea that the notions of speaker and/or addressee play a role in determining the syntactic distribution of certain classes of elements (adverbs, embedded clauses, agreement markers and pronouns). From this perspective, our work can thus be seen as providing new evidence concerning the nature of the syntactic representation of speaker and addressee from another area of grammar and another language, Korean.

There are several possibilities for how exactly to encode these notions in the syntactic representation. For example, we could view speaker and addressee as independent operators, or as syntactic features realized as the head of corresponding functional projections. However we do it, we must bear in mind that the speech style particles express the relation between speaker and addressee. If we postulate two independent functional projections, one encoding the notion of speaker and one that of addressee, a speech style particle like *-eyo* could then be viewed as resulting from the following configuration: (a) the head of the Speaker Phrase has the value "lower than or equal to addressee, polite style"; (b) it may only co-occur with an Addressee Phrase with the value "higher than or equal to speaker, polite style"; and (c) this combination of features is spelled out morphologically as *-eyo*. Alternatively, we could postulate the existence of a single functional projection, whose features express the relation between speaker and addressee under discussion. We will adopt this latter possibility, thus assuming that there is a single projection whose head has values that can express a range of relations between speaker and addressee; we call this projection **SPEECH STYLE PHRASE**. We leave open the question of how our analysis relates to the other proposals in the literature that discuss the syntactic encoding of the notions of speaker and addressee.

3.3 Clause typing morphemes

As we have emphasized above, in Korean every clause, matrix or embedded, must end with a sentence final particle. Example (28h) above showed that a matrix clause is ungrammatical if no sentence final particle is present. The example in (35a) below shows that an embedded clause is also ungrammatical if no sentence final particle is present, unless it is a non-finite nominal clause as in (35b):¹⁹

- (35) a. *John-un [Inho-ka cemsiyim-ul mekess]-ko malhayss-ta.
John-TOP [Inho-NOM lunch-ACC ate]-COMP said-SFP
Intended meaning 'John said that Inho ate lunch.'

¹⁹NOMN is a gloss for nominalizer.

- b. John-un [Inho-ka cemsium-ul mek-ki]-lul palan-ta.
 John-TOP [Inho-NOM lunch-ACC eat-NOMN]-ACC wish-SFP
 ‘John wishes for Inho to eat lunch.’

However, out of roughly 50 sentence final particles, only five may be embedded: *-ta*, *-nya*, *-(u)la*, *-ma* and *-ca*. These are known as plain style particles in the literature. As we can see from the glosses of the embedded clauses in (36), these five particles seem to distinguish five types of clauses: declarative (36a), interrogative (36b), promissives (36c), imperative (36d) and exhortative (36e).^{20,21}

- (36) a. John-un [Inho-ka cemsium-ul mekess-**ta**]-ko malhayss-ta.
 John-TOP [Inho-NOM lunch-ACC ate-DEC]-COMP said-SFP
 ‘John said that Inho ate lunch.’
- b. John-un [Inho-ka cemsium-ul mekess-**nya**]-ko mwuless-ta.
 John-TOP [Inho-NOM lunch-ACC ate-INT]-COMP asked-SFP
 ‘John asked if Inho ate lunch.’
- c. Apeci-kkeyse [siyksa-lul ha-si-**ma**]-ko yaksokha-si-ess-ta.
 father-NOM meal-ACC do-HON-PRM]-COMP promise-HON-PAST-SFP
 ‘Father promised that he would eat.’
- d. Inho-ka apeci-ekey [siyksa-lul ha-si-**la**]-ko malhayss-supnita.
 Inho-NOM father-to meal-ACC do-HON-IMP]-COMP said-SFP
 ‘Inho told his father to eat.’
- e. Inho-ka John-ekey [cemsium-ul mek-**ca**]-ko malhayss-ta.
 Inho-NOM John-to lunch-ACC eat-EXH]-COMP said-SFP
 ‘Inho said to John to eat lunch with him.’

Given that the object of investigation of this paper are jussives, we will not analyze the declarative and interrogative markers *-ta* and *-nya* in any detail, and will instead focus on the three jussive particles *-ma* (36c), *-(u)la* (36d), and *-ca* (36e), which mark a clause as a promissive, an imperative and an exhortative, respectively.

Support for the idea that these particles mark clause type and nothing else when embedded comes from the observation that, in such contexts, the sentence does not contain any information concerning speech style. Take for example (36d); the embedded sentence includes a sentence final particle *-la* (‘imperative’), but does not indicate any speech style. This is particularly striking in light of the fact that, in matrix clauses, *-la* typically co-occurs with the speech style particle *-e*.²² Root clauses with *-e* and *-la* have plain speech style. In contrast, in embedded contexts *-la* does not co-occur with *-e* or any other speech style particles, and does not itself convey information about speech style. This is shown by the fact that in an embedded clause (for example (36d)), *-la* may co-occur with the subject honorific morpheme *-si*. This co-occurrence would be impossible in root clauses; the presence of the honorific would bring about a style clash with the style signaled by *-e*, since it would indicate that the addressee is of higher social status than the speaker.²³

Additional evidence that sentence final particles in embedded clauses do not express speech style comes from the fact that those sentence final particles that contain a morpheme explicitly indicating speech style

²⁰Suh (1996) takes the ability to be embedded as evidence for claiming that there exist five distinct clause types in Korean.

²¹In (36c), *-kkeyse* is the honorific form of the nominative markers *-ka* or *-i*.

²²The particle *-e* alternates with *-a*, and this alternation is phonologically conditioned: if the verb stem ends in *-a* or *-o*, then *-a* is used; when the preceding segment is a consonant, *-u* occurs; otherwise, *-e* is used.

²³There is a very limited set of fixed expressions in which the two co-occur in matrix clauses:

are never allowed. For example, as shown in (37), the formal speech style particle *-supni-*, the polite speech style particle *-eyo*, and the half-talk speech style particle *-e* cannot occur in embedded clauses.

- (37) a. *Inho-ka apeci-ekey [John-un cip-ey kass-**supnita**]-ko malhass-ta.
 Inho-NOM father-to John-TOP home-to went-SFP-COMP said-DEC
 ‘Inho said to his father that John went home.’
- b. *Inho-ka apeci-ekey [John-un cip-ey kass-**eyo**]-ko malhass-ta.
 Inho-NOM father-to John-TOP home-to went-SFP-COMP said-DEC
- c. *Inho-ka apeci-ekey [John-un cip-ey kass-**e**]-ko malhass-ta.
 Inho-NOM father-to John-TOP home-to went-SFP-COMP said-DEC

In all three cases, the ungrammaticality arises from the presence of the speech style particles in the embedded clause. The sentence would be grammatical only if they were interpreted as direct quotations, but in that case the complementizer would have to be not *-ko* but *-lako*.

A simple way to account for the fact that sentence final particles do not express speech style in embedded clauses is to hypothesize that speech style is always marked in the Speech Style Phrase and that the Speech Style Phrase is restricted to root clauses. This hypothesis fits in with the idea that has been expressed in the literature that notions like “speaker” are syntactically represented high in the clausal structure (in layers of a complex CP structure) and may be missing in certain constructions (cf. Haegeman (2006), among others).²⁴

Now that we have established that, in embedded clauses, these plain style particles only mark clause type, we need to examine their distribution and their function in root clauses. Let us start from the observation that, whereas embedded clauses completely lack information concerning speech style, matrix clauses typically convey information about speech style, even when the only sentence final particle they contain is one of the five particles that can be embedded. For example, consider a root exhortative that contains only the particle *-ca*, as in (38):

- (38) Cemsiyim mek-**ca**.
 Lunch eat-EXH
 ‘Let’s have lunch.’

This sentence is felicitous when uttered from a parent to a child, but not the other way around; it signals that the speaker is higher than or equal to the addressee, and can be used by family members or close friends.²⁵ So, in a root clause like this one, the sentence clearly conveys information about speech style.

-
- (i) Kitay-ha-si-la
 expectation-do-HON-IMP
 ‘Expect (something big or exciting)!’
- (ii) Nolaci ma-si-la
 Surprise not-HON-IMP
 ‘Do not be surprised!’

It is not clear what to make of this kind of expressions, and we do not provide an analysis of them here.

²⁴Note that the subject honorific morpheme *-si-* in (36d) is possible in embedded clauses. Such a morpheme, known as a ‘propositional honorific’ in the Korean literature, is different from the speech style particles in that it expresses the relation between the speaker and the referent of the subject, rather than the relationship between the speaker and the addressee. Hence, it must utilize a different syntactic structure from the speech style morphemes (which are known as ‘performative honorifics’ in the literature).

²⁵Recall from the discussion in footnote 15 that the plain styles cannot be used by a younger or socially lower person to an older or socially higher person, which is a prominent difference between the half talk style and plain style.

As mentioned above, however, there are some special contexts where information about speech style can be absent even in root clauses. These are the cases in which there is no specific addressee. In the case of the jussive particles, such cases occur in mottos used in schools, government, or corporations. An example of a school or company motto is given in (39):

- (39) Choysen-ul ta ha-**ca**.
 Best-ACC all do-EXH
 ‘Let’s do our best!’

We suggest that we should look at the relationship between (38) and (39) in terms of the idea that (38) contains a null speech style particle, while (39) lacks this particle.

Imperatives provide evidence for this view, because, in contrast to promissives and exhortatives, they express speech style in root clauses with an overt morpheme. Observe that in imperatives the morpheme *-e* (or its allomorph *-a*) marks plain style, as in (40) below.²⁶ This sentence could be used to tell a particular addressee not to steal. In contrast, in cases such as the Ten Commandments and in mottos, no speech style morpheme is present, as shown in (41):²⁷

- (40) Totwukcil haci-mal-**a-la**.
 Steal do-not-SSP-IMP
 ‘Do not steal!’
- (41) a. Totwukcil haci-mal-**la**. (From the Ten Commandments)
 steal do-not-IMP
 ‘Do not steal!’
- b. Onul il-ul nayil-lo miyrucci mal-**la**.
 today work-ACC tomorrow-to postpone not-IMP
 ‘Do not put off today’s work until tomorrow.’
- c. Choysen-ul ta ha-**la**.
 Best-ACC all do-IMP
 ‘Do your best!’

