

Introducing Arguments and Case

by

Soo-Hwan Lee

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Dedication

For mom and dad

Acknowledgements

I would like to thank Alec Marantz who has been very supportive during my years at NYU. Alec's insights have shaped much of how I think about linguistics and much of who I am as a linguist. Based on my various encounters with Alec, I noticed that he often knows what is at the very core of our discussion even before I mention it. He is a fast thinker. I must say I have benefited from many of his great talents.

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Abstract

Drawing evidence from Korean, I argue that the argument-introducing heads Voice (Kratzer 1996) and Appl (Pylkkänen 2008), which are reduced to *i** (Wood & Marantz 2017), assign honorific (HON) case markers to the nominal argument in their specifier position. While direct objects (DOs) are not eligible for an HON case marker, subjects, indirect objects (IOs), and vocative noun phrases are. To gain further evidence that the Spec-head configuration is necessary for HON case assignment, I provide a full account of the distribution of case in Korean. My analysis of vocative noun phrases lends support to the claim that A-properties can be observed in CP, which is often assumed to be an A'-domain (see Obata & Epstein 2011 and van Urk 2015, among others). Cross-linguistic evidence is presented from Meadow Mari (Uralic), southern dialects of Basque (Isolate), Galician (Romance), Lebanese Arabic (Semitic), among other languages. A theoretical implication of this thesis is that the subject and the IO can be grouped together to the exclusion of the DO. An additional implication is that discourse participants such as the addressee are represented in syntax (see Speas & Tenny 2003, Haegeman & Hill 2013, Miyagawa 2017, 2022, Portner et al. 2019, among others). Under my analysis, what is often referred to as the Speech Act Phrase (SAP) boils down to either VoiceP or ApplP. Hence, I emphasize that argument-introducing heads can

be introduced beyond the thematic domain in syntax (see Tsai 2018, Spadine 2020, Ritter & Wiltschko 2019, among others).

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List of Abbreviations

1 / 2 / 3 1st / 2nd / 3rd person	DAT dative
ABL ablative	DECL declarative
ACC accusative	DEM demonstrative
AL(OC) allocutive	ERG ergative
ASP aspectual marker	EXPL expletive
AUX auxiliary	F feminine
AV actor voice	FAM familiar
CAUS causative	FOC focus
CLF classifier	FRML formal
COMP complementizer	GEN genitive
CONJ conjunction	HON honorific
COP copular	HON.DAT honorific dative

HON.NOM honorific nominative	PLN plain
IND indicative	POSS possessive
INS instrumental	PN proper name
IPFV imperfective	PRF perfect
JUSS jussive	PRS present
LOC locative	PST past
M masculine	PST2 past (perfective)
N neuter	PV patient voice
NEG negation	REFL reflexive
NMZL nominalizer	RES resultative
NOM nominative	SG singular
PASS passive	TOP topic
PL plural	

CHAPTER 1

Introduction

Arguments can be introduced in various syntactic positions. Syntactic heads such as Voice and Appl have been argued to be responsible for the introduction of these arguments (Marantz 1993; Kratzer 1996; Pylkkänen 2002, 2008; Wood & Marantz 2017, among many others). Some argue that the highest argument-introducing head in a given derivation defines a phase (McGinnis 2001; Bošković 2014; Holmberg et al. 2019, among others). It is often assumed that all arguments are introduced inside VoiceP. Hence, VoiceP has been considered to be the endpoint in which arguments undergo external merge (EM). Under this common assumption, EM of arguments outside VoiceP is not taken into serious consideration. In this thesis, I address the following question: Can arguments be introduced outside VoiceP? My simple answer is yes. I propose that an argument can undergo EM in the left periphery and showcase A-properties in what is often assumed to be an A'-domain. My primary source of evidence comes from Korean case distribution on nominal arguments. I also provide empirical evidence from a wide range of languages, including Meadow Mari (Uralic), Basque (Isolate),

Galician (Romance), and Lebanese Arabic (Semitic), in suggesting that argument introduction is possible in the C domain. While the empirical data provided in this work is by no means exhaustive, I wish to shed light on the theoretical possibility that argument structure can be established independently of the thematic domain.

1.1 A puzzle and the proposal

Korean has a case marking system which displays NOM (nominative), DAT (dative), ACC (accusative), and VOC (vocative). Some of these case markers have honorific counterparts. They are HON.NOM, HON.DAT, and HON.VOC. A question arises as to why HON.ACC is absent in the case paradigm as shown in Table 1.1 (see also Kim & Chung 2015; Lee & Nie 2022).¹ I propose that honorific (HON) case markers in Korean are assigned by external and applied argument-introducing heads such as Voice (Kratzer 1996) and Appl (Pylkkänen 2002, 2008) in a Spec-head configuration. Under this assumption, direct objects (DOs) are not eligible for HON.ACC, since they are neither an external argument nor an applied argument forming a Spec-head configuration with an argument-introducing head. In (1), only the subject and the indirect object (IO) are eligible for HON case-assignment despite the fact that the subject, the IO, and the DO can all be honorified nominal entities.

- (1) Halmeni-**kkeyse** sonnim-**kkey** halapeci-**ul**
 grandmother-HON.NOM guest-HON.DAT grandfather-ACC
 sokayha-si-ess-ta.
 introduce-HON-PST-DECL
 ‘Grandmother introduced grandfather to the guest.’

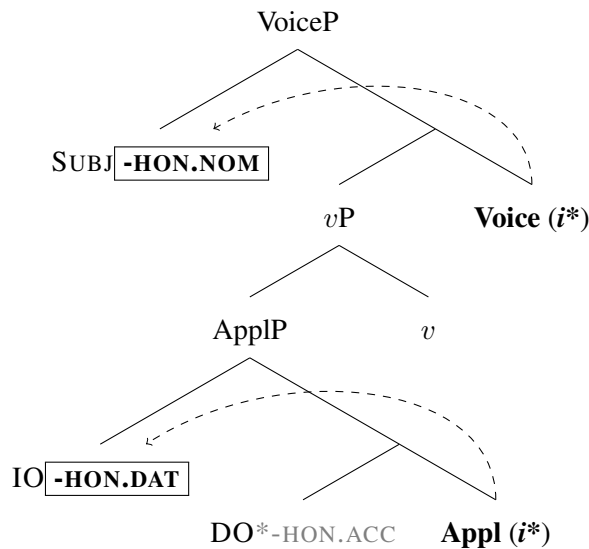
¹In Korean, DAT can be spelled out as *hanthey* or *eykey*. For the sake of consistency, I use the form *hanthey* unless the sources I cite use *eykey*.

VOC	(y)a
HON.VOC	∅
NOM	<i>i~ka</i>
HON.NOM	<i>kkeyse</i>
DAT	<i>hanthey</i>
HON.DAT	<i>kkey</i>
ACC	(l)ul
*HON.ACC	N/A

Table 1.1: Korean (honorific) case markers

(2) fleshes out the derivation showcasing how HON case markers are assigned in (1). To reiterate, an argument-introducing head can assign an HON case marker to its argument when the two form a Spec-head relation. Wood & Marantz (2017) argue that argument-introducing heads can be grouped together into a single syntactic unit, namely i^* . Adopting Wood & Marantz’s proposal, I use i^* to refer to Voice and Appl.²

(2) HON case-assignment based on (1)



My assumptions about argument introduction imply that the DO and the verb always form a constituent before the IO enters the derivation in Korean. This runs counter to some

²Marantz (2022) takes v to be an argument introducer.

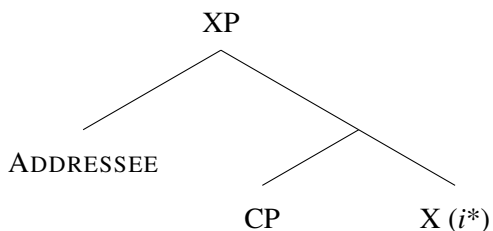
of the analyses offered for English ditransitives in the previous literature (Larson 1988; Pesetsky 1995; Harley 2002, among others). According to Larson (1988), the IO merges with the verb before the DO is introduced in double object constructions (DOCs) and prepositional/postpositional dative constructions (PDCs). While Harley (2002) argues that the DO merges with the verb prior to the introduction of the IO in DOCs, she argues for the opposite in PDCs. The distinction between a specifier and a complement is not taken into serious consideration in these two approaches. Taking a departure, I argue that making this distinction adequately captures the overall case distribution in Korean. Chapter 2 provides further elaboration on this issue. Two other points of departure I wish to emphasize are the application of a phase-based Dependent Case analysis (Baker 2015; Levin 2017) and the Nanosyntax case hierarchy (Caha 2020) to Korean. I will show instead that syntactic heads in the clausal spine are responsible for assigning case to their nominal arguments in a Spec-head configuration. In Chapter 3, I provide an extensive discussion on Korean case stacking to collect further evidence that HON case markers are assigned by *i**.

Based on the current proposal, a nominal argument introduced by *i** in a Spec-head configuration is eligible for HON case-assignment regardless of where it sits in syntax. An overt vocative noun phrase is often assumed to undergo EM in a specifier position in the matrix left periphery (Hill 2007; Haegeman & Hill 2013; Miyagawa 2017, 2022; Portner et al. 2019). (3) fleshes out the basic details. Here, I take X to be *i** since its role is to introduce an argument. The argument being introduced is the vocative nominal, which represents the addressee of the conversation.³ Throughout this thesis, I use the non-capitalized terms ‘addressee’ and ‘speaker’ to refer to the actual interlocutors of a given conversation.

³I posit that a nominal is an argument, instead of an adjunct, if it can receive an HON case marker and exhibit agreement with the verb. This is what a subject does in Korean. As we will see, a vocative noun phrase is an argument because it can receive an HON case marker and show agreement with the verb. Adjuncts are not able to do this in Korean.

The capitalized terms ‘Addressee’ and ‘Speaker’ refer to the nominal arguments that undergo EM in the left periphery and elsewhere in syntax.

(3) Introduction of the vocative Addressee



In (3), the Addressee forms a Spec-head relation with X (*i**). The prediction is that an honorified Addressee should be eligible for HON case-assignment just like subjects and IOs. This prediction is borne out. In (4), the alternation between VOC and HON.VOC is systematic based on whether the Addressee is honorified or not. VOC is realized as (y)a and HON.VOC is realized as a phonologically null element \emptyset . The (y)a $\sim\emptyset$ alternation also interacts with the presence of the clause-final politeness marker -yo (see Choi 2016; Yim 2021). The politeness marker -yo cannot be realized together with plain VOC as shown in (4a). However, -yo can be realized together with HON.VOC as shown in (4b).⁴

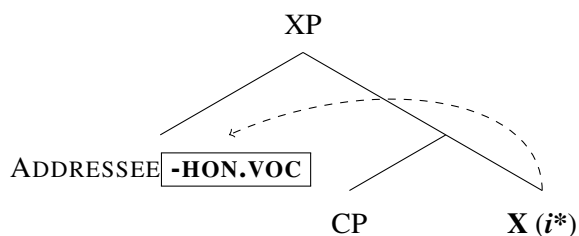
- (4) a. Mina-**ya**, halmeni-kkeyse cip-ey ka-si-ess-e(*-**yo**).
 Mina-VOC, grandmother-HON.NOM house-LOC go-HON-PST-DECL
 ‘Mina, grandmother went home.’
- b. Halmeni- \emptyset , Mina-ka cip-ey ka-ss-e-**yo**.
 grandmother-HON.VOC, Mina-NOM house-LOC go-PST-DECL-YO
 ‘Grandmother, Mina went home.’

The VOC \sim HON.VOC alternation in (4) entails that Korean has HON.VOC. This is captured under the current analysis. That is, an honorified Addressee receives an HON case marker from its argument-introducing head *i** in a Spec-head configuration, as shown in (5). This

⁴In Korean, concepts such as politeness and honorificity have been used interchangeably. For present purposes, I wish not to make a fine-grained distinction between these terms.

aligns with the approach that the vocative Addressee is a part of the sentence in Korean (Kim 2002).

(5) HON case-assignment of the vocative Addressee



A theoretical implication based on (5) is that an argument can undergo EM outside the thematic domain. A broader implication is that A-properties such as argument introduction and case-assignment are observed in the clause periphery, which is commonly taken to be an A'-domain. Hence, the overall analysis of the thesis lends support to the idea that constituents in the left periphery may exhibit both A- and A'-properties (see also Obata & Epstein 2011; van Urk 2015; Lohninger et al. 2022, among others).

1.2 Arguments introduced in the embedded left periphery

Independent evidence that an argument can be introduced beyond the thematic domain is observed in a variety of languages. In this thesis, I focus on languages from diverse language families to ensure that the proposal covers a wide range of linguistic phenomena. In addition to case-assignment, phenomena involving control constructions, clitics, indexical shift, and formality mismatches provide support to the overarching claim that an Addressee can reside in multiple syntactic domains. Besides the matrix left periphery, embedded left peripheries in some languages are considered to be a possible syntactic environment where an Addressee argument is introduced. Meadow Mari, for instance, hosts what is referred to as a 'double

dative construction’ (Burukina 2023). In a double dative construction, the secondary DAT-marked argument is claimed to undergo EM in embedded Spec,CP which in turn controls PRO downstairs, as shown in (6). (6) can be interpreