THE MORPHOSYNTAX OF CLAUSE TYPING: SINGLE, DOUBLE, PERIPHERASTIC, AND MULTIFUNCTIONAL COMPLEMENTIZERS IN KOREAN

by

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A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of DOCTOR OF PHILOSOPHY in the Department of Linguistics

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Supervisory Committee

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Abstract

In this dissertation I provide an account of the distribution of Korean clause-typing markers from the perspective of a formal typological model, the Universal Spine Hypothesis (Wiltschko, 2014, 2017). Although Korean clause-typing markers have both syntactic properties (expressing force/mood, Chomsky 2000, 2001) and pragmatic properties (expressing speech styles, Sohn 1999), my investigation focuses on the morphosyntactic properties of clause-typing markers in single-layered and double-layered CPs. I detail their ability to transmit clause type, their compatibility with TAM elements, and their incompatibility with subordinators and speech act elements. My central claim is that, through an association with the linking spine (i.e., CP in generative grammar), clause-typing markers, including ta and e, construct Korean language-specific categories. Clause-typing markers interact with a syntactic domain encoding the common ground of speech participants, the grounding spine.

My dissertation has two major findings. First, the morphophonological realization of C is obligatory in both finite and non-finite clauses. I therefore propose a Clause Complementation Parameter (CCP)—all clauses must have a complementizer, and a C must have a correspondent PF realization. This accounts for the expletive-like dummy complementizers e and ci which can fill the head of the three basic clause types. Second, functional elements selecting clause-typing markers support the existence of syntactic projections above the traditional CP. For instance, iterative ko and hearsay y in reiterated and hearsay utterances, respectively, must be associated with the syntactic domain above CP. I argue that along with polite yo and intonation, they construct Korean language-specific categories through their association with the three universal categorizers.
k: linking, k: grounding, and k: responding. This is formulated as \([\text{RespP } \text{GroundP } \text{LinkingP} \text{AnchoringP } \ldots -\text{SSPAST}] -\text{taDECL} \text{ -yHEARSAY} \text{ (-yPOLITE)} \uparrow]\).

Investigations of the distributions of periphrastic irrealis clause-typing markers and multifunctional clause-typing markers contribute to our understanding of the multifaceted nature of category C: the periphrastic irrealis markers show that C with T can restrict the person feature on the subject. The interpretations of multifunctional markers in different morphosyntactic contexts show that their properties emerge in two ways: through interaction with local elements in the domain or by virtue of their association with hierarchically distinct domains.

Assuming the Universal Spine Hypothesis, I have accounted for the morphosyntactic properties of Korean clause-typing markers by proposing language-specific categories considering the functional layers. This dissertation offers a more complete account of Korean grammar but also will provide an explanation for cross-linguistic differences in encoding of clause-typing—Units of Languages change how C appears.
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A list of conventions used in the text:

∅ null or empty functional marker
+ association (within the Universal Spine Hypothesis)
* ill-formedness; ungrammaticality
↑ rising pitch contour
↓ falling pitch contour
§ section
[ ] phonetic form; surface form
(*-ta) This means that if -ta is present, then the clause is ungrammatical
*(-ta) This means that if -ta is absent, then the clause is ungrammatical. Or, -ta is not optional
(-yo) This means that the absence of -yo does not affect the grammaticality of the clause
# pragmatically ungrammatical/inappropriate

To a large extent, the transcriptions, glosses and translations used in the glosses are those of the original. Exceptions to this generalization will be noted.
List of Abbreviations

List of abbreviations (including abbreviations used in other authors’ work)
1 first person
2 second person
3 third person
ACC accusative
AH addressee honorific
ANT anterior
AGR agreement
A-oriented addressee oriented
AUX auxiliary verb
BL blunt speech style
C complementizer
C\(^0\) the head of complementation phrase
CCP Clause Complementation Parameter
CL classifier
COMP complementizer
CP complement phrase
CRT cognitive realization marker
c-selection category selection
CSL Chinese as a second language
CTH Clause Typing Hypothesis
DEC declarative mood marker
DECL declarative
DEF deferential speech style
DP determiner phrase
EPIS epistemic
EVAL evaluative
EVID evidential
EXH exhortative
F feminine
F\(^0\) the head of function phrase
FAM familiar speech style
FI falling intonation
FinP finite phrase
FocP focus phrase
FP function phrase
FUT future tense
HEARSAY hearsay marker
HOR honorific
IMP imperative
IND indicative mood
INF infinitive
INT interrogative
IntP interrogative phrase
INTI intimate speech style
INTER interrogative
IP inflectional phrase
IRR irrealis
iType interpretable clause type
Kos Konversionally Oriented Semantics
LMC late middle (Mandarin) Chinese
LMK late middle Korean
LOC locative
log.ad logophoricity (coreference with addressee)
log.sp logophoricity (coreference with speaker)
m masculine
ModP mood phrase
MSK Modern Standard Korean
NOM nominative
Op operator
O-oriented other oriented
PASS passive
PERF perfect aspect
PF Phonetic Form
PFCT perfect aspect
POL polite marker
PL plural
PNE prenominal marker
PRES present tense
PRM promissive
pro a phonetically null pronominal argument
PRO the null subject of embedded clauses
PROM promissive
PROPS propositive
p-selection pragmatic selection
PST past tense
R R-expression
REP reportative
RETRO retrospective
RI rising intonation
RQ request
Q question marker; interrogative
QT quotation
SA speech act
saP speech act phrase
SAP speech act phrase
SG singular
SH subject honorific marker
s-selection semantic selection
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUB</td>
<td>subject</td>
</tr>
<tr>
<td>TAM</td>
<td>tense-aspect-modal</td>
</tr>
<tr>
<td>TP</td>
<td>tense phrase</td>
</tr>
<tr>
<td>TOP</td>
<td>topic marker</td>
</tr>
<tr>
<td>TopP</td>
<td>topic phrase</td>
</tr>
<tr>
<td>UG</td>
<td>Universal Grammar</td>
</tr>
<tr>
<td>UoL</td>
<td>Unit of Language</td>
</tr>
<tr>
<td>USH</td>
<td>Universal Spine Hypothesis</td>
</tr>
<tr>
<td>$\nu$Type</td>
<td>underspecified clause type</td>
</tr>
<tr>
<td>WH</td>
<td>interrogative word</td>
</tr>
</tbody>
</table>
My research began with my master’s thesis on the syntax of Korean polar alternative questions. At the time, I was unsure if I should parse the verbal suffix $e$ separately from the stem, glossing it as an infinitive, or if I should consider it a part of the verb stem. When I attempted to parse it separately, I struggled to gloss the suffix consistently. In certain phrases, the suffix acts like an infinitive head that must select a verb root, yet in other cases, it can also select past-tense $ess$ at the right edge of the clause. In verbal complements, the suffix $e$ appears to be a part of the verb phrase, while in root clauses, it appears to be a complementizer.

As $e$ ubiquitously occurs in V−V constructions (e.g., serial verb constructions, compound verb constructions, and complex verb constructions) (cf. Choi, Y. 2008; Suh, Y. 2000), I chose those constructions as a topic for my qualifying paper. I attempted to probe the morphological properties of the suffix $e$ within the framework of Construction Morphology (Booij, 2010). Unfortunately, I failed to find a satisfactory answer. Eventually I read a chapter in Wilschko (2014) discussing the multifunctionality of functional items. Wilschko’s research was my key to solving this problem. Although I am a morphology enthusiast, I concluded that morphology alone could not allow me to fully understand the morphological properties of $e$, beyond identifying it as an inflectional suffix, because the morphological properties of $e$ change depending on where the suffix occurs in the syntactic structure.

The next issue I encountered concerned the difference between $e$ and $ta$ as the heads of root clauses. Descriptive linguists call $e$ “an intimate speech style sentence ender”, and $ta$ “a plain speech style sentence ender” (see §2.2.4). However, take a look at
a famous Korean nursery rhyme called *Kom sey mali* ‘Three bears’ which includes clauses ending in *e* or *ta* (indicated in bold).

\[\text{Kom sey mali} \text{ ‘Three bears’}\]

\[
\begin{align*}
\text{Kom} & \quad \text{sey} & \quad \text{mali-ka} & \quad \text{han cip-ey} & \quad \text{iss-e}: \\
\text{bear} & \quad \text{three} & \quad \text{CL-NOM} & \quad \text{one house-LOC} & \quad \text{exist-COMP} \\
& \quad \text{‘Three bears live in one house.’} \\
\text{Appa kom} & \quad \text{emma kom} & \quad \text{aki kom}. \\
\text{dad bear} & \quad \text{mom bear} & \quad \text{baby bear} \\
& \quad \text{‘Daddy bear, mommy bear, baby bear.’} \\
\text{Appa kom-un} & \quad \text{ttwungttwungha-e [ttwungttwunghay].} \\
\text{dad bear-TOP} & \quad \text{be.chubby wubby-COMP} \\
& \quad \text{‘Daddy bear is chubby wubby.’} \\
\text{Emma kom-un} & \quad \text{nalssinha-e [nalssinhay].} \\
\text{mom bear-TOP} & \quad \text{be.skinny-COMP} \\
& \quad \text{‘Mommy bear is skinny.’} \\
\text{Aki kom-un} & \quad \text{nemwu kwiyepe [kwiyewe].} \\
\text{baby bear-TOP} & \quad \text{so be.cute-COMP} \\
& \quad \text{‘Baby bear is so cute.’} \\
\text{Hiccwuk hiccwuk cal ha-n-ta.} \\
\text{Smile smile well do-PRES-DECL} \\
& \quad \text{‘Smile, smile, there you go.’}
\end{align*}
\]

You can see that the first four clauses end in the (putative) intimate speech-style sentence ender *e*, while the last clause ends in *ta*. The standard descriptive generalization about these endings predicts that this change of sentence ender changes the speech style within the song, that is, the song starts in the intimate speech style and ends in the plain speech style. Considering that the choice of speech styles depends on the speaker’s social status.

---

1 I use square brackets to indicate the surface form after various phonological rules have been applied to the string of functional markers. The surface form of an inflected predicate is posited at the end of the sentence. For instance, analyzing the surface form *hay* as two elements consisting of the verb root *ha* ‘do’ plus *e* is well established in the literature.
relative to the addressee, this would be a somewhat surprising interpretation as we do not expect a shift in the addressee or audience within one song.

The clausal suffixes e and ta are the first functional markers acquired by Korean children, usually around the age of two years, and the most frequent functional markers in caregivers’ speech (see § 2.2.5). Both a child language acquisition expert (S. Choi, 1995) and a discourse analysis expert (H. Lee, 1993) have argued that, rather than speech style, e expresses old information, while ta expresses new information to speech participants. Again, if this assessment is correct, it produces a surprising interpretation of the nursery rhyme: that the first four sentences somehow express old information, while the last sentence expresses new information. It seems that the diverging properties of e and ta are difficult to pin down from a semantic/pragmatic perspective.

Now consider what happens if the head of the last clause in the nursery rhyme (i.e., ta) is replaced by e:

\[
\begin{array}{cccc}
Hiccwuk & hiccwuk & cal & ha-(^n)-e / ^{ha-e} [hay]. \\
smile & smile & well & do-PRES-COMP / do-COMP
\end{array}
\]

The resulting clause is bizarre. First, e is incompatible with present-tense n. Second, the surface form hay ‘do (it)’, which consists of a dynamic full verb root ha- ‘do’ plus the suffix e and a null subject and object, must now be interpreted as an imperative (e.g., cal hay ‘Do it well!’). Third, it is difficult to accept that this command interpretation of a clause with e expresses old information. Seen from this morphosyntactic perspective, the difference between the suffixes e and ta is straightforward: a clause ending in ta always expresses the declarative (or the exclamative), while a clause with e can be either a declarative or an imperative depending on its syntactic context: tensed or tenseless. Thus,
it appears to be more systematic to approach these two suffixes morphosyntactically rather than considering their semantic and pragmatic differences; however, the differences between e and ta and functional elements representing them in the same domain have never been the main focus of a morphosyntactic analysis, to the best of my knowledge.

The present dissertation uses these distributional differences of e and ta in morphosyntax as a jumping-off point to investigate the properties of clause typing markers in Korean matrix clauses in general, using a morphosyntactic approach.
Author’s Declaration

I have not previously submitted this dissertation for any degree other than the Doctor of Philosophy in Linguistics at the University of Victoria, British Columbia, Canada. I confirm that the contents comprise my original work, except where otherwise stated. All contributions from external sources have been acknowledged and explicitly referenced.

Some of the contents of this dissertation have been previously presented at various conferences and workshops. An extended version of the discussion of Korean hearsay constructions in Chapter 3 was presented at the Canadian Linguistic Association Annual Meeting at the University of Calgary in May 2016 and was published in the proceedings of that conference. The reiterated constructions with *ko* were presented at the workshop at the 12th biannual meeting of the Association of Typology at Australia National University in Canberra in December 2017. Finally, the discussion of periphrastic irrealis complementizers and person constraints on those complementizers in Chapter 4 was presented at the Manitoba Workshop on Person in Winnipeg in September 2017 and will appear in the proceedings of that workshop as Ceong (forthcoming).

Any mistakes or errors are my responsibility.
Acknowledgments

As I present this work, I am indebted to many people for all their help and support in preparing it. This thesis is a long-standing collaborative work with my respected supervisor Leslie Saxon. My interest in clause-typing markers began when I took her class on exclamatives during my master’s program. Since then she has consistently provided me with helpful feedback and support, especially in my exploration of clause-typing markers or complementizers. My sincerest thanks go to Leslie for generously sharing her time, knowledge, insight with me for the last decade. The two beautiful words “thank you” are not good enough to properly recognize Leslie’s contributions to this present work. Without her guidance and encouragement, including during her sabbatical year, I could not have completed this dissertation.

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Thanks to the faculty and staff at the Department of Linguistics at the University of Victoria, especially, Suzanne Urbanczyk, who provided me with constructive feedback when she served as the supervisor of my qualifying paper on Korean verb-verb
constructions, and Martha McGinnis, who shared her insights as a committee member for my qualifying paper on Korean hearsay constructions. Thanks also to Dave McKercher for providing me with many opportunities to serve as a teaching assistant for his syntax and semantics courses and providing me with valuable teaching opportunities. And thanks to Jenny Jessa and Maureen Kirby for all their care and help.

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Lastly, this thesis is dedicated to the people who made me who I am: my mother, Soon-Ae Yang, who always supported me, and my father, Il-Hyo Chung (sorry for changing my English last name, Dad!) who provided me the opportunities to speak and experience Japanese language and culture when I was a teenager and instilled in me a love for learning and languages (he published his first collection of his poems in his 70s and also has been learning Chinese from Continuing Studies). My sisters and brother in Korea and the United States, Bokyung, Yukyung, and Donglim and their families for rooting for me. I owe many thanks to my family here in Victoria for their endless support and understanding: my husband, Ki-Thaek Im, who trusted and supported me to go my own way, and my son, Byunghan (Brian) and my daughter, Jiwoo (Jessica), who are always lovely and good children. I am also grateful to the Im family in Korea for their support.

For contributions of funding for research and for travelling to various conferences, I wish to thank the University of Victoria. It was a crucial component in making this work possible.
Chapter 1

Introduction

1.1 Goals

The main object of this dissertation is to investigate the morphosyntactic properties and categories of various clause-typing markers from the perspective of the Universal Spine Hypothesis (Wiltschko, 2014). Specifically, I explore these markers from the point of view of the syntax of speech acts (Cinque, 1999; Ross, 1970; Speas, 2004). How do functional items interact with speech acts encoded in the grammar?

The Speech Act (SA) structure discussed in the literature (Cinque, 1999; Haegeman & Hill, 2013; Miyagawa, 2010, 2017; Speas, 2004; Speas & Tenny, 2003) may render a tensed clause (either declarative or interrogative) as an assertion or question; it may render a tenseless clause (either imperative or exhortative) as a command or invitation. At the same time, the SA structure may identify an assertive force conveyed by the clause as endorsed by the speaker or someone else (a direct assertion versus an indirect/hearsay/quotative declarative). Much as DP has multiple facets in terms of gender, number, or person (e.g., nP, PhiP, and numP), Complementizer Phrase (CP) also has multiple sides (e.g., ForceP, FocusP, TopicP, and FiniteP; see Rizzi, 1997). In the present case, the heads of CP must carry complex features that are associated with (in-) dependence, (non-)finiteness, clause type, and a person feature that interacts with the Speech Act (SA) participants and the subject of the clause. The goal of this work is to study functional items associated with CPs. This dissertation aims to provide:
1.2 Functional items beyond tense in Korean

Korean is a head-final agglutinative language—that is, complementizers are marked on the predicates at the right edge of the clause. Consider the two clauses in (1): (1a) is a simple interrogative clause containing a predicate with two inflectional markers, while (1b) is a simple interrogative containing a predicate with numerous inflectional items.\(^2\)

(1)
\[
\begin{align*}
a. & \quad n\text{-}ka & i & \text{salam-}u\text{l} & \text{cap-}a\text{ss}e \\
& \quad \text{you-NOM} & \text{this person-ACC} & \text{catch-PST-COMP} \\
& \quad \text{‘Did you capture this person?’}
\end{align*}
\]

\[
\begin{align*}
b. & \quad k\text{u} & p\text{wun-i} & \text{cap-hi-si-}e\text{ss}e\text{-}s\text{skeyss-sup-ti-kka} \\
& \quad \text{the person.HOR-NOM} & \text{catch-PASS-AGR-ANT-PST-EPIS-AGR-EVID-Q} \\
& \quad \text{‘Did you feel that he had been caught?’}
\end{align*}
\]

(Sohn 1994, cited in Cinque, 1999: 53)

In addition to the past-tense marker (indicated in bold), between one and four functional markers can appear on the Korean predicate. These markers range from the complementizer \(e\) in (1a) or the string of suffixes, including conjectural epistemic \(keyss\), the addressee honorific agreement marker \(sup\), the evidential \(ti\), and interrogative \(kka\) in (1b).\(^3\) The grammatical clause in (2a) can be substituted for (1a) without the meaning

---

1. Some complementizers in matrix clauses can be embedded under matrix predicates.

2. The source of examples adopted from the literature is indicated; they are presented as in the original including glosses unless noted otherwise. Thus, the same morpheme can be glossed differently in different studies.

3. Korean inflectional markers have phonologically conditioned (e.g. vowel harmony; open syllable) allomorphs: aspect and past tense (\(ss, ess, ass, yess\)); present tense (\(nun, n\)); underspecified COMP (\(a, e\)); nominative case (\(ka, i\)); accusative case (\(lul, ul\)); irrealis modal (\(l, ul\)); topic marker (\(nun, un\)) and so on.
changing; the ungrammatical clauses in (2b) and (2c) show that well-formed clauses must contain at least one obligatory overt functional marker at the right edge of the predicate after a tense marker, even in the (intended) declarative (2c); this role is served by e in (1a) and ni in (2a).

(2)

a. ne-ka i salam-ul cap-ass-ni
   you-NOM this person-ACC catch-PST-INT
   ‘Did you capture this person?’

b. *ne-ka i salam-ul cap-ass
   I-NOM this person-ACC catch-PST
   ‘Did you capture this person?’ (intended)

c. *nay-ka i salam-ul cap-ass
   I-NOM this person-ACC catch-PST
   ‘I captured this person.’ (intended)

The contrast between (3a) and (3b) shows that the spell-out of the interrogative markers kka in (1b) and ni in (2a) are not in free variation but are systematically organized. The interrogative ni can immediately select past tense ess, while kka cannot, as shown in ill-formed clause (3b);\(^5\) kka must select irrealis ul (3c), sup-ni (3d), or sup-ti (3e). (3e) is repeated from (1b).

(3)

a. ku pwun-i cap-hi-si-ess-ni
   the person.HOR-NOM catch-PASS-SUB.HON-PST-INT
   ‘Has he been caught?’/’Was he caught?’

b. *ku pwun-i cap-hi-si-ess-kka
   the person.HOR-NOM catch-PASS-SUB.HON-PST-INT
   ‘Has he been caught?’/’Was he caught?’ (intended)

\(^4\) The distribution of five matrix interrogative markers is discussed in C. Kim (2012): ni, nya, na, ka, and kka; the discourse-pragmatic functions of four matrix interrogative markers are discussed in Jeong (2018): ni, nya, na, and ka.

\(^5\) Both past tense and past anterior are marked by the homophone ess (and its allophones such as ass, ss, yess), as seen in (1b).
Moreover, the order of these functional markers on the predicate is very systematic. The absence of certain functional markers yields ungrammatical clauses, as shown in the examples in (4) which contrast with (3e); the evidential *ti* is omitted in (4a), the hearer agreement marker *sup* is omitted in (4b), and the combination of the three functional items *keyss-sup-ti* is omitted in (4c). Regardless of their intended meaning, the clauses in (4) are all ungrammatical.

(4)

a. *ku pwun-i cap-hi-si-ess-ess-keyss-sup-ti-kka*
   the person.HOR-NOM catch-PASS-AGR-ANT-PST-EPIS-AGR-EVID-Q
   ‘Did you feel that he had been caught?’

b. *ku pwun-i cap-hi-si-ess-ess-keyss*(sup)-ti-kka*
   the person.HOR-NOM catch-PASS-AGR-ANT-PST-EPIS-AGR-EVID-Q

c. *ku pwun-i cap-hi-si-ess-ess*(keyss-sup-ti)-kka*
   the person.HOR-NOM catch-PASS-AGR-ANT-PST-EPIS-AGR-EVID-Q

The functional heads beyond TP that are encoded on predicates in Korean are also heterogeneous. Consider a clause assembled with a different set of functional heads:

(5)

*Minca-nun ttena-ss-te-kwun-yo*
Minca-TOP leave-PST-EVID-EVAL-POL
‘I noticed that Minca had left.’

(Sohn 1994, cited in Cinque, 1999: 54)
The clause in (5) includes the evidential *te*, the evaluative *kwun*, and the polite marker *yo* beyond past-tense *ess*, yet the glosses of the suffixes show that, with the exception of the evidentials, their properties all differ from those in (3e).

The question arises which marker is responsible for the declarative interpretation of the clause, given there is no overt declarative marker in (5). Is it covertly marked or does one of three functional markers beyond the past-tense marker serve as a portmanteau marker, cumulatively expressing the indicative mood of the clause? Simply by comparing the two clauses in (1) and (5), we can conclude that various functional items are available beyond tense in Korean.

Following the Mirror Principle (Baker, 1985), Cinque (1999) proposes that the various functional heads (including SAP) are hierarchically organized in Universal Grammar. The proposed order is illustrated in (6).

(6) **The Order of Clausal Functional Heads (Cinque, 1999: 54)**

\[ \text{Mood}_{\text{speech act}} > \text{Mood}_{\text{evaluative}} > \text{Mood}_{\text{evidential}} > \text{Modality} > \text{T(Past) T(Anterior)} > \]

\[ \text{Voice} > \text{V} \]

If this representation is correct, at least four functional heads beyond tense (or five, if we include the putative “politeness” projection) can be morphologically marked on Korean predicates. The suffixes on the predicate beyond T, as exemplified in the above clauses (e.g., *e*, *keyss*, *sup*, *ti* (or *te*), *kka*, *kwun*, *ni*, and *yo*), are likely language-specific.

---

6 In the literature, sometimes mood is considered to be a grammatical category of the semantic notion modality. It is unclear to me whether Cinque’s proposal here is distinct from that described in Palmer (2001).

7 Cinque’s recognition of “politeness” as a functional category comes in a footnote (see Cinque, 1999: 224, note 11).
morphosyntactic elements that are associated with the universal functional heads. These functional markers from a large set of functional suffixes are concatenated to indicate syntax-pragmatic interface information associated with that particular clause in a speech act.

The first main claim made in this dissertation is that there must be a morphophonologically marked functional head beyond T in the structure of all clauses (e.g., dependent and independent; finite and non-finite; and declarative, interrogative and imperative clauses) in Korean. This claim can be formulated as a Clause Complementation Parameter (CCP), as follows:

(7) **Clause Complementation Parameter (CCP)**

All clauses must have a complementizer (COMP), and a COMP must have a correspondent PF realization.

This obligatory CP projection and morphological requirement of CCP yields a morphophonological realization of the projection which includes underspecified complementizers (e.g., e) that lack an interpretable/valued clause-typing feature and a finiteness specification. The CCP is a Korean-specific parameter of the Clause Typing Hypothesis (CTH) (Cheng, 1991; Moscati, 2010). Refining Cheng’s CTH, Moscati (2010) proposes a modified CTH in the framework of Split CP hypotheses (e.g., Rizzi, 1997), as shown in (8a).

(8)  
\textbf{a. Clause Typing Hypothesis (Split CP)}

ForceP must host an appropriate typing feature. \hspace{1cm} (Moscati, 2010: 66)
b. **Clause Typing Hypothesis (Cheng, 1991)**

Every clause needs to be typed. (cited in Moscati, 2010: 66)

Although both CCP and CTH require the head of CP/ForceP to be present in the structure, the CTH does not predict the existence of a semantically null COMP or an expletive COMP, like the Korean e lacking a typing feature. The expletive-like complementizer e in Korean can fill the head of CP, as in (9).

(9) \[ CP C^0 e ]

If the CTH in (8) correctly represents the principle of UG, then intonation must be included or play a role in the syntactic structure, as in (10). The functional marker e and intonation must coalesce into a functional element at the right edge of the clause to satisfy the CTH in derivation.

(10) \[ CP C^0 e ↓ ] ; \[ CP C^0 e ↑ ]

Alternately, as the CCP allows a semantically null or an expletive COMP in CP, a rising or falling intonation can be associated with a higher functional projection, as shown in (11). The CTH is satisfied at LF after a CP element merges with an FP element. F is a variable over functional categories.

(11) \[ FP [ CP C^0 e ] F^0 ↓ ] ; \[ FP [ CP C^0 e ] F^0 ↑ ]

The structure in (12a) accounts for an intervening element between e and intonation in Korean clauses, that is, polite yo. The structure (12b) is ill-formed.
In this dissertation, I provide evidence argue for the legitimacy of (11) and (12a), that is, a faceted approach to clause typing, by showing the well-formedness of clauses with these elements and identifying their selectional properties. Moreover, based on their morphosyntactic properties, I subcategorize Korean matrix complementizers and argue that the diverse morphophonological realizations of C in Korean define language-specific C categories: i) clause-typing C (declarative ta, interrogative ni and nya, exhortative ca, promissive ma); ii) underspecified C (e and ci); iii) periphrastic irrealis C (l-key, l-lay, l-kka); and iv) evidential C (kwun, ney). In other words, any of these subcategorial functional markers can be associated at C⁰. These language-specific categories contain systematically organized variants that interact with pragmatics such as illocutionary force and speech participants.

1.3 Functional items and the Universal Spine Hypothesis

With these goals and this claim in mind, in this thesis I will investigate matrix clauses such as those exemplified in (13). The clauses expressing a simple assertion (13a), an echo question (13b) and reinforcement in (13c) are examples of the clauses I investigate in this dissertation. Functional elements beyond a tense marker, and their properties define clause type classes. For instance, declarative ta, indirect speech marker ko, and a rising intonation (cf. van Heuven & Hann, 2000) render the clause in (13b) as an echo declarative question, while the same clause with a falling intonation contributes the
interpretation in (13c) which is a reinforced assertion. The universal properties of the prosodic properties of questions are identified as high peaks, later peaks, and higher end pitch in Gussenhoven & Chen (2000). I will discuss the role of intonation in echo questions and reinforcement assertions in § 3.4.3.

(13)

a. **Simple assertion**
   
   \[\text{Yuna-NOM gold-medal-ACC cannot take-PST-DECL} \]
   
   ‘Yuna could not win a gold medal.’

b. **Echo question**
   
   \[\text{Yuna-NOM gold-medal-ACC cannot take-PST-DECL-COMP-POL-RI} \]
   
   ‘(Are you saying that) Yuna could not win a gold medal?’

c. **Reinforcement assertion**
   
   \[\text{Yuna-NOM gold-medal-ACC cannot take-PST-DECL-COMP-POL-FI} \]
   
   ‘(I’m saying that) Yuna could not win a gold medal!’

Although the clause in (13b) is interpreted and functions as an echo question in Korean, I do not take the approach of Sobin (2010) in determining the structural and featural differences between echo questions and other question types (e.g., yes-no questions or wh-questions). I also do not concern myself with whether the characteristics of the echo question in (13b) constitute “meta-representation” (Noh, 1998). My main concern is syntactic: which heads host functional items such as declarative \( ta \), indirect \( ko \), and polite \( yo \) in the structure. The focus of this investigation is to determine what their exact Korean language-specific categories are and which universal categories they are associated with. I will argue that declarative \( ta \), iterative \( ko \), and polite \( yo \) (with a falling or rising intonation) correspond to projections beyond TP and are not spelled-out on a single head, whether CP (Chomsky, 1995), \( \text{MoodSpeech} \_\text{ActP} \) (Cinque, 1999), or ForceP (Rizzi, 1997).
In the generative literature on Korean, the functional markers following declarative ta in (13) have typically been considered non-syntactic elements and rarely included in analysis. Thus, the indirect speech marker ko, the polite marker yo, and the rising and falling intonations that distinguishes an echo question from a reinforcement assertion in matrix clauses have not been treated as functional elements that are generated in the syntactic structure. The representation of the structure of the matrix clause has been assumed as in (14).

(14) \[
[C_{\text{CP/MoodP}} [\text{TP } \ldots -ss]\text{-ta}]
\]
(Beck & Kim, 1997; Han & Lee, 2007)

Now consider the ungrammatical echo question (15b) and reinforcement clause (15c), in which the indirect speech marker ko follows the well-formed evidential-evaluative declarative clause (15a), repeated from (5).

(15)

a. Minca-nun ttena-ss-te-kwun-(yo)↓
Minca-TOP leave-PST-EVID-EVAL-POL-FI
‘I noticed that Minca had left.’
   (Sohn 1994, cited in Cinque, 1999: 54)

b. Minca-nun ttena-ss-te-kwun-(*ko)-(yo)↑
Minca-TOP leave-PST-EVID-EVAL-COMP-POL-RI
‘(Are you saying that) you noticed that Minca had left?’ (intended)

c. Minca-nun ttena-ss-te-kwun-(*ko)-(yo)↓
Minca-TOP leave-PST-EVID-EVAL-COMP-POL-FI
‘(I’m saying that) I noticed that Minca had left.’ (intended).

The ungrammaticality of the clauses with ko (rather than their infelicitousness) in (15) confirms that ko in echo questions and reinforcement constructions is a functional marker in the syntactic structure that is governed by the computational system. It selectively follows particular COMP UoLs.
Where does \textit{ko} appear in the structure? To the best of my knowledge, the structural position of \textit{ko} in matrix clauses with these pragmatic functions has never been accounted for in the syntax, while \textit{ko} in embedded clauses has been assumed to be the head of CP, either by itself (16a) or blended into the head with a clause-typing marker such as declarative \textit{ta} (16b).

\begin{enumerate}
\item \[ [vP [\text{MoodP [TP -ss] -ta]-ko] v^0] \] (e.g., S. Kim, 2011; J. Yoon, 2007)
\item \[ [vP [\text{TP -ss] -tako}] v^0] \] (e.g., An, 2007; Kang, 2006; Rhee, 2016)
\end{enumerate}

The second major claim made in this dissertation is that functional heads beyond clause-typing CP/ForceP exist and can be justified through syntactic analysis. Inspired by approaches incorporating the pragmatics-syntax interface into syntactic structure including SAP (Cinque, 1999; Haegeman & Hill, 2013; Miyagawa, 2010, 2017; Speas, 2004, Speas & Tenny, 2003), and based on the strict order of the functional heads and each head’s selectional properties in Korean, I assume that functional markers that occur in interface projections can be incorporated into the syntactic structure.

\begin{enumerate}
\item \[ [\text{saP [SAP [CP [TP \ldots -ss] -ta]-ko] (-yo) -] \]
\end{enumerate}

Wiltschko and Heim (2016) and Wiltschko (2017) elaborate on the syntactic structure beyond CP and propose that the structure of a clause is systematized with sets of hierarchically arranged universal categories (\textit{k}) including \textit{k}: Responding and \textit{k}: Ground. CP, IP, AspP, and vP in the verbal domain in the traditional approach are considered as language-specific categories, which realize the universal categories including \textit{k}: Linking, \textit{k}: Anchoring, \textit{k}: Point-of-View, and \textit{k}: Classification, respectively, as in Figure 1.1. Each
universal domain, or spine, is associated with language-specific morphosyntactic elements, and these associations define language-specific categories. The structure of the universal spine proposed in Wiltschko (2014) and subsequent related works (Thoma, 2016; Wiltschko & Heim, 2016; Wiltschko, 2017, Wiltschko, 2018) is organized as in Figure 1-1.

![Figure 1-1](image)

**Figure 1-1 Universal categories and the categories in the spine**

Within the framework of the Universal Spine Hypothesis (Wiltschko, 2014; Wiltschko & Heim, 2016; Wiltschko, 2017), I propose that the Korean functional items under discussion predicates correspond to the heads of projections within the Universal Spine Hypothesis (henceforth USH). A hierarchically organized representation for Korean functional markers including the marker *ko* in matrix clauses is proposed as in (18a).

(18)

a. \[
\text{[RespP [GroundP [LinkingP [AnchoringP \ldots -ss] -ta] -ko] (-yo) -↑]} \text{ (marked, cf. (13b))}
\]

b. \[
\text{[RespP [GroundP [LinkingP [AnchoringP \ldots -ss] -e] \emptyset] (\emptyset)-↓]} \text{ (unmarked)}
\]
The unmarked structure in (18b), a simple non-honorific declarative clause, contains a null direct speech marker, a null non-honorific marker, and a falling intonation which are all unmarked. Empirical evidence in this dissertation especially supports three universal functional projections—linking, grounding, and responding spines. The details of these domains will be discussed further in each successive chapter. Focusing on the morphophonological realizations of clause-typing matrix complementizers and the elements that dominate them, I investigate how the interaction between language-specific morphosyntactic elements and universal categories define Korean language-specific categories.

The following are the main research questions I ask in this dissertation:

▪ Are functional items beyond tense markers obligatory?
▪ What are the minimally contrasting sets of functional markers?
▪ What are the distributional and selectional properties of functional markers?
▪ What are the language-specific categories in Korean that correspond to the domains of the Universal Spine?
▪ If a functional marker occurs more than once in the structure or in the grammar, does it always carry the same function?

1.4 The data and methodology

This section introduces the source of data, transcription conventions, linguistic background of the author, the range of the data, and research methodology.

The data in this dissertation is drawn from the Korean linguistic literature and descriptive grammar books on Modern Standard Korean, including Yeon and Brown (2011). The majority of examples are adopted or adapted from the book Korean: A
comprehensive grammar by Yeon and Brown (2011) because the clauses in that work reflect the natural spoken language containing diverse matrix complementizers. As the examples in Yeon and Brown (2011) are written in Hangul (the Korean alphabet), I have transcribed them in this dissertation using the Yale system of romanization; I have also parsed and glossed each example. Examples in this dissertation that do not have a reference source were constructed on the basis of my knowledge as a native speaker of modern standard Korean; I was born and educated in Seoul (thirteen years of education including post-secondary, and twenty-six years of residence) and may have had early exposure to the southeastern dialects as both my parents came from that region and spoke the regional dialect when they were young. When I constructed examples for this dissertation, I checked descriptive grammar books or searched on Google to confirm that my knowledge and usage matched with the prescriptive and descriptive grammar. To my knowledge, there are no controversial examples.

As shown in §1.2, the attested matrix complementizers in Korean are numerous. However, it is not the case that the morphological diversities exhibited by these forms are in free variation or solely governed by pragmatics. If the inventory of syntactic analysis includes clause type, then the system and properties of matrix complementizers in Korean must be investigated in syntax separately from pragmatics. Despite the numerous complementizers available in matrix clauses, only declarative ta, interrogative ni (or nya) and imperative la have been exclusively treated as matrix complementizers in the generative tradition. In this dissertation, I argue that the inventory of functional markers

8 Except the titles of books and proper names in § 2.2.2 and § 2.2.3, which are presented in the McCune-Reischauer system of romanization that is widely used outside of linguistics.
in the C system can be extended and that the system of contrasting functional markers can be investigated via morphosyntax. Although I will not focus equally on all the matrix complementizers discussed in this dissertation, the range of the investigated complementizers is: ta, ni (nya), la, ca, ma, e, and ci (Chapter 3); ta-ko, nya-ko, la-ko, ca-ko, ta-y, nya-y, la-y, ca-y, kes, and ci (Chapter 4); lay, key, kka, kel, la, and kwun (Chapter 5); and la and ko (Chapter 6). The majority of these suffixes appear frequently in studies on acquisition (S. Choi, 1991, 1995, 1998, 2015; M. Kim & Phillips, 1998; Y. Kim, 1997), descriptive grammars, and pragmatics-/discourse-oriented functional grammars (Brown, 2015a, b; H. Lee, 1993, 1994, 1999; J. Noh, 2008; M. Pak, 2006, 2008; S. Sohn, 1996, 2015; K. Yoon, 2010).

The research method employed in this study is an introspective data analysis. I will present explicit arguments to support my claims. Although it is not my goal to demonstrate that the USH provides a better approach than other hypotheses, this dissertation favours the USH because it straightforwardly provides structural positions for all functional elements that appear beyond CP. Alternative hypotheses, such as the extended SAP (Haegeman & Hill, 2013; Speas & Tenny, 2003), may be able to account for the structural positions of the heads of echo, reinforcement, and hearsay constructions, but I did not test this possibility in this dissertation due to the limits of time and space.

In the next section, the assumptions adopted in this dissertation are briefly stated.

1.5 Theoretical assumptions

Theory shapes how we perceive the grammar and the structure of a language. The structure of CP will be analyzed differently depending on how the theory one adopts
approaches and interprets the properties of CP. Nonetheless, in many different approaches, including the minimalist program (Chomsky, 1995), the split-CP hypothesis (Rizzi, 1997), and the USH (Wiltschko, 2014), grammatical categories are directly associated with projections and all projections are hierarchically organized. As discussed earlier, CP is the topmost clausal projection under all these theories, although its status as a single or multiple projection varies. The status of the complementizer as a universal category is re-examined by Wiltschko (2014), who investigates categories from a formal typological point of view. Wiltschko (2014) argues that there is no universal category complementizer; instead she proposes a universal structure of the category. For instance, the English complementizer *that* is a unit of English language that is associated with the English-specific category complementizer, and as a unit of that category it is associated with a universal structure of the domain linking. Wiltschko (2014) rejects direct mapping of language-specific lexical items to universal categories and instead introduces the Universal Spine Hypothesis, which dismisses both the universal base hypothesis (Ross 1970) and the no-base hypothesis (Joos, 1958) while attempting to account for the similarities and variations among categories attested in various languages. I do not present a separate section to summarize the USH here; readers may refer to Bliss (2013) and Thoma (2016) for a thorough treatment. Instead, the key notions and proposals in the theory that underlie the discussion in this dissertation will be addressed as needed during my investigation of Korean matrix complementizers; in each section, I discuss the properties of complementizers from the perspective of the USH. In the next subsection, I introduce the terminology I have adopted from Wiltschko (2014) to explicitly distinguish
morphologically-realized complementizers from complementizers as the structural heads of CPs.

1.5.1 Terminology

Two distinct conventional manipulations will be used for complementizers in this study: Unit of Language (UoL) in the C system (cf. Wiltschko, 2014) and COMP (C⁰). As structural case and morphological case are distinguished in the literature, I also distinguish structural complementizers (COMP) and heads (C⁰) of complementizer projections (CP) from morphological complementizers (COMP UoLs). Although a COMP UoL is theoretically a morpholexical and morphophonological realization of C⁰, it may be multifunctional (cf. the preposition UoL for and the complementizer UoL for, which occupy P⁰ and C⁰, respectively in English) or it may be a portmanteau morpheme (cf. the Greenlandic Eskimo UoL voq, expressing declarative and third-person singular simultaneously)⁹. Consequently, although C⁰ can be zero-marked or marked by intonation,¹⁰ I argue that the ultimate role of the null UoL is contrastive in the syntactic position.¹¹ A UoL can be associated with any domain or with multiple domains; however, only UoLs can bear this multifunctional or portmanteau property; C⁰ cannot do so. Each C⁰ must have a distinct subcategory feature in the system. Thus, we must separate the structural position of Complementizer (COMP) from the lexical manifestation of complementizers (UoLs). To that end, in this study, I adopt the term COMP UoL from Wiltschko (2014) to indicate a morphophonological realization of COMP, while I reserve

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⁹ See example (25a) in Chapter 2.

¹⁰ It has been assumed that the declarative complementizer in English independent clauses is zero-marked.

¹¹ It is not desirable to have two distinct zero-marked UoLs in the same category. A zero-marked UoL may be allowed in cases where its counterpart has a contrasting feature.
the term COMP for the abstract head of CP with a categorial feature and other syntactic features. The notion complementizer is used as a covering term for both COMP UoLs and COMPs.

1.6 The organization of this dissertation

This first chapter has introduced the main goal and research questions of this dissertation. The remainder is organized as follows. Chapter 2 provides the necessary background for an investigation of Korean matrix complementizers. First, I present a brief review of the literature on matrix complementizers in general, then I present the background of the Korean matrix complementizers including early documentation, dialectical variation, pragmatic variation, and first-language acquisition.

The goal of Chapter 3 is to provide a comprehensive discussion of the morphosyntactic properties of matrix complementizers in single-layered CPs, such as declarative *ta*. The approach taken here concentrates on different aspects from those that view Korean matrix complementizers as sentence enders or semantic modal markers, which tend to focus on their pragmatic or semantic properties. I take a close look at the distribution of three classes of so-called sentence enders—plain, intimate, and polite—from among the six classes that are traditionally labelled in terms of speech styles. Based on the properties and distribution of these matrix complementizers, I propose language-specific categories associated with the linking spine within the framework of the USH. The clause-typing language-specific category c: Type is further subdivided into an interpretable Type (*c: i*Type) and an underspecified Type category (*c: u*Type), depending on whether a given complementizer can autonomously assign locutionary force type to a clause in its domain.
In **Chapter 4**, I discuss the morphosyntactic properties of matrix complementizers in double-layered CPs, such as the echo declarative *ta-ko*. I defend my claim that the heads of echo, reinforcement, and hearsay constructions (e.g., echo *ko* and hearsay *y*) are associated with a Korean language-specific category *c*: INDIRECT (original versus reproduced/cited speech), which is associated with the grounding spine. In addition to *c*: INDIRECT, I propose that the Korean language-specific category *c*: INTERACTION (see Ginzburg, 2012) is associated with the responding spine. The category INTERACTION can select either *c*: INDIRECT or *u*Type in the structure. Polite *yo* and intonation, as members of *c*: INTERACTION, are associated with the responding spine.

In **Chapter 5**, I introduce another class of clause-typing complementizers which have a strong selectional linking with the irrealis modal -*l*-, focusing on their linear order and projection in the structure. Unlike the *i*Type (e.g., declarative *ta*, interrogative *nya*) and *u*Type (*e* and *ci*) which select the modal keyss, the complementizers *key* and *lay* always select the irrealis modal *l* when the clause expresses the subject’s volition or supposition in matrix clauses. Focusing on *l-key* ‘I will…’ and *l-lay* ‘I will…’ or ‘will you…’, I investigate a set of complementizers that exhibits a strong bond with a T element (i.e., irrealis *l*) in a matrix clause expressing the subject’s volition.

**Chapter 6** is concerned with the distribution and interpretation of multifunctional complementizers, including *la* and *ko*, which appear in more than one syntactic position in the structure. The multifunctional complementizers are difficult to gloss in terms of an invariant morphosyntactic function, especially in morpheme-based approaches. Multifunctional *la* and *ko* exhibit their multifunctional properties in different ways. They may interact with distinct functional elements in the same position in a local domain, or
they may associate with distinct structural positions. The implications of the multifunctional properties of *la* and *ko* deserve further and deeper investigation in future studies.

Finally, in **Chapter 7**, I offer conclusions and suggestions for further research.
Chapter 2

Complementizers

2.1 The properties of complementizers in Universal Grammar

The aim of this chapter is to provide the essential background for an examination of Korean matrix complementizers. After I present a brief review of the properties of matrix complementizers in general, I present the overview of Korean matrix complementizers from various perspectives, including historical development, dialectology, pragmatics, and early acquisition.

Compared to major lexical categories such as nouns or verbs, complementizer is a newer functional category. Oxford English Dictionary cites Rosenbaum’s doctoral dissertation (1965) as its origin. Since the term complementizer was first introduced by Rosenbaum (1965), it has become widely accepted in the generative tradition that complementizers are a universal category (cf. Bresnan, 1970, 1972; Chomsky, 1973; Chomsky & Lasnik, 1977).¹

\[ C_{UG} = \{ c: \text{COMPLEMENTIZER} \} \]

In Bresnan (1970), COMP is a node in the deep structure and the initial claim about the projection that hosts complementizers is S’ (S’→COMP S); Chomsky (1986a: 3) replaces S’ with CP and S with IP, arguing that C is a core element (together with T and v) in the

¹Rosenbaum (1965: 41) identifies linguistic units including that, for, to, POSS (‘s), -ing, if, whether, and the wh-words in embedded interrogatives as English complementizers.
clause. Under this approach, the structure of clauses in head-final languages can be represented as in (20); this is the structure I assume in this dissertation, along with the Universal Spine (Wiltschko, 2014).

\[(20) \ [CP [C [TP [T [vP [v [vP [V V^0]]] v^0]] T^0]] C^0]]\]

The structure in (20) entails that obligatory functional elements that select or follow Tense in head-final languages must be complementizers; the rightmost morphological elements are complementizers that head the highest projection in the structure and select Tense elements. In addition to positional and selectional properties, the distributional, semantic, and pragmatic properties of CP are identified as: i) introducing clauses; ii) establishing illocutionary sentence force; and iii) placing the proposition into a discourse-oriented role (Panagiotidis, 2010). Taking structures describing the lexical category and functional projection of complementizers in (19) and (20) as read, in the next subsections, I briefly survey the major issues and topics surrounding complementizers and CP that are relevant to the current work.

2.1.1 Clause type and complementizers in independent clauses

In the generative tradition, it is uncontroversial that CP is located in a higher domain than IP/TP, although it is less straightforward to assume that every clause consists of a CP. A closely-related notion is the finiteness of the clause: the head of a finite clause is generally considered to be C^0, but the categorization of the head of a non-finite clause is
contentious.² For instance, the highest projection of an imperative has been a subject of some debate in the literature. It has variously been argued to be VP (Platzack & Rosengren, 1998; Rupp, 1999), TP (Jensen 2003), CP (Bennis, 2006; C. Han, 1998), and a special JussiveP which is situated between TP and CP (Zanuttini, 2008; Zanuttini, M. Pak, & Portner, 2012). Imperatives are not included as examples of clause types manifested by ForceP in Rizzi (1997). The arguments about the role of CP as a functional head in the literature are summarized in (21):

(21) The Functional Heads of Independent Clauses
    a. Every clause contains a functional projection CP (Adger, 2003; Chomsky & Lasnik, 1977);
    b. Every finite clause has a functional projection CP (Stowell, 1982);
    c. A clause can have more than one CP (Cinque, 1999; Rizzi, 1997);
    d. Non-finite clauses may lack a CP (Jensen, 2003; Ormazabal, 1995; Platzack & Rosengren, 1998; Rupp, 1999; Stowell, 1982).

Statement (21a) assumes that imperatives contain CP, while statements (21b) and (22d) leave space for positing a lack of CP in imperatives (cf. Jensen, 2003). Concentrating on the head of CP, I identify its syntactic properties in the Universal Base Hypothesis (cf. Wiltschko, 2014) as:

(22)  
    a. If it appears in a clause, C₀ is the highest head;
    b. C₀ is obligatory in finite clauses;

² The notion “nonfiniteness” is defined as “independent clauses exhibiting reduction in tense/agreement morphology and the absence of a prototypical subject” (see Nikolaeva, 2007); according to Nikolaeva imperatives are nonfinite clauses.
c. There is at least one $C^0$ in finite clauses; and

d. $C^0$ takes CP or TP as its complement in finite clauses.

To sum up, from a purely syntactic point of view $C^0$ is defined as the highest functional head in finite independent clauses, taking a TP (or CP) as a complement. However, I have also pointed out that there remains a lack of agreement in the literature as to whether $C^0$ (as a category expressing illocutionary force) is present in all clause types, including imperatives. The idea that all clauses have a CP conflicts with the idea that imperatives lack a CP. This issue seems to be closely related to what features are assumed in the head of CP/ForceP. The assumption that $C^0$ contains sub-categorical features like [DECL], [INT], or [IMP] (or [DIRECTIVE]) is compatible with the idea that CP is present in all clause types; if we assume that $C^0$ contains a binary feature [+Q] and [-Q] and uses one of these features to manifest the interpretation of clauses, an auxiliary feature such as [-Finite] is needed to distinguish declaratives from imperatives because both are [-Q]. Alternatively, if we assume that $C^0$ contains a binary feature [+Fin] and [-Fin] and uses one of these features to manifest the interpretation of clauses, a feature such as [-Q] is needed to distinguish declaratives from interrogatives because both are [+Finite] in independent clauses. In the following section, I discuss assumptions in the literature concerning features associated with matrix CPs.

2.1.2 Operators and features associated with CP

The features associated with the head or operator of CP have been discussed for interrogatives and declaratives. A typical analysis involves Q (Adger, 2003; Aoun & Li, 1993; Cable, 2010; Carnie, 2013; Chomsky, 2000; Hagstrom, 1998; Hornstein, Nunes, & Grohmann, 2005; Ginsburg, 2009). Q can be represented in the structure by either a
binary feature ([+Q] and [-Q]) or a Q-morpheme. For instance, the English complementizers *if* and *whether* are proposed to be associated with the features [+Q, +FINITE] in Carnie (2013). The null interrogative complementizer in matrix questions is assumed to have the same features (Carnie, 2013) or an additional strong Q-feature that triggers do-insertion and T-to-C movement (Adger, 2003). The [+tense] feature is used instead of [+Fin] for English complementizers in Sportiche, Koopman, & Stabler (2014).

In this dissertation, I assume that the head of an imperative is C with a [non-finite] feature; in other words, the restriction preventing T from hosting a present, past, or irrealis feature is encoded in C. At a minimum, then, there are three basic Cs in matrix clauses, corresponding to [DECL], [INT], and [IMP].

\[(23) \quad C^0 = \{[\text{finite}, -Q]; \ [\text{finite}, +Q]; \ [\text{non-finite}]\}\]

As there are more than these three basic clause types attested across languages, sometimes a special complementizer is suggested. Carnie (2013: 383) proposes a complementizer $C_{[+\text{INT}]}$ for echo questions and intonational questions and argues that the [+INT] feature does not trigger any movement. A question naturally arises whether the interpretation of $C_{[+\text{INT}]}$ is applicable to echo questions in languages other than English. It seems that the relationship between the head or heads in complementizer systems and overt morphological encodings of the heads has not been fully explored in the literature.

If we widen our attention to include various clause types corresponding to English echo questions—tag questions, optatives, subjunctives, exclamatives, exhortatives (e.g., *let’s* clauses) and so on—we find various functional items in addition to the three basic clause-typing complementizers in Korean matrix clauses; that is, questions equivalent to English echo-questions and tag-questions can be expressed by functional items. Although various
syntactic studies have addressed clauses with the other sentence forces—such as echo questions (Sobin, 1990, 2010), tag questions (Culicover, 1992; Kimps, 2007, 2016), and exclamatives (d’Avis, 2016; Delfitto & Fiorin, 2014a, b; Zanuttini & Portner, 2003)—a holistic approach to clause type and the associated complementizers has not been fully realized in the literature.

2.1.3 The multi-layered CPs and labels

As discussed in the previous section, syntactic configurations involving the complementizer projection are not exclusively associated with a single feature indicating force. In addition to introducing the illocutionary force of a clause, complementizers correlate with finiteness; as the notion of finiteness is distinct from clause type and not all clauses are associated with clause type, the idea of split CPs has been raised within the generative grammar approach. Rizzi (1997) proposes four projections above IP/TP, of which ForceP is the highest projection and FinP (i.e., FinitenessP) is the lowest. Located between these two projections are TopicP and FocusP, which are relevant to information structure (Endo, 2007; Erteschik-Shir, 2007). Proponents of a split CP approach hold that the full picture of the complementizer system consists of hierarchically organized functional projections: ForceP > FocusP > TopicP > FiniteP (Rizzi, 1997), or Speech act MoodP > Evaluative MoodP > Evidential MoodP > Epistemic ModP (Cinque, 1999; Speas, 2004). This approach has been named the Cartographic Project in the literature (Aboh & Pfau, 2011; Endo, 2007; Haegeman, 2006; Kuwabara, 2013; Manzini, 2012; Munaro, 2011; Paoli, 2007; Roussou, 2000; Schwabe, 2004; Tsai 2008).
Table 2-1 Survey of the organization of CP layers

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Cinque (1999: 55)</td>
<td>MoodP Speech act, MoodP Evaluative, MoodP Evidential, ModP Epistemic, TP (PAST)</td>
<td></td>
</tr>
<tr>
<td>Haegeman &amp; Hill (2013)</td>
<td>sa1P SA1P sa2P SA2P ForceP TP</td>
<td></td>
</tr>
<tr>
<td>Wiltschko &amp; Heim (2016)</td>
<td>RespP GroundP LinkingP AnchoringP</td>
<td></td>
</tr>
</tbody>
</table>

Table 2-1 illustrates that the internal structure of CP is complex and systematically organized, regardless of how the projections are labelled.\(^3\) Table 2-1 also shows that there must be at least one projection that is responsible for Force or clause type above TP/IP. This core projection—C in a single CP system—is also a locus of agreement with the subject. This functionality should come as no surprise, given the fact that, for example, the subject of an imperative clause is restricted to carrying a second-person feature which must be specified on C (see Bennis 2006), especially under the assumption that Agree or features on T (e.g., nominative Case) originate on the phase head C in Feature Inheritance (Richards, 2007) and the phase head C hypothesis (Chomsky, 2005; Miyagawa, 2005).

2.1.4 Agreement in CP

Empirical data from across languages shows that the subject of a clause and its head agree in more clause types than just imperatives. For instance, in Katwijk Dutch, the head

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\(^3\) The details of the Cartographic Project are beyond the scope of this paper. The properties of these projections are the subject of ongoing research; it remains to be seen how these projections are associated with the Universal Spine.
of a clausal complement agrees with the subject (Bayer, 1984; Carstens, 2003; Haegeman, 1992; Haegeman & van Koppen, 2012; Zwart, 1997), as illustrated in (24).

(24) Katwijk Dutch
a. ...dat ik zuinig leef.
   ‘...that I live frugally.’

b. ...datt-e we/jullie/hullie gewoon lev-e.
   ‘...that we/you/they live normally.’ (Haegeman & van Koppen, 2012: 441)

The alternation between dat ‘that’ and datt-e ‘that’ in the complement clauses is due to the presence of a subject with distinct phi features; this shows that complementizers agree in number and person with the subject of an embedded clause in Katwijk Dutch.

In some languages, the head of a matrix clause with a distinct clause-typing feature interacts with the subject of the clause; Greenlandic Eskimo is one such language. The head of the clause is realized by distinct functional markers that are inflected for person and number of the subject; three distinct items, voq (25a), va (25b), and guk (25c), express three distinct clause types in addition to indicating a third-/second-person subject (König & Siemund, 2007: 278).

(25) Greenlandic Eskimo
a. Iga-voq
   cook-DEC.3SG
   ‘He cooks.’

b. Iga-va
   cook-INT.3SG
   ‘Does he cook?’

c. Iga-git/-guk
   cook-IMP.2SG/-IMP.2/3.SG
   ‘Cook (something)/ Cook it’ (König & Siemund, 2007: 278)
In the case of a first-person subject in declaratives and a second-person subject in interrogatives, *anga* (26a) and *pit* (26b) appear instead of *voq* and *va* (Fortescue, 1984, cited in König & Siemund, 2007: 278).

(26) **Greenlandic Eskimo**
   a. *angirlasi-nngil-anga*
      be homesick not-1SG_DEC
      ‘I am not homesick.’
   b. *niri-riir-pit*
      eat already-2SG_INT
      ‘Have you already eaten?’
   c. *niri-guk*
      eat-2SG.3SG_IMP.
      ‘Eat it’

   (König & Siemund, 2007: 278, footnote 3)

The examples in (27) are taken from the East Greenlandic language Tunumiisut, which shows similar inflections. The second-person pronoun or second-person indexical morpheme *tit* in the declarative (27a) differs from *kkit* in the imperative (27b) and both are marked at the right edge of the clause.

(27) **Tunumiisut**
   a. *nuitia-kai-kka taki-ssa-wa-tit*
      woman-bad-IPL see-FUT-IND-2SG.3PL
      ‘You will see my bad women.’
   b. *itii-nia-kkit*
      look-INJUNCT-2SG.3PL
      ‘Look at them.’

   (Tersis, 2010: 584)

Korean is another language where the head of a matrix clause with a distinct clause-typing feature interacts with the subject: the functional markers *la* (28a), *ma* (28b), and *ca* (28c) express both clause type and the phi feature on the subject.
The functional markers at the right periphery in (28) must interact not only with the subject, but with the speech participants as well—for instance, imperatives and exhortatives encode the addressee (cf. Zanuttini, 2008). Korean is not the only language where functional markers overtly encode the phi feature of the addressee. The Eastern dialect of Basque, Souletin, is well-known for so-called allocutive agreement, in which functional markers indicate the gender and number of the addressee in addition to a colloquial/formal relationship between the speaker and the addressee. In particular, allocutive agreement is sensitive to clause type—it is absent in matrix interrogatives. Based on the incidence of agreement between the subject/addressee and the head of a matrix clause in languages including Japanese, Miyagawa (2017) proposes phi- and delta-features (discourse-configurational features of topic and focus) that can be associated with either C or T to account for various types of agreement attested in languages. Japanese differs from English or Spanish regarding where phi and delta feature agreement occurs. Miyagawa (2017) argues that phi feature agreement occurs in C in Japanese and proposes four attainable categories, as in (29).
(29) **Some Predicted Languages**

Category I: $C_\phi, T_\delta$ — Japanese

Category II: $C_\delta, T_\phi$ — English

Category III: $C, T_\phi\delta$ — Spanish

Category IV: $C_\phi\delta, T$ — Dinka

(Miyagawa, 2017: 19)

Although in this thesis I do not attempt to propose which of these categories Korean properly belongs to, I provide evidence for the correlation between complementizers and phi features/speech participants in Korean.

**2.2 The overall design of Korean complementizers**

Typologically, complementizers occur at the rightmost edge of the clause in head-final languages and at the leftmost edge of the clause in head-initial languages; complementizers in VSO languages such as Irish and Welsh also appear at the leftmost edge of the clause. Korean is a head-final agglutinative language with relatively free word order and nominative–accusative case markers; it has also been identified as a WH-in-situ and pro-drop language. As these basic facts are relatively well-documented in representative introductory grammar books (Lee & Ramsey, 2000; H. Sohn, 1999; Yeon & Brown, 2011), this section presents an overview of the grammar of Korean which focuses on complementizers.

**2.2.1 Properties and constituents**

Although arguments in the specifier and complement positions in the Korean structure can freely move around to reflect information structure (e.g., Topic and Focus), the heads of core projections are attached together on predicates, as discussed in the introductory
section. The functional heads of vP, VoiceP, TP and CP never show individual movement in the structure, as they are suffixed to VP with a fixed order; the order of the suffixes on predicates includes causative and passive markers, a subject honorific marker, tense markers, an aspect marker, and an irrealis or prospective marker. The relative order of a clause-typing marker, and indirect speech marker, and hearer polite marker is fixed. As a result, these distinct morphological items are attached to the heads of projections when the projections are dislocated. For instance, the heads of subordinated and complement clauses have different lexical items from the heads of matrix clauses, although both belong to the same category C (see § 5.5). Thus, a change of argument order may play a role in information structure, such as topicalization or focus constructions, while a change of suffix order on predicates does not play a role at all and may even be disallowed.

In these circumstances, how many functional markers are available in matrix C0 alone? If we include all dialectical variations (see § 2.2.3), the number is massive. Are they systematically organized? The answer is very clearly yes. I will overview these markers briefly based on Modern Standard Korean (henceforth MSK). Morphological items attached as the heads of matrix C0 are heterogeneous because they are inflected in both clause type and pragmatics (e.g., dialect, register, speech styles); each contains a specification on T elements and person features. The simplest matrix CP is \([CP [TP [VP V0] \emptyset] C0]\). The set of complementizers that can be spelled out in this context is: \{ta, nya, la, ca, ma, a, ci, key, so, ney and several others\}; the set of complementizers that can be spelled out in the context of \([CP [TP [VP V0] lIRR] C0]\) is \{key, lay, kka, kel, la\}; in \([CP [TP[VP V0] ss PST] C0]\) we find \{ta, nya, a, ci, ney, kwun and several others\}; in non-finite double layered CPs \([CP [CP [TP [VP V0] \emptyset] C0]] C0] we find \{lako, cako lay, cay, lamye, \}
camye, lamyense, camyense, lanikka, canikka and several others} and in finite double layered CPs \([CP [CP [TP [VP V^0] ss \text{ PST}] C^0] C^0]\) are \{tako, nyako, tay, nyay, tamye, nyame, tamyense, nyamyenese, tanikka, nyanikka, and several others\}. These matrix complementizers from MSK exhibit selectional properties which have not been highlighted in the literature so far. The historical records and dialectology show that these sets of complementizers have seen dramatic changes to their forms and functions over time, and exhibit diversity between speech communities. In the remainder of this chapter, I introduce the early documentation and dialect variation of matrix complementizers and their role in first language acquisition.

### 2.2.2 Early documentation

The earliest written records of vernacular Korean are Pŏnyŏk PakT'ongsa ‘A Korean version of Interpreter Pak’ (1517) and Pŏnyŏk Nogŏltae ‘A Korean version of the Old Cathayan’ (1517), both translated by Ch’oe Sejin, a Korean-Chinese interpreter who lived during the Joseon dynasty (Lee & Ramsey, 2011:112). The author and year of publication of the original book Nogŏltae ‘The Old Cathayan’ (before 1423) are unknown, but it was a popular travel language phrasebook for people, especially traders, travelling to northern China in the era of the Goryeo Kingdom (918-1392). As full sentences from both spoken Late Middle Chinese (LMC) and Late Middle Korean (LMK) are recorded in Pŏnyŏk Nogŏltae, it can be described as the oldest surviving textbook for Korean CSL (Chinese as a second language) learners. Now it is valued as a source for studying LMK and LMC. The first sentence of the Pŏnyŏk Nogŏltae is a Chinese interrogative clause (30a) with a Korean translation (30b); the second sentence
(30c) is an answer to the question, which is a simple declarative; (30d) is its Korean translation.4

(30)

a. ta ge, ni cong nali lai (LMC)
   big brother you from where come
   ‘Big bro, where are you from?’

b. ney etulelo-syeputhe o-nta (LMK)
   you where-from come-COMP
   ‘Where are you from?’

c. wo cong gaoli wangjing lai (LMC)
   I from Goryeo capital come
   ‘I come from the capital city of Goryeo.’

d. nay 高麗王京 ulesyeputhe o-la (LMK)
   I Goryeo capital city from come-COMP
   ‘I come from the capital city of Goryeo.’

The interrogative nta in (30b) is homophonous with the present declarative marker n-ta in MSK, while the declarative marker la in (30d) is homophonous with the MSK imperative marker la. According to T. Pak (2002: 181), -nta (or -lta), -nka (-lka), and -nko (-lko) were three markers that were mainly used in information-seeking interrogatives in LMK; if the addressee is the subject of the clause, -nta (or -lta) functions as the matrix interrogative marker regardless of the presence of a wh-word. If the subject of the clause is not the addressee, then -nko (-lko) functions as the matrix interrogative marker with wh-words, and -nka (-lka) taking that role when there are no wh-words. D. Kim (2002: 161) also notes as a salient characteristic of LMK that -nta (or -lta) functions as an

4 A picture of the first page of the book is included in Lee and Ramsey (2011: 112). The current author translates and glosses the Chinese sentences. The proper noun “Goryeo capital city” is not translated into Korean and is written in Chinese characters in the original, which can be read as gaoli wangjing in Modern Standard Mandarin.
interrogative marker if the subject of the interrogative is understood as an addressee, regardless of the presence of overt second-person pronouns in the clause.

It seems that partial feature agreement or coindexing between the subject and complementizer existed in interrogatives in LMK. These three markers, which appear as interrogative heads in LMK, have fully or partially lost their functions in MSK. Consider the matrix complementizers in (31), surveyed by S. Yoon (1999), which appear in interrogative clauses in MSK.

(31) **The Heads of Matrix Interrogatives in MSK**

a. Simple enders: *nya, ni, nka, na, o, so, pnikka, lkka, e (or a), ci*

b. Complex enders: *tanunya, lanunya, canunya, lyenunya, tani, lani, cani, lyen, llay*

(S. Yoon, 1999: 148)

Only *nka* marks interrogatives in both LMK and MSK. The marker *nka* in MSK is used as a stylistic variant that also can appear in directive, declarative, and exclamative clauses (Yoon, 1999: 153).

This brief overview of the early records of matrix complementizers has shown that the correlation between the forms and function for matrix complementizers has changed over time. Assuming the sentences included in *Pŏnyŏk Nogŏltae* are only representative of the dialect spoken by Ch’oe Sejin, the comparison between historical and modern forms of complementizers is quite limited. As we will see in the next section, the forms and functions of matrix complementizers vary across dialects in Modern Korean.
2.2.3 Dialectical variation

Different dialects of Korean are often mutually intelligible (Yeon, 2012), and matrix complementizers exhibit variation just as lexical items do. On the basis of linguistic patterns and geographical regions, seven (or eight) different dialect divisions are proposed in the literature: i) northwestern dialects (P’yŏngan Province); ii) northeastern dialects (Hamgyŏng province); iii) central dialects (Kyŏnggi, Hwanghae, Kangwon, and Ch’ungch’ŏng provinces) including Standard/Seoul dialects; iv) southwestern dialects (Chŏlla province); v) southeastern dialects (Kyŏngsang province); and vi) Cheju dialect (Cheju island) (Yeon, 2012). In addition to those six or seven dialect regions, King and Yeon (1992) propose an eighth, Kolyemal ‘the tongue of Goryeo people’ which is spoken in Kazakhstan and Uzbekistan by Koreans who emigrated from Yuchin in the North Hamgyŏng province. The P’yŏngan, Hamgyŏng, and Hwanghae provinces are all located in North Korea. The diverse patterns of matrix complementizers are a salient aspect of Korean dialectology. Based on Yeon (2012), the correspondences between dialects and clause-typing markers are shown in Table 2-2. Some items in this table seem to include TAM elements and polite yo, which bears further investigation. The fact that bold elements occur across clause types indicates that the expletive-like e in Standard/Seoul dialect has variants in Pyongan (i.e., -(u)m-mey) and in Kolyemal (-o).

This is a very brief overview of the various morphological realizations of C across dialects in Modern Korean. The salient morphological forms associated with a particular dialect confirm that C interacts with speech participants and pragmatics. The next section surveys the literature on matrix complementizers from the perspective of pragmatics.
<table>
<thead>
<tr>
<th>Dialect Divisions</th>
<th>Declarative</th>
<th>Interrogative</th>
<th>Imperative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P’yŏngan</strong></td>
<td>-(u)m-mey; -(u)m-ney;</td>
<td>-(u)m-mey; -wu;</td>
<td>-(u)m-mey;</td>
</tr>
<tr>
<td></td>
<td>-(u)wey; -swu-ta;</td>
<td>-kan;</td>
<td>-(u)si-tana;</td>
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<td>-(su)p-ney-ta;</td>
<td>(su)p-ney-kka;</td>
<td>-(u)-si-la-yo;</td>
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<td></td>
<td>-(su)p-mey-ta;</td>
<td>(su)p-mey-kka;</td>
<td>-(u)-si-kyo;</td>
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<td>-(u) wa-yo;</td>
<td></td>
<td>-(u)-si-p-syo</td>
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<tr>
<td></td>
<td>-(u)p-ti; -(u)wey-ta</td>
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<td><strong>Hamgyŏng</strong></td>
<td>-(u)m-mey; -(u)m-ney;</td>
<td>-(u)m-mey; -wu;</td>
<td>-(u)p-sey;</td>
</tr>
<tr>
<td></td>
<td>-(u)cipi; -(u)way; -ota;</td>
<td>-cipi; -m-nungka;</td>
<td>-(u)p-so;</td>
</tr>
<tr>
<td></td>
<td>-wuta; -weta;</td>
<td>-m-twu(ng); -sswuta;</td>
<td>-(u)-cipi;</td>
</tr>
<tr>
<td></td>
<td>-op-cipi; -(u)m-mey-ta</td>
<td>-(u)m-mey-gi;</td>
<td>-(u)sosey;</td>
</tr>
<tr>
<td><strong>Ch’ungch’ŏng</strong></td>
<td>-ta-ya; -swu; -eyu</td>
<td>-wu; -nam;</td>
<td>-keyna; -wu;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-eyu; -sup-ni-kyya</td>
<td>-eyu</td>
</tr>
<tr>
<td><strong>Standard (Seoul)</strong></td>
<td>-e; -eyo; -ta; -ney;</td>
<td>-e; -eyo; -na; -ni;</td>
<td>-e; -eyo; -key;</td>
</tr>
<tr>
<td></td>
<td>-ya; -uo; -so;</td>
<td>-uo; -so; -(su)nikka;</td>
<td>-sey; -uo; -so;</td>
</tr>
<tr>
<td></td>
<td>-(su)pnita</td>
<td>-(n)unya; -(n)unkayo</td>
<td>-(u)sipso;</td>
</tr>
<tr>
<td><strong>Chŏlla</strong></td>
<td>-eya; -elawu;-lsey;</td>
<td>-eya; -nya; -elawu;</td>
<td>-(u)seyyo</td>
</tr>
<tr>
<td></td>
<td>-si; -ye</td>
<td>-(su)p-ni-kye</td>
<td></td>
</tr>
<tr>
<td><strong>Kyŏngsang</strong></td>
<td>-e-yey; -(si)m-te;</td>
<td>-no; -nung-kyo;</td>
<td>-si-i-so</td>
</tr>
<tr>
<td></td>
<td>-si-te -(ni)te</td>
<td>-(si)-p-ni-kye</td>
<td></td>
</tr>
<tr>
<td><strong>Cheju</strong></td>
<td>-(u)-khiye; -em-ce,</td>
<td>-em-ti(ya) ; -em-sini;</td>
<td>-(u)p-se;</td>
</tr>
<tr>
<td></td>
<td>-em-se; -em-chwu,</td>
<td>-esinya; -m-kka;</td>
<td>-(u)p-ce;</td>
</tr>
<tr>
<td></td>
<td>-kwu-ta; -em-swu-ta;</td>
<td>-m-kko; -em-se;</td>
<td>-(u)-sim;</td>
</tr>
<tr>
<td></td>
<td>-(s)wu-ta</td>
<td>-em-singa;</td>
<td>-cwu</td>
</tr>
<tr>
<td><strong>Kolyemal (Yukchin)</strong></td>
<td>-(u)-o; -kkuma;</td>
<td>-(u)-o; (u)-mtu;</td>
<td>-(u)-o;</td>
</tr>
<tr>
<td></td>
<td>(u)pti-kkuma;</td>
<td>(u)pti-mtu;</td>
<td>-(u)pso;</td>
</tr>
<tr>
<td></td>
<td>(u)ptey</td>
<td>(u)ptey</td>
<td>-keypso; -kio</td>
</tr>
</tbody>
</table>
2.2.4 Pragmatic variation

Korean, along with Japanese, is well known to be rich in linguistic encoding of speech styles and politeness (Aikhenvald, 2010; König & Siemund, 2007; Siemund, 2018). Although the gender-related differences in speech patterns observed in Japanese are less prominent in Korean, some markers (such as -so) are used more frequently by people of particular gender identities and age ranges. The characteristics of an utterance according to social status or register within a dialect are encoded by matrix complementizers. When the heads of CP interact with the features of SAP, the morphological realizations of C must encode features stemming from social elements (e.g., dialect, speech style, politeness, speaker’s gender, and register/formality) in addition to marking the type of the clause. These properties of matrix complementizers in Korean are well described by Brown (2015a):

It is no exaggeration to say that a Korean speaker cannot open his/her mouth to utter a single sentence without considering his/her social position vis-à-vis the person he/she is talking to (and/or talking about) and molding his/her utterance with the appropriate level of honorific forms to match that relationship. (p. 303)

Because of this pragmatic property associated with matrix complementizers, only complementizers that occur in both matrix and embedded clauses (e.g., declarative ta, interrogative nya and ci, imperative la, and exhortative ca) have been discussed often. This is to be expected when the mainstream of generative grammar considers the properties of matrix CP and embedded CP to be identical or composed of a single C. Unlike embedded declarative clauses, the heads of matrix declaratives can be occupied
by functional markers that are inflected in at least six different speech styles in MSK.

This is shown in Table 2-3.

Table 2-3 The speech-style inflected declarative markers

<table>
<thead>
<tr>
<th>English name</th>
<th>Korean name</th>
<th>Declarative endings</th>
<th>Formal/Informal</th>
<th>Honorific category</th>
</tr>
</thead>
<tbody>
<tr>
<td>'deferential' style</td>
<td>hapsypo-chey</td>
<td>-supnita</td>
<td>Formal</td>
<td>Honorific</td>
</tr>
<tr>
<td>'polite' style</td>
<td>hayyo-chey</td>
<td>-eyo</td>
<td>Informal</td>
<td></td>
</tr>
<tr>
<td>'semiformal' style</td>
<td>hao-chey</td>
<td>-(s)o</td>
<td>Formal</td>
<td>Authoritative</td>
</tr>
<tr>
<td>'familiar' style</td>
<td>hakey-chey</td>
<td>-ney</td>
<td>Formal</td>
<td></td>
</tr>
<tr>
<td>'intimate' style</td>
<td>hay-chey</td>
<td>-e</td>
<td>Informal</td>
<td>Non-honorific</td>
</tr>
<tr>
<td>'plain' style</td>
<td>hayla-chey</td>
<td>-ta</td>
<td>Formal</td>
<td></td>
</tr>
</tbody>
</table>

(Brown, 2015a: 305)

Declarative ta, -e, -ney, -(s)o, -eyo, and -supnita in Table 2-3 have been labelled “final-enders/sentence-terminal suffixes/sentence final particles” (Chang, 1996; S. Choi, 1995; Lee & Ramsey, 2000; H. Lee, 1994; M. Pak, 2006, 2008; H. Sohn, 1994, 1999; Song, 2005), or “mood markers” (Bhatt, 1999; S. Choi, 1995; S. Kim, 2011; J. Lee, 2009; Martin, 1992; J. Park, 2011a; Y. Park, 2015; Yoon, 1997), as they have pragmatic/semantic functions as sentence-relating speech acts when they occur at the right edge of sentences. For instance, the plain declarative ta, interrogative ni, imperative la, and exhortative ca contrast with the formal/deferential declarative pnita, interrogative pnikka, imperative psio, and exhortative psita in speech style distinctions (Aikhenvald, 2010: 213; Bisang, 2007: 130; Chang, 1996; König & Siemund, 2007: 280; Siemund, 2018: 88; Sohn, 1994, 1999). The dual properties of Korean matrix COMP UoLs, which mark clause type as well as their pragmatic-discourse function, have received great attention in the literature. The four clause-types and six “speech style” markers are well-documented especially in the typological studies (see Aikhenvald, 2010: 213; König &
introduced them into the literature on the typology of clause types. The consensus views on the pragmatic properties of these grammatical elements are summarized in Table 2-4.

<table>
<thead>
<tr>
<th></th>
<th>Declarative</th>
<th>Interrogative</th>
<th>Imperative</th>
<th>Propositive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plain</strong></td>
<td><em>po-n-ta</em> see-IND-DEC</td>
<td><em>po-ni</em> see-Q</td>
<td><em>po-a-la</em> see-INF-IMP</td>
<td><em>po-ca</em> see-PROPS</td>
</tr>
<tr>
<td><strong>Intimate</strong></td>
<td><em>po-a</em> see-INF</td>
<td><em>po-a</em> see-INF</td>
<td><em>po-a</em> see-INF</td>
<td><em>po-a</em> see-INF</td>
</tr>
<tr>
<td><strong>Familiar</strong></td>
<td><em>po-ney</em> see-DEC</td>
<td><em>po-na</em> see-Q</td>
<td><em>po-key</em> see-IMP</td>
<td><em>po-sey</em> see-PROPS</td>
</tr>
<tr>
<td><strong>Blunt</strong></td>
<td><em>po-o</em> see-BL</td>
<td><em>po-o</em> see-BL</td>
<td><em>po-o</em> see-BL</td>
<td></td>
</tr>
<tr>
<td><strong>Polite</strong></td>
<td><em>po-a-yo</em> see-INF-POL</td>
<td><em>po-a-yo</em> see-INF-POL</td>
<td><em>po-a-yo</em> see-INF-POL</td>
<td><em>po-a-yo</em> see-INF-POL</td>
</tr>
<tr>
<td><strong>Deferential (Formal)</strong></td>
<td><em>po-p-ni-ta</em> see-AH-IND-DEC</td>
<td><em>po-p-ni-kka</em> see-AH-IND-Q</td>
<td><em>po-si-p-si-o</em> see-SH-AH-RQ-IMP</td>
<td><em>po-p-si-ta</em> see-AH-RQ-PROPS</td>
</tr>
</tbody>
</table>

(Sohn, 1994:8, cited in Bisang, 2007: 130; Aikhenvald, 2010: 213)

The bolded elements in Table 2-4 represent the three basic clause types plus exhortative (i.e., propositives (*let’s*-clauses)) in six different styles discussed in the Korean literature, with minor variations (see Aikhenvald, 2010: 213; Chang, 1996: 191; Lee & Ramsey, 2000: 183; König & Siemund, 2007: 280; Siemund, 2018: 88; Yeon & Brown, 2011: 171). For instance, the term *propositive* in Table 2-4 is sometimes interchangeable with ‘exhortative’ or ‘adhortative’ in the literature (cf. M. Pak, 2006, 2008; Sohn, 1994). Although they mark clause type heterogeneously, more attention has been paid to their pragmatic function than their morphosyntactic function. As Brown (2015a: 305) points

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5 Abbreviations used in the glosses in Table 2-4 are from Bisang (2007): AH anterior BL blunt DEC declarative IMP imperative IND indicative INF infinitive PROPS propositive POL polite Q interrogative RQ request SH subject honorific marker
out, the declarative markers’ different styles can be employed within one speech event; that is, formality and informality are not directly associated with these markers, and we should separate the distribution of the forms in syntax from those in pragmatics.

If Korean adults regularly employ six or more declarative markers in everyday speech, how do Korean children or learners of Korean as a second language acquire declarative markers? Several studies (S. Choi, 1991, 1995, 1998, 2015; M. Kim & Phillips, 1998; Y. Kim, 1997) have shown that children acquire either the suffix e or ta in their first uttered verbs. In the next section, I will survey several studies on Korean children’s acquisition of matrix complementizers to support my arguments that the suffixes e and ta are best analyzed as complementizers with distinct morphosyntactic features rather than distinct speech style markers; early acquisition of these two suffixes proves that they do not simply represent distinct speech styles.

### 2.2.5 First language acquisition

Few studies on Korean children’s first language acquisition offer answers about acquisition of complementizers. One thing that these studies have established is that, unlike English native speakers, Korean caregivers and children produce more verb tokens than noun tokens in their utterances, and Korean children tend to acquire predicates before nominal elements (S. Choi, 1998; Tardif, 1996). As Korean verb roots and stems must be inflected and their bare forms are not allowed even in imperatives, verb stems with a complementizer carrying a null tense marker are produced and acquired first. S. Choi (1995: 171) lists matrix complementizers (‘sentence-ending suffixes,’ in Choi’s term) that are characterized based on their semantic properties in the context. S. Choi
reports that Korean children acquire the complementizers in Table 2-5 early; these suffixes are also observed to appear frequently in adult speech directed to children.

Table 2-5 The forms and meanings of Korean sentence-ending suffixes

<table>
<thead>
<tr>
<th>Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPISTEMIC</td>
<td>Selected content</td>
</tr>
<tr>
<td>-ta (Type 1)</td>
<td>newly perceived information for the speaker</td>
</tr>
<tr>
<td>-ta (Type 2)</td>
<td>new information to the listener</td>
</tr>
<tr>
<td>-e</td>
<td>assimilated information, unmarked form</td>
</tr>
<tr>
<td>-ci/-canha</td>
<td>certainty of proposition, shared information</td>
</tr>
<tr>
<td>-kwun</td>
<td>newly made inference</td>
</tr>
<tr>
<td>-tay</td>
<td>reported speech, hearsay/story-telling</td>
</tr>
<tr>
<td>-ney</td>
<td>information based on factual evidence</td>
</tr>
<tr>
<td>-ni</td>
<td>uncertainty and negative bias of proposition</td>
</tr>
<tr>
<td>DEONTIC</td>
<td>Selected content</td>
</tr>
<tr>
<td>-kkey</td>
<td>future, intention, prediction</td>
</tr>
<tr>
<td>-llay</td>
<td>future, desire</td>
</tr>
</tbody>
</table>

(S. Choi, 1995: 171)

The first matrix complementizer acquired by children is either underspecified e or declarative ta. Results from two different studies show that children may vary in which of these they acquire first. S. Choi (1991) investigates three young Korean children’s acquisition of matrix complementizers. In Table 2-6, one child (PL), who is 1 year 8 months 2 weeks old, utters a verb stem marked by ta earlier than e with a request function, one child (TJ) utters e with a request function before ta; and one child (HS) starts uttering ta and e with a request simultaneously.

Table 2-6 Three young Korean children’s acquisition of matrix COMPs

<table>
<thead>
<tr>
<th>PHASE</th>
<th>I</th>
<th>II (request)</th>
<th>II (descriptive)</th>
<th>III</th>
<th>IV</th>
<th>(deontic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL</td>
<td>1:8.2</td>
<td>1:9.2</td>
<td>1:11.2</td>
<td>2:0.3</td>
<td>2:1.2</td>
<td>2:0.3 2:1.2</td>
</tr>
<tr>
<td>TJ</td>
<td>1:9.3</td>
<td>1:9.0</td>
<td>1:11.1</td>
<td>2:2.0</td>
<td>2:1.1</td>
<td>2:6.1 2:7.3</td>
</tr>
<tr>
<td>HS</td>
<td>1:10.2</td>
<td>1:10.2</td>
<td>1:10.3</td>
<td>2:1.3</td>
<td>2:5.4</td>
<td>2:3.1 2:1.3</td>
</tr>
</tbody>
</table>

(S. Choi, 1995: 99)
S. Choi (1991: 118) concludes that there is no relationship between input frequency of tokens and the order of acquisition of these suffixes.

A child in M. Kim and Phillips’s (1998) study showed different results. Jiyong, the child subject, uttered verb stems marked by $e$ 100% of the time during her first two years of acquisition but decreased that frequency to 88.6% after she acquired the other complementizers. This is shown in Table 2-7. M. Kim and Phillips (1998) further observe that, by the age of 2 years and 7 months, Jiyoung was using $e$ in the speech context of three major illocutionary forces (command, assertion, and question) with occasional errors; for instance, using $e$ instead of $e$-yo or $ca$ in the exhortative context.

Table 2-7 Jiyong’s acquisition of matrix COMPs

<table>
<thead>
<tr>
<th>Age</th>
<th>Total #M</th>
<th>-$e$ (-a)</th>
<th>-$t$a</th>
<th>-$ci$</th>
<th>-$ca/e$-yo</th>
<th>Modality-involving</th>
</tr>
</thead>
<tbody>
<tr>
<td>2;2</td>
<td>42</td>
<td>42(100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2;3</td>
<td>132</td>
<td>132(100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2;4</td>
<td>207</td>
<td>185(89%)</td>
<td>7</td>
<td>13</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2;5</td>
<td>89</td>
<td>86(96.6%)</td>
<td></td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>2;6</td>
<td>79</td>
<td>70(88.6%)</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2;7</td>
<td>64</td>
<td>60(93.7%)</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>total</td>
<td>613</td>
<td>575</td>
<td>9</td>
<td>18</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

(M. Kim & Phillips, 1998: 3)

The frequency of matrix complementizers in caregiver’s speech in M. Kim and Phillips (1998) is shown in Table 2-8. Although M. Kim and Phillips (1998) count clauses marked by $e$ (a) separately from those marked by $ya$ (copular $-i$- plus $a$), they could have been considered together as $e$ (a).
Table 2-8 The frequency of matrix COMPs in caregiver’s speech

<table>
<thead>
<tr>
<th></th>
<th>-e (-a)</th>
<th>-ta</th>
<th>-ya</th>
<th>-ni</th>
<th>-ci</th>
<th>-ca</th>
<th>Modality-involving</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>908</td>
<td>137</td>
<td>318</td>
<td>145</td>
<td>221</td>
<td>48</td>
<td>238</td>
<td>2080</td>
</tr>
<tr>
<td>Percentage</td>
<td>43.7%</td>
<td>6.6%</td>
<td>15.3%</td>
<td>7%</td>
<td>11%</td>
<td>2.3(%)</td>
<td>11%</td>
<td>100%</td>
</tr>
</tbody>
</table>

(M. Kim & Phillips, 1998:3)

What do these studies on children’s acquisition of matrix complementizers tell us? Do children learn pragmatics and syntax simultaneously? S. Choi (1991) proposes that Korean children acquire epistemic modality earlier than deontic modality. Do they learn epistemic knowledge alongside syntactic functions? What evidence can show that children are acquiring a modality rather than a grammatical category C or a form? Although neither of the studies reviewed above indicates which dialects the observed caregivers speak, the data suggests that they speak Standard Korean. Would the children acquire e or ta first if the caregivers were to speak dialects other than Standard Korean—given that, as S. Choi (1991) stated, there appears to be no relationship between input frequency of tokens and the order of acquisition of these suffixes? Although I do not seek answers to these questions in this dissertation, it is worthwhile to ask how we can distinguish the syntactic categorial form from the form expressing a semantic modality if both are expressed simultaneously.

2.3 Conclusions

This chapter provided an overview of matrix complementizers (in general and in Korean) and introduced the outstanding issues this dissertation will address. I laid out my claim that all matrix clauses contain a complementizer, regardless of their morphophonological realization. I briefly described Korean matrix complementizers from the perspectives of
historical development, dialectology, pragmatics, and early acquisition. Not only have Korean matrix complementizers changed over time in terms of function and shape, they also display variants across dialects in synchronic grammar. Pragmatic and early acquisition studies support the hypothesis that the differences between complementizers—for instance, the difference between e and ta—cannot simply be accounted for by differences of speech style.
Chapter 3

Complementizers in a single-layered CP

3.1 Introduction: The role of matrix complementizers

What are the properties of matrix complementizers in Universal Grammar (UG)? Unlike matrix complementizers that can be deleted (Bresnan, 1970, footnote 4), Chomsky’s initial motivation for introducing a matrix CP into syntactic analysis was to host a moved element in the structure (see Newmeyer, 1986: 159). In proposing a “complementizer substitution universal” to host wh-phrases in English transformations, Chomsky (1973: 234) presupposes a universal category COMPLEMENTIZER in matrix clauses. Given this background, the term ‘complementizer’ in Chomsky (1973) refers to a structural position presented in the structure rather than morphophonological elements or feature bundles.

In addition to serving as the landing site for moved elements in the clausal structure, the matrix CP is also the syntactic domain where the clause type is licensed, various modalities are expressed, and finiteness is determined in both the generative tradition (Adger, 2007; Carnie 2013; Chomsky, 1995: Koopman & Sportiche, 2014; Wöllstein, 2004) and the Cartographic Project (Adger & de Cat, 2004; Demonte & Fernández-Soriano, 2009; Emonds, 2004; Rizzi, 1997, 2001). The analysis of matrix complementizers as sentence type operators is favored in semantic and pragmatic

---

1 I use the notion “clause-type” to denote sentence force in this chapter. Clauses have been identified to have several different types based on the following properties: i) dependency: dependent (subordinating, complement, small and relative clauses) versus independent clauses, embedded versus main clauses; ii) force: declarative, interrogative, imperative; iii) mood: indicative, subjunctive; iv) finiteness: finite, non-finite; v) polarity: positive, negative; vii) parenthetic, insubordination. Some of these terms overlap conceptually to a greater or lesser extent.
analyses (Jeong & Potts, 2016; Kaufmann, 2012; Lauer 2013), speech act theory (Harnish, 1994; Sadock, 1994, Siemund, 2018), and studies of modality (Palmer, 2001; Portner, 2009, 2017) and prosody (Bartels, 1999; Gunlogson, 2003), while syntactic studies focus on the hierarchical organization of CPs from the perspective of structural position (Cinque, 1999; Coniglio & Zegrean, 2012; Rizzi 1997, 2001; Saito, 2012; Speas, 2004; Ueda, 2009). In line with the syntactic approach and putting aside complementizers’ pragmatic properties (i.e. speech style related properties), the goal of this chapter is to provide a comprehensive discussion of their morphosyntactic properties in a single-layered CP in Korean.

The structure of this chapter is as follows. In Section 3.2, I briefly review the literature on clause types. I am concerned with the issue of representing two conflicting clause type markers (i.e. a declarative and an interrogative clause-typing marker) within a clause. In Section 3.3, I explore the distribution and interpretation of clause-typing complementizers in Korean, including declarative ta in matrix clauses. I show that Korean sentence force can be expressed either solely through clause-typing complementizers or through an arrangement of two or more grammatical features such as suprasegmentals, Tense-Aspect-Modal (henceforth, TAM) elements, and the person feature on the subject. I argue that e and ci are underspecified Type complementizers. In Section 3.4, I investigate the distributional properties of complementizers and their compatibility with other functional elements. In Section 3.5, I propose a language-specific complementizer category, Type. I present a summary of the distribution of morpholexical complementizers associated with matrix COMP heads by discussing their properties from the perspective of the Universal Spine Hypothesis (Wiltschko, 2014).
3.2 The grammar of clause type and the interpretation of force

With respect to licensing the clause type, studies (including typological studies) have shown that languages differ considerably in how they present clausal force (König & Siemund, 2007; Sadock & Zwicky, 1985): Some examples include work on imperatives (Aikhenvald, 2010; Schalley, 2008; Van der Auwera & Lejeune, 2006), interrogatives (Cheng, 1991; works in Chisholm, Jr., 1984; Luo & Wu, 2017; Siemund 2001), exclamatives (Badan & Cheng, 2015; Brandner, 2010; d’Avis, 2001, 2016; Delfitto & Fiorin, 2014a, 2014b; Yamato, 2010) and tag questions (Brasoveanu, De Clercq, Farkas, & Roelofse, 2014; Culicover, 1992; Kimps, 2007, 2016; Kimps, Davidse, & Cornillie, 2014; Mithun, 2012). Nevertheless, as many languages show similarities (e.g. a person feature on the subject is restricted to second person or an interrogative marker is overtly marked), theoretical studies have attempted to unify the parametric properties of clause types across languages in the framework of UG: see work on interrogatives (Cable, 2010; Cheng, 1991; Ginsburg, 2009), imperatives (Alcázar & Saltarelli, 2014; Han, 1998; Isac, 2015; Medeiros, 2013; Zanuttini, 2008), optatives (Grosz, 2011), and jussives (Dobrushina, 2012; Zanuttini et al. 2012). However, Portner (2004) remarks on the lack of studies focusing on “clause type systems”, while König and Siemund (2007: 323) point out that there are very few studies on the relationship between clause-typing markers (the strategies) and the interpretation of sentence force. In other words, morpholexical and morphophonological realizations of matrix complementizers, especially those of the heads of ForceP and FiniteP rather than TopicP or FocusP in the split-CP system (Rizzi, 1997), are still understudied, particularly in non-European languages.
Several theoretical studies suggest that C has a clause-typing feature (Biberauer & Roberts, 2015; Cheng, 1991; Chomsky 2000, 2001; Haegeman, 2012; Moscati, 2010; Rizzi, 1997) and consider overt functional morphs as the realization of the phrasal head. Following this assumption, I will discuss two central issues in the morphosyntax of complementizers while investigating the morphosyntactic properties of Korean matrix complementizers: (i) the internal structure of matrix complementizer systems; and (ii) the association between morphological items in the C domain and the structural heads of matrix CPs.

In the literature on complementizers, two proposals have been made about the internal structure of the complementizer system: single CP projection versus split-CP projection. The split-CP hypothesis suggests that the phrase (ForceP) headed by Force markers or containing Force operators—regardless of their morphological status, overt or null—specifies whether a given clause is declarative, interrogative, or exclamative and so on (Douglas, 2017; Haddican, Holmberg, Tanaka, & Tsoulas, 2014; Prieto & Borràs-Comes, 2017; Rizzi, 1997). Nevertheless, how many and what kind of operators are associated with Force P or CP in the grammar have not been thoroughly discussed, to the best of my knowledge. Both the single and split-CP approaches suggest that if a complementizer system has a morph X that is associated with a particular clause type, then the morph is associated with C and the marker is the head or an operator of CP or ForceP.² Some theoretical problems of this approach are how we treat null/empty

² It seems that the English interrogative adverb whether (sometimes considered to be a complementizer) is not considered to have a head-relationship with the embedded interrogative clause and it is proposed to be in the specifier of CP (Adger & Quer, 2001; Pesetsky & Torrego, 2001).
morphs that are associated with a particular clause type and how we treat a single phonetic form associated with all three basic clause types.

3.2.1 Encoding of clause type and its presentation

Every natural language, including English and Korean, shares the declarative and interrogative clause types (expressing illocutionary force in speech act theory or sentence modalities in semantics), but these clause types may be encoded very differently, both morphosyntactically and morphophonologically, in different grammars. For instance, auxiliary do-support and subject-auxiliary verb inversion are used in matrix interrogative clauses in English but not Korean, while interrogative-typing markers are found in matrix interrogatives in Korean but not English.

Morphophonologically, both declaratives and interrogatives are marked overtly in matrix clauses in Korean, while they are marked overtly in embedded clauses in English. Nevertheless, our theory posits that in both languages, a [+Q] or [-Q] operator on the head or specifier of CP licenses the interrogative or declarative clause type, respectively. 3 Whereas English marks main and embedded clauses asymmetrically, all clause types are marked by overt lexical items in Korean—but there is more than one lexical item for each clause type.

Under the single CP approach, the different encodings of English and Korean clause types in matrix clauses must be parametric properties of morphophonological components of the complementizers. Under the split-CP approach, the different encodings of English and Korean clause types can be interpreted two different ways: (i)

3 Contrary to the dominant assumption, Roberts and Roussou (2002: 141) assume that there is no such [+DECL] or [-DECL] feature and that C, as the head of CP, means Declarative by default where a sub-clause type feature of C such as Q, Exclamative, or Conditional is absent.
they may be seen as variations of the morphophonological components of complementizers; or (ii) they may permit consideration of the difference as parametric properties of distinct complementizers, the heads.

Typological studies on the grammatical marking of clause types state that the three basic clause types are attested across languages, although languages differ considerably in how they present clausal force (König & Siemund, 2007; Sadock & Zwicky, 1985; Siemund, 2018). Survey studies on clause-typing markers sometimes present the data with puzzling glosses, such as a declarative type marker and an interrogative type marker co-occurring within a simple clause. According to König and Siemund (2007), the declarative à (32a) and interrogative hère (32b) typing markers can co-occur in Shona (a Bantu language), as in (32b).

(32) **Shona**

a. *ndi-nô-tàùr-à*
   
   1.SG-PRES-speak-DEC
   ‘I speak.’

   (König & Siemund, 2007:323)

b. *ndi-nô-tàùr-à*  
   
   1.SG-PRES-speak-DEC  
   ‘Do I speak?’

   (König & Siemund, 2007:323)

Similarly, König and Siemund (2007) and Siemund (2018) present Japanese data in which the interrogative marker *ka* (33b) selects the portmanteau suffix -*ru* (33a) that indicates the present tense and the declarative force simultaneously in the Japanese clause-type system, as in (33b).

(33) **Japanese**

a. *sakana-o  tabe-ru*
   
   fish-ACC  eat-PRES.DEC
   ‘I eat fish.’

   (Siemund, 2018: 89)
b. *sakana-o  *tabe-ro/te-ka
   fish-ACC  eat-IMP-INT
   ‘Do you eat fish?’  (intended)

Contrary to these two languages, and as predicted by Sadock and Zwicky (1985), the interrogative marker *ni*(35b) and the declarative marker *ta*(35a) are mutually exclusive in a clause in Korean, as illustrated in (35c).

(35) Korean
   a. chamchi-lul cacwu mek-ess-ka
      tuna-ACC often eat-PRES-DEC
      ‘(I) often ate tuna fish.’
   b. chamchi-lul cacwu mek-ess-ka
      tuna-ACC often eat-PST-INT
      ‘Did (you) often eat tuna fish?’
   c. chamchi-lul cacwu mek-ess-(*ta)-ni
      tuna-ACC often eat-PRES-DEC-INT
      ‘Did (you) often eat tuna fish?’ (intended)

A question arises about whether the difference between Japanese and Korean is merely a parametric variation of the properties of the morphological complementizers or the C
system. The distinct organization of morphological encoding in the clause-typing systems of two different languages which are usually considered to have very similar grammar (cf. Horie 2000; Kaplan & Whitman 1995; Kim 2011; Koopman 2005; Kubota & Lee 2015) calls for attention in analyzing the system of universal complementizers. The glossing that declarative and interrogative markers co-occur within a clause may be problematic in syntax and semantics; it must require two heads within a CP or ForceP with distinct subcategorial features. Furthermore, the question force marked by the Shona here and the Japanese ka must conceptually contradict each other, with the assertion force marked by the Shona declarative à and the Japanese declarative ru, so why does this derivation not crash at LF? Alternatively, the (32b) and (33b) clauses may be different kinds of questions apart from being information-seeking yes-no questions, like what Yokoyama (2013) discribes as “rhetorical questions”, “conjectural questions”, and “self-addressed confirmatives”.

The departure point of this section was the observation that the nature of matrix complementizers in languages with large numbers of morphological realizations has not received much attention outside of typology. For instance, the discussion on how the relationship between complementizers as morphs (e.g., sentential particles) and the complementizers as heads are projected in the C system is needed. I seek to answer the following questions:

- If interrogative and declarative markers can co-occur in a clause, do they have semantically conflicting features in the structure?
- If interrogative and declarative markers can co-occur in a clause, do they occupy the same or distinct positions in the structure?
The co-occurrence of seemingly contradictory clause-type markers within a clause is not only presented in typological studies; it is also presented in the generative literature. Based on the different interactions of declarative *che* and interrogative *se* with Topic and Focus heads, Rizzi (2013) proposes that *che* ‘that’ occupies a distinct structural position from *se* ‘if’ in Italian embedded clauses; the claim is also supported by empirical data from Spanish, which has the complementizer sequence *que si* ‘that if’ in embedded clauses (Plann, 1982; Suñer, 1994). Dutch also has the *of dat* ‘if that’ sequence (Zwart, 2011). Does Spanish *que* have [+DECL] while *si* has [+Q] features in the embedded clauses? As Rizzi (2013: 206) proposes, if IntP with a polar question operator is compatible with ForceP in an embedded clause in Italian and Spanish, do we expect the same structure in matrix clauses? Thus, the first central issue regarding the internal structure of matrix CPs is the exact relationship between the morphologically realized functional items and the structural heads of the systems; the internal structure of matrix CP contains more than one morphologically realized functional item which may or may not have distinct illocutionary forces.

The second issue is the treatment of homophones within the complementizer category. If a morph or particle expresses more than one kind of clause type, how is the element interpreted at LF? Since the shape of the complementizer is the same, it must be that the structural heads differ in such cases. It is quite common that a homophonous complementizer marks two or more distinct clause types. Korean has complementizers with a single form appearing in all three basic clause types at the right periphery of

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4 Plann and Suñer both translate *que si* as ‘whether’; Plann glosses it as ‘that if’, while Suñer does not include glosses of that particular example and *que* is indicated as optional in parentheses.
matrix clauses. Consider the distribution of $e$, which occurs as a head in three distinct types of clauses, as shown in (36).

(36) **Matrix complementizers in an intimate speech style**

a. *moki-lul* $\text{cap-ass-e-}\downarrow$ (declarative)
   mosquito-ACC catch-PST-COMP-FI
   ‘(I) caught the mosquito.’

b. *moki-lul* $\text{cap-ass-e-}\uparrow$ (interrogative)
   mosquito-ACC catch-PST-COMP-RI
   ‘Did (you) catch the mosquito?’

c. *moki-lul* $\text{cap-θ-a-}\uparrow$ (interrogative)
   mosquito-ACC catch-T-COMP-RI
   ‘Do I catch the mosquito?’

d. *moki-lul* $\text{cap-θ-a-}\downarrow$ (imperative)
   mosquito-ACC catch-T-COMP-FI
   ‘Catch the mosquito!’

If we put aside the pragmatic properties of the intimate speech style of $e$, what we observe is that there is no one-to-one relationship between $e$ and the clause type.\(^5\) The arrow $\uparrow$ indicates a rising pitch contour and $\downarrow$ indicates a falling pitch contour. The past tensed $e$-clause with a falling intonation (36a) is interpreted as a declarative, but with a rising intonation (36b) is interpreted as an interrogative. The tenseless $e$-clause with a rising intonation (36c) is interpreted as an interrogative, but with a falling intonation (36d) is interpreted as an imperative. In written discourse, punctuation markers replace two alternating intonations. The arrows $\uparrow$ and $\downarrow$ are represented as independent functional markers separated by a hyphen from $e$ in the examples in (36), because they are functional markers that enter the structure independently.

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\(^5\) The low vowel $e$ alternates with the middle vowel $a$ due to vowel harmony in Korean. The null subjects in the examples are recoverable by topic in the discourse because Korean is a discourse-oriented *pro*-and topic drop language (cf. Barbosa, 2011; Huang, 1984; Y. Kim, 2000; Kown & Sturt, 2013).
According to the traditional view, this expletive-like *e* is simply an intimate speech style sentence particle: an intimate speech style declarative (36a), an intimate speech style interrogative (36b), and an intimate speech style imperative (36c) (Chang, 1996; Sohn, H., 1999). However, as the same form appears in all distinct clause types, there is no evidence that the marker *e* actually carries the clause-typing subcategorial features associated with the head of CP or ForceP, except for filling the head associated with clause type at LF. Moreover, *e* must be of category C because it selects the past tense marker *ss* (or *ess/ass*), as in (36a) and (36b).

Based on the distribution of the suffix *e* in the clause-typing system, I seek to answer the following questions:

- How does a functional marker with the same morphophonological representation signal three conceptually distinct clause types?
- Can a marker with the same morphophonological representation have three distinct clause type features in the same domain: *e* [-Q], *e* [+Q], and *e* [[IMP]]?

A homophonous morpheme marking all three basic clause types is also proposed for English clause types. Within a generative approach to English clause types, a null morphological realization of C is proposed to be a head of all three basic clause types. A null complementizer with a second-person feature (Bennis, 2006) and an imperative operator (Han, 1998, 2001) are proposed for the imperative; a null COMP in (37a) is assumed to be the allomorph of a head of declarative-complement clause as in (37b) but cannot be the allomorph of the head of a subject complement clause in (37d), as in (37c),
although the *that*-clauses in (37b) and (37d) are equally both finite dependent clauses and have identical surface strings.

(37)

a. Mary thinks \([c \emptyset] \text{Sue will buy the book}\].

b. Mary thinks \([c \text{that}] \text{Sue will buy the book}\].

c.*\([c \emptyset] \text{Sue will buy the book}\] was expected by everyone.

d. \([c \text{That}] \text{Sue will buy the book}\] was expected by everyone.

(Stowell, 1981, cited in Pesetsky & Torrego, 2001: 392)

It is also proposed that a null C is the head of matrix declaratives (Roberts & Roussou, 2002).

(38)

a.*\([c \text{That}] \text{Sue will buy the book}\].

b. \([c \emptyset] \text{Sue will buy the book}\].

A null C is also proposed for the head of interrogative clauses with *whether*. Pesetsky and Torrego (2001) propose that *if* is a head of CP, while a null C occupies the head of C in *whether*-complement clauses of the verb *ask*, as in (39). This proposal is also accepted in Adger and Quer (2001) and Radford (2009).

(39)

a. Mary asked me \([c' \text{whether} \emptyset c \text{Bill was happy}]\].

b. Mary asked me \([ifc \text{Bill was happy}]\].

(Pesetsky & Torrego, 2001: 392)

Like the Korean clausal marker *e* (or *a*) in (36), a null C appears as the head of different clause types in English. If the same form can mark different clause types in the
clause-tying C domain, how are the Clausal Typing Hypothesis (Cheng, 1991) and the ForceP hypothesis (Rizzi, 1997) satisfied in the grammar?

As pointed out by Portner (2004), the relationship between the interpretation of force and its encoding in the grammar needs more attention. For instance, the UoL no is often glossed as Q in the Japanese literature, as shown in (40a). However, no also appears in declaratives, as in (40b).

(40)

a. Taroo-wa nani-o awatete-iru-no
   Taro-TOP what-ACC panick-ing Q
   ‘Why (in the hell) is Taro panicking?’ (Miyagawa, 2017:15)

b. Taroo-wa soko-ni i-ku no
   Taro-TOP there-to go-PRES no
   ‘Taro will go there.’ (Saito, 2015:268)

If no and ka were both interrogative markers as suggested, it entails that when these markers co-occur in an embedded clause as in (41a), they would be glossed as two Qs as in (41b).

(41)

a. Taroo-wa [kare-no imooto-ga soko-ni i-ta (no) ka (to)] minna-ni
   Taro-TOP he-GEN sister-NOM there-at be-PST no ka to all-DAT
   tazune-ta
   inquire-Past
   ‘Taroo asked everyone if his sister was there.’ (Saito, 2015:262)

b. Taroo-wa [kare-no imooto-ga soko-ni i-ta (no) ka (to)] minna-ni
   Taro-TOP he-GEN sister-NOM there-at be-PST Q Q COMP all-DAT
   tazune-ta
   inquire-PST
   ‘Taroo asked everyone if his sister was there.’
Why does a clause need two interrogative markers? What is the precise role of the Japanese UoL no in matrix and embedded clauses? Like the Korean COMP UoL e and the English null COMP UoL, the Japanese COMP UoL no can be the head of more than two different clause types in matrix clauses. Moreover, it seems that a question force can be manifested by more than one COMP UoL in Japanese matrix clauses: namely, no with a rising intonation and ka. Therefore, it is important to distinguish clause-typing markers assisted by intonation in matrix clauses from those that are not.

Drawing data from Korean, I attempt to rectify existing blanks in the literature concerning the formal marking of potential sets of grammaticalized clause-type complementizers in matrix clauses. This chapter investigates the morphosyntactic properties of Korean matrix complementizers with respect to their form, distribution, and interpretation.

3.3 Clause-typing complementizers: Type markers versus expletives

The Korean clause-typing system in matrix clauses employs two devices to indicate sentential forces. The one-to-one relationship between the morphological realizations of the Force heads (e.g., the declarative type marker ta is associated with asserting force); and the “typing” of the force of a clause through a combination of finiteness, the person feature on the subject, and intonation (e.g., an asserting force is typed by a type marker e associated with a falling intonation in tensed clauses). In the latter configurational clause-typing system, a morphological realization is presented in the CP heads, but it does not carry an interpretable subcategorial feature such as DECL or [-Q]. Korean is a language that uses both strategies discussed in Portner (2004) to express the three basic clause
types and forces. Portner (2004) lays out the mechanisms used by languages to generate the sentential force. The two mechanisms identified are:

(42)

a. Clauses are “typed” (i.e., marked as belonging to a certain type) through the presence of some specialized element, often seen as encoding the force of the clause. This element is viewed as residing high in the clausal structure, typically in the CP domain.

b. Clauses are “typed” through a combination of grammatical properties, as in the construction grammar approach. For instance, an interrogative in English might be identified as the abstract construction type that can be realized by the presence of a *wh*-operator or subject-auxiliary inversion.

(Portner, 2004: 236)

Despite extensive examinations of individual clause types in formal studies, systematic studies focusing on the holistic system of the mapping between clause-typing markers and their clause typing properties in a single language have rarely been conducted. For instance, the system of more than fifty clause-typing morphological markers that are frequently used in Korean (C. Kim, 2012) has not been fully investigated from the morphosyntactic perspective. In my dissertation, I only focus on three speech styles—plain, intimate, and polite (indicated as bold)—in Table 3-1. Table 3-1 is a reorganized version of Table 2-4, merging the cells which have identical phonetic forms. Notice that intimate *e*, blunt *o*, and polite *-e-yo* occur as heads in all three basic clause types.

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6 I am aware of the studies investigating Plains Cree (Cook, 2008), Northern Italian dialects (Poletto, 2000), and Ecuadorian Siona (Bruil, 2014).
Table 3-1: Speech style sentence-enders in relation to clause-types

<table>
<thead>
<tr>
<th></th>
<th>Declarative</th>
<th>Interrogative</th>
<th>Imperative</th>
<th>Exhortative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain</td>
<td>-ta</td>
<td>-ni</td>
<td>-la</td>
<td>-ca</td>
</tr>
<tr>
<td>Intimate</td>
<td></td>
<td>-e</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Familiar</td>
<td>-ney</td>
<td>-na</td>
<td>-key</td>
<td>-sey</td>
</tr>
<tr>
<td>Blunt</td>
<td></td>
<td>-o</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polite</td>
<td></td>
<td>-e-yo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferential</td>
<td>-p-ni-ta</td>
<td>-p-ni-kka</td>
<td>-si-p-si-o</td>
<td>-p-si-ta</td>
</tr>
</tbody>
</table>

The morphosyntactic properties of the other three speech styles—familiar, blunt, and deferential—are primarily excluded from investigation in this dissertation in the interests of space, but there are rationales behind the selection of the former styles (plain, intimate, and polite speech styles) over the latter ones (familiar, blunt, and deferential speech styles). First, the familiar speech style markers—ney, na, key, and sey—are likely related to the evidential domain (K. Kim, 2004; Noh, 2003; Strauss, 2005) and probably construct a separate clause-typing class. According to Noh (2003), the distribution of n ey is constrained by pragmatics and n ey is analyzed as “a marker of relevant information to the speaker”. Noh (2003) gives a situation in which one would use -ney instead of -e or ta: when one notices their friend’s new haircut, the speaker would utter the clause with n ey.

(43) a. meli calla-ss-ney
g hair cut-PAST-DECL.EVID
‘You got your hair cut.’

None of the four familiar speech style markers can be embedded by matrix predicates; all markers except imperative key (i.e., n ey, na, and sey) can be marked by polite yo. Their
morphosyntactic distribution almost resembles the intimate and blunt speech styles. As my focus is not on the semantic and pragmatic properties of these markers, I exclude them from the main discussion.

Second, the blunt speech style marker -o is possibly a pragmatically-conditioned allomorph of the intimate speech style marker e; -o appears in all three basic clause types like e, yet unlike e, -o does not appear in complements of auxiliary verbs. Although e at the right edge of clauses functions as a clause head while expressing an intimate speech style, it also occurs as the head of complement of auxiliary verbs, as shown in (44). The grammatical clauses in (44a) show that e can be the complement of the auxiliary verb po- ‘see; try’, while o can be embedded by neither the COMP UoL nun (44b) nor the auxiliary verb (44c).

\[(44)\]
\[\text{a. } [\text{Swuna-}ka\ ku\ mwuncey-lul\ phwul-e\ po-ass-ta]\]
\[\text{Swuna-NOM the problem-ACC solve-COMP see-PAST-DECL}\]
\[\text{‘Swuna tried to solve the problem.’}\]

\[\text{b.* } [\text{Swuna-}ka\ ku\ mwuncey-lul\ phwul-ess-o]\text{-nun}\ cwucang\]
\[\text{Swuna-NOM the problem-ACC solve-PAST-COMP-COMP claim}\]
\[\text{‘the claim that Swuna solved the problem’ (intended)}\]

\[\text{c.* } [\text{Swuna-}ka\ ku\ mwuncey-lul\ phwul-o\ po-ass-ta]\]
\[\text{Swuna-NOM the problem-ACC solve-COMP see-PAST-DECL}\]
\[\text{‘Swuna tried to solve the problem.’}\]

Thus, assuming the blunt speech style marker -o is a pragmatically-conditioned allomorph of e, it is left for future study.

I also leave deferential speech style markers for future study because they are highly inflected in pragmatics. This is supported by the fact that the deferential speech style markers never occur in embedded clauses/narrow syntax. Unlike plain declarative
ta, deferential declarative pnita cannot occur as the head of noun complement clauses/restricted relative clauses or as the clausal complement of matrix predicates (Portner et al., 2019). This is shown in (45).

(45)

a. Swuna-ka ku mwuncey-lul phwul-ess-ta (plain)
   Swuna-NOM the problem-ACC solve-PST-DECL
   ‘Swuna solved the problem.’

b. Swuna-ka ku mwuncey-lul phwul-ess-supnita (deferential)
   Swuna-NOM the problem-ACC solve-PAST-DEC.DEF
   ‘Swuna solved the problem.’

c. [Swuna-ka ku mwuncey-lul phwul-ess-ta]-nun cwucang
   Swuna-NOM the problem-ACC solve-PST-DEC.PNE claim
   ‘the claim that Swuna solved the problem’ (Kim, 2011: 279 (2))

d.*[Swuna-ka ku mwuncey-lul phwul-ess-supnita]-nun cwucang
   Swuna-NOM the problem-ACC solve-PAST-POL.COMP.COMP claim
   ‘the claim that Swuna solved the problem’ (intended)

Only plain declarative ta (45a) can be the head of noun complements marked by nun (analyzed as a “prenominal marker (PNE)” by Sh. Kim (2011)) subordinating cwucang ‘claim’ (45c). Conversely, the well-formed differential declarative supnita (45b) cannot be embedded by nun, as in (45d). The UoL supnita is a marker which has politeness toward the addressee already incorporated into the form. Unlike polite yo which follows C, the polite marker supni occurs between T and C. This position, which is lower than C, is similar to that of the Japanese polite marker -mas- which occurs between V and T (cf. Miyagawa, 2017:19). Indeed, Korean also has a politeness-related marker between V and T; the Korean subject honorific marker -si- occurs in the same position as the Japanese -mas-. By only comparing two languages, we observe a micro-variation of politeness in the syntactic structure within a language and across languages. As my goal is not to
determine the structural positions of various politeness-related pragmatic features, I do not bring these differential speech style markers into this dissertation. Instead, two distinct sets of matrix COMP UoLs marking types of clauses are investigated: type markers versus expletive-like configurational COMP UoLs. § 3.3.1 discusses type markers, while § 3.3.2 discusses expletive-like configurational COMP UoLs.

3.3.1 Examples of clause-typing COMP UoLs: -ta, -ni, -la, -ca, -ma, -l-la, -te-la

The heads of clauses in Korean are all morphologically marked. Some of them have a one-to-one relationship between form and the interpretation of the clause type, while some of them do not. Overtly marking clause type is not the exception for declaratives. Korean is a “marked declarative language” in which the morphological marker of declaratives shows a parallel distribution with interrogatives (Zaefferer, 1990: 222). Sadock and Zwicky (1985) list languages such as German, Welsh, Greenlandic, Blackfoot, and Hidatsa as exhibiting marked declaratives. The matrix clauses in (46) are marked by the basic three clause-typing COMP UoLs: ta (46a), ni or nya (46b), and la (46c) which express declarative, interrogative, and imperative, respectively.

(46)

a. Hamoni-ka cip-ul naka-ss-ta (declarative)
   Harmony-NOM home-ACC go out-PST-DECL
   ‘Harmony left the house.’

b. Hamoni-ka cip-ul naka-ss-ni/nya (interrogative)
   Harmony-NOM home-ACC go out-PST-INT
   ‘Did Harmony leave the house?’

c. cip-ul naka-la (imperative)
   home-ACC go out-IMP
   ‘Leave the house!’
As shown in (46), the morphological marker of the three basic clause types in Korean is indicated in parallel. It is well-established that the declarative and interrogative clause types are licensed in the COMP domain: either CP (Chomsky, 1995) or ForceP (Rizzi, 1997) depending on whether one uses the single CP or split-CP approach; however, it remains less clear whether imperatives are also licensed in the COMP domain. Imperatives are similar to interrogatives and declaratives, in that they indicate illocutionary force but are distinguished in terms of finiteness. Imperatives are also distinct from the other main clause types in that they only license a second-person feature on the subject, with or without number inflection (Van der Auwera & Lejeune, 2006). If a language has a designated UoL that marks a clause as an imperative (or any other clause type), should it be considered an imperative complementizer or a null operator with second-person and non-finite features (cf. Bennis, 2006)? It is reasonable to ask which projection imperative la (46c) occupies: TP or CP in the traditional approach; IP, FinP, or ForceP in Rizzi (1997); or T-JussiveP in Zanuttini et al., (2012). Based on its distribution in negative imperatives, Han and Lee (2007) propose that imperative la is the head of CP which selects a null deontic modal in ModP, which itself selects negative mal, suggesting that both declarative ta and imperative la occupy the head of CP in Korean. Following Han and Lee (2007), I consider the functional elements at the right periphery of the

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7 The interrogatives nya and ni are in free variation in independent clauses (M. Pak 2008), while ni does not occur in dependent clauses headed by ko.

8 Imperative la has two allomorphs: CV-la and CVC-ela. It is unclear whether the UoL -la attaches to √V-e, or whether the UoL ela is an imperative marker. Cho and Sells (1995), Han (2007), and M. Pak (2008) gloss ela as an imperative marker. The root ssu- in verb ssu-ta ‘write’ is pronounced as sse when it is followed by e and ela, as in the three putative underlying imperative forms: ssu-e[sse]; ssu-ela[ssela]; ssu-la[ssela] ‘Write (it)!’; *ssu-∅.
clauses in (46) to all be COMP UoLs regardless of the finiteness or non-finiteness of the clauses marked by them.

In terms of the feature of C, contrary to the dominant assumption, Roberts and Roussou (2002: 141) argue that there is no [+DECL] or [-DECL] feature in the category of complementizers; they propose that C means ‘declarative’ by default where a sub-clause type feature of C such as Q, EXCLAMATIVE, or CONDITIONAL is absent. Their proposal seems to be based on the parametric difference between V1 English and V2 German; the C of V2 German finite clauses has an additional feature that marks clause-typing, while the C of V1 English declaratives lacks any clause-typing feature. Following Roberts and Roussou (2002: 141), if we assume that C=declarative *ta* or C=declarative *e* by default, we must delete declarative *ta* or *e* and insert *ni* or *la* to form interrogative or imperative clause types in Korean.

(47)

a. *Hamoni-ka cip-ul naka-ss-ta* (declarative)
   Harmony-NOM home-ACC go out-PST-DECL
   ‘Harmony left the house.’

   Harmony-NOM home-ACC go out-PST-COMP-FI
   ‘Harmony left the house.’

c. *Hamoni-ka cip-ul naka-ss-ta-ni/nya* (interrogative)
   Harmony-NOM home-ACC go out-PST-INT
   ‘Did Harmony leave the house?’

d. *Hamoni-ka cip-ul naka-ss-e-ni* (interrogative)
   Harmony-NOM home-ACC go out-PST-INT
   ‘Did Harmony leave the house?’

Do we need the speculation assuming C means ‘declarative’ by default? It seems like C in Korean is structurally present without any default clause type feature. Instead, the
default feature seems to be a finite or non-finite specification, according to whether or not it selects a past tense marker, as in (48a).

(48)  
\begin{enumerate}  
\item a. \textit{Harmony-ka} \textit{cip-ul} \textit{naka-ss-e} \text{[finite]}-\downarrow \quad \text{(default)}  
\begin{tabular}{l}
Harmony-NOM \ home-ACC \ go out-PST-COMP [+FIN]-FI \\
\end{tabular}  
\begin{tabular}{l}
‘Harmony left the house.’  
\end{tabular}  
\item b. \textit{Harmony-ka} \textit{cip-ul} \textit{naka-ss-e} \text{[finite]}-\downarrow \quad \text{(assertion)}  
\begin{tabular}{l}
Harmony-NOM \ home-ACC \ go out-PST-COMP-FI \\
\end{tabular}  
\begin{tabular}{l}
‘Harmony left the house.’  
\end{tabular}  
\item c. \textit{Harmony-ka} \textit{cip-ul} \textit{naka-ss-e} \text{[finite]}-\uparrow \quad \text{(question)}  
\begin{tabular}{l}
Harmony-NOM \ home-ACC \ go out-PST-COMP-RI \\
\end{tabular}  
\begin{tabular}{l}
‘Did Harmony leave the house?’  
\end{tabular}  
\item d. \textit{cip-eyse} \textit{naka-∅-a} \text{[non-finite]}-\downarrow \quad \text{(command)}  
\begin{tabular}{l}
home-LOC \ go out-TAM-COMP-FI \\
\end{tabular}  
\begin{tabular}{l}
‘Leave the house!’  
\end{tabular}  
\end{enumerate}  

Although (48a) can be viewed as a proposition at LF, (48b) with a falling intonation and (48c) with a rising intonation are interpreted at LF as an assertion and a question, respectively. I hypothesize that the interpretation of clause (48a) without punctuation in written discourse such as text messages must hang on the discourse context.

In addition to declarative, interrogative, and imperative clause-typing markers, Korean also has separate clause-typing markers for expressing exhortation, promise, warning, and retrospection. Languages differ in terms of which sentence moods are expressed by grammatical markers in the complementizer system (Zaefferer, 1990). Like some other languages that have been reported to have a wide range of “attitude markers” (cf. A. Kim, 2015; Kimps, 2007; Sadock & Zwicky 1985), Korean has various clause-typing markers that fill roles beyond the basic clause-typing options. For instance, as illustrated in (49), \textit{ca} (49a), \textit{ma} (49b), \textit{l-la} (49c), and \textit{te-la} (49d) mark clause types
outside of the three basic clause types (or sentential modality). They have been labelled as exhortative, promissive, apprehensive/premonitive, and mirative evidential, respectively, in the Korean literature based on their contribution to the meaning of the clauses (cf. H. Lee, 1994; M. Pak, 2008; S. Sohn, 1996; Strauss, 2005).

(49)

a. *Sola-ya cip-ey ka-ca* (exhorative)

\[\text{Sora-VOC home-LOC go-EXH}\]

‘Sola, let’s go home.’

b. *nay-ka cip-ey ka-ma* (promissive)

\[\text{1sg-NOM home-LOC go-PRM}\]

‘I will go home.’

c. *Sola-ka cip-ey ka-l-la* (apprehensive/premonitive)

\[\text{Sora-NOM home-LOC go-IRR-COMP}\]

‘(warning) Sola may go home.’

d. *Sola-ka cip-ey ka-te-la* (mirative evidential)

\[\text{Sora-NOM home-LOC go-EVID-COMP}\]

‘(I saw) Sola going home.’

The COMP UoLs in (49) tend to encode the attitude of the speaker toward what he or she is saying about the proposition, expressing it as an invitation or warning in addition to marking a clause with a certain type: (49b-d) are translated as declarative clauses in the English translations. Note that la in (49c) and (49d) is homophonous. When la selects the irrealis l, the clause is interpreted as apprehensive or premonitive (cf. M. Pak, 2008), whereas it is interpreted as evidential mirative declarative when la selects the evidential retrospective te (Strauss, 2005). The UoL la is a multifunctional element in the COMP paradigm which can be interpreted differently depending on the morphosyntactic context. This is another case of multifunctional UoLs expressing more than one clause type, yet the distinct interpretation of la depends on more complicated syntactic contexts than the
UoL  

I will discuss the distribution of the UoL la extensively in the context of the multifunctionality of complementizers in Chapter 6. In this chapter, only la as the head of imperatives is discussed.

I have established that Korean has clause-typing markers in single-layered matrix CPs which mark various clause types in addition to the three basic clause types. However, Korean also has two unique expletive-like COMP UoLs that occur in all three basic clause types. The COMP UoLs  
e  
and  
ci  
can appear as the head of all three basic clause types in the structure.

3.3.2 Configurational and underspecified Type complementizers: -e and -ci

Unlike clause-typing UoLs, as discussed in the previous section, which directly establish a relationship between the form and clause type in the domain,  
e  
and  
ci  
simply follows a tense element without specifying any clause type. However, the clauses marked by these non-clause-typing UoLs are still interpreted as clauses having an assertion, question, or command in the utterance. What is the relationship between the morphosyntactic properties of these expletive-like clause-typing UoLs and their associated force potentials? After I demonstrate the morphosyntactic properties of  
e  
, which does not autonomously mark any clause type but gives an interpretation of illocutionary force by arrangement of local functional elements in the structure, I illustrate the morphosyntactic properties of  
ci  
that display the same distribution as  
e  
.

Consider the morphosyntactic properties of  
e  
and disregard its pragmatic discourse-associated function (i.e., intimate speech style) in Table 3-2.
Table 3-2 Sentence-enders in Plain, Intimate, and Polite speech styles

<table>
<thead>
<tr>
<th></th>
<th>Declarative</th>
<th>Interrogative</th>
<th>Imperative</th>
<th>Exhortative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain</td>
<td>ta</td>
<td>nya (ni)</td>
<td>la</td>
<td>ca</td>
</tr>
<tr>
<td>Intimate</td>
<td>e</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polite</td>
<td></td>
<td>e-yo</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 3.2 illustrates, *ta* or *nya* show one-to-one matches with the clause type they represent in the matrix clauses. The UoL *e*, however, occurs in all three basic clause types and can potentially be the head of any of these clause types. The UoL *e* does not occur in exhortative, as shown in (50). A bare verb stem with *e* is not interpreted as exhortative (50a) and an exhortative clause cannot be expressed by a bare verb stem with *e* (50b), but an exhortative reading is possible if the same clause is followed by polite *yo* which incorporates the addressee into the clause (50c).

(50)

a. *mek-e-*↓  
edeat-COMP-FI  
‘Eat (it)./‘let’s eat it.

b. *mek-e-*↓  
edeat-COMP-FI  
‘Let’s eat (it)!’ (intended)

c. *mek-e-yo-*↓  
edeat-COMP-POL-FI  
‘Please, eat (it)./‘let’s eat it.

Although the UoLs *e-yo* in Table 3-2 occur in all four distinct clause types in the polite speech style, I argue that, morphosyntactically, the polite marker is not in the same paradigm as the particles from the other two classes. This is discussed below.

Now consider *e-yo* in (51a), which consists of two parts. The first part is the expletive-like COMP UoL *e*; the second is the polite or addressee honorific marker *yo*. 
Although yo may be obligatory in pragmatics, it is not obligatory in morphosyntax, as illustrated in the grammatical clause without yo in (51b).

(51)

a. *mek-e-yo-↓
   eat-COMP-POL-FI
   ‘Please eat (it).’

b. *mek-e-↓
   eat- COMP-FI
   ‘Eat (it)!’

c. *mek-∅-↓
   eat-COMP-FI
   ‘Eat (it)!’ (intended)

d. *mek-ss-∅-↓
   eat-PST-COMP-FI
   ‘I ate (it).’ (intended)

e. *mek-yo-↓
   eat-POL-FI
   ‘Eat (it)!’ (intended)

The distribution of yo contrasts with the obligatory e, as shown in the ungrammatical examples (51c) and (51d); without e, both the bare verb stem (51c) and the inflected verb stem (51d) form ill-formed clauses; as polite yo selects C not T or V, without e, the clause in (51e) is ill-formed. Based on this optional distribution of yo in morphosyntax, I conclude that yo in the polite style marker e-yo does not belong to the same functional category as the obligatory e, which is in complementary distribution with clause-typing UoLs in the structure. In reaching this conclusion, my analysis aligns with Cho and Sells

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9 The interpretation of the sentence type of the intimate style plus the polite marker yo is ambiguous. The clause can be interpreted as either a polite request or an invitation ‘Let’s eat’. Wuli ‘we’ can be the subject of (51a) with the adverb hamkkey ‘together’.
(1995:143), who argue that the COMPs e and ta are items belonging to classes distinct from yo.

In addition to being an obligatory element at the right edge of the matrix clause, the UoL e is also obligatory in certain dependent clauses selected by auxiliary verbs, as in (52). The UoL e in chac-a (52a) is the head of the non-finite clausal complement of auxiliary verb po-‘see; try.’ Like the English to, e in this domain can be the head of vP, TP, or CP (FinP) depending on one’s assumption.

(52)

a. congke-lul chac-a po-ass-e-↓ (clausal compelement)
   evidence-ACC find-COMP see-PST-COMP-FI
   ‘I’ve tried to find the evidence.’

b. *congke-lul chac-∅ po-ass-e-↓
   evidence-ACC find-COMP see-PST-COMP-FI
   ‘I’ve tried to find the evidence.’ (intended)

c. *congke-lul chac-∅ cwu-∅-e-↓ (clausal compelement)
   evidence-ACC find-COMP give-TAM-COMP-FI
   ‘Find the evidence for me!’

The UoL e marking lexical verbs in complex verb constructions (a lexical verb plus an auxiliary verb) is selected by auxiliary verb stems which share their forms with lexical verbs like the multifunctional English have; they include po-‘see; try’, benefactive cwu-‘give; do for X’ and peli-‘throw away; teminative aspect’. The ill-formed (52b) and (52c) show that e is also an obligatory head in the propositional structure. In this construction, the clause marked by e must be non-finite. Thus, e must carry the finiteness specification, [-finite], in this domain. This e differs from e as a matrix clausal head which can be either [+finite] or [-finite]—recall examples in (48). In this low position with [-finite]
specification, *e* does not express a meaning relating to an illocutionary force, probably because it cannot be associated with intonation.

The UoL *e* is probably associated with positive polarity, while *ci* is associated with negative polarity; *ci* appears in the position of *e* in negative imperatives, as in (53b).

(53)

a. *cungke-lul chac-a a-*↓
   evidence-ACC find-COMP POS.COMP-FI
   ‘Find the evidence.’

b. *cungke-lul chac-ci ma.*
   evidence-ACC find-COMP NEG.COMP
   ‘Don’t find the evidence.’

This speculation comes from that fact that the UoL *ci* also appears as a clause-typing UoL at the right edge of matrix clauses without associating with any particular clause-typing features. Although *ci* is listed as a special yes-no and *wh*-question particle in Cheng (1991) and is not included among the traditional six speech style sentence enders, the distribution of *ci* shows that it is not an interrogative Type UoL but an expletive-like UoL which can occur as the head of all three distinct illocutionary forces, as illustrated in (54).

(54)

a. *cungke-lul chac-ass-ci-*↓
   evidence-ACC find-PST-COMP-FI
   ‘(certainly) I found the evidence.’

b. *cungke-lul chac-ass-ci-*↑
   evidence-ACC find-PST-COMP-RI
   ‘You found the evidence, didn’t you?’

c. *cungke-lul chac-∅-ci-*↓
   evidence-ACC find-TAM-COMP-FI
   ‘(I suggest you) Find the evidence!’
The UoL \( ci \) follows past-tense verbs in (54a) and (54b) to mark the clauses as an assertion and a confirmational question, respectively; an uninflected verb stem marked by \( ci \) expresses suggestion, as in (54c). As shown in (54b), a clause marked by \( ci \) does not form a canonical interrogative with yes-no question force but does form confirmational tag questions. Thus, \( ci \) is another UoL that can mark the same three basic clause types through interacting with other functional elements, although clauses marked by \( e \) and \( ci \) have distinct pragmatic functions. Like \( e \), \( ci \) cannot be absent from the clause; \( ci \) adds the extra meaning ‘certainly’ to clauses.

(55)

\[
\begin{align*}
\text{a. } & \text{cungke-lul chac-ass-ci-↓} & \text{(assertion)} \\
& \text{evidence-ACC find-PST-COMP-FI} \\
& '(certainly) I found the evidence.' \\
\text{b. } & \text{cungke-lul chac-ass-*(ci)-↓} & \text{(intended)} \\
& \text{evidence-ACC find-PST-COMP-FI} \\
& '(certainly) I found the evidence.'
\end{align*}
\]

The COMP UoL \( ci \)—referred to as a “committal sentence terminal suffix” (H. Lee 1994, 1999) or “wh-interrogative Q-morpheme” (Cheng, 1991)—is reported as the second most frequent sentence ender in discourse (following \( e \)).

10 The matrix \( ci \) exhibits a similar distribution to that of \( e \) discussed in this section, although semantically they carry different connotations. Within a discourse-pragmatic analysis, H. Lee (1999) notes that \( ci \)

---

10 According to Lee (1991), the UoL \( ci \) (15.8%) is the second most frequent sentence-terminal suffix after the suffix \( a \) (58.5%) in colloquial discourse in Korean (see Lee 1999: 244, footnote 2). Note that Lee (1991) reports the declarative suffix -\( ta \) occurs only 2.4% of the time in colloquial discourse. For this reason, the suffix -\( ta \) is often regarded as a declarative marker in written discourse. However, based on conversational discourse data selected from the corpus, Noh (2008) states that the suffix -\( ta \) occurs in spoken discourse with various pragmatic functions. Noh also includes clauses ending in -\( ta \) with a rising intonation, which require further investigation. See Table 2-8 for the frequency of matrix COMP UoLs in caregiver’s speech.
in independent clauses may express the speaker’s supposition (asking for confirmation) or suggestion, depending on the syntactic environment in which it appears. Lee argues, however, that the core meaning of *ci* is “committal,” which means the speaker believes in the truth of the conveyed message.

The distinct semantic properties of *e* and *ci* emerge in interrogative minimal pairs with or without *wh*-words, as in (56).

(56)
a. *cungke-lul* *chac-ass-e-*↑
   evidence-ACC find-PST-COMP-RI
   ‘Did you find the evidence?’

b. *cungke-lul* *chac-ass-ci-*↑
   evidence-ACC find-PST-COMP-RI
   ‘You found the evidence, didn’t you?’

c. *ettehkey* *chac-ass-e-*↑
   how find-PST-COMP-RI
   ‘How did you find it?’

d. *ettehkey* *chac-ass-ci-*↑
   how find-PST-COMP-RI
   ‘(I am wondering) how (s/he) found it.’

e. *ettehkey* *chac-ass-ci-*↑
   how find-PST-COMP-RI
   ‘How did you find it? (intended)’

Unlike the content question marked by *e* in (56c), *ci*-clauses with *wh*-words and a falling intonation express the speaker’s curiosity without seeking an answer (56d) and a rising intonation is incompatible with *wh*-words (56e). Disregarding its distinct pragmatic functions, *ci* is, like *e*, an underspecified COMP UoL lacking a subcategorial clause-typing feature in morphosyntax. Thus, its morphosyntactic property of being an unmarked Type UoL differs from its semantic property of marking the speaker’s
supposition. The UoL ci must carry a distinct semantic feature associated with underspecified positive and negative certainty [± CERTAINTY] (if there is such feature in semantics).

The headedness of e and ci is further supported by their identical selectional properties. They uniformly select and are selected by functional elements in the local domain. Consider the clauses containing the irrealis modal l which is translated as ‘will’ in English in these contexts, as in (57).

(57)

a. \textit{kkok cungke-lul chacu-l-key} without fail evidence -ACC find-IRR-COMP
   ‘(I) will find the evidence without fail!’

b. \textit{kkok cungke-lul chacu-l-kes-i-ta} without fail evidence -ACC find-IRR-COMP-be-DECL
   ‘(I) will find the evidence without fail!’

The underspecified UoLs e and ci are compatible with the modal keyss in matrix clauses, as in (58a) and (58c), but are incompatible with the modal l in matrix clauses, as in (58b) and (58d).

(58)

a. \textit{kkok cungke-lul chac-keyss-e-↓} without fail evidence -ACC find-CONJ-COMP-FI
   ‘(I) will find the evidence without fail!’

b. *(kkok cungke-lul chacu-l-e-↓) without fail evidence -ACC find-IRR-COMP-FI
   ‘(I will find the evidence without fail!’ (intended)

c. \textit{Inho-ka cungke-lul chac-keyss-ci-↓} Inho-NOM evidence -ACC find-CONJ-COMP-FI
   ‘(I suppose) Inho will find the evidence.’

d. *(Inho-ka cungke-lul chacu-l-ci-↓) Inho-NOM evidence -ACC find-IRR-COMP-FI
   ‘Inho will find the evidence.’ (intended)
The UoL *keyss* is a contextual modal marker which encodes either volition or supposition (Koo & Lehmann, 2010) and which “indicates that the propositional content conveyed is a prediction or a conjecture made through deductive reason” (H. Lee, 2015a: 253).

Although both modal elements can be translated as ‘will’ in English in these contexts, which implies some semantic similarity between them, only the modal *keyss* is compatible with the underspecified UoLs *e* (58a) and *ci* (58c). In this respect, *e* and *ci* are heads which select T elements and share similar selectional properties in the same category. They show a similar distribution in interacting with the UoLs in the higher domain. They are incompatible with the indirect COMP *ko*, as in shown in (59a) and (59c), but compatible with polite *yo*, as in (59b) and (59d).

(59)

a. *cungke-lul chac-ass-e-ko-↓*
   evidence-ACC find-PST-COMP-COMP-FI
   ‘(I said) I found the evidence.’ (intended)

b. *cungke-lul chac-ass-e-yo-↓* (assertion)
   evidence-ACC find-PST-COMP-POL-FI
   ‘I found the evidence.’

c. *cungke-lul chac-ass-ci-ko-↓*
   evidence-ACC find-PST-COMP-COMP-FI
   ‘(I said) I found the evidence.’ (intended)

d. *cungke-lul chac-ass-ci-yo-↓* (assertion)
   evidence-ACC find-PST-COMP-POL-FI
   ‘(certainly) I found the evidence.’

The compatibility of *e* and *ci* with discourse-related functional markers at the right periphery, shown in (59), is opposite to that of clause-typing Type UoLs. I will discuss the compatibility between Type UoLs and discourse-related functional markers (e.g., echo questions or polite *yo*) further in Chapter 4, but for now it is enough to show that the UoLs *e* and *ci* share a similar distributional property; a place holder which stands for the
complementizer of the clause in the head final language. Despite having a similar distribution with \( e \), \( ci \) is mostly excluded from the discussion of Korean sentence-final particles (Chang, 1996; Lee & Ramsey, 2000: 183; König & Siemund, 2007: 280; Siemund, 2018: 88; Yeon & Brown, 2011: 171), except Lee (1994) who highlights the inability of \( e \) and \( ci \) to mark a specific clause type; their distributional frequencies in terms of clause type in informal discourse are estimated as in Table 3-3.

Table 3-3 Uses of -\( e \) and -\( ci \) by different sentence force

<table>
<thead>
<tr>
<th></th>
<th>Assertion</th>
<th>Question</th>
<th>Command</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>-( e )</td>
<td>265 (63.2%)</td>
<td>136 (32.5%)</td>
<td>18 (4.3%)</td>
<td>419 (100%)</td>
</tr>
<tr>
<td>-( ci )</td>
<td>90 (79.6%)</td>
<td>22 (19.5%)</td>
<td>1 (0.9%)</td>
<td>13 (100%)</td>
</tr>
</tbody>
</table>

(\( H. \) Lee 1994: 525)

What are the morphosyntactic properties of \( e \) and \( ci \) and how are they distinguished from declarative \( ta \) or interrogative \( ni \)? As \( e \) and \( ci \) select Tense, they must be complementizers, as suggested in the literature (Cho & Sells, 1995; Sells, 1995); they occur in the same structural position as Type UoLs such as declarative \( ta \). Should we define complementizers as functional markers indicating clause types or can we call \( e \) and \( ci \) complementizers even though they do not mark any clause type by themselves? If complementizers are always modal (Frajzyngier, 1995), which moods do \( e \) and \( ci \) express? Although I limit my discussion here to the distribution of these UoLs in the structure and will not discuss the semantic differences between \( e \) and \( ci \), I speculate that they are modals which respectively mark indicativity of a clause with certainty and subjunctivity with uncertainty of the clauses, respectively. Under the pressure of the role of the matrix clause under the universal Clausal Typing Hypothesis (Cheng, 1991: 29)
and the universal category Force (Chomsky, 1995; Rizzi, 1997), they are also interpreted as clause-type markers. As Siemund (2018: 89) notes, it is true that clause-typing and mood-typing markers overlap each other and are alike.

If e and ci are not Type UoLs, then the alternative would be that they are Fin COMP UoLs in the head of FinP in Rizzi’s system. I accept the possibility that the underspecified COMP UoLs are generated in FinP and move to ForceP in Rizzi’s system.

The central claim of this section is that Korean has distinct sets of Type COMP UoLs in the COMP domain; depending on whether they are specified or underspecified for clause type, they are morphologically realized differently. I argue that e and ci are the morphophonological realizations of the underspecified Type COMP from the perspective of the universal Clausal Typing Hypothesis (Cheng, 1991: 29) and the universal category Force (Chomsky, 1995; Rizzi, 1997). Based on the approach I adopt here, clause-typing UoLs are reorganized, as in Table 3-4; the underspecified ci which is not included in Table 3-3 is added as Type COMP UoLs, as ci shows a similar distribution with e.

Table 3-4 COMP UoLs in relation to Type related features

<table>
<thead>
<tr>
<th>COMP UoLs</th>
<th>ta</th>
<th>nya (ni)</th>
<th>la</th>
<th>ca</th>
<th>e ; ci</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE</td>
<td>iTYPEŒDECL</td>
<td>iTYPEŒINT</td>
<td>iTYPEŒIMP</td>
<td>iTYPEŒEXH</td>
<td>uTYPE</td>
</tr>
</tbody>
</table>

As discussed, the COMP UoLs in Table 3-4 employ distinct grammatical devices to express the force of clauses: either morphological typing or typing derived through interactions of functional features in the local domain which I will discuss further in the next section. I conventionally use the subscript i for specified Type UoLs and u for underspecified Type UoLs, to distinguish two morphologically distinct subclasses of UoLs in the same category and associated with the same domain.
(60) Typing COMP UoLs in a single-layered CP (iType UoLs)

a. Declarative
   CP
   TP
   -ta [DECL]
   -ess [PAST]

b. Interrogative
   CP
   TP
   -ni; nya [INT]
   -ess [PAST]

c. Imperative
   CP
   TP
   -(e)la [IMP]
   ∅

(61) Underspecified typing COMP UoLs in a single-layered CP (uType UoLs)

a. Assertion
   CP
   TP
   -e; -ci↓
   -ess [PAST]

b. Question
   CP
   TP
   -e; -ci↑
   -ess [PAST]

c. Command
   CP
   TP
   -e; -ci↓
   ∅

In this subsection, I have defended my hypothesis that the morphosyntactic properties of the COMP UoLs e and ci should be examined separately from their pragmatic-discourse properties. Examining COMP UoLs from the perspective of morphosyntax is a new approach in the literature, to the best of my knowledge.

3.3.3 Clause Complementation Parameter and expletive-like COMP UoLs

The requirement of an overt morphophonological marker even in declarative clauses is a prominent property of the Korean clause-typing system that is not generally shared by other languages; for example, neither Japanese nor Chinese has separate declarative marking in either matrix or embedded declarative clauses although they have overt interrogative-typing markers in both matrix and embedded clauses: Chinese A-not-A constructions can be embedded but interrogative ma cannot be embedded (Hagstrom,
2006). Sadock and Zwicky (1985) survey two forms of declaratives: unmarked and marked. In an unmarked declarative language, interrogatives are formed based on either declarative construction plus some particles (according to them Tagalog and Japanese are of this type) or an alteration in the word order of the declarative (they classify English and Kapampangan as this type). The UoL e in (62a) is unlikely to be an unmarked declarative marker because it also appears in commands (62b). Moreover, unlike the Shona and Japanese unmarked declarative markers followed by interrogative markers (see § 3.2.1), a clause marked by e cannot be followed by or co-occur with interrogative ni, as in (62c).

(62)

a. cungke-lul chac-ass-e-↓
   evidence-ACC find-PST-COMP-FI
   ‘(I) found the evidence.’

b. cungke-lul chac-a-↓
   evidence-ACC find-COMP-FI
   ‘Find the evidence.’

c. *cungke-lul chac-ass-e-ni
   evidence-ACC find-PST-COMP-INT
   ‘Did (you) find the evidence?’ (intended)

However, a rising contour instead of the overt interrogative marker ni, can follow e; a rising contour marks a clause as interrogative (63a). Under the assumption of treating a clause marked by e as an expletive COMP UoL, an accurate representation for the UoL e should be COMP instead of DECL; e is often glossed as a declarative or intimate speech morpheme in the literature (cf. Ceong, 2016; S. Yoon, 2013, 2015 and more), as exemplified in (63b). I suggest that the gloss of e should be COMP as in (63a) and (63c) to capture its underspecified property in terms of clause-type in syntactic analyses.
As discussed earlier and shown again in the examples in (64), a null COMP UoL is disallowed in Korean grammar. I predict that the expletive-like COMP UoL e has a phonologically unpronounced counterpart in other languages; in such cases, however, intonation must play a role in separating the declarative interpretation of the clause from the interrogative interpretation in finite clauses.

This prediction is attested in Japanese, which has similar syntactic structure but is dissimilar in morphophonology, as in (65). Either the null UoL (65a; 65b) or the UoL no (65c; 65d) can appear in the clause-typing COMP position and it hosts the intonation (Kaiser, Ichikawa, Kobayashi, & Yamamoto, 2013: 484).
b. *sushi-o*  *tabe-ru-Ø-*↑

sushi-ACC  eat-PRES-COMP-RI

‘Are you going to eat the sushi?’

c. *sushi-o*  *tabe-ru-(no)-*↓

sushi-ACC  eat-PRES-COMP-FI

‘(I) will eat the sushi.’

d. *sushi-o*  *tabe-ru-(no)-*↑

sushi-ACC  eat-PRES-COMP-RI

‘Are you going to eat the sushi?’

A question arises why, contrary to Japanese, the UoL *e* is overt even in unmarked clauses in Korean. Moreover, considering that *e* occurs in the three basic clause types, the morphosyntactic properties of *e* are unclear as they do not carry a specific clause-type-related feature. Kang (1988) attempts to provide an explanation for the requirement of a morphological marker at the right edge of clauses in Korean. Kang (1988) proposes a morphological principle to account for these verbal suffixes attaching to bound roots in Korean. The principle is referred to as Morphological Closure, as cited in (66).

(66) **Morphological Closure**

Bound predicates must be “closed” by a set of suffixes belonging to the category C.

(Kang, 1988: 78)

Kang (1988: 78, footnote 35) argues that verbal final suffixes such as *la* ‘imperative’, *ta* ‘declarative’, *ni* ‘interrogative’, and *e* ‘serial’ belong to the category C. What C stands for in his study is unclear. Kang (1988:78) describes the properties of C as follows: Category C consists of the verb-final suffixes that are able to end a verb; C does not include the
TAM suffixes; and the set of C must be learned one by one. Overall, Kang’s proposal, reproduced in (66), is that the UoL required at the right edge of a clause is morphologically, rather than syntactically, constrained in languages with bound verbal roots. The Morphological Closure hypothesis, however, cannot explain the alternation of suffixes in syntax—specifically, why there is more than one suffix available to satisfy the Morphological Closure hypothesis and why the suffix ta is prohibited in imperatives, as shown in (67).

<table>
<thead>
<tr>
<th>Root</th>
<th>Citation forms</th>
<th>Imperatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>sin-</td>
<td>sin-ta ‘to put on shoes’</td>
<td>sin-e/ sin-ela/*sin-ta</td>
</tr>
<tr>
<td>pis-</td>
<td>pis-ta ‘to comb’</td>
<td>pis-e/ pis-ela/*pis-ta</td>
</tr>
<tr>
<td>ki-</td>
<td>ki-ta ‘to crawl’</td>
<td>ki-e/ ki-ela/*ki-ta</td>
</tr>
<tr>
<td>ca-</td>
<td>ca-ta ‘to sleep’</td>
<td>ca-al/ca-lal/*ca-ta</td>
</tr>
</tbody>
</table>

Consequently, I argue that these suffixes are generated by a morphosyntactic motivation in the syntactic structure. These suffixes fulfill a morphosyntactic requirement of clause complementation—all clauses must have a UoL of a maximal head (or phase)—in agglutinative languages. Following Bresnan (1970), I propose a Clause Complementation Parameter (henceforth CCP) to account for an obligatory UoL in the head of clauses in Korean.

(68) **Clause Complementation Parameter (CCP)**

All clauses must have a complementizer (COMP) and a COMP must have PF-realization.

---

11 C seems to stand for Closure; Kang explicitly states that UoL -ci, kes, -ko, -nun, and -ki are complementizers in his study. It seems that Kang only considers the heads of complement clauses of verbs as complementizers.
Just as all clauses require a subject and the EPP (Extended Projection Principle) licenses expletive pronouns in finite clauses, all clauses must have a head; either ForceP or FiniteP (Rizzi, 1997) or both can be activated (Haegeman, 1997; Rizzi, 1997).

Descriptively, I can say that the UoL e is an expletive-like placeholder in the domain, lacking a value in terms of clause-type in matrix clauses. Although Korean has expletive COMP UoLs, it is not clear if any other languages also have an expletive COMP UoL that can fill the heads of all three basic clause types. As the Japanese finite no in assertions (see (65c)) and questions (see (65d)) is an optional PF realization (cf., Saito, 2015), it may be an expletive COMP UoL only in finite clauses. The Japanese UoL no with intonation may satisfy the Clause Typing Hypothesis (Cheng, 1991; Moscati, 2010) only in finite clauses. I argue that a UoL with either an interpretable or uninterpretable clause type UoL satisfies the CCP; the Clause Typing Hypothesis could be satisfied when an uninterpretable UoL is accompanied by intonation.

How does a COMP UoL which is phonologically null, or does not have a one-to-one relationship with the form and the type of the clause, interact with semantic representation in the computational system? Korean and Japanese are not the only languages with a dummy COMP UoL. A null COMP can be assumed in some clauses in English, as discussed in § 3.2.1. Although Pesetsky and Torrego (2001) do not discuss the feature bundles of the COMP UoLs such as that and if, they provide four abstract COMPs with distinct feature bundles: the COMP₁ of the matrix wh-clauses \{uT, (+EPP), uWH (+EPP)\}; the COMP₂ of the embedded-wh-clauses \{uT, (-EPP), uWH (+EPP)\}; COMP₃ of the embedded declarative \{uT, (+EPP)\}; and COMP₄ of the embedded declarative  

---

12 Korean is widely recognized as a null subject or pro-drop language, lacking agreement inflection and having no expletive (Barbosa, 2011).
with wh-extraction{uT, (+EPP), uWH (+EPP)}.\textsuperscript{13} The features of the COMPs of both the matrix and embedded polar interrogatives, and the COMP of the matrix declarative are not provided. The features of COMP in Pesetsky and Torrego (2001) seem to be incompatible with the Clausal Typing Hypothesis (Cheng, 1991) and the specification of Force (Chomsky, 1995; Rizzi, 1997) because the COMPs do not carry any feature related to Type or Force including [±Q]. Moreover, if we accept that a null COMP occupies the head of whether-interrogative clauses, we need an alternative explanation for the widely accepted assumption that subject-auxiliary inversion in embedded interrogatives is blocked by the overt lexical complementizers, as we know that a null [+Q] triggers subject-auxiliary inversion in matrix interrogatives but not in embedded interrogatives.

The existence of these null or expletive-like COMP UoLs suggests that marking C heads is obligatory, yet the way the head is marked is divergent: overt or covert. Regardless of their phonetic realizations, they share the property of contextually determined distinct clause-types, as in (69) and (70). Expletive-like COMP UoLs in (69) and nulls in (70) from two different languages have multifaceted roles in the domain resulting in various interpretations of the clauses they mark.

(69) \textbf{The multifaceted UoL} \textit{e} \textbf{in Korean}

\textit{e}_{\text{CONTEXT1}}: \text{a filler of matrix DEclarative}

\textit{e}_{\text{CONTEXT2}}: \text{a filler of matrix INTERROGATIVE}

\textit{e}_{\text{CONTEXT3}}: \text{a filler of matrix IMPERATIVE}

\textit{e}_{\text{CONTEXT4}}: \text{a head of non-finite clausal complements of a set of auxiliary verbs}

\textsuperscript{13} Pesetsky and Torrego (2001: 371) assume that \textit{that} is a T element which has moved to C in the clause in (1).

(1) What did John say that Mary will buy?
The Korean COMP UoL e can appear in all three basic clause types, while null COMP markers must appear in all three basic clause types in English if we follow the assumption of a special imperative C in the literature (cf. Bennis, 2006; Han, 1998).

(70) The multifaceted UoL $\emptyset$ in English

$\emptyset_{C1}$: obligatorily null matrix DECLARATIVE
$\emptyset_{C2}$: obligatorily null matrix IMPERATIVE
$\emptyset_{C3}$: optionally null embedded DECLARATIVE
$\emptyset_{C4}$: obligatorily null embedded finite clauses with whether

(Adger & Quer, 2001; Pesetsky & Torrego, 2001; Radford, 2009)

The obligatoriness of $e$ and the null C in certain clauses suggest that they are morphological realizations of the C head. Structural obligatoriness, along with uniqueness, is considered a salient property of the projection head (Wiltschko 2014: 55). In this section, I have proposed that $e$ is an expletive complementizer or an underspecified Type complementizer constructing a language specific-category ‘Type’ in the C system which serves the language-specific CCP.

3.4 The distributional properties of underspecified COMP UoLs

Having examined the distinct paradigmatic properties of both specified and underspecified clause-typing COMP UoLs, I now turn to the configurational properties of the uType COMP UoLs in the local domain and the mechanism of the interpretation of the matrix clauses. In the following sections, I will discuss the distribution of COMP UOLs in terms of their configuration with TAM elements, the person feature on the subject, and discourse-pragmatic related functional elements that select them, as represented in (71) and (72).
(71) Type UoLs in matrix clauses

a. Declarative

```
FP  
|---|---|---|
  CP|   |   |
    |---|---|---|
  TP|   |   |
   (-keyss);-*l
```

b. Interrogative

```
FP  
|---|---|---|
  CP|   |   |
    |---|---|---|
  TP|   |   |
   (-keyss);-*l
```

c. Imperative

```
FP  
|---|---|---|
  CP|   |   |
    |---|---|---|
  TP|   |   |
   (e)la;-*keyss;-*l
```

(72) uType UoLs in matrix clauses

a. Assertion

```
FP  
|---|---|---|
  CP|   |   |
    |---|---|---|
  TP|   |   |
   (-keyss);-*l
```

b. Question

```
FP  
|---|---|---|
  CP|   |   |
    |---|---|---|
  TP|   |   |
   (-keyss);-*l
```

c. Command

```
FP  
|---|---|---|
  CP|   |   |
    |---|---|---|
  TP|   |   |
   (e)ci;-*keyss;-*l
```

3.4.1 Type COMP UoLs and inflectional elements

As Rizzi (1997) and Chomsky (2008, 2013) point out (and as assumed by others such as Miyagawa, 2010; Richards, 2007; Stowell, 1982), complementizers have a close relationship with verbal inflection. Previous authors have proposed that finiteness is a core property of complementizers (Demonte & Fernández-Soriano, 2009; Rizzi, 1997). The properties of finiteness diverge into two criteria in the literature (see Amritavalli, 2014; Anderson, 2007; Nikolaeva, 2007): a) the state of being independent or dependent clauses; and b) the state of either encoding agreement (inflected verbs) or lacking agreement (no inflection on verbs). The interaction between mood and finiteness (Anderson 2007), the relationship between mood and complementizers (Boye, van Lier, & Brink, 2015; Cinque, 1999; Frajzyngier, 1995; Speas, 2004), and the interaction
between finiteness and complementizers (Adger, 2007; Rizzi 1997) have been discussed in the literature. Most of these studies consider mood subordinators as complementizers. Following Rizzi (1997), Adger (2007) suggests the FinP in the C system, arguing that Fin contains a specified [finite: ±] feature. Landau (2004), however, proposes that finiteness is only relevant to embedded clauses.

The distributional properties of Type COMP UoLs in Korean and other languages support the assumption that the phase head of C passes its tense and phi features to the head of T (Chomsky, 2008; Miyagawa, 2010; Richards, 2007). Type COMP UoLs can be divided into two groups based on their compatibility with the modal marker keyss: ta (73a), ni (73b), and the underspecified e and ci co-occur with the conjecture keyss ‘will’ (73c), while promissive ma (74a), imperative la (74b), and exhortative ca (74c) cannot co-occur with it.

(73)

a. nay-ka  pemin-ul  cap-keyss-ta
   1sg-NOM  criminal-ACC  catch-IRR-DECL
   ‘I will catch the criminal.’

b. ne-ka  pemin-ul  cap-keyss-ni
   2sg-NOM  criminal-ACC  catch-IRR-INT
   ‘Will you catch the criminal?’

c. wuli-ka  pemin-ul  cap-keyss-e/ci-
   1pl-NOM  criminal-ACC  catch-IRR-COMP/CMP-FI
   ‘We will probably catch the criminal.’

(74)

a. *nay-ka  pemin-ul  cap-keyss-ma
   1sg-NOM  criminal-ACC  catch-IRR-PROM
   ‘I will catch the criminal.’ (intended)

b. *ne-ka  pemin-ul  cap-keyss-la
   2sg-NOM  criminal-ACC  catch-IRR-IMP
   ‘You will catch the criminal.’ (intended)
c. *wuli-ka  pemin-ul  cap-keyss-ca
   1pl-NOM  criminal-ACC  catch-IRR-IMP
   ‘We will catch the criminal.’ (intended)

Declarative *ta* (75a), interrogative *ni* (75b), and the underspecified *e* and *ci* (75c) cannot co-occur with the irrealis marker *l* ‘will’.

(75)
   a. *nay-ka  pemin-ul  capu-l-ta
      1sg-NOM  criminal-ACC  catch-IRR-DECL
      ‘I will catch the criminal.’ (intended)
   b. *ne-ka  pemin-ul  capu-l-ni
      2sg-NOM  criminal-ACC  catch-IRR-INT
      ‘Will you catch the criminal?’ (intended)
   c. *wuli-ka  pemin-ul  capu-l-e/ci-
      1pl-NOM  criminal-ACC  catch-IRR-COMP/COMP-FI
      ‘We will probably catch the criminal.’ (intended)

As illustrated in (76), since the irrealis marker *l* is compatible with a different set of COMP UoLs (which will be discussed in detail in Chapter 5), the incompatibility between *T* and *C* in (75) is not semantically but morphosyntactically constrained.

(76)
   a. nay-ka  pemin-ul  cap-l-key
      1sg-NOM  criminal-ACC  catch-IRR-COMP
      ‘I will catch the criminal.’
   b. ne-ka  pemin-ul  cap-l-lay-
      1sg-NOM  criminal-ACC  catch-IRR-COMP-RI
      ‘Will you catch the criminal?’
   c. wuli-ka  pemin-ul  cap-l-kka
      1pl-NOM  criminal-ACC  catch-IRR-COMP
      ‘Shall we catch the criminal?’

This compatibility between *T* and *C* elements is illustrated in the structure, as in (77) for *uType UoLs* *e* and *ci* and (78) for *iType UoLs* *ta* and *ni*. 
(77) *Type UoLs and compatible and incompatible tense elements

a. $e$ and $ci$ in finite clauses

\[
\text{CP} \quad \text{TP} \quad \text{CP} \\
\quad -e, -ci \\
\quad -keyss- \text{ ‘will’}, -ss- \text{ [PAST]}
\]

b. $e$ and $ci$ in finite clauses

\[
\text{CP} \quad \text{TP} \quad \text{CP} \\
\quad -e, -ci \\
\quad *-l- \text{ ‘will’}
\]

In terms of compatibility with T elements, $e$ and $ci$ (77) and $ta$ and $ni$ (78a, b) in finite clauses exhibit the same distribution. Unlike the non-finite $la$, $ca$, and $ma$ (78c, d), the UoLs $e$, $ci$, $ta$, and $ni$ are all also compatible with the modal keyss and past tense ess.

(78) *iType UoLs and compatible and incompatible tense elements

a. declarative; interrogative

\[
\text{CP} \quad \text{TP} \quad \text{CP} \\
\quad -ta \text{ [DECL]}, -ni \text{ [INT]} \\
\quad -keyss- \text{ ‘will’}, -ss- \text{ [PAST]}
\]

b. declarative; interrogative

\[
\text{CP} \quad \text{TP} \quad \text{CP} \\
\quad -ta \text{ [DECL]}, -ni \text{ [INT]} \\
\quad *-l- \text{ ‘will’}
\]

c. imperative; exhortative; promissive

\[
\text{CP} \quad \text{TP} \quad \text{CP} \\
\quad -la \text{ [IMP]}, -ca \text{ [EXH]} \\
\quad -ma \text{ [PRM]} \\
\quad *-keyss- \text{ ‘will’}
\]

d. imperative; exhortative; promissive

\[
\text{CP} \quad \text{TP} \quad \text{CP} \\
\quad -la \text{ [IMP]}, -ca \text{ [EXH]} \\
\quad -ma \text{ [PRM]} \\
\quad *-l- \text{ ‘will’}
\]

The selectional difference concerning a T element between finite ($ta$ and $ni$) and non-finite ($la$, $ca$, and $ma$) within *iType UoLs correlates in the choice of negation.

Declarative $ta$ and interrogative $ni$ co-occurring with modal keyss select the auxiliary
negative _anh- (79a), while they cannot co-occur with the negative modal _ma-, as in (79b).

(79) *Type UoLs and compatible and incompatible tense and negation

a. declarative; interrogative

\[\text{CP} \rightarrow \text{TP} \rightarrow \text{NegP} \rightarrow -\text{keyss}-, *-l- \rightarrow \text{anh-}, *\text{ma}-\]

b. imperative; exhortative

\[\text{CP} \rightarrow \text{TP} \rightarrow \text{NegP} \rightarrow -l-, *-\text{keyss}- \rightarrow \text{ma-}, *\text{anh}-\]

Imperative _la and exhortative _ca co-occurring with modal _l select the auxiliary negative _ma-, while they cannot co-occur with the modal _keyss, as in (79b). The negation _ma_ replaces non-deontic negative marker _anh ‘not’, as in (79a). Han and Lee (2007) analyze the marker _mal_ as a fused negative auxiliary; it is inserted later in the derivation within the framework of Distributed Morphology (Han & Lee, 2007). Negative deontic imperatives have many surface forms with various COMP UoLs: V- _ma-la_ (or V- _mal-a_), V- _malala_, and V- _ma-a_, V- _mal-ci_, and V- _mal-key_ and negative deontic exhortative is _mal-ca_.

(80) _Mal_ in negative imperatives (Han & Lee, 2007: 386)
Although *keyss* and *l* are both associated with modality, declarative *ta* and interrogative *ni* are incompatible with *mal*, as in (81). Declarative *ta* and interrogative *ni* must be specified as selecting specific T UoLs, as they are incompatible with both the irrealis negation marker *mal* and irrealis *l*.

(81)
a. *cungke-lul chac-Ø-ci mal-ta* (negative declarative)
   evidence -ACC find-TAM-COMP NEG.IRR-COMP
   ‘I will not find the evidence.’ (intended)

b. *cungke-lul chac-Ø-ci mal-ni* (negative interrogative)
   evidence -ACC find-TAM-COMP NEG.IRR-INT
   ‘Will you not find the evidence?’ (intended)

As negation markers occurring in finite/realis clauses are specified as auxiliary *anh* - ‘not’ or adverbial *an* - ‘not’, declarative *ta* and interrogative *ni* must select the UoL *keyss* in forming negative intentional clauses, as in (82).

(82)
a. *cungke-lul chac-Ø-ci anh-keyss-ta* (negative declarative)
   evidence -ACC find-TAM-COMP NEG.AUX-IRR-DECL
   ‘I will not find the evidence.’

b. *cungke-lul chac-Ø-ci anh-keyss-ni* (negative interrogative)
   evidence -ACC find-TAM-COMP NEG.AUX-IRR-INT
   ‘Don’t you think (they) would find the evidence?’

c. *cungke-lul an-chac-keyss-ni* (negative interrogative)
   evidence-ACC neg-find-IRR-INT
   ‘Won’t they find the evidence?’ (a rhetorical question)

The interrelation between clause-types and negation or between finiteness/modal and negation has been provided by research on a typology of negation (Dahl, 2010). Korean also has this interrelationship. The different negative forms under different type of T
UoLs discussed above is the extension of the correlation between TAM and clause-type UoLs. Thus, the (in-)compatibility of a tense element with a Type COMP UoL confirms that TAM specification is associated with Type UoLs in the lexicon although a clause-typing subcategorial feature is absent in uType COMP UoLs. Contrarily, both clause-typing subcategorial features and TAM specification are encoded with the form of the iType COMP UoLs in the lexicon. (This is similar to the English whether versus if complementizers: whether can co-occur with to, while if cannot except in narrow circumstances).

Matching between iType COMP UoLs and Tense UoLs is further confirmed by two semantically identical but morphosyntactically different promissives. Promissive ma is an iType COMP UoL specified as having a null tense and a first-person feature (Zanuttini et al., 2012). The verb stem in the well-formed clause marked by ma must be a bare verb (83a), and, although the meaning of ma does not necessarily disable selection of the irrealis modal l ‘will’, the result of this combination is ungrammatical (83b). This sense can be achieved by l-key (83c); the COMP UoL key with l also expresses the subject’s intention.

(83)

a. \textit{pemin-\textit{ul}} \textit{kkok} \textit{capu-\textit{ma}} \text{(promissive)}
\begin{tabular}{ll}
\text{criminal-ACC} & \text{be sure} \\
\text{catch-PRM}
\end{tabular}

‘I will be sure to catch the criminal.’

b. *\textit{pemin-\textit{ul}} \textit{kkok} \textit{cap-l-\textit{ma}} \text{(promissive)}
\begin{tabular}{ll}
\text{criminal-ACC} & \text{be sure} \\
\text{catch-IRR-PRM}
\end{tabular}

‘I will be sure to catch the criminal.’ (intended)

c. \textit{pemin-\textit{ul}} \textit{kkok} \textit{capu-l-\textit{key}} \text{(promissive)}
\begin{tabular}{ll}
\text{criminal-ACC} & \text{be sure} \\
\text{catch-IRR-COMP}
\end{tabular}

‘I will be sure to catch the criminal.’
In negative promissive constructions, promissive *ma* and *key* are restricted to taking the auxiliary negative *anh*, as in (84).\(^{14}\)

(84)

\begin{tabular}{lllllll}
\textbf{a.} & \textit{pemin-ul} & \textit{celtay} & \textit{cap-ci} & \textit{anhu-ma} & (negative promissive) \\
& criminal-ACC & never & catch-COMP & & \\
& & & & NEG.AUX-PROM & \\
& ‘I will never capture the criminal.’ & \\

\textbf{b.} & *\textit{pemin-ul} & \textit{celtay} & \textit{cap-ci} & \textit{mal-ma} & (negative promissive) \\
& criminal-ACC & never & catch-COMP & & \\
& & & & NEG.IRR-PROM & \\
& ‘I will never capture the criminal.’ (intended) & \\

\textbf{c.} & \textit{pemin-ul} & \textit{celtay} & \textit{cap-ci} & \textit{anhu-l-key} & (negative promissive) \\
& criminal-ACC & never & catch-COMP & & \\
& & & & NEG.AUX-IRR-COMP & \\
& ‘I will never capture the criminal.’ & \\
\end{tabular}

Contrary to the incompatibility of promissive *ma* with *mal* (84b), imperative *la* (85a) and exhortative *ca* (85b) are compatible with the deontic negation UoL *mal*. The COMP UoL *key* expressing the subject’s intention shows the same distribution as *ma* in negations.

(85)

\begin{tabular}{lllllll}
\textbf{a.} & \textit{pemin-ul} & \textit{cap-ci} & \textit{mal-ala} & (prohibition, negative imperative) \\
& criminal-ACC & catch-COMP & & & \\
& & & & NEG.IRR-IMP & \\
& ‘Don’t catch the criminal.’ & \\

\textbf{b.} & \textit{pemin-ul} & \textit{cap-ci} & \textit{mal-ca} & (suggestion, negative exhortative) \\
& criminal-ACC & catch-COMP & & & \\
& & & & NEG.IRR-EXH & \\
& ‘Let’s not catch the criminal.’ & \\
\end{tabular}

The ill-formed negative imperative (86a) and exhortative (86b) paired with *anh* ‘not’ show that these COMP UoLs must select irrealis (deontic) negation; they are incompatible with the realis negation *anh*.

\(^{14}\) As a native speaker of Korean, the current author has never used the UoL *ma* in both positive and negative promissive constructions; gender and age effects may be related to this grammatical judgement. The so-called “long negation form” seems to be more naturally compatible with promissive *ma* in negation (e.g., V-\textit{ci anhu-ma} ‘I won’t V’). Thus, I do not agree with M. Pak (2006) who identifies *mal* as a compatible element with promissive *ma*. 
(86)
a. *pemin-ul cap-ci anhu-la (negative imperative)
criminal-ACC catch-COMP NEG.AUX-COMP
‘Don’t catch the criminal.’ (intended)

b. *pemin-ul cap-ci anhu-ca (negative exhortative)
criminal-ACC catch-COMP NEG.AUX-COMP
‘Let’s not catch the criminal.’ (intended)

I argue that the specification of TAM-related properties is a core property of COMP UoLs: a realis/temporal feature on T must be matched with that of Type UoLs.

To see the syntagmatic difference between specified Type COMP and unspecified Type COMP UoLs in morphosyntax, consider Table 3-5, which summarizes their compatibility with TAM UoLs based on the discussion above and in the literature (cf. Yeon & Brown, 2011). The irrealis modal l is compatible with ci in dependent clauses (see § 5.5.1) and la in an apprehensive reading but not in imperative constructions (see example (49c)).

Table 3-5 The properties and compatibility of COMP UoLs with TAM UoLs

<table>
<thead>
<tr>
<th>UoLs</th>
<th>clause-type</th>
<th>past tense</th>
<th>modal keyss</th>
<th>realis neg anh-</th>
<th>irrealis neg -mal-</th>
<th>irrealis modal -l-</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta</td>
<td>DECL</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>ni, nya</td>
<td>INT</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>e</td>
<td>uType</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td>ci</td>
<td>uType</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√ (dependent)</td>
</tr>
<tr>
<td>la</td>
<td>IMP</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>√</td>
<td>√ (apprehensive)</td>
</tr>
<tr>
<td>ca</td>
<td>EXH</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td>ma</td>
<td>PROM</td>
<td>*</td>
<td>*</td>
<td>√</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>
Korean Type COMP UoLs exhibit cohesive forces with TAM UoLs, as the correspondence between C and T is predicted to be a universal property of language (Stowell, 1982; van Urk, 2014).

The distinct compatibility of COMP UoLs with each TAM marker shows that an uninterpretable tense feature must be assigned in each COMP UoL. This proposal is compatible with the assumption that C carries a uT feature (Bobaljik & Wurmbrand, 2015; Pesetsky & Torrego, 2001). The specified inflection information associated with each COMP UoL confirms that their morphosyntactic functions can be separated from their pragmatic-discourse functions.

In sum, the paradigm of the matrix COMP UoLs regarding temporality is complex. They are heterogeneous in interacting with various tense, aspect, and modal elements. This section included the examination of complementizers in finite clauses with the modals keyss, l, and mal. In the next section, I will show that person features on the subject play a role in the interpretation of a clause marked by the underspecified COMP UoLs.

### 3.4.2 Type COMP UoLs and person features on the subject

The interpretation of null subjects under certain Type COMP UoLs supports the claim that clause-typing COMP UoLs are the locus of the person feature (Chomsky, 2005, 2008; Miyagawa, 2010, 2012, 2017; Richards, 2007). The first piece of evidence comes from the fact that Korean has a set of iType COMP UoLs which restrict the subject in matrix clauses (e.g., imperative la, promissive ma, and exhortative ca) to being *

)*[INDIVIDUATION] (Harley & Ritter, 2002). Unlike in English, Korean phi feature agreement is deficient in past-tensed clauses but is robust in tenseless or irrealis clauses
(e.g., *key*, *lay*, see §5.4). Within Type UoLs, declarative *ta* and interrogative *ni* do not restrict person features on the subject, while imperative *la* restricts the person feature to be a second person (87a) and exhortative (87b) and promissive *ma* (87c) restrict it to the first-person, as discussed in the literature on agreement of person features on the subjects of jussive clauses (H. Lee, 2012; Miyagawa, 2010; J. Park, 2011b; Seo & Hoe, 2015; Zanuttini et al., 2012).

(87)

a. (*ne-*)(*nay-*)(*ku-)*ka  cemsim-ul  sa-la  (Imperative)
   2sg/-1sg/3sg-NOM  lunch-ACC  buy-IMP.2SG
   ‘Buy lunch.’

b. (*nay-*)(wuli-)(*ne-*)(*ku-)*ka  cemsim-ul  sa-ca  (exhortative)
   1sg/-1pl/-2sg/3sg-NOM  lunch-ACC  buy-EXH.1PL
   ‘Let me/Let’s buy lunch.’

c. (*nay-*)(wuli-)(*ne-*)(*ku-)*ka  cemsim-ul  sa-ma  (promissive)
   1sg/-1pl/-2sg/3sg-NOM  lunch-ACC  buy-PRM.1SG
   ‘I/we will buy lunch.’

Although the UoL *ca* is analyzed as a first-person plural marker in Zanuttini et al. (2012), Seo and Hoe (2015) report non-canonical use of *ca*, when a first-person singular subject occurs as the subject of exhortative clauses. This is indicated as (√) in Table 3-6.

<table>
<thead>
<tr>
<th>UoLs</th>
<th>clause-type</th>
<th>first-person</th>
<th>first-person plural</th>
<th>second-person</th>
<th>third-person</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ta</em></td>
<td>DECL</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td><em>ni</em>, <em>nya</em></td>
<td>INT</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td><em>e</em></td>
<td>uType</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td><em>ci</em></td>
<td>uType</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td><em>la</em></td>
<td>IMP</td>
<td>*</td>
<td>*</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td><em>ca</em></td>
<td>EXH</td>
<td>(√)</td>
<td>√</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td><em>ma</em></td>
<td>PROM</td>
<td>√</td>
<td>√</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>
This restriction on person features on the subject is not found in matrix clauses with $\text{iType}$ or $\text{uType UoLs}$ that can select past tense markers, although $\text{ci}$ adds the additional meanings ‘certainly’ (88a) and ‘probably’ (88b) to the proposition.\footnote{Thus, the clause with $\text{ci}$ in (88b) would be translated in English as ‘I bought lunch, didn’t I’ or ‘You bought lunch, didn’t you’ or ‘He bought lunch, didn’t he?’}

(88)

(89)

The subject honorific marker $\text{si}$ in the pro-drop context plays a crucial role in identifying the reference expressed by a null subject between a third-person and second-person subject (L. Kim & Kaiser, 2009; L. Kim, 2010). Although it is controversial whether $\text{si}$ is an agreement marker (Kim & Sells, 2007), it is clear that $\text{si}$ confines the subject to being either second- or third-person. For instance, if COMP UoLs are declarative $\text{ta}$, interrogative $\text{ni}$, and $\text{uType UoLs e}$ and $\text{ci}$, as in (89), the UoL $\text{si}$ in the clause likely refers to a third-person subject if the subject is null.
As the subject honorific marker *si* is incompatible with the first-person subject and tenseless *i*Type UoLs restrict the subject to being *[3rd]* person, exhortative *ca* and promissive *ma* diallow *si*.

(90)

a. *cemsi-*ul    *sa-*(*si*)-*ca*  (exhortative)
   lunch-ACC    buy-SUB.HOR-EXH.1PL
   ‘Let’s buy lunch.’

b. *cemsi-*ul    *sa-*(*si*)-*ma*  (promissive)
   lunch-ACC    buy-SUB.HOR-PRM.1SG
   ‘I will buy lunch.’

While the marker *si* is incompatible with *la* in matrix imperative clauses like (91a), they are compatible in embedded imperative clauses, as in (91b). Matrix imperative *la* is incompatible with *si* because the subject of imperative *la* must be a non-honorific person due to its pragmatic properties associated with impoliteness. The referent *si* is compatible with *la* in embedded imperative clauses because the subject of a *la*-clause is not restricted to second-person in embedded clauses; a third-person is the agent of the verb *tuleo-* ‘come in’ and the subject of the embedded imperative (91b).

(91)

a. *tuleo-*(*si*)-*la*
   come in-SUB.HOR-IMP
   ‘Come in.’

b. *tuleo-*si-*la-*ko    *ha-*ela
   come in-SUB.HOR-IMP-COMP    do-IMP
   ‘Ask her/him to come in.’

The distributions of the honorific *si*, person features on the subject, Type UoLs, and domain effects are systematic and part of the computational system; although the honorific *si* is optional and its selection is governed by the role of the argument in
pragmatics, its structural position and its restricted distribution under certain Type UoLs ensure the morphosyntactic properties of the honorific *si*. Moreover, its incompatibility with *la* shows that *la* is more than just imperative clause-typing or a second-person feature in matrix clauses—*la* also carries a non-honorific pragmatic feature. The asymmetric behavior of *si* and imperative *la* in matrix and embedded clauses confirms a C domain effect (which I will discuss in Chapter 6). Thus, the person restriction under *i*Type tenseless clauses summarized in Table 3-6 above only applies to single-layered matrix clauses.

This person-related discourse feature associated with *la* resembles the allocutive agreement discussed in Miyagawa (2010, 2012, 2017). Basque has an allocutive or addressee agreement (Miyagawa, 2017) in root clauses having distinct markers for the addressee with distinct social status (e.g., a female vs. a male friend; friend vs. formal and so on). This Basque allocutive agreement does not happen when the second person subject agreement is present in the clause.

(92) Allocutive Probe associated with C (Miyagawa, 2017: 25)

```

\[ \begin{array}{c}
\text{SPEAKER} \\
\text{SAP} \\
\text{SA} \\
\text{HEARER} \\
\text{CP} \\
\text{S} \end{array} \]
```

Similarly, when the Korean second person subject agreement marker (or imperative) *la* is present in imperatives, a polite marker directed at the addressee, the polite *yo*, does not
occur. If the addressee is higher in social status than the speaker, the Korean speaker employs a construction like (93a) rather than (93b).

(93)

a. *tuleo-si-e-yo↓
come in-SUB.HOR-COMP-POL-FI
‘Please, come in.’

b. *tuleo-si-la
come in-SUB.HOR-IMP
‘Please, come in.’ (intended)

Miyagawa (2017) relates the Basque allocutive marker with the Japanese polite marker -mas-, the distribution of which is limited to matrix clauses. The Korean polite yo in (93a) is also limited to matrix clauses and the politeness is toward the addressee rather than the subject. The well-formed clause in (94) shows that the politeness must not be toward the subject referent.

(94)
moki-ka tuleo-a-yo [tulewayo]-↓
mosquito-NOM come in-COMP-POL-FI
‘Mosquitos come in.’

Conversely, the impoliteness of imperative la in (93b) limits the properties of both subject and addressee, as la’s incompatible properties with polite yo are specified in its morphosyntactic form. If we analyze imperative la as an allocutive probe, the structure could be like (95).

(95) Allocutive Probe associated with la

\[
\text{SPEAKER} \\
\text{saP} \\
\text{HEARER} \\
\text{CP} \\
\text{utterance =) l}a \phi \text{ ALLOCUTIVE PROBE} \\
\text{*(POLITE ADDRESSER) OR *(POLITE YO)}
\]
The imperative la does not behave as an allocutive probe in embedded clauses. When the subject of an embedded imperative is overtly marked, as in (96), the subject must be marked as dative (96a) and (96b) rather than nominative (96c) and (96d). Arguments marked by the dative case marker poko are the goal in Obligatory Control (OC): the object of the verb ha ‘do; say’ and the subject of the verb tuleo- ‘come in’ (see Madigan 2008). Although imperative la and exhortative ca cannot co-occur with R-expressions with the INDIVIDUATION feature (Harley & Ritter, 2002) in matrix clauses, they can in embedded clauses. The R-expression marked by the dative case marker in the main clause of ha and the null subject in the embedded imperative must be a co-indexed argument in OC constructions.

(96)

a. appa-k-poko PROk tuleo-si-la-ko ha-ela
dad-DAT _____ come in-SUB.HOR-IMP-COMP do-IMP
‘Ask your dad to come in.’

b. appa-k-poko PROk naka-(si)-ca-ko ha-ela
dad-DAT _____ go out-SUB.HOR-EXH-COMP do-IMP
‘Tell your dad to go out together (with us).’

c. *appa-k-ka tuleo-si-la-ko ha-ela
dad-NOM come in-HOR-IMP-COMP do-IMP
‘Ask your dad to come in.’ (intended)

d. *appa-k-ka naka-ca-ko ha-ela
dad-NOM go out-EXH-COMP do-IMP
‘Tell your dad ‘let’s leave’.’ (intended)

Thus, clauses marked by tenseless iType COMP UoLs la and ca restrict person features on the subject and the subject honorific marker si only in matrix clauses. UoLs la and ca allow R-expressions as the subject if they are controlled by matrix arguments marked by dative case. The interaction between the person feature as a phi feature and the discourse
feature as a delta feature (Lochbihler & Mathieu, 2016; Miyagawa, 2010, 2017) on the subjects of these clauses must be further investigated. The incompatible person feature (*[3rd]) and the incompatible subject honorific marker *si under tenseless iType UoLs are represented in the tree in (97).

(97) **Tenseless iType UoLs in matrix clauses:** la [IMP], ca [EXH], ma [PROM]

\[
\begin{align*}
&\text{CP} \\
&\text{TP} -la, -ca, -ma \\
&\text{AgrSP} \phi \\
&\text{vP} (*si) \\
&\text{DP (*[3])} \text{ naka- ‘go out’}
\end{align*}
\]

My intention is to show the structural position of *si in the structure in (97), based on its distribution in finite clauses in (98), and not to propose the legitimacy of AgrSP in the structure. All compatible person features and the optional subject honorific marker *si under Tensed iType UoLs are represented in the tree in (98).

(98) **Type UoLs selecting T [PAST]:** no restricted person features on the subject

a. **Declarative**

\[
\begin{align*}
&\text{CP} \\
&\text{TP} -ta [DECL] \\
&\text{vP} -ss [PAST] \\
&\text{DP[1,2,3sg/pl]} \text{ naka- ‘go out’}
\end{align*}
\]

b. **Interrogative**

\[
\begin{align*}
&\text{CP} \\
&\text{TP} -ni; -nya [INT] \\
&\text{vP} -ss- [PAST] \\
&\text{DP[1,2,3sg/pl]} \text{ naka- ‘go out’}
\end{align*}
\]
The relationship between the interpretation of the clause type and the person feature on the subject of the clause marked by the underspecified Type COMP UoLs $e$ and $ci$, as represented in (99), will be discussed in the next section.

(99) **uType UoLs:** the interpretation of the subject and clause types

<table>
<thead>
<tr>
<th>Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assertion</strong></td>
<td>![Syntax Tree for Assertion]</td>
</tr>
<tr>
<td><strong>Question</strong></td>
<td>![Syntax Tree for Question]</td>
</tr>
<tr>
<td><strong>Command</strong></td>
<td>![Syntax Tree for Command]</td>
</tr>
</tbody>
</table>

### 3.4.3 A rising intonation and COMP UoLs

Clause type as a form and illocutionary force as a function have been distinguished by many researchers, including Huddleston (1994), Ceong and Saxon (2013), and Thoma (2016). One of the reasons I consider the category of Korean matrix complementizers as $c$: Type elements rather than Force elements (Chomsky, 1995, Rizzi, 1997) is to account for the fact that $u$Type COMP UoLs do not mark a specific clause type via morphological form; instead they mark a clause type by expressing an illocutionary force generated by combining with suprasegmentals. In this dissertation, following Bruil (2014) and Thoma (2016) the morphophonetic markers that express contrastive or distinctive clause-types in a language are referred to as clause-typing markers, while force is referred to as a pragmatically constructed speech act of a clause, including assertions, questions, commands, or requests. For example, I assume that the subject and auxiliary inversion in the English clause ‘Can you pass me the salt?’ is identified as an interrogative modality (cf. Frajzyngier 1995) which expresses an illocutionary force ‘request’, and that an
interrogative clause-typing marker is absent in matrix clauses but available in embedded clauses in the grammar of English. However, a rising intonation in English echo questions, which plays a role in differentiating assertions from polar echo questions (e.g., ‘Harmony is your dog.’ vs. ‘Harmony is your dog?’), or a rising intonation in Korean direct questions with underspecified clause-typing markers or in indirect questions, which play a role in differentiating assertions from questions, is a morphophonetic marker entering the structure. Citing van Heuven and Haan’s (2000) experimental works on the prosody of Dutch question types, De Clercq (2017) states that prosody plays a great role in determining the interrogativity of polar echo questions. According to Bartels (1999: 84), “the obligatoriness of the final fall distinguishes alternative questions from Yes-no questions and *wh*-questions.” In such cases, I consider intonation as a morphosyntactic UoL.

Following these studies, I argue that intonation must agree with the semantic properties of the UoLs if clauses are marked by $i$Type UoLs in Korean. Unlike English, a clause marked by declarative $ta$ cannot precede a rising intonation in Korean. This is shown in the ungrammatical clause in (100b); a clause with declarative $ta$ cannot employ a rising intonation to form a polar echo question.

(100)

a. She’s a genius? (Huddleston 1994: 427)

b. *$kunye$-$ka$ $chencay$-(i)$-$ta$-$↑$

  she-NOM  genius-be-DECL-RI

  ‘She’s a genius?’ (intended)

Moreover, a clause marked by $u$Type COMP UoLs $e$ and $ci$ also cannot form a polar echo question even if it is marked by a rising intonation, as in (101).
(101)
a. *kunye-ka chencay-(i)-ess-e-↑
she-NOM genius-be-PST-COMP-RI
‘She’s a genius?’

b. *kunye-ka chencay-(i)-ess-ci-↑
she-NOM genius-be-PST-COMP-RI
‘She’s a genius?’

As discussed in § 3.3, a clause marked by e with a rising intonation (102a) forms a yes-no question, while a clause marked by ci with a rising intonation (102b) forms a confirmational polar question (i.e., a tag question).

(102)
a. kunye-ka chencay-(i)-ess-e-↑
she-NOM genius-be-PST-COMP-RI
‘Was she a genius?’

b. kunye-nun chencay-(i)-ess-ci-↑
she-TOP genius-be-PST-COMP-RI
‘She was a genius, wasn’t she?’

Conversely, a polar echo question’s force must be signalled by double COMP UoLs that are a combination of declarative ta and indirect speech COMP UoL ko with a rising intonation, as in (103).

(103)
kunye-ka chencay-(i)-ess-ta-ko-↑
she-NOM genius-be-PST-DECL-COMP-RI
‘She was a genius?’

Just as we assume that a null declarative morpheme exists in complementary distribution with the interrogative morpheme in English, we can reasonably assume that there is a null COMP UoL in complementary distribution with the indirect COMP UoL ko; the absence
of the indirect COMP UoL *ko* in clauses headed by *ta* and *la* signals that the clause is
direct speech. I observe that any of the direct null UoL-selecting *u*Type UoLs, the
indirect UoL *ko*, or polite *yo* can host prosody in the structure. I will discuss this direct
versus indirect category in the next chapter. Here, I argue that the direct null UoL
selecting *u*Type UoLs or polite *yo* hosts a rising intonation in matrix clauses.

Splitting up illocutionary force into the direct speech act and clause type in the CP
system has been proposed based on distinct phenomena in various languages: the
Japanese embedded question particle *ka-doo-ka* (Type0) and the complementizer *to*
(Force0) (Ginsburg, 2009: 41); the split between Force0 and Type0 based on the
distribution and interpretation of Korean polar alternative questions (Ceong 2012; Ceong
& Saxon, 2013); and ILL (illocutionary Force) and CT (Clause-Type) based on discourse
particles (Coniglio & Zegrean, 2012). Assuming intonation can be a type of COMP UoL
(Elvira-García, Roseano, & Fernández-Planas, 2017; De Clercq, 2017; Tyler, 2013), I
propose that suprasegmentals play an important role in the interpretation of the
illocutionary force of a clause with *i*Type UoLs at LF. In other words, *e* or *ci* with a
falling intonation are in complementary distribution with *ta*, while *e* or *ci* with a rising
intonation are in complementary distribution with *ni* in matrix clauses. Considering the
asymmetric distribution of *i*Type and *u*Type UoLs in matrix clauses, it is reasonable to
speculate that the domain hosting suprasegmentals is equivalent to the SAP in the
literature.

All Type COMP UoLs look not only downward (e.g., T or AgrSP), but also
upward, interacting with the higher domain. The Type UoLs and the underspecified Type
UoLs in each category behave uniformly in their syntagmatic relationships with the elements that select them.

Table 3-7 COMP UoLs in relation to syntax-pragmatic interface elements

<table>
<thead>
<tr>
<th>UoLs</th>
<th>Clause Type</th>
<th>Polite yo</th>
<th>↑ (or ?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta</td>
<td>iType DECL</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>nya</td>
<td>iType INT</td>
<td>*</td>
<td>√</td>
</tr>
<tr>
<td>la</td>
<td>iType IMP</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>ca</td>
<td>iType EXH</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>ma</td>
<td>iType PROM</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>e</td>
<td>uType</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>ci</td>
<td>uType</td>
<td>√</td>
<td>√</td>
</tr>
</tbody>
</table>

Table 3-7 illustrates that iType UoLs are incompatible with polite yo and rising intonation (except for the interrogative nya), while underspecified Type UoLs are compatible with both. This asymmetric compatibility between the two sets of Type UoLs with polite yo confirms that the interface between syntax and pragmatics is real and can be presented in the syntactic structure. So far, I have examined reasons for thinking that the morphosyntactic properties of the COMP UoLs e and ci should be separated from their pragmatic-discourse functions. Two language-specific categories are generated from the association of the UoLs in the COMP system. The first category is substantiated by iTYPE and the second category by uTYPE. As suprasegmentals play a role in determining the interpretation of clause force-type with uType UoLs, I propose that suprasegmentals must be UoLs in the syntactic structure along with polite yo substantiated by c: Direct. This claim will be discussed further in the next section, in which I advocate for a formal typological approach. Assuming TAM elements in Korean
are associated with $k$: anchoring, I associate the Type COMP UoLs discussed in this section with the universal categorizer $k$: linking and propose Korean language-specific categories within the framework of Wiltschko (2014) as CP in a traditional approach is considered to be associated with $k$: linking (Bliss 2013; Wiltschko 2014).

3.5 The linking spine and language-specific categories

This section discusses Korean Type COMP UoLs within the framework of the Universal Spine Hypothesis (Wiltschko, 2014), which assumes that the functional structure of a clauses consists of many hierarchically organized functional heads. As shown in (104), the linking spine is the highest of the hierarchically organized universal spines proposed by Wiltschko (2014).  

(104) The areas in the spine (Wiltschko 2014: 253)

\[
\begin{array}{c}
\text{CP} \\
\text{IP} \\
\text{AspP} \\
\ \text{vP} \\
\ \text{nP} \\
\text{DP} \\
\text{ϕP} \\
\text{KP}
\end{array}
\]

As Wiltschko defines it (2014: 28), the function of the linking spine is to establish “a relation between the proposition or referent and the ongoing discourse” and is “a domain where the existing structure is linked to the larger structure.” Following Bliss (2013) and Wiltschko (2014), I assume that complementizers in the generative tradition (Bošković & Lasnik, 2003; Branigan, 1992; Bresnan, 1970, 1979; Carstens, 2015; Chomsky, 1973;

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16 Grounding and responding spines are proposed to occur above the linking spine in Wiltschko’s more recent works (Wiltschko & Heim 2016, Wiltschko, 2017) (see Figure 1-1).
Chomsky & Lasnik, 1977; Chou, 2013, Diercks, 2013; Frajzyngier, 1995; Grimshaw, 1979; Haegeman & Van Koppen, 2012; Rizzi, 1997; Rooryck, 2000; Sobin, 1991; Watanabe, 2000) are the category that will most likely be associated with the linking spine. Thus, Type UoLs as morphological realization of complementizers in Korean will be argued to be associated with the linking spine in the next section; \( i \)Type and \( u \)Type COMP UoLs are associated with the linking spine within the framework of the USH.

### 3.5.1 Proposal: The language specific linking category \( c \): Type

Wiltschko (2014) proposes that UoLs in individual languages which establish a relation between the proposition and the discourse constitute a language-specific category in the linking domain. For instance, the English COMP UoLs such as \( that \) and \( if \) form a language-specific category through association with a universal categorizer \( k \) in the USH. The declarative \( that \) and interrogative \( if \) must be associated with the linking spine because they select the Tense elements which are associated with the anchoring spine; this is formulated as in (105).

(105)

\[
\begin{align*}
a. \quad c &= k: \text{linking} + \text{UoL} \\
b. \quad c: \text{COMP}_1 &= k: \text{linking} + \text{COMP UoLs} \{a, b, c\} \\
c. \quad c: \text{COMP}_2 &= k: \text{linking} + \text{COMP UoLs} \{A, B, C\} \\
c. \quad c: \text{COMP}_3 &= k: \text{linking} + \text{COMP UoLs} \{\alpha, \beta, \gamma\} \\
\end{align*}
\]

If a language has a single category in the domain of the linking spine, the formulation of the linking spine in the language must be as in (105a). Conversely, if a language has multiple categorical groups in the domain of the linking spine, the linking spine of the
language must be organized as in (105b). Thus, the abstract Universal categorizer $k$ does not have sound ($\pi$) and substantive content ($\Sigma$), but language-specific categories do. Under the USH, clause types (or clause type-related linguistic phenomena) in a language are conveyed by a UoL in a language-specific category. What is the language-specific category in the domain of the linking spine in Korean?

As discussed in the previous sections, following the universal Clausal Typing Hypothesis (Cheng, 1991: 29; Moscati, 2010) and the universal category Force (Chomsky, 1995; Rizzi, 1997), and in line with Ceong (2012), Denham (2000), Ginsburg (2009), and Portner (2004), I argue that “Type” can be a Korean language-specific category in the domain of the complementizer system, as the head of a clause in Korean can be typed by a clause-typing morphophonological item; declarative $ta$ and interrogative $ni$ form a language-specific category, $c$: Type. The first piece of evidence comes from the linear order which reflects a functional element’s position in the structure. Declarative $ta$ and interrogative $ni$ select TAM elements which are associated with the anchoring spine within the USH, so $ta$ and $ni$ must be associated with the linking spine that selects the anchoring spine. The second piece of evidence comes from the obligatoriness of the COMP UoLs. “Obligatoriness” is one of the properties of a syntactic head (Wiltschko, 2014: 91). This obligatoriness is relevant to the existence of the placeholder clause-typing $u$Type UoLs in the same domain; this further confirms the head status of Type UoLs. The third piece of evidence comes from their selectional properties. The $c$-selectional properties of Type UoLs, as described in Tables 3-5 and Table 3-6, show that indeed sentence enders have the morphosyntactic properties of COMP UoLs. Diagnosing the surface effects (Wiltschko, 2008, 2014) of COMP UoLs, I argue that both
iType and uType UoLs are heads associated with $k$: linking via the “is-a” relation. If the overtly marked or zero marked UoL exhibits obligatoriness and head effects, and it licenses expletive interpretation, the UoL is associated with a universal spine $k$ by means of the “is-a” relation (Wiltschko 2014: 90). The language-specific category $c$: Type can be formulated with the USH, as in (106).

(106) 

\[ c: \text{Type} = k: \text{linking} + \text{COMP UoLs} \]

If we looked at sentence-final particles from an exclusively discourse-pragmatic perspective, we would fail to account for the Clausal Typing Hypothesis (Cheng, 1991) and the specification of Force (Chomsky, 1995; Rizzi, 1997) when the COMP is occupied by the intimate $e$ or polite speech style marker $e$-yo which cannot mark one of three basic clause types by themselves; the interpretation of a clause marked by them is ambiguous or uninterpretable in the case of lacking interaction with other local functional elements such as prosody. Considering that the primary morphosyntactic role of a COMP UoL is to mark clause type, as assumed in the literature, I propose $c$: iType as a language-specific category for COMP UoLs that have the sub-categorial clause type feature and $c$: uType as a language-specific category for COMP UoLs that do not have a sub-categorial clause type feature. Although uType COMP does not carry a sub-categorial clause-type feature, it is possible that it carries a finite or modal related feature, a possibility which I do not further investigate in this dissertation. Based on the association of the UoLs defined by the order of functional markers on predicates in well-formed clauses, I
propose the association of a language-specific category \( c: \) Type in the syntactic spine, as in (107).

(107) **Association of Korean \( c: \) Type UoLs with the syntactic spine**

\[
\begin{array}{c}
\text{k: linking} \\
\text{k: anchoring} \\
\end{array}
\]

\[
\begin{array}{c}
k: \text{linking} \\
c: \text{Type} \{ c: \text{iType}; c: \text{uType} \} \\
k: \text{anchoring} \\
\end{array}
\]

An alternative approach could be the major treatments that matrix complementizers have received in the literature as SPEECH STYLE markers (Chang, 1996: 191; Lee & Ramsey, 2000: 183; König & Siemund, 2007: 280; Siemund, 2018: 88; Yeon & Brown, 2011: 171). SPEECH STYLE could form a language-specific category, as in (108).

(108)

\[
c: \text{Speech Style} = k: \text{linking} + \text{COMP UoLs}
\]

\[
c: \text{Speech Style} (\{ \text{Plain, Intimate, Familiar, Blunt, Polite, Deferential (or Formal)} \})
\]

Under this assumption, the plain speech style declarative \( ta \) as well as the formal speech style declarative \( pnita \) would be associated with the linking spine to form the language-specific category \( c: \) SPEECH STYLE. Categorizing Korean COMP UoLs based on the interface between morphosyntax and pragmatics, as in (108), is problematic in accounting for the asymmetric morphosyntactic properties between speech style markers. First, the uses of the intimate speech style marker \( e \) and the plain speech style declarative \( ta \) within a speech event by the same speaker to the same addressee are observed in Noh (2008). Recall that those studies investigated caregivers’ and young children’s speech and
found that these two markers were both used by each person in the conversation (see §2.2.5). Thus, plain speech style markers are not distinguished from the intimate speech style in terms of politeness level. Second, the table of sentence-enders (see Table 2-4) is organized based on speech styles and omits many UoLs associated with clause-typing markers including promissive ma, underspecified ci, and irrealis complementizers l-key and l-lay and so on. Third, the asymmetric behaviours between the plain speech style clause-typing markers and the rest of the speech style markers, including the intimate speech style marker e, are irrelevant to speech style differences. Unlike plain declarative ta, which shows symmetric distributional properties within a clause (109a), the intimate declarative e does not behave identically between matrix and balanced embedded clauses, as in (109b).

(109)

a. cungke-lul chac-a po-ass-ta-ko mit-nun-ta
   evidence-ACC find-COMP see-PST-DECL-COMP believe-PRES-DECL
   ’pro; believe(s) that proj have tried to find the evidence.’

   evidence-ACC find-COMP see-PST-COMP COMP believe-COMP-FI
   ’pro; believe(s) that proj have tried to find the evidence.’

c. cungke-lul chac-a po-ass-ta-ko mit-e↓
   evidence-ACC find-COMP see-PST-DECL-COMP believe-COMP-FI
   ’pro; believe(s) that proj have tried to find the evidence.’

If we assume that (109a) is uttered in the plain speech style and (109b) is uttered in the intimate speech style, why does the intimate declarative e behave differently within the same speech style? I argue that COMP UoLs are dependent on the properties of the heads of the domain. Speech style differences between plain and intimate markers cannot
adequately explain the asymmetry in (109). If we classify speech style markers by their embeddability, there are two categories: plain and the rest of the speech styles.

(110)

Embeddable by \( ko \): Plain

Unembeddable by \( ko \): Intimate, Familiar, Blunt, Polite, Deferential (or Formal)

Lastly, the labels “sentence enders” and “speech style markers” are misleading as to the properties of these complementizers, some of which apparently appear as non-matrix clausal heads, as in (111).

(111)

a. \( pemin-ul \)  \( chac-a \) \( po-ass-e-\downarrow \) (clausal complement)
   culprit-ACC  find-COMP  see-PST-COMP-FI
   ‘I’ve tried to find a culprit.’

b. \( pemin-ul \)  \( chac-ci \) \( mal-ci-\downarrow \) (clausal complement)
   culprit-ACC  find-COMP  NEG.IRR-COMP-FI
   ‘(I suggest) Don’t find a culprit.’

The intimate speech style marker \( e \), that is, the underspecified COMP UoLs \( e \) and \( ci \), occur in complement clauses of auxiliary verbs as in (111). The UoLs \( e \) (111a) and \( ci \) (111b) in this position cannot be referred to as sentence enders or speech style markers.

The second alternative language-specific category is Mood. Mood Phrase has been proposed as the projection for the plain speech style markers (Bhatt, 1999; Bhatt & Yoon, 1992; K. Lee, 2009; Park, 2011; Y. Park, 2015; Yoon, 1997). If \( ta \), \( nya \), \( la \), and \( ca \) are language-specific mood complementizers, this projection can be formulated as in (112) in the USH.

(112)  \( c: \) Mood = \( k: linking \) + COMP UoLs
It is unclear if other types of clause-typing markers with various speech style markers also appear as heads of the Mood Phrase under this assumption. In particular, categorizing Korean COMP UoLs based on the interface between morphosyntax and semantics may be problematic in accounting for the data in (113), repeated here from (36), where the clause is marked by $e$, which does not carry a particular clause type or a speech act mood by itself at the right periphery of matrix clauses.

(113)

a. moki-lul cap-ass-e↓
   mosquito-ACC catch-PST-COMP-FI
   ‘(I) caught the mosquito.’

b. moki-lul cap-ass-e↑
   mosquito-ACC catch-PST-COMP-RI
   ‘Did (you) catch the mosquito?’

c. moki-lul cap-∅-a↑
   mosquito-ACC catch-TAM-COMP-RI
   ‘Should I catch the mosquito?’

d. moki-lul cap-∅-a↓
   mosquito-ACC catch-TAM-COMP-FI
   ‘Catch the mosquito!’

If the UoL $e$ is a mood marker, what does this expletive-like or empty mood contribute to the proposition at LF? I argue that $c$: speech style and $c$: Mood are not appropriate morphosyntactic categories for language-specific complementizers in the higher position in the structure which has a syntactic function of complementation. The advantage of the morphosyntactic approach to matrix COMP UoLs is that it can account for the properties of expletive-like $u$Type COMPs by assuming feature agreement and the domain effects.

In summary, $c$: $i$Type and $c$: $u$Type are proposed as Korean language-specific categories associated with the linking spine. The presence of the expletive-like COMP
UoL $e$, which is obligatory but underspecified for both clause type and finiteness, provides evidence that force, type, and finiteness are all robust in the Korean complementizer system. At least in Korean, the distribution of COMP UoLs supports the idea that a matrix type complementizer is a universal category present in all clause types, since i) COMP UoLs are obligatory; and ii) there is an expletive-like COMP (e.g., $e$).

Before closing this section, Table 3-8 and Table 3-9 below show how the specified and underspecified $u$Type markers get their interpretation of illocutionary force at LF.

Table 3-8

<table>
<thead>
<tr>
<th>Anchoring [Tense]</th>
<th>Linking [$i$Type]</th>
<th>Interpreted as …in independent clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>${\pi: ss \Sigma: past}$</td>
<td>${\pi: ta \Sigma: DECL}$</td>
<td>assertion</td>
</tr>
<tr>
<td>${\pi: ss \Sigma: past}$</td>
<td>${\pi: ni \Sigma: INT} {\pi: nya \Sigma: INT}$</td>
<td>question</td>
</tr>
<tr>
<td>${\pi: \emptyset \Sigma: non-past}$</td>
<td>${\pi: la \Sigma: 2^{nd}, IMP}$</td>
<td>command</td>
</tr>
<tr>
<td>${\pi: \emptyset \Sigma: non-past}$</td>
<td>${\pi: ca \Sigma: 1^{st} inclusive, EXH}$</td>
<td>invitation</td>
</tr>
<tr>
<td>${\pi: \emptyset \Sigma: non-past}$</td>
<td>${\pi: ma \Sigma: 1^{st}, PROM}$</td>
<td>intention</td>
</tr>
</tbody>
</table>

Table 3-9

<table>
<thead>
<tr>
<th>Anchoring [Tense]</th>
<th>Linking [$u$Type]</th>
<th>Intonation</th>
<th>Interpreted as …in independent clauses</th>
</tr>
</thead>
<tbody>
<tr>
<td>${\pi: ss \Sigma: past}$</td>
<td>${\pi: e \Sigma: \emptyset}$</td>
<td>[-rising]</td>
<td>assertion</td>
</tr>
<tr>
<td>${\pi: ss \Sigma: past}$</td>
<td>${\pi: ci \Sigma: \emptyset}$</td>
<td>[+rising]</td>
<td>conformational assertion</td>
</tr>
<tr>
<td>${\pi: \emptyset \Sigma: non-past}$</td>
<td>${\pi: e \Sigma: \emptyset}$</td>
<td>[+rising]</td>
<td>conformational question</td>
</tr>
<tr>
<td>${\pi: \emptyset \Sigma: non-past}$</td>
<td>${\pi: e \Sigma: \emptyset}$</td>
<td>[-rising]</td>
<td>suggestion</td>
</tr>
</tbody>
</table>
I do not claim that the \(iT\)ype and \(u\)Type classes in the linking domain can account for all matrix COMP UoLs in Korean. For instance, UoLs in evidential paradigms in independent clauses, as in (114), exhibit dissimilar properties from both \(iT\)ype and \(u\)Type UoLs.

(114)

a. \(pi-ka\) \(wa-ss-\text{kwun}-(yo)\)
   rain-NOM come-PST-EVID-POL
   ‘It rained.’ (the proposition is an established fact)

b. \(pi-ka\) \(wa-ss-\text{ney}-(yo)\)
   rain-NOM come-PST-EVID-POL
   ‘It rained.’ (I saw it; everything is wet)

c. \(pi-ka\) \(o-na-(yo)\)
   rain-NOM come-EVID-POL
   ‘Is it raining?’ (I hear it)

d. \(pi-ka\) \(wa-ss-\text{na}-(yo)\)
   rain-NOM come-PST-EVID-POL
   ‘Did it rain?’ ‘It rained?’ (after the speaker saw the road is wet all over)

The UoLs \(\text{kwun}\), \(\text{ney}\), and \(\text{na}\) in (114) can be embedded by polite \(yo\), but \(\text{kwun}\) and \(\text{ney}\) mark declaratives, whereas \(\text{na}\) only marks interrogatives (self-questions).\(^{17}\) Thus, they are all \(iT\)ype UoLs; \(\text{kwun}\) is another COMP UoL compatible with present-tense \(\text{nun}\), as in \(pi-ka\ o-nun-\text{kwun}\ ‘(the speaker’s perception) It is raining’, while \(\text{ney}\) and \(\text{na}\) are incompatible with the present tense marker; \(\text{ney}\) and \(\text{na}\) follow either bare verb stems or past-tense-inflected verb stems. The compatibility of these three evidential COMP UoLs with TAM elements again confirms C–T dependency (Chomsky, 2008; Miyagawa, 2010;

\(^{17}\) The distribution and interpretation of the UoL \(\text{kwun}\) will be discussed briefly in Chapter 6; it is in complementary distribution to the UoL \(\text{la}\) in the evidential paradigm: \(te-\text{kwun}\) versus \(te-\text{la}\).
Richards, 2007; Stowell, 1982). Outside of studies on evidentiality, the sorts of clauses headed by the UoLs in (114) are rarely employed as data for syntactic analysis. Due to limitations of space, I will not expand my discussion to the Type COMP UoLs in the evidential mood paradigm in this dissertation.

In sum, matrix COMP UoLs in Korean satisfy either the universal Clausal Typing Hypothesis (CTH, Cheng, 1991) or the language-specific Clause Complementation Parameter (CCP). The CCP states that all clauses must have a morphophonologically realized and either marked or unmarked COMP UoL. Just as all matrix finite clauses require a morphophonologically realized subject and the EPP licenses expletive pronouns in finite clauses in some languages, CTH and CCP require either an underspecified COMP UoL or a clause-typing COMP UoL in matrix clauses in Korean. These principles imply that the CTH may be satisfied by a null COMP UoL with a clause-typing operator if the parametric CCP is inactive in a language. The distributional characteristic of COMP UoLs show that underspecified COMP UoLs including \(e\) can be spelled-out in matrix clauses under the CTH and CCP, while they are spelled out in restricted syntactic context such as auxiliary complement clauses to satisfy only the CCP (and possibly to satisfy a mood requirement which I do not further pursue in this dissertation). The difference between the English EPP expletive \(it\) and the Korean CCP expletive \(e\) is that this expletive COMP UoL occurs even in non-finite clauses. This language-specific category in a complementizer system can be accounted for within the framework of the USH, which embraces parametric categories within a universal category which possessing universally attested properties.
3.6 Conclusions

This chapter provided a novel analysis of Korean clause-typing matrix complementizers from a morphosyntactic point of view within the framework of the USH. I have taken a close look at the distribution of three categories from among the six speech-style so-called sentence enders: plain, intimate, and polite speech styles. Based on their properties and distribution, I proposed language-specific categories associated with the linking spine within the framework of the USH. The clause-typing language specific category $c$: Type is further subcategorized into $c$: $i$Type and $c$: $u$Type, depending on whether a COMP UoL can type a clause autonomously in the domain. The former UoLs contain paradigmatic subcategory features such as $ta$ [DECL] (cf. Adger, 2003). The latter UoLs, including UoLs $e$ and $ci$, carry an underspecified Type category feature. These expletive-like $u$Type UoLs are semantically opaque and cannot act to mark a clause type independently; instead of treating the $u$Type UoLs as homophones with distinct abstract features—$e$[-Q], $e$[+Q], and $e$[IMP]—I have analyzed them by associating their local configuration with $T$, the person feature on the subject, and intonation: $e$ which is selected by [$\pm$ falling intonation] and selects [$\pm$ finite $T$] with [$\pm$ 2$^{nd}$]. I argue that clauses marked by $u$Type UoLs are ‘unmarked clauses’ rather than ‘unmarked declaratives’ or ‘default declaratives’ in Korean. Thus, $C=$an underspecified clause, finite or not, rather than $C=$Declarative (as assumed in Roberts & Roussou, 2002: 141) at least in Korean.

By making this distinction, I showed that the paradigm based on six speech styles is not directly relevant to syntax. Instead, we observe a morphosyntactic paradigm that permits two clause-typing systems within a language. The UoL $e$ may appear as an intimate speech-style marker or a declarative clause-typing marker, but $e$ is not inherently
one or the other. Assuming that C has a clause-typing feature (Biberauer & Roberts, 2015; Cheng, 1991; Haegeman, 2012; Rizzi, 1997), I hypothesized that the head of a clause must have a clause-type-related feature, but that feature can be valued by an element external to the clause-type domain in independent clauses when the head is filled by the underspecified COMP UoLs e or ci. The UoL e likely contrasts with ci in semantics, possibly as indicative versus subjunctive or realis versus irrealis, but I do not further discuss their semantic properties in this dissertation.

The four questions I asked in the introduction of this chapter have been answered in the course of my analysis. In Korean, we do not find interrogative and declarative markers co-occurring in a single-layered matrix clause. A COMP UoL including e and ci can signal three conceptually distinct clause types with the same phonetic form but its form must not carry three distinct clause type features in the same domain. Rather, e and ci express three distinct clause types by local configuration.

The combination of declarative marker ta and a question force can co-occur in a clause if they form second-hand speech constructions expressing echo and hearsay questions. Thus, when declarative and interrogative markers co-occur in a clause, they do not have semantically conflicting features; they occupy distinct positions in the structure and express a distinct illocutionary force from canonical yes-no questions. This will be investigated in the next chapter.
Chapter 4

Complementizers in double-layered CPs

4.1 Introduction: The syntax-pragmatics interface

In traditional generative grammar and the cartographic approach, CP or ForceP is understood to be the topmost functional projection. If this proposal is correct, the linking spine, (which hosts the Korean language-specific categories c:iType and c:uType, as discussed in the previous chapter), is likely to be the topmost universal spine. However, cross-linguistic empirical data shows that functional elements can also appear above CP. In this chapter, I defend the legitimacy of two additional categorial domains above the linking spine: the grounding and responding spines (see Thoma, 2016; Witzschko & Heim, 2016; Witzschko, 2017).

The idea of potential domains above CP or ForceP is not new in the literature. For instance, a substantial body of literature exists on speech act phrases that act as hosting sites for speech participants above CP (Speech Act Phrase—SAP). Empirical data supporting the SAP has been presented by researchers working within generative grammar (Haegeman, 2014; Haegeman & Hill, 2013; Miyagawa, 2012; Nasu, 2012; Speas & Tenny 2003, Speas 2004), with data drawn from Korean, Ibero-Romance, Japanese, Bavarian, and Canadian English (Ceong, 2016; Corr, 2016; Miyagawa, 2017; Thoma, 2016; Wiltschko & Heim, 2016; Zu, 2018). Building on these studies, this chapter explores the SAP: First, I provide empirical evidence from Korean supporting the legitimacy of two domains above the linking spine within the USH. Second, I describe
the language-specific categories associated with these domains, and their morpho-
syntactic properties.

To begin, I defend my claim that the heads of echo, reinforcement, and hearsay constructions are associated with a Korean language-specific category $c$: INDIRECT (original versus reproduced/cited speech), which is associated with the grounding spine.\(^1\) In addition to $c$: INDIRECT, I propose the Korean language-specific category $c$: INTERACTION (two-way interactions in the interactional domain) (cf. Ginzburg, 2012) that selects either $c$: INDIRECT or $c$: $u$Type UoLs.

Under the assumption that “every element that appears in a well-formed structure must be licensed in one of a small number of available ways” (Chomsky, 1986b, p. 93), all UoLs in well-formed clauses in (115) must be licensed in the structure. Following this licensing principle and working within the framework of the USH, I compare UoLs in first-hand (115a) versus second-hand speech constructions including echo questions (115b) and hearsay questions (115c), which contrast in terms of their directness of speech.

(115)

\begin{align*}
\text{a. } & \text{ nayngmyen } \text{ mek-ule } \text{ ka-ca} \quad \text{(direct exhortative)} \\
& \text{cold noodles } \text{ eat-COMP } \text{ go-EXH} \\
& \text{‘Let’s go eat cold noodles!’} \\

\text{b. } & \text{ nayngmyen } \text{ mek-ule } \text{ ka-ca-ko-↑} \quad \text{(echo question)} \\
& \text{cold noodles } \text{ eat-COMP } \text{ go-EXH-COMP-RI} \\
& \text{‘Are you saying we should go eat cold noodles?’} \\

\text{c. } & \text{ nayngmyen } \text{ mek-ule } \text{ ka-ca-y-↑} \quad \text{(questioning hearsay)} \\
& \text{cold noodles } \text{ eat-COMP } \text{ go-EXH-HEARSAY-RI} \\
& \text{‘Did s/he ask us to go eat cold noodles?’}
\end{align*}

\(^1\) The term is adopted from Huddleston’s (1994, p. 427) observation that “Echoes involve a kind of citation,” which can be applied to hearsay constructions.
The clause with the exhortative marker *ca* in (115a) is semantically and pragmatically first-hand direct speech, while the exhortative clauses followed by the markers *ko* and *y* in (115b) and (115c) are semantically expressing complex events and pragmatically expressing second-hand speech, even though they are syntactically simple clauses including one predicate, the full verb *ka-* ‘go’, in independent clauses. The so-called quotative/reportative *ko* and hearsay *y* in the independent clauses in (115) are roughly equivalent to the italicized phrases in the English translations. It is safe to infer that echo *ko* and hearsay *y* in these clauses are irrelevant to the semantics of typical clause types considered in Chapter 3. Although clauses marked by *ko* and *y* in the examples in (115) are all simple clauses, the presence or absence of these UoLs marks distinct speech acts; they contrast between first-hand utterances (original to the speaker) and second-hand utterances (repeated or cited by the speaker). In Chapter 3, I argued that Type UoLs are substantiated by the linking spine within the UHS. Following that argument, UoLs that immediately follow Type UoLs are substantiated by the *grounding* spine within the framework of the USH (Thoma, 2016; Wiltschko, 2014, 2017; Wiltschko & Heim 2016).

The chapter is organized as follows: Section 4.2 presents a detailed investigation of the distribution and interpretation of the echo and reinforcement function of *ko* (‘I said CP’ or ‘*did you say* CP’) and hearsay *y* (‘they/she/he said CP’) in simple clauses. I show that these two functional UoLs express complex speech events within a clause. Based on my interpretation of the UoLs expressing duplicated speech in the domain of direct and indirect speech, in Section 4.3, I propose the language-specific category *c: INDIRECT*. Section 4.4 determines how *ko* and *y* fit within the USH by showing that *c: INDIRECT* is associated with the grounding spine. Section 4.5 examines the distribution and roles of
the polite marker *yo* and intonation that follow the UoLs of *c: INDIRECT*. A language-specific category *c: INTERACTION* hosting both polite *yo* and intonation is proposed to occupy the responding spine. Section 4.6 presents the concluding remarks of the chapter.

### 4.2 Decomposing complementizers in second-hand speech

As right-peripheral clause elements, *ko* and *y* exhibit a unique distribution and interpretation: they express complex speech events within a simple clause (a clause with a single lexical verb). Echo questions (H-Lee, 2010; S-Sohn 1996), self-quotation (J-Kim, 2002; S-Sohn, 1996, 2015), and reportative evidentials (Ahn & Yap, 2014, 2015; J-Kim, 2002; N-Kim, 2000) containing *ko*, and hearsay/reportative evidentials (Ceong, 2016; J. Chung, 2010, 2011; I. Kwon, 2011) containing *y*, have been discussed in analysis of grammaticalization (Ahn & Yap, 2014; S-Sohn, 1996, 2011; Rhee 2016) and pragmatic discourse analyses (Ahn & Yap, 2015; M-Kim, 2003; S. Kim, 2012; H. Lee, 2010; Sohn & Park, 2003), but have rarely been discussed in the morphosyntactic literature (one exception is Ceong, 2016). Outside morphosyntax, these elements have variously been treated as final particles (see Hancil et al., 2015), discourse particles (see Stede & Schmitz, 2000), or evidentials (see Aikhenvald, 2015). Following Chomsky’s (1986) licensing principle this dissertation treats *ko* and *y* as elements licensed in the structure.

This section seeks answers to questions such as, *what licenses the morphosyntactic elements appearing above the clause-typing projection?* As the null subjects in direct exhortative clauses are all recoverable as a plural first-person (Zanuttini et al. 2012), the agent of the verb of saying in English translations of echo questions and hearsay constructions is always recoverable based on *ko* and *y*—although intonation also plays a role in these clauses, as shown in (116), partially repeated from (115).
(116)

a. *nayngmyen mek-ule ka-ca* (direct exhortative)
cold noodles eat-COMP go-EXH
‘Let’s go eat cold noodles!’

b. *nayngmyen mek-ule ka-ca-y↓* (hearsay report)
cold noodles eat-COMP go-EXH-HEARSA-Y-FI (cited exhortative)
‘S/he said let’s go eat cold noodles.’

c. *nayngmyen mek-ule ka-ca-y↑* (questioning hearsay)
cold noodles eat-COMP go-EXH-HEARSA-Y-RI (questioning hearsay)
‘Did s/he ask us to go eat cold noodles?’

d. *nayngmyen mek-ule ka-ca-ko↑* (echo question)
cold noodles eat-COMP go-EXH-COMP-RI (echo exhortative)
‘Are you saying we should go eat cold noodles?’

e. *nayngmyen mek-ule ka-ca-ko↓* (self-quotation)
cold noodles eat-COMP go-EXH-COMP-RI (reinforced exhortative)
‘(I said) Let’s go and eat cold noodles.’

The properties and distribution of what I call hearsay assertion *y* (116b), hearsay question *y* (116c), echo question *ko* (116d), and reinforcement *ko* (116e), will be further discussed in the following subsections. The point I want to emphasize here is that it is not the case that the agent of the verb of saying in each example in (116) is recoverable purely depending on intonation or pragmatic discourse context. If the agent were solely determined by the pragmatic discourse context, then alternating meaning differences between a *s/he said* clause with *y* (b) and an *I said* clause with *ko* (e) or between a rising (c, d) and falling contour alternation in (b, e) must be in free variation. I argue that this is not the case: these UoLs are not in free variation, but rather express speech participants’ roles in the current and/or previous utterances systematically, in addition to indicating that the exhortative is not a direct exhortative. In (116b, 116c), the agent of the verb *ka-* ‘go’ is understood to include the speaker of the past speech event, who is a third
person/non-speech participant in the hearsay report. If pragmatics plays a role in the clauses in (116), it should not be very different from the deictic nature of the pronoun I in *I’m cold*, or the pragmatic function of this utterance when the speaker is in a room with the window open. The pragmatic situations are exemplified in the figure below.

<table>
<thead>
<tr>
<th>First-hand speech (116a)</th>
<th>second-hand speech (116b) (hearsay assertion)</th>
<th>second-hand speech (116c) (hearsay question)</th>
</tr>
</thead>
<tbody>
<tr>
<td>v-ca↓</td>
<td>v-ca-y↓</td>
<td>v-ca-y↑</td>
</tr>
<tr>
<td>Let’s go eat cold noodles!</td>
<td>(Brian said) let’s go eat cold noodles!</td>
<td>(Did Brian say) let’s go eat cold noodles?</td>
</tr>
<tr>
<td>Brian says to Jessica</td>
<td>Jessica says to Leah</td>
<td>Leah says to Jessica</td>
</tr>
<tr>
<td>Brian and Jessica are colleagues and it is lunch time.</td>
<td>Brian, Jessica, and Leah are colleagues.</td>
<td>Leah overheard what Brian said to Jessica.</td>
</tr>
</tbody>
</table>

Figure 4-1 Pragmatic situations with hearsay assertions and questions

This is one of the plausible pragmatic contexts. In other words, it does not matter whether Brian speaks to Jessica or to Leah in first-hand speech. A clause without the hearsay marker expresses a first-hand, direct exhortative, while a clause with the hearsay marker y expresses second-hand speech quoting what a third person said without being embedded by a full matrix/quoting/reporting clause including the verb of saying; the expression of hearsay can be an assertion or a question depending on intonation. In (116b), Leah may or may not have heard what Brian said to Jessica, but in (116c), Leah must have heard what Brian said. Thus, the hearsay marker requires a pragmatic condition in which the speaker of the hearsay directly or indirectly refers to a prior speech event. This is also
true for echo or reinforcement constructions. The pragmatic situations described in the
figure above are typical but not necessarily the only possible context.

Regardless of the pragmatic situation, ko with a rising intonation expresses echo
questions in second-hand speech and with a falling intonation expresses the speaker’s
reinforcement in second-hand speech.

<table>
<thead>
<tr>
<th>First-hand speech (116a)</th>
<th>second-hand speech (116d) (echo question)</th>
<th>second-hand speech (116e) (reinforcement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ponsive sentence</td>
<td>(Did you say) let’s go eat cold noodles?</td>
<td>(I said) let’s go eat cold noodles!</td>
</tr>
<tr>
<td>Brian says to Jessica</td>
<td>Jessica echoes Brian’s back to him</td>
<td>Brian says again to Jessica</td>
</tr>
<tr>
<td>Brian and Jessica are colleagues and it is lunch time.</td>
<td>Jessica does not expect to eat cold noodles, or she didn’t hear clearly what Brian said to her.</td>
<td>Brian is repeating himself because he didn’t get a response from Jessica.</td>
</tr>
</tbody>
</table>

Figure 4-2 Pragmatic situations with echo questions and reinforcement

Thus, I claim that the contrasting interpretations of the italicized phrases in the English
translations of the well-formed clauses in (116) substantiate functions of ko and y, along
with intonation, in the syntax.

In this section, I will investigate the morphosyntactic properties of the COMPs ko
(henceforth “echo ko”) and y to determine which projection licenses them within the
framework of the USH. As ko also occurs in embedded contexts as a subordinating
complementizer, the properties of ko in complex sentences are discussed before the
discussion of echo and reinforcement ko. The subsections are organized as follows: §
4.2.1 discusses how Korean CP recursion differs from that of English (in that two overt UoLs, a Type UoL and the subordinating ko, co-occur in complex sentences). Empirical evidence from Korean and Japanese shows that two distinct CPs are placed between the low TP and the predicates of the matrix clauses in the structure. § 4.2.2 and § 4.2.3 examine the interpretation and distribution of ko and y, respectively, in matrix clauses. This discussion leads to the conclusion that ko contrasts with a null direct speech marker or the direct quotation marker lako (or hako); echo ko filling a higher position contrasts with the hearsay marker y, while there is no overt element that contrasts with the subordinating COMP ko in the low CP in complex sentences.

4.2.1 Subordinating complementizer ko

The main focus of this section is the characteristics and syntactic behaviour of the clausal heads of embedded clauses in complex sentences, which appear to be distinct from the heads of second-hand speech clauses in simple sentences. My claims are expressed in the trees sketched in (117).

(117) The structure of CP in dependent and independent clauses

```
a. Embedded CP
   vP
   ↘
   CP2
     ↘
     CP1
       ↘
       *(ko)

*ta, *e

b. Root CP
   saP
   ↘
   SAP
     ↘
     CP3
       ↘
       *(ko)

*ta, *e

∅; *(ko)
```

Two distinct heads are observed within the relevant domains: (i) a high SAP head, selected by saP UoLs (e.g., the polite marker yo or intonation); (ii) a low CP2 head,
selected by clausal-complement-taking predicates (e.g., *ha*-‘do’). By comparing a recurring low CP and a non-recurring high SAP in grammatical clauses, I argue that the head of low CP in (117a) must be overtly marked in the structure, while saP in (117b) is a projection which can be optionally activated in Korean (and probably in English). The tree in (117a) shows that two COMP UoLs *ta* and *ko* are obligatorily associated with double-layered CPs in embedded clauses, while only a single COMP UoL, declarative *ta* (or -*e*), is obligatorily associated with the head of CP in root clauses (117b). The UoLs *ko* and *yo* in (117b) occur when the projection SAP and saP are activated and cannot recur. The combination of CP₁ and CP₂ exhibits recursion. CP complement-taking matrix predicates, including *ha*-‘do; say’ in (117a), must select *ko*, and this *ko* (CP₂) cooccurs with *i*-Type UoLs including declarative *ta* (CP₁).

Consider the complex sentences consisting of three finite clauses in (118). The clausal complements of the verbs *malha*-*ta* ‘say’ and *mit*-*ta* ‘believe’ in (118) are each marked by two COMP UoLs: declarative *ta* and subordinating *ko*. The complex sentences in (118) show that the combination of *ta*-*ko* can be recursive. The head of matrix CP (CP₃) can be marked by either *ta* (118a) or *e* (118c).

(118)
a. [Anna-*nun* [[*Lily-ka* Jerry-*lul* manass-*ta*-*ko*]] *Joy-ka* malhayss-*ta*-*ko*]  
   Anna-TOP Lily-NOM Jerry-ACC met-DECL-COMP *Joy-NOM said-DECL-COMP  
   *mit-nun-*ta-*∅*]  
   believe-PRES-DECL-DIRECT  
   ‘Anna believe that Joy said that Lily met Jerry.’

b. [Anna-*nun* [[*Lily-ka* Jerry-*lul* manass-*ta*-*ko*]] *Joy-ka* malhayss-*ta*-*ko*]  
   Anna-TOP Lily-NOM Jerry-ACC met-DECL-COMP *Joy-NOM said-DECL-COMP  
   *mit-ess-e-∅* ↓  
   believe-PST-COMP-DIRECT-FI  
   ‘Anna believed that Joy said that Lily met Jerry.’
The ungrammatical sentences in (119) show that a declarative clause cannot undergo recursion without *ko, regardless of whether the clausal head is *iType COMP ta or *uType COMP e.

(119)

a. [Anna-nun [[Lily-ka Jerry-lul manass*ta-* (ko)] Joy-ka malhayst*ta-* (ko)]
   Anna-TOP Lily-NOM Jerry-ACC met.DECL-COMP Joy-NOM said.DECL-COMP
   mitess*ta]
   believed-DECL
   ‘Anna believe that Joy said that Lily met Jerry.’ (intended)

   Anna-TOP Lily-NOM Jerry-ACC met-COMP J-NOM said-COMP believed-COMP-FI
   ‘Anna believe that Joy said that Lily met Jerry.’ (intended)

Unlike COMPs in Korean dependent clauses, COMPs at the left edge of English dependent clauses indicate dependency and force simultaneously, as in (120c) and (120d).

(120)

a. Ø Brian went home. (Independent/Declarative)

b. Ø INVERSION Did Brian go home? (Independent/Interrogative)

c. that/Ø Brian went home (Dependent/Declarative)

d. whether/if Brian went home (Dependent/Interrogative)

From the morphophonological and morphosyntactic perspectives, the heads of matrix and embedded CPs of Korean and English show distinct properties. There must be two heads hosting a Type UoL and the subordinator *ko in the structure of dependent clauses in Korean, morphophonologically speaking, while there is only one such head in English (cf. Bhatt, 1999). This raises some questions: do the obligatory null declarative in matrix clauses and the overt that and optional null COMP in embedded declaratives all have the
same feature in English? And assuming the Uniformity Principle (Chomsky 2001, p. 2), which feature realizes *ta*, *e*, and *ko* in Korean?

An influential advocate of the split-CP, Rizzi (1997, p.327) notes that CP may undergo limited recursion. TopicP is freely recursive, but recursion of FocusP is impossible; Rizzi does not consider whether ForceP or FinP can undergo recursion. Rizzi (1997: 312) proposes that C in a dependent clause splits into two functional heads in English; overt *that* [+decl, (+fin)] and null *that* [(+decl), +fin, (+Agr)] alternate as the head of C in dependent declarative clauses (although null *that* is more restricted than overt *that*). Whether these features apply to the heads of independent or dependent declaratives in other languages is not explicitly stated in Rizzi (1997). We know that overt *that* [+decl, (+fin)] lacking (+Agr) is prohibited in root declaratives in English. The obligatory null Ø in the independent clause in (121) must be distinct from the overt dependent *that* and the optional null *that*; I assume that the English obligatory null Ø in independent declarative clauses must have [+fin, +Agr] in Rizzi’s system, based on the interpretation and inflection of the head in English matrix declarative clauses.

(121)

a. [Ø Anna thought [**that** Joy believed [**that** Lily said [**that** she met Jerry]]]].

b. [Ø I said [Ø she thought [Ø you knew about it]]].

Assuming the Uniformity Principle (Chomsky 2001, p. 2), it would follow that the heads *that* [+decl, (+fin)] and null *that* [(+decl), +fin, (+Agr)] are recursive in English declaratives, while the obligatory null [+fin, +Agr] (or [+decl, +fin, +Agr]) is not.

---

2 I use the terms *root*, *independent*, and *main/matrix* as synonyms—counterparts of the terms *subordinate*, *dependent*, and *embedded*, respectively.
Now let us consider embedded interrogative CP’s ability to be recursive. The recursion of embedded interrogative CP in Korean is parallel to embedded declarative CP. The complex sentences in (122) show that the interrogative iType nya and ko together undergo recursion.

(122)
a. \([na\text{-}eykey [[Lily\text{-}ka Jerry\text{-}lul manass\text{-}nya\text{-}ko] Anna\text{-}ka Joy\text{-}eykey 1sg\text{-}DAT Lily\text{-}NOM Jerry\text{-}ACC met\text{-}INT\text{-}COMP Anna\text{-}NOM Joy\text{-}DAT mwuless\text{-}nya\text{-}ko] mwut\text{-}nun\text{-}kes\text{-}i\text{-}nya\text{-}∅)]\]
asked\text{-}INT\text{-}COMP ask\text{-}PRES\text{-}COMP\text{-}be\text{-}INT\text{-}DIRECT
‘Did you ask me if Anna asked Joy whether Lily met Jerry?’

b. *[na\text{-}eykey [[Lily\text{-}ka Jerry\text{-}lul manass\text{-}nya\text{-}∅] Anna\text{-}ka Joy\text{-}eykey 1sg\text{-}DAT Lily\text{-}NOM Jerry\text{-}ACC met\text{-}INT\text{-}COMP\text{-}DIRECT Anna\text{-}NOM Joy\text{-}DAT mwuless\text{-}nya\text{-}∅] mwut\text{-}nun\text{-}ke\text{-}i\text{-}nya\text{-}∅)]
asked\text{-}INT\text{-}DIRECT ask\text{-}PRES\text{-}COMP\text{-}be\text{-}INT\text{-}DIRECT
‘Did you ask me if Anna asked Joy whether Lily met Jerry? (intended)’

Unlike their declarative counterpart that, interrogative if and whether in English dependent clauses do not have an optional null counterpart; they are morphosyntactically obligatory like nya-ko.\(^3\)

(123)
a. [Did you ask me [whether/if Anna asked Joy [whether/if Lily met Jerry?]]]

b. *[Did you ask me [Anna asked Joy [Lily met Jerry?]]]

Taking the Uniformity Principle into consideration, this implies that ko in dependent clauses does not have an equivalent morphological counterpart in English. If whether and if are not fused functional elements made up of interrogativity and subordinator, then it

\(^3\) The distributional difference between whether and if is discussed in Adger and Quer (2001).
could be that the canonical word order under the low CP is the equivalent morphosyntactic counterpart of the Korean *ko*. Considering both languages must have Type COMPs, the equivalent English equivalent of *ko* is not an overt or separate element. Although it is reported that a similar subordinating element is shared by some languages—including Kashmiri, Icelandic, Yiddish, and Japanese (Bhatt, 1999)—it seems that the understanding of the morphosyntactic properties of this head, or the structural position of this head in the structure, has not been incorporated into the main stream of syntactic theory adopted by authors such as Rizzi (1997).

What are the morphosyntactic properties of *ko*? In spite of its dissimilar morphosyntactic properties from those of the English COMPs *that*, *if*, and *whether*, traditionally *ko* has been glossed as a complementizer (Y. Choi, 2007; S. Kim, 2011; Ko, 2005; Madigan, 2008; M. Pak, 2006) and the clause-typing UoL *ta* has been glossed as the modal DECL in the literature (Bhatt, 1999; Y. Choi, 2007; S. Kim, 2011; Ko, 2005; Madigan, 2008; M. Pak, 2006). If we assume the clause-typing “modals” are force-complementizers, subordinating indirect *ko* is a grammatical element that selects a Type-complementizer when it is selected by matrix predicates. According to Bhatt (1999), languages like Kashmiri, Icelandic, Yiddish, and Japanese have split-CPs like Korean, where clause types and subordination are marked separately.

For instance, Japanese, which is often considered to have extensive similarities to Korean (see Horie, 2000; Koopman, 2005; Saito & An, 2014), has the UoL *to*, which shows a similar distribution to the Korean *ko*. Fukui (1995, p. 356) states that Japanese *to* does not have a counterpart in English, as it exhibits quite different behaviours from the English complementizer *that*. The distribution of Japanese *to* in (124b) shows that an
extra morphological marker to connects the matrix predicate tazuneta ‘asked’ and the embedded interrogative marked by ka in indirect speech. In other words, the complementizer to selects the interrogative ka like Korean ko selects nya in embedded interrogative clauses.

(124)

a. Taroo-wa [CP Hanako-ga Ziroo-ni atta-to] omotteiru
   Taroo-TOP Hanako-NOM Ziroo-DAT met-COMP think
   ‘Taroo thinks that Hanako met Ziroo.’

b. Taroo-wa Ziroo-ni [dare-ga kare-no ie-ni kuru-ka-to] tazuneta
   Taroo-TOP Z-DAT who-NOM his house come-FORCE-COMP asked
   ‘Taroo asked Ziroo who is coming to his house.’

(125)

Saito (2012) considers the UoL to in (124) to be a complementizer for ‘paraphrases of direct discourse,’’ which can be employed in both direct and indirect speech in Japanese. Note that the Japanese to marks both direct and indirect speech (Maier, 2009), while Korean has distinct quotative markers lako or hako to distinguish quotative constructions from indirect speech in complex clauses (King, 1994). From the perspective of Cartographic Projection (Rizzi 1997), Saito (2012) argues that the Japanese UoL to is associated with CP REPORT in the hierarchically organized COMP layers, as shown in (125).

(125)    [CP … [CP … [CP … Finite (no)] Force (ka)] Report (to)]
This domain, which Saito calls ReportP (Saito, 2012, 2013), can be set aside in our analysis for three reasons: (i) the detailed properties of the projection ReportP are not unfolded in Saito (2012, 2013); (ii) the data in Saito (2012, 2013) includes only the Japanese subordinating complementizer to in embedded clauses, which is not under our consideration in this section and is assumed to be distinct from the sentence-final to (or tte); and (iii) applying the label ‘Report’ even to the Korean subordinating ko seems to be odd conceptually, as the Japanese complementizer to in (126) does not behave like a reportative. If to were literally reportative, it would be not selected by the verb shijiru ‘believe’ and would not be compatible with the matrix verb in present tense and a first-person subject, as in (126).

(126)

\[ \text{Sore dake wa uso dewanakta, to, boku wa ima demo shinjite-iru} \]
\[ \text{that at-least TOP lie not-was COMP I TOP now even am-believing} \]
\[ \text{‘I believe even now that at least that was not a lie.’} \]
\[ \text{(S. Suzuki, 2000: 41)} \]

The Korean subordinating COMP ko likewise occurs in non-reportative embedded clauses, as in (127).

(127)

\[ \text{ku-uy mal-i kecis-i aniye-ss-ta-ko mit-nun-ta} \]
\[ \text{he-GEN words-NOM lie-NOM not.be-PST-DECL-COMP believe-PRES-DECL} \]
\[ \text{‘I believe that what he said wasn’t a lie (lit. his words were not a lie).’} \]

For these reasons, I do not consider ReportP to be a viable category label for the subordinating and echo COMP ko.

Contrary to Saito (2012), Ginsburg (2009) claims that Japanese to occupies the head of ForceP because the head of the dependent interrogative UoL kadooka occupies
TypeP—which he assumes to be in line with InterrogativeP (IntP) in Rizzi (2001), as illustrated in (128).\(^4\)

(128) \([\text{ForceP} \ldots \ [\text{TypP} \ldots \ Type (kadooka)] \text{Force} (to)]\)  (Ginsburg, 2009: 41)

The Force projection in Ginsburg’s system hosts an element that marks a clause as embedded. The author does not expand his analysis to the matrix Force domain (i.e., the hearsay UoL tte). The UoLs ko and to, which are selected by CP taking verbs from two distinct but similar languages and without any direct equivalent in English, need more attention in morphosyntactic analysis and may contribute to our understanding of the universal structure of the C system within UG. However, since this chapter focuses on the structure of CPs in matrix clauses, a formal analysis of the Korean ko and the Japanese to at the right edge of embedded clauses will be not conducted.

4.2.2 Marking echo and reinforcement clauses: ko

Although the subordinating ko discussed in the previous section (along with Japanese to) has no meaning, it must be present in the domain. I will refer to this subordinating ko as “low ko” because it always occurs in embedded clauses selected by a CP-taking matrix verb in a complex sentence. In contrast to low ko, there is a scenario where both Korean ko (Ahn & Yap, 2014; M-Kim, 2003; H. Lee, 2010; S-Sohn, 1996, 2015) and Japanese to (Hayashi, 1997; Makino, 1983; Mushin, 2001; Okamoto, 1995; Okamoto & Ono, 2008; Shibasaki, 2007) occur at a very high position in the clausal structure. In this position, both acquire a specific discourse function. Although these UoLs from two different

\(^4\) The embedded interrogative complementizer kadooka is a morphologically complex entity which can be decomposed into: ka (Q)+doo “wh”+kat(Q). (e.g. words include doo “wh” are such as doo-site “why”, doo-suru “what will you do?” and dooyatte “how”) and so on.
languages seem to differ as to what function they lexicalize (cf. Hayashi, 1997), focusing on the distribution of this high ko, I propose a projection licensing these overt UoLs, which selects Type UoLs in matrix clauses. I refer to the projection as GroundP (Wiltschko & Heim, 2016; Wiltschko, 2017).

In everyday conversations, speakers of Korean may insert ko in the COMP position of independent clauses as a discourse device. When independent clauses have the overt UoL ko, ko is understood as a second-hand speech marker. What I will call second-hand speech is a superordinate term describing the speaker repeating or citing a speech act either made by a remote third party or an immediate speech participant including her/himself. For instance, an echo marker embeds the speech act just uttered by one of the speech participants in the immediate presence of the speaker, while a hearsay marker embeds a speech act made by a remote third party. The speech participants in echo and reinforcement constructions share common ground (cf. Clark & Brennan, 1991): the immediate speech context. I refer to (129a) as first-hand speech, while (129b) is second-hand speech—echoed speech uttered by the addressee of the first-hand speech. (129c) is second-hand speech where the speaker repeats what they themselves just said.

(129)

a. na, cha    sa-ss-ta
   1sg  car     buy-PST-DECL
   ‘I bought a car.’

b. cha    sa-ss-ta-ko↑
   car     buy-PST-DECL-COMP-RI
   ‘You bought a car?’/Are you saying you bought a car?)

c. cha    sa-ss-ta-ko↓
   car     buy-PST-DECL-COMP-FI
   ‘(I SAID) I bought a car!’ (didn’t you hear what I said?)
The matrix *ko*, boldfaced in (129), does not share its meaning or function with the subordinating COMP *ko*. Following Sung-Ock Sohn (2015: 193), I argue that echo constructions are not a result of ellipsis in synchronic grammar.⁵ Taking a diachronic perspective, Ahn and Yap (2014) consider *tako* to be a hearsay evidential marker derived in its grammaticalization path from the omission of *ha*, the verb of saying. If we assume ellipsis of the main clause in synchronic grammar, there is no explanatory account for the possible ellipsis patterns. There is no syntactic operation that deletes the main verb; thus, this partial deletion cannot be explained if we assume that *malhasse* ‘said’ is deleted, as in (130).

(130)  
\[
\begin{array}{llll}
\text{ta} & \text{hay-ss-ta-ko} & \text{malhass-e-yo-↑} \\
\text{all} & \text{do-PST-DECL-COMP} & \text{say-PST-COMP-POL-RI} \\
\end{array}
\]

‘Did you say that you finished all of it?’

A second possible ellipsis analysis could be that all the elements following *ko* are deleted, as in sluicing. Again, explanatory adequacy is missing: the motivation for deleting the entire main clause (including the pragmatic elements polite *yo* and intonation) and then adding the pragmatic elements back in again is unclear. Such an analysis is represented in (131).

(131)  
\[
\begin{array}{llll}
\text{ta} & \text{hay-ss-ta-ko} & \text{malhass-e-yo↑ yo-↑} \\
\text{all} & \text{do-PST-DECL-COMP} & \text{say-PST-COMP-POL-RI} \\
\end{array}
\]

‘You finished all of it?’ (Lit. Are you saying that you finished all of it?)

Lastly, if we assume deletion of the main clause, how do we constrain our account so that only main clauses with a first- or second-person subject are deleted? The interpretation of

the echo utterance rules out the possibility of a main clause with a third-person agent of the verb of saying. Moreover, how do we constrain the analysis so that clauses expressing “are you saying” are deleted, but clauses expressing “you said”, as in (132), are not?

(132)
\[
\begin{align*}
&\text{ta} \quad \text{hay-ss-ta-ko} \quad \text{ne-ka} \quad \text{malhass-e} \downarrow \\
&\text{all} \quad \text{do-PST-DECL-COMP} \quad \text{you-NOM} \quad \text{say-PST-COMP-FI} \\
&\text{‘(You said that) you finished all of it.’}
\end{align*}
\]

Given these considerations, I argue that the well-formed clauses in (133), partly repeated from (129), are not derived by ellipsis in synchronic grammar.

(133)
\[
\begin{align*}
a. \quad &\text{na, cha} \quad \text{sa-ss-ta} \\
&\text{1sg car buy-PST-DECL} \\
&\text{‘I bought a car.’}
\end{align*}
\]

b. cha sa-ss-ta-ko↑
\[
\begin{align*}
&\text{car buy-PST-DECL-COMP-RI} \\
&\text{‘You bought a car?’/Are you saying you bought a car?)} \\
&\text{(*Do you think/believe you bought a car?)} \\
&\text{(*I heard/pro3 said that you bought a car)}
\end{align*}
\]

c. cha sa-ss-ta-ko↓
\[
\begin{align*}
&\text{car buy-PST-DECL-COMP-FI} \\
&\text{‘(I SAID) I bought a car!’ (didn’t you hear what I said?)} \\
&\text{(*I think/believe I bought a car.)} \\
&\text{(*I heard you bought a car.)}
\end{align*}
\]

Insubordination (i.e., the use in independent clauses of what appear to be formally dependent clauses (cf. Evans, 2007: 367)) or reanalysis may apply to echo questions and reinforcement clauses from a diachronic perspective. In synchronic analysis, I am interested in them as hierarchically organized UoLs and realizations of language-specific categories in the structure. The function of echo ko with a rising intonation in (133b) is analogous to the function of contour in English echo questions (Adger, 2003, p. 352).

Although echo clauses are simple sentences with a single verb at surface, they are
semantically and pragmatically complex (as illustrated in the English translation). The function of reinforcement *ko* with a falling intonation in (133c) is likely analogous to the function of stress on the verb ‘said’ in the English translation. I conjecture that the echo clauses in (133) reflect an insubordinated clause with a non-continuation contour (Elvira-García et al. 2017, p. 31), which is “the conventionalized main clause use of what, on prima facie grounds, appear to be formally subordinate clauses” (Evans 2007: 367). Echo *ko* marks its complement to be a kind of utterance, rather than a proposition. In other words, the clause in the square brackets has a restricted interpretation: it must be the reported speech (or thought in the case of reinforcement) of a speech participant.

Although the subordinating *ko* can serve as the complement of a verb of perception, such as *sayngkakhata* ‘think’ or *mitta* ‘believe’, the sense of echo *ko* is not interpreted as ‘do you think…’ but only ‘did you say…’, as in the English translation (133b).

The omission of echo *ko* with a rising intonation in (134a) does not affect the well-formedness of the clause, but the omission of subordinating *ko* in (134b) does.

(134)

a. [cha  sa-ss-ta]-*ko*-↑
car   *buy*-PST-DECL-COMP-RI

‘Did you say that you bought a car?’

b. *[ [Lily-ka Jerry-lul  manass-nya]-*ko*  Anna-ka  Joy-eykey
Lily-NOM  Jerry-ACC  met-INT-INDIRECT  Anna-NOM  Joy-DAT

*mwuless-nya*-*ko*  na-eykey  *mwuless-nya-∅*
asked-INT-COMP  1sg-DAT  asked-INT-DIRECT

‘Did you ask me if Anna asked Joy whether Lily met Jerry? (intended)

Although echo *ko* does not affect syntactic well-formedness, I consider it to be an obligatory head, based on the difference in meaning between clauses with and without *ko*. Moreover, I argue that *ko* in echo and reinforcement constructions is a reanalyzed
element functioning as to bring to the fore an earlier speech act in the synchronic grammar.

So far, I have demonstrated that high ko, as in the representations (135a) and (135b), displays a distinct interpretation and distribution from the unmarked null direct COMP (135c) and the obligatory low ko (136). In summary, there are two contrasting

(135) **Independent/matrix clauses: second-hand** (a, b) versus **first-hand speech** (c)

a. Echo ko       b. Reinforcement ko       c. first-hand speech

(136) **Dependent/embedded clauses: Complements of CP taking verbs**

UoLs at the high position of the clause in the speech domain of directness: echo and reinforcement ko, and the unmarked direct null UoL. Conversely, there are no contrasting UoLs of the low ko (grammatically selected obligatory ko).6

---

6 I do not assume that the direct quotation markers lako and hako contrast with the subordinator ko, as they occur in sentences with two distinct structures. They are in complementary distribution with the direct null COMP.
Echo *ko* is not the only grammatical device used to cite speech within a clause in Korean. While *ko* marks cited utterances of the current speech participants, hearsay *y* marks cited speech originally uttered by a third person. Although hearsay is often considered a subcategory of the evidential system (Willett, 1988; Aikhenvald, 2004; Speas, 2008), the distribution of hearsay *y* is not limited to declarative clauses. This topic will be discussed in the following section.

### 4.2.3 Marking hearsay constructions: *y* in second-hand speech

This subsection describes the interpretation and distribution of hearsay *y*, often treated in the literature as an unanalyzable morpheme *tay* ‘hearsay,’ as illustrated in (137). The glossing in each example is unchanged from the original source.

(137)

<table>
<thead>
<tr>
<th>Example</th>
<th>Glossing</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. elyep-tay</td>
<td>difficult-tay ‘It is difficult, I hear.’ (M-Kim, 2003: 5)</td>
</tr>
<tr>
<td>b. kamki kelly-ess-tay</td>
<td>cold catch-PST-DECL.HEARSAY ‘He is sick (I heard).’ (Chung, 2010: 409)</td>
</tr>
<tr>
<td>c. salam-i toy-la-ko kulay-ss-tay</td>
<td>person-NON become-IMP-QT say like that-PST-HEARSAY ‘I heard that he had said….’ (SB-Kim, 2012: 54)</td>
</tr>
</tbody>
</table>

As shown in (137), hearsay *y* is often not considered to have an independent function in morphosyntax; *tay* is consistently parsed as a single unit despite its inconsistency in glossing. Sohn and Park (2003:106) consider *tay* to be a morphosyntactic fusion, formed from declarative *ta* and the main verb *ha*- ‘to say’. However, how verbs of saying are related to the hearsay UoL *y* is unclear from a diachronic perspective. Sometimes, the
diphthong əy is treated as an evidential reportative marker and t as a declarative marker, as in Kwon (2011) (glosses as in the original).  

(138)  
a. nayil pi-ka o-n-ta  
   tomorrow rain-NOM come-IMPERF-DECL  
   ‘It rains tomorrow.’  

b. nayil pi-ka o-n-t-ay  
   tomorrow rain-NOM come-IMPERF-DECL-ay  
   ‘(I was told by someone that) It rains tomorrow.’ (Kwon, 2011: 59)

Ceong (2016) departs from these analyses, arguing instead that hearsay declarative tay belong in a paradigm with hearsay interrogative nyay, hearsay imperative lay, and hearsay exhortative cay. Following this work, I separate the UoL y from all the fusional forms in this paradigm, and treat tay, nyay, lay, and cay as decomposable complex UoLs consisting of a clause-typing UoL and a (third-person) hearsay marker.

The first notable characteristic of hearsay y is that, contrary to ko, it does not have a homophonous counterpart in embedded clauses. As shown by the ungrammatical example in (139a) and grammatical examples with y in (139b) and (139c), y only occurs in a matrix clause. The UoL ko replaces y when hearsay clauses are embedded by matrix clauses, as in (139c).

(139)  
a. *salam-i toy-la-y kulay-ss-ta-y↓  
   person-NOM become-IMP-HEARSAY say so-PST-DECL-HEARSAY-FI  
   ‘I heard that he had said I should become a decent person.’ (intended)

---

7 Note that all examples in (137) and (138) are declaratives; tay or ay is translated as ‘I heard’, ‘I heard that’, ‘I hear’ or ‘I was told by someone that’, with or without parentheses. The inconsistent translation reflects the difficulty of establishing a precise equivalent in English.

8 If we follow Kwon’s glossing, we need an explanation for *nayil pi-ka o-n-t despite t being suggested as marking a declarative.
b. \textit{salam-} \textit{toy-la-}y-\downarrow
\textit{person-NOM become-}IMP-\textit{HEARSAY-FI}
‘\textit{pro}_3 said I should become a decent person.’

c. ([\textit{salam-} \textit{toy-la-}]\textit{ko}(*y) \textit{kulay-ss-ta}]
\textit{person-NOM become-}IMP-\textit{COMP say-}PST-\textit{DECL}
‘S/he had said I should become a decent person.’

Based on this behaviour, we can say that hearsay \textit{y} is in complementary distribution with the matrix clause containing a third-person subject and a verb of saying, as in (139c).

This implies that \textit{y} and echo \textit{ko} share the highest position in the structure, but \textit{y} does not share the same position as subordinating \textit{ko} in embedded clauses. The hearsay \textit{y} contrasts with echo and reinforcement \textit{ko} and a null UoL in the domain dominating clause-typing CP, as in (140).

(140) **Independent/matrix clauses: second-hand** (a, b) **versus first-hand speech**

\begin{itemize}
  \item a. Echo \textit{ko}
  \item b. Hearsay \textit{y}
  \item c. first-hand speech
\end{itemize}

The trees in (141) show that hearsay \textit{y} and a null UoL do not contrast with the obligatory subordinating \textit{ko} in the domain dominating clause-typing CP.

(141) **Dependent/embedded clauses: Complements of CP taking verbs**

\begin{itemize}
  \item a. CP \textit{malha-}‘say’ \textit{-ko, (*-y)} \textit{-ta[DECL]}
  \item b. CP \textit{malha-}‘say’ \textit{-ko, (*-y)} \textit{-ta[DECL]}
  \item c. CP \textit{malha-}‘say’ \textit{-ko, (*∅)} \textit{-ta[DECL]}
\end{itemize}
The echo *ko and the hearsay *y occupy the same structural position in the matrix CP; this is confirmed by the functional elements preceding and following them in the fixed order, as illustrated in (142a) and (142b): they follow declarative *ta and precede polite *yo. The ill-formed clauses with a different order in (142c), (142d), (142e), and (142f) show that *ko and *y cannot co-occur; they are in complementary distribution.

(142)

a. *pi-ka o-ko iss-ta-*y-*y-*yo↑
   rain-NOM come-COMP exist-DECL-HEARSAY-POL-RI
   ‘Are they saying that it is raining?’

b. *pi-ka o-ko iss-ta-*ko-*y-*yo↑
   rain-NOM come-COMP exist-DECL-COMP-POL-RI
   ‘Are you saying that it is raining?’

c. *pi-ka o-ko iss-ta-*y-*ko↑
   rain-NOM come-COMP exist-DECL-HEARSAY-COMP-RI
   (intended: ‘Are you saying that it is said that it is raining?’)

d. *pi-ka o-ko iss-ta-*ko-*y↑
   rain-NOM come-COMP exist-DECL-COMP-HEARSAY-RI
   (intended: ‘Did they say that he said that it is raining?’)

e. *pi-ka o-ko iss-ta-*y-*ko↓
   rain-NOM come-COMP exist-DECL-HEARSAY-COMP-FI
   (intended: ‘I said that it is said that it is raining.’)

f. *pi-ka o-ko iss-ta-*ko-*y↓
   rain-NOM come-COMP exist-DECL-COMP-HEARSAY-FI
   (intended: ‘It is said that I said that it is raining.’)

The morphosyntactic properties of hearsay *y have not been fully discussed in the literature, as researchers tend to only look at *tay (although the other fusion forms *nyay, *lay, and *cay are included in the data presented in the studies of Chung (2010) and Yeon and Brown (2011: 395)). It is typically argued that *tay anchors an utterance to a participant who is absent from the given speech event, in addition to incorporating the
speaker’s epistemic stance of “inaccessibility of information” for the speaker (Sohn & Park, 2003:117). Sohn and Park (2003) compare tay with the non-fused form ta-(ko) hay ‘say CPDECL’ but do not compare or bring up the other fusion forms such as nyay, lay and cay in their analysis. M. Kim (2003) compares the functional roles of three UoLs, tay, myense, and ko, in social interaction and argues that the evidential epistemic marker tay indicates that the speaker’s stance is a shared stance; the speaker’s role in tay-clauses is as an “animator” (Goffman, 1981).

While hearsay tay has been discussed in functional grammar (M. Kim, 2003; Sohn & Park, 2003), in semantics (Chung, 2010, 2011), and in cognitive semantics (I. Kwon 2011), Ceong (2016) is the first attempt to account for this morpheme in syntax. Following Speas and Tenny (2003), Ceong (2016) proposes two distinct features pro[Φ: 3] and proarb on the specifier of SAP to account for two readings of tay—the evidential rumor reading ‘I heard’ and the reportative reading ‘s/he said’. Ceong argues that the evidential rumor reading ‘I heard’ associated with the proarb feature is not available in the hearsay interrogative, imperative, or exhortative.

As shown in Ceong (2016), hearsay shares three morphosyntactic properties with echo ko. First, it is the head of a clause which embeds cited speech (reproduced speech) within a single clause, in contrast to direct original speech. Second, it only occurs in main clauses and only followsftype UoLs. The example in (143a) is a simple direct wh-question marked by the unmarked direct null UoL, while (143b) is a hearsay question in

---

9 The speaker must access information about what is being said in hearsay interrogatives, imperatives, and exhortatives because the speaker of a hearsay construction was an addressee of the speech event that is being reported in such constructions (cf. Ceong, 2016).
which the speaker reports someone’s question to the addressee and hearsay *ya* is attached to the *i*-Type UoL, interrogative *nya*.

(143)

a.  *Mina-nun mwe sa-ss-nya-∅*
Mina-TOP  what  buy-PST-INT-DIRECT
‘What did Mina buy?’

b.  *Mina-nun mwe sa-ss-nya-y↓*
Mina-TOP  what  buy-PST-INT-HEARSAY-FI
‘pro3 asked what Mina bought.’
‘Lit. pro3 said, what did Mina buy?’

The hearsay question is not precisely a quotation because the speaker of the hearsay construction (144b) does not exactly quote the previous/cited speech (144a), word-by-word or morpheme-by-morpheme.

(144)

a.  A:  *Mina-nun mwe sa-ss-e↑*
Mina-TOP  what  buy-PST-COMP-RI
A:  ‘What did Mina buy?’

b.  B:  *ne-nun mwe sa-ss-nya-y/e-y↓*
you-TOP  what  buy-PST-INT-HEARSAY /COMP- HEARSAY-FI
B:  ‘pro3 asked what you bought.’
‘Lit. pro3 said, what did Mina (=you) buy?’

The speaker of the utterance in (144a) is asking what Mina bought; in (144b), the speaker (who was also the addressee in (144a)), is reporting the question to Mina. Pragmatically, the hearsay question can be used in a communication situation in which a speaker borrows another person’s word to ask a question, but this usage is irrelevant to the core interpretation of hearsay constructions. What is relevant structurally is that the *u*-TYPE *e* cannot appear in place of *i*-TYPE *nya* in (144b) because hearsay *ya* only selects *i*-TYPE UoLs, and the proper noun ‘Mina’ becomes the pronoun ‘you’ if Mina is the addressee of the current utterance. Thus, hearsay constructions are not quotations in a strict sense. By
attaching \textit{y} to a simple content question as in (143b) and (144b), the current speaker signals that the person who is interested in knowing what Mina bought is not the speaker herself, but a third person who may or may not be known to the addressee and is not involved in the direct interaction in the conversation. This construction presupposes that the addressee of the hearsay construction must have been absent during the original utterance.\(^{10}\) In other words, by employing the marker \textit{y}, the speaker can indicate that somebody else is asserting, asking, inviting, or commanding—without explicitly articulating a complex clause. The contrastive interpretations between the clauses with and without \textit{y} in (143) confirm that hearsay \textit{y} adds a similar function to matrix clauses as echo \textit{ko} does. The difference is that the agent of the implicit verb of saying is \textit{not} a speech participant in hearsay constructions but \textit{is} a speech participant in echo constructions.

The distribution of the hearsay marker \textit{y} that attaches to all other \textit{i}Type UoLs is summarized in Table 4-1, adapted from Ceong (2016: 3).

Table 4-1 The contrast between clauses with or without hearsay \textit{y}

<table>
<thead>
<tr>
<th>First-hand speech constructions</th>
<th>Second-hand (hearsay) constructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{cemsim-ul mekess-ni}nya? lunch-ACC</td>
<td>\textit{cemsim-ul mekess-ni}ya-\textit{y}↑ lunch-ACC</td>
</tr>
<tr>
<td>‘Did you eat lunch?’</td>
<td>‘\textit{pro} said, did you eat lunch?’</td>
</tr>
<tr>
<td>\textit{cemsim-ul meke-la.} lunch-ACC</td>
<td>\textit{cemsim-ul meke-la}ya-\textit{y}↑ lunch-ACC</td>
</tr>
<tr>
<td>‘Eat lunch!’</td>
<td>‘\textit{pro} said, eat lunch!’</td>
</tr>
<tr>
<td>\textit{cemsim-ul mek-ca.} lunch-ACC</td>
<td>\textit{cemsim-ul mek-ca}ya-\textit{y}↑ lunch-ACC</td>
</tr>
<tr>
<td>‘Let’s eat lunch!’</td>
<td>‘\textit{pro} said, let’s eat lunch.’</td>
</tr>
</tbody>
</table>

\(^{10}\) If the third person is in proximity to the speech participants, the UoL \textit{canha} ‘you know’ (A. Kim, 2015) is likely to be employed instead of the UoL \textit{y}.
The third property shared by hearsay \( y \) and echo \( ko \) is that both co-occur with suprasegmentals and optionally with the polite \( yo \). Intonation plays a role in the interpretation of hearsay constructions. The interpretation of the illocutionary force of a hearsay clause is variously a hearsay exhortative question (145a) or a hearsay exhortative assertion (145b), depending on the accompanying suprasegmentals. This intonation-dependent property is similar to the \( u \)Type UoLs \( e \) and \( ci \).

(145)

\[
\begin{align*}
\text{a. } & \text{nayngmyen } \text{mek-ule} \quad \text{ka-ca-y-(yo)-↑} \quad \text{(questioning hearsay)} \\
& \text{cold noodles } \text{eat-COMP} \quad \text{go-EXH-HEARSAY-POL-RI} \\
& \text{‘Did pro}_3 \text{ ask us to go eat cold noodles?’} \\
\text{b. } & \text{nayngmyen } \text{mek-ule} \quad \text{ka-ca-y-(yo)-↓} \quad \text{(hearsay exhortative)} \\
& \text{cold noodles } \text{eat-COMP} \quad \text{go-EXH-HEARSAY-POL-FI} \\
& \text{‘pro}_3 \text{ said let’s go eat cold noodles.’}
\end{align*}
\]

The presence or absence of polite \( yo \) does not affect the interpretation of clauses. When the addressee is older or higher in rank than the speaker, the polite discourse particle \(-yo\) is required in pragmatics. Although the distribution of polite \( yo \) is pragmatically motivated, its structural placement following hearsay \( y \) is morphosyntactically determined. For instance, the second-hand speech UoLs \( ko \) and \( y \) share the properties of \( u \)Type UoLs, but not \( i \)Type UoLs in their compatibility with the polite \( yo \), as in (146).

The \( i \)Type UoL declarative \( ta \) cannot be followed by polite \( yo \) (146a), whereas the \( u \)Type UoL \( e \) (146b) and the second-hand speech UoLs \( ko \) (146c) and \( y \) (146d) can.

(146)

\[
\begin{align*}
\text{a. } & \text{*nayngmyen } \text{mek-ule} \quad \text{kass-ess-\textbf{ta}-yo} \\
& \text{cold noodles } \text{eat-COMP} \quad \text{went-PST-DECL-POL} \\
& \text{‘I had gone to eat cold noodles.’} \\
\text{b. } & \text{nayngmyen } \text{mek-ule} \quad \text{kass-ess-\textbf{e}-yo-↓} \\
& \text{cold noodles } \text{eat-COMP} \quad \text{went-PST-COMP-POL-FI} \\
& \text{‘I had gone to eat cold noodles.’}
\end{align*}
\]
c. nayngmyen  mek-ule  kass-ess-ta-ko-yo-
  cold noodles  eat-COMP  went-PST-DECL-COMP-POL-FI
  ‘I said I had gone to eat cold noodles.’

d. nayngmyen  mek-ule  kass-ess-ta-y-yo-
  cold noodles  eat-COMP  went-PST-DECL-HEARSAY-POL-FI
  ‘I heard they had gone to eat cold noodles.’

The role of the polite marker and suprasegmentals will be revisited in § 4.5.

The morphosyntactic properties of hearsay y can be summarized as: (i) it only
follows iType UoLs (it is sensitive to the category of Type) in matrix clauses; (ii) unlike
ko, it is a monofunctional UoL\(^{11}\); (iii) as the head of a clause, it marks a clause as second-
hand speech (reporting direct speech expressing complex speech events); and (iv) it is
followed by optional polite yo or the obligatory suprasegmentals. Moreover,
semantically, hearsay y can be interpreted variously as s/he/they said, it is said, or I heard
when it follows declarative ta; it cannot be interpreted as it is said, or I heard when it
follows the other iTYPE UoLs (Ceong, 2016). Ceong (2016) accounts for the different
interpretations of hearsay constructions by associating a role of Performer in performative
analysis (Ross 1970) with a pro\(_{arb}\) feature or a pro [3\(^{rd}\)] feature on the specifier of the
projection of hearsay y, as in (147).

(147) Independent/matrix clauses (cf. Ceong, 2016)

a. ‘it is said’  
   b. ‘s/he/they said’  
   c. ‘Did s/he/they say?’

\(^{11}\) There is a homophonous UoL of lay that only occurs after the future or irrealis l, as I will discuss in Chapter 5. The distinct meanings and distributions of the two lays indicates that only y in hearsay constructions is decomposable and has the function discussed above.
The highest position in the structure can be confirmed by the scope of temporal adverbs: when a hearsay clause includes a temporal adverb such as *ecey* ‘yesterday’ or *nayil* ‘tomorrow’, it only modifies the embedded proposition. The clause will never be interpreted as ‘it is said yesterday’, ‘s/he said yesterday’, or ‘s/he will say tomorrow’, as in (148).

(148)

a. *ecey nayngmyen mek-ule kass-ess-ta-y-*↓
yesterday cold noodles eat-COMP went-PST-DECL-HEARSAY-FI
‘S/he said they went to eat cold noodles yesterday.’
‘*S/he said yesterday they went to eat cold noodles.’

b. *nayil nayngmyen mek-ule ka-keyss-ta-y-*↓
tomorrow cold noodles eat-COMP went-IRR-DECL-HEARSAY-FI
‘S/he said we should go to eat cold noodles tomorrow.’
‘*S/he will say tomorrow we should go to eat cold noodles.’

Only intonation can modify the hearsay marker. As discussed in Ceong (2016), the hearsay speech event cannot be cancelled by negation, as in (149). The negative *ma* is selected by a null deontic modal in imperatives (Han & Lee, 2007), while the negative *anh* is selected by past tense *ass*.

(149)

cold noodles eat-COMP go-COMP NEG-PST-DECL-HEARSAY-FI
‘S/he said they didn’t go to eat cold noodles.’
‘*S/he didn’t say they went to eat cold noodles.’

b. *nayngmyen mek-ule ka-ci ma-la-y-*↓
tomorrow cold noodles eat-COMP NEG-IMP-HEARSAY-FI
‘S/he said we should not go to eat cold noodles.’
‘*S/he didn’t say we should go to eat cold noodles.’
The scope of temporal adverbs and negation shows that hearsay \( y \) is generated in the domain beyond clause-typing \( \text{CP} \).

Although no equivalent of hearsay \( y \) exists in English, many languages have UoLs that are analogous to \( ko \) or \( y \), as in (150).

(150)

\( a. \) \( Para\text{-}sha\text{-}n\text{-}s\text{i} \)
\[ \text{rain-PROG-3-si} \]
‘(Speaker was told that) it is raining.’ \((\text{Quechuan, Faller, 2002: 3})\)

\( b. \) \( Que \) está lloviendo
\[ \text{that} \text{ it-is raining} \]
‘(Speaker was told that) it is raining.’ \((\text{Spanish, Etxepare, 2010: 606})\)

\( c. \) \( ame\text{-}ga \) \( futteiru\text{-}tte \)
\[ \text{rain-NOM} \quad \text{rain.PROG.DECL-HEARSAY} \]
‘(They say) it is raining.’ \((\text{Japanese, Aoki, 1986: 230})\)

It is unclear if the Quechuan \( si \) can be selected by matrix verbs in complex sentences as the Spanish \( que \) and Japanese \( tte \) can. In a study examining \( to \) in Japanese, Hayashi (1997) notes that \( tte \) in (150c) is a colloquial variant of the Japanese complementizer \( to \). Hayashi (1997) treats them as different realizations of the same particle. As shown in the translation, the meanings and functions of the Korean hearsay \( y \) in (150) overlap with the meanings and functions of the Quechuan enclitic \( si \), the Spanish complementizer \( que \), and Japanese \( tte \) in (150c).\(^{12}\)

(151)

\[ \text{pi-ka} \quad o\text{-}n\text{-}ta\text{-}y\text{-}↓ \]
\[ \text{rain-NOM} \quad \text{come-PRES-DECL-HEARSAY-FI} \]
‘(I was told that) it is raining (there).’

\(^{12}\) The Japanese UoL \( tte \) is simply regarded as an informal form of the UoL \( to \) by Japanese researchers (Hayashi, 1997; Shibasaki, 2007); from my observations, it seems likely that \( tte \) is an allomorph of the root \( to \) rather than the subordinating complementizer \( to \).
In each of these four examples from four different languages, the phrasal meaning *someone else said/it is said/I was told* is expressed by a single functional marker rather than by a matrix clause containing a DP and VP (a verb of saying); the examples in (150) and (151) share either the proposition “\( p = \text{it is raining} \)” or the declarative clause [CP\text{DECL} it is raining]. It has been proposed that these functional markers are hearsay markers, indicating that the speaker has no personal experience or evidence regarding the truth of the proposition. For these reasons, it has been traditionally assumed that they are a subtype of the grammatical category of “evidentials,” expressing indirect evidence.

Evidential markers are defined in the literature as functional elements that indicate “how or to what extent speakers stand for the truth of the statements they make,” (Rooryck, 2001, p. 125), or “grammatical markings of information source” (Aikhenvald, 2015, p. 239). If an evidential marker only occurs with a declarative marker, the definition would be legitimate.

In the next section, I will propose a category \( c: \text{INDIRECT} \) which encompasses the second-hand speech UoLs *ko* and *y*, which contrast with first-hand null UoL in the clause system.

### 4.3 First-hand and second-hand speech contrast as a grammatical category

Although the complementizer system has been elaborated by Rizzi (1997) and Cinque (1999), Force\(^0\) or C\(^0\) as the highest head is not sufficient if we look at Korean and Japanese data. When a functional element selecting Force\(^0\) (Rizzi 1997) or C\(^0\) [±Q] is presented in a head-final language, clearly, a syntactic domain that likely selects Force\(^0\) or C\(^0\) must be accounted for in the syntactic structure.
In this section, I will build upon my claim that \(ko\) and \(y\) are associated with the grounding spine and construct a language-specific category \(c\): INDIRECT.

4.3.1 Language specific category \(c\): INDIRECT

If functional elements show similar distribution and share a similar concept, they are likely members of the same grammatical category. In this subsection, I defend the claim that echo/reinforcement \(ko\) and hearsay reportative \(y\) consist of the same language-specific category \(c\): INDIRECT, which expresses second-hand (repeated/reproduced) utterances as opposed to direct (first-hand) speech. I propose that the domain hosting functional elements belonging to \(c\): INDIRECT also hosts \(c\): DIRECT, which is expressed by the absence of \(c\): INDIRECT elements. The motivation behind posting this language-specific category is that Korean has morphologically peculiar UoLs that share a semantic commonality and structural position. As we do not usually have overt affirmative markers in a clause and the heads of declarative clauses are usually unmarked across languages (König and Siemund, 2007), direct speech is likely unmarked, cross-linguistically. Similarly, direct affirmative imperatives are unmarked, while indirect imperatives or negative imperatives are marked. These morphological contrasts are illustrated in (152). (152a) is a simple positive imperative which includes a null positive and direct speech marker; (152b) is a simple negative imperative which includes a negative \(ma\) and direct speech marker. (152c) is a positive hearsay imperative which includes a null positive and the hearsay marker; (152d) is a negative hearsay imperative which includes a negative \(ma\) and the hearsay marker.

(152)
\[a. \text{ku pyenci ilk-e-∅-la-∅} \]
\[
\text{the letter read-COMP-POSITIVE-IMP-DIRECT} \\
\text{‘Read the letter!’}
\]
b. *ku pyenci ilk-ci ma-la-∅*\(^{13}\)
   the letter read-COMP NEG-IMP-DIRECT
   ‘Don’t read the letter!’

c. *ku pyenci ilk-∅-la-y-*\(^{14}\)
   the letter read-COMP-POSITIVE-IMP-HEARSAY-FI
   ‘pro\(3\) said you should read the letter!’

d. *ku pyenci ilk-ci mal-la-y-*↓
   the letter read-COMP NEG.IRR-IMP-HEARSAY-FI
   ‘pro\(3\) said you shouldn’t read the letter!’

Although I do not claim here that the covert positive marker should be glossed for every analysis of clause structure, a null positive marker must fill the head of PolarityP in the syntactic structure. For instance, in contrast with the positive and direct imperative, which are unmarked in (152a), the negative imperative (152b) and indirect imperative (152c) are overtly marked by *mal* and *y*, respectively. The UoL *mal* is a fused negative verbal UoL, which spells out in the morphosyntactic environment of NegP and is activated and selected by a null deontic modal in negative imperatives (see Han & Lee, 2007). The direct UoL is null in the morphosyntactic environment of direct speech but contrasts with the second-hand speech marker *y*, as in (152c, 152d). The direct null *∅* indicates that the speaker of the sentence is coincident with the space and time of the current speaker, whereas the indirect hearsay *y* marks the speaker of the complement clause as coincident with neither the current speaker nor the addressee. This analysis is supported by the meaning difference between direct command (152a) and hearsay command (152c). The UoL *y* in hearsay command (152c) also contrasts with *ko* in echo commands (153a) and reinforcement (153b) in the second-hand speech domain.

\(^{13}\) This negative imperative has an alternative short form *ma-a* and a long form *mal-ala* instead of *ma-la*.

\(^{14}\) [ilk-\(u\)-la-y\(] is a surface form of /ilk-e-la-yl/. The hearsay *y* triggers a vowel change.
(153)

a. **ku pyenci**  *ilk-ci*  **mal-la-ko**↑
   the letter        read-COMP    NEG.IRR-IMP-COMP.REITER-RI
   ‘Are you saying I shouldn’t read the letter?’

b. **ku pyenci**  *ilk-ci*  **mal-la-ko**↓
   the letter        read-COMP    NEG.IRR-IMP-COMP.REITER-FI
   ‘I’m saying you shouldn’t read the letter!’

Descriptively, echo *ko* conveys ‘I’m saying CP’ or ‘Are you saying CP?’, depending on the force of the clause (as indicated by suprasegmentals). The alternative interpretations of the clause suggest that the structure of the clause with the UoLs is compositional. Note that *ko* in echo questions does not convey any of ‘You are saying CP’, ‘Am I saying CP?’, ‘S/he is saying CP’ or ‘Is s/he saying CP?’ This demonstrates that, *ko* is associated with the speech participant feature, while hearsay *y* is not.

To account for the contrast between ‘I’m telling you…’ in Ross’s (1970) performative analysis of (152b) and ‘I’m telling you I said ….‘ of (153b), I suggest that there is a feature that manifests the contrast between original and reproduced utterances within direct speech. In other words, the distribution and interpretation of *ko* and *y* suggest that there is a functional domain hosting these UoLs, **c**: INDIRECT, which bears a feature or configuration that indentifies speech participants and their relationship to the speech event.

As second-hand speech markers, including hearsay markers, are overtly marked in some languages, it is plausible to assume that the categories **c**: DIRECT and **c**: INDIRECT exist in the domain above the head of the clause. Therefore, I propose that **c**: DIRECT hosts UoLs contrasting with the unmarked first-hand speech marker.

This claim receives further support from a close examination of the similar morphosyntactic distribution of high *ko* and hearsay *y*. The categorial selectional property
can be seen as an indication of the head status of the UoL. The \(i\)Type UoLs and \(u\)Type UoLs discussed in Chapter 3 show distinct compatibility with echo and reinforcement \(ko\), as summarized in Table 4-2. \(ko\) selects the \(i\)Type UoLs but is incompatible with the \(u\)Type UoLs.

Table 4-2 Type COMP UoLs and Indirect \(ko\)

<table>
<thead>
<tr>
<th>Reiter (ko)</th>
<th>(ta)-(ko)</th>
<th>(nya)-(ko)</th>
<th>(la)-(ko)</th>
<th>(ca)-(ko)</th>
<th>*(e)-(ko)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(*ci)-(ko)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type UoLs</th>
<th>(ta) (DECL)</th>
<th>(nya) (INT)</th>
<th>(la) (IMP)</th>
<th>(ca) (EXH)</th>
<th>(e) (UNDERSPECIFIED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ci) (UNDERSPECIFIED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hearsay \(y\) shows exactly the same compatibility and distribution as high \(ko\), with selection only of \(i\)Type UoLs.

Table 4-3 Type COMP UoLs and hearsay \(y\)

<table>
<thead>
<tr>
<th>Hearsay (y)</th>
<th>(ta)-(y)</th>
<th>(nya)-(y)</th>
<th>(la)-(y)</th>
<th>(ca)-(y)</th>
<th>*(e)-(y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(*ci)-(y)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type UoLs</th>
<th>(ta) (DECL)</th>
<th>(nya) (INT)</th>
<th>(la) (IMP)</th>
<th>(ca) (EXH)</th>
<th>(e) (UNDERSPECIFIED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ci) (UNDERSPECIFIED)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the Mirror Principle (Baker 1985), \(ko\) and \(y\) must occupy a higher structural position than that of the Type UoLs, as \(ko\) and \(y\) follow the Type UoLs in this head-final language. It is likely that \(ko\) occupies a position that contrasts (i) direct with indirect speech and (ii) clausal dependency with independency. I argue that, like the heads of Topic and Focus, which are “accessory components” (Rizzi, 2001), the head of c: INDIRECT is activated in the structure as a result of the interface between syntax and pragmatics (or discourse).
I do not claim that *ko* and *y* are the only UoLs in *c: INDIRECT*. The UoLs *mye* ‘you said’ (cf. Ceong, 2016), *myense* ‘I hear’ (Ahn & Yap, 2014), *nikka* ‘I said’ (H. Kim, 2015; S. Sohn, 1993), and *tanta* ‘I hear’ (Ahn & Yap, 2014; Rhee, 2016) may also be associated with *c: INDIRECT*. Based on the distribution of *mye, myense* and *tanta* following declarative *ta* with a rising intonation (i.e., declarative hearsay question constructions), Ahn & Yap (2014) analyze them as evidential markers derived from phonological reduction of the verb *malha* ‘say’ and forming unanalyzable insubordination constructions through morphosyntactic restructuring. Their study focuses on showing the grammaticalization of these UoLs drawing on data from historical documents. Although I observe that these UoLs following declarative *ta* have two competing interpretations—an evidential interpretation of confirming the rumor associated with the addressee and a quotative interpretation of repeating what the addressee just said (cf. Ceong, 2016)—they have only the latter interpretation when they follow interrogative *nya*, imperative *la*, and exhortative *ca*, as I have discussed for hearsay *y*. Unlike hearsay *ta-y*, the UoLs *ta-my, ta-myense*, and *ta-nikka* all also function as subordinators in complex clauses in synchronic grammar. For this reason, I exclude them from this chapter in the interests of time. Their multifunctional properties in distinct domains and their evidential interpretation in synchronic grammar will be left as a topic for future study. I also will not consider their morphosyntactic properties further here.

The systematic order of the Korean *y* and Japanese *tte* in hearsay constructions, supports the theory that there is a hierarchically-organized formal structure in the abstract structure in UG. As discussed, the abstract structure is organized in association with a language-specific category *c: INDIRECT* in Korean. Therefore, I propose that *ko* and *y* are
formed by associating with the grounding spine in the universal spine to construct this language-specific category \( c \): INDIRECT in Korean. The properties of the grounding spine (Thoma, 2016; Wiltschko & Heim, 2016) will be discussed in the following section.

### 4.4 The grounding spine

Wiltschko and Heim (2016) proposes a universal syntactic domain above the linking spine (=S; CP)—\( k \): grounding, which hosts a speaker-oriented and an addressee-oriented functional element in the structure, as shown in (154). The grounding spine (GroundP) is a functional domain that “serves in the negotiation and management of the common ground” (Wiltschko, 2014, p. 322) and encodes “the speaker’s attitude toward the proposition” (Wiltschko & Heim, 2016: 321). GroundP dominates the head of a matrix clause and is dominated by the responding spine (RespP) hosting the Call on the Addressee (Beyssade & Marandin 2006), indicated as CoA in the representation below.

(154) **The Extended Universal Spine** (Wiltschko & Heim, 2016: 321)

![Diagram](image)

Within the framework of the USH, Thoma (2016) states that the grounding spine contains a representation of the speech act participants (i.e., the speaker and the addressee). The core function of the grounding spine seems to be to establish a relationship between the ongoing discourse and the speech act participants.
In this section, I will argue that the category \( c: \text{INDIRECT} \) of the grounding spine is responsible for licensing the UoLs expressing the relationship ([±coincidence]) between speech participants from two different speech events in the syntactic structure. By this configuration, the category \( c: \text{INDIRECT} \) indicates whether the clause expresses first-hand speech (original to the speaker) or second-hand speech (reproduced/repeated by the speaker). The term “second-hand speech” is employed here to distinguish the concept from “indirect speech”, which usually refers to complex sentences containing at least two finite clauses with two grammatical subjects and two lexical verbs. The second-hand speech constructions considered here are mono-clauses.

My goal in this section is to provide an account of \( c: \text{INDIRECT} \) within the framework of the USH. In § 4.4.1, I will introduce the grounding spine (Thoma, 2016), which contains language-specific categories that are linked to speech act participants and relate closely to the discourse. In § 4.4.2, I will attempt to demonstrate the association between the grounding spine and \( c: \text{INDIRECT} \). In § 4.4.3, I will survey the universal and parametric properties of UoLs from other languages showing similar properties to the Korean citing UoLs.

4.4.1 The grounding spine (Thoma, 2016)

Within the framework of the USH and \( k: \text{grounding} \), Thoma (2016) investigates five discourse particles in the Bavarian dialect of German: \textit{fei}, \textit{doch}, \textit{ja}, \textit{eh}, and \textit{jetz}. Thoma proposes that these particles can be subcategorized into three classes: speaker-oriented, addressee-oriented, and other-oriented particles. Based on a detailed examination of the distribution and interpretation of these particles, including the most common German particle \textit{ja}, Thoma argues that these discourse particles are associated with a syntactic
layer, the grounding spine (GroundP), within the hierarchy of the universal spine (Wiltschko, 2014; Wiltschko & Heim, 2016). The structure of GroundP, which is proposed to encode the speech participants’ epistemic states, consists of two hierarchically organized subcategories; addressee-oriented and speaker-oriented grounding spines. As in (155), GroundA (Addressee-oriented) dominates GroundS (Speaker-oriented), which in turn dominates CP, which hosts “other-oriented” discourse particles. Thoma (2016) notes that the notions “speaker” and “addressee” used in her system are “proxies” of the ground, rather than a direct representation (p. 244). Based on examination of the constrained ordering of Bavarian particles in clauses, Thoma proposes that the discourse particles fei and doch are associated with GroundA, while the UoL ja is associated with GroundS. Other-oriented discourse particles in German identified by Thoma are.jetz and eh.

(155) Addressee and Speaker-oriented functional elements (Thoma, 2016: 275)

```
   GroundA
    / \          A-oriented discourse particles
   /   \
GroundS       S-oriented discourse particles
     / \
    CP   O-oriented discourse particles
```

It follows from Thoma’s analysis that there is a universal domain embodying UoLs linked to speech participants, which would apply to Korean. Moreover, this domain would dominate the linking spine, which is associated with “other-oriented” particles. Thoma considers clause type to be different from illocutionary force but the exact nature or properties of the Type COMP UoLs she identifies in Bavarian German is unclear.
Assuming CP in (155) is associated with $k$: linking, in the next section, I argue that the Korean $ko$ and $y$ are associated with $k$: grounding. Assuming the Mirror Principle, I base my argument on the linear order of $ko$ and $y$, both of which follow the UoLs associated with the linking spine.

### 4.4.2 The grounding spine and $c$: INDIRECT

As discussed in the previous section, the German discourse particles that Thoma associates with the grounding spine are related to speech participants (Thoma, 2016). I argue that echo $ko$ and hearsay reportative $y$ are also linked to speech participants, because each UoL indicates a distinct speech participant’s involvement: current speech participants (UoL $ko$) and non-speech participants (UoL $y$). In this approach the non-speech participant is defined from the point of view of the speech participant. Moreover, the fact that $ko$ and $y$ immediately follow imperative and exhortative UoLs, which are assumed to be associated with the addressee (Zanuttini, 2008), confirms the speech participants’ involvement; they must occupy at least the same level in the structure as the addressee. Unlike the German discourse particles, Korean $ko$ and $y$ are both suffixes; as a result, their ordering in the clause is straightforward. Based on the Mirror Principle (Baker, 1985), the head visibility (Sigurðsson, 1993), and empirical evidence, I argue that $c$: DIRECT and $ko$ and $y$ are associated with the grounding spine. The relevant empirical evidence is as follows: (i) $ko$ and $y$ co-occur with UoLs marking imperative and exhortative, which encode the speech participants, especially the addressee, in the syntax (Zanuttini 2008); (ii) the order of $ko$ and $y$ is restricted to the position following Type UoLs, including imperative $la$ and exhortative $ca$; and (iii) formation of echo utterances is impossible without the UoL $ko$ (e.g., echo utterances cannot be marked solely via
intonation, as in English). The UoLs ko and y are p(ragmatic)-selectional elements in the grammar and especially the syntactic structure.

Now consider the default interpretation of the subject in direct imperatives like the examples below. When the addressee is Minho, the speaker asks him to buy a drink in at least three different ways. When there is a plural addressee, the proper name Minho can be coindexed with the addressee under imperative la, as in (156c).

(156)

a. pro swul sa-la
   _____ alcohol buy-IMP
   ‘Buy a drink!’

b. Minho-ya, ne-ka swul sa-la
   Minho-VOC you-NOM alcohol buy-IMP
   ‘(You/Minho(=you)), buy a drink!’

c. ne-/Minho-ka swul sa-la
   you-/Minho-NOM alcohol buy-IMP
   ‘You/Minho(=you), buy a drink!’

The null subject of the verb sa- ‘buy’ is interpreted as the addressee in (156a). The subject can be either an overt second-person pronoun (156b) or a proper noun without a vocative (156c) in imperatives, although a proper noun in imperatives must be co-indexed with the addressee in the given speech context, command. That means the proper noun Minho must be bound by the head of the higher structure associating the addressee; the second-person pronoun (with either the nominative ka or the vocative ya) is likely an element in TopicP. When the addressee, Minho, responds to the command or request in (156), he could repeat what he heard as either (157a) or (157b) but not as (157c), because he was not the speaker in the prior speech event.

(157)

a. [na-poko swul sa-la-ko↑] (echo question)
   1sg-DAT alcohol buy-IMP-COMP-RI
   ‘Are you telling me to buy a drink?’
b. \[pro\ mwe\ \text{sa-la]-ko-} \uparrow\] (echo question)
what buy-IMP-COMP-R1
‘I should buy what?’/ ‘(What are you telling me to buy?)’

\[\text{alcohol\ } \text{sa-la]-ko-} \downarrow\] (reinforcement)
‘I’m saying/ I said buy a drink!’

(157c) is pragmatically ill-formed although it is not ungrammatical in the syntactic sense of being ill-formed; the reinforcement can be uttered only by the speaker who uttered the direct imperatives in (156). The interpretations of the examples in (157) indicate that the clauses in square brackets are cited from a previous conversation between the same speech participants. One cannot utter the sentences in (157) without having the discourse context sharing the common ground between speech participants. However, that is a pragmatic aspect of echo questions and not a morphosyntactic property of the clauses in (157). For this reason, although I assume that echo and reinforcement ko in the examples above are pragmatically activated, the morphosyntactic properties of ko must be analyzed: it shows the head properties in which it selects and is selected by functional elements.

The interpretation of the null subject pro can be altered by the absence/presence of ko and its interaction with intonation in Korean, as a pro-drop language. For instance, the subject of the verb sa- ‘buy’ in the echo utterances in (157a) and (157b) is not the addressee. It is a first-person—pragmatically, the speaker of the echoing or citing utterance marked by the dative poko—who was the addressee in the previous utterance. This evidence shows that the interpretation of the null subject of an imperative clause alters depending on speech act type: first-hand versus second-hand speech. The clauses with the null subject pro in (156) and (157) are all grammatical; the null pronominal
UoLs would be interpreted appropriately by a native speaker of Korean. The echo questions in (157a) contrast with self-citation or reinforcement (158b), which only differ in intonation (cf. S-Sohn, 1996). The speaker of (158a) (in first-hand speech) and (158b) (in second-hand speech) must be the same, and the subject of the verb remains the same (a second person) as the addressee in both clauses.

(158)

a. swul  sa-la
   alcohol buy-IMP
   ‘Buy a drink!’

b. swul  sa-la-ko-↓
   alcohol buy-IMP-COMP-FI
   ‘I’m saying/ I said you should buy a drink!’

Based on these facts, I argue that echo ko is licensed in the syntactic structure, although it is selected for a communication purpose (i.e., pragmatically-activated). The Korean complex sentence (159a) is an information-seeking yes-no question, so it is grammatical but is pragmatically an inappropriate construction. As a yes-no question, the answer to (159a) would be ney ‘yes (I said)’ or ani ‘no (I didn’t say).’ Similarly, the illocutionary force of the complex sentence with a matrix predicate in (159b) differs from that of the reinforcement declarative in (158b) in pragmatics.

(159)

a. #na-poko  [swul  sa-la]-ko  malhass-ni
   1sg-DAT   alcohol   buy-IMP-COMP   said-INT
   ‘Did you say I should buy a drink?’

b. #nay-ka   [swul  sa-la]-ko  malhass-canha
   1sg-NOM   alcohol   buy-IMP-COMP   said-EVID-COMP
   ‘I said you should buy a drink (as you know).’

The speaker in (158b) urges the addressee to buy a drink, while the speaker in (159b) criticizes the addressee for not buying a drink. Thus, the meanings and pragmatic
purposes of the clauses in (158b) and (159b) differ. Following this, I argue that echo and reinforcement utterances do not result from elision of main predicates; the simple clauses with indirect ko in echo questions (157a) and reinforcements (158b) are distinct constructions from complex sentences with overt matrix predicates in (159), which may have distinct roles in the grammar and in language use/pragmatics.

The alternating interpretations of imperatives with and without ko in (158) show that ko interacts with the speech participants in the higher domain. Therefore, I predict that a rising intonation by itself cannot form an echo utterance, as illustrated in (160).

(160)

\[\text{(160) a. } *[\text{swul sa-la}] \uparrow \]
\[\text{alcohol buy-IMP-RI} \]
\[\text{‘Buy a drink?/are you telling me to buy a drink?’ (intended)} \]

\[\text{b. } *[\text{mwe sa-la}] \uparrow \]
\[\text{what buy-IMP-RI} \]
\[\text{‘Buy what?/I should buy what?’ (intended)} \]

Lastly, regardless of the contrast between first- and second-person second-hand speakers (with ko) and third-person second-hand speakers (with y), the point of view of the utterance must be associated with the current speaker. A speaker cannot report their own utterance by employing hearsay y. Accordingly, I argue that the general concept expressed by ko and y—direct citation or the relationship between the speech participants in two distinct speech events—is indeed a grammatical category encoded in the abstract functional projection, the grounding spine. Conceptually, one might say that echo questions are addressee-oriented, while self-quotation (reinforcement) is speaker-oriented; the hearsay y is ‘other-oriented’ because a third-person or impersonal reading indicated by hearsay y must involve a non-speech participant. However, the two UoLs are mutually exclusive, both occurring in a position following iType UoLs and followed by
the addressee-oriented polite yo. Taking this into account, I propose that ko and y are licensed in the speaker-oriented grounding spine; the two UoLs that encode indirect speech and the speech participants’ roles in the current/previous utterance can be represented as in (161).

(161) **Speaker-oriented GroundP**

*echo ko:* the speaker; repeats what the **addressee,** just said

*reinforcement ko:* the speaker; repeats what s/he; just said

*hearsay assertion y:* the speaker repeats what a **third person** said who is not proximate to the conversation (a third person ≠ addressee)  

*hearsay question y:* the speaker conjectures/supposes from grounds or evidence insufficient to ensure what a **third person** said to the addressee (a third person ≠ addressee)

Even in hearsay questions, the speaker must have the grounds or ‘source of knowledge’ that the addressee has information about the clause type. Without this pragmatic condition, hearsay questions are infelicitous. For instance, if the speakers of the clauses in (162) do not have this prior condition—say, the addressee was absent from the conversation with a third party—they would not ask hearsay imperative questions like in (162). The hearsay imperatives are grammatical, but they will be pragmatically infelicitous.

---

15 If a third person is a proximate individual in the previous utterance, the UoL canha ‘as you heard’ (cf. A. Kim, 2015) will be employed.

(1) ka-la-y↓  
go-IMP-HEARSAY-FI  
‘S/he (distal) asked you to leave.’

(2) ka-la-canha.  
go-IMP-COMP  
‘As you heard, s/he (proximate) asked you to leave.’
Based on the semantic and pragmatic properties associated with ko and y, I propose that the association (+) of the speaker-oriented UoLs and the grounding spine licenses their functions: direct and indirect speech ($\mathfrak{f}$) can be captured by schemas like (163).

(163)

\[
\begin{align*}
\mathfrak{f}_{\text{direct}} &= \text{UoL } \emptyset + \text{grounding spine} \\
\mathfrak{f}_{\text{echo/reinforcement}} &= \text{UoL } ko + \text{grounding spine} \\
\mathfrak{f}_{\text{hearsay}} &= \text{UoL } y + \text{grounding spine}
\end{align*}
\]

The alternative interpretations of ko as an echo question or reinforcement, is not determined in the grounding spine; it is determined in the responding spine associated with intonation. Nevertheless, echo and reinforcement ko are restricted to reproduced speech uttered by the current speech participants. Korean has reduplication in morphology (e.g., onomatopoeia) and copying in syntax (e.g., A-not-A questions; see Ceong, 2012); therefore, it is plausible that the grammar has reiteration (reproducing or citing illocutionary force) as a grammatical operation in the speech act domain. As a linguistic phenomenon occurring in natural language, reiteration is a core feature that distinguishes all kinds of reproduced direct speech, including self-quotation and hearsay, from original direct speech. To account for the morphophonological realization of the morphosyntactic operator or feature reiteration in the interactional speech act domain, I associate the categories $c$: DIRECT and $c$: INDIRECT with the grounding spine.
The contrastive category of $c$: INDIRECT is consequently $c$: DIRECT in the domain. Like the contrast between $c$: NEGATIVE (overt) and $c$: AFFIRMATIVE (covert) in the polarity domain, $c$: DIRECT is invisible as it is substantiated by a null UoL with semantic properties of Polarity. The null UoL in $c$: DIRECT selects Type UoLs associated with the linking spine. In the USH framework, a language-specific category instantiates the universal grounding spine through a “substantiation” relation between a UoL and the domain. The category INDIRECT instantiates the universal grounding spine through the properties of $ko$ and $y$ as heads. The categories $c$: INDIRECT and $c$: DIRECT and their associations are represented as in (165).

(165)  

\[
\begin{align*}
(c: \text{INDIRECT} &= k: \text{grounding} + \text{UoLs \{} ko, y \}\} \\
(c: \text{DIRECT} &= k: \text{grounding} + \text{UoLs} \{} \emptyset \}\}
\end{align*}
\]

The UoLs $ko$ and $y$ construct $c$: INDIRECT and the null UoL constructs $c$: DIRECT in the grounding spine by association (+). The USH inquires the “logic of Associate” (Wiltschko 2014: 86): i) how the UoLs $ko$, $y$ or $\emptyset$ associate with $k$: grounding (i.e., manner of association (e.g., substantiation or modification)), ii) where the UoLs associate with the spine (i.e., place of association (e.g., one spine or multiple spines; linking or grounding spine and so on), and iii) when the UoLs associate with $k$: grounding (i.e., timing of association (e.g., early or late insertion)). I discuss further the logic of Associate of COMP UoLs and the spine in Chapter 6 when I investigate multifunctional COMP UoLs.
Here I focus on the place of association of the UoLs of \( c: \text{INDIRECT} \) and \( c: \text{DIRECT} \). Based on the grounding spine in Wiltschko and Heim (2016: 321), as in (154), and in Thoma (2016: 275), as in (155), I argue that the grounding spine associated with the UoLs \( ko, y \) or \( \emptyset \) dominates the linking spine associated with the UoLs \( ta, nya, la, ca, e, \) and \( ci \), as in (166); the linear order of UoLs in the clause supports this structural hierarchy.

\[
\begin{align*}
\text{GroundP} & \quad c: \text{DIRECT} \{\emptyset\} \quad c: \text{INDIRECT} \{ko, y\} \\
\text{LinkingP} & \quad c: \text{iTYPE} \{ta, nya, la, ca\} \\
& \quad c: \text{uTYPE} \{e, ci\}
\end{align*}
\]

\( c: \text{uTYPE} \) UoLs \( \{e, ci\} \) are selected by direct \( \emptyset \), while \( c: \text{iTYPE} \) UoLs \( \{ta, nya, la, ca\} \) are selected by either direct \( \emptyset \) or indirect \( ko \) and \( y \) in matrix clauses. The Speech Act Principle in the syntactic structure states that a clause must contain a functional domain that encompasses the role of the speaker, whether s/he is an owner or borrower, original speaker, or a spokesperson. The ownership of the illocutionary force or thought must be indicated in the utterance, and the category \( c: \text{INDIRECT} \) represents it via the grounding spine. Thus, the specific force-type Cs proposed by Adger (2003: 352), Carnie (2013), and Sobin (2010) in connection with echo questions are not applicable to the Korean echo construction if C is equivalent to Type or C is associated with the linking spine.

Is there a universal principle that licenses \( c: \text{INDIRECT} \) in Korean? According to Wiltschko (2014), the head of each spine is intrinsically transitive to mediates between the argument in the complement position and the argument in the specifier of the spine.
For instance, the anchoring head is associated with an unvalued coincidence feature ([uCoin]) which must be valued as either [+coin] or [-coin]; a UoL associated with c: PRESENT TENSE values [uCoin] as [+coin], while a UoL associated with c:PAST TENSE values [uCoin] as [-coin]. The coinciding (or not) elements are the time of the event situation (i.e., the complement of k: anchoring with [uCoin]) and the utterance situation (i.e., the specifier of k: anchoringP). Location and participant can appear as situation arguments instead of time.

(167) **Formalizing anchoring** (cf. Wiltschko 2014: 141)

\[
\begin{align*}
&k: \text{anchoringP} \\
&\quad \text{arg}_{sit} \quad k: \text{anchoring} \\
&\quad \quad \langle \text{time, location, participant} \rangle \\
&\quad \quad k: \text{anchoring} \quad \quad \text{arg}_{sit} \\
&\quad \quad \quad \langle \text{time, location, participant} \rangle \\
&\quad \quad [\text{uCoin}] \\
\end{align*}
\]

Employing the coincidence feature within the USH, I hypothesize that situation arguments contain performer coordinates (\textit{perf}) and location coordinates (\textit{loc}) value \textit{ko} or \textit{y}, contrasting with \textit{c: DIRECT} in the grounding spine.

(168) **Formalizing grounding**

\[
\begin{align*}
&k: \text{groundP} \\
&\quad \text{arg}_{sit} \quad k: \text{grounding} \\
&\quad \quad \langle \text{performer, location} \rangle \\
&\quad \quad k: \text{grounding} \quad \quad \text{arg}_{sit} \\
&\quad \quad \quad \langle \text{performer, location} \rangle \\
&\quad \quad [\text{uCoin}] \\
&\quad \quad ko, y, \emptyset 
\end{align*}
\]
In Ceong (2016), I implement Performer in second-hand speech constructions inspired by Ross’s (1970) performative analysis. I assume that all clauses in direct speech are embedded by a high underlying structure of “I’m telling you” in the grounding spine. The categories $c$:DIRECT and $c$:INDIRECT contain a performer and a performative verb of saying. The category depends on whether the performer of the Type situation coincides with the performer of the utterance situation. If the (first-person) performer of the Type situation coincides with the (first-person) performer of the utterance situation, then the Type is understood as a $c$:DIRECT utterance. If there is no coincidence between the performers of the Type situation and the utterance situation, the Type is understood as $c$:INDIRECT. In reiterated and hearsay speech, the location of the Type situation (i.e., the complement of $k$: grounding with $[\text{ucoin}]$) will not coincide with that of the utterance situation (i.e., the specifier of $k$: groundP). Echo and reinforcement constructions must be $[+\text{coin}]$ in location and $[-\text{coin}]$ in time; the performer must be $[+\text{coin}]$ for reinforcements but $[-\text{coin}]$ for echo constructions. Hearsay constructions must be $[-\text{coin}]$ in location, time, and performer.

(169) **Formalizing grounding:** $c$: INDIRECT

```
  k: groundP
    /\     \     /
     /  \    /  \  \\
arg_{sit} /    \ <-Utt-performer-> \    /  \\
     /     \  \\
     k: grounding

k: grounding
  /\       /
 /  \     /\  \\
 [\text{-coin}] ko, y
arg_{sit} /  \<-Type-performer>
```

---

16 Investigating hearsay $y$ within the SAP approach, Ceong (2016) proposes that it is licensed in the lower SAP with either a $\text{pro}^Φ$ or $\text{pro}^arb$ feature on the specifier of SAP. These alternative $\text{pro}$ features account for the two readings of $tay$—the evidential rumor reading ‘I heard’ and the reportative reading ‘s/he said’.
In sum, the association of a universal categorizer $k$: grounding and the Korean specific UoLs $ko$ and $y$ define $c$: INDIRECT. My analysis within the framework of the USH may be able to uniformly account for similar elements in other languages.

In the next section, I survey multifunctional UoLs in other languages that function as complementizers in embedded clauses and as evidential reportatives expressing ‘he or she said’ when not accompanied by matrix predicates. Where in the structure does the evidential reportative marker from different languages appear? I predict that its location is likely associated with the grounding spine.

4.4.3 A survey of second-hand speech markers

The goal of this section is to show that many languages have right or left peripheral functional markers which take an embedded CP as its complement, yet their structural positions seem to not have been discussed. It is a quite common phenomenon that a functional element in the head of embedded CP selected by matrix verb _say_ often becomes a stand-alone functional marker without being accompanied by the matrix verb. In such cases, it carries a meaning of ‘s/he said/says’ (but not ‘you said/say’) or ‘I said/say’ across languages.

These left/right periphery elements having the meaning of ‘a third person said’ without a main clause (i.e., without a pronominal argument or lexical verb of saying) have been observed in Tukang Besi, Buru (Klamer, 2000), Goemai (Hellwig, 2006), Iberian Spanish (Etxepare, 2010), Cuzco Quechua (Faller, 2002), and Japanese (Aoki, 1986; Hayashi, 1997).
According to Klamer (2000), Tukang Besi and Buru, both Austronesian languages, employ complementizers (*kua* and *fen*, respectively) in a manner similar to the Korean *ko*. The UoL *fen* in Buru precedes reported speech, as in (170).

(170)

a. *Da prepa fen ringe iko*

3s say FEN 3s go
‘He; said that he; went (=left)’ (Klamer 2000: 79)

b. *Fen, “Ng-ina, nang dahu-decuk.”*

FEN 1sVOC-mother 1sPoss bunch.repeat-k
‘(He) said, “Mother, (then) the next hand is for me.’’ (Klamer 2000: 81)

The UoL *fen* in (170b) is translated as ‘he said’ or ‘she said’ in the absence of an overt pronominal subject and the verb *prepa* ‘say’; the behaviour of *fen* in (170b) superficially resembles the Japanese *tte* (see (150)) and the Korean hearsay *y* (see (151)).

The UoL *yin* in Goemai shows a similar pattern. The details in (171) may differ, as they feature logophoric pronouns, but it seems that *yin* expresses *a third person said* without the verb *k’wal* ‘talk’ in (171b).

(171)

a. *K’wal yin gwa goe tu ji*

talk SAY sgm.log.ad OBLIG kill(SG) sgm.log.sp
‘(He;i) said that he;i should kill him;’

b. *Yin doe yââl m-mat goe*

SAY sgf.log.sp rise(SG) NOMZ-sgf.log.sp.POSS COMIT

*sh’aat doe*

wing sgf.log.sp.POSS
‘(She;i said) that she;i rises on her;i own with her;i wings.’

(Hellwig, 2006: 219)

The distribution of Spanish *que* overlaps with Buru *fen* and Goemai *yin*. According to Etxepare (2010), Spanish *que* occurs as the head of reported speech in both dependent (172a) and independent clauses (172b).
(172)
a. *Juan dice que quién viene*  
Juan says that who is-coming  
‘Juan says: ‘who is coming?’’ (Etxepare 2010: 617)

b. *Que no vas, entonces*  
that neg you-go, then  
‘You say that you are not going then.’ (Etxepare 2010: 610)

The context given by Etxepare for (172b) suggests that the meaning and usage of this *que* is analogous to that of Korean echo *ko*, but the clause is translated as declarative in (172b). Like Korean *ko*, the root *que* in Spanish precedes declaratives (173a), imperatives (173b), and interrogatives (173c), as exemplified.

(173)
a. *Que tu madre, hoy, viene a las 5*  
that your mother today comes at 5  
‘I’m telling you that your mother is coming at 5.’’ (Etxepare 2010: 610)

b. *Que a trabajar*  
that to work  
‘(She/he says that) work!’ (Etxepare 2010: 616)

c. *Que cómo estás*  
that how are-you  
‘(She/he says that) how are you?’ (Etxepare 2010: 607)

It is worth emphasizing that the usage of the UoL *que* in (173a) and the Korean self-quoting UoL *ko* are alike in many ways when *que* is used as a “self-report” (Etxepare 2010: 610); the UoL *que* solely expresses the phrasal meaning *I’m telling you that*, as in (173a). Etxepare (2010: 618) notes that the clause in (173b) can be a complement clause of a verb of saying or a main clause. The meaning of *que* in (173b) and (173c) overlaps with that of Korean hearsay *y* and Japanese *tte* (see R. Suzuki, 2007) rather than the subordinating Korean *ko* or Japanese *to* (see S. Suzuki, 2000, Saito & Haraguchi, 2012).
The interpretation of *que* in (173c) is what motivates Etxepare to compare *que* with the reportative evidential *si* in Cuzco Quechua (Faller, 2002). The UoLs from these three different languages show striking parallels, as in (174)\(^{17}\).

(174)

a. *Que cómo estás* (Iberian Spanish)
   that how are-you
   ‘(She/he says that) how are you?’ (Etxepare 2010: 607)

b. *Imayna-ta-s ka-sha-nki* (Cuzco Quechua)
   how-ACC-si be-PROG-2
   ‘(She says) how are you?’ (Faller 2002: 233)

c. *cal cinay-ss-nya-y↓* (Korean)
   well spend-PST-INT-HEARSAY-FI
   ‘(She/he says) how are you?’

All three clauses in (174) are simple independent clauses in morphosyntax, but the matrix clause in each English translation shows that the clauses are conceptually complex sentences. As observed, the UoLs *que*, *s*, and *y* in (174) are not interrogative markers. Although it is unclear if these elements from different languages are also compatible with all three major clause types, their peripheral properties and meanings resemble those of the Korean indirect speech markers *ko* and *y*. If we attempt to account for the elements having the meaning ‘s/he said/says’ in matrix clauses at the right or left peripheries, the question is which projections they should be associated with. A new syntactic position other than clause-typing CP for these UoLs is needed. Is there a universal base structure for these UoLs despite the morphological variation exhibited across the different languages? To account for the variation expressed by UoLs across languages, I have

\(^{17}\) I assume that the matrix clause ‘she/he says that’ is meant to indicate hearsay at LF interpretation, since *she/he says that how are you* is ungrammatical in English.
argued that the grounding spine hosts an indirect-speech-related language-specific category such as c: INDIRECT in Korean. The USH considers that each language must have a language-specific category associated with the grounding spine. If my proposal for ko and y presented in this section is on the right track, my next question is “which projection is polite yo, following ko and y in the matrix clauses, associated with?” In the next section, I discuss the syntactic domain that hosts a purely pragmatically activated optional functional marker. Polite yo is grammatically an optional element, although it can be obligatory in pragmatics.

4.5 The responding spine and c: INTERACTION

The function of the polite marker yo, which expresses politeness towards the hearer, has mostly been discussed from a pragmatic perspective (see Brown 2015 and references there), except Yim and Dobashi (2016) which discusses its peculiar prosodic characteristics. Probably because polite yo occurs extensively in conversation and informal communication, its structural position in the syntactic structure has not been explored. If a language has both colloquial and non-colloquial registers, linguists who study pragmatics or discourse analysis tend to look at colloquial forms, while those doing syntactic analysis tend to look at non-colloquial forms; at least, this seems to be the case in the Korean and Japanese literature. For instance, among six different styles of Korean sentence-typing markers, generally only the so-called “plain style markers” are addressed in syntactic analysis, as declarative ta has often been considered to be more formal and appropriate for use in writing (cf. Noh, 2008). The use of the term ‘colloquial’ to describe a language, such as colloquial Spanish (Estellés-Arguedas, 2015), colloquial German (Kaufmann & Poschmann, 2013), or colloquial Singapore English (Sato 2011; Sato &
Kim, 2012; Smakman & Wagenaar, 2013), assumes there are non-colloquial counterparts to these language variants. What are they? How are they relevant to the morphosyntactic properties of matrix complementizers? Colloquial versus non-colloquial registers in English may be a matter of choice of constructions; one may say I wanna go home in colloquial speech, while one may say or write I want to go home in formal speech/writing. The Korean polite yo, which follows uType UoLs e and ci discussed in Chapter 3 and periphrastic irrealis COMP UoLs l-key, l-lay, and l-kka, which will be discussed in Chapter 5, is also different from declarative supnita and interrogative supnikka used in formal speech and writing. As we do not exclude clauses with the word wanna from syntactic analysis of English (cf. Postal & Pullum, 1978; Hudson, 2006), neither should we exclude polite yo and the uType UoLs. If the object of syntactic analysis is natural language, there is no reason for us to exclude yo simply because it mostly appears in colloquial registers. Moreover, I show that the appearance of polite yo in a clause is organized systematically even though its absence does not yield an ungrammatical clause. I argue that the difference between colloquial and non-colloquial utterances can be treated as the presence or absence of a category in the responding spine (Wiltschko & Heim, 2016) or activation or inactivation of the spine, based on the distributional behavior of yo in Korean.

As implied by its label, “hearer honorific marker,” polite yo is activated pragmatically in the grammar; the presence of polite yo presupposes the addressee, so it does not appear in monologue utterances. I argue that discourse particles, including polite yo, have a p-selectional property, contrary to c-selection or s-selection in syntactic analysis. I posit that the language-specific UoL yo is a member of a language-specific
category $c$: INTERACTION, activated by $k$: Responding associated with Call on Addressee (Wiltschko & Heim, 2016). I borrow the term “interaction” from Ginzburg (2012) who develops a framework called KoS which accounts for linguistic constituents in dialogue including non-clausal utterances. KoS (Ginzburg glosses it as Konversationally Oriented Semantics) is not an acronym, but Ginzburg borrows the name of an island in the south Sporades group of the Dodecanese to describe his Conversationally Oriented Semantics in his formal approach to language use, especially non-sentential utterances in dialogue (e.g., yeah, yes, no, right etc.). Assuming intonation and politeness towards the addressee requires dialogue contexts, without going into details of his account, I propose a language-specific category $c$: INTERACTION that encompasses dialogue contexts including intonation and polite marker yo. There is no overt pragmatic or morphosyntactic element beyond the suffix yo in Korean predicates. This implies that there is a limit to how many categories can be encoded as hierarchical grammatical elements in the structure. There is only one possible syntactic domain that hosts Call on Addressee; although the domain is termed ‘Call on Addressee’, politeness is activated by the speaker in relation with the addressee. The speaker temporarily interacts with speech participants using various conversational rules (e.g., turn-taking), social stance (e.g., politeness), and utterance types including intonation, direct or indirect speech, and grammatical encoding regarding clause types in dialogal speech events. I assume that the speaker as an interlocutor is involved in the domain.

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18 My original idea was adopting ‘cool medium’ from McLuhan (1994) and Huang (1984); however, the idea of an ‘Interactional domain’ in the grammar (Ginzburg, 2012) is likely able to cover ubiquitous non-clausal constituents one can easily notice in Korean dialogues, which I do not discuss in this dissertation. As polite yo and intonation can be attached to non-clausal constituents, I borrow the term ‘Interaction’ from Ginzburg (2012). (I appreciate Dr. Wiltschko for suggesting the reference.)
Recently, Miyagawa (2017) proposed an allocutive probe phi feature to account for the Japanese politeness marker -mas-, which occurs in well-formed clauses where the addressee is socially superior to the speaker and its distribution is irrelevant to the properties of the subject. Although the Japanese politeness marker -mas- appears between verb stems and Tense in matrix clauses, it is argued to be associated with C. The phi feature associated with C acting as a probe undergoes raising to the higher SA head (i.e., the speaker) in the SAP of Haegeman and Hill (2013) and c-commands its goal, addressee, in the specifier of the low SAP. This account for the Japanese polite marker -mas- Miyagawa (2017) also supports the necessity of the structural position that hosts person features associated with the speaker and the addressee rather than the subject. Hence, in § 4.5.1, I introduce the responding spine, which is associated with Call on Addressee (Wiltschko & Heim, 2016). In § 4.5.2, I discuss the distribution of polite yo and suprasegmentals, and their possible positions in the structure. I show that a hierarchical ordering exists between polite yo and suprasegmentals when they co-occur.

4.5.1 The responding spine (Wiltschko & Heim, 2016)

I argue that polite yo is pragmatically activated, while suprasegmentals are morphosyntactically activated. A question thus arises: are polite yo and suprasegmentals also associated with the grounding spine, or is there a higher domain in the structure that hosts them? If there is a higher domain above the grounding spine, what is it? In a recent syntactic analysis of the confirmational particle eh in Canadian English, Wiltschko and Heim (2016) posit the existence of a syntactic domain that hosts this particle. Specifically, they propose a responding spine as a domain that dominates the grounding
spine. The sentence-peripheral confirmational particle *eh* in Canadian English is exemplified in (175).

(175)
I have a new dog, eh?  
(Wiltschko & Heim, 2016: 308)

The speaker who utters a sentence consisting of the simple declarative *I have a dog* and the discourse particle *eh* with a rising intonation, as in (175), requests a response from the addressee. The sentence in (175) contrasts with, for example, reading a passage in a book that says *I have a new dog* without the particle *eh*. Wiltschko and Heim (2016) characterize a syntactic domain hosting the UoL *eh* as the responding spine (RespP). The RespP (Wiltschko & Heim, 2016) dominates the GroundP (Thoma, 2016), as represented in (176). Utterances in dialogical context have two properties: expressing the speaker’s new commitment and calling on the addressee to take up the utterance (Beyssade & Marandin, 2006). Inspired by Beyssade & Marandin (2006) who discuss the asymmetry between the speaker’s commitment and speaker’s call on addressee, Wiltschko and Heim (2016) characterize RespP as associated with Call on Addressee.

(176) **Responding and grounding spine** (Wiltschko & Heim, 2016: 335)
Based on evidence that confirmational *eh* confirms the addressee’s epistemic knowledge rather than the proposition, the authors argue that the responding domain associated with the rising contour dominates the grounding domain associated with confirmational *eh* rather than the propositional CP.

In the next section, I discuss the elements occupying the responding spine in Korean.

**4.5.2 Polite yo as c: INTERACTION**

My goal in this section is to provide an account of the language-specific category *c: INTERACTION* and UoLs associated with this category within the framework of the USH.

In particular, I explore the possibility of mapping between *c: INTERACTION* and the UoL *yo* within the responding spine (Wiltschko & Heim, 2016). The distribution of the so-called addressee honorific marker *yo* was shown in passing in Chapter 3. Following Brown (2015b), I refer to *yo* as “polite *yo*” instead of “the addressee honorific marker” for simplicity throughout this section. According to Brown (2015b), polite *yo* expresses a direct indexical meaning that signals the speaker’s epistemic and affective stance. This means that like the Canadian English confirmational *eh*, polite *yo* does not directly interact with the proposition. As Brown (2015b: 46) points out, a careful examination of the “sentence-final suffixes” (which are Type categories in my system) and their interaction with polite *yo* is required prior to establishing the full properties of polite *yo*.

Although the subject honorific *si* has been suggested to be a (partial) agreement marker (Choe, 2004; I. Choi, 2003) polite *yo* has not usually been considered as a morphosyntactic element. Within the extended universal structure, including the responding spine (Wiltschko & Heim, 2016), I argue that morphosyntactically and conceptually, it is reasonable to assume that polite *yo* is associated with RespP via a
language-specific category $c$: INTERACTION, because it systematically selects $ko$ and $y$, which were proposed to be associated with the grounding spine in §4.4.2. Based on well-formed and ill-formed clauses showing the linear order of the UoLs in (177), I propose that polite $yo$ has a syntactic location in the structure when it is activated by p-selection and constructs $c$: INTERACTION via association with $k$: Responding.

(177)

a. $mwe\; sa-ss-e-(yo)\uparrow$
   what buy-PST-COMP-POL-RI
   ‘What did you buy?’/ ‘Did you buy something?’

b. $mwe\; sa-ss-nya-ko-(yo)\uparrow$
   what buy-PST-INT-COMP-POL-RI
   ‘What did I buy?’/ ‘(Are you asking) what I bought?’
   ‘Are you asking if I bought something?’

c. $*mwe\; sa-ss-yo-e\uparrow$
   what buy-PST-POL-COMP-RI

d. $*mwe\; sa-ss-nya-yo-ko\uparrow$
   what buy-PST-INT-POL-COMP-RI

The linear order of UoLs, not including intonation which reflects the selectional relation in the hierarchical structure, is presented here.

(178)
I assume that *yo* interacts with the addressee-oriented responding spine because it presupposes the presence of a speech participant—an addressee who shares common ground with the speaker (cf. Krifka, 2008). If polite *yo* did not presuppose a certain addressee, it should not be blocked in non-interactional writing or speech lacking the Call on Addressee (Beyssade & Marandin 2006). In other words, polite *yo* is blocked in a non-interactional communication precisely by the absence of an addressee who shares common ground with the speaker. For instance, polite *yo* is blocked when the speaker thinks aloud or talks to themselves, as when delivering a monologue. It is likely that polite *yo* is blocked in non-interactive registers.

Additional evidence supporting the linking between *yo* and the addressee comes from the interpretation of clauses ending with the *u*-Type UoL e, followed by *yo*. This type of clause is interpreted as either exhortative or imperative. Without *yo*, the *e*-clause never has the exhortative meaning. Thus, it appears *yo* has the function of inviting the addressee to the dialogue.

(179)

a. *ka-a-*↓
   go-COMP-FI
   ‘Go (away)!’

b. *ka-a-yo-*↓
   go-COMP-POL-FI
   ‘Let’s go.’/ ‘Please, leave.’

c. *ka-si-e-yo-*↓
   go-SUB.HON-COMP-POL-FI
   ‘Please, leave.’

When polite *yo* is attached to a direct imperative with the *u*-Type UoL e, such as the one in (179a), it causes either the force of the sentence or the person feature of the clausal
subject to shift, as in (179b). In (179c), politeness is double-marked. The subject
honorable UoL $si$ marks the subject of the verb $ka$- ‘go,’ while the UoL $yo$ marks the
addressee, who happens to be the subject of the imperative. As the subject honorific
marker $si$ is incompatible with a first-person subject, clause (179c) is never interpreted as
exhortative. Recall that the exhortative is absent in the intimate speech type paradigm
(see Table 3.1 in Chapter 3). It seems that the clause is interpreted as an exhortative when
the speech participant feature on the specifier of the responding spine scopes over the
person feature of the subject of the clause with the uType UoL $e$.

Now let us return our attention to the morphosyntactic properties of polite $yo$,
which can be summarized by the following three points: i) its right-most position in the
matrix clauses and its complement-selection properties; ii) its grammatical optionality;
and iii) its controller which optionally attaches to phonological phrases of constituents.

First, the distribution of $yo$ suggests its fixed syntactic position—at the right-most
edge of matrix clauses—in the structure of CP. It does not occur elsewhere, leaving aside
its phonological copies in the clause.\textsuperscript{19} The multiple $yos$ in parentheses without glossing
in (180a) are copies of $yo$. Without them, the clause is well-formed.

\textbf{(180)}
\begin{itemize}
  \item [a.] $cey$-$ka$-($yo$) $ceey$-($yo$) $kkapheey$-$eyse$-($yo$) $Mina$-$lul$-($yo$) $mannass$-$e$-$yo$-

    1sg-NOM yesterday café-LOC Mina-ACC met-COMP-POL-FI

    ‘I met Mina at the café yesterday.’ (cf. Yim & Dobashi, 2016: 214)

  \item [b.] *$cey$-$ka$-$yo$ $ceey$ $kkapheey$-$eyse$ $Mina$-$lul$ $mannass$-$e$-

    1sg-NOM yesterday café-LOC Mina-ACC met-COMP-FI

    ‘I met Mina at the café yesterday.’
\end{itemize}

\textsuperscript{19} The polite -$yo$ also can attach to discourse markers such as $ceki$-$yo$ ‘Excuse me (lit. that-POL),’ right
dislocated elements, and fragment answers. Here, I limit my exploration of the distribution of -$yo$ to the
domain of CPs with the canonical word order lacking topic-focus phrases.
c. *cey-ka-yo  cey-yo  kkaphey-eyse-yo  Mina-lul-yo  mannass-e↓  
1sg-NOM  yesterday  café-LOC  Mina-ACC  met-COMP-FI
‘I met Mina at the café yesterday.’

The ill-formed clause in (180b) shows that polite yo cannot occur elsewhere in the clause and (180c) shows that without the highest yo in the structure, the copies of yo cannot be licensed. When yo occurs in a clause marked by iType UoLs, it must be mediated by indirect UoLs ko and y, as illustrated in Table 4.4. Yo immediately follows or selects iType UoLs.

<table>
<thead>
<tr>
<th>Type UoLs</th>
<th>ta (DECL)</th>
<th>nya (INT)</th>
<th>la (IMP)</th>
<th>ca (EXH)</th>
<th>e (UNDERSPECIFIED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearsay -y</td>
<td>ta-y-yo</td>
<td>nya-y-yo</td>
<td>la-y-yo</td>
<td>ca-y-yo</td>
<td></td>
</tr>
<tr>
<td>Echo -ko</td>
<td>ta-ko-yo</td>
<td>nya-ko-yo</td>
<td>la-ko-yo</td>
<td>ca-ko-yo</td>
<td></td>
</tr>
<tr>
<td>Direct Ø</td>
<td>*ta-yo</td>
<td>*nya-yo</td>
<td>*la-yo</td>
<td>*ca-yo</td>
<td>e-yo, ci-yo</td>
</tr>
<tr>
<td>Type UoLs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The linear order and the fact that nothing can intervene between the uTYPE UoL e and polite yo in (181) implies that e is likely in complementary distribution with tako and tay in matrix clauses and the existence of the null direct marker in the domain is real.

(181)
a. pi-ka    o-ko    iss-e-(yo) (iss-e-∅-yo)↓  
  rain-NOM  come-COMP  exist-COMP-POL-FI
  ‘It is raining.’

b. *pi-ka    o-ko    iss-e-ko-(yo)↓  
  rain-NOM  come-COMP  exist-COMP-POL-FI
  ‘I said that it is raining.’ (intended)

c. pi-ka    o-ko    iss-ta-ko-(yo)↓  
  rain-NOM  come-COMP  exist-DECL-POL-FI
  ‘I said that it is raining.’
As the term ‘hearer honorific’ indicates, yo presupposes the presence of speech participants, so it is fair to say that its domain activates the grounding spine hosting speech participants’ common ground. The polite yo in the responding spine c-commands every constituent except intonation; it cannot immediately select UoLs in the linking spine, as shown in (182).

(182)  
  a. [RespP[Pol] [GroundP[Indirect] [LinkP[Type ta]-ko]-yo]  
  b. [RespP[Pol] [GroundP[Indirect] [LinkP[Type ta]-y]-yo]  
  c. [RespP[Pol] [GroundP[Direct] [LinkP[uType e]-∅]-yo]  
  d. *[RespP[Pol] [GroundP[Direct] [LinkP[Type ta]-∅]-yo]

Second, although yo exhibits rigid order when it occurs in the matrix clauses, it is grammatically optional; its omission does not affect the grammaticality of the clause. Polite yo is typically treated as a kind of speech style marker. Yeon and Brown (2011, p. 170) characterize the properties of the Korean honorific UoLs, including yo, by describing the Korean honorification system in which “it is impossible to speak a single sentence in Korean without calculating your [=speaker] relative social status and/or degree of familiarity with the person/people you are talking to and talking about.” As emphasized, the category of honorifics is obligatory in spoken language, particularly in interactive registers. In non-interactive registers, for instance in formal writing such as in newspapers, the polite yo or the subject honorific marker si are absent either because the addressee/audience is unspecified or because the Call on Addressee is inactive.
Therefore, I argue that "yo" is associated with Call on Addressee in the responding spine and can be optionally activated depending on register (Biber, Davies, Jones, & Tracy-Ventura, 2006; Ferrara, Brunner, & Whittemore, 1991) and pragmatics—although it is assumed to always be presented in the abstract structure. In this way, we can account for the distributional behavior of polite "yo".

Third, polite "yo" can have downward copies in spoken language, as exemplified in parentheses in (183a). These multiple instances must be copies of "yo" because the clause is ill-formed if polite "yo" at the rightmost edge is absent.

(183)

a. cey-ka-(yo), ecey-(yo), kkaphey-eyse-(yo), Mina-lul-(yo), manass-e-yo↓
   1sg-NOM yesterday café-LOC Mina-ACC met-COMP-POL-FI
   ‘I met Mina at the café yesterday.’

b. cey-ka-yo ecey-yo kkaphey-eyse-yo Mina-lul-yo manass-e-yo↓
   1sg-NOM yesterday café-LOC Mina-ACC met-COMP-POL-FI
   ‘I met Mina at the café yesterday.’

Yim and Dobashi (2016) investigate the unique distribution of "yo", which is usually found in spoken language by young people. According to Yim and Dobashi (2016), "yo" is a prosodic element that appears at the right edge of phonological phrases (φ).

(184)

(cey-ka-yo)φ (ecey-yo)φ (kkaphey-eyse-yo)φ (Mina-lul-yo)φ (manass-e-yo)φ.

Thus, the multiple instances of "yo" inside the clause are not multiple associations of the polite "yo" with the responding spine; the copies must not be associated with the responding spine. However, the polite "yo" attached to DPs, AdvP, and PPs in fragment answers, as in (185b), (185d), and (185f), is likely associated with the responding spine.
In sum, the distribution of polite yo discussed so far shows that it occurs in the fixed and highest position in the clause/sentence/utterance level. Although it is grammatically optional like an adjunct, its complement-selectional properties and the ability to license phonological copies show that yo must be a head with quantitative properties. Its pragmatic and semantic properties signal that it must be associated with the Call on Addressee in the structure.

Now let us return our attention to suprasegmentals which tag along with polite yo or uType UoLs.

### 4.5.3 Intonation as c: INTERACTION

I propose that the highest functional elements in independent clauses are suprasegmentals. Without these elements, lack of specification of the illocutionary forces
clause type with direct \( \nu \)Type UoLs or indirect speech UoLs would cause the derivation to crash at LF in Korean. Suprasegmentals are contained within a language-specific category in the domain of the responding spine. Suprasegmentals play a role in determining the illocutionary force of the underspecified clause type in the top three highest domains; (a) the linking domain with \( \nu \)Type UoLs; (b) the grounding domain with \( c \): INDIRECT UoLs; and (c) the responding domain with the optional polite \( yo \), as summarized in the tree in (186), which shows the positions suprasegmentals can occupy in the structure. The ungrammaticality of (186d) shows that suprasegmentals enter into the structure at the right edge of the clause regardless of whether the language is head-initial like English or head-final like Korean. The rising intonation in this position is assumed to have high peaks, later peaks, and higher end pitch in which Gussenhoven & Chen (2000) identifies as the universal prosodic properties of questions.

(186) **The domains in which suprasegmentals merge with UoLs**

a.\[
\text{RespP} \\
\text{GroundP} \\
\text{LinkingP} \quad \emptyset \\
\end{align*}
\]
\[
e, ci
\]

b.\[
\text{RespP} \\
\text{GroundP} \\
\text{LinkingP} \quad ko, y \\
\end{align*}
\]
\[
ta, nya, la, ca
\]

c.\[
\text{RespP} \\
\text{RespP} \\
\text{GroundP} \quad (yo) \\
\text{Linking} \quad ko, y \\
\end{align*}
\]
\[
ta, nya, la, ca
\]

d.\[
\text{RespP} \\
\text{GroundP} \quad (*↓↑) \\
\text{LinkingP} \quad e, ci \\
\end{align*}
\]
The polite yo can intervene between indirect UoLs and suprasegmentals. It is observed that a rising intonation is obligatory when the linking spine is activated by \( u \)Type UoLs including \( e \) in questions; a rising intonation is also obligatory when the grounding domain is activated by (in-) direct UoLs including \( k o \) in echo questions and hearsay questions. The evidence that a rising intonation is associated with the spine rather than a UoL (including the polite yo) is shown by the ungrammaticality of the copies of yo with a rising intonation, as illustrated in (187).

(187)
\[*(Sumi-ka-yo)_{\varphi} \uparrow (ecey-yo)_{\varphi} \uparrow (kkaphey-eyse-yo)_{\varphi} \uparrow (Mina-lul-yo)_{\varphi} \uparrow (mannass-e-yo)_{\varphi} \uparrow\]
Sumi-NOM-RI yesterday-RI café-LOC-RI Mina-ACC-RI met-COMP-POL-RI
‘Did Sumi meet Mina at the café yesterday?’

The hearsay clause similar alternates between assertion and question according to the accompanying suprasegmentals, as shown in (188). Spoken with a rising intonation, (188a) is a hearsay question indicating that the current speaker was a non-speech participant in the direct exhortative, while (188b) with a falling intonation indicates that the speaker was a speech participant in both speech events. The response to (188a) must be a confirmational hearsay exhortatives, as illustrated in (188c) and (188d).

(188)
\begin{align*}
\text{a. } & nayngmyen \quad mek-ule \quad cikum \quad ka-ca-y_{\uparrow} \\
& \text{cold noodles eat-COMP now go-EXH-HEARSAY-RI} \\
& \text{‘Did pro3 ask us to go eat cold noodles now?’}
\end{align*}

\begin{align*}
\text{b. } & nayngmyen \quad mek-ule \quad cikum \quad ka-ca-y_{\downarrow} \\
& \text{cold noodles eat-COMP now go-EXH-HEARSAY-FI} \\
& \text{‘pro3 said let’s go to eat cold noodles now.’}
\end{align*}

\begin{align*}
\text{c. } & ney, \quad cikum \quad ka-ca-y-(yo)_{\downarrow} \quad \text{(hearsay exhortative)} \\
& \text{yah, now go-EXH-HEARSAY-POL-FI} \\
& \text{‘Yah, pro3 said let’s go now.’}
\end{align*}
d. ani-yo, nacwung-ey ka-ca-y-(yo)-↓ (hearsay exhortative)
   no, later-PP go-EXH-HEARSAY-POL-FI
   ‘No, pro3 said let’s go later.’

As shown in (188), polite yo can occur optionally between the indirect UoL y and suprasegmentals. If the response to (187a) is a hearsay exhortative with a rising intonation, as illustrated in (189a) and (189b), it would be ill-formed.

(189)
   a. #ney, cikum ka-ca-y-(yo)-↑ (hearsay exhortative)
     yah, now go-EXH-HEARSAY-POL-RI
     ‘Yah, did pro3 say let’s go now?’

   b. #ani-(yo), nacwung-ey ka-ca-y-(yo)-↑ (hearsay exhortative)
      no, later-PP go-EXH-HEARSAY-POL-RI
      ‘No, did pro3 say let’s go later?’

Importantly, whereas the linking domain contains three or more different clause types, the grounding domain has only two force types: question (‘Are you saying…?/Did s/he say…?) and assertion (I’m telling you…./ I heard…).20

(190)
   a. ta hay-ss-ta-ko [kwu]-yo-↑
      all do-PST-DECL-COMP-POL-RI
      ‘You finished all of it?’ (Lit. Are you saying that you finished all of it?)

   b. ta hay-ss-ta-ko[kwu]-yo-↓
      all do-PST-DECL-COMP-POL-FI
      ‘I FINISHED all of it.’ (Lit. I said I finished all of it.)

   c. ta ha-la- ko[kwu]-yo-↑
      all do-IMP-COMP-POL-RI
      ‘Should I do all of it?’ (Lit. Are you telling me to do all of it?)

   d. ta ha-la- ko[kwu]-yo-↓
      all do-IMP-COMP-POL-FI
      ‘You should do it all.’ (Lit. I am telling you to do it all.)

20 The UoL ko in matrix clauses has an allophone [kwu], unlike ko in embedded clauses (see Sohn 1996: 222).
Therefore, I contend that suprasegmentals are obligatory syntactic elements with certain UoLs. Following De Clercq (2017) and Van Heuven (2000), I argue that suprasegmentals are realizations of grammatical features in the syntactic structure (i.e., RespP). Evidence for this analysis comes from the fact that these features, along with clauses with uType UoLs, affect the identification of the clause type (either echo questions or reinforcement). In other words, suprasegmentals help to encode the speech participants’ response or stance. Details of the syntax-intonation interface are beyond the scope of this dissertation; however, recently research has shown increasing interest in exploring the interaction between syntax and prosody (De Clercq, 2017; Elvira-García et al., 2017; Iwata & Kobayashi, 2013; Sturgeon, 2008; Tyler, 2013; Van Heuven & Haan, 2000).

Based on the alternative interpretation of the clause and the distribution of intonation, I propose a hierarchical structure of the Korean C system that includes a rising intonation, as in (191). I assume that a falling intonation is a default UoL in the domain.

(191)

a. [RespP\textsc{intonation} [RespP\textsc{pol} [GroundP -ko] -yo] ↓, ↑]
b. [RespP\textsc{intonation} [RespP\textsc{pol} [GroundP -y] -yo] ↓, ↑]
c. [RespP\textsc{intonation} [RespP\textsc{pol} [GroundP -∅] -yo] ↓, ↑]
d.*[RespP\textsc{polite} [RespP\textsc{intonation} [GroundP -ko] ↑] yo]

The language-specific categories \textit{c}: INTERACTION, and the UoLs associated with the categorizer \textit{k}: responding, are formulated as in (192).

(192)

\textit{c}: INTERACTION = UoL yo + \textit{k}: responding

\textit{c}: INTERACTION = intonation + \textit{k}: responding
The UoL yo with intonation realizes the value (i.e., Call on Addressee) associated with k: responding. The tree in (193) shows that the spines and categories are hierarchically organized in the structure. It also shows that declarative _ta_ can co-occur with a question force marked by a rising intonation when mediated by indirect _ko_. Thus, when a declarative and a question force co-occur within a clause, a rising intonation is not associated with the linking or grounding spine but with the responding spine, expressing a different illocutionary force from a direct question. The _k_: responding is so far the highest syntactic domain in the framework of the USH; there are only two hierarchical universal spines between _k_: anchoring and _k_: responding: _k_: linking and _k_: grounding. It is an ongoing task to find out what kinds of language-specific categories and UoLs would fill each spine. If a language has more than two functional markers between _k_: anchoring and _k_: responding, then we need to determine if they belong to the same spine or if we need a new universal spine.

(193)

![Diagram](RespP)

GroundP  (yo) ↑  c: Interaction

LinkingP  _ko_  c: Indirect

_ta_  c: Type

To the best of my knowledge as a native speaker, there is no suffix that can follow polite _yo_ in Korean. This systematic order of UoLs beyond T or _k_: anchoring observed at the right periphery of Korean seems to be shared by Japanese, which often exhibits overall similarities but selective differences.
Saito (2015) observes that finite *no*, interrogative *ka*, and indirect *to* show the rigid order in embedded clauses even though they do not necessarily occur all together. The example in (194a) is repeated from (125). The obligatory combinations in (194b) show that at least two heads must occur, while (194d) shows that Force *ka* in (194a) is morphologically obligatory in embedded interrogatives; *ka* as the head of a mediate or clause-typing projection cannot be omitted. (194c) shows that the revised order of these heads is ungrammatical.

(194)

a. \([\text{CP} [\text{CP} [\text{TP PAST} \text{ta}] \text{Finite} \text{no}] \text{Force} \text{ka}] \text{Report} \text{to}]\)

b. *ta-no-ka, ta-ka-to, ta-no-ka-to*


d. *ta-no-to*  

(cf. Saito 2015: 262: 22)

Contrary to embedded clauses, in Japanese matrix clauses different types of UoLs show rigid ordering. Japanese has a set of sentence-final discourse particles following tense elements in assertion. The particles including *wa, yo, ne, and na* show their rigid order (cf. Endo 2007, Saito 2015). Without going into detail, the rigid order reported in Saito (2015) is summarized as in (195).

(195)

a. \([\text{FP} [\text{FP}[\text{TP PAST} \text{ta}] (\text{wa})] (\text{yo})] (\text{ne/na})]\)

b. *Hanako-wa*  *soko-ni*  *i-ta* (wa) (yo) (ne).

Hanako-TOP there-at be-PST wa yo ne

‘Hanako was there.’  

(Saito 2015: 267 (35))
Here are some combinations of these functional elements that can and cannot co-occur, according to Saito (2015).

(196)

a. \([\text{FP} [\text{FP} [\text{CP} \text{[TP Past ta]} \text{ Finite no}] \text{ Force } \Phi_{\text{DECL}}] (\text{wa})] (\text{yo})] (\text{ne/na})\]

b. ta-wa, ta-yo, ta-ne, ta-na, ta-no-ne, ta-no-yo, ta-yo-ne, ta-yo-na, ta-wa-ne, ta-wa-yo, ta-wa-yo-ne


Elements appearing beyond C, similar to the Japanese particles in the parentheses in (196a), have been referred to as “extra-clausal constituents” in recent literature (Dik et al., 1990; Kaltenböck et al., 2016). Assuming the association of clause-typing UoLs with the linking spine, the UoLs following Tense in both embedded and matrix clauses in Korean and Japanese are limited to a maximum of three. As they show a systematic order, we need structural positions where they spell-out.

4.6 Conclusions

This chapter explored the mapping of Korean double complementizers such as ta-ko and the universal abstract structure in the two topmost domains in the structure. The morphosyntactic properties of indirect UoLs ko and y in “speech within speech” (Aikhenvald, 2008; D’Arcy, 2015; Jakobson, 1971) constructions shows that they are not licensed by the traditional notion of CP or ForceP, which has been widely accepted as the highest projection in the C system containing a clause-type feature, such as declarative, in generative grammar.
Indirect *ko* and *y*, as the heads of independent clauses, express complex speech events within a clause. Echo and reinforcement *ko* mark repeated speech by a speech participant: part or all of the speaker/addressee’s previous utterance is repeated by the speaker. Indirect *ko* with a rising intonation forms echo questions, while indirect *ko* with a falling intonation indicates the speaker’s reinforcement (see S. Sohn 1996, 2015). Indirect *y* marks hearsay, or a report of speech which was uttered previously by a non-speech participant. Based on their constrained meanings and distributions, I have argued that *ko* and *y* must be licensed in syntax despite being pragmatically activated.

Within the theoretical framework of the USH, I have argued that *ko* and *y* are associated with the universal structure, in the grounding spine, where (in-)directness of speech acts and speech participants are associated by means of a coincidence feature. The claim that echo *ko* and hearsay *y* are associated with the grounding spine in the hierarchically organized universal spines is supported by the fact that *ko* and *y* select the Type UoLs, which are associated with the linking spine. Conceptually, it is reasonable to assume that first-hand and second-hand speech are associated with the grounding spine, because speech participants in indirect speech must presuppose the common ground that they share the necessary context for the repeated/embedded speech.

Hearsay *y* is likely to be a grammaticized functional UoL with the performer feature OTHER in GroundP and constructs the language-specific category c: INDIRECT.

The tri-components—the form, function, and distribution—of the UoL constitute the morphosyntactic properties of each UoL. The advantage of the UHS is that it enables us to account for homophonous UoLs in synchronic grammar (i.e., the subordinating and echo *ko*) and to show the connection between homophonous UoLs in distinct categories.
in diachronic grammar. These multifunctional properties of UoLs will be discussed in Chapter 6. First, however, I turn in Chapter 5 to an investigation of periphrastic complementizers that co-occur with the irrealis / in matrix clauses.
Chapter 5

Periphrastic irrealis complementizers

5.1 Introduction: Irrealis complementizers and the irrealis modal l

This chapter discusses an additional class of COMP UoLs which have a strong connection with a specific T element in matrix clauses. The UoLs that show bonds between C and T are l-key and l-lay. Conventionally, I call them *periphrastic irrealis complementizers*. Concisely, *l-key* is translated as ‘I/we will…’ and *l-lay* is translated as ‘I/we will…or will you…’, depending on intonation. As these UoLs selecting irrealis *l* in matrix clauses exhibit peculiar properties, they have been treated as fused functional elements. For instance, *l-key* is glossed as a promissive in Han (2006), while it is glossed as a modal ‘will’ in Zanuttini et al. (2012).\(^1\)

(197)

\begin{enumerate}
\item[a.] *nayil ka-lkey*  
\hspace{1cm} tomorrow go-PROM  
\hspace{1cm} ‘I will go tomorrow.’  
\hspace{1cm} (Han 2006: 14 (18))
\item[b.] *emmalsensayngnim-i towa cwu-lkey*  
\hspace{1cm} Mommy/teacher-NOM help give-will  
\hspace{1cm} ‘Mommy/teacher (=the speaker) will help you.’ (Zanuttini et al., 2011: 1256 (34))
\end{enumerate}

In this chapter, I argue that the promissive meaning of the clauses in (197) stems from the combination of three functional elements: irrealis *l*, complementizer *key*, and a falling

\(^1\) The orthographic variant *lkkey* instead of *lkey* is sometimes used. Although the English translation does not show that *emna* ‘mommy’ and *sensayngnim* ‘teacher’ refer to the speaker, Zanuttini et al. (2012: 1257) notes that they are co-indexed with the speaker because the clause in (197b) is interpreted as a promissive.
intonation. I investigate their compositionality, linear order, and associated projections within the framework of the USH. I also propose the syntactic analysis that derives the structure (198).

(198) **The representation of periphrastic irrealis:** *l-key-yo ‘I will (do it).’*

```
K: responding
   K: grounding
   (yo) ↓
   K: linking
   0
   K: anchoring
   key
   l
```

Assuming the linear order of functional UoLs on predicates at surface are arranged in a hierarchical representation (Baker 1985), I propose that COMP UoLs including *lay* and *key* are selected by the null UoL of *c:* DIRECT in the grounding spine and select *l* of *c:* IRREALIS in the anchoring spine. The null UoL of *c:* DIRECT is selected by a falling intonation along with optional polite *yo* of *c:* INTERACTION in the responding spine. The other linking UoL *lay* can replace *key,* although a rising intonation instead of a falling intonation may co-occur with *lay.* That means these linking UoLs carry morphosyntactic features that match and are matched by UoLs upward and downward.

In addition to the linking, grounding, and responding spines, the USH proposes a universal category *K:* anchoring to account for the formal organization of form and function in the inflection domain which varies depending on languages (Wiltschko, 2014). Based on empirical data from Blackfoot, Halkomelem, and Upper Austrian German, Wiltschko proposes that TENSE is not a universal grammatical category. Instead,
Tense is a language-specific category in some Indo-European languages including English, while PERSON and LOCATION are language-specific categories in Blackfoot and Halkomelem, respectively. These language-specific categories are associated with an “anchoring category”—a universal category associated with language-specific categories in individual languages by way of UoLs. For instance, the universal category \( K \):

*anchoring* can be associated with \( c: \) TENSE, \( c: \) PERSON \( c: \) LOCATION, or \( c: \) REALIS in an individual language’s inflection domain, because this domain typically introduces a relationship between the reported event and the ongoing discourse.

In relation to Tense, recent studies focused on properties of T and C propose that T’s properties are closely related to C’s properties (henceforth, C-T conjecture): T receives its tense and phi features from the phase head of C (Chomsky 2008, Miyagawa 2010; Richards 2007; Stowell, 1982; van Urk, 2014), as illustrated in (199).

(199) C-T conjecture

a. Tense feature

\[
\begin{align*}
\text{CP} & \quad \text{TP} \\
& \quad [u\text{Tense}] \\
& \quad [i\text{Tense}] 
\end{align*}
\]

b. phi feature

\[
\begin{align*}
\text{CP} & \quad \text{TP} \\
& \quad [u\text{PERSON}] \\
& \quad [i\text{PERSON}] 
\end{align*}
\]

If this interconnection between C and T is a universal property of language, we can expect Korean to exhibit connections between linking UoLs and anchoring UoLs. In Chapter 3, I demonstrated that Type UoLs carry features related to T-(non-finite), C-(clause type), and the specifier of T (see Table 3-6); in this chapter, I introduce further evidence supporting the C-T conjecture by demonstrating the compatibility and
incompatibility between Type UoLs and inflectional TAM (Tense-Aspect-Modal) UoLs.

As discussed in Chapters 3 and 4, Korean has numerous complementizers which appear as the head of clauses. Some COMP UoLs can take past tense *ess, while the non-finite COMP UoLs imperative *la, exhortative *ca, and promissive *ma take a null T. Similar to *la, *ca, and *ma which only appear as the heads of tenseless clauses, the COMP UoLs including *lay and *key discussed in this chapter take an irrealis *l and appear as the head of clauses expressing a future-like event.

(200) linking\textit{TYPE}\textbullet anchoring\textit{IRREALIS} conjecture

Korean complementizers exhibit classificatory splits in which a set of Type UoLs interacts with a set of irrealis modal elements. In this chapter, I explore the morphosyntactic properties of Type complementizers from four perspectives. First, I investigate the selectional properties of COMP UoLs from the perspective of their compatibility with two separate domains: \textit{c: \textsc{Type}} and \textit{c: \textsc{Realis}}. For instance, declarative *ta and interrogative *nya from \textit{c: \textsc{Type}} select the irrealis *keyss, while a different set of complementizers from \textit{c: \textsc{Type}} including *key, select the irrealis *l (or *ul in closed syllables). Irrealis *l also can be selected by the COMP UoLs such as *kes ‘that’ and *ci.
'whether’ in embedded clauses, while declarative ta and interrogative nya never select irrealis l in either main or embedded clauses.

Second, I investigate the properties of these irrealis Type complementizers from the perspective of clause-typing. I begin by examining the interpretation of the illocutionary force of these complementizers, then look at their interaction with the UoLs in the higher domain—that is, the grounding spine. The irrealis Type UoLs lay and key are shown to be asymmetric (i.e., unembeddable), while declarative ta and interrogative nya exhibit symmetric behaviours between dependent and independent clauses. For instance, the periphrastic l-lay and l-key must be selected by a null direct speech marker and followed by an optional polite yo at surface, while the combination of keyss-ta and and keyss-nya can be selected by either a null direct speech marker or an indirect speech marker (e.g., the subordinating/echo/reinforcement ko and the hearsay y).

Third, I investigate the properties of the periphrastic complementizers lay and key from the perspective of the restriction on the person features of clausal subjects. For instance, clauses with keyss-ta place no limit on the subject, allowing even an inanimate subject, while periphrastic l-key hosts only the first-person subjects.

Last, I investigate the properties of periphrastic complementizers from the perspective of the asymmetry between matrix and dependent COMP UoLs in terms of the selectional properties on TAM elements. I show that irrealis l does not have contrastive realis TAM elements in matrix clauses when it is selected by key and lay, whereas irrealis l has contrastive realis TAM elements—including present nun or past n—when it is selected by ci and kes in dependent complement clauses.
The organization of this chapter is as follows: Section 5.2 focuses on the compatibility between complementizers and modals; the periphrastic complementizers *l-key* and *l-lay* are decomposed into the irrealis modal *l* and the Type COMP UoLs *key* and *lay*. I compare COMP UoLs co-occurring with the irrealis modal *l* with COMP UoLs co-occurring with another type of modal, *keyss*. Section 5.3 illustrates the relationship between the interpretation of clause types and the form of periphrastic complementizers. I use the unembeddable nature of the complementizers *key* and *lay* to illustrate their structural properties in the context of root phenomena. Section 5.4 discusses the distribution and interpretation of periphrastic complementizers, focusing on their roles in restricting person features on the subject. Section 5.5 illustrates the distribution of the UoL *l* with the complementizers *ci* and *kes* in embedded clauses. The heads of complement clauses take the UoL *l* as an irrealis contrasting with realis elements such as present-tense *nun* and perfect/past *n*, which have distinct forms from their counterparts in matrix clauses. The bond between TAM elements and complementizers in Korean is explained in light of the C-T conjecture. Section 5.6 analyzes periphrastic complementizers in the context of the USH and considers some theoretical implications. Section 5.7 concludes the chapter.

**5.2 Decomposing periphrastic complementizers *l-key* and *l-lay***

By showing two sets of *c:* TYPE in the linking spine and *c:* REALIS in the anchoring spine in clauses expressing similar meaning, I argue that the periphrastic complementizers *l-key* and *l-lay* are decomposed into Type UoLs -*key* and -*lay* plus irrealis *l*. For instance, declarative *ta* and interrogative *nya* of *c:* TYPE select the irrealis *keyss*, while Type UoLs
-key and -lay select the irrealis l (or ul in closed syllables). Compare the clauses with keyss and l in (201) which express the speaker’s intention.²

(201) keyss-ta versus l-key

a. na-nun    nayil    ttena-keyss-ta
   1sg-TOP   tomorrow  leave-IRR-DECL
   ‘I will leave tomorrow.’

b. na-nun    nayil    ttena-l-key
   1sg-TOP   tomorrow  leave-IRR-COMP
   ‘I will leave tomorrow.’

c. nay-ka    ku    yeca-lul    manna-keyss-ta
   1sg-NOM   the   woman-ACC  meet-IRR-DECL
   ‘I will meet her.’

d. nay-ka    ku    yeca-lul    manna-l-key
   1sg-NOM   the   woman-ACC  meet-IRR-COMP
   ‘I will meet her.’

Declarative ta in (201a) and (201c) selects keyss, while key in (202b) and (202d) selects l. Similar to the English periphrastic possessive of DP being equivalent to DP’s in terms of their meaning, the periphrastics keyss-ta and l-key are semantically similar in a certain context, as illustrated in (201). The semantic similarity is further supported by their echo responses; the echo question responses to the clauses of keyss-ta and l-key are identical.

As key cannot be followed by indirect ko, the echo questions (202b) and (202d) respond to the stimulus clauses with keyss-ta (202a) and l-key (202c) the same way.

(202) echo questions

a. na-nun    nayil    ttena-keyss-ta
   1sg-TOP   tomorrow  leave-IRR-DECL
   ‘I will leave tomorrow.’

² It seems that scholars disagree on the properties of the UoL keyss as a tense, aspect, or modality marker (see Sohn 1995: 46). Following H-Sohn (1999: 360) and Koo and Lehmann (2010), I treat keyss and ul as modal UoLs.
b. *nayil ttena-keyss-ta-ko↑ (echo)
tomorrow leave-IRR-DECL-COMP-RI
‘You will leave tomorrow?’

c. na-nun nayil ttena-l-key (stimulus)
1sg-TOP tomorrow leave-IRR-COMP
‘I will leave tomorrow.’

d. nayil ttena-keyss-ta-ko↑ (echo)
tomorrow leave-IRR-DECL-POL-RI
‘You will leave tomorrow?’

e. *nayil ttena-l-key-ko↑ (echo)
tomorrow leave-IRR-DECL-POL-RI
‘You will leave tomorrow?’ (intended)

The ill-formed clause with l-key followed by indirect ko (202e) shows that keyss-ta and l-key are morphosyntactically different despite having a similar meaning. Thus, Korean complementizers differ from English complementizers in that they carry T features that can be checked by the head of T. Table 5-1 shows that key and lay subcategorize for T differently from declarative ta and the underspecified complementizer e in matrix clauses, although they all can appear as the head of declarative clauses.

Table 5-1 The compatibility of C elements with T elements

<table>
<thead>
<tr>
<th>T⁰_IRR</th>
<th>C⁰</th>
<th>ta</th>
<th>e (a)</th>
<th>key</th>
<th>lay</th>
</tr>
</thead>
</table>

The COMP UoL e shows the same compatibility with declarative ta, while lay shows the same compatibility with key.

(203) keyss-e versus l-lay

a. na-nun ne-lul ttena-keyss-e↓
1sg-TOP you-ACC leave-IRR-COMP-FI
‘I will break up with you.’ (Lit. I’ll leave you.)’
Comparing the parallel distribution of keyss and l in clauses expressing similar meaning, I justify my proposal to separate the UoL l from the periphrastic complementizers such as l-key and treating it as an independent functional morpheme.

5.2.1 Separating irrealis l from -lkey

The inflectional elements l and keyss can be broadly viewed as non-factual or non-actualized potential modals (Mithun, 1995; Noonan, 2007) or irrealis modals (Palmer, 2001), as proposed for other languages; they express events that may occur or might have occurred. The marker l, glossed IRREALIS, has sometimes been referred to as a FUTURE tense or IMPERFECT marker (An, 2014: 371), while keyss has been analyzed as a modal expressing volition or supposition depending on syntactic contexts (including clause type) (Koo & Lehmann, 2010).³ Compare the UoLs dominating keyss and l in (204), which both express a future-tense-like meaning translated as the English modal will.⁴

Even without the assistance of adverbs, the two modals—which both appear between a verb stem and a complementizer in the structure—briefly indicate that the events expressed by the predicate have not been actualized.⁵

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³ The function of keyss is defined by Martin (1992) as “definite future”, “deductive reasoning” (H. Lee 1991), “the speaker/hearer’s attitude” (H. Sohn 1999: 360), or “the closest thing Korean has to a future tense marker” (Yeon & Brown, 2011). K. Han (1991: 134) notes that l and keyss can be seen as the same functional element.

⁴ Yeon and Brown (2011) present these sentences in Korean script; the glossing and Romanization of all examples above are mine. The English translation is kept as original.

⁵ Examples of functional elements that can occur between a verb stem and a modal include the derivational causative/passive UoLs including hi and the inflectional subject honorific UoL si in predicates.
Although *keyss* and *l* in (204) are both translated as ‘will’ in English, they have different distributions. First, the UoLs *keyss* and *l* interact with different complementizers. The contrast between the grammatical clauses in (204) and the ungrammatical clauses in (205) shows that declarative *ta* is only compatible with *keyss*, while declarative *key* is only compatible with *l*. Clause type does not play a role in either case, as the examples in (205) are neither interrogative nor imperative.

Although *keyss* and *l* in (204) are both translated as ‘will’ in English, they have different distributions. First, the UoLs *keyss* and *l* interact with different complementizers. The contrast between the grammatical clauses in (204) and the ungrammatical clauses in (205) shows that declarative *ta* is only compatible with *keyss*, while declarative *key* is only compatible with *l*. Clause type does not play a role in either case, as the examples in (205) are neither interrogative nor imperative.

---

6 The form used in Han (2006) is an orthographic variant *kkey*; *kkey* reflects the word’s surface pronunciation. The form *key* is an underlying form or its citation form in the standard Korean dictionary.
While the combination of *keyss* and *ta* has never been treated as a single functional element in the literature, the combination of *l* and *key* has sometimes been treated as a single functional element. For instance, K. Han (1991: 134) considers *lkey* to be a complex sentence-terminal suffix based on three facts: i) it does not behave like the common sentence-terminal suffixes (such as the Type UoLs we discussed in Chapter 3); ii) the combination of *l* and *key* is peculiar; and iii) nothing can intervene between the two elements. N. Han (2006) also treats *lkey* as a modal-like *promissive* element, while Yeon and Brown (2011: 208), discussing *lkey* in their chapter ‘Tense and Aspect,’ note that *lkey* is an intimate speech-style sentence ending. According to Yeon and Brown, *lkey* as “used when the speaker is promising or volunteering to perform an action in the immediate future”; when “the action tends to be within the direct control of the speaker and is usually of relevance or benefit to the hearer”; and when “[expressing] spontaneously formed intentions.”

In addition to the three factors considered by K. Han (1991:134), a primary reason for treating *lkey* as a single morpheme could be the fact that *l* shows no contrast in the TAM paradigm in matrix clauses. That is, whereas *keyss-ta* (206a) contrasts with the present *n-ta* (206b) and the past *ess-ta* (206c), *-key* does not.

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7 The UoL *key* is homophonous with the familiar-speech-style imperative *key* (see Table 2.4 in Chapter 2) and the causative/purpose marker *key* (see Song, 2015), which I do not discuss here. The matrix complementizer *key* (or *kkey* when it surfaces after *l*) has been referred as to a *sentence-ender* (Choi, 1991: 99).

8 K. Han (1991) does not explain how *l-key* is peculiar. I conjecture that its specific interpretation and its restriction on a first-person subject can be considered as its idiosyncratic properties.

9 Yeon and Brown (2011) consider the suffix *keyss* and periphrastic constructions (including *ul-ke*, *ul-key*, and *ulyeko hata ‘be going to’*) as markers corresponding to future tense in Korean.
(206)

a. kot  kicha-ka  chwulpalha-keyss-ta
    soon  train-NOM  depart-IRR-DECL
    ‘The train will depart soon.’
    (Yeon & Brown 2011: 204)

b. yeki-eyse  kicha-ka  chwulpalha-n-ta
    here-LOC  train-NOM  depart-PRES-DECL
    ‘The train is departing here.’

c. yeki-eyse  kicha-ka  chwulpalhay-ss-ta
    here-LOC  train-NOM  depart-PST-DECL
    ‘The train departed here.’

The lack of TAM contrast in clauses marked by l-key, *n-key (present tense) or *ss-key (past tense) in the inflectional paradigm, is illustrated in (207).

(207)

a. nay-ka  changmwun-ul  yel-e  cwu-l-key
    1sg-NOM  window-ACC  open-COMP  give-IRR-COMP
    ‘I will open the window for you.’
    (Yeon & Brown 2011: 208)

b. *nay-ka  changmwun-ul  yel-e  cwu-n-key
    1sg-NOM  window-ACC  open-COMP  give-PRES-COMP
    ‘I am opening the window for you.’ (intended)

c. *nay-ka  changmwun-ul  yel-e  cwu-ess-key
    1sg-NOM  window-ACC  open-COMP  give-PST-COMP
    ‘I opened the window for you.’ (intended)

Contrary to K. Han (1991:134) and N. Han (2006), I decompose the periphrastics into irrealis l and COMP UoLS key and lay based on two sources of evidence: i) the UoL l preceding COMP UoLS key and lay with a relatively consistent meaning ‘will; shall’ cannot be a morphological coincidence; and ii) the UoL l has contrastive T elements in noun complements or relative clauses. The UoL l contrasts with perfect/realis n and imperfect/realis nun in embedded or dependent clauses (i.e., noun complement clauses).
Consider the paradigm-like distribution of \( l \) in the clauses including \( l\text{-}key \) (208a), \( l\text{-}lay \) (208b), \( l\text{-}kka \) ‘shall I…’ or ‘shall we …’ (208c), and \( l\text{-}kel \) ‘I should have…’ (208d). All these clauses express an action that has not happened; as \( kka \) in (208c) marks the clause as an interrogative and it contrasts with declarative \( key \) and \( kel \), \( l \) must be a modal or a UoL associated with \( T \). The clauses in (208) are minimal pairs in which only COMP UoLs alternate.

(208)

\[
\begin{align*}
\text{a.} & \quad nay-ka & \text{changmwun-ul} & \text{yel-e} & \text{cwu-}l\text{-}key-\downarrow \\
& \text{1sg-NOM} & \text{window-ACC} & \text{open-COMP} & \text{give-IRR-COMP-FI} \\
& \text{‘I’ll open the window for you.’} & & (\text{Yeon} \& \text{Brown} 2011: 208) \\
\text{b.} & \quad ne-ka & \text{changmwun-ul} & \text{yel-e} & \text{cwu-}l\text{-}lay-\uparrow \\
& \text{you-NOM} & \text{window-ACC} & \text{open-COMP} & \text{give-IRR-COMP-RI} \\
& \text{‘Will you open the window for me?’} \\
\text{c.} & \quad nay-ka & \text{changmwun-ul} & \text{yel-e} & \text{cwu-}l\text{-}kka-\uparrow \\
& \text{1sg-NOM} & \text{window-ACC} & \text{open-COMP} & \text{give-IRR-COMP-RI} \\
& \text{‘Shall I open the window for you?’} \\
\text{d.} & \quad nay-ka & \text{changmwun-ul} & \text{yel-e} & \text{cwu-}l\text{-}kel-\downarrow \\
& \text{1sg-NOM} & \text{window-ACC} & \text{open-COMP} & \text{give-IRR-COMP-FI} \\
& \text{‘I should have just opened the window for pro.’}
\end{align*}
\]

In addition to the first piece of evidence, the morphosyntactic properties of the UoL \( l \) (\( ul \) after closed syllables) in noun complement clauses, as in (209a), indicate that \( l \) is an individual \( T \) element. The irrealis \( l \) contrasts with \( T \) elements including perfect/realis \( n \) (209b), imperfect/present/realis \( nun \) (209c), and periphrastic present progressive -\( ko issnun \) (209d); each example is adapted from S. Sohn (1995: 4).\(^{10}\)

(209)

\(^{10}\)S. Sohn (1995: 24) classifies the UoL \( l \) as a predictive modal rather than a future-tense marker. The glosses in (209) are provided by the current author.
Based on the semantic consistency between dependent and independent clauses with $l$—the non-factual or non-actualized potential events—it is reasonable to treat $l$ as a separate functional marker from the periphrastic $l$-$key$ and $l$-$lay$. If they were fused single elements, they would have to be COMP UoLs based on the discussion in Chapter 3, which states that all clauses must have a morphologically realized complementizer (Clause Complementation Parameter).

### 5.3 The Force and embeddability of periphrastic complementizers

The interpretation of each periphrastic complementizer in terms of clause type is distinctive. In this section, I consider the distribution and interpretation of periphrastic complementizers in terms of clause type from two different perspectives: the interpretation of illocutionary force and main clause phenomena (Aelbrecht et al., 2012). The embeddable and unembeddable properties of complementizers associated with each phonetic shape of COMP UoLs discussed in Chapters 3 and 4, are also observed in clauses with periphrastic complementizers. In line with Miyagawa’s (2012, 2013)
discussion of main-clause phenomena in Japanese, some clauses in Korean are simply unembeddable or cannot be selected by matrix predicates.

### 5.3.1 The Force of periphrastic complementizers

Recall that Korean complementizers can be divided into two sets of Type UoLs: a set of UoLs that mark clause type by interacting with intonation or other functional elements, and a set that mark clause type autonomously. This characteristic applies to the periphrastic complementizers as well. As we saw in the previous section, the clause types expressed by periphrastic complementizers are diverse: without interacting with intonation, \textit{l-key} marks declaratives, while \textit{l-kka} marks interrogatives or dubitatives. Unlike \textit{l-key} and \textit{l-kka}, \textit{l-lay} can interact with intonation to mark both declaratives and interrogatives. Examples of clause type and the interpretation of force are shown in (210).

\begin{equation}
\begin{align*}
\text{(210)} & \\
\text{a. } \text{nay-ka} & \quad \text{nolayha-l-key} & \quad \text{(assertion)} \\
1\text{sg-NOM} & \quad \text{sing-IRR-COMP} \\
\text{‘I will sing.’} & \quad \text{(voluntarily)} \\
\text{b. } \text{nay-ka} & \quad \text{nolayha-l-key} & \quad \text{*} \\
1\text{sg-NOM} & \quad \text{sing-IRR-COMP-RI} \\
\text{‘Will/Shall I sing?’} & \quad \text{(intended)} \\
\text{c. } \text{nay-ka} & \quad \text{nolayha-l-kka} & \quad \text{(self-question)} \\
1\text{sg-NOM} & \quad \text{sing-IRR-INT} \\
\text{‘Shall I sing?’} & \quad \text{(asking permission)} \\
\text{d. } \text{nay-ka} & \quad \text{nolayha-l-lay} & \quad \text{(assertion)} \\
1\text{sg-NOM} & \quad \text{sing-IRR-COMP-FI} \\
\text{‘I will sing.’} & \quad \text{(determined)}
\end{align*}
\end{equation}

\[11\text{ I assume that each matrix clause can fall into one of the universal clause-type categories in the grammar separate from the interpretation of illocutionary force: declarative, interrogative, and imperative.}\]
Declarative *l-key* (210a) and declarative *l-lay* (210d) display subtle connotation differences—voluntary (*l-key*) versus strong intention or determination and (*l-lay*)—and the detailed connotation difference between the alternations is not the focus of this dissertation.\(^{12}\) K. Han (1991: 136) shows that *l-key* and *l-lay* are interchangeable in the context of (211). The example (211a) is a (weak) promise, while (211b) is a strong declaration that it will be done.\(^{13}\) Parsing, glossing, and translation are by the current author.

(211)

a. *hanpen te o-l-key*
   once more come-IRR-COMP
   ‘I’ll come back again.’  \(\) (K. Han, 1991: 136)

b. *hanben te o-l-lay*
   once more come-IRR-COMP
   ‘I’ll come back again.’  \(\) (K. Han, 1991: 136)

The existence of a clause-type restriction on the complementizers is further confirmed by evidence that clauses with *l-key* are incompatible with *wh*-words, whereas clauses with *l-kka* and *l-lay* with a rising intonation are compatible with *wh*-words, as in (212).

(212)

a. *nwukwu-ka nolayha-l-key*-↑
   who-NOM sing-IRR-COMP-RI
   ‘Who will sing?’ \(\) (intended)

---

\(^{12}\) The difference between their connotations resembles the difference between the English passive sentences *He got fired* versus *He was fired*.

\(^{13}\) The periphrastic modal V-*l-swu-to iss*- expresses the weakest version of promissive like ‘I could come back again.’
b. *nya-ka nwukwu-lul manna-l-key↑
   1sg-NOM who-ACC meet-IRR-COMP-RI
   ‘Who will I meet?’

c. nya-ka nwukwu-lul manna-l-kka
   1sg-NOM who-ACC meet-IRR-INT
   ‘Who shall I meet?’

d. nwukwu-lul manna-l-lay↑
   who-NOM meet-IRR-COMP-RI
   ‘Who will you meet?’

Therefore, although *key and *lay occupy the same structural position and can both be declarative heads, the morphosyntactic properties of each are distinct. *key appears only in assertions, while *lay, with alternating intonation, can appear as the head of either an assertion or a question. Like the underspecified matrix Type UoLs *e and *ci discussed in Chapter 3, *lay-clauses with a falling intonation mark declaratives, while with a rising intonation they mark interrogatives. Declaratives can be expressed by l-key, l-lay, keyss-ta, keyss-e, and keyss-ci; interrogatives can be expressed by l-kka, l-lay, keyss-nya, keyss-e, and keyss-ci in clauses expressing events that have not occurred. If we analyze *key, *kka, *lay, *ta, *nya, *e, and *ci as Type UoLs associated with *k: linking, the distribution of these UoLs shows that functional elements appearing in the same structural position, the linking spine, do not necessarily have identical morphosyntactic properties.

The clause-type or force interpretation of periphrastic complementizers is summarized in Table 5-2.

Table 5-2 Clause types and periphrastic UoLs

<table>
<thead>
<tr>
<th>T-C UoLs</th>
<th>Declarative</th>
<th>Interrogative</th>
<th>Imperative</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-key</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>l-kka</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>l-lay</td>
<td>✓ (with ↓)</td>
<td>✓ (with ↑)</td>
<td>x</td>
</tr>
</tbody>
</table>
COMP UoLs select *keyss* instead of irrealis *l*, as shown in Table 5-3.

<table>
<thead>
<tr>
<th>T-C UoLs</th>
<th>Declarative</th>
<th>Interrogative</th>
<th>Imperative</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>keyss-ta</em></td>
<td>✓</td>
<td>✘</td>
<td>✘</td>
</tr>
<tr>
<td><em>keyss-nya</em></td>
<td>✘</td>
<td>✓</td>
<td>✘</td>
</tr>
<tr>
<td><em>keyss-e</em></td>
<td>✓ (with ↓)</td>
<td>✓ (with ↑)</td>
<td>✘</td>
</tr>
<tr>
<td><em>keyss-ci</em></td>
<td>✓ (with ↓)</td>
<td>✓ (with ↑)</td>
<td>✘</td>
</tr>
</tbody>
</table>

Each Type UoL shows distinct properties in terms of selecting a TAM element and expressing a clause-type.

As the interpretation of the clause type of *l-lay* clauses alternates between assertion and question depending on intonation, it is predicted that *l-lay* must only occur in root clauses that are followed by polite *yo* and not indirect *ko*. This prediction turns out to be true, as discussed in the next section.

**5.3.2 Unembeddable periphrastic complementizers**

Similar to the distribution of underspecified UoLs *e* and *ci*, the periphrastic UoLs *l-key*, *l-lay*, and *l-kka* cannot be embedded by indirect *ko*. This distributional property of clauses with an unembeddable COMP UoL can be identified as a root phenomenon. Root phenomena (Emonds, 1970; Miyagawa, 2017) are defined as syntactic constructions which occur only in independent clauses or independent-clause-like constructions. Miyagawa (2017: 21) identifies three types of matrix clause or matrix-clause-like contexts, based on the Japanese politeness marking *-mas*-: i) *-mas*- in a simple matrix CP (e.g. *Hanako will come*); ii) *-mas*- in a CP subordinated by a matrix CP (e.g., *Because Hanako will come, please be at home.*); and iii) *-mas*- in a reported CP in direct discourse (e.g., *Taro said*...
that Hanako will come. Building on Miyagawa (2017), three contexts of Korean root clauses with periphrastic UoLs can also be identified: i) -l-key and l-lay in a simple matrix CP (e.g. I will come); ii) l-kka- and l-lay in polar alternative questions: a positive CP subordinated by a negative CP (e.g., Will you come or not; shall I do or not); and iii) -l-key in a reported CP in direct discourse with the direct quotation markers lako or hako (e.g., Mina said “I will come.”).

In this subsection, I discuss the periphrastic complementizers from the perspective of main-clause phenomena by investigating their interaction with the head of the grounding spine, as also discussed in Chapter 4. That is, I compare the behaviour of periphrastic complementizers in direct and indirect discourse. Although the UoLs l-key and keyss-ta with a first-person subject both denote the meaning ‘I will’ in matrix declarative clauses, they show distinct distributions in terms of their ability to appear in embedded clauses. As shown in (213), l-key cannot be embedded by ko directly (213a) and must be embedded via the direct quotative lako (213b) in quotation. As K. Han (1991: 134) notes, l-key must change into keyss-ta in embedded clauses, as in (213c).

(213)

a. *nay-ka changmwun-ul yel-e cwu-l-key-ko hay-ss-ta
   1sg-NOM window-ACC open-Vo give-IRR-COMP-COMP do-PST-DECL
   ‘I said I will open the window.’ (intended)

b. “changmwun-ul yel-e cwu-l-key.” lako Mina-ka malhay-ss-ta
   window-ACC open-Vo give-IRR-COMP QUOT Mina-NOM say-PST-DECL
   ‘Mina said, “I will open the window.”’

c. Mina-ka changmwun-ul yel-e cwu-keyss-ta-ko hay-ss-ta
   Mina-NOM window-ACC open-Vo give-IRR-DECL-COMP do-PST-DECL
   ‘Mina said she will open the window.’
Thus, clauses containing l-key are pure root clauses: they cannot be embedded by the subordinating ko, but only by employing the direct quotatives hako or lako and are only selected by communicative matrix predicates in parenthetical clauses. Following the discussion in Chapter 4, I argue that the difference between key and ta lies in the head feature—that is, whether it is selected by indirect ko or the null direct marker, as in (214) and (215). Polite yo follows key (214a) or indirect ko (215a) at surface, but ko cannot follow key (214b).

(214)

a. changmwun-ul yel-e cwu-l-key-∅-yo
   window-ACC open-COMP give-IRR-COMP-DIRECT-POL
   ‘I would open the window for you.’

b. *changmwun-ul yel-e cwu-l-key-ko-
   window-ACC open-COMP give-IRR-COMP-COMP.REITER-FI
   ‘I said I will open the window.’

(215)

a. changmwun-ul yel-e cwu-keyss-ta-ko-(yo)-↓
   window-ACC open-COMP give-IRR-DECL-COMP.REITER-POL-FI
   ‘I said I will (would) open the window.’

b. changmwun-ul yel-e cwu-keyss-ta-(*yo)
   window-ACC open-COMP give-IRR-DECL-POL
   ‘I will open the window.’ (intended)

c. changmwun-ul yel-e cwu-keyss-supni-ta
   window-ACC open-COMP give-IRR-AD-DECL
   ‘I would open the window.’

The incompatibility of ta and polite yo in (215b) could suggest that the morphosyntactic properties of declarative ta are incompatible with the morphosyntactic function of polite yo. Is declarative ta semantically or pragmatically incompatible with the politeness marker? It appears not. The politeness marking is encoded differently with declarative ta.

The polite marker supni which appears between keyss and ta in the grammatical clause
(215c) shows that the ungrammaticality of (215b) is morphosyntactic and not semantic. It seems therefore to suggest that the interface between syntax and pragmatics is manifested by two alternative positions; the addressee polite marker *supni* occurs between TAM and Type, while *yo* occurs between Type and Indirect. In this dissertation, I will not further investigate these alternating syntactic positions hosting the addressee honorifics *supni* and *yo*. In the next subsection, I will discuss the concord between the subject, speech participants, and periphrastic complementizers.

5.4 Person in concord with the periphrastic complementizers

In the previous section, we observed that the connection between C-T is somewhat loose in clauses with *keyss-ta*, while it is strong in clauses with periphrastic complementizers including *l-key*. The contrasting properties of *keyss-ta* and *l-key* can be observed again in the constraint on the specifier of the anchoring spine. In this section, I shift focus to the properties of the subject under these complementizers. Specifically, I investigate the restriction on Person features on the subject in clauses with a periphrastic complementizer. Unlike *keyss-ta* clauses, in which even inanimate R-expressions can be the subject of clauses, the periphrastic *l-key* and *l-lay* restrict person features on the subject. For example, the clauses marked by *l-key* and *l-lay* disallow a third-person subject. Moreover, *l-key* and *l-lay* with a falling intonation restrict the subject to being first-person; *l-lay* with a rising intonation restricts the subject to being second-person. This restriction is shown in (216) below.
Periphrastic irrealis complementizers and restricted Person on the subject

(a. \textit{l-key}: ‘I will vP’)

\begin{align*}
\text{GroundP} & \\
\text{LinkingP} & \emptyset \\
\text{AnchoringP} & \\
\text{DP} & \text{key} \\
1^{\text{st}}, 2^{\text{nd}}, 3^{\text{rd}}
\end{align*}

(b. \textit{l-lay}↓: ‘I will vP’)

\begin{align*}
\text{GroundP} & \\
\text{LinkingP} & \emptyset ↓ \\
\text{AnchoringP} & \\
\text{DP} & \text{lay} \\
1^{\text{st}}, 2^{\text{nd}}, 3^{\text{rd}}
\end{align*}

c. \textit{l-lay}↑: ‘Will you vP’

\begin{align*}
\text{GroundP} & \\
\text{LinkingP} & \emptyset ↑ \\
\text{AnchoringP} & \\
\text{DP} & \text{lay} \\
2^{\text{nd}}, 1^{\text{st}}, 3^{\text{rd}}
\end{align*}

The person restriction under these periphrastic UoLs is discussed further in the following subsection.

5.4.1 The person restriction on complementizers

The periphrastic complementizers \textit{l-key} and \textit{l-lay} restrict the subject argument to being human. This differs from the non-periphrastic complementizers including \textit{keyss-ta} which have no such restriction. As shown in example (217a), neither the inanimate NP \textit{kicha} ‘train’ (a) nor the animate NP \textit{swutalk} ‘rooster’ (b) can serve as the subject of a clause containing the periphrastic complementizer \textit{l-key}. Conversely, the non-periphrastic complementizer \textit{keyss-ta} allows both types of subject, as illustrated in (c) and (d).
The well and ill-formed minimal pairs in (217) show that \textit{l-key}, unlike \textit{keyss-ta}, disallows non-human arguments as the subject. The UoLs \textit{l-key} require the subject to be co-indexed with the speaker. In addition to non-human arguments, the interpretation of null subjects under \textit{l-key} and \textit{l-lay} shows that they disallow a third-person subject regardless of alternating intonation, as in (218). A third-person subject interpretation is disallowed in all clauses.

(218)
\begin{itemize}
  \item[a.] \textit{pro} \textit{appa-hanter} \textit{cenhwahe} \textit{l-key} \\
  \underline{dad} \text{DAT} \text{phone-IRR-COMP} \hspace{3cm} \text{I}/*you/*he will phone dad.'
  \item[b.] \textit{pro} \textit{appa-hanter} \textit{cenhwahe} \textit{l-lay} \\
  \underline{dad} \text{DAT} \text{phone-IRR-COMP-RI} \hspace{3cm} \text{I}/*you/*he will phone dad.'
  \item[c.] \textit{pro} \textit{appa-hanter} \textit{cenhwahe} \textit{l-lay} \\
  \underline{dad} \text{DAT} \text{phone-IRR-COMP-RI} \hspace{3cm} \text{Will you/*I/*he phone dad?}
\end{itemize}
While *l-key* (218a) and *l-lay* with a falling intonation (218b) only allow a first-person subject interpretation, referring to the speaker, *l-lay* with a rising intonation (218c) only allows a second-person subject interpretation, referring to the addressee.

The restricted interpretation of null subjects under *l-key* and *l-lay* is confirmed by the observation that only an overt pronoun subject with a specific person feature is allowed under the head of *l-key* and *l-lay*. As illustrated in (219a) and (219b), the first-person singular pronoun *nay* ‘I’ and plural pronoun *wuli* ‘we’ are the only grammatical subjects in clauses with *l-key* and *l-lay* with a falling intonation; the second-person singular pronoun *ne* ‘you’ and the third-person pronoun *ku* ‘he’ are incompatible with them (219b).

(219)

a. *nay/wuli-ka appa-hanthey cenhwaha-l-key/-lay-↓*  
   I/we-NOM dad-DAT phone-IRR-COMP-FI  
   ‘I/we will phone dad.’

b. *ne/*ku-ka appa-hanthey cenhwaha-l-key/-lay-↓*  
   you/he-NOM dad-DAT phone-IRR-COMP-FI  
   ‘You/he will phone dad.’ (intended)

c. *ne/nehuy-/*ku/*nay-ka appa-hanthey cenhwaha-l-lay-↑*  
   you/you.pl/he/I-NOM dad-DAT phone-IRR-COMP-RI  
   ‘Will you phone dad /*Will he phone dad/*/Will I phone dad?’ (intended)

The second-person singular pronoun *ne* ‘you’ and plural pronoun *nehuy* ‘you guys’ are the only grammatical subjects of *l-lay* clauses with a rising intonation, as in (219c).

Neither *l-key* nor *l-lay* allows a third-person pronoun subject. This differs from the non-periphrastic *keyss-ta* and *keyss-nya* which do not restrict the person feature on the subject without considering its alternating meaning between volition and supposition.
In addition to the interpretation of null subjects and the person restriction on overt pronouns, the interpretation of R-expressions under $l$-$key$ and $l$-$lay$ shows that the specifier of TP is constrained by the heads, $l$-$key$ and $l$-$lay$.

All R-expressions under $l$-$key$ and $l$-$lay$ must be interpreted as the speaker or the addressee and cannot be a non-speech participant. The DP sensayng-nim ‘Mr. Teacher’ in (221a) and halmeni ‘granny’ in (221b) are R-expressions, so they are supposed to be a third person. However, these two DPs must be interpreted as a first person/the speaker. Usually kinship terms and titles in Korean can function as the speaker, the addressee, or the subject of imposter constructions. Interestingly, however, even the common noun sensayng ‘teacher’ with the honorific form nim (which attaches to titles) must be interpreted as a first person, the speaker, in $l$-$key$ clauses.
This strong restriction put in place by these periphrastic complementizers yields imposter-like constructions (cf. Collins & Postal 2012). As the R-expressions sensayng-nim ‘Mr. Teacher’ (221a) and halmeni ‘Granny’ (221b) lose their free interpretation and must be interpreted as first-person and co-indexed with the speaker, R-expressions lose their free interpretation in imposter constructions.

Based on these three pieces of evidence, I propose that when l is selected by key and lay, accompanied by a falling intonation, pro with [Speaker] is licensed (222a); when l is selected by lay, accompanied by a rising intonation, pro with [Addressee] is licensed (222b).

Based on the structure presented in (222a), R-expressions in Korean seem to enter derivation without a person feature and be co-indexed with pro with [Speaker]; R-expressions specified as third-person arguments (e.g., proper nouns) are disallowed under l-key and l-lay. Although l-lay with a rising intonation forms an interrogative or expresses question force (222b), it only licenses a second-person subject or the addressee as the subject. It cannot appear as the head of an interrogative when the subject has a first-person or third-person feature, as illustrated in (222b) above. If the subject needs to be a first-person or third-person subject in interrogatives expressing future-like events, the periphrastic complementizer l-kka must serve as the head in such cases, as in (223).
A null subject in a clause with *l-kka* must be interpreted as first person (singular or plural, depending on the discourse context). A third-person can be the subject of *l-kka* clauses although its interpretation is more like a self-questioning or supposition ‘I’m wondering if Mina…,’ or seeking the addresse’s conjecture, ‘do you think if Mina…’ or ‘Will Mina …’, as in (223c). The interrogative complementizer *kka* has been analyzed as a self-question marker (see more discussion in Jang, 1999; Kim, 2002) and has different question force from the response-seeking interrogative *ni* (or *nya*). Unlike *l-lay* interrogatives, which are incompatible with an inanimate subject (224a, b), the interrogative *l-kka* licenses inanimate subjects, as in (224c, d).
The examples in (224c, d) are more like the verbalized thoughts of the speaker, not requests for a response, so it may be that $l$-$kka$ is associated with the attitude or point of view of the speaker in the higher domain (e.g., GroundP, SAP), operating similarly to the English adverb ‘frankly.’ A clause with $l$-$kka$ does not generally request the addressee’s response, but it may if it is followed by polite yo of c: INTERACTION in the responding domain.

(225)

a. nayil chwu-ul-kka-yo
   Tomorrow cold-IRR-INT-POL
   ‘Will it be cold tomorrow?’

b. cikum ka-myen nemwu nuc-ul-kka-yo
   now go-if too be.late-IRR-INT-POL
   ‘Will it be too late if I go now?’

This alternating interpretation of $l$-$kka$ clauses with and without yo is similar to the contrast between the imperative interpretation of an e-clause and the plausible exhortative interpretation of an e-clause with polite yo that I have discussed in Chapter 3. The polite yo seems to have a function of inviting the addressee into the conversation.

It is argued that properties of overtly realized UoLs in the right periphery and the interpretation of null subjects are both derived from syntax. Table 5-4 summarizes the forms and meanings of the periphrastic complementizers discussed so far. A clause marked by $l$-$lay$ alternates between declarative with a falling intonation and interrogative with a rising intonation. The arrows indicating these contrasting interpretations are included.
Table 5-4 The interpretation of periphrastic COMP UoLs

<table>
<thead>
<tr>
<th>Heads UoLs</th>
<th>Interpreted as …</th>
<th>Subject</th>
<th>Whose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T</td>
<td>C</td>
<td>PF</td>
</tr>
<tr>
<td>-l-</td>
<td>key</td>
<td>↓</td>
<td>desire, intention, volition</td>
</tr>
<tr>
<td>-l-</td>
<td>lay</td>
<td>↓</td>
<td>desire, intention, volition</td>
</tr>
<tr>
<td>-l-</td>
<td>lay</td>
<td>↑</td>
<td>desire, intention, volition</td>
</tr>
<tr>
<td>-l-</td>
<td>kka</td>
<td>↑</td>
<td>suggestion, speculation</td>
</tr>
</tbody>
</table>

The periphrastic irrealis COMP UoLs l-key and l-lay with a falling intonation express the desire, intention, and volition of the subject who is co-indexed with the speaker as well as marking the clause as declarative; l-lay with a rising intonation expresses the desire, intention, and volition of the subject who is co-indexed with the addressee and marks the clause as interrogative; l-kka marks a clause as interrogative without a question force requiring the addressee’s response. With a first-person subject, l-kka clauses express a suggestion of the speaker. With a third-person subject, l-kka clauses express a speculation of the speaker.

Table 5-5 The interpretation of Type COMP UoLs (cf. Zanuttini et al., 2012)

<table>
<thead>
<tr>
<th>Heads UoLs</th>
<th>Interpreted as …</th>
<th>Subject</th>
<th>Whose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T</td>
<td>C</td>
<td>PF</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ma</td>
<td>↓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>la</td>
<td>↓</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ca</td>
<td>↓</td>
</tr>
</tbody>
</table>

The periphrastic l-key, l-lay, and l-kka clauses discussed in this chapter are somewhat parallel to jussive clauses discussed in Zanuttini et al. (2012) in terms of a ban of a third-person subject and person features on the subject (see Table 5-5): first-person (l-key, l-lay with a falling intonation, promissive ma), second-person (l-lay with a rising
intonation, imperative *la*), and first-person inclusive (*l-kka* and exhortative *ca*). They differ in T elements. Periphrastics including irrealis modal *l* are tensed, while jussives are tenseless.

So far, I have examined the distribution of COMP UoLs *-key*, *-lay*, and *-kka* in matrix clauses. They share the properties of: i) co-occurring with irrealis *l*; ii) restricting realis elements (a ban of past-tense *ess*); and iii) disallowing a third-person subject. In the next section, I investigate COMP UoLs that select irrealis *l* in embedded clauses: *kes* and *ci*. As the heads of complement clauses, *kes* and *ci* select not only the irrealis *l* but also a set of TAM elements, including the imperfect *nun*, perfect *n*, and retrospective *ten*. Irrealis *l* in embedded clauses constrasts with the present *nun* or the past *n* under *kes*, while it contrasts with the imperfect *nun* or the perfect *ess-nun* under *ci*. Thus, a different set of T elements is selected again by a different set of C elements. The distribution of complementizers *ci* and *kes* in embedded clauses is the topic of the next section.

5.5 COMP UoLs *kes* and *ci* in dependent clauses

5.5.1 Two kinds of dependent CPs

Korean complementizers exhibit systematic splits in terms of which UoLs associate with the heads of dependent and independent clauses. In typological studies on clause types, the terms *balanced* and *deranked* are used to describe interactions of complementizers with dependent clauses (Boye et al. 2015; Stassen, 1985; Van Lier 2009). The balanced dependent CP *Paul will move to Finland* in (226a) is morphosyntactically identical to the independent declarative clause *Paul will move to Finland*, while the deranked dependent CP *Paul’s moving to Finland* in (226b) cannot stand alone as an independent clause but can appear as the specifier of TP, as in *Paul’s moving to Finland is shocking*. 
(226)
  a. John regrets [that [Paul will move to Finland]]. (balanced dependent CP)
  b. John regrets [Paul’s moving to Finland]. (deranked dependent CP)  
     (Van Lier, 2009: 3)

Both Paul will move to Finland and Paul’s moving to Finland is shocking are embedded clauses in (226); these terms are useful to distinguish two different types of embedded clauses. For instance, the independent clause carrying declarative ta in (227) can be subordinated by direct COMP UoLs (e.g., ∅, lako, and hako) in quotations.14

(227)
  a. phol-i tholontho-lo isaka-n-ta
     Paul-NOM Toronto-to move out-PRES-DECL
     ‘Paul will move to Toronto.’
  b. phol-i tholontho-lo isaka-n-ta hakolako con-i malhay-ess-ta
     Paul-NOM Toronto-to move out-PRES-DECL QUOT John-NOM say-PST-DECL
     ‘John said, “Paul will move to Toronto.”’

As discussed in Chapter 4, a clause with declarative ta can be embedded by indirect ko, as in (228).

(228)
  a. [phol-i tholontho-lo isaka-n-ta]-ko sewunhay hay-ss-ta
     Paul-NOM Toronto-to move-PRES-DECL-COMP regret.COMP do-PST-DECL
     ‘He regrets that Paul will move to Toronto.’
     ‘Paul regrets that he will move to Toronto.’
  b. [phol-i tholontho-lo isaka-n-ta]-ko hay-ss-ta
     Paul-NOM Toronto-to move-PRES-DECL-COMP do-PST-DECL
     ‘He said that Paul would move to Toronto.’
     ‘Paul said that he would move to Toronto.’

14 See King (1994) for the historical development of reported speech in Korean.
I will conventionally refer to the instances of *ta*-declarative clauses marked by indirect *ko* in (228) as *balanced* dependent clauses because the clauses in parentheses are identical to the independent clauses in (227a). The verbs including *sewunha-* ‘regret’ and (*mal*)*ha-* ‘say’ typically take *balanced* dependent clauses as their complements. However, some verbs cannot take *balanced* dependent clauses. By comparing (229a) and (229b), we know that the verb *al-* ‘know’ takes the deranked CP (229a) headed by *kes*, but it cannot take the balanced dependent CP headed by *ta*, as in (229b); the verb *sayngkakha-* ‘think’ can (229c).

(229)

(a. [CP *Mina-nun* [CP *nay-ka* *ku ton-ul* *ta ssu-n-kes*-ul *anta*

Mina-TOP 1sg-NOM the money-ACC all spend-PST-DECL-ACC know.DECL

‘Mina know that I spent all the money.’

b.*[CP *Mina-nun* [CP *nay-ka* *ku ton-ul* *ta sse-ss-ta*-ko *alassta*

Mina-TOP 1sg-NOM the money-ACC all spend-PST-DECL]-COMP knew.DECL

‘Mina knew that I spent all the money.’ (intended)

c. [CP *Mina-nun* [CP *nay-ka* *ku ton-ul* *ta ssess-ta*-ko *sayngkakhanta*

Mina-TOP 1sg-NOM the money-ACC all spent-DECL]-COMP think.DECL

‘Mina thinks that I spent all the money.’

The clause with *kes* (229a) cannot stand alone as an independent clause, unlike the balanced CP in parentheses (229b). Conventionally, I will refer to clauses marked by *kes* and *ci* as *deranked* dependent clauses. The clause in (229a) acting like an English gerund is marked by accusative *ul* and cannot be marked by indirect *ko*.

The same mechanism applies to the UoL *ci* in *deranked* dependent clauses. The dependency of the English counterpart of a clause with *ci* is expressed by the word order CSV (230a) or CSVO (230b). The dependent CPs headed by *ci, kel* (*kes* +ACC), and
cwul (ci + lul_{ACC}) in (230) are ungrammatical without the matrix verbs including al-‘know’ (230a), mwut-‘ask’ (230b), and molu-‘not.know’ (230c-e).

(230)
a. pro Mina-ka eti-ey iss-nun-ci *(al-a)-↓
   Mina-NOM where-LOC exist-PRES COMP know-COMP-FI
   ‘I know where Mina is.’

b. pro Mina-ka cip-ey iss-nun-ci *(mwule-po-a)-↓
   Mina-NOM house-LOC exist-PRES COMP ask-see-COMP-FI
   ‘Ask if Mina is at home.’

c. pro Mina-ka cip-ey iss-nun-ci *(molla-ss-e)-↓
   Mina-NOM house-LOC exist-PRES COMP not.knew-COMP-FI
   ‘I didn’t know that Mina was at home.’

d. pro Mina-ka phathi-ey o-n-kes-ul[kel] *(mollass-e)-↓
   Mina-NOM party-LOC come-PST-COMP-ACC not.knew-COMP-FI
   ‘I didn’t know that Mina came to the party.’

e. pro Mina-ka phathi-ey o-l-ci-lul [cwul] *(mollass-e)-↓
   Mina-NOM party-LOC come-IRR-COMP-ACC not.knew-COMP-FI
   ‘I didn’t know that Mina was coming to the party.’

In the true sense of the term, the deranked dependent clauses with kes and ci in (230) are authentic ‘dependent’ clauses lacking illocutionary force or speech acts (cf. Ceong, 2012; Ceong & Saxon, 2013). In the following subsections, the selectional properties between the heads of deranked dependent CPs and TAM elements are discussed.

5.5.2 The head of dependent CPs and T elements

Periphrastic irrealis COMP UoLs l-key and l-lay always mark independent clauses, while T-C UoLs keyss-ta and keyss-nya can mark both root and dependent clauses. In this section, I investigate another set of T-C UoLs l-kes and l-ci. On the one hand, the UoLs kes and ci are similar to key, lay, and kka, selecting irrealis l when a proposition expresses a prospective or future event. On the other hand, kes and ci are different from key, lay,
and *kka*, selecting a set of TAM UoLs contrasting with each other in terms of realis. When *l* is selected by *kes* and *ci*, it contrasts with a full set of TAM elements. The contrastive behaviors of *kes* and *ci* with *l-key* and *l-lead* are shown in trees below.

(231) **The heads of complement clauses: *kes* and *ci***

a. *l* in prospective and future   b. *T* in present and past tense

```
(231a) shows that the heads of complement clauses *kes* ‘that’ and *ci* ‘if’ select *l* in irrealis, while they select past/perfect/realis *n*, present *nun*, and retrospective *ten* in (231b). (232a) shows that the head of root clauses including *key*, *lay*, and *kka* select *l* in irrealis, while (232b) shows that these heads cannot select realis elements.
```

(232) **The head of independent clauses: *key*, *lay*, and *kka***

a. *l* in prospective and future   b. *T* in present and past tense

```
As discussed in Chapter 3, the COMP UoL *ci* is an underspecified Type in independent clauses which can mark a confirmational declarative, interrogative, and imperative in the clause, depending on co-occurring intonation and *T* elements (past tense *ess* vs. tenseless). Conversely, *ci* in dependent clauses is specified as an interrogative marker, usually co-
occurring with WH-words or negation. Interestingly, the underspecified Type \( ci \) in independent clauses selects \( keyss \) (233a), while \( ci \) in dependent clauses selects \( l \) (234a).

(233) **The head \( ci \) in independent clauses**

a. **T in prospective and future**

\[
\text{CP} \quad \text{TP} \quad ci \quad \text{keyss, } *l
\]

b. **T in present and past tense**

\[
\text{CP} \quad \text{TP} \quad ci \quad ss \ [\text{past}], \ \emptyset \ [\text{present}]
\]

The underspecified Type \( ci \) in independent clauses selects past tense \( ess \) (233b) and a null T element, while \( ci \) in dependent clauses selects \( ess\text{-}nun \) [realis], \( nun \) [present], and \( ten \) [retrospective] (234b).

(234) **The head \( ci \) in dependent clauses**

a. **T in prospective and future**

\[
\text{CP} \quad \text{TP} \quad ci \quad l, \ *keyss
\]

b. **T in present and past tense**

\[
\text{CP} \quad \text{TP} \quad ci \quad ess\text{-}nun \ [\text{realis}], \ nun \ [\text{present}], \ ten \ [\text{retrospective}]
\]

This asymmetric distribution and selectional properties of COMP UoLs \( ci \) and \( kes \) are discussed further with examples below.

**5.5.3 The COMP UoL \( ci \) and \( kes \) in dependent CPs and T elements**

What is the category of \( ci \)? \( ci \) occurs in four morphosyntactic contexts: i) the head of an underspecified matrix CP expressing or requesting confirmation (e.g., *you believe me*,...
don’t you?); ii) the complement head of the negative auxiliary anh- ‘not’ (e.g., I don’t believe you.); iii) the head of a complement with wh-words (e.g., I know what to do.); and iv) the complement head of matrix verbs such as ask or wonder or the negative predicate don’t know (e.g., I ask if she believes me.). The following examples show that the COMP UoL ci may occur in four distinct morphosyntactic contexts. The examples in (235) show the first context: Matrix or root clauses.

(235) **matrix or root CP**

a. *ne-lul mit-ci*↓
   
you-ACC believe-COMP-FI
   ‘(certainly) I believe you.’

b. *na-lul mit-ci*↑
   
I-ACC believe-COMP-RI
   ‘You believe me, don’t you?’

c. *kunyang mit-∅-ci*↓
   
just believe-COMP-FI
   ‘(I suggest you) Just believe it!’

The examples in (236) show the second context: The complement head of the modal mos- ‘cannot’ or negative auxiliary anh- ‘do not.’

(236) **complement CP**

a. *ne-lul mit-ci mos ha-ci*↓
   
you-ACC believe-COMP cannot do-COMP-FI
   ‘(certainly) I don’t believe you.’

b. *ne-lul mit-ci anh-ass-e*↓
   
I-ACC believe-COMP do.not-PST-COMP-FI
   ‘I did not believe you.’

The examples in (237) show the third context: the head of complement clauses with wh-words.’
(237) complement CP with wh-words

a. mwues-lul hay-ya ha-l-ci cal al-ko iss-e↓
   what-ACC do-COMP do-IRR-COMP well know-COMP be-COMP-FI
   ‘I know well what to do.’

b. nwukwu-lul manna-l-ci acik cengha-ci mos hayssta
   who-ACC meet-IRR-COMP yet decide-COMP cannot did.DECL
   ‘I could not decide who to meet.’

c. encey ka-nun-ci mwul-e po-ca
   when go-PRES-COMP ask-COMP try-EXH
   ‘Let’s ask him/her when he/she is going.’ (Yeon & Brown, 2011: 306)

d. eti ka-l-ci molu-keyss-e↓
   where go-IRR-COMP not.know-IRR-COMP-FI
   ‘I don’t know where to go.’

e. nwukwu sakwuy-nun-ci kwungkwumha-ci↑
   who dating-PRES-COMP be curious-COMP-RI
   ‘You are curious who I’m dating, aren’t you?’

f. mwues-ul sa-l-ci molu-keyss-e↓
   what-ACC buy-IRR-COMP not.know-IRR-COMP-FI
   ‘I don’t know what to buy.’

The examples in (238) show the fourth context: the head of complement clauses selected by matrix verbs such as ask or wonder or negative predicate don’t know, without containing a wh-word.

(238) complement CP

a. na-lul cohaha-nun-ci mwul-e poass-e↓
   1SG-ACC like-PRES-COMP ask-COMP saw-COMP-FI
   ‘I have asked if she/he likes me.’

b. ne-lul cohahakey toy-l-ci cal molu-keyss-e↓
   you-ACC like-COMP become-IRR-COMP well don’t know-IRR-COMP-FI
   ‘I am not sure if I would become like you.’

As shown in (238), the deranked clauses with ci can be directly embedded by matrix predicates without the subordinating complementizer ko. According to Yeon and Brown
(2011: 307), the English modal ‘might’ serves as an appropriate gloss for the periphrastic construction -ci-to molu-ta, literally meaning ‘don’t even know whether’, when it is used in paradigms such as in (239).  \(^{15}\)

(239)

<table>
<thead>
<tr>
<th>a.</th>
<th>pi-ka</th>
<th>o-l-ci-to</th>
<th>moll-a-↓</th>
</tr>
</thead>
<tbody>
<tr>
<td>rain-NOM</td>
<td>come-IRR-COMP-even</td>
<td>not.know-COMP-FI</td>
<td></td>
</tr>
<tr>
<td>‘It might rain.’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b.</th>
<th>pi-ka</th>
<th>o-nun-ci-to</th>
<th>moll-a-↓</th>
</tr>
</thead>
<tbody>
<tr>
<td>rain-NOM</td>
<td>come-PRES-COMP-even</td>
<td>not.know-COMP-FI</td>
<td></td>
</tr>
<tr>
<td>‘It might be raining.’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c.</th>
<th>pi-ka</th>
<th>o-ass-nun-ci-to</th>
<th>moll-a-↓</th>
</tr>
</thead>
<tbody>
<tr>
<td>rain-NOM</td>
<td>come-PERF-PRES-COMP-even</td>
<td>not.know-COMP-FI</td>
<td></td>
</tr>
<tr>
<td>‘It might have been raining.’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>d.</th>
<th>pi-ka</th>
<th>o-ass-ul-ci-to</th>
<th>moll-a-↓</th>
</tr>
</thead>
<tbody>
<tr>
<td>rain-NOM</td>
<td>come-PERF-IRR-COMP-even</td>
<td>not.know-COMP-FI</td>
<td></td>
</tr>
<tr>
<td>‘It might have rained.’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>e.</th>
<th>pi-ka</th>
<th>o-ass-ess-ul-ci-to</th>
<th>moll-a-↓</th>
</tr>
</thead>
<tbody>
<tr>
<td>rain-NOM</td>
<td>come-ANT-PERF-IRR-COMP-even</td>
<td>not.know-COMP-FI</td>
<td></td>
</tr>
<tr>
<td>‘There might have been rain.’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The contrastive examples in terms of TAM in (239) show that ci in dependent clauses licenses the full-irrealis paradigm, including irrealis l. Similar to ci, multifunctional kes in dependent clauses also licenses the full-irrealis paradigm, including irrealis l (M. Kim 2004, 2009; J. Kim & Horie, 2009; H. Yoon, 2012). In the literature, the complementizer kes ‘that’ in (240) is analyzed as a nominalizer (M. Kim 2004; J. Kim & Sells, 2008), E-type pronominal (Chae, 2007; M. Kim, 2009) or complementizer (H. Yoon, 2012). H.

\(^{15}\) Compare these examples to the clause below, in which the UoL ci is interpreted as whether.

(1) ikey isul-in-ci mwul-i-n-ci molu-keyss-e-yo.
<table>
<thead>
<tr>
<th>this.NOM</th>
<th>alcohol-be-TAM-COMP</th>
<th>water-be-TAM-COMP</th>
<th>not.know-IRR-COMP-POL</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘I don’t know whether this is water or alcohol.’ (Yeon &amp; Brown 2011: 306)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Yoon (2012) proposes that the UoL *kes* can serve as the head of three different categories: noun, expletive, and complementizer. What I am interested in in this section is the distribution of the UoL *kes* in terms of compatible TAM elements, as shown in (240).

(240)

a. *pi-ka*  
   *o-l-kes/*ci *kath-a-↓*  
   rain-NOM come-IRR-COMP be likely-COMP-FI  
   ‘It seems that it will rain/ it looks like rain.’

b. *pi-ka*  
   *o-n-kes/*ci *kath-a-↓*  
   rain-NOM come-IRR-COMP be likely-COMP-FI  
   ‘It seems that it has rained/ it looks like it has rained.’

c. *pi-ka*  
   *o-nun-kes/*ci *kath-a-↓*  
   rain-NOM come-IRR-COMP be likely-COMP-FI  
   ‘It seems that it is raining/ it looks like it is raining.’

d. *pi-ka*  
   *o-ass-ten-kes/*ci *kath-a-↓*  
   rain-NOM come-PAST-RETRO-COMP be likely-COMP-FI  
   ‘It seems that it had rained.’

e. *pi-ka*  
   *o-ass-ul-kes/*ci *kath-a-↓*  
   rain-NOM come-PERF-IRR-COMP be likely-COMP-FI  
   ‘It seems that it would have rained.’

The UoL *n* in (240b) indicates a past event time or realis, while the same form *n* in independent clauses (where *n* is selected by declarative *ta*), indicates present tense. This confirms again that the TAM elements inherit their properties from either dependent C or independent C. This proposal is supported by the fact that the irrealis *keyss* cannot be selected by *kes*, as in (241b).

---

16 The alternative analysis is that *n* is a relativizer. Sohn (1999: 309) gives an analysis in which *n* is realized as zero with the prospective *l* and *n* expressing the past event by incorporating the past tense morpheme *ess*, which is historically deleted in this paradigm. It seems that it is possible that present and past tense are marked by an identical form as past tense and imperative are marked by the same form in Kisongo Maasai (Koopman, 2001).
(241)

a. *pi-ka o-l-kes kath-a-
   rain-NOM come-IRR-COMP be likely-COMP-FI
   ‘It seems that it will rain/ it looks like rain.’

b. *pi-ka o-keyss-kes kath-a-
   rain-NOM come-IRR-COMP be likely-COMP-FI
   ‘It seems that it will rain/ it looks like rain.’ (intended)

c. pi-ka o-keyss-ta
   rain-NOM come-IRR-COMP
   ‘It seems that it will rain/ it looks like rain.’

Based on the distribution of *ci in (239) and kes in (240), I conjecture that *ci and kes have distinct properties of c:Type in the linking spine. They are different from iType or uType UoLs or periphrastic COMP UoLs in independent clauses. Especially, the morphosyntactic properties of *ci when it serves as the head of a deranked CP are different from when it serves as the head of independent CPs. The TAM elements that are compatible with kes and *ci are summarized in Table 5-6.

Table 5-6 The compatibility of kes and *ci with TAM UoLs in dependent CPs

<table>
<thead>
<tr>
<th>Event time</th>
<th>TAM UoLs in dependent CPs</th>
<th>COMP UoLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>prospective, future</td>
<td>*l</td>
<td>kes, *ci</td>
</tr>
<tr>
<td>present, progressive</td>
<td>nun</td>
<td></td>
</tr>
<tr>
<td>past</td>
<td>*n</td>
<td></td>
</tr>
<tr>
<td>subjunctive</td>
<td>ess-ul</td>
<td></td>
</tr>
<tr>
<td>near future</td>
<td>tun</td>
<td>*ci</td>
</tr>
<tr>
<td>past perfect</td>
<td>ess-ess-nun</td>
<td></td>
</tr>
<tr>
<td>past retrospective</td>
<td>ess-ten</td>
<td>kes</td>
</tr>
</tbody>
</table>
I conclude this section by summarizing the incompatibility of TAM elements with two distinct sets of complementizers. The same TAM UoLs that are compatible with the deranked dependent COMP UoLs in Table 5-6 are incompatible with the heads of matrix or balanced dependent clauses, as summarized in Table 5-7. As the compatibility of TAM UoLs with the Type COMP UoLs in matrix CPs and balanced-dependent CPs have been discussed in Chapter 3 (see Table 3-5), I do not repeat their distributions here.

Table 5-7 The incompatibility of COMP UoLs with TAM UoLs in independent CPs

<table>
<thead>
<tr>
<th>Event time</th>
<th>TAM UoLs</th>
<th>Incompatible COMP UoLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>prospective, future</td>
<td>l</td>
<td>*ta, *nya, *e, *ci</td>
</tr>
<tr>
<td>present, progressive</td>
<td>nun</td>
<td></td>
</tr>
<tr>
<td>past</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>subjunctive</td>
<td>ess-ul</td>
<td></td>
</tr>
<tr>
<td>near future</td>
<td>tun</td>
<td></td>
</tr>
<tr>
<td>past perfect</td>
<td>ess-ess-nun</td>
<td></td>
</tr>
<tr>
<td>past retrospective</td>
<td>ess-ten</td>
<td></td>
</tr>
</tbody>
</table>

So far, focusing on periphrastic complementizers containing the irrealis *l*, I have discussed their peculiar interaction with TAM elements, the subject, and with the interpretation of illocutionary force. In the next section, I reexamine periphrastic complementizers within the framework of the USH and propose some implication.

5.6 The periphrastic complementizers and the USH

The asymmetric properties between the heads of independent and dependent clauses found in Korean is not exceptional. For instance, the special properties of the subject are found in Chinese dependent clauses, while the subjects of independent clauses lack such properties (Zhang 2016). In the literature on Blackfoot, there is an Algonquianist term
called ‘independent order’, which describes the fact that matrix assertive clauses can be either unmarked or marked as irrealis. Blackfoot scholars argue that independent and conjunctive clauses are organized differently from other types of clauses, including imperative and subjunctive. For instance, although the contrast between a local and a non-local person marker is morphologically marked in independent and conjunctive clauses, it is not observed in subjunctives and imperatives. Wiltschko proposes that this contrast between independent order and other clause types in Blackfoot is associated with the anchoring spine (Wiltschko, 2014: 119), which includes Tense in the traditional generative studies. Under the C-T conjecture, the domain that manifests the “order contrast” in Blackfoot can be inherited from the properties of the linking spine; the linking spine in Blackfoot is manifested by number agreement, which is sensitive to the properties of CP (Bliss, 2013: 224; Wiltschko, 2014: 119). In relation to correlation between order and person prefixes in Blackfoot, questions arise: how is the linking spine materialized and how is the state of an independent clause externalized in Korean? I conjecture that the four categories proposed for \( K: anchoring \rightarrow c: TENSE, c: PERSON \rightarrow c: LOCATION, \) or \( c: REALIS \) in the universal inflection domain may also manifest the linking spine in Korean \( (K: linking \rightarrow c: TENSE, c: PERSON \rightarrow c: LOCATION, \) or \( c: REALIS \)).

Korean clause-typing complementizers discussed in this dissertation all have specific associations with T elements. Some complementizers have strong person agreement features (e.g., imperative \( la \), exhortative \( ca \), and promissive \( ma \), and periphrastics). COMP UoLs carrying pragmatic features are sensitive to speech participants, which must interact with a local person. Some evidential COMP UoLs including \(-kwun\) select the retrospective or spatial tense \(-te\) (Chung 2007). As discussed in this chapter, periphrastic COMP UoLs key
and *lay* only select irrealis *l*, which implies that *κ*: REALIS is activated in both *K*: linking and *K*: anchoring. Although this is speculation, it must be true if the C-T conjecture and the four categories in *κ*: anchoring are correct. Having this assumption in mind, in this section, I attempt to account for the syntactic structure of clauses with COMP UoLs *l*-key and *l*-lay in independent clauses and *l*-kes and *l*-ci in dependent clauses within the framework of the USH. Based on the Mirror Principle (Baker 1985), I associate the functional elements and the spine as in (242) and (243). The UoLs *lay*, *kka*, and *kel* along with *key* are also associated with *κ*: linking, which dominates *κ*: anchoring hosting irrealis *l*.

(242) The structure of periphrastic irrealis COMP UoLs

```
               k: responding
                  ▲
                k: grounding
                   ▲
             (yo) ▼
            k: linking
              ▲
        k: anchoring
          ▲
    key, lay, kka, kel

κ
```

The UoLs *kes* and *ci* are also associated with *κ*: linking. Contrary to (242), *κ*: anchoring hosts a set of T elements including irrealis *l*, as illustrated in (243), when it is dominated by *κ*: linking hosting *kes* and *ci*. As in (243), the two highest domains—*κ*: grounding and *κ*: responding—are absent. It can be analyzed that the absent domains are inactivated by some predicates selecting complement clauses, including *al*- ‘know’ and *kwungkumha*- ‘wonder’, or simply that these verbs only select UoLs in *κ*: linking that lack features associated with *κ*: grounding.
Based on the contrast between indicative and subjunctive in Upper Austrian German, Wiltschko (2014) proposes a language-specific category of *k*: anchoring, *c*: REALIS, to host realis indicatives and irrealis subjunctives in independent clauses. Similarly, the UoLs discussed in this chapter show that *c*: REALIS is marked overtly in both *k*: anchoring and *k*: linking. In Korean, T of matrix clauses in the non-present and non-past tenses can be filled by either keyss, *l*, and a null T, as summarized in Table 5-8. These T elements are systematically selected by distinct Type UoLs. The UoL *ci* is the only UoL that can select both keyss and *l*, although *ci* selecting keyss behaves differently from when it selects *l*; *ci* selecting *l* can be the head UoL of a non-root clause. The organization of UoLs in Table 5-8 shows that the UoLs in the grounding and responding spines cannot immediately follow UoLs in the anchoring domain. As T can be null, UoLs in the linking spine are the only category that must be overtly marked in Korean. Assuming the C phrase head (Richards 2007)—T is licensed by C—it is reasonable to assume that *la*, *ca*, and *ma* are elements associated with the linking spine and not the anchoring.

Alternatively, we can assume that C is a null and *la*, *ca*, and *ma* are T elements. However, these markers contrast each other in clause type rather than temporally. If *la*, *ca*, and *ma* are person agreement markers, as assumed in Zanuttini et al. (2012), we need
an explanation why the subject honorific marker *si* is blocked under them. As they carry pragmatic features in addition to clause-typing features, they have to be associated with the linking spine.

In terms of identifying clause type, *key, kka* and *kel* are *i*-Type UoLs, while *lay* is a *u*-Type UoL. In terms of realis, *key, lay, kka* and *kel* are all irrealis, different from the *i*-Type declarative *ta*, interrogative *nya*, and the *u*-Type UoLs *e* and *ci*, which can select realis/past tense *ess* and volition/supposition *keyss*. As imperative *la*, exhortative *ca*, and promissive *ma* also inherently cannot select realis/past tense *ess* and volition/supposition *keyss*, they may also be seen as irrealis.

Korean linking UoLs can be divided based on whether they can be followed by polite *yo* or not. If a clause with a linking UoL can be followed by polite *yo*, it has the properties of a root clause. The *u*-Type UoLs *e* and *ci* discussed in Chapter 3 and irrealis UoLs *key, lay*, and *kka* discussed in this chapter can be followed by polite *yo*. Although *i*-Type UoLs declarative *ta*, interrogative *nya*, imperative *la*, and exhortative *ca* cannot be immediately followed by polite *yo* in direct speech, they can after they merge with indirect *ko* and *y* in indirect speech in root clauses. The UoLs *kes* and *ci* in complement clauses are only selected by predicates and cannot be followed by any element from the grounding or responding spines. In order to draw a clear association between language-specific categories and Universal categories, the form, meaning, and distribution of each UoL need to be examined carefully. As summarized in Table 5-8, the interactions between UoLs from these three domains are very systematic. The semantic properties of these UoLs must be irrelevant to the asymmetric behaviours of the irrealis *l* and *keyss*; we have seen that these elements sometimes overlap each other in meaning, depending on
the context (see (201)). I have taken the position that the difference between \textit{i}Type/\textit{u}Type UoLs and \textit{irrealis} Type UoLs in syntax is independent of their semantic or pragmatic (i.e., speech-level) properties, and instead is rooted in their distributional or morphosyntactic properties. The key differentiators between sets of UoLs are: (i) the ability to be selected by indirect UoLs, (ii) the ability to be selected by polite \textit{yo}, and (iii) compatibility with the \textit{irrealis} \textit{i}. I argue that the morphosyntactic properties of these UoLs can be separated from the multilayered meta-linguistic properties like pragmatics (speech styles), sociolinguistics (dialect variation), and discourse (written and spoken registers).

### Table 5-8 Selection among UoLs in GroundP, LinkingP, and Anchoring P

<table>
<thead>
<tr>
<th>Anchoring</th>
<th>Linking</th>
<th>Grounding</th>
<th>Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>c: Realis</td>
<td>c: Type</td>
<td>c: Direct</td>
<td>c: Indirect</td>
</tr>
<tr>
<td>keyss</td>
<td>ta</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>nya</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>e</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>ci</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td>l</td>
<td>key</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>lay</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>kka</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>kel</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>kes</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>ci</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>ø</td>
<td>la</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>ca</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>ma</td>
<td>√</td>
<td>*</td>
</tr>
</tbody>
</table>

5.7 Conclusions

The complementizers which select irrealis modal / in matrix clauses, including key, lay, and kka, are incompatible with the past-tense ess and volitional/suppositional modal keyss. The complementizer ci selects keyss in matrix clauses, while it selects l in dependent clauses. With respect to their interaction with the UoLs of the grounding and the responding spines, the complementizers key, lay, and kka cannot be selected by indirect markers ko or y from the grounding spine but can be selected by polite yo from the responding spine. As the periphrastic Type UoLs only occur as heads of matrix complementizers, the COMP UoLs kes ‘that’ and ci ‘whether’ appear as the heads of complement clauses in dependent clauses and select the irrealis modal /.

These selectional properties of the UoLs associated with the linking spine, together with the restricted interpretation of the subject in clauses marked by the periphrastic Type UoLs, offer evidence to support a feature dependency between C⁰ and T⁰ (Chomsky, 2008; van Urk 2014); the features of T are derived from the features of C. Moreover, the distinct licensing restrictions on the morphological realization of C⁰ observed in the heads of independent versus dependent CPs supports the proposal that the properties of independent C⁰ differ from those of dependent C⁰ (cf. Ceong & Saxon, 2013). I conjecture that the distributional properties of the heads of independent CPs are related to certain main-clause phenomena that have been observed across languages.

The richly marked morphosyntactic elements that indicate the clausal edge structure in Korean provide an ideal exploratory platform for testing the principles and parametric characteristics of complementizers; this exploration also brings attention to the relationship between form (realizations of morphosyntactic features) and syntactic...
structure (see Ackema & Neeleman, 2007; Borer, 1998; Spencer, 2000). Further investigation into the interconnection of TAM elements, complementizers, and the person feature across languages may help shed light on why Korean periphrastic complementizers exist. The USH hypothesizes that these local elements in the CP domain can be manifested variously across languages.
Chapter 6

Multifunctional complementizers

6.1 Introduction

This chapter is concerned with the distribution and interpretation of multifunctional UoLs that appear in more than one syntactic position or express more than one meaning in the same position in the structure. A multifunctional UoL is a lexical or functional item that behaves as a different functional marker with an identical phonetic shape in specific morphosyntactic environments (cf. Lefebvre, 1998; Travis, 2005; Wiltschko, 2014). Multifunctional UoLs are ubiquitous across languages (Bruhn de Garavito, 2000; Corr, 2016; Lefebvre, 1998; Hirose & Nawata, 2016; Okamoto & Ono, 2008). As the English word *have* alternates between being a lexical verb of possession and an auxiliary verb, Korean verb roots including *cwu-* and *po-* behave as either lexical (*cwu-*‘give’ and *po-*‘see; watch; look’) or auxiliary verbs (benefactive *cwu-*‘do X for Y’ and *po-*‘try’) in complementary morphosyntactic environments, so these two distinct categorical properites of the same root are mutually exclusive.

Multifunctional elements in Korean are not limited to being lexical or open class items. This chapter investigates the multifunctional properties of functional elements including the right edge functional UoLs *la* and *ko*: *la* can be the head of an imperative, an apprehensive, or an evidential declarative, while *ko* can appear as the head of AspP, TP, clause-typing CP, or a subordinating CP. The UoLs *la* and *ko* demonstrate morphological instances of items that appear to be correlated but do not show identical
distribution. I treat these items as multifunctional UoLs and show their distributions. This chapter is intended to act as a foundation for future discussion of the connection between lexical/functional items and categories.

The organization of this chapter is as follows: Section 6.2 is devoted to the distribution and interpretation of the multifunctional la and ko. Wiltschko (2014) hypothesizes that a morpholexical item can be associated with at least one and at most six functional layers in verbal and nominal domains. I show that multifunctional UoLs exhibit their multifunctional properties in two ways: (i) they may interact with distinct functional elements in the same position in a local domain including la, or (ii) they may associate with distinct structural positions including ko. The tree in (244) represents the multifunctional properties of la: la is interpreted as the head of an imperative when it selects an active bare verb and is selected by a null direct speech marker; as the head of an apprehensive when it selects irrealis l and is selected by a null direct speech marker; as the head of an evidential declarative when it selects evidential te and is selected by an indirect speech marker; and as the head of an embedded declarative when it selects a bare copular i ‘be’ and is selected by an indirect speech marker.

(244) **Multifunctional la and its syntactic contexts**

![Diagram](image-url)
The tree in (245) represents the multifunctional properties of *ko*. *ko* may associate with distinct structural positions including Point-of-viewP, AnchoringP, LinkingP, and GroundP.

(245) Multifunctional *ko* and its structural heads

In Section 6.3, I discuss the valuation of multifunctional UoLs associated with a spine. Each function of *la* and *ko* is established by the association of the structural position with different manner, place, and timing. Section 6.4 is the conclusion.

6.2 Multifunctional complementizers and their interpretation

Homophonous UoLs within a language are treated as multifunctional UoLs in the USH. For example, the homophonous English UoL *that* can be morphosyntactically distinguished by a formula that specifies its sound or shape (**π**), its substantive content (**Σ**), and its language-specific categories (Wiltschko, 2014).

(246)

a. *c*: DEMONSTRATIVE = {**π**: *that* **Σ**: ?}

b. *c*: COMPLEMENTIZER = {**π**: *that* **Σ**: ?}

(Wiltschko, 2014: 5)
The UoL *that* in English is an example of a homophonous form that functions as the head of multiple distinct categories. Often, the meaning or function of the UoL emerges from the existence of a contrastive UoL also associated with the same head. The demonstrative category of the UoL \{π: *that* Σ: distal\}, for instance, is recognizable because of the existence of a contrastive UoL \{π: *this* Σ: proximal\} in the DP domain, while the clause-typing complementizer category of the UoL \{π: *that* Σ: declarative\} is identifiable because of the contrastive UoLs \{π: *whether* Σ: interrogative\} and \{π: *if* Σ: interrogative\} in a set of language-specific complementizer categories (cf. Chomsky & Lasnik, 1977; Chomsky, 1995).

(247)
   a. c: DEMONSTRATIVE = \{π: *that* Σ: distal\}
   b. c: COMPLEMENTIZER = \{π: *that* Σ: declarative\}

The attested clauses in (248) include the multifunctional UoL *that*. The two *that*-UoLs in the clause in (248b) are grammatical because they belong to different categories and appear in two distinct positions in the surface structure. A native speaker of English would unambiguously identify *that* (248a) as a demonstrative, and the two *thats* in (248b) as a complementizer and a demonstrative, respectively; *that* in (248c) would be identified as a demonstrative and *that* in (248c) as a complementizer.

(248)
   a. *I know that* guy. (Wiltschko, 2014: 5)
   b. *I know that that* guy is courageous.
   c. *I know that* guy is courageous.
   d. *I know that* guys are courageous.
A UoL associated with different meanings can occur in the same linear position. Within the exact same position in a clause, a UoL can be interpreted differently because its structural position is different from its surface position. For instance, the Spanish se expresses different meanings depending on its structural position, as in (249).

(249)  
\[ Se \quad \text{terminó} \quad el \quad \text{postre}. \]  
\[ se \quad \text{finish} \quad \text{the} \quad \text{dessert} \]  

a. ‘The desserts finished (ran out).’ (Inchoative se)  
b. ‘The desserts were finished.’ (Impersonal passive)  
c. ‘The desserts were finished.’ (Impersonal reflexive)  

(Bruhn de Garavito, 2000: 32)

The interpretation of clauses with se in Spanish depends on the syntactic environment: whether se is the head of Inner Aspect or the head of AgrO (Bruhn de Garavito 2000).

Now consider the Korean UoLs la in (250) and ko in (251), which are interpreted differently depending on what precedes and follows them on the surface.

(250)  
a. Inho-ya, cip-ey ka-la  
\quad \text{Inho-VOC} \quad \text{home-LOC} \quad \text{go-IMP}  
‘Inho, (you) go home.’  

b. Inho-ka cip-ey ka-lla  
\quad \text{Inho-NOM} \quad \text{home-LOC} \quad \text{go-PREM}  
‘(warning) Inho may go home’  
\quad \text{(cf. M. Pak, 2008: 5)}

c. Inho-ka cip-ey ka-te-la  
\quad \text{Inho-NOM} \quad \text{home-LOC} \quad \text{go-RETRO-DECL}  
‘[I saw/observed] Inho going home.’  
\quad \text{(cf. S. Sohn, 2015: 188)}

d. Inho-nun caki chaykim-i-la-ko sayngkakha-a-
\quad \text{Inho-NOM} \quad \text{self} \quad \text{responsibility-be-DECL-COMP} \quad \text{think-COMP-FI}  
‘Inho thinks that it is his responsibility.’
When *la* selects an active bare verb or a null T, it is identified as the head of an imperative (250a); when *la* selects irrealis *l*, it functions as the head of an apprehensive (250b); when *la* selects evidential *te*, it is interpreted as an evidential declarative marker (250c); and when *la* selects a bare copular *i* ‘be’ and is selected by an indirect speech marker, it is again interpreted as a declarative marker (250d). Thus, *la* functions as a multifunctional complementizer without changing position in the structure.

Unlike *la*, which occurs mostly at the right periphery of the clause, *ko* appears in multiple positions in a sentence.

(251)

a. *Mina-ka*  *o-ko*  *sip-ta-ko*  *malhayss-ta-ko*-↑
   Mina-NOM come-COMP want-DECL-COMP said-DECL-COMP-RI
   ‘(Are you saying that) Mina said she wanted to come?’

b. *Mina-nun*  *o-ko*  *iss-ko*  *Leah-nun*  *imi*  *wass-ta-ko*-↑
   Mina-TOP come-COMP have-COMP Leah-TOP already came-DECL-COMP-RI
   ‘(Are you saying that) Mina is coming now and Leah already came?’

The three distinct positions of *ko* in each complex clause in (251) show that it has at least three or four distinct functions. Building on the discussion in Chapter 3 and Chapter 4, this chapter investigates the nature of ubiquitous multifunctional complementizers in the synchronic grammar of Korean. Having the hierarchically organized universal spines in mind, I particularly explore the compatibility of these multifunctional UoLs with the elements in the layers of the spine. If the investigation of UoLs in Chapters 3, 4, and 5 is from a paradigmatic perspective, then the investigation of UoLs in this chapter is from a syntagmatic perspective—how the hierarchically distinct position of a UoL in the structure contributes to its interpretation. I explain how the declarative interpretation of the UoL *la* differs from that of the underspecified UoLs *e* and *ci*, which can form a
declarative by interacting with past-tense *ess*, a person feature of the subject, and intonation. Recall that the *u*Type UoLs *e* and *ci* can mark imperatives and declaratives by interacting with finiteness. As demonstrated in Chapter 3 and Chapter 4, *la* never follows past-tense *ess* or prospective *keyss*. The inherent and contextual properties of each *la* are examined by comparing and contrasting the distribution and interpretation of *la* in minimal pairs.

6.2.1 The multifunctional complementizer *la*

Whereas a clause marked by the UoL *ta* is never interpreted as imperative, a clause marked by *la* can be interpreted as imperative as well as declarative. In such a case, *la* is introduced as an allomorph of declarative *ta* (K. Chung, 2007; J. Lee, 2011; S. Sohn, 2015). Instead of seeing *la* as an allomorph of *ta*, in this section, I analyze *la* as a multifunctional COMP UoL whose meaning is determined by interaction with the functional elements that select it and are selected by it. As can be seen in (252), repeated from (250), *la* occurs in various clause types. The relevant attested examples in (252) are presented with my parsing and glossing.

(252)

a. *Inho-ya, cip-ey ka-la* (imperative)
   Inho-VOC home-LOC go-COMP
   ‘Inho, (you) go home.’

b. *Inho-ka cip-ey ka-l-la* (apprehensive)
   Inho-NOM home-LOC go-IRR-COMP
   ‘(warning) Inho may go home’

c. *Inho-ka cip-ey ka-te-la* (declarative)
   Inho-NOM home-LOC go-EVID-COMP
   ‘[I saw/observed] Inho going home.’

d. *Inho-nun caki chaykim-i-la-ko sayngkakha-e↓* (declarative)
   Inho-NOM self responsibility-be-C-C think-COMP-Fi
   ‘Inho thinks that it is his responsibility.’
The UoL *la* in (252a) has been analyzed as a so-called “plain style” imperative ender; the clause ending in the periphrastic *lla* in (252b) has been analyzed as a single morpheme that expresses admonition or apprehensive; and *la* in (252c) and (252d) has been considered as an allomorph of the declarative *ta* (K. Chung, 2007; J. Lee, 2011; S. Sohn, 2015).  

The most salient property of *la* is that it never immediately selects either the past-tense marker *ess* or the conjecture *keyss*, as discussed in Chapter 3 and 5.  

The incompatibility of *la* with these tense-related markers in the local domain is also shared by the exhortative *ca* and promissive *ma*. However, unlike *ca* and *ma*, which only select bare verb stems or a null T in matrix clauses, *la* can select irrealis or the retrospective or evidential -*te*-. *La* also can select a bare copular -*i*- ‘be’ in embedded clauses (in contrast, exhortative *ca* and promissive *ma* never occur with the copular -*i*- ‘be’ in matrix or embedded clauses). Interestingly, when *la* selects a copula in embedded clauses, it must be interpreted as declarative. Thus, depending on the morphosyntactic environment, a clause headed by *la* can be interpreted as imperative, apprehensive, or declarative.

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1 K. Chung (2010) revises her analysis of *la* and glosses *la* as a presentative mood marker, based on the fact that the clause with *te-la* cannot be embedded by the verbs *believe, think, or know*. K. Chung argues that (252c) is a root clause. The difficulty of glossing *la* shows that *la* is not monofunctional. The UoL *la* in (252d) is glossed as an introspective mood marker in H. Lee (1993). Thus, a semantically-based morphological account of *la* yields inconsistency.

2 The UoL *la* is compatible with past-tense *ess* and conjecture *keyss* if evidential *te* intervenes between them and *la*, as in *ka-ss-te-la* ‘I saw that s/he went (go-pst-retrospective-decl).’ I will discuss declarative-reading *la* in the evidential paradigm in § 6.2.1.2 (cf. J. Lee, 2011).

3 The UoL *ca* can select past-tense *ess* in subordinating clauses locally and must follow the auxiliary verb *po*­-see; *try*, as in (1) below. The construction V-*e* *po-ass-ca* expresses ‘it is no use trying V’ (Yeon & Brown, 2011; 284). The homophonous *ca* is a subordinating complementizer without a clause-type feature.

(1) a. *wul-e po-ass-ca mwasun soyong-i iss-keyss-e-↑*
   cry-COMP try-PST-COMP what.COMP use-NOM be-PROS-COMP-RI
   ‘What’s the use in crying?’

b. *Minho-eykey malha-e po-ass-ca amwu soyong eps-e-yo-↓*
   Minho-DAT say-COMP try-PST-COMP any use not.be-COMP-POL-FI
   ‘There is no use talking to Minho’
Evidently, the clause-type feature associated with la must be uninterpretable or underspecified before merging with the interpretable feature on its complement. The second-person feature or imperative feature is not directly or inherently associated with the form. The imperative interpretation is, rather, configurationally associated with its syntactic position and the syntactic environment in which it spells out. The fact that ta never occurs in the syntactic environment of (252c) and (252d) may play a role in whether la is interpreted as a declarative. The ungrammatical clauses with ta replacing la are illustrated in (253).

(253)

a. *<em>Inho-ka</em> cip-<em>ey</em> ka-<em>te</em>-(<em>*ta*/la</em>)
   <em>Inho-NOM home-LOC go-RETRO-DECL</em>
   ‘[I saw/observed] Inho going home.’ (intended)

b. *<em>Inho-nun caki chaykim-i-<em>ta</em>-ko</em> sayngkakhay-↓
   <em>Inho-NOM self responsibility-be-DECL-COMP think-COMP-FI</em>
   ‘Inho thinks that it is his responsibility.’ (intended)

Whether the restriction on ta is phonologically governed and declarative la is a historical remnant are not very important considerations here. What is relevant is that the same form in the same clause-typing category can be interpreted differently in an environment where the competitive element, the declarative ta, is absent from the paradigm. This is similar to syncretism in case and person paradigms, although the semantic domain is related to the clause-typing complementizer projection. If C. Kim (2012) and Zanuttini et al. (2012) are right that “sentence-enders” are indeed person-marking or pronominals, the properties of complementizers must be related to the person feature on the subject.
the multifunctional *la*. The first distributional meaning or function of *la* discussed will be in the context of a clause containing the irrealis *l*.

### 6.2.1.1 The UoL *la* in apprehensives

A grammatical marker that is used to alert the addressee of a clause to a potential but undesirable event is labeled as apprehensive in the literature (Angelo & Schultze-Berndt, 2016; Lichtenberk, 1995; Vuillermet & Schultze-Berndt, 2018). These apprehensive UoLs are very common in Australian languages, including creole languages (Angelo & Schultze-Berndt, 2016). The English word *lest* is often described as an apprehensive marker; its various functions are observed by Lichtenberk (1995).

(254)

a. *Take your umbrella lest you be wet.* (Precautioning/ Avertive)

b. *Take your umbrella lest it rain.* (Precautioning/ In-case)

c. *I fear lest it rain.* (Fear complementation)

d. *Lest we forget.* (Apprehensional epistemics)

(Vuillermet & Schultze-Berndt, 2018)

Rhee and Kuteva (2018) gloss *lla* as a mono-morphemic apprehensive and translate it in English as ‘lest’, as in (255). This apprehensive *lla* has been alternatively glossed as premonitive or admonitive (M. Pak, 2008).

(255)

```
  pulley  tuleo-lla  changmwun  tat-ala
  insect  come.in-APPR  window  close-IMP
```

‘Close the window lest insects come inside.’ (Rhee & Kuteva, 2018)

The periphrastic *lla* is labelled as a “two-shape connective ending” in Yeon and Brown (2011: 272), as it consists of *l* and *la*; the fusion *lla* functions as the head of a
subordinating clause, as in (256a) and (256b). The examples are adopted from Yeon and Brown (2011), with parsing and glossing by the current author. Applying the same rationale that I applied for the periphrastic complementizers, including $l$-$key$ in Chapter 5, I interpret $lla$ as a fusion at surface of irrealis $l$ and $la$.

(256)

a. \textit{tachi-$l$-$la$} \quad \textit{cosimhay-$la$}  \\
    hurt-IRR-COMP \quad be watchful-COMP  \\
    ‘You might get hurt, so watch out!’

b. $hakkyo$-$ey$ \quad $nucu$-$l$-$la$ \quad $ppalli$ \quad $ilen$-$a$-$la$  \\
    school-LOC \quad be late-IRR-COMP \quad quickly \quad get up-COMP  \\
    ‘Get up quickly or you might be late for school.’

c. $setwulle$-$la$, \quad $nucu$-$l$-$la$  \\
    hurry up-COMP \quad be late-IRR-COMP  \\
    ‘Hurry up. You are going to be late.’

(Yeon & Brown, 2011: 272)

In (256a) and (256b), the clauses with apprehensive meaning are, syntactically, subordinating clauses of matrix imperatives, although apprehensive $la$ marks clauses referring to an undesirable future event. A clause marked by $la$ with an apprehensive meaning can be either dependent (256a, b) or independent (256c). As long as the main clauses are directive, apprehensive clauses are compatible with any directive UoL, $u$Type $e$ (as in (257a)), or exhortative $ca$ (as in (257b)). Apprehensive clauses are incompatible with declarative $ta$ with the past-tense $ess$, as in (257c); if the main clause is marked by declarative $ta$, the clause must also contain conjecture/prospective $keyss$ in order to be well-formed, as in (257d). [hay] in square brackets is the surface form of $ha$-$a$.

(257)

a. \textit{tachi-$l$-$la$} \quad \textit{cosimha-a [hay]}  \\
    hurt-IRR-COMP \quad be watchful-COMP-$Fi$  \\
    ‘You might get hurt, so watch out!’
b. *hakkyo-ey nucu-*la ppalli ilena-ca
   school-LOC be late-IRR-COMP quickly get up-EXH
   ‘Let’s get up quickly or we might be late for school.’

c. *nucu-*la ilena-n-ta
   be late-IRR-COMP get up-PRES-DECL
   ‘I might be late, so I am getting up.’ (intended)

d. nucu-*la ilena-ya keyss-ta
   be late-IRR-COMP get up-COMP PROS-DECL
   ‘I might be late. I should get up.’

It is more natural to omit the subject in the clauses in (257); the interpretation of the subject of the apprehensive depends on the person-feature associated with the matrix COMP UoL.

Although *-la has been treated as a mono-morphemic apprehensive or premonitive in the literature, I treat la as a multifunctional UoL from the perspective of morphosyntax, arguing that the same la in imperative clauses is contextually interpreted as apprehensive. Here, I will revise my proposal made in Chapter 3. There, I treated la as an iType UoL with an interpretable imperative feature, following the literature, which has suggested la is a head containing a second-person feature (Zanuttini et al., 2012) or an imperative complementizer (Ceong, 2012; Han & Lee, 2007). A close examination of la’s distribution in the grammar reveals that it is contextually determined; it is contextually interpreted as an imperative head only when it follows a dynamic or active bare verb in either a matrix or embedded clause. Thus, I argue that the imperative meaning of la emerges in this syntactic environment. For instance, when la selects a bare stative verb with a subject with a non-second-person feature, as in (258), a clause containing la is interpreted as an exclamative-like declarative, as in (258a, b); when it selects a bare
stative verb with a subject with a second-person feature, it is interpreted as an optative-like imperative, as in (258c).  

(258)

a. *ai coha-la*  
   oh good-COMP  
   ‘I’m so happy/I’m so glad!’

b. *eme yeyppe-la*  
   oh pretty-COMP  
   ‘It’s so pretty/you are so pretty!’

c. *khi com khe-la*  
   high please be tall-COMP  
   ‘May you be tall!’

It seems that the optative reading of (258c) is related to the interaction of the semantic properties of the adverb *com* ‘please’ and the stative verb stem *khu-ta* ‘be tall’ with the form of *la*. The UoL *la* in (258a) and (258b) is interchangeable with *ta*, although the clause with *la* may be read as a more feminized expression than with *ta*.

(259)

a. *coh-ta*  
   good-DECL  
   ‘It’s good/it’s nice.’

b. *yeyppu-ta*  
   pretty-DECL  
   ‘It’s pretty/you are pretty!’

The optative reading of the clause marked by *la* in (258c) cannot be replaced with *ta*, as in (260a), which is ungrammatical for the intended meaning. When the same clause is marked by *ta* with a specific intonation, not only does it express the speaker’s sarcasm

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5 The vowel *a* can be parsed as separated, as in *coha-la*, or attached to the imperative *la*, as in *coh-ala*; the citation form of the verb stem *coh-* is *coh-ta* ‘like; be good.’ I treat the vowel as an epenthetic vowel in a closed syllable, as there is no epenthetic vowel when the verb stem is an open syllable. Only the vowel *u* is modified by *la*, becoming *e*; cf. *khu-ta* ‘be big; be tall’ (258c) and as in *yeyppu-ta* ‘be pretty’ (258b).
about the height of the addressee, but the meaning of the polysemic adverb *com* ‘please; little’ is also interpreted differently.

(260)

a. *khi com khu-ta*
   
   height please be tall–DECL
   
   ‘May you be tall!’ (intended)

b. *khi com khu-ta* (declarative)
   
   height little be tall–DECL
   
   ‘You are certainly tall.’ (sarcastically)

In sum, the UoL *la* is interpreted as imperative when it occurs with an active bare verb, and as exclamative or optative when it co-occurs with a bare stative verb with a specific intonation marker.

Although *la* is interpreted as a declarative-like exclamative in (258), it cannot be a phonological allomorph of the declarative *ta*; the two UoLs interact differently with negation *an-/anh*- and past-tense *ess*. The UoL *la* is incompatible not only with the past tense but also with both so-called short prefix negation (i.e., *an-*) and long auxiliary negation (i.e., *anh*), regardless of verb type. A clause marked by *la* needs to be headed by the specific negative form *mal* (Han & Lee, 2007). The examples in (261) contain active/dynamic verbs, so positive counterparts would be interpreted as imperatives—and negative imperatives are incompatible with short prefix negation, as in (261a), and long auxiliary negation *anh*-, as in (261b). Negative imperatives are only marked by the deontic negative *mal* (Han & Lee, 2007), as in (261c). The negative imperatives *malala*, *mala*, and *ma* are in free variation.

(261)

a. *Inho-ya cip-ey an-ka-la*
   
   Inho-VOC home-LOC not-go-COMP
   
   ‘Inho, don’t go home.’
b. *Inho-yə cip-ey ənha-la
   Inho-VOC home-LOC go-COMP not-COMP
   ‘Inho, don’t go home.’

c. Inho-yə cip-ey ənha-la
   Inho-VOC home-LOC go-COMP NEG.IRR-COMP/NEG-COMP
   ‘Inho, don’t go home.’

d. Inho-yə cip-ey ma
   Inho-VOC home-LOC go-COMP NEG.CMP
   ‘Inho, don’t go home.’

Compare the ill-formed (261a) and (261b) to the well-formed (262a) and (262b) that are compatible with declarative *ta; compare the grammatical (261c) to the ill-formed (262c).

(262)

a. cip-ey an-ka-n-ta
   home-LOC not-go-PRES-DECL
   ‘I’m not going home.’

b. cip-ey ka-ci anh-nun-ta
   home-LOC go-COMP NEG.AUX-PRES-DECL
   ‘I’m not going home.’

c.*cip-ey ka-ci mal-ta
   home-LOC go-COMP NEG.IRR-DECL
   ‘I must not go home.’ (intended)

d. cip-ey ka-ci mala-ya ha-n-ta
   home-LOC go-COMP not.IRR-must do-PRES-DECL
   ‘I must not go home.’

The same restriction applies to clauses with statives, as in (263).

(263)

a.*khi com an khe-la
   height please not be tall-COMP
   ‘Please, don’t be tall (don’t grow)!’ (intended)

b.*khi com khu-ci anha-la
   height please be tall-COMP NEG.AUX-COMP
   ‘Please, don’t be tall (don’t grow)!’ (intended)
Thus, \textit{la} in (258a) and (258b) must have different features from declarative \textit{ta} in (259a) and (259b), although they are interpreted as exclamative-like declaratives in semantics. This shows that the morphosyntactic properties of these UoLs are distinct from their semantic properties.

Now we turn our attention to \textit{la} as the head of an apprehensive clause. The two clauses in (264), with and without the irrealis \textit{l}, express distinct forces or speech acts. Clause (264a), in which \textit{la} immediately selects an active verb, is interpreted as imperative, while clause (264b), in which \textit{la} selects an active verb but co-occurs with the irrealis \textit{l}, is interpreted as alerting the addressee.

(264)
\begin{enumerate}
\item \textit{Inho-ka cip-ey ka-la} \hfill (Inho = addressee)
\begin{tabular}{l}
\textit{Inho-NOM.FOC home-LOC go-IMP} \\
\end{tabular}
\begin{tabular}{l}
\textit{\textquote{Inho (not Minsoo), go home.}}
\end{tabular}
\item \textit{Inho-ka cip-ey ka-l-la} \hfill (Inho \neq addressee)
\begin{tabular}{l}
\textit{Inho-NOM home-LOC go-IRR-COMP} \\
\end{tabular}
\begin{tabular}{l}
\textit{\textquote{(warning) Inho may go home.}}
\end{tabular}
\end{enumerate}

Note that \textit{Inho} must be co-indexed with the addressee in the imperative, while the proper noun must be third-person in the apprehensive. As the morphosyntactic contexts of imperative \textit{la} and apprehensive \textit{la} do not overlap, I argue that \textit{la} in (264b) can be considered multifunctional, with its meaning contextually determined. The morphosyntactic contexts of imperative \textit{la} and apprehensive \textit{la} can be distinguished as follows: i) the null subject of an imperative clauses with \textit{la} is restricted to a second person, while there is no restriction on the person feature of the null subject of an
apprehensive clause; ii) *la* in imperatives directly selects a bare verb stem, while *la* in apprehensives selects irrealis *l* and cannot select a bare verb stem directly; iii) *la*-imperatives must be embedded by indirect *ko*, while *la*-apprehensives are parasitic and co-occur with directives (such as imperatives or exhortatives) without a subordinator or coordinator; in such cases, the *la*-apprehensive acts like a conditional and the null subject of the *la*-apprehensive behaves like an anaphor, as in (265). (265a) is repeated from (256a).

(265)

a. pro **tachi-l-la** pro **cosimhay-la**
   hurt-IRR-COMP be watchful-IMP
   ‘Watch out; you might get hurt!’

b. pro **tachi-l-la** pro **cosimha-ca**
   hurt-IRR-COMP be watchful-EXH
   ‘Let’s watch out; we might get hurt, so!’

The distribution of *la*-apprehensives shows that matrix *la*-apprehensives are likely the result of insubordination. I will not discuss *la*-apprehensives from a diachronic perspective here. The English translation shows that *la* in apprehensive clauses is more or less equivalent to a declarative, while irrealis *l* is equivalent to the modal *might*. In the next section, I show the distribution of *la*, which can serve as a declarative clause-typing UoL. I show that its meaning is not strongly associated with a directive that requires a response, even in clauses with active/dynamic verbs.

6.2.1.2 The UoL *la* in declaratives with the -te- evidential

With respect to marking clause-type, Korean complementizers differ from English complementizers in that they are required for the interpretation of clause force. For instance, the Type UoLs *ta*, *la*, *ca*, and *ma* never mark a clause as interrogative, regardless of whether a rising intonation follows. Moreover, *ta* never marks a clause as
imperative. However, as discussed in the previous section, the association between the imperative interpretation and the form of la is somewhat looser. The clause-typing la has predominantly been considered an imperative clause-typing marker that contrasts with either declarative ta or exhortative ca. Based on this assumption, la following evidential te in retrospective clauses (as in (266b)) has been treated as an allomorph of declarative ta in the literature (K. Chung, 2007; I. Kwon, 2012; Lim, 2012; S. Sohn 1995, 2015), distinct from imperative la.

(266)

a. *cip-ey ka-la
home-LOC go-IMP
‘Go home.’

b. John-i cip-ey ka-te-la
John-NOM home-LOC go-EVID-COMP
‘[I saw/observed] John going home.’ (cf. S. Sohn, 2015: 188)

Assuming all homophonous UoLs are multifunctional, in this subsection I investigate the form, function, and distribution of la, exploring the seemingly contradictory alternative interpretations it exhibits within the clause-typing Type category. Consider the types of the clauses with la in (266a) and (266b), which are interpreted differently. I agree with Sohn’s interpretation that the clause in (266b) is declarative, but I do not agree with the glossing of la as a declarative morpheme; such a gloss wrongly predicts that la may select any finite TAM UoLs, including past-tense ess. The ungrammaticality of (267a) and (267b) shows that la cannot be straightforwardly considered a declarative marker or an allomorph of declarative ta.

(267)

a. *Inho-ka cip-ey ka-ss-la
Inho-NOM home-LOC go-PAST-COMP
‘Inho went home.’ (intended)
b. *Inho-ka cip-ey ka-n-la
   Inho-NOM home-LOC go-PRES-COMP
   ‘Inho is going home/Inho goes home.’ (intended)

If *la is indeed a declarative head marker, why is declarative *la incompatible with past-tense ess and present-tense n? Why can past-tense ess co-occur with declarative ta but not with the putative declarative *la? The evidence in (267) shows that the inherent morpholexical properties associated with the form *la are relevant to the incompatibility; the interpretation of *la as a declarative must be contextual. It must belong to a distinct paradigm. Now I return to investigating what syntagmatic conditions result in the declarative interpretation of *la, based on its semantic and morphosyntactic properties in (266) and (267).

The contrast between the minimal pair in (266) is the presence or absence of retrospective te. The UoL te has been analyzed in different ways in the literature: as a retrospective (H. Lee, 1993), spatial deictic tense (Chung, 2007), or evidential (J. Lee, 2011). Yeon and Brown (2011: 201) define te as an “observed or perceived past tense marker” and explain that te can be translated in English as “it has been observed that” or “I saw/noticed/realized/felt/heard that”. The examples in (268) are adopted from Yeon and Brown (2011: 201); parsing and glossing are by the current author.

(268)

a. nwun-i o-te-la
   snow-NOM come-EVID-COMP
   ‘(I saw that) it was snowing.’

b. nwun-i wa-ss-te-la
   snow-NOM come-PST-EVID-COMP
   ‘(I saw that) it had snowed.’
Evidential \textit{te} selects a bare verb stem in (268a) and can select past-tense or perfective aspect \textit{ess} in (268b). Evidential \textit{te} can select conjectural \textit{keyss} and the periphrastic progressive -\textit{ko=iss} (see §6.2.2.1). This is shown in (269).

(269)
\begin{enumerate}
\item a. \textit{nwun-i} \textit{kot} \textit{o-keyss-te-la}
\hspace{1em}
\begin{tabular}{l}
\text{snow-NOM} \hspace{1em} \text{soon} \hspace{1em} \text{come-IRR-EVID-COMP}
\end{tabular}
\hspace{1em}
\begin{tabular}{l}
\text{‘(I felt that) it will snow soon.’}
\end{tabular}
\item b. \textit{Mina-ka} \textit{talli-ko} \textit{iss-te-la}
\hspace{1em}
\begin{tabular}{l}
\text{Mina-NOM} \hspace{1em} \text{run-COMP} \hspace{1em} \text{exist-EVID-COMP}
\end{tabular}
\hspace{1em}
\begin{tabular}{l}
\text{‘(I saw that) Mina was running.’}
\end{tabular}
\end{enumerate}

A Type UoL that semantically contrasts with \textit{la} in terms of illocutionary force is interrogative \textit{nya}, as in (270).

(270)
\begin{enumerate}
\item a. \textit{nwun-i} \textit{o-te-la}
\hspace{1em}
\begin{tabular}{l}
\text{snow-NOM} \hspace{1em} \text{come-EVID-COMP}
\end{tabular}
\hspace{1em}
\begin{tabular}{l}
\text{‘(I/*you/*they saw that) it was snowing.’}
\end{tabular}
\item b. \textit{nwun-i} \textit{o-te-nya}
\hspace{1em}
\begin{tabular}{l}
\text{snow-NOM} \hspace{1em} \text{come-EVID-INT}
\end{tabular}
\hspace{1em}
\begin{tabular}{l}
\text{‘(Did you/*I/*they see that) it was snowing?’}
\end{tabular}
\end{enumerate}

Depending on the force of a clause containing \textit{te}, it describes an event to be observed or perceived by the speaker or addressee: the perceiver of the thing being discussed must be the speaker in the statement and the addressee in the question. The \textit{u}Type UoLs \textit{e} and \textit{ci} and exhortative \textit{ca} are incompatible with \textit{te}.

Although the clauses in (270a) cannot be subordinating clauses by themselves, they can subordinate when selected by the negative polarity item -\textit{to} ‘even,’ as in (271). Here,
the subordinate clauses are irrealis or counterfactual, depending on the aspect or tense.

The perfective aspect and past-tense markers *ess* are homophonous.\(^6\)

(271)

a. *nwun-i* \(\text{o-te-la-to}\) *phathi-ey* *wa-la*
   snow-NOM come-EVID-COMP-even party-LOC come-IMP
   ‘Even if it snows, come to the party.’

b. *nwun-i* *wa-ss-te-la-to* *phathi-ey* *ka-ss-ul-kes-i-ta*
   snow-NOM come-ANT-EVID-COMP-even party-LOC go-ANT-IRR-COMP-be-DECL
   ‘Even if it had snowed, I would have gone to the party.’

In the literature, including Strauss (2005) and Chung (2005, 2010), *tela* is sometimes treated as a single morpheme. Strauss (2005) compares *tela* with *kwun* and *ney* and proposes that the three UoLs are mirative evidential markers, glossing *tela* as a ‘cognitive realization marker (CRM)’. Chung (2005, 2010) considers *tatela* as a second-hand reportative marker.

(272)

a. *chac-ul* *kil-i* *eps-tela-ko-yo*
   find-ATTR way-NOM not exist-CRM-QT-POL
   ‘(I realized that) there was no way to find her.’ (Strauss, 2005: 475, (39))

b. *Mary-ka* *mikwuk-ey* *ka-ss-tatela*
   Mary-NOM America-LOC go-PFCT-REP
   ‘(They say) Mary went to America.’ (Chung, 2005: 191, 2010: 938)

*Te-la* in (272b) is interpreted as a second-hand reportative marker because it selects declarative *ta* instead of a tense element or a bare verb stem, so *ta, te*, and *la* are better considered as separate morphemes. As *te-la* forms a minimal triplet with *te-kwun* and *te-

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\(^6\) If *te* is a spatial deictic tense marker (Chung, 2007), then *ss* is likely a perfect aspect marker. See H. Lee (2015) for a summary on tense and aspect markers in Korean.
I analyze *te* as a single functional marker. As cited in Cinque (1999: 54) and Lee (1993: 150), *te* can be selected by either of the evidential declaratives *kwun* (273a) or *la*, and the order between *te* and *kwun* is fixed, as the ill-formed clause in (273b) shows.

(273)
a. *Minca-nun ttena-ss-te-kwun-yo*
Minca-TOP leave-PST-EVID-EVAL-POL
‘I noticed that Minca had left.’ (Sohn 1994, cited in Cinque, 1999: 54)

b. *Minca-nun ttena-ss-kwun-te-yo*
Minca-TOP leave-PST-EVID-EVAL-POL
‘I noticed that Minca had left.’ (intended)

The connotations of the two examples in (274) have only subtle differences.

(274)
a. *Minca-nun ttena-ss-te-kwun*
Minca-TOP leave-PST-EVID-EVAL
‘(I noticed that) Minca had left.’ (regretful)

b. *Minca-nun ttena-ss-te-la*
Minca-TOP leave-PST-EVID-COMP
‘(I noticed that) Minca had left.’ (observation)

Lee (1993: 151) views *kwun* as a functional marker conveying “consciously known but unassimilated information,” while Strauss (2005) claims that *kwun* forms a natural class of miratives with the UoLs *ney* and *tela* in the evidential paradigm. Putting aside the exact nature of the meaning differences, if we only focus on the distribution of *kwun* and *la*, the two UoLs show similar but still distinct distributions. Both *la* and *kwun* only occur in declarative clauses, and they are the only Type UoLs that are compatible with *te* in first-hand declaratives, as in (275).7

7 In second-hand declaratives, *nwun-i o-te-la-y* ‘H/she said that it was snowing.’; *nwun-i o-te-la-ko*. ‘I’m saying that it was snowing’ are well-formed clauses, while *nwun-i o-te-kwun-y* and *nwun-i o-te-kwun-ko* are ill-formed.
Clauses with kwun and la have a fixed interpretation as declaratives and are incompatible with rising intonation. Both can select past-tense (or perfective) ess, while only kwun can select present-tense n (or nun), as in (276b).

Polite yo selects kwun, as in (277a), whereas it cannot select te-la, as in (277b).

Conversely, ko can selects la but not kwun, as in (c) and (d)
Most of Strauss’s (2005) set of naturally occurring examples include exclusively the combination *te-la-ko* (cf. Sohn, 2015). Thus, within the evidential paradigm, *kwun* and *la* share similar but still distinct distributions.

I have shown that the similar semantic properties of these UoLs do not correlate with their morphosyntactic properties. Although *ta, la,* and *kwun* occur as the head of declarative clauses, each interacts differently with UoLs from the lower and higher domains. *La* contrasts with *kwun* in the evidential paradigm and with exhortative *ca* and promissive *ma* in the directive paradigm. When *la* merges with evidential retrospective *te,* it has the declarative interpretation; when it merges with either the bare stem of an active verb or irrealis *l,* it can be interpreted as imperative or apprehensive, respectively, depending on what it selects. The investigation of multifunctional UoLs shows that the properties of morphologically realized forms are associated with language-specific functional categories within the universal linking category.

### 6.2.1.3 The UoL *la* in declaratives and the bare *-i-* copula

The last situation in which *la* is associated with declarative mood is found in indirect speech contexts containing the present-tensed copular *-i-* ‘be’; that is, in clauses headed by *ko* or *y.* In this very constrained syntactic environment, *la* is interpreted again as declarative, and the default declarative *ta* is absent. For this situation to arise, three syntactic conditions need to be met. First, *la* must be selected by *ko* or *y,* as in (278).

(278)

```
a. i  chayk-i  caki  chayk-i-la-ko↑
   this book-NOM self book-be-COMP-COMP.REITER-RI
   ‘(Are you saying that) this is your book?’
```

---

8 This unexpected interpretation of *la* is possibly critically related to the absence of *ta,* irrespective of phonological or historical motivation; I do not investigate this motivation further here.
b. *i chayk-i caki chayk-i-la-y↑
  this book-NOM self book-be-COMP-HEARSAY-RI
  ‘(Did s/he say that) this is her/his book?’

(279)
  a. *i chayk-i caki/nay chayk-i-la
     this book-NOM self/my book-be-COMP
     ‘This book is your/my book.’ (intended)

  b. i chayk-i nay chayk-i-ta/ chayk-i-a [ya]-↓
     ‘This book is my book.’

Second, the clause must be present tense, as illustrated in (279b). The (280a) is ill-formed because it is inflected in past tense; declarative ta is the correct Type UoL in this context, as shown in (280b).

(280)
  a. i chayk-i caki chayk-i-(*ess)-la-ko↑
     ‘(Are you saying that) this was your book? (intended)

  b. i chayk-i caki chayk-i-ess-ta-ko↑
     ‘(Are you saying that) this was your book?’
Third, the verb must be copular -\textit{i}-. Dynamic verb stems can co-occur with \textit{la} in indirect speech, but in such cases, \textit{la} expresses imperative (or command force) rather than declarative. (281) shows that \textit{la} can express imperative mood when it occurs with a dynamic verb stem in indirect speech, although the clause with \textit{la} in (281a) can be interpreted as declarative with the deontic modal ‘should.’

(281)
\begin{itemize}
  \item a. \textit{pro} \textit{na-poko} \textit{ka-la-ko-$\uparrow$}
    \begin{tabular}{ll}
      1sg-DAT & go-COMP-COMP.REITER-RI \\
    \end{tabular}
    ‘(are you saying that) I should go? (Lit. Are you asking me to go?)
  \item b. * \textit{pro} \textit{na-poko} \textit{ka-ta-ko-$\uparrow$}
    \begin{tabular}{ll}
      1sg-DAT & go-DECL- COMP.REITER-RI \\
    \end{tabular}
    ‘(are you saying that) I should go? (intended)
\end{itemize}

The declarative function of \textit{la} is even incompatible with present-tensed stative verbs such as \textit{coh-ta} ‘be good’ or \textit{pissa-ta} ‘be expensive.’ The ungrammatical (282a) shows that present-tense stative verbs behave differently from the copular verb in this context.

(282)
\begin{itemize}
  \item a. *\textit{i} \textit{chayk-i} \textit{coh-la-ko-$\uparrow$}
    \begin{tabular}{ll}
      this book-NOM & be.good-COMP-COMP.REITER-RI \\
    \end{tabular}
    ‘(Are you saying that) this book is good?’ (intended)
  \item b. \textit{i} \textit{chayk-i} \textit{coh-ta-ko-$\uparrow$}
    \begin{tabular}{ll}
      this book-NOM & be.good-DECL- COMP.REITER-RI \\
    \end{tabular}
    ‘(Are you saying that) this book is good?’
\end{itemize}

Thus, the necessary morphosyntactic context for the interpretation of \textit{la} as declarative can be summarized as follows: i) the clause must contain the present-tense/uninflected copular -\textit{i}- ‘be’; and ii) it must occur in a subordinate clause in the context of second-hand speech.
A careful examination of the distribution of la reveals that la is incompatible with past-tense ess in any given context, even when it is semantically interpreted as a declarative. Thus, the interpretation of la is contextually determined by the syntactic environment, but at the same time, la carries inflectional information. Specifically, la as a [Type] UoL can select an anchoring UoL which is valued as either [+coin] or [-coin] with respect to [realis]. When la selects the retrospective evidential te [realis], it is interpreted as a declarative; when la selects irrealis l, it is interpreted as an imperative or apprehensive. These alternative interpretations of la in the same category c: Type present very strong evidence that la is not fundamentally an imperative Type COMP; rather, its status as an imperative emerges configurationally.

6.2.1.4 Summary

In this subsection, I examined the considerable variation in the interpretation of la clauses; some clauses with la are interpreted as imperative, while others are interpreted as declarative or apprehensive. The distribution and interpretation of la show that it should be glossed as an underspecified COMP.

Based on this evidence, it appears that the form, meaning, and distribution associated with a given UoL must be evaluated within a language, and language-specific categories must be established with reference to universal categories. Contrary to the preliminary analysis presented in Chapter 3, this examination reveals that the imperative feature is not directly associated with the form of la. Instead, the specification of TAM information and compatibility of speech act association information are encoded in its distribution. The interpretation of clauses with la as imperative is configurationally determined by a syntactic context containing a second-person subject and a bare active
verb. This conclusion is further supported by the fact that clauses marked by the *u*Type UoLs *e* or *ci* are also interpreted as imperative when they contain a bare active verb and a second-person subject. However, it is also true that not just any UoL can appear as a head in this syntagmatic context. As a result, *la* can mark a clause as apprehensive, evidential declarative, or present-tense copular declarative without conflict with *ta*. Neither the form nor structural position of *la* is solely responsible for its proper interpretation in various clause types. Therefore, the assumption that this UoL is “typed” as imperative or as a plain speech style imperative marker must be revised in morphosyntax.

Table 6-1 Multifunctional *la* and its interaction with TAM and Indirect UoLs

<table>
<thead>
<tr>
<th>V</th>
<th>TAM</th>
<th>Type UoL</th>
<th>Indirect UoL</th>
<th>interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>active causative</td>
<td>∅</td>
<td><em>la</em></td>
<td>∅, <em>ko</em>, <em>y</em></td>
<td>IMP</td>
</tr>
<tr>
<td>stative</td>
<td>∅</td>
<td></td>
<td>∅</td>
<td>EXCL, OPTA</td>
</tr>
<tr>
<td>active stative</td>
<td><em>te</em></td>
<td></td>
<td>∅, (<em>ko</em>, <em>y</em>)</td>
<td>DECL</td>
</tr>
<tr>
<td>copula</td>
<td>∅</td>
<td></td>
<td><em>ko</em>, <em>y</em></td>
<td>DECL</td>
</tr>
</tbody>
</table>

A similar mechanism applies to another multifunctional UoL, *ko*, which may have the widest distribution in Korean. *Ko* appears as the head of several structural positions, including AspP, TP, MoodP, and CP. The function of *ko*, unlike that of *la*, is determined by its structural position rather than via local configuration; I will discuss this in the next section.

6.2.2 The multifunctional complementizer *ko*

The holistic examination of multifunctional *ko* undertaken here is a task which, to the best of my knowledge, has not been attempted before. The suffix *ko* shows wide
distribution across categories. It appears as the categorial head of conjunction words, including *kuliko* ‘and’ and *hako* ‘and’, as well as direct quotative words such as *lako* and *hako* (selected by communicative verbs such as *malha-ta* ‘say’ in direct quotations). In the clausal domain, *ko* can appear as (i) the head of the clausal complement of an auxiliary verb, (ii) a head linking two or more clauses expressing sequential, parallel, or contrastive events, and (iii) the head of an embedded or matrix clause in direct or indirect speech. The UoL *ko* is thus a functional marker with a single form that appears across multiple functional categories.

Elements that serve as quotatives in addition to other functions have been attested in languages both typologically related and unrelated to Korean. As discussed in the introduction of this chapter, Ibero-Romance *que*, which is very typologically distinct from Korean, has four functions: a finite complementizer, quotative, exclamative, and conjunctive (cf. Corr, 2016). English *like* has five functions: a preposition, a conjunction, an adjectival suffix (as in *human-like*), regular discourse marker, and quotative discourse marker (Romaine & Lange, 1991). Japanese, a very typologically close language to Korean, has *tte* which exhibits five distinct functions: a finite complement marker, a topic marker, a conjunctive particle, a semi-sentence-final particle, and a sentence-final particle (Okamoto & Ono, 2008). In each of these cases, the conjunctive and quotative are shared functions of a single UoL. Similar cross-linguistic examples were briefly surveyed in Chapter 4, § 4.4.3. The discussion in this section builds on these studies of multifunctional items in various languages to expand our understanding of the characteristics of multifunctional UoLs in the CP domain.
Although the distribution of *ko* is widespread in the Korean grammar, I will only discuss seven distinct instances of *ko* in the clausal domain here. A quick look at the examples in (283) reveals that *ko* can occur in more than three different positions in the same sentence.

(283)

a. *Mina-ka o-ko sip-ta-ko malhayss-ta-ko*↑

   Mina-NOM come-COMP want-DECL-COMP said-DECL-COMP-RI

   ‘(Are you saying that) Mina said she wanted to come?’

b. *Mina-nun o-ko iss-ko Leah-nun imi wass-ta-ko*↑

   Mina-TOP come-COMP have-COMP Leah-TOP already came-DECL-COMP-RI

   ‘(Are you saying that) Mina is coming now and Leah already came?’

All the instances of *ko* in (283) are obligatory, although *ko* at the right periphery may be seen as a pragmatic selection (i.e., repeating or confirming what the speaker just heard or said). The leftmost *ko*, which follows the verb stem *o-* ‘come’ in both examples (283a-b), is selected by the auxiliary verbs *sip-* ‘want’ and *iss-* ‘exist, have’; these auxiliary verbs with *ko* periphrastically form the desiderative and progressive tense/imperfect aspect, respectively. Structurally, this infinitive-like *ko* appears in a head above vP; morphological causative markers in the Voice projection, including causative *hi* (cf. K. Kim, 2011), can intervene between a verb stem such as *ip-* ‘wear’ and *ko*, as in *ip-hi-ko sip-* ‘(I) want to let X wear a dress’.

The middle *ko* following declarative *ta*-in (283a) is a subordinating complementizer selected by the verb *malha-* ‘say’, as discussed in Chapter 4. The middle *ko* in (283b) marking the auxiliary verb stem *iss-* is a so-called “connective”, which is usually translated as ‘and’ in English. The rightmost *ko* in both examples marks the clause as an echo question with a rising intonation, as discussed in Chapter 4.
The morphosyntactic context of \textit{ko} in progressives is investigated in § 6.2.2.1, and \textit{ko} in desiderative constructions is investigated in § 6.2.2.2. In both these instances, \textit{ko} is selected by an auxiliary verb. § 6.2.2.3 and §6.2.2.4 discuss \textit{ko} with a connective-like function, which I show has a distinct finiteness specification depending on the properties of the sentence. \textit{ko} associated with the grounding spine is revisited briefly in § 6.2.2.5, and \textit{ko} as a Type UoL is introduced in § 6.2.2.6. § 6.2.2.7 is the summary.

\textbf{6.2.2.1 The head \textit{ko} associated with Aspect (progressive): vP-\textit{ko} iss-}

The goal of this section is to investigate the distribution of \textit{ko} as the head marker of a non-finite complement in periphrastic imperfective clauses. The UoL \textit{ko} in this structural position (i.e., the complement of an auxiliary verb \textit{iss-} ‘be; exist; have’) does not express conjunctive ‘and’ or the illocutionary force of a clause, such as an echo question or declarative question force.

Korean progressive tense/imperfect aspect can be marked by the present-tense marker \textit{nun} (\textit{n} in open syllable) or by a periphrastic construction (\textit{ko} plus the auxiliary verb \textit{iss-} ‘exist; have’), as in (284).

(284)

\begin{enumerate}
\item \begin{tabular}{l}
\textit{Mina-nun} \textit{ca-n-ta} \\
Mina-TOP sleep-PRES-DECL
\end{tabular} ‘Mina is sleeping (now). /Mina sleeps (here every day).’
\item \begin{tabular}{l}
\textit{Mina-nun} \textit{ca-\textit{ko}} \textit{iss-ta} \\
Mina-TOP sleep-COMP being-DECL
\end{tabular} ‘Mina is sleeping (now). /*Mina sleeps (here every day).’
\end{enumerate}

The periphrastic progressive in (284b) is often discussed together with another periphrastic construction that bears a contrastive head: UoL \textit{e} plus the auxiliary verb \textit{iss-} ‘exist; have’, as in (285).
As shown in this minimal pair, the alternation between *ko* and *e* assigns a different interpretation to the clause (the two adverbs in these clauses do not play a role in the alternative interpretation).

What is the Korean language-specific category containing *ko* and *e* in this minimal pair? When *ko* appears in this position, it expresses an aspect-related meaning. As a comprehensive review of the properties of *ko* in the tense and aspect domain already exists (see H. Lee, 2015b), I focus here on the differences and similarities between *ko* and *e* in this minimal pair from a morphosyntactic perspective, by asking what selects *ko* and *e* in the structure. Consider the minimal pairs in (286) and (287).

The event time expressed by the inflected auxiliary verb matches the event time of the clause marked by *ko* or *e*. The first property of *ko* and *e* in this position is that TAM elements, including past-tense *ess*, cannot intervene between the verb stem and *ko* or *e*, as illustrated in (287). The clauses marked by *ko* and *e* are non-finite; the event time in each case is indicated by the event time of the matrix clause.
The ungrammatical sentences in (287a) and (287b) show that ko and e occupy a lower head than Tense.

As the above examples show, at the surface level, ko and e are realized at the same position in the clause—between a bare verb and an auxiliary verb—despite having two different meanings. However, in terms of their distribution, ko differs from e in several respects. For instance, ko marks causative verbs, while e marks inchoative verbs, as in (288).

When the positions of ko and e are reversed, these clauses are ill-formed, as in (289). The properties of ko and e show that they select semantically and syntactically distinct verbal categories.
c. *Mwun-i tät-hi-ko iss-ess-ta  
Mwun-i NOM close-CAU-MARK being-PST-DECL  
The door was closing.

d. Mwun-i tät-hi-e iss-ess-ta  
Mwun-i NOM close-CAU-MARK being-PST-DECL  
The door was closed.

Ko can co-occur with all transitive verbs, while e only co-occurs with some of them
(Yeon & Brown, 2011: 212) in this particular structural position. For instance, ca- ‘sleep’
cannot be selected by e in this position (290a), although it can in the clause-typing
domain (290c).

(290)  
a. *tahaynghi Mina-ka ca-a iss-ess-ta  
fortunatley Mina-NOM sleep-CAU-MARK being-PST-DECL  
‘Fortunately, Mina was asleep.’ (intended)

b. tahaynghi Mina-ka ca-ko iss-ess-ta  
fortunatley Mina-NOM sleep-CAU-MARK being-PST-DECL  
‘Fortunately, Mina was sleeping/ Mina was asleep.’

c. Mina-ya yeki-eysa ca-a↓  
Mina-VOC here-LOC sleep-CAU-MARK-MARK  
‘Mina, (you) sleep here.’

Ko and e also behave differently in the context of the subject honorific marker si.
The honorific form si can intervene between the verb stems and ko in (291a) and (291b),
but it cannot intervene between the stem and a, as in (291c) and (291d). The verb kyeysi-
‘be; exist.HOR’ is an inflected/derived honorific form of the auxiliary verb iss- ‘be; exist.’

(291)  
a. Ung, cikum o-si-ko kyeysi-e↓  
ya now come-HOR-MARK being.HOR-MARK-MARK  
‘Yes, (s/he) is coming now.’

b. Ung, cikum-to keki sa-si-ko kyeysi-e↓  
ya now-even there live-SUB-HOR-MARK be.HOR-MARK-MARK  
‘Yes, (s/he) is still living there.’
c. *Ung. cikum o-si-a [osye] kyeysi-e↓
ya now come-SUB.HOR-COMP be.HOR-COMP-FI
‘Yes, (s/he) is here.’ (intended)

d. *Ung. cikum sal-si-a kyeysi-e↓
ya now alive-SUB.HOR-COMP be.HOR-COMP-FI
‘Yes, (s/he) is alive.’ (intended)

Without *si, the clauses in (291c) and (291d) are well-formed, as illustrated in (292). So, the ergativity of the verbs o- ‘come’ and sal- ‘live’ is irrelevant to the ungrammaticality of the two examples in (292).

(292)

a. Ung, cikum o-a [wa] kyeysi-e↓
ya now come-COMP be.HOR-COMP-FI
‘Yes, (s/he) is here.’ (intended)

b. Ung, cikum sal-a kyeysi-e↓
ya now live-COMP be.HOR-COMP-FI
‘Yes, (s/he) is alive.’

The asymmetric behavior of the minimal pairs with the honorific marker *si shows that *si, as a subject agreement marker, can serve as an effective diagnostic tool for testing the structural position of ko and e in this usage; outside this syntactic context, the subject honorific marker *si is compatible with both intransitive/unergative verbs in clauses marked by e. Following Wiltschko (2014), which posits the structural progression k:
anchoring > k: point-of-view > k: classification, I propose that ko occupies a position above k: classification but below k: anchoring, while e occupies a position below k: point-of-view for these particular minimal pair constructions.

Putting aside the precise aspectual meaning differences between the two UoLs in this structural position, the meaning and distribution associated with ko and e in this position shows that they do not mark different types of clauses with different
illocutionary force (as they do when they occur as the head of matrix clauses). In this domain, *ko* and *e* uniformly express an aspectual meaning rather than Type. The functions of *ko* and *e* in these two distinct structural positions show that they are simply c-selectional heads in the domain below TP.

While the auxiliary verb *iss*- ‘exist; have’ takes two contrastive heads, *ko* and *e*, there is another auxiliary verb that takes only one type of complement clause head: the auxiliary verb stem *sip*- ‘want; would like to’ must take *ko* as its complement. The strong selectional relationship between *ko* and *sip*- will be discussed in the following subsection.

### 6.2.2.2 The head *ko* associated with Modal (desiderative): *vP-*ko sip-

As we have seen, the structural position below TP serves as the locus for *ko* when it functions as the head of the clausal complement of an auxiliary verb. When *ko* serves as the head of the complement of the auxiliary verb *sip*- ‘want’, it is semantically opaque or lacks aspectual meaning; as the auxiliary *sip*- ‘want’ is only compatible with *v-*ko complement clauses, no contrastive morphological head is available to help us tease apart its semantic particulars. *Ko* is straightforwardly c-selected by *sip*-. As *v-*ko *sip-* clauses express the meaning ‘want to do something,’ *ko* in this context is often treated as an infinitive. Although the English translation of *sip*- is ‘want,’ the two verbs are not morphosyntactically equivalent. The auxiliary verb *sip*- is incompatible with an NP complement—unlike the other desiderative full verbs *wonha*- ‘want’ and *pala*- ‘want; wish; hope’, which take NPs or nominal CPs (e.g., *V-ki* ‘V-ing’). The selection between *ko* and *sip*- is illustrated by the examples in (293).

(293)

<table>
<thead>
<tr>
<th>(a)</th>
<th><em>yeki-eyse</em></th>
<th><em>sal-ko</em></th>
<th><em>sip-ess-nya</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>here-LOC</td>
<td>live-COMP</td>
<td>want-PST-INT</td>
<td></td>
</tr>
</tbody>
</table>

‘Did you want to live here?’
b. *yeki-eyse  sal-\textit{a}  sip-\textit{ess-nya}
  here-LOC  live-COMP  want-PST-INT
  ‘Did you want to be alive here?’ (intended)

In desiderative constructions with \textit{ko}, the causative \textit{hi} and the subject honorific marker \textit{si} (but not the past-tense marker \textit{ess}) can intervene between the stem and \textit{ko}, as in (294); this is precisely equivalent to what we find in progressive constructions.

(294)
a. yeki-eyse  \textit{cap-\textit{hi-ko}}  sip-\textit{ess-ni}
  here-LOC  catch-CAU-COMP  want-PST-INT
  ‘Did you want to be caught here?’

b. yeki-eyse  \textit{sa-\textit{si-ko}}  sipu-\textit{si-e-yo-}↑
  here-LOC  live-SUB.HOR-COMP  want-SUB.HOR-COMP-POL-RI
  ‘Do you want to live here?’

c. ai-eykey  \textit{os-\textit{ul}}  \textit{ip-\textit{hi-si-ko}}  \textit{kyey-si-ess-ta}
  child-DAT  clothes-ACC  put on-CAU-SUB.HOR-COMP  being-SUB.HOR-PST-DECL
  ‘S/he was putting clothes on the child.’

d. *yeki-eyse  \textit{cap-\textit{hi-ess-ko}}  sip-\textit{ess-ni}
  here-LOC  catch-CAU-PST-COMP  want-PST-INT
  ‘Did you want to be caught here?’

The c-selectional properties that inform the relationship between heads and functional elements can also be observed in constructions with the auxiliary \textit{po-} ‘try’ (derived from the lexical verb \textit{po-} ‘see’). The distributional properties of \textit{ko} in this syntactic position are again contrastive with \textit{e}, and the UoL \textit{e} again selects the morphological causative (295a) but not the past-tense marker \textit{ess} (295b) and the subject honorific marker \textit{si} (295c).

(295)
a. \textit{os-\textit{ul}}  \textit{motwu}  \textit{ip-\textit{hi-e}}  \textit{po-\textit{ass-ni}}
  clothes-ACC  all  put on-CAU-COMP  see-PST-INT
  ‘Have you tried all the clothes on (the child)?’
The ungrammatical (295b) shows that the complement of the auxiliary *po-*‘try’ must be non-finite; the ungrammatical (295c) shows that *e* must be lower than the subject honorific marker, the structural position that hosts *ko* in the complement of an auxiliary verb.

So far, I have shown that the distribution of *ko* contrasts with that of *e* in two non-finite complement clauses. Comparison of the properties of *ko* in the two types of complement clauses shows that the interpretation of *ko* emerges from contrastive elements in the domain, rather than from the form itself. By focusing on the interaction between TAM elements and the subject honorific marker *si*, I have shown that *ko* is likely located below *k*: anchoring and above *k*: classification. The distribution of *e* shows that it can be associated with *k*: classification, despite the fact that its surface position sometimes overlaps with *ko*. In the next section, I will turn to the distribution of a clause marked by *ko* that contains two full verbs with a co-indexed subject and serves a conjunctive-like function in a sentence. In this syntactic environment, *ko* functions as
neither an aspectual marker nor an infinitive; it rather, it functions as the head of a dependent-subordinating clause.

6.2.2.3 The head ko associated with non-finite conjunct: TP-ko

This section demonstrates that ko can be the head of a conjunctive-like subordinating clause. I argue that ko with a subordinating function is associated with k: anchoring, which is above k: classification. In this context, ko marks the clause as subordinating with the meaning of ‘and’ or ‘and then’, linking two chronological event sequences carried out by the same subject, as in (296).

(296)
pro cenyek-ey-nun chayk-ul ilk-ko ca-a-yo.
evening-PP-TOP book-ACC read-COMP sleep-COMP-POL
‘In the evenings, I read books and then go to sleep.’

(Yeon & Brown, 2011: 285)

The morphosyntactic characteristics of the subordinating clause marked by ko are identical to those of ko in periphrastic constructions, as discussed in the previous section. Although the causative hi (297a) and the honorific subject marker si (297b) can intervene between the verb stem and ko, the past-tense marker ess cannot intervene in a clause marked by ko (297c).

(297)
a. [pro [PRO chayk-ul ilk-hi-ko] cay-we-ss-e]-↓
   book-ACC read-CAU-COMP sleep-CAU-PST-COMP-FI
   ‘(I) made pro read books and then go to bed.’

b. [pro [PRO chayk-ul ilku-si-ko] cwumwusi-ess-e]-↓
   book-ACC read-SUB.HOR-COMP sleep.HOR-PST-COMP-FI
   ‘(pro3.HOR) read books and then went to sleep.’

c. *[pro [ PRO chayk-ul ilk-ess-ko] ca-ss-e]-↓
   book-ACC read-PST-COMP sleep-PST-COMP-FI
   ‘(I) read books and then went to sleep.’ (intended)
Each clause has two full verbs, so the phrase in which *ko* occurs must have clausal status (i.e., a constituent with a subject and a predicate at LF) even though it is non-finite. We know it is non-finite because (i) the verb cannot be inflected (297c), and (ii) an overt nominative-marked subject is disallowed, as in (298b).

(298)

a. `[pro] [PRO chayk-ul ilk-ko] ca-ss-e]-↓
   book-ACC read-COMP sleep-PST-COMP-FI
   ‘(I) read books and then went to sleep.’

b. *[na-nun] [nay-ka chaky-ul ilk-ko] ca-ss-e]-↓
   1sg-TOP 1sg-NOM book-ACC read-COMP sleep-PST-COMP-FI
   ‘I read books and then went to sleep.’ (intended)

c. [Mina-nun] [PRO chayk-ul ilk-ko] ca-ss-e]-↓
   Mina-TOP book-ACC read-COMP sleep-PST-COMP-FI
   ‘Mina read books and then went to sleep.’

d. *[Mina-nun] [Mina-ka chayk-ul ilk-ko] ca-ss-e]-↓
   Mina-TOP Mina-NOM book-ACC read-COMP sleep-PST-COMP-FI
   ‘Mina read books and then went to sleep.’ (intended)

In natural speech, the subject of a matrix clause with a first-person feature is often expressed by *pro*, so, in (298a) the subjects of both clauses are understood as the same person—the speaker. As shown in (298b) and (298d), the presence of an overt nominative-marked subject in a subordinating clause marked by *ko* is ungrammatical. In this construction, the clause headed by *ko* behaves like a controlled clause; i) the subject of the *ko*-clause must be a null and co-indexed with the subject of the finite clause; ii) the event time of the *ko*-clause is scoped over by the temporality of the matrix predicate, even though, morphosyntactically, the *ko*-clause must be non-finite.

This chronological sequence of two clauses with the same subject creates a resultative-like construction, as in (299).
The subject honorific marker -si can intervene between the verb stem and ko in a
resultative-stative-like construction, but cannot intervene between causative hi and ko, as
in (300a) and (300b).

The grammatical clause in (300c) has two alternative interpretations. The alternation is
related to the internal structure of the clause to which the honorific marker si is attached.

Thus, the chronological sequence (300c) and resultative-stative construction (300a) have
different structures. This observation can be confirmed by observing the interaction of
each construction with adverbs. The chronological order of events can be reversed by the
adverbs such as nacwung-ey ‘later’ or mence ‘first’, which can intervene between two full
verbs, as in (301).
(301)  
\(a. \text{mence chayk-ul ilku-si-ko nacwungey cwumwusi-ess-e-↓} \)  
\(\text{ahead book-ACC read-HOR-COMP later sleep.HOR-PST-COMP-FI} \)  
‘(pro\(\text{_3}\)) read books first and then went to bed later.’  
\(b. \text{chayk-ul nacwung-ey ilku-si-ko mence cwumwusi-e-yo-↓} \)  
\(\text{book-ACC later read-HOR-COMP ahead sleep.HOR-COMP-POL-FI} \)  
‘Please, go to bed first and read the book later.’  

The interaction of the constructions with the adverbs in (301) shows that \(ko\) with the resultative-stative function (302a) occupies a different structural position from chronological \(ko\) in (301), even though superficially both instances of \(ko\) occupy the same structural position. The multifunctional \(ko\) is associated with a different spine.  

(302)  
\(a. \text{camos-ul an ip-ko cwumwusi-ess-e-↓} \)  
\(\text{pajamas-ACC not wear-COMP sleep.HOR-PST-COMP-FI} \)  
‘(pro\(\text{_hor.3}\)) slept without wearing her pajamas.’  
\(b. *\text{mence camos-ul an ip-ko nacwungey cwumwusi-e-yo-↓} \)  
\(\text{aheadpajamas-ACC not wear-COMP later sleep.HOR-COMP-POL-FI} \)  

In both the chronological and resultative constructions, the clause marked by \(ko\) is non-finite and the subjects of the two clauses are co-indexed. Each \(ko\) is generated either above \(k\): classification and below \(k\): anchoring, or in \(k\): anchoring (When the clause marked by \(ko\) is compatible with the honorific \(si\), \(ko\) is likely associated with the anchoring spine). In the next subsection, I will show that \(ko\) can also be generated above the anchoring spine, selecting past-tense \(ess\). This will demonstrate again that \(ko\) is able to spell out in several heads in the structure.

6.2.2.4 The head \(ko\) associated with finite conjunct: TP-\(ko\)

When two morphosyntactically independent matrix clauses are adjacent and interconnected somehow by semantics and pragmatics, one of the clauses can be marked
by *ko*. When *ko* performs this function, it is associated with *u*TypeP. As the head of a matrix clause, *ko* has a [±finite] feature and can select past-tense *ess*; the function of *ko* in this case is similar to the one performed by the English clausal conjunction marker *and* in a position between two matrix clauses.

(303)

a. *Minswu-nun pang-ul chiw-ess-ko,*  
   *na-nun changmwun-ul takk-ass-ta*  
   Minsoo-TOP room-ACC tidy up-PST-COMP 1sg-TOP window-ACC wipe-PST-DECL  
   ‘Minsoo tidied up his room; I will wipe the window off.’  
   (adapted from Yeon & Brown, 2011: 285)

b. *na-nun changmwun-ul takkass-ta.*  
   *Minswu-nun pang-ul chiw-ess-ko-*↓  
   1sg-TOP window-ACC wiped-DECL Minsoo-TOP room-ACC tidy up-PST-COMP-FI  
   ‘I wiped the window off; Minsoo tidied up his room.’

The finite clause marked by *ko* in the complex sentence in (303a) acts as an independent clause in (303b). *Ko* thus marks both finite subordinate clauses and matrix clauses. As the head of a matrix clause, *ko* behaves as a Type marker; I will discuss this function further in the next subsection. We might expect *ko* to express a clause type in this environment; however, this is not the case. Rather, the clause-type interpretation of the clause marked by *ko* alternates depending on the type of the adjacent clause. If the adjacent matrix COMP UoL has question force, the clause marked by *ko* with a rising intonation can be interpreted as interrogative, as in (304b).

(304)

a. *Minswu-nun pang-ul chiw-ess-ko,*  
   Minsoo-TOP room-ACC tidy up-PST-COMP  
   *ne-nun changmwun-ul takk-ass-ni*  
   1sg-TOP window-ACC wipe-PST-INT  
   ‘Did Minsoo tidy up his room and did you wipe the window off?’

b. *ne-nun changmwun-ul takk-ass-ni*  
   1sg-TOP window-ACC wipe-PST-INT
Based on the characteristics and distribution of *ko* shown in (304b)—particularly, the fact that a finite clause marked by *ko* can appear with a rising intonation in the absence of an adjacent matrix clause—*ko* seems to have been reanalyzed as a *u*Type UoL in the synchronic grammar. This facet of *ko* will be discussed in the next subsection.

6.2.2.5 The head *ko* associated with type: TP-*ko*

Traditional grammar studies conspicuously do not discuss *ko* as a clause-typing Type UoL (see Aikhenvald, 2010: 213; Chang, 1996: 191; Lee & Ramsey, 2000: 183; König & Siemund, 2007: 280; Siemund, 2018: 88; Yeon & Brown, 2011: 171). Thus, it seems possible that *ko* has recently acquired this additional grammatical role. The head of the finite matrix clause marked by *ko* in (305a) has been referred as a “clausal connective suffix functioning as a question-formulating device” or “turn-final *ko*” (M. Kim, 2015: 63). This function of *ko* as a clause-typing UoL is rarely recognized. Why does *ko* require this extra descriptive label? It is largely due to its somewhat semantically dependent properties. We might speculate that the independent clause marked by *ko* in (305a) is the result of insubordination of the subordinating clause with *ko* in (305b).

(305)
a. *ilena-la!*  *ca-ci*  *mal-ko-↓*
   wake up-COMP! sleep-COMP not.IRR-COMP-FI
   ‘Get up. Don’t sleep.’

b. [[*ca-ci*  *mal-ko*],  *ilena-la*]
   sleep-COMP not.IRR-COMP wake up-IMP
   ‘Don’t sleep, (and) get up.’

(Yeon & Brown, 2011: 286)
The subordinating clause *ca-ci mal-ko* in (305b) can function as an independent clause via the head *ko* acquiring a new grammatical function in synchronic grammar. Unlike clauses marked by other clause-typing Type UoLs, the independent clause marked by *ko* in (305a) is semantically and pragmatically connected with the antecedent/preceding clause ‘Get up’.

The examples in (306) can occur in the middle of a conversation without any obvious dependency on an adjacent clause. By merging with a rising intonation, a clause with *ko* forms a question in interactive registers.

(306)

a. cemsim-un mek-ess-ko-(yo)-↑
lunch-TOP eat-PST-COMP-(POL)-RI
‘So, you’ve had lunch, as well?’

b. neyJ-ka an ka-myen nan ettehkey ha-ko
you-NOM not go-if I.TOP how do-COMP
‘If you don’t go, what about me?’ (whatever am I supposed to do?)

(Yeon & Brown, 2011: 287)

According to Yeon and Brown (2011), *ko* in (306) indicates a clause “being tagged onto what has previously been said” when it occurs with a rising intonation, and “the speaker’s stance pointing out a difference between the hearer’s previous words and current actions” with a falling intonation (p. 287). The pragmatic aspects of *ko* as the head of a matrix clause are documented in M. Kim (2015), who analyzes this use of *ko* as a distinct type of declarative question. In terms of its interacting with intonation and polite *yo*, *ko* behaves similarly to the underspecified Type UoLs *e* and *ci*. Similar to *e* and *ci*, *ko* can be the head of a declarative (303b), negative imperative (305a), or interrogative (306a). Thus, the use of *ko* as *c: u*Type is distinct from the uses of *ko* discussed in previous sections; its
position in this case occurs structurally higher along the linking spine. The next subsection revisits the variant of ko that I discussed extensively in Chapter 4, which spells out higher in the structure than clause-typing ko.

6.2.2.6 The head ko associated with iteration: CP-ko

The multiple instances of ko in (307) reflect its various distributions discussed so far. The rightmost ko in the examples functions as a second-hand speech act marker. That is, this ko is associated with the functions of echo and reinforcement.

(307)

a. Mina-ka yeki-ey. o-ko sip-ta-ko hayss-ta-ko↑
Mina-NOM here-LOC come-COMP want-DECL-COMP did-DECL-COMP-RI
‘(Are you saying that) Mina said she wanted to come here?’

b. Mina-nun wul-ko iss-ko Lia-nun ka peli-ess-ta-ko↑
Mina-TOP cry-COMP being-COMP Leah-TOP go throw-PST-DECL-COMP-RI
‘(Are you saying that) Mina is crying and Leah has left?’

In this section, I briefly compare the structural position of this leftmost ko with the positions of the ko variants discussed in the previous sections.

While the instances of ko discussed in the previous sections are obligatory, the absence of the topmost ko in the structure does not affect the well-formedness of the clause. It does, however, affect the meaning of the clause. The fact that the absence of ko in this position does not yield an ungrammatical clause cannot be taken as evidence that ko is a discourse particle or adjunct in the Korean grammar. I have argued for ko’s headedness based on its selectional properties and systematic order in the structure. Ko in this position is selected by the interface between discourse/pragmatics and morphosyntax (cf. Speas, 2004; Wiltschko & Heim, 2016). The multifunctional ko can be accounted for
by associating each instance of it with a different place in the hierarchy, as shown in (308).

(308) **Multifunctional ko**

\[
\text{GroundP (c:Indirect)} \quad \text{LinkingP (c:Type)} \quad \text{AnchoringP (c:Fin)} \quad \text{ViewpointP (c: Aspect)} \quad \text{classifictionP (c:Verb)}
\]

\(ko\) can appear as the head of numerous traditional functional projections, including AspP, TP, and CP, as shown above. Based on the distribution of \(ko\), I argue that the morphosyntactic properties of \(ko\) must be determined from the position it occupies in the structure of the clause. Having shown that a single UoL can head different functional projections in the Korean grammar, for now, I conclude the discussion on the multifunctional properties of \(ko\) by presenting a summary of this section.

**6.2.2.7 Summary**

In this section, I have emphasized the diverse facets of \(ko\). In the lower domain, \(ko\) is a functional head straightforwardly selected by auxiliary verbs, including \(sip\)- ‘want to’ and \(iss\)- ‘exist; have’. No other functional marker contrasts with \(ko\) in desiderative constructions; the functional head \(e\) contrasts with \(ko\) in progressive constructions, expressing a resultant-stative clause. **Ko** can appear as the head of a non-finite subordinating clause in a control-type relationship with the matrix subject; it can also
appear as the head of a matrix clause, behaving like an independent clause in a
morphosyntactic sense but like a dependent clause in a semantic and pragmatic sense.
The reanalyzed matrix *ko* occupies the Type domain, but like other underspecified Type
UoLs, it cannot be selected by *ko* in the grounding domain. If all these variants of *ko* are
related in their historical development, it seems that *ko* has acquired its distinct functions
by moving upward in the structure.

In the next section, I will attempt to summarize how the full distributions of the
multifunctional UoLs *la* and *ko* can be valued and spelled out within the USH.

### 6.3 Associating multifunctional complementizers with a spine

Each distinct interpretation of *la* and *ko* discussed in the previous sections is established
by the structural position and syntactic environment in which they occur. If distinct
interpretations or functions of *la* or *ko* were to occur in the same morphosyntactic
environment, they could be considered as coincidental homophonous functional markers.
However, the systematic and separate distributions of *la* and *ko* show that they are not
coincidental homophones. They are better seen as multifunctional markers.

#### 6.3.1 Previous approaches to multifunctional complementizers

In the fixed-category or morpheme-based lexical approach, *ko* has been described
variously as a phonological remnant, a connective, a reportative/quotative
complementizer, and a sentence-final particle, based on the meaning and function
associated with the form in each clause; *la* has been described as an imperative marker
and an allomorph of declarative *ta*, with *lla* considered as a single morpheme marking an
apprehensive based on the meaning and function associated with its form in the clause.
Since they have always been treated as accidental homophones, the different types of
clauses marked by *ko* and *la* have almost never been discussed together in morphosyntactic analysis; after all, their distributions do not overlap. The sole exception to this is a partial discussion of the grammaticalization paths of quotative *ko* and the sentence-final particle *ko* offered in Rhee (2016) and S. Sohn (2011).

In the morpheme-based lexicalist approach to Korean complementizers (Cho & Sells, 1995; Sells, 1995), instances of *ko* with distinct distributions are categorized in the lexicon according to their morphological positions: V2 *ko* (COMP2<sub>V,SIS</sub>), V3 *ko* (mood; conjunctive), and V4 *ko* (discourse).<sup>9</sup> Sells (1995) argues that these *kos* are not the heads of hierarchically organized projections, but instead fill slots in the template of the lexicon. This lexicalist approach to complementizers or “inflectional suffixes” was later challenged by J. Yoon (1995) and Koopman (2005). Although I do not go into the details of Yoon and Koopman’s counter-argument here, in supporting Yoon and Koopman’s syntactic accounts of complementizers, I argue that the lexicalist approach cannot account for the differences between the subordinator *ko*, echo *ko* and reinforcement *ko*, discussed in Chapter 4 and § 6.2.2, all of which are variants of V4 *ko* in the lexicalists’ categorization scheme. If the V3 suffix *ko* (conjunctive) and the V4 suffix *ko* (discourse) are simply characterized as distinct lexemes (Sells, 1995), the sequential occurrences of V3 suffix *ko* and V4 suffix *ko* should be allowed in natural language. In reality, however, sequential occurrences of these *kos* are disallowed, as in (309).

(309)

a. *cemsim-un mek-ess-ko-↑*
   lunch-TOP eat-PST-KO<sub>V3</sub>-RI
   ‘And you’ve had lunch, as well?’

---

<sup>9</sup> Verbal slots in the lexicon: Vroot-V1-V2-V3-V4 (Sells 1995: 143). COMP2 is an alternative morphological slot of V2 assumed by Sells.
b. *cemsim-un mek-ess-ko-ko-↑
lunch-TOP eat-PST-DECL-KOv3-KOv4-RI
‘(Are you saying that) you’ve had lunch?’

Ko with a clause-typing function (309a) and ko with a second-hand speech function (309b) are independently possible in the grammar; therefore, the ungrammaticality of (309c) must have a syntactic explanation. Sells’ (1995: 296) observation of the heterogeneous properties of ko is accurate, but it cannot serve as a rationale for adopting the lexicalist account, in which inflectional suffixes, including ko in Korean, have no syntactic status. Following Yoon (1995) and Koopman (2005), I argue that the homophonous koses can be accounted for by a morphosyntactic analysis, and furthermore, I argue that the USH can account adequately for this element’s multifunctionality. In the next section, I propose a mechanism by which the multifunctional las and kos are valued in the spine.

6.3.2 Morphosyntactic approaches to multifunctional complementizers

Within the USH, Thoma (2016: 225) discusses two hypotheses that might account for Bavarian discourse particles: (i) a lexicalist hypothesis, which assumes that the differences in function of each UoL are due to differences in their nature; and (ii) a syntactic hypothesis, which assumes that the differences in each UoL’s function are due to their syntactic context. The lexicalist approach to the homophonous las and kos can be schematized, as in (310) and (311).
(310) **Lexical approach to the multifunctionality of la**

- \( la_1 \): IMPERATIVE
- \( la_2 \): APPREHENSIVE
- \( la_3 \): EVIDENTIAL DECLARATIVE
- \( la_4 \): EMBEDDED COPULAR DECLARATIVE

(311) **Lexical approach to the multifunctionality of ko**

- \( ko_1 \): CONNECTIVE
- \( ko_2 \): SUBORDINATOR; QUOTATIVE
- \( ko_3 \): ECHO QUESTION DISCOURSE PARTICLE
- \( ko_4 \): REINFORCEMENT DISCOURSE PARTICLE

As presented in (310) and (311), a lexicalist hypothesis treats the homophonous *la* and *ko* as distinct morphemes that coincidentally have identical forms. In that approach, there is no assumption that the *las* and *kos* are internally connected in either the diachronic or the synchronic grammar. On the other hand, a multifunctional approach to homophonous *la* and *ko* would predict that a UoL could acquire a new function by associating with a new syntactic domain in the diachronic and synchronic grammar. The association of the syntactic context with *la* and *ko* can be succinctly formulated as in (312) and (313).

(312) **Syntactic approach to the multifunctionality of la**

\[
\begin{align*}
\text{\textit{IMPERATIVE}} & = la + Cx_{1\text{SYN}} \\
\text{\textit{APPREHENSIVE}} & = la + Cx_{2\text{SYN}} \\
\text{\textit{DECLARATIVE}} & = la + Cx_{3\text{SYN}} \\
\text{\textit{DECLARATIVE}} & = la + Cx_{4\text{SYN}}
\end{align*}
\]

(313) **Syntactic approach to the multifunctionality of ko**

\[
\begin{align*}
\text{\textit{PROGRESSIVE}} & = ko + Cz_{1\text{SYN}} \\
\text{\textit{CONJUNCTION}} & = ko + Cz_{2\text{SYN}} \\
\text{\textit{TYPING}} & = ko + Cz_{3\text{SYN}} \\
\text{\textit{CITATION}} & = ko + Cz_{4\text{SYN}}
\end{align*}
\]
**CXSYN** and **CZSYN** indicate the syntactic contexts, which, broadly, can be the nominal or clausal domain, or narrowly, linking or grounding; the syntactic contexts can also be subcategorized. Employing a configurational morphosyntactic approach to the multifunctional UoLs, I next propose a valuation for each instance of the multifunctional UoLs I have discussed so far.

### 6.3.3 The valuation of the multifunctional complementizers

The multifunctional properties of these UoLs are evidence for the existence of distinct categories and distinct syntactic positions. In the following subsections, I discuss the valuation of multifunctional UoLs in general based on multifunctional *la* and *ko*. §6.3.3.1 discusses the valuation of *la* and §6.3.3.2 considers the valuation of *ko*.

#### 6.3.3.1 The association of multifunctional *la*

The interpretations and obligatoriness of *la* as an imperative, an apprehensive, and a declarative show that *la* is a head of clause-typing C which interacts with distinct pragmatic or illocutionary operators. Since not all clause-typing UoLs match with these interpretations, they must have features that match each other. Without going into the details of the feature properties, I argue that *la* is associated with *κ*: linking, as it is a kind of clause-typing marker. I showed in the introduction of this chapter that the substantive content of complementizers is dissimilar across languages. For this reason, we may ask about *the manner, the place*, and *the timing* in which UoLs associate with the spine. These are the three parameters used to define the association relationship in the USH. The manner of association refers to the idea that a UoL can be associated with the spine either as a head relation (UoL is *κ*) or a modifier relation (UoL modifies *κ*). The manner of association of *la* can be represented as in (314).
(314) **Manner of Association**

a. head-relation: \([la]k: \text{linking}\)

b. modifier-relation: \(\{k: \text{linking}, la\}\)

Although the interpretation of \(la\) alternates depending on its syntactic context, \(la\) marks a kind of clause-typing head containing a selectional property. As the absence of \(la\) is ungrammatical in all four instances, all four distributions of \(la\) are heads associated with the linking spine with an “is-a” relation.

The place of association is the *position* where UoLs are associated with the spine. As the UoL \(la\) selects a bare verb stem in the imperative, irrealis \(l\) in the apprehensive, and retrospective \(te\) in the evidential paradigm—all of which are associated with \(K\): anchoring—\(la\) must be associated with the linking spine, as in (315).

(315) **Place of Association**

a. : \(<la, k: \text{linking}>\)

b. \(<k: \text{anchoring}, l>, \ <k: \text{anchoring}, te>\)

The last parameter of association is the timing of association. The UoL \(la\) may associate with \(K\): linking either before or after the syntactic computation. The idea of split morphologies, pre-syntactic association and post-syntactic association of UoL is adopted in the USH (Wiltschko, 2014: 83). The early and late insertion of \(la\) is represented as in (316).

(316) **Timing of Association**

a. Pre-syntactic association of \(la\): \(<la, k: \text{linking}>\)

b. Post-syntactic association of \(la\): \(<k: \text{linking}, la>\)
As la is Type-neutral, I propose that la is inserted pre-syntactically (cf. Wiltschko, 2014: 88; 95). In addition to the three parameters of association, the USH also provides three distinct methods of valuation in the grammar: morphological valuation \((m\)-valuation\), matrix predicate valuation \((pred\)-valuation\), and higher functional head valuation \((f\)-valuation\). For instance, in tensed clauses in English, the past-tense \(-ed\) is valued by \(m\)-valuation. The UoL \(-ed\) values the unvalued coincidence feature \([ucoin]\) (see Demirdache & Etxebarria, 1997) as \([-\text{coin}]\); by doing so, it indicates that the event expressed by the predicate does not coincide with the time of the utterance. Thus, the valuation of temporal content values \([ucoin]\) in independent clauses by morphological markings is referred to as \(m\)-valuation. Tenseless clauses are valued differently. If a non-finite clause is embedded by a predicate, it is valued by \(pred\)-valuation; if no overt predicate embeds the non-finite clauses (including imperatives), it is valued by \(f\)-valuation. The \(f\) in \(f\)-valuation stands for a functor in the higher structure (see Wiltschko, 2014: 164).

In this subsection, based on these three parameters of association and three distinct valuation methods, I present a proposal that captures how each la is valued in the structure within the USH. The contexts and interpretation of the UoL la, associated with the Korean language-specific category Type and the linking spine, are summarized, as in (317).

(317) **Syntactic approach to multifunctional la**

\[
\begin{align*}
&f_{\text{IMPERATIVE}} = la + CZ1\text{SYN} \\
&f_{\text{APPREHENSIVE}} = la + CZ2\text{SYN} \\
&f_{\text{DECLARATIVE}} = la + CZ3\text{SYN} \\
&f_{\text{DECLARATIVE}} = la + CZ3\text{SYN}
\end{align*}
\]
\[Cz_{1SYN} = \text{selecting an active bare verb and selected by a null direct speech UoL}\]
\[Cz_{2SYN} = \text{selecting irrealis } l \text{ and selected by a null direct speech UoL}\]
\[Cz_{3SYN} = \text{selecting evidential } te \text{ and selected by either a direct or indirect speech UoL}\]
\[Cz_{4SYN} = \text{selecting a bare copular and selected by an indirect speech UoL}\]

The examples include multifunctional \(la\) in (318) are repeated from (250).

(318)

\(\text{a. } Inho-ya, \ cip-ey \ ka-la \) (Cz\(_{1SYN}\))
\hspace{1cm} \text{Inho-VOC \ home-LOC \ go-COMP}
\hspace{1cm} \text{‘Inho, (you) go home.’}

\(\text{b. } Inho-ka \ cip-ey \ ka-l-la \) (Cz\(_{2SYN}\))
\hspace{1cm} \text{Inho-NOM \ home-LOC \ go-IRR-COMP}
\hspace{1cm} \text{‘(warning) Inho may go home’}

\(\text{c. } Inho-ka \ cip-ey \ ka-te-la \) (Cz\(_{3SYN}\))
\hspace{1cm} \text{Inho-NOM \ home-LOC \ go-RETRO-COMP}
\hspace{1cm} \text{‘[I saw/observed] Inho going home.’}

\(\text{d. } Inho-nun \ caki \ chaykim-i-la-ko \ sayngkakhay↓(Cz\(_{4SYN}\))\)
\hspace{1cm} \text{Inho-NOM \ self \ responsibility-be-COMP-COMP think.COMP-FI}
\hspace{1cm} \text{‘Inho thinks that it is his responsibility.’}

A question arises whether the UoL \(la\) in the main clause is an instance of \(m\)-valuation or \(f\)-valuation. I conclude that it must be \(m\)-valuation because the morphological form of \(la\) distinguishes it from other Type UoLs such as \(ta\) or \(nya\). The tenseless nature of the imperative clause does suggest \(f\)-valuation; however, the non-finiteness and person-feature specification associated with imperative \(la\) suggest \(m\)-valuation and pre-syntactic association: \(<la, K: \text{linking}>\). Based on the morpholexical properties of \(la\) that co-occur with the irrealis \(l\) and the evidential or spatial past-tense \(te\), I propose that apprehensive and evidential declarative \(las\) are valued by \(m\)-valuation, while declarative \(la\) in embedded clauses is valued by \(pred\)-valuation. As the interpretations of apprehensive \(la\)
and evidential declarative la are valued by TAM elements, I propose that both are pre-
syntactic associations of la: < la, K: anchoring>.

6.3.3.2 The valuation of ko

The multifunctional la in imperative, apprehensive, and declarative clauses has a
conceptually shared functional property: clause typing. The multifunctional ko is
different; although each ko shares the status of being the head of a complement, no
appropriate label can cover all its distributions. Compared to the multifunctional la,
which appears in a fixed structural position between TAM elements and indirect
elements, ko seems to occupy different domains. In this subsection, I will propose an
analysis of how the homophonous koses are valued in distinct constructions.

Assuming ko is distributed in the syntax as a morpholexical item, I have highlighted
that the multifunctional homophonous kos occupies at least four distinct positions in the
verbal domains. As the absence of ko is ungrammatical or ill-formed in each place where
it occurs, I conclude that all instances of ko are equally heads, associated with their
domains by the “is-a” relation (UoL is a K). The three parameters of association for
multifunctional koses are presented below. (319) presents the manner of association: a head-
relation with four distinct domains.

(319) Manner of Association


b. head-relation: [ko]K: anchoring

c. head-relation: [ko]K: linking

d. head-relation: [ko]K: grounding
The distinct domains and syntactic environments associated with *ko* are summarized in (320).

(320) **Syntactic approach to the multifunctional *ko***

\[
\begin{align*}
\text{f}_\text{PROGRESSIVE} &= ko + Cz1SYN \\
\text{f}_\text{DESIDERATIVE} &= ko + Cz2SYN \\
\text{f}_\text{CONJUNCTION} &= ko + Cz3SYN \\
\text{f}_\text{TYPE} &= ko + Cz4SYN \\
\text{f}_\text{SUBORDINATOR} &= ko + Cz5SYN \\
\text{f}_\text{ECHO, REINFORCEMENT} &= ko + Cz6SYN
\end{align*}
\]

*Cz1SYN* = the head of complement clauses; can select the subject honorific *si* and selected by auxiliary verbs including *iss*- ‘exist; be’; below TP

*Cz2SYN* = the head of complement clauses; can select the subject honorific *si* and selected by auxiliary verbs including *iss*- ‘sip-‘want’; below TP or TP

*Cz3SYN* = the head of non-finite subordinating clauses; can select the subject honorific *si* and subordinated by the clause with PRO; below TP or TP

*Cz4SYN* = the head of finite clauses; selects finite TP and can be selected by rising intonation or subordinated by a clause with a different subject

*Cz5SYN* = selects Type UoLs and is selected by a set of matrix predicates

*Cz6SYN* = selects Type UoLs and is selected by either a rising or falling intonation in a clause

The examples including the distribution of multifunctional *ko* are illustrated in (321).

(321)

   
   M-TOP cry-Cz1SYN being-PST-Cz4SYN Leah-TOP go throw-PST-DECL-Cz6SYN-FI
   
   ‘(Are you saying that) Mina is crying and Leah has left?’

b. *Mina-ka chayk ilk-ko ca-ko sip-ta-ko hayssta-ko-↑*
   
   M-NOM book read-Cz3SYN sleep-Cz2SYN want-DECL-Cz5SYN did.DECL- Cz6SYN-RI
   
   ‘(Are you saying that) Mina said she wanted to read a book and then go to sleep?’
c. *chayk-un ta* *ilk-ess-ko-*

book-ACC all read-PST-Cz4SYN-RI

‘So, have you finished the book?’

Based on the multiple distributions of *ko* in a clause, the place of association of *ko* can be represented as in (322).

(322) **Place of Association**

a. *<ko, K: point-of-view>* as in Cz1SYN

b. *<ko, K: anchoring>* as in Cz2SYN and Cz3SYN

c. *<ko, K: linking>* as in Cz4SYN

d. *<ko, K: grounding>* as in Cz5SYN and Cz6SYN

Unlike the UoL *la*, *ko* is not only category-neutral in the paradigmatic domain, but also domain-neutral in its syntagmatic relations. Thus, it is likely pre-syntactically associated with the spine.

(323) **Timing of Association**

Pre-syntactic association: *< ko, K >*

The difference between *ko* in its echo-question function and its subordinating function lies in the head that selects each variant. *Ko* with a subordinating function must be valued by *pred*-valuation, selected by a matrix predicate bearing the subject with any person-feature; *ko* with an echo-question or reinforcement function must be valued by either *f*-valuation or *m*-valuation. As no overt predicate embeds common-ground clauses, including the echo imperative, *ko* with a second-hand speech function is likely valued by
This function of *ko* values the unvalued coincidence feature \([u\text{coin}]\) as \([-\text{coin}]\) or \([+\text{coin}]\) with the speaker feature in current and preceding speech events; by providing a valuation, it indicates whether the event expressed by the predicate coincides with the speaker of the utterance. Having understood the three parameters of association and three distinct valuation methods relevant to multifunctional *ko* and *la*, I turn to my conclusion.

### 6.4 Conclusions

Since multi-layered CPs (Rizzi 1997, Cinque 1999) were first introduced in the literature, a range of multifunctional complementizers in Indo-European languages—such as the Greek *pu* (Roussou 2000, 2010), Persian *ke* (Ghomeshi, 2013), English *that* (Radford, 2013), French *que* (Baunaz, 2015; Baunaz & Lander, 2018), and Ibero-Romance *que* (Corr 2016)—have been investigated explicitly (although Baunaz and Lander (2018) discuss homophonic complementizers from the perspective of syncretism rather than multifunctionality). The multifunctional elements in a language often arise through grammaticalization and offer a fruitful topic for historical linguists. The English words *like* (Romaine & Lange, 1991; Vandelanotte, 2012; Vandelanotte & Davidse, 2009) and *to* (Los, 1998, 2007) provide familiar examples. The category change of a UoL within a language is discussed in the context of the generative tradition by Roberts and Roussou (2003), who consider reanalysis of V to T elements and V to T to C elements within the minimalist framework (Chomsky, 1995, 2000).

Multifunctional complementizers are also attested robustly in Korean. Most COMP UoLs occur in more than one syntactic position in the structure. Although the development of *ko* with a second-hand speech marking function (Ahn & Yap, 2014; King, 1994; Rhee, 2016; S-Sohn, 1996, 2011) and with a clause-typing function (M. Kim,
2015; E. Ko, 2010) has been discussed to a certain extent in the literature, the distribution of multifunctional complementizers in the synchronic Korean grammar has not yet been discussed fully, especially with regard to their morphosyntactic traits. If parametric options in the grammar are associated with functional categories based on lexical items (Roberts & Roussou, 2003: 10), examination of multifunctional UoLs in individual languages can help boost our understanding of functional categories; each UoL in each language can be realized as having a fused, null, or one-to-one relationship with a functional head.

Just as the multifunctional complementizers within Indo-European languages shed light on the properties of complementizers, the properties of Korean multifunctional complementizers discussed in this chapter help to illuminate our understanding of the relationship between the morpholexical properties of complementizers and their structural positions.
Chapter 7

Conclusions and remarks

7.1 Major findings: Multiple domains above the Tense Phrase

Paying particular attention to subcategorization of matrix complementizers, this dissertation investigated Korean matrix complementizers that are generated at the interface of syntax and pragmatics. The Universal Spine Hypothesis (Wiltschko, 2014; Wiltschko & Heim, 2016; Wiltschko, 2017) guided this research in illuminating how clause-typing, indirect speech-marking, and interactional functional markers that appear above the Tense Phrase (TP) in matrix clauses are encoded in the morphosyntax of Korean.

Considering the fixed order of these functional markers and the limitations on co-occurrences within a clause, I have argued that these functional markers (e.g., declarative ta, reproduced-speech marker ko, polite yo) are hosted by the three structural domains—k: linking spine, k: grounding spine, and k: responding spine—within the framework of the Universal Spine Hypothesis (USH). Through association with these domains, these functional markers compose Korean language-specific categories such as c: Type, c: Indirect, and c: Interaction, as shown in (324) and (325).


Although the USH and the Neo-Performative Hypothesis (Cinque, 1999; Haegeman & Hill, 2013; Miyagawa, 2010, 2017; Speas, 2004; Speas & Tenny, 2003) propose slightly different structures above the CP, both share the same assumption that speech acts and speech act participants can be encoded by morphosyntactic elements; these elements are associated with the syntactic structure. This study favoured the USH because this hypothesis allows the linear functional elements that appear beyond TP in Korean to be accounted for straightforwardly (as discussed in this dissertation).

After briefly summarizing the proposals made in each chapter, I will conclude this dissertation by addressing certain relevant issues that remain undiscussed in the present work.

7.2 Major findings of each chapter

Each chapter of this dissertation considered in detail the associations of certain functional items and Korean language-specific categories with the syntactic domains in the universal spine. Below, I summarize the points discussed in each chapter.

7.2.1 Clause-type identification and matrix complementizers

My examination of the morphosyntactic properties and distribution of complementizers in Chapter 3 showed that the categorization of matrix complementizers (i.e., sentence-level complementizers) based on pragmatics can be best accomplished by adopting a morphosyntactic approach (see § 3.3). A morphosyntactic analysis provides a solid foundation for parallel cross-linguistic comparisons of matrix complementizers across languages.
When complementizers are discussed in the generative tradition, they are typically understood as either heads of a lower CP selected by a matrix predicate or heads of a clause in the subject/specifier position. However, typological studies have shown that not all languages have complementizers selected by matrix predicates (e.g., Manam language, cf. Lichtenberk, 2016) or clausal complements (e.g., Dyirbal language, cf. Dixon & Aikhenvald, 2006). The deficiency of dependent complementizers in some languages implies that we must start our investigation of complementizers by analyzing the properties of the heads of matrix clauses. Of particular interest are the properties of obligatory markers and rule-governing markers that appear in the highest projection across languages. I showed that certain complementizers in Korean can independently express clause types and clausal independence (or direct speech acts), while in other instances an obligatory expletive-like complementizer, finiteness, person features on the subject, and intonation work together to give rise to an interpretation of clause type. Both types of complementizers have been referred as to “sentence enders” in the literature (Aikhenvald, 2010; Bisang, 2007; Lee & Ramsey, 2000; König & Siemund, 2007; Sohn, 1994, 1999; Yeon & Brown, 2011). I argued that these sentence enders are obligatory rule-governing functional markers, corresponding to matrix complementizers in generative grammar or associated with the linking spine in the USH.

I also closely compared the functional and subcategorial properties of complementizers, focusing on matrix clauses. Based on the asymmetric distribution of Korean complementizers between matrix and embedded clauses, I contended that the nature of matrix clause heads is different from that of embedded/subordinated clause heads. This claim is supported by the fact that the heads of matrix clauses have more
correspondent morphophonological forms (e.g., ta, ni, e, ci, key, lay, tay, ca, ma, ney, kwun, kka and several others) than embedded clauses (e.g., ta, nya, ca, la, kes, and ci) within the same dialect (Standard Modern Korean). Some matrix complementizers (e.g., l-key, l-lay, ta-y, ca-y, la-y, ney, kwun and several others) only occur in matrix clauses and can merge with polite yo but not with indirect ko. Based on this finding, I argued that the heads of matrix clauses interact with speech participant features, which may in turn interact with the social background of speech participants and the context of the speech act (e.g., evidential, hearsay, or quote) in pragmatics. The morphophonological realizations of the heads of clauses show that the asymmetry between the heads of matrix and subordinated complementizers is precisely encoded in the morphosyntax of Korean.

The asymmetric properties of matrix and subordinated clausal heads in Korean may be compared with the properties of negative complementizers across languages; such complementizers can be sensitive to structural positions, as discussed in Moscati (2010). The asymmetric morphophonological realizations of clausal heads discussed in this dissertation can be compared to order marking in clause-types in Algonquian languages, including Blackfoot (see Bliss, 2013), or the Main Clause Phenomena (Aelbrecht et al., 2012) discussed in the literature.

7.2.2 Grounding spine hypothesis and double complementizers

Evidence brought to bear in Chapter 4 of this dissertation shows that clause-typing complementizers are not the highest functional elements that can appear in the structure. Above that level, an indirect-speech-marking or reproduced-speech-marking complementizer can select a limited set of clause-typing complementizers. As I showed in Chapter 3, these complementizers have an interpretable or valued clause-type feature.
In addition, a functional marker expressing the speaker’s politeness towards the addressee can select two types of categorial markers: indirect-speech-marking complementizers and complementizers with an uninterpretable or unvalued clause-type feature. This polite marker yo, with a falling or rising intonation, plays a role in distinct interpretations of speech acts.

The message conveyed by an utterance is not always an original production of the speaker; the speaker can also represent the words or ideas of others. In English, such second-hand messages are typically conveyed by an indirect clause embedded under a matrix clause such as she said or you said. Alternatively, in interactional conversation, the speaker might employ an echo question strategy to communicate the words or thoughts of others. There is no unified technical term that refers to both embedded clauses forming indirect speech and the clauses in echo questions; furthermore, clauses in hearsay constructions also share the property of disassociation of the ownership of the clause from the speaker. I have argued in this dissertation that the heads of clauses in first-hand speech and second-hand speech are marked differently, morphophonologically, with a single complementizer or double complementizers, respectively; double complementizers consist of a second-hand speech head and a valued clause-type marker.

I have argued that these reproduced/indirect speech markers are associated with a Korean language-specific category c: INDIRECT (marking original versus reproduced/cited speech), which is associated with the grounding spine. The arguments for positing a projection above the clause-typing CP (i.e., linking spine) are thus: i) morphological arguments, based on the distribution of the functional markers ko and yo following clause-typing markers on predicates in a head-final language (e.g., ta-ko, la-ko,
nya-y, ca-y); and ii) syntactic arguments, based on the selectional properties of the functional markers ko and y, which only select iType clause-typing markers (e.g., *e-ko, *ci-y, *e-y, *ko-ko).

The distribution of ko also shows that a null head of direct speech exists in complementary distribution with the head of indirect speech in Korean matrix clauses. The presence of ko and hearsay y and the role of intonation in distinct domains in Korean shows that the contrast between first-hand (direct) and second-hand (indirect) speech must be accounted for within the syntactic structure.

Although second-hand (indirect) speech markers usually select clause-typing markers, not all languages support the co-occurrence of clause-typing markers with a head of second-hand (indirect) speech. Bruil (2014) treats the heads of reportative clauses in parallel with the heads of other major clause types in Siona, for example. She does this based on the distribution of the reportative marker, which is in complementary distribution with other kinds of clause-typing markers, as seen in Table 7.1.

Table 7-1 Clause types in the Ecuadorian language Siona

<table>
<thead>
<tr>
<th>Clause type</th>
<th>Type of authority</th>
<th>Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assertive</td>
<td>Epistemic</td>
<td>Speaker</td>
</tr>
<tr>
<td>Interrogative</td>
<td>Epistemic</td>
<td>Addressee</td>
</tr>
<tr>
<td>Reportative</td>
<td>Epistemic</td>
<td>Non-speech act participant</td>
</tr>
<tr>
<td>Imperative</td>
<td>Deontic</td>
<td>Speaker</td>
</tr>
</tbody>
</table>

(Bruil, 2014: 341)

The distinct distributions of the heads of indirect (reportative) speech in Korean and Siona matrix clauses have implications for linguistic typology and theory; the language-
specific categories associated with the linking and grounding spines require further investigation from a morphosyntactic perspective.

In addition to the domain that hosts $c$: **INDIRECT** elements (expressing the contrast between first-and second-hand speech), I have proposed a Korean language-specific category $c$: **INTERACTION** (Ginzburg, 2012). I introduced this category based on observations of contrasting interpretations between different heads of reproduced speech—echo questions and reinforcement constructions—manifested by intonation. Along with polite *yo*, which can select the indirect marker *ko* and hearsay *y* in the structure, I argued that rising and falling intonation are hosted by the responding spine; intonation with or without *yo* constructs $c$: **INTERACTION**. Because a falling or rising intonation with or without polite *yo* selects *e* and *ci* matrix clauses, I argued that intonation is obligatory in such clauses. The approach taken in this dissertation can be applied to the Japanese reportative and hearsay marker *tte* and finite complementizer *no*, which can be accompanied by both a rising and falling intonation and play a role in the interpretation of the clause type.

### 7.2.3 Linking-Anchorong conjecture and irrealis complementizers

Focusing in Chapter 5 on periphrastic clause-typing markers in matrix clauses, I showed that, co-occurring with the irrealis modal *l*, the matrix complementizers *key*, *lay*, *kka*, and *kel* (e.g., *l-key* ‘I will…’, *l-lay* ‘I will…or will you…’, *l-kka* ‘Shall I…or shall we …’, and *l-kel* ‘I should have…’) restrict the person feature on the subject. The facts are summarized in Table 7-2, reproduced from § 5.4.1.
Table 7-2 The interpretation of periphrastic complementizers

<table>
<thead>
<tr>
<th>Heads</th>
<th>Items</th>
<th>Interpreted as …</th>
<th>Whose</th>
<th>Person feature of the subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-C</td>
<td>l-key</td>
<td>intention, volition</td>
<td>the speaker</td>
<td>1sg, *2sg, *3rd</td>
</tr>
<tr>
<td>T-C</td>
<td>l-lay↓</td>
<td>intention, volition</td>
<td>the speaker</td>
<td>1sg, *2sg, *3rd</td>
</tr>
<tr>
<td>T-C</td>
<td>l-lay↑</td>
<td>intention, volition</td>
<td>the addressee</td>
<td>*1sg, 2sg, *3rd</td>
</tr>
</tbody>
</table>

This bond between T and C elements in matrix clauses in Korean can be explained by the so-called C–T conjecture in the literature: The assumption that the features of T can be derived from the features of C (Chomsky 2008, Miyagawa 2010; Richards 2007; Stowell, 1982; van Urk, 2014). Under Strong Uniformity, Miyagawa (2017) suggests that features of T can be derived from features of C across languages parametrically. Miyagawa proposes that the phi feature remains at C and agrees with the addressee in the Speech Act Phrase (Haegeman & Hill, 2011) in Japanese. Miyagawa speculates that Korean is also a language in which the phi features remain at C.

Chapter 5 of this dissertation provided two pieces of empirical evidence to support the C–T conjecture that Korean TAM elements inherit their properties from complementizers’ features: i) the constraint on the person feature of the subject under certain complementizers, as discussed above; and ii) the compatibility between functional markers on the heads of CP and TP. The latter source of evidence regarding the compatibility between the morphological realizations of T⁰ and C⁰ is summarized in Table 7-3.
Table 7-3 The subcategorization of complementizers

<table>
<thead>
<tr>
<th>TAM</th>
<th>compatible COMPs</th>
<th>Incompatible COMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>[NON-PAST]</td>
<td>matrix CP</td>
<td>dependent CP</td>
</tr>
<tr>
<td></td>
<td>keyss</td>
<td>ta, nya, e, ci</td>
</tr>
<tr>
<td></td>
<td>l</td>
<td>key, lay</td>
</tr>
<tr>
<td></td>
<td>∅</td>
<td>la, ca</td>
</tr>
</tbody>
</table>

Irrealis clause-typing markers such as key have a strong connection with the irrealis modal l, while realis complementizers such as ta, which can co-occur with past-tense ess, are compatible with the conjecture marker keyss but not with the irrealis l.

In sum, Korean complementizers select subcategorized TAM elements and do feature-checking with person features on the subject. This may also explain why the past-tense marker is realized differently in matrix clauses than in relative/noun complement clauses (i.e., ess in matrix clauses versus un in relative clauses). Moreover, the C–T conjecture predicts that language-specific categorial features associated with the anchoring spine may be selected by language-specific categorial features associated with the linking spine.

7.2.4 Homophonous functional markers and multifunctional complementizers

Multifunctional items are ubiquitous across languages, including Korean. Much as the English complementizers such as that, for, if and to and the Japanese tte display multiple functions in their respective languages (cf. Hirose & Nawata, 2016; Okamoto & Ono, 2008), Korean complementizers also exhibit multifunctionality. Chapter 6 of this dissertation discussed numerous multifunctional complementizers, focusing in particular on the multifunctionality of la and ko. The multifunctional la is a clause-typing
complementizer that behaves as the head of imperative, apprehensive, and declarative clauses depending on the morphosyntactic context. The distinct functions of *la* emerge in interaction with adjacent elements and contrasting complementizers available in the same domain. By occupying the heads of distinct hierarchical domains in the structure, *ko* is associated with different features. Although I did not discuss the multifunctionality of *e* and *ci* in this dissertation, based on their ubiquitous occurrence in the functional domain, I expect that they also have multifunctional characteristics, as *la* and *ko* do.

The examination of multifunctional complementizers discussed in Chapter 6 allows for comparison with similar complementizers from other languages, such as Japanese *tte* (Hirose & Nawata, 2016; Okamoto & Ono, 2008), Greek *pu* (Roussou 2000, 2010), Persian *ke* (Ghomeshi, 2013), English *that* (Radford, 2013) and *like* (Romaine & Lange, 1991), French *que* (Baunaz, 2015; Baunaz & Lander, 2018), and Ibero-Romance *que* (Corr 2016), all of which also exhibit multifunctionality. I hypothesize that functional items are more likely to follow the multifunctional pattern of *ko*—in which the homophonic form appears in distinct hierarchical positions—than of *la*.

### 7.3 Future directions: Korean and cross-linguistic comparisons

Time and space have, of course, limited the scope of this study. While I have focused on the distribution and structural positions of complementizers in matrix clauses in Korean, there remain closely associated areas of interest that this dissertation has not addressed. In particular, this dissertation was only able to account for a limited set of complementizers from a single dialect in Korean; the interactions of such complementizers with other functional elements such as negation, *wh*-words or domains such as phonology,
semantics, and pragmatics have not been discussed fully. I leave these areas of inquiry for future work.

7.3.1 A manageable range of complementizers

This dissertation did not account for all attested complementizers in Korean. I have only focused on complementizers that are used in Modern Standard Korean. A previous survey of clause-typing complementizers in J. Yeon (2012) did not indicate whether the various complementizers found across dialects (as listed in Chapter 2) also occur in embedded clauses. I conjecture that matrix complementizers in various dialects may be neutralized in embedded clause contexts where clausal complements are selected by communicative verbs. This conjecture requires investigation in a future study. Ultimately, the distribution of each complementizers in each dialect should be investigated independently, so that the results may be compared cross-dialectically and with my findings.

I have argued that the so-called sentence enders are not simply pragmatic elements, despite the enormous variation they show across dialects. Any given clause is circumscribed by layers of distinct properties of the grammar, including conversational grounding and interaction between speech participants; the head of a matrix clause is a point of tangency that encompasses both grammatical and pragmatic properties. If the absence of a sentence ender causes a clause to be ill-formed, that sentence ender cannot be merely a pragmatic-speech style marker. It must be a portmanteau functional marker. Although this dissertation primarily investigated complementizers in Modern Standard Korean, the structure and the subcategories of Type complementizers discussed in this dissertation can be applied to the investigation of complementizers in different dialects.
7.3.2 Negation

I have briefly noted that Korean has a negative (imperative) marker `ma` that must select clausal complements marked by `ci`. It is unclear if `ma` is a reduced form of the sequences `ma-la` (NEG-IMP)`/ma-(-l)-ala` (NEG-IRR-IMP) or a reanalyzed negative complementizer in synchronic grammar. As shown in (326b), the clausal complements marked by `ci` can perform as the head of imperatives independently along with the complementizers `e` and `la`.

(326)

a. `cikum ka-ci ma/ ma-la/ ma-l-ala`
   `now do-COMP NEG.IMP/NEG-IMP/NEG-IRR-IMP`
   ‘Don’t go now!’

b. `cikum ka-ci/ka-a/ka-la`
   `now go-COMP/ go-COMP/ go-IMP`
   ‘Go now!’

Along with the modal negations `ma` ‘don’t’ and `mos` ‘cannot’, Korean has so-called short (i.e., `an-V`) and long negation (`V-ci anh-`). The negative prefix `an` ‘not’ is compatible with `ci` and `e` but incompatible with `la`.

(327)

a. `mwullon, an ka-ci↓ an ka-ci↑`
   `of course, not go-COMP/ not go-COMP-RI`
   ‘Of course, I’m not going./You are not going, are you?’

b. `an ka-a↓ lan ka-a↑`
   `not go-COMP/ not go-COMP-RI`
   ‘I’m not going!/Aren’t you going?’

c. `*an ka-la↓ *an ka-la↑`
   `not go-COMP-FI/ not go-COMP-RI`
   ‘Don’t go!’ (intended)
The modal negations mos ‘cannot’ is incompatible with the periphrastic complementizers l-key and l-lay.

(328)

a. mos ha-keyss-ta
   cannot do-CONJ-DECL
   ‘(I) cannot do it.’

b. *mos ha-l-key/ ha-l-lay↓
   cannot do-IRR-COMP / do-IRR-COMP-FI
   ‘(I) won’t be able to do it.’ (intended)

Although complementizers interact with polarity in distinct structural positions, this study did not investigate the interaction between complementizers and the various negative markers attested in Korean. Our understanding of the properties of complementizers discussed in this dissertation may be enhanced by further considering their distribution with negative markers. Cross-linguistically, the interaction of complementizers and clausal polarity is well documented. Negative complementizers are attested in Irish, Latin, Basque, and Hebrew (Moscati, 2010). Investigation of the distribution of polarity-sensitive complementizers across languages will shed light on our understanding of the properties of complementizers and their interaction with PolarityP with the feature [±Neg].

7.3.3 WH-elements: WH-interrogatives and quantified phrases

Clausal interpretation shares much in common with the interpretation of wh-words in wh-in-situ languages, especially in Korean. Under certain complementizers (e.g., the interrogative ni), wh-words can be interpreted as either interrogative elements or non-interrogative indefinite elements (cf. Aoun & Li, 1993). Regardless of its interpretation, as a wh-interrogative or a quantified phrase, a clause with or without a wh-word must be
marked by a complementizer in Korean. The limited interpretation of *wh*-elements under

*wh*-elements under certain complementizers, including the declarative *ta* and imperative *la*, shows that the illocutionary force of the clause scopes over the *wh*-words, as in (329).

(329)

a.  *nwukwu*  _com_  *manna-ss-ta*
    someone/*who  bit meet-PST-DECL
    ‘I met someone briefly.’

b.  *nwukwu*  _com_  *manna-la.*
    someone/*who  please meet-IMP
    ‘Please, meet someone.’

c.  *nwukwu*  _manna-ni*
    someone/who  meet-INT
    ‘Are you seeing someone?’
    ‘Who are you meeting?’

To the best of my knowledge, the interaction between *wh*-elements and the attested complementizers in Korean has not been fully investigated in the literature. The compatibility and interpretation of *wh*-words under various complementizers is another topic of future study that will enhance our understanding of complementizers. The investigation of complementizers discussed in this dissertation will serve as a foundation for future research.

7.3.4 Semantics and pragmatics

I have kept discussion of the semantic and pragmatic properties of complementizers to a minimum in this dissertation. Constraints of space and time do not allow for such discussion: the semantic and pragmatic properties of a single complementizer (or the complementizers expressing one kind of clause type) could stand alone as the topic of a dissertation. For instance, a single complementizer, the periphrastic complementizer *l-kel*
that I briefly mentioned in Chapter 5, is investigated from the perspective of its semantic and pragmatic properties in D. Lee’s doctoral dissertation (2017). Since the present dissertation aimed to identify the structural positions of complementizers by focusing on domain effects, I did not offer my own analysis of the semantic and pragmatic properties of the complementizers under discussion.

The semantic and pragmatics properties of complementizers can be difficult to pin down. For instance, the underspecified or multifunctional e is unlikely to be associated with a particular fixed meaning (e.g., old information). An analysis of the semantics and pragmatics of any single complementizer requires exhaustive discussion and needs to be all-inclusive. The pragmatic discussions in D. Lee (2017) and Jeong (2018) will be complementary to the current morphosyntactically-oriented study.

7.3.5 Prosody

Recently, the interface between syntax and phonology has received increasing attention in the literature (Bennett, Elfner, & McCloskey, 2016; Elvira-García et al., 2017; Estellés-Arguedas, 2015; Hsu, 2016; Kuroda, 2013; Richards, 2010; Smith, 2013; Tyler, 2013). Some of these studies have shown that the (in-)dependence of a clause can be determined by prosodic cues (Elvira-García et al., 2017). For example, in some languages rising intonation can serve as the prosodic cue of a question (Gussenhoven & Chen, 2000); however, the internal structure of the rising intonation in interrogatives can vary and is language-specific (Gussenhoven & Chen, 2000). Although I have suggested in this dissertation that falling or rising intonation allows the merging of functional elements from distinct domains and plays a role in the interpretation of clauses in Korean, I did not examine intonational phrases in this work or include any spectrograms to support my
speculations. The prosodic patterns of a rising intonation associated with ta-ko in echo questions may differ from the pattern associated with ta-y in hearsay questions, for example, or with ni or e in first-hand questions. Future examination of the intonational phrasing of clauses with various complementizers will supplement our understanding of the interface between complementizers and prosody.

7.4 Final Remarks

Complementizers in Korean express more than just clause types. A complementizer may express the dependence of a clause, the status of a clause as speech by the speaker, and the involvement of a speech participant. Clause types in Korean can be expressed by a single complementizer or by a ‘configuration’ of multiple functional items including intonation. To use complementizers correctly, Korean speakers need both grammatical and pragmatic knowledge about the insertion of each morphophonological form and the precise subcategorization associated with it. For instance, the speakers must understand the grammatically and pragmatically distinct properties of e and la as the heads of matrix clauses—a structural position in which they can appear in free variation (i.e., in matrix clauses), whereas in embedded clauses they cannot. The distribution of e shows that unmarked finite clauses found in matrix clauses across languages may not be “unmarked declaratives”; rather, they are likely just unmarked finite clauses or underspecified-type clauses that must be precisely marked by intonation. This finding also implies that the head of an interrogative clause does not select the head of a declarative; instead, a rising intonation selects the head of a finite clause. Thus, the null heads of declaratives must be in complementary distribution with the heads of interrogatives in the same domain.
Although the functional markers that appear on the heads of the linking, grounding, and responding spines in Korean are different from those found in English and other languages, I conject that their universal properties will be shared by functional elements in other languages, as Wiltschko (2014) assumes. Only the language-specific categories associated with domains and elements may differ. A more complete account of the properties of morphophonologically overt matrix complementizers across languages will contribute to our understanding of the limits and range of matrix complementizers in Universal Grammar.
Bibliography


Ackema, Peter, and Ad Neeleman. 2007. Morphology≠ syntax. In Gillian Ramchand and Charles Reiss (Eds.), The Oxford handbook of linguistic interface (pp. 325-352): Oxford University Press.


Beyssade, Claire, and Jean-Marie Marandin. 2006. The speech act assignment problem revisited: Disentangling speaker’s commitment from speaker’s call on addressee. Empirical issues in syntax and semantics, 6, 37-68.


Bresnan, Joan. 1972. Theory of complementation in English syntax. (Ph.D. diss.,), Massachusetts Institute of Technology.


Brown, Lucien. 2015a. Honorifics and politeness. In Lucien Brown and Jaehoon Yeon (Eds.), The Handbook of Korean Linguistics (pp. 303-319). West Sussex: John Wiley and Sons, Inc.


Hsu, Brian. 2016. Syntax-prosody interactions in the clausal domain: Head movement and coalescence. (Ph.D. diss.), University of Southern California.


Jeong, Sunwoo, and Christopher Potts. 2016. Intonational sentence-type conventions for perlocutionary effects: An experimental investigation. Paper presented at the Semantics and Linguistic Theory (SALT) 26, University of Texas at Austin.

Joos, Martin. 1958. Readings in Linguistics: The Development of Descriptive Linguistics in America Since 1925; Edited for the Committee on Language Programs by M. Joos: American Council of Learned Societies.


Kim, Dong-so. 2002. *Chunse Han'gug kaesol [Studies in Late Middle Korean]*. Kyöngbuk Kyöngsan-si: Taegu Kat'ollik Taehakkyo Ch'ulp'anbu.


Kim, Sangbok. 2012. Interaction, grammar, and stance in reported speech. (Ph.D. diss.), University of California, Los Angeles.


Kuroda, Shige-Yuki. 2013. Prosody and the syntax of indeterminates. Lingua, 124(0), 64-95.

Kuwabara, Kazuki. 2013. Peripheral effects in Japanese questions and the fine structure of CP. Lingua, 126(0), 92-119.


Los, Bettelou. 1998. The rise of the to-infinitive as verb complement. *English Language and Linguistics, 2*(1), 1-36.


Miyagawa, Shigeru. 2013. Surprising agreements at T and C. Ms., MIT. lingbuzz/001764


Ueda, Yukiko. 2009. The right periphery in the Japanese CP. *Scientific approaches to language, 8,* 95-118.