Because there is no specific addressee in the cases in (41), no speech style morpheme is present (not even a null one); this case is therefore parallel to an embedded imperative like (36d), which we have argued does not contain a Speech Style Phrase at all. Returning to the exhortatives in (38)-(39), our claim is that (38) contains a null version of the plain style particle *-e*, while (39), in contrast, contains the clause typing (exhortative) morpheme *-ca* but no speech style morpheme. In other words, the root exhortative in (39) has the same structure as the embedded exhortative in (36e).

Speakers are not free to drop the speech style morpheme at will, of course. If there is a specific addressee in the context, a speech style particle is required; for example, if a parent is speaking to a child, the particle *-e* must be used, as we see in (42a-b), which contrasts with (41a) and (41c), respectively:²⁸

²⁶The view we are proposing here departs from the one presented in the literature, which treats these five particles as expressing “plain style”. We believe that the sentences that go under the label “plain style” are not uniform in either their syntax or semantics/pragmatics. Though the term can be appropriately used to describe a set of forms, we claim that these forms are ambiguous between the plain style (when the sentence contains a null speech style morpheme) and the absence of speech style (when there is no speech style morpheme at all, as in mottos).

²⁷In these glosses, “SSP” stands for “speech style particle”.

²⁸The *ha(ta)* verb in Korean is an irregular verb in that when the verbal root *-ha* combines with the speech style particle *-a*, it becomes not *ha-a* but *ha-y*. So the surface form of the verbal predicate in (43b) is ‘*hay-la*’.

- (42) a. Totwukcil haci-mal *(-a)-**la**. (From parent to a child)
 Steal do-not (-SSP)-IMP
 ‘Do not steal!’
 b. Choysen-ul ta ha *(-a)-**la**.
 Best-ACC all do (-SSP)-IMP
 ‘Do your best!’

On the basis of these data, we conclude that the particles that can be embedded, in particular the jussive particles *-ma*, *-ca* and *-la* that are the object of our investigation, do not encode speech style, either in embedded or in matrix clauses.

Given our proposal that speech style is expressed in the syntax by the functional projection Speech Style Phrase, and the evidence that clause type marking is independent of speech style, we argue that particles that indicate whether a clause is a promissive, imperative, or exhortative occur in a different functional projection from the speech style particles. We label this projection JUSSIVE PHRASE.²⁹ In section 3.5, we will show how the properties of the jussive phrase help us provide an analysis of both similarities among and differences between promissives, imperatives and exhortatives.

3.4 Speech style and clause typing morphemes in co-occurrence

To summarize our syntactic claims so far, we have argued for the existence of two distinct functional projections, the Speech Style Phrase, which expresses speech style, and the Jussive Phrase, which marks (jussive) clause type. Now we will discuss in detail how the morphology of Korean sentence final particles realizes these two projections. We’ll see the following cases:

1. Only the Jussive Phrase is present in the structure, and it is headed by an overt morpheme;
2. The Speech Style Phrase and the Jussive Phrase are both present in the structure and headed by distinct overt morphemes;
3. The Speech Style Phrase and Jussive Phrase are both present in the structure, but only one is headed by an overt morpheme:³⁰
 - (a) The Speech Style Phrase is headed by an overt morpheme, and the Jussive Phrase is headed by a null morpheme; or
 - (b) The Speech Style Phrase is headed by a null morpheme, and the Jussive Phrase is headed by an overt morpheme.

Let us start with cases where the structure contains the Jussive Phrase but no Speech Style Phrase. In our view, this is the case in all embedded clauses as well as in those root clauses that lack a specific addressee. We review two sets of examples below:

- (43) a. Embedded imperative
 Sensayngnim-kkeyse haysayngtul-ekey [choysen-ul ta ha-**la**]-ko
 teacher-NOM students-to [best-ACC all do-IMP]-COMP
 malssum-ha-si-ess-ta.
 say(hon)-do-HON-PAST-SFP

²⁹We leave open whether declarative *-ta* and interrogative *-nya* reside in the same projection, in which case a different name would be in order.

³⁰The question arises as to why we do not see the case where both the Speech Style Phrase and the Jussive Phrase are headed by an empty morpheme. We discuss this point below.

- ‘The teacher told the students to do their best.’
- b. Root imperative (a class motto)
 Choysen-ul ta ha-**la**.
 Best-ACC all do-IMP
 ‘Do your best!’
- (44) a. Embedded exhortative
 Sensayngnim-kkeyse haysayngtul-ekey [choysen-ul ta ha-**ca**]-ko
 teacher-NOM students-to [best-ACC all do-PRM]-COMP
 malssum-ha-si-ess-ta.
 say(hon)-do-HON-PAST-SFP
 ‘The teacher said to the students ‘let’s do our best’. (indirect quotation)
- b. Root exhortative (a class motto)
 Choysen-ul ta ha-**ca**.
 Best-ACC all do-EXH
 ‘Let’s do our best.’

Next we examine cases in which both the Jussive Phrase and the Speech Style Phrase are present in the structure, and both are headed by an overt morpheme.³¹

- (45) Choysen-ul ta ha-**a-la**.
 Bese-ACC all do-SSP-IMP
 ‘Do your best.’

Imperatives are unique among jussives in allowing sentences like (45), in which an overt speech style morpheme co-occurs with an overt clause typing particle. In promissives and exhortatives, we do not find cases in which both the clause typing and the speech style morphemes are overt (as mentioned in the last section, when the speech style morpheme is present, it is null). However, there are many such cases with declaratives and interrogatives, for example:

- (46) a. Inho-ka cip-ey kass-**supni-ta**.
 Inho-NOM home-to went-SSP-DEC
 ‘Inho went home.’
- b. Inho-ka cip-ey kass-**supni-kka**?
 Inho-NOM home-to went-SSP-INT
 ‘Did Inho go home?’

Root promissives and exhortatives contain a null version of the plain style morpheme *-e* when the clause typing particle is present. This constitutes the third of the three possibilities mentioned above, namely the one in which the Speech Style Phrase and Jussive Phrase are both present in the structure, but only one is headed by an overt morpheme. In this case, it is the Jussive head that has an overt morpheme.³²

³¹We will set aside the issue of how to get the right surface order *-a-la* for now and come back to it later in this section.

³²The same is true of declaratives and interrogatives. In plain declarative and interrogative sentences as in (i) and (ii) below, we propose that there is a null plain style morpheme and a clause typing particle:

- (47) Choysen-ul ta ha-**ma**. $-ma = \emptyset_e + ma$
 best-ACC all do-PRM
 ‘I promise to do my best.’
- (48) Choysen-ul ta ha-**ca**. $-ca = \emptyset_e + ca$
 best-ACC all do-EXH
 ‘Let’s do our best.’

Next we turn to instances in which the speech style morpheme is overt and the clause typing morpheme is not. Certain morphemes that indicate speech style can occur in root clauses without an overt clause typing particle. In particular, the half talk morpheme *-e* and the polite particle *-eyo* can be used in this way:

- (49) a. Cikum cemsiy^m mek-**e**.
 Now lunch eat-SSP
 ‘I am eating lunch now.’
- b. Cikum cemsiy^m mek-**e**?
 now lunch eat-SSP
 ‘Are you eating lunch now?’
- c. Cikum cemsiy^m mek-**e**!
 now lunch eat-SSP
 ‘Eat lunch now!’
- (50) a. Cikum cemsiy^m mek-**eyo**.
 Now lunch eat-SSP
 ‘I am eating lunch now.’
- b. Cikum cemsiy^m mek-**eyo**?
 now lunch eat-SSP
 ‘Are you eating lunch now?’
- c. Cikum cemsiy^m mek-**eyo**!
 now lunch eat-SSP
 ‘Eat lunch now!’

Both of these speech style morphemes can easily be used in imperatives (as well as declaratives and interrogatives), as in (49c) and (50c); they are quite marginal in exhortatives and promissives:

- (51) a. Cemsiy^m mek-**e**.
 Lunch eat-SSP
 ‘*I promise to eat lunch!/*Let’s eat lunch!’
 ‘Eat lunch!/I am eating lunch./Are you eating lunch?’

-
- (i) Na-nun cemsiy^m-ul mek-ess-ta. $-ta = \emptyset_e + ta$
 I-TOP lunch-OBJ eat-PAST-SFP
 ‘I ate lunch.’
- (ii) Cemsiy^m-ul mek-ess-nya? $-nya = \emptyset_e + nya$
 lunch-OBJ eat-PAST-SFP
 ‘Did you eat lunch?’

Recall that plain style covers another case as well, the one where no speech style morpheme at all is present (as in mottos, the ten commandments, etc.). See footnote 26.

- b. Cemsium mek-eyo.
 Lunch eat-SSP
 ‘*I promise to eat lunch!/*Let’s eat lunch!’
 ‘Eat lunch!/I am eating lunch./Are you eating lunch?’

We do not believe it is an accident that *-e* and *-eyo* occur in declaratives, interrogatives, and imperatives but not (or at least, not very naturally) in the other clause types. Declaratives, interrogatives, and imperatives are the “major” clause types, in Sadock and Zwicky (1985) classification. According to Sadock & Zwicky, they are universal (at least they are much more common than exhortatives and promissives). In this sense we could say that imperatives are the unmarked jussive sub-type. Given this, it is not surprising that a jussive that is not marked overtly as to which kind of jussive it is will be interpreted as an imperative. More specifically, we argue that (49c) contains a Jussive Phrase that is not headed by an overt morpheme; because of this, it is interpreted as having the default value for jussives, and this leads to its being an imperative. Once we have given our account in section 3.5 of what distinguishes imperatives, exhortatives, and promissives from one another syntactically, we will be able to make this reasoning more explicit.

Before we move on to discussing the syntax of jussives in more detail, there is one loose end to discuss. We have seen that in some sentences (e.g., (49) and (50)), there is a null clause typing particle, while in others ((47) and (48)), there is a null speech style particle. However, in no sentence are both of them null. That is, an example like (52) is impossible in any clause type:

- (52) *Cemsium-ul mek(-ess)
 lunch-ACC eat-PAST

We don’t have a formal analysis of this property. Traditional descriptions of Korean have a concept of “sentence ender” (Martin (1992) and Sohn (1999), among others), the intuition being that a root sentence is not complete without the right kind of morpheme at the end. Speech style particles, clause typing particles, and the combinations of these comprise this class of sentence enders; (52) shows that a tense marker cannot serve as a sentence ender, indicating that the issue is not simply that the verb stem cannot be bare. We believe that the traditional intuition about Korean grammar is correct: a sentence must be ended by a morpheme from a particular class; though we’re not sure whether the constraint should be seen as phonological or morphological in nature, we observe that only overt elements can serve this sentence ending function.

Another technical issue we should mention concerns the linear order of the clause typing and speech style morphemes. We have suggested that speech style morphemes are higher in the structure than clause typing morphemes, in light of the fact that they fail to occur in embedded clauses. Thus, following much of the literature, we can analyze embedded clauses as simply lacking the top layer(s) of structure present in root clauses. However, if we assume that Korean functional projections are head-final, this leads to the wrong order. The speech style morpheme always precedes the clause typing morpheme when both occur. There are several ways one might address this issue. First, it could be that the speech style morpheme is lower in the structure but is still missing in embedded clauses, while the higher clause typing morpheme is present in both. This goes against the intuition (which may of course be wrong) that clauses with less structure are always sub-constituents of clauses with more structure. Second, perhaps the order of morphemes is purely a matter for morphology. That is, only features are represented in syntax, and the morphological component realizes these features in an order that meets morphological constraints, as in Distributed Morphology (Marantz (1997) among others) or the approach of Sells (1995). And finally, it could be that the observed order is the result of movement. For example, it could be that Korean functional projections are left-headed, and the IP ends up moving to the specifier position of the highest head, i.e. to its left (Kayne (1994)). The choice among these options does not impact the points we wish to make in this paper. Because in the rest of

this paper we'll be discussing the Jussive Phrase but not any longer the Speech Style Phrase, we'll simply leave the latter out, and we won't discuss the issue of linear order any further.

3.5 The syntactic function of the jussive particles

In this section we will discuss the syntactic function of the jussive particles *-ma*, *-la*, and *-ca*. Let us recall the conclusion reached in Section 2 that promissives, imperatives, and exhortatives are subtypes of a single clause type, jussives. They all indicate the same kind of directive force, metaphorically adding a requirement to some individual's To-do List. Now we address the questions of what their precise syntactic function is, and how this function plays a role in distinguishing promissives, imperatives, and exhortatives. Our proposal is based on the simple observation that the jussive subtypes differ in the interpretations of their subjects. This can be seen in (1)-(3), repeated here for convenience:

(53) PROMISSIVE

Nayil cemsium-ul sa-**ma**.
tomorrow lunch-ACC buy-PRM

'I will buy lunch tomorrow.'

(54) IMPERATIVE

Cemsium-ul mek-**e-la**.
lunch-ACC eat-SSP-IMP

'Eat lunch!'

(55) EXHORTATIVE

Cemsium-ul mek-**ca**.
lunch-ACC eat-EXH

'Let's eat lunch.'

The promissive subject in (53) refers to the speaker; the imperative subject in (54) refers to the addressee(s); and the exhortative subject in (55) refers to a group including both the speaker and the addressee(s). We suggest that the role of the jussive particle is to indicate the person features of the subject. For example, *-ma* does not mark "promissive force". Rather, it marks the presence of a first person subject. Since the subject of a jussive clause identifies the individual whose To-do List is updated (for reasons to be discussed in detail in Section 4), and the updating of the speaker's own To-do List amounts to a promise, this ultimately marks the sentence as a promissive. Similarly for the other two cases.

More formally, we propose that the relation between the jussive particle and the subject of a jussive clause is one of agreement. The idea that Korean shows person agreement may be surprising, since it is usually thought of as a "no agreement" language. Before we let that stop us, however, we should look a little bit more closely into what it means for a language not to display agreement. The first point to make is that we don't want to say that Korean lacks person features. Presumably, pronouns in Korean are just like in any other language, with first or second person features being interpreted as presupposing reference to the speaker or addressee, respectively. Therefore, the lack of agreement in Korean is an issue of the relationship between these person features on a DP and a functional projection that might be expected to enter an agreement relation with them. When linguists say that Korean does not show agreement, they are referring to the

fact that T does not enter an agreement relation with any person features on the subject.³³ (See Baker (to appear) for a relevant discussion of parametric differences in agreement within a broader cross-linguistic perspective.) Our claim is that the head of the Jussive Phrase agrees with the subject in person features. For reasons that will be discussed when we give our detailed semantic analysis in Section 4, this agreement is essential both to the assignment of directive force to the clause and to the determination of which sub-type of jussive it is.³⁴

In terms of a formal mechanism for agreement, it can be seen as either the matching or passing of features; our view leans toward the latter, as we're about to see, though this choice does not affect the substance of our proposal. Let us start by considering the case of pronominal subjects; in jussive clauses, the only pronominal subjects that are allowed refer to the speaker (1st person), to the addressee (2nd person) or to both speaker and addressee (as in first person plural pronouns inclusive of the addressee).³⁵ This is exemplified by sentences like those in (56), where the jussive head *ma* and the pronominal subject *nay* share 1st features (56a), *la* and *ney* share 2nd person features (56b) and *ca* and *wuli* share 1st and 2nd person features (56c):

- (56) a. *Nay-ka cemsium-ul sa-ma.*
I-NOM lunch-ACC buy-PRM
'I promise to buy lunch.'
- b. *Ney-ka cemsium-ul sa-la.*
You-NOM lunch-ACC buy-IMP
'You buy lunch.'
- c. *Wuli-ka cemsium-ul sa-ca.*
We-NOM lunch-ACC buy-EXH
'Let's you and I buy lunch.'

³³Korean appears to show number agreement:

- (i) *Motwu-tul ppali-tul mek-e-la.*
everybody-PL fast-PL eat-SSP-IMP
'Everybody eat fast!'

There is much literature on this phenomenon (cf. Choe (1988), Kuh (1987), Park and Sohn (1993), Yim (2003), Park (2006)) and we do not offer our own account of this kind of sharing of features in this paper. We would simply like to make a note of this fact since, if it indeed involves a formal agreement mechanism, it supports our proposal that there can be agreement in Korean.

Miyagawa (2006) proposes that there is person agreement in Japanese. He claims that polite markers such as *-desu* and *-masu* are actually person agreement markers. For details, see Miyagawa's paper.

³⁴We speculate that there may be a connection between the lack of person agreement between the subject and T in Korean and the availability of person agreement between the subject and the jussive particle. Because T cannot show agreement, it will not count as an intervener between the subject and the particle, and therefore this jussive agreement is possible. More generally, it is common for languages to lack subject-verb agreement in imperatives, and this is even true of those that typically show subject-verb agreement on T. This pattern could be explained on the assumption that agreement between the subject and the Jussive⁰ is required in all imperatives. If the subject were to agree with T, this would prevent agreement between the subject and the jussive head.

³⁵We observe that it's extremely difficult to have a third person pronoun as the subject of an imperative in English (though Kayne p.c. has pointed out to us that the negative counterpart is less bad):

- (i) *He/him move!
(ii) ??Don't he move!

This could be because third person pronouns, contrary to noun phrases, enter the derivation with person features (cf. Bernstein (to appear)), and so cannot agree with the jussive head. Alternatively, it could be that they enter the derivation without person features, and if they acquire second person features through agreement, they are spelled out as *you*. That is, the phonological form of pronouns is determined at spell out, and is not part of their lexical entry.

We need to consider two possibilities concerning the relation between the subjects and sentence final particles in these examples. The pronominal subject might already be endowed with person features when it enters a relation with the Jussive Phrase. In this case, the relation between the Jussive head and the subject would be one of feature matching. Alternatively, if Baker (to appear) is right in proposing that an element can have 1st or 2nd person features only if it is bound by something that has those features, then it is tempting to think that, in jussive clauses, it is the Jussive head that gives 1st and 2nd person features to the pronominal subjects. In this case, the relation between the Jussive head and the pronominal subjects would be one of feature passing, rather than feature matching. If we were to express this relation in terms of Chomsky (2000) Agree relation, we would view the Jussive head as the probe and the pronominal subject as the goal. The result of this relation would be that the same feature values are present on both probe and goal. However, differently from Chomsky's system, the value of the feature of the probe would be seen as passed on to the goal, rather than the other way around.

Turning now to non-pronominal subjects,³⁶ as in (57), we assume that a noun phrase lacks person features (cf. Sauerland (2005) and Baker (to appear)).³⁷ The relation between the jussive head and the subject thus amounts to the passing of features, just as in the second of the two alternatives envisioned for pronominal subjects. For example, in (57a), *emma* 'mommy' receives 1st person features from the promissive particle *ma* in the Jussive head; in (57b) *Inho* receives 2nd person features from the head *la* and refers to the addressee; and in (57c) the subject *Emma-lang Inho* receives a combination of 1st and 2nd person features and refers to both speaker and addressee:

- (57) a. Emma-ka masiyssnun kansiyk-ul cwu-**ma**
 mommy-NOM delicious snack-ACC give-PRM
 'Mommy promises to give you a delicious snack.'
- b. Inho-ka simpwulum-ul hay-**la**
 Inho-NOM errand-ACC do-IMP
 'Inho run the errand!'
- c. Emma-lang Inho-ka kati chengso ha-**ca**
 Mommy-with Inho-NOM together clean do-EXH
 'Let's clean together, mommy and Inho.'

Though in Korean the only indication that the subjects in (57) have first/second person features is their interpretation, in English we have grammatical evidence for the idea that a (bare) noun phrase can acquire values other than 3rd for their person feature. Consider the following example:

³⁶In the text, we focus on pronominal and referential subjects. Quantifiers which function as the subjects of imperatives are a special case:

- (i) Motwu/nwukwu/myetmyeng na-lul towa cwu-la.
 Everybody/somebody/few people me-ACC help give-IMP
 'Everybody/somebody/a few of you help me!'

There are two proposals we could make about them. If these subjects are generalized quantifiers, we would say that agreement occurs with a covert representation of their domain of quantification. In this case, *motwu* 'everybody' would be interpreted, correctly, as 'every one of you'. It is also possible that they are not true quantifiers, but rather referential expressions. For example, *motwu* could be seen as referring to a plurality, and the predicate it combines with is distributed over this plurality; this possibility is suggested by the fact that it can co-occur with the distributive particle *ta* 'all'. If this is the right way to look at *motwu*, in jussive clauses agreement would occur just as in (58b) below. That is, the Jussive head would agree directly with the subject, which then would refer to the set of addressees. A closer paraphrase of (i) in this case would be 'You people (all) help me!'

³⁷Person features might be associated with the D-layer, as proposed in Bernstein (to appear) and Zanuttini (in prep). If so, then our claim should be read as saying that noun phrases lacking a D-layer lack person features, though DPs might have them.

(58) Boys put on your coats, girls sit down on the bench!

The 2nd person anaphor *your* in (58) shows that the subject NP *boys* has 2nd person features.³⁸ Since *boys* in other contexts can bind a 3rd but not a 2nd person anaphor, it is reasonable to suggest that in imperatives it acquires 2nd person features from the (null) Jussive head.

At this point, we should comment on the fact that our way of viewing feature passing in agreement is the reverse of how linguists typically view the prototypical case of agreement, that between the subject and a finite verb. In the case of subject-verb agreement, the common intuition is that the subject has person features that it passes on to the verb in the agreement relation. In the cases in (57), it is not the subject that passes its features onto the functional head, but rather the functional head that passes the value of its person feature on to the subject. The fact that features are shared in this way raises a number of issues that we will not discuss here for reasons of space.³⁹

Let us now return to an issue that we put aside earlier. In the cases we've been looking at in this section, the Jussive Phrase is headed by an overt element which, we claim, bears person features. But not all Jussive Phrases are headed by an overt morpheme. We saw in example (51) that the sentence final particles *-e* and *-eyo* mark only speech style, and not clause type, and we interpreted this as showing that they are not in the head of the Jussive Phrase. Rather, the Jussive Phrase is headed by a null element in these cases. Given this way of looking at things, it's significant that *-e* and *-eyo* are possible in declaratives, interrogatives, and imperatives, but are quite marginal in promissives and exhortatives. In the previous section, we attributed this fact to the idea that imperatives are the "default" jussive type, in some sense. That is, a jussive which is not marked for which sub-type of jussive it is, will be interpreted as an imperative. Given our hypothesis that jussive sub-types are distinguished by the person features of the Jussive head and the subject, we can give formal content to the idea that imperatives are the default jussives. We can simply say that the Jussive Phrase has, by default (i.e., unless an overt particle is present to indicate differently), second person features. These person features will be matched or shared with the subject, and thus the subject will refer to the addressee(s). This fact in turn will result in an imperative interpretation for any jussive sentence without a jussive particle.

In this section we have developed an account of the relationship between the jussive head and the subject in terms of a relation of agreement. In concluding this section, we'd like to emphasize the intuition behind this technical implementation. Though promissives, imperatives, and exhortatives are similar in many ways, as pointed out in Section 2, they differ in whether they are directed towards the speaker, addressee(s), or both. Jussive particles indicate which of these three cases hold: *-ma* → speaker, *-la* → addressee(s), and *-ca* → speaker+addressee(s). In this section, we've proposed that jussive particles do this job by hosting person features and sharing them with the subject. This explains why it is always the subject of the jussive clause that corresponds to the individual to whom the requirement is directed. At a broader level, our analysis says that *-ma*, *-la*, and *-ca* mark clause type, but do not do so by expressing illocutionary notions like promise, order, or exhortation; rather, they distinguish among the different jussive types through the simple expression of person features. In the next section, we'll present a semantic analysis of jussives that builds on our syntactic proposals and addresses the issue of how the grammatical notion of agreement is related to the pragmatic effect of updating a particular individual's To-do List.⁴⁰

³⁸For arguments that *boys* is not a vocative in this example, see Davies (1986), Potsdam (1996), Jensen (2003b)

³⁹See Pesetsky and Torrego (to appear) for a discussion of how Chomsky's 2000 notion of Agree might be modified to cover a wider variety of cases. They do not, however, consider exactly the case we are discussing.

⁴⁰An alternative approach would build on the idea of Platzack and Rosengren (1994, 1998), Jensen (2003a,b) that imperatives contain two subject-like elements, the subject that is talked to and the subject that is the agent of the predicate. In this context, one would say that the Jussive head agrees with the subject that is the agent of the predicate, and that the constraint that the referents of the subject-like elements coincide is encoded in the semantics (through whatever mechanism).

4 The Source of Directive Force in Jussives

In the previous section, we concentrated on how the three different kinds of jussive clauses differ from each other. In particular, we have argued that they differ in the person features associated with their subject. However, we have not focused on how jussive clauses differ, as a group, from other types of clauses. But of course the jussive clauses differ dramatically in meaning from other clauses: they all have directive force. We have described directive force informally as the adding of a requirement to some individual or individuals' To-do List (see also Han (1998), Potts (2003), Roberts (2004)), where the identity of the relevant individual(s) determines whether the clause is imperative, promissive, or exhortative. In this section, we will discuss the source of directive force in jussives, building on the informal notion of a To-do List.

4.1 Overview of the semantic model

Portner (2004) proposes that the major clause types are distinguished by their semantic types. It is uncontroversial that declaratives denote propositions and that interrogatives denote a more complex type of object, such as a set of propositions or an equivalence relation among worlds. Likewise, we propose (following Hausser (1980)) that imperatives denote properties. The hypothesis that imperatives denote properties has two major advantages. The first is that it offers hope for explaining the unique syntactic properties of imperative subjects in many languages. For example, null subjects are widely possible in imperatives, even in languages like English which are not otherwise pro-drop. This paper is not the place for discussing this point in detail, since the subjects of imperatives (and other jussives) in Korean are not dramatically different from the subjects of other clause types (for example, Korean is generally pro-drop). However, one can see from the analysis in Section 3.5 how we might attempt to build such an explanation. The subjects of jussives, we have claimed, agree with the head of the Jussive Phrase; this is not something that the subjects of declaratives or interrogatives do. Perhaps the null subject is somehow licensed by agreement with the Jussive Phrase. See Zanuttini (in prep) for an extensive discussion of the properties of imperative subjects in English in terms of the overall framework presented here.

The second major advantage of the hypothesis that imperatives denote properties is more relevant to our concerns here. It allows an explanation of how root clauses are associated with a particular discourse function without appeal to mysterious entities like “force markers”. Declaratives conventionally function to assert information. If assertion is modeled as the adding of a proposition to the Common Ground, a set of propositions, this function can be read off of a declarative clause's semantic type; that is, declaratives denote propositions, and so it is natural that they should be used to update the Common Ground, a set of propositions. Similarly, if we assume that the discourse context contains a set of questions as one of its components (e.g., the Question under Discussion Stack of Ginzburg (1995a,b)), then the fact that an interrogative clause functions conventionally to update this set can be read off of the fact that it denotes a question.

We can try to make this reasoning more precise as follows. We hypothesize that the default mechanism for updating the discourse with a sentence *S* is to add its denotation to a component of the discourse context that is a set of *S*-denotations. The discourse context contains at least a set of propositions (the Common Ground) and a set of questions (the Question Set). If a declarative sentence is uttered, the fact that it denotes a proposition implies that, as a default, it is used to update the Common Ground. Since the Common Ground is a model of the information mutually assumed in a conversation, this means that, as a default, declaratives are used to assert information. The theory works similarly for interrogatives.

Portner (2004) argues that a third component of the discourse context is the To-do List function *T*, a function that assigns a set of properties to every participant in the conversation. For any participant *p*, *T*(*p*) is the set

of properties which p is committed to trying to have (see Portner (2004) for a more precise implementation of the pragmatics of the To-do List). Some properties may be in the set $T(\text{addressee})$ because the addressee has herself committed to trying to make them true of herself; others may be there by assumption (e.g., the property of eating three meals today). When someone utters a sentence whose function is to add a property to the addressee's To-do List, this amounts to a directive. Our notion of directive encompasses the full range of interpretations that imperatives may have, including orders, suggestions, invitations, and permissions. All of these involve adding a property to the To-do List; they differ in other aspects of the situation. For example: if the directive is for the benefit of the speaker and is backed up by some kind of coercive authority, we will describe it as an order (*Bring the Bentley around!*). If it is for the addressee's benefit, it will be perceived as a suggestion (*Take the #3 bus!*). If it is understood to be something the addressee wants to be on her To-do List anyway, it is likely to be described as giving permission (*Go ahead, have an apple!*).⁴¹

The discourse function of imperatives can be modeled in formal terms in the same way as that of declaratives and interrogatives. If the imperative IMP is uttered, as a default the property denoted by IMP will be added to a To-do List. It cannot be added by the default update function to either of the other components of the context, the Common Ground or Question Set, since these are not sets of properties. It can only be added to a To-do List. Since $T(\text{addressee})$ is the set of properties which the addressee is committed to trying to have, adding the denotation of IMP to $T(\text{addressee})$ can be seen as constituting the imperative's directive force. Why exactly it is added to the addressee's To-do List and not that of another individual will be discussed below.

So far we have only talked about the interpretation of imperatives. In this paper we have argued that promissives and exhortatives are like imperatives in adding a requirement to a To-do List: promissives to the speaker's To-do List and exhortatives to both the speaker's and addressee's. This brings us to three questions that can be addressed in light of the Korean pattern:

1. How do imperatives, promissives, and exhortatives come to denote properties?
2. Exactly which properties do they denote?
3. Why does an imperative denote a property that is added to the addressee's To-do List, and not that of another conversational participant? Likewise, why does a promissive add a requirement to the speaker's To-do List, and an exhortative to both the speaker's and addressee's?

Answers to all of these questions are suggested by the syntactic derivation proposed in Section 3.5. We propose that the agreement relationship between the Jussive head and the subject of the imperative corresponds to semantic binding by an abstraction operator (i.e., λ -abstraction). First we'll show how this idea answers the three questions above, and then we'll give a more rigorous statement of how the semantic interpretation of jussives proceeds.

The idea that the Jussive head is an abstraction operator directly accounts for the fact that jussives denote properties (answering question 1). The abstraction operator combines with the core TP, of type $\langle s, t \rangle$, and turns it into an expression of type $\langle e, \langle s, t \rangle \rangle$, i.e. one that denotes a property. The proposal also goes part of the way towards telling us which properties they denote (question 2): the syntactic process of agreement occurs between the Jussive head and the clause's subject, not its object or any other argument, since the subject is the DP closest to the Jussive Phrase. As a result, because the jussive head binds the DP

⁴¹It has been pointed out that permission sentences pose a problem for pragmatic theory (Lewis (1979)) if they are viewed as expanding the set of options open to the speaker. Like Brown and Levinson (1987), we assume that this is not the right way to look at permission sentences. Rather, they represent a speaker's attempt to get an addressee to do something she would like to do; that is, they are directives which are in line with the addressee's desires. For example, you may wish to eat one of the apples on my desk, but you do not take one out of politeness. I can say "Have an apple!" in an attempt to have this property added to your To-do List, so that ultimately you will get to eat the apple. See Portner (2006) for additional discussion.

it agrees with, the semantic process of abstraction results in a property the argument of which corresponds to the clause's subject. This is a correct result, since we do not find imperatives like the following, where the person upon whom a requirement is placed is represented as a non-subject:

- (59) *Mary see (you)! (intended meaning: “Be seen by Mary!”)

Now we turn to answering question 3. What we've said so far does not distinguish the jussive subtypes. As it stands now, a promissive and an imperative with the same lexical content should be synonymous. For example, both (60a) and (60b) would denote the property of going to pick up Inho from the airport:

- (60) a. Konghang-ey Inho-lul teyliy-le ka-**ma**.
 airport-to Inho-ACC pick-up-to go-PRM
 ‘I promise to go pick up Inho from the airport.’
 b. Konghang-ey Inho-lul teyliy-le ka-**la**.
 airport-to Inho-ACC pick-up-to go-IMP
 ‘Go pick-up Inho from the airport.’

If the two were synonymous, it is not clear how we could go about answering question 3: there's nothing in this meaning to tell us whether it should be added to the speaker's or the addressee's To-do List. A solution to this problem can be offered in terms of a presuppositional analysis of person features (Cooper (1979), Heim and Kratzer (1998), Schlenker (2003), Sauerland (2004), among others). This idea may be illustrated through an analogy with gender features. If gender features are presuppositional, the semantics of a simple pronoun like *he* works as follows:

- (61) For any variable assignment function g , $\llbracket he_1 \rrbracket^g$ is only defined if $g(1)$ is male.
 If it is defined, $\llbracket he_1 \rrbracket^g = g(1)$.

The system we will specify in detail below interprets the features in such a way that the presuppositions of the subject become domain restrictions on the function which results when the subject is abstracted over (as in the predicate abstraction rule of Heim and Kratzer (1998)). In the case of gender features, if we abstract over *he*, the resulting function is only defined for male arguments. Suppose that the syntactic representation contains an abstraction operator OP_1 binding a pronoun he_1 . Then, schematically we have the following:

- (62) a. $\llbracket he_1 VP \rrbracket^g$ is only defined if $g(1)$ is male.
 If it is defined, $\llbracket he_1 VP \rrbracket^g = \llbracket VP \rrbracket^g(\llbracket he_1 \rrbracket^g)$.
 b. $\llbracket OP_1[he_1 VP] \rrbracket^g = [\lambda x : x \text{ is male} . \llbracket he_1 VP \rrbracket^{g[x \rightarrow 1]}]$

In (62b), the clause “ x is male” indicates that the property is only defined if its argument is male.

Turning back to jussive clauses in Korean, in this case the relevant features are person features, not gender features. First person introduces a presupposition that the variable refers to the speaker, second person that it refers to the addressee(s), and first person plural that it refers to a group including the speaker and addressee(s). The presuppositional analysis will imply that promissives, imperatives, and exhortatives are interpreted as follows:

- (63) a. PROMISSIVE
 Nayil cemsiyim-ul sa-ma.
 tomorrow lunch-ACC buy-PRM

- ‘I promise to buy lunch tomorrow.’
- b. [$\lambda x : x = \text{speaker}(c)$. x buys lunch tomorrow]
- (64) a. IMPERATIVE
- Nayil cemsiyim-ul sa-la.
tomorrow lunch-ACC buy-IMP
- ‘Buy lunch tomorrow.’
- b. [$\lambda x : x = \text{addressee}(c)$. x buys lunch tomorrow]
- (65) a. EXHORTATIVE
- Nayil cemsiyim-ul sa-ca.
tomorrow lunch-ACC buy-PRM
- ‘Let’s buy lunch tomorrow.’
- b. [$\lambda x : \{\text{addressee}(c), \text{speaker}(c)\} \subseteq x$. x buys lunch tomorrow]

The promissive denotes a property that can only be true of the speaker, the imperative denotes a property that can only be true of the addressee, and the exhortative denotes a property that can only be true of a group containing the addressee and speaker.

This presuppositional analysis of person features lets us answer question 3 (see also Portner (2004)). Since the imperative in (64) denotes a property that can only be true of the addressee, it only makes sense for it to be added to the addressee’s To-do List. If it were added to another individual’s list, like the speaker’s, this individual could not succeed in coming to have the property. This explains why the property expressed by an imperative is added to the addressee’s To-do List and no other. Similar reasoning goes for (63) and (65). Therefore, the presuppositions introduced by the person features on the jussive subjects serve to distinguish semantically the subtypes of jussive clause. This answers question 3.

4.2 Sketch of a Formal Semantic Model

In this section, we will briefly sketch a formal model of these semantic ideas. We will illustrate the analysis with promissives only; imperatives and exhortatives work similarly. The key piece of our proposal is the link between binding and agreement. We claim that the agreement relation between the Jussive head and the subject is intimately connected with the fact that the Jussive head semantically binds the subject. Perhaps surprisingly, we don’t know of any literature which addresses the relation between agreement and binding in a general way. In order to situate the case of Jussive agreement in Korean within the broader context of agreement phenomena, we will briefly discuss three cases of agreement. To do this, we need to make a distinction between what we’ll simply call “agreement”, the co-variance of morpho-syntactic features (e.g. Moravcsik (1978)), and “configurational agreement”, the syntactic relation which has been analyzed in terms of syntactic configurations such as the spec-head relation or the head-complement relation (see discussion in Chung (1998)). A connection between binding and agreement is apparent in cases like the following:

- (66) a. Every girl thinks that John likes her.
b. Mary loves herself.

It seems that whenever binding under c-command occurs, the two elements show co-variance of features. That is, the two agree. However, these are probably not cases of configurational agreement, since the relation is not analyzable as a spec-head, head-associate or head-complement relation.

The prototypical cases of configurational agreement discussed in the literature do not involve binding. Take for example a sentence that exhibits subject-verb agreement:

(67) John is running.

Here the relation between *John* and the inflectional element which bears phi-features is a canonical example of configurational agreement, but there is no binding involved. On the one hand, the fact that the subject is not bound is made clear by the fact that a referential expression may serve as the subject. On the other, it's hard to see what semantically contentful element in Infl would be bound by the subject.

The case we are interested in, agreement between the Jussive head and the subject, is in a way a hybrid of (66) and (67). The agreement relation is configurational (in section 3.5, we have suggested it can be viewed as a relation between probe and goal), but we have also proposed that the Jussive head binds the subject. In what follows, we will examine how this binding relation works. At this point, what we'd like to emphasize is that we are proposing a new combination of properties for a type of agreement: configurational agreement in combination with binding.

We can imagine various ways to create a link between binding and agreement. One kind of syntactic solution would define the agreement relation in such a way that, whenever features are shared between a variable binder and a variable, they must have the same index. This idea is merely technical in the sense that it connects binding and agreement without explaining why there should be such a connection. We would like to offer another solution. We propose that variables are nothing but phi-features (cf. Pesetsky and Torrego (to appear)). More precisely, the particular occurrence, or token, of a bundle of one or more phi-features is the syntactic object that is assigned a value by the variable assignment function. When example (68) is interpreted with respect to a variable assignment function g , g takes as its argument the feature bundle $[[\text{gender:masc}], [\text{person:3}]]$. The function g assigns to this bundle some particular male individual salient in the context. The interpretation rule for pronouns will then imply that *he* refers to this individual.

(68) $\text{He}_{[\text{gender:masc}], [\text{person:3}]}$ left

Of course two bundles of phi features with the same feature-value pairs (e.g., $[[\text{gender: masculine}], [\text{person: 3}]]$) can occur on semantically distinct elements in a sentence. In these cases, each element may receive a different referent. For example, in (69) *he* and *him* have different referents even though both have feature bundles with masculine gender and third person:

(69) He saw him.

Though *he* and *him* here have the same feature-value pairs in terms of types, they are distinct occurrences of this type. The variable assignment function works with occurrences of feature bundles, and so different referents can be assigned to the two pronouns. Because of the need to distinguish occurrences of feature bundles that have the same feature-value pairs, we'd like to introduce some additional notation. We distinguish distinct occurrences of a feature by placing an index after the feature. (These indices are not really part of the syntactic representation, but are rather meta-theoretical devices that let us point to particular occurrences of features in writing about them.) In (70), the indices 4, 5, 6, and 7 mark distinct occurrences of features:

(70) $\text{He}_{[\text{gender:masc}][4], [\text{person:3}][5]}$ saw $\text{him}_{[\text{gender:masc}][6], [\text{person:3}][7]}$.

Because the occurrences of the features $[\text{gender:masc}]$ and $[\text{person:3}]$ on *he* are not the same as those on *him*, as indicated by the fact that they have different indices, the two variables *he* and *him* will be treated as distinct by the variable assignment function. That is $g([\text{gender:masc}][4], [\text{person:3}][5]) \neq g([\text{gender:masc}][6],$

[person:3][7]). Maybe $g([\text{gender:masc}][4], [\text{person:3}][5]) = \text{David}$ and $g([\text{gender:masc}][6], [\text{person:3}][7]) = \text{Bob}$. For convenience, we can indicate a feature bundle by the set of indices which we use to identify its features. Thus, we can write $g(\{4,5\})$ to pick out David and $g(\{6,7\})$ to pick out Bob.

We have analyzed the configurational agreement between the Jussive head and subject as a relation instantiated between a probe and a goal, on the model of Chomsky's (2000) Agree relation. In that system, agreement involves realizing the same token of a bundle of features in different positions. Thus, in the case of (67), it is assumed that T enters the derivation with phi-features that lack values, while *John* enters the derivation with fully specified phi-features. Once the Agree relation is established, the phi-features of *John* are copied onto T. It must be emphasized that when copying occurs, the same occurrences of these feature-value pairs are multiply located within the phrase marker; we would therefore indicate this in our syntactic description by using the same indices in both position. This representation is used by the PF component, which will select the appropriate phonological forms. In the derivation of LF, the phi-features of T are deleted because they are not interpretable; in other words, the features will receive a semantic interpretation only in their original position, on *John*.

In promissives, we also have the Agree relation between a functional head and the subject. After Jussive⁰ and the pro subject agree, the representation is as in (71):

(71) Jussive⁰_{[person: 1][7]} [TP pro_{[person: 1][7]} . . .]

Notice that we have the same index 7 marking the [person: 1] feature of the Jussive head and the pro. Because the feature is interpretable in both positions, no deletion occurs. On the pro subject, it is interpreted as a variable; on the Jussive head, it serves as the index of the abstraction operator. Thus the feature is interpreted just as indices are in Heim and Kratzer (1998).

Before we go on to present the details of semantic rules that can interpret the structures we're talking about, let us summarize our claims:

1. The Jussive head is a variable binder.
2. The Jussive head binds the subject because it agrees with it.
3. The semantics of phi-features is presuppositional.

In what follows we'll implement these ideas in more detail. The precise way in which we do this is not central to our claims, and is just meant to show how such a system could work.

We begin with the interpretation rule for variables. This rule can look rather ordinary since we adopted the convention that a set of numerical indices represents the occurrences of phi-features. For example, the meaning of the pro in (71) is given by the variable assignment function g . Because pro here has only a single phi feature, [person: 1][7], we write $g(7)$ to indicate the value that g assigns to pro. In the general case we have (72):

(72) For any variable v consisting of phi features $F_1[i_1], \dots, F_n[i_n]$,
 $\llbracket v \rrbracket^{g,c} = g(\{F_1, \dots, F_n\})$
 (or for convenience we write: $\llbracket v \rrbracket^{g,c} = g(\{i_1, \dots, i_n\})$.)

For example:

(73) $\llbracket He_{[\text{gender:masc}][4],[\text{person:3}][5]} \rrbracket^{g,c} = g(\{4,5\})$.

- a. $\llbracket \text{Jussive}^0_{[\text{person: 1}][7]} [\text{TP } \text{pro}_{[\text{person: 1}][7]} \text{ cemsiy-m-ul sa}] \rrbracket^{g,c} =$
- b. $[\lambda x : \llbracket \text{TP} \rrbracket^{w,g[\{7\} \rightarrow x],c} \text{ is defined} . \llbracket \text{TP} \rrbracket^{w,g[\{7\} \rightarrow x],c}] =$
- c. $[\lambda x : \llbracket \text{pro}_{[\text{person: 1}][7]} \rrbracket^{g[\{7\} \rightarrow x],c} \text{ is defined} .$
 $\llbracket \text{cemsiy-m-ul sa} \rrbracket^{g[\{7\} \rightarrow x],c} (\llbracket \text{pro}_{[\text{person: 1}][7]} \rrbracket^{g[\{7\} \rightarrow x],c}) =$
- d. $[\lambda x : g[\{7\} \rightarrow x](\{7\}) = \text{speaker}(c) . [\lambda y \lambda w . y \text{ buys lunch in } w](x)] =$
- e. $[\lambda x : x = \text{speaker}(c) . [\lambda w . x \text{ buys lunch in } w]].$

In step (c), $\llbracket \text{pro}_{[\text{person: 1}][7]} \rrbracket^{g[\{7\} \rightarrow x],c}$ is only defined if $g(\{7\}) = \text{speaker}(c)$. Unless $\llbracket \text{pro}_{[\text{person: 1}][7]} \rrbracket^{g[\{7\} \rightarrow x],c}$ is defined, the entire TP's meaning is not defined. Thus, the presupposition of pro becomes a condition on when the TP as a whole has a meaning, and in step (d) it becomes a domain restriction on the property denoted by the promissive. In this way, the system derives our target interpretation for promissives, namely (e). The other jussive subtypes work similarly, the only difference being in the presupposition introduced by their person features.

4.3 Complexities with overt subjects

A number of complexities arise with jussive clauses containing overt subjects. There are three types of cases. In (79a), we see a noun phrase which is usually a third person referential expression used to refer to the speaker. In (79b), we have an embedded subject; and in (79c), we find a quantified subject:

- (79) a. Emma-ka masiyssnun kansiyk cwu-ma.
 mommy-NOM delicious snack give-PRM
 'Mommy promises to give you a delicious snack.'
- b. Sensayngnim-kkeyse haksayngtul-ekey [tangsin-i ttekpokki-lul sa-ma]-ko malssum
 Teacher-NOM students-DAT [self-FOC rice cake-ACC buy-PRM]-COMP say
 ha-si-ess-ta
 do-HON-PST-DE C
 'The teacher said to the students that he promises to buy rice cake.'
- c. Motwu (ta) na-lul towa cwu-e-la.
 Everybody (all) me-ACC help give-SSP-IMP
 'Everybody help me!'

We will not be able to give a complete analysis of either (79a) or (79b), because as we will see, doing so would take us beyond the scope of this paper; we will make some preliminary comments on these two cases, however. We will not discuss the case of a quantified subject at all because as noted in footnote 37, we are not certain whether the subject is truly quantified in Korean (it could refer to a group in combination with a distributive predicate).

Let us begin with the case of (79a). It is possible to use a restricted range of nouns to refer to the speaker in a promissive or the addressee in an imperative. In the promissive case, we find the Korean equivalents of nouns like "mommy", "daddy", "older brother", and other kinship terms for individuals older than the addressee, and "teacher".⁴³ These forms are typically used in speaking to small children, similarly to English. They

⁴³Names may be used in promissives if they have an honorific suffix (as in *Inho-nim* 'Inho-HON'); in this case, the addressee need not be a small child, but the speaker is given an elevated status. A different range of nouns is possible in imperatives, including "younger brother" and names.

always describe the addressee’s relationship to the individual; for example, “mommy” always means ‘your mommy’. Note that when used in declaratives and interrogatives, they do not necessarily refer to the speaker; for example a teacher could say (80) to a small child:

(80) Mommy will pick you up soon.

However, when they occur as the subject of a promissive, they necessarily refer to the speaker. Because of this fact, we analyze them as involving person features when they occur in promissives and other jussives. For example, in a promissive “mommy” receives first person feature from the Jussive head under agreement, and this results in the following semantics:

(81) $[[\text{mommy}_{[\text{person}: 1][7]}]]^{\text{g},\text{c}}$ is only defined if $\text{g}(\{7\})=\text{speaker}(c)$.
When it is defined, $[[\text{mommy}_{[\text{person}: 1][7]}]]^{\text{g},\text{c}} = \text{mother-of}(\text{addressee}(c))$.

(The representation might be made more elegant by treating “mommy” as a feature, so that the variable has a representation like $[[\text{mommy}: +], [\text{person}: 1]]$. We leave aside such niceties here.) The first person feature on “mommy” is a variable, and so it may be bound by the Jussive head. the following is a preliminary representation of (79a), using the English gloss instead of the original Korean for convenience:⁴⁴

(82) $[[\text{Jussive}^0_{[\text{person}: 1][7]} [\text{TP } \text{mommy}_{[\text{person}: 1][7]} \text{ give you a delicious snack}]]]^{\text{g},\text{c}} =$
 $[\lambda x : x=\text{speaker}(c) . [\lambda w . x=\text{mother-of}(\text{addressee}(c)) \text{ and } x \text{ gives addressee}(c) \text{ a delicious snack in } w]]$

If this sketch is on the right track, forms like “mommy” serving as the subject of a jussive are not so different from pronominal subjects. However, there is reason to be cautious because the phenomenon of common nouns being used with a name-like or pronominal-like meaning is somewhat widespread but not well understood. In particular, we need to understand the syntax of this usage (e.g., why bare singulars are possible in English), why only a restricted range of nouns is possible, and how they come to be related to the addressee (that is why “mommy” means “your mommy”).

Next we will examine the properties of the subjects of embedded jussives. We’ll begin by looking at the case of embedded null subjects, and then tentatively extend our ideas to the type of overt embedded subject in (79b). An example of a null embedded subject of a promissive is (83a), and a null embedded subject of an imperative is given in (83b):

(83) a. Ku salam-i Inho-ekey Sooni-lul towacwu-**ma**-ko malhayss-ta.
That person-NOM Inho-DAT Sooni-ACC help-PRM-COMP said-DEC
‘That person said to Inho that he promises to help Sooni.’

⁴⁴Though we treat “mommy” as pronominal in nature, we do not expect it to be bindable in examples like the following, in contrast with *I*:

- (i) Only mommy thinks mommy will succeed. (no bound reading)
- (ii) Only I think I will succeed. (bound reading ok)

Example (ii) can get a bound reading because the first person feature on the c-commanded *I* may be deleted under binding (Kratzer (1998); this type of data is originally due to Irene Heim), and thus the sentence may mean “I think I will succeed, and for no other *x*, *x* thinks *x* will succeed”. In contrast in (i), nothing triggers the deletion of the lexical content indicating that the referent of “mommy” is the addressee’s mother. Thus, it has to mean “Mommy thinks mommy will succeed, and for no other *x*, *x* thinks mother(addressee(*c*)) will succeed”. This represents the non-bound reading “Mommy thinks she will succeed, and nobody else thinks mommy will succeed.”

- b. Ku salam-i Inho-ekey Sooni-lul towacwu-**la**-ko malhayss-ta.
 That person-NOM Inho-DAT Sooni-ACC help-IMP-COMP said-DEC
 ‘That person told Inho to help Sooni.’

The null subject of “help” in (83a) must be interpreted as bound by the matrix subject. When we have an embedded imperative rather than a promissive, as in (83b), it must be bound by the matrix dative, “Inho”. We interpret this pattern of binding as indicating that the embedded subject is a shiftable indexical. If it were simply a null reflexive, we would have no explanation for the fact that it may be bound by the matrix subject in (83a) but not in (83b), nor for the fact that it may be bound by the matrix dative in (83b) but not in (83a). Instead, it seems that the embedded subject in (83a) has first person features of some sort, as in other promissives, and that the matrix subject of “say” counts as the speaker in the relevant sense. Likewise, the embedded subject in (83b) has second person features, and the matrix dative counts as the addressee.

Ideally we would like to assign the embedded promissive in (83a) the same structural relationship between the Jussive head and the subject as a root promissive. This means that the Jussive head will agree in first person features with the subject and bind it. The fact that the subject has first person features leads to a presupposition that its value is the speaker. Thus far, we’ve given the relevant presupposition as (74). (74) says that [person: 1] refers to the speaker in the context, speaker(c). The data with embedded subjects we are looking at now shows that this is not quite right. The notion of “speaker” relevant to promissives is shiftable: it refers to the speaker of the context in root clauses, but to the speaker of a reported speech act in embedded clauses. (Similarly, the notion of “addressee” relevant to imperatives is shiftable, referring to the addressee of the reported speech act in embedded clauses.)

There has been much discussion in the literature of how to best represent logophoric and shiftable indexicals (e.g. Schlenker 2003, Anand and Nevins (2004)). For our purposes the details are not terribly important. What’s crucial is that we can distinguish a version of the first person feature which is not shiftable (used in the interpretation of “I” in both Korean and English) from a version which is. This shiftable first person feature, which we represent as [shiftable: 1], is associated with the Jussive head in promissives. Thus we have the following derivation with agreement:

- (84) Jussive⁰_{[shiftable: 1][7]} pro help Sooni! →
 Jussive⁰_{[shiftable: 1][7]} PRO_{[shiftable: 1][7]} help Sooni!

In a root clause, [shiftable: 1] carries a presupposition that the variable refers to the speaker of the actual context of utterance, just like [person: 1]. Thus, if (84) is used in a root clause, it is the speaker who promises to help Sooni. When it is embedded under a verb like “say”, however, [shiftable: 1] presupposes that the variable refers to the speaker of the reported context, typically the matrix subject. Thus in (83a), it is the referent of “that person”, the matrix subject, who promises to help Sooni.

This approach lets us understand why an overt first person subject is not in general possible in embedded promissives. The structure would be as follows:

- (85) Jussive⁰_{[shiftable: 1][7]} I_{[person:1][8]} help Sooni! →
 Jussive⁰_{[shiftable: 1][7]} I_{[person:1][8][shiftable: 1][7]} help Sooni!

The lexical item *I* represents the feature [person: 1], while the jussive head introduces the feature [shiftable: 1]. Thus, after agreement we have the feature combination [person: 1][shiftable: 1]. In a root clause, this combination of features is consistent, because the meaning of [shiftable: 1] corresponds to that of [person: 1]. They both create a presupposition that the variable refers to the speaker of the utterance context. However, in embedded clause, they are not in general consistent. While [person: 1] says that the variable

should refer to the speaker, [shiftable: 1] says that it should refer to the same person as the matrix subject. Since these are not the same, in (86a) for example, the embedded subject cannot refer to anything.

- (86) a. *Ku salam-i Inho-ekey Nay-ka Sooni-lul towacwu-**ma**-ko malhayss-ta.
That person-NOM Inho-DAT I-NOM Sooni-ACC help-PRM-COMP said-DEC
'He said to Inho that I promise to help Sooni.'
- b. Nay-ka Inho-ekey Nay-ka Sooni-lul towacwu-**ma**-ko malhayss-ta.
I-NOM Inho-DAT I-NOM Sooni-ACC help-PROM-COMP said-DEC
'I said to Inho that I promise to help Sooni.'

The combination of features [shiftable: 1] and [person: 1] is only consistent when the matrix subject happens to be *I*. As we see in (86b) the embedded first person subject is indeed acceptable in this case. The contrast in (86) is strong evidence in favor of our use of two person features, [person] and [shiftable].

Finally, we turn to embedded subjects of the type in (79b), repeated here:

- (87) Sensayngnim-kkeyse haksayngtul-ekey [tangsin-i ttepokki-lul sa-ma-ko] malssum
Teacher-NOM students-DAT [self-FOC rice cake-ACC buy-PRM-COMP] say
ha-si-ess-ta
do-HON-PST-DEC
'The teacher said to the students that *he* promises to buy rice cake.'

In this case we have an overt subject. It is not clear whether we should view this form, *tangsin* (honorific variant of *caki* 'self'), as a logophor or a reflexive, or some combination of the two. We do not try to address this issue here (cf. Cho (1995), among others), and so can only discuss a few aspects of this structure which are relevant to our main claims. Outside of this context, *tangsin* can be used to refer to second and third person, suggesting that it lacks lexical person features altogether.⁴⁵ This means that it is the same as *pro* in terms of phi-features, and thus the derivation of the embedded clause in (87) is similar to that given in (84). Because *tangsin* is the overt counterpart of null *pro* in terms of its phi-features, we expect that using it instead of the null element will give rise to a contrastive or focalized interpretation; this is exactly what we find.⁴⁶

To summarize the main points of section 4, a natural semantics can be offered for a syntactic representation which involves agreement between the jussive head and the subject of a jussive clause. This semantic analysis allows us to explain why jussives have directive force (they denote properties of a certain kind) and how promissives, imperatives, and exhortatives come to have different sub-varieties of directive force (it's due to the presuppositions of the person features involved in agreement). There are a number of complexities with overt and embedded subjects, and further work will be needed to make sure that they can all be explained in terms of the present framework. In this paper, we hope to have made enough detailed suggestions that it is now plausible that our syntactic analysis in terms of person agreement is correct.

5 Conclusion

Because Korean is unusual in having a distinct morphosyntactic form for sentences used to make promises, it provides an interesting case study as we attempt to understand the relationship among syntax, semantics,

⁴⁵It can't be used with first person antecedents because it is an honorified form, and one cannot honorify oneself.

⁴⁶Madigan (2005, 2006) claims that *caki* 'self', the plain form of *tangsin*, in exhortatives in Korean is an overt counterpart of PRO. For details of his arguments, we refer the readers to Madigan (2005, 2006).

and conversational use. We have shown that both syntactic and semantic considerations argue for grouping promissives with the more common sentence types of imperatives and exhortatives to constitute the clause type of jussives. Intuitively, they are all directives, adding a requirement to some individual's To-do List, but they differ in which individual's To-do List is to be updated. Promissives are directed at the speaker, imperatives at the addressee(s), and exhortatives at a group containing both. This intuitive characterization is rooted in grammar: promissives, imperatives, and exhortatives are marked by different sentence-final particles, and the particular individual whose To-do List is to be updated is the referent of the clause's subject (at least if we set aside quantified subjects, as we have done in this paper). Our aim has been to provide a formal syntactic analysis which accounts for these grammatical phenomena while at the same time helping us to understand the semantics and pragmatics of jussives. Because these phenomena are rare – if not unique – to the extent that we are successful it will make an important contribution to our overall understanding of natural language.

Our key syntactic claim is that there is a relationship of agreement between the functional head which hosts the sentence final particle in jussive clauses and the clause's subject. This allows us to account for the intuition that the sentence final particle contains information about the referent of the subject, while allowing for the fact that it can also co-occur with an overt subject. Though the idea that Korean has subject agreement may be surprising, agreement is the only theoretical mechanism available in syntactic theory that allows us to capture the relationship between particle and subject. In this way, the structure of the theory has given us a particular kind of lens (hopefully a revealing one) for looking at the empirical data. At the same time, the details of the agreement relation here pose a challenge for our existing understanding of agreement. In particular, we have a case of subject agreement that is not between subject and an inflectional category, but rather with a higher functional head. Moreover, in this instance the agreeing phi-feature is interpretable in both positions, serving as the index of an abstraction operator in the higher position and as the index of a variable in the lower one. This combination of properties has been observed before (Pesetsky and Torrego (to appear)), but not often, and it has not been incorporated into standard thinking about agreement. Therefore, from a theoretical perspective, our paper also makes a contribution by giving a detailed study of a new variety of agreement.

Our paper is relevant to two other general issues as well. One is the way in which we should classify languages in terms of their agreement properties. It is typically assumed that Korean and other similar languages like Japanese lack overt agreement in phi-features, but if our analysis is correct, one needs to think carefully about the role of sentence final particles before accepting such a claim. At least one should not assume that a language lacking subject-verb agreement must lack phi-feature agreement in general. The second general issue concerns the relevance of our analysis to jussives (in particular, imperatives) in other languages. Should we claim that imperatives cross-linguistically involve agreement between a functional head and the subject? We are not certain by any means, but it is worth thinking about some of the common properties of imperatives in light of this kind of analysis. Imperative subjects are frequently special; for example, they are constrained to refer to (or quantify over) the addressee(s) and they may be expressed by forms different from other subjects (e.g. as null subjects in non-pro-drop languages). It doesn't seem crazy to us to think about these properties in terms of the subject agreeing with, and being bound by, an element with second person features. We leave this issue for future study.

References

Ahn, Hee-Don, and Hang-Jin Yoon. 1989. Functional categories in Korean. In *Harvard studies in Korean linguistics*, ed. Susumo Kuno et al., volume III, 79–88. Hanshin Publishing Co.

- Anand, P., and A. Nevins. 2004. Shifty operators in changing contexts. In *Proceedings of Semantics and Linguistic Theory 14*, ed. K. Watanabe and R. B. Young. Cornell University Linguistics Department: CLC Publications.
- Baker, Mark. to appear. *The syntax of agreement and concord*. Cambridge University Press.
- Bernstein, Judy. to appear. English *th-* forms. In *Essays on nominal determination*, ed. Alex Klinge and Henrik H. Muller. John Benjamins.
- Brandner, E. 2004. Head-movement in minimalism, and V2 as Force-marking. In *Interface explorations 9: Syntax and semantics of the left periphery*, ed. H. Lohnstein and S. Trissler. Mouton de Gruyter.
- Brown, Penelope, and Stephen C. Levinson. 1987. *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Cho, Sook Whan. 1995. ‘Caki’ (‘self’) as a Jekyll and Hyde. In *Harvard studies in Korean linguistics*, ed. Susumo Kuno et al., volume VIII, 252–265. Seoul: Hanshin Publishing Co.
- Choe, Hyen-Sook. 1988. Restructuring parameters and complex predicates: A transformational approach. Doctoral Dissertation, MIT, Cambridge, Mass.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. R. Martin, D. Michaels, and J. Uriagereka, 89–155. Cambridge/London: The MIT Press.
- Chung, Sandra. 1998. *The design of agreement: Evidence from Chamorro*. Chicago: University of Chicago Press.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads: A cross-linguistic perspective*. New York and Oxford: Oxford University Press.
- Cooper, Robin. 1979. The interpretation of pronouns. In *Selections from the third Groningen Round Table*, ed. F. Heny and H. Schnelle, volume 10 of *Syntax and Semantics*, 61–92. New York: Academic Press.
- Davies, Eirlys. 1986. *The English imperative*. Croom Helm linguistics series. London: Croom Helm.
- Ginzburg, Jonathan. 1995a. Resolving questions, part I. *Linguistics and Philosophy* 18:459–527.
- Ginzburg, Jonathan. 1995b. Resolving questions, part II. *Linguistics and Philosophy* 18:567–609.
- Haegeman, Liliane. 2006. Argument fronting in English, Romance CLLD, and the Left Periphery. In *Crosslinguistic research in syntax and semantics: Negation, tense and clausal architecture*, ed. R. Zanuttini, H. Campos, E. Herburger, and P. Portner. Washington, DC: Georgetown University Press.
- Han, Chung-Hye. 1998. The syntax and semantics of imperatives and related constructions. Doctoral Dissertation, University of Pennsylvania.
- Han, Chung Hye, and Chungmin Lee. 2002. On negative imperatives in Korean. In *Proceedings of the 16th Pacific Asia Conference on Language, Information and Computation*. The Korean Society for Language and Information.
- Hausser, R. 1980. Surface compositionality and the semantics of mood. In *Speech act theory and pragmatics*, ed. F. Kiefer and J. Searle, 71–95. Dordrecht: Reidel.

- Heim, Irene, and Angelika Kratzer. 1998. *Semantics in generative grammar*. Blackwell.
- Hong, Ki-Mun. 1947. *Chosen mwunpep yenkwu (Korean grammar research)*. Seoul: Seoul Press.
- Jensen, Britta. 2003a. Imperatives in English and Scandinavian. Doctoral Dissertation, University of Oxford.
- Jensen, Britta. 2003b. Syntax and semantics of imperative subjects. *Nordlyd* 31:150–164. URL <http://www.ub.uit.no/munin/nordlyd/index.php>.
- Kayne, Richard S. 1994. *The antisymmetry of syntax*, volume 25 of *Linguistic Inquiry Monographs*. Cambridge, Mass.: MIT Press.
- Kim-Renaud, Y.-K., and M. Pak. 2005. Agreement in Korean syntax: A case of sentence final particles. In *Harvard International Symposium on Korean Linguistics XI*, ed. Susumo Kuno et al., 548–561. Seoul: Hanshin Publishing Co.
- Ko, Young-Keun. 1974. Hyentay kwuke-uy chongkyel emi-ey tayhan kwucocek yenkwu (A structural research of modern Korean sentence end particles). *Ehak Yenkwu (Language Research)* 10.
- Kratzer, Angelika. 1998. More structural analogies between pronouns and tenses. In *Proceedings of SALT 8*, ed. Devon Strolovitch and Aaron Lawson, 92–110. Ithaca, NY: CLC Publication.
- Kuh, Hakan. 1987. Plural copying in Korean. In *Harvard studies in Korean linguistics*, ed. S. Kuno et al., volume II, 239–250. Seoul: Hanshin Publishing Co.
- Kwon, Jae-II. 1992. *Hankwuke tongsalon (korean verb theory)*. Seoul: Minum Press.
- Lewis, David K. 1979. A problem about permission. In *Essays in honour of Jaakko Hintikka*, ed. E. Saarinen, R. Hilpinen, I. Niiniluoto, and M. Provence Hintikka, 163–175. Dordrecht: Reidel.
- Madigan, Sean. 2005. Exhaustive and partial control in Korean: Controlled *caki* as an overt form of pro. In *Harvard studies in Korean linguistics*, ed. Susumo Kuno et al., volume XI, 642–655. Seoul: Hanshin Publishing Co.
- Madigan, Sean. 2006. Split control into exhortative complements in Korean. Paper presented at the 2006 LSA summer meeting.
- Marantz, A. 1997. No escape from syntax: Don't try a morphological analysis in the privacy of your own lexicon. Manuscript, MIT.
- Martin, Samuel. E. 1992. *A reference grammar of Korean: A complete guide to the grammar and history of the Korean language*. Rutland, Vermont and Tokyo, Japan: Charles E. Tuttle Company.
- Miyagawa, S. 2006. Person agreement at C. Manuscript, MIT.
- Moravcsik, Edith A. 1978. Agreement. In *Universals of human language*, ed. Joseph H. Greenberg, volume IV, 331–374. Stanford: Stanford University Press.
- Nam, Ki-Sim. 2001. *Hyentay kwuke tongsalon (modern Korean verb theory)*. Seoul: Tayhak Publishing Company.
- Pak, Miok. 2004. Sentence types in Korean. Georgetown University, MS.
- Pak, Miok. in prep. Investigating the role of sentence end particles in Korean. Manuscript, Georgetown University.

- Pak, Miok, Paul Portner, and Raffaella Zanuttini. 2004. Deriving clause types: Focusing on Korean. In *Proceedings of Linguistic Society of Korea 2004*, Yonsei Institute of Language and Information Studies, 359–368. Seoul: Hanshin Publishing Co.
- Palmer, F.R. 1986. *Mood and modality*. Cambridge: Cambridge University Press.
- Park, Jong Un. 2006. Syntactic and semantic licensing conditions on the plural marker *-tul* in Korean. Manuscript, Georgetown University.
- Park, Myung-Kwan, and Keun-Won Sohn. 1993. A minimalist approach to plural marker licensing in Korean. In *MIT working papers in linguistics (MITWPL)*, volume 20, 193–208. Cambridge, MA: MIT Press.
- Pesetsky, David, and Esther Torrego. to appear. The syntax of valuation and the interpretability of features. In *Clever and right: A festschrift for Joe Emonds*, ed. S. Karimi, V. Samiian, and W. Wilkins. Mouton. URL http://web.mit.edu/linguistics/www/pesetsky/Pesetsky_Torrego_Agree_paper.pdf.
- Platzack, Christer, and Inger Rosengren. 1994. On the subject of imperatives. A minimalist account of the imperative pronoun and negated imperatives. *Sprache und Pragmatik* 34:26–67.
- Platzack, Christer, and Inger Rosengren. 1998. On the subject of imperatives: A minimalist account of the imperative clause. *The Journal of Comparative Germanic Linguistics* 1:177–224.
- Portner, Paul. 2004. The semantics of imperatives within a theory of clause types. In *The Proceedings of SALT 14*, ed. Kazuha Watanabe and Robert B. Young. Ithaca, NY: CLC Publications. URL <http://semanticsarchive.net>.
- Portner, Paul. 2006. Imperatives and modals. URL <http://semanticsarchive.net>, manuscript, Georgetown University.
- Portner, Paul, and Raffaella Zanuttini. 2000. The force of negation in Wh exclamatives and interrogatives. In *Studies in negation and polarity: Syntactic and semantic perspectives*, ed. L. Horn and Y. Kato, 201–39. New York and Oxford: Oxford University Press.
- Potsdam, Eric. 1996. Syntactic issues in the English imperative. Doctoral Dissertation, University of California, Santa Cruz.
- Potts, C. 2003. Keeping world and will apart: A discourse-based semantics for imperatives. Talk delivered at the NYU Syntax/Semantics Lecture Series, October 17, 2003. Handout available at <http://www-unix.oit.umass.edu/>
- Roberts, Craige. 2004. Context in dynamic interpretation. In *The handbook of pragmatics*, Blackwell Handbooks in Linguistics 16, 197–220. Oxford & Malden, MA: Blackwell Publishing.
- Sadock, Jerrold M., and Arnold Zwicky. 1985. Speech act distinctions in syntax. In *Language typology and syntactic description*, ed. Timothy Shopen, 155–196. Cambridge: Cambridge University Press.
- Sauerland, Uli. 2004. A comprehensive semantics for agreement. Paper presented at the Phi-Workshop, McGill University, August 2004.
- Sauerland, Uli. 2005. On the semantic markedness of phi-features. Manuscript, ZAS.
- Schlenker, Philippe. 2003. A plea for monsters. *Linguistics and Philosophy* 26:29–120.

- Sells, Peter. 1995. The category and case marking properties of Verbal Nouns in Korean. In *Harvard studies in Korean linguistics*, ed. Susumo Kuno et al., VI, 370–386. Seoul: Hanshin Publishing Co.
- Sohn, Ho-Min. 1994. *Korean*. Descriptive Grammars. London and New York: Routledge.
- Sohn, Ho-Min. 1999. *The Korean language*. Cambridge Language Surveys. Cambridge and New York: Cambridge University Press.
- Speas, Margaret. 2004. Evidentiality, logophoricity and the syntactic representation of pragmatic features. *Lingua* 114:255–276.
- Suh, C.-S. 1996. *Korean grammar*. Seoul: Hanyang University Press.
- Tenny, C. 2000. Core events and adverbial modification. In *Events as grammatical objects*, ed. C. Tenny and J. Pustejovsky, 285–334. CSLI Publications.
- Whitman, John. 1989. Topic, modality, and IP structure. In *Harvard studies in Korean linguistics*, volume III, 341–356. Seoul: Hanshin Publishing Co.
- Yim, Changguk. 2003. Subject agreement in Korean: Move F, attract F, or Agree? In *TLS 5 Proceedings*, ed. W. E. Griffin, 147–156. Austin, Texas: Texas Linguistics Forum.
- Zanuttini, Raffaella. in prep. Addressing the addressee in imperatives. Manuscript, Georgetown University.
- Zanuttini, Raffaella, and Paul Portner. 2003. Exclamative clauses: At the syntax-semantics interface. *Language* 79:39–81.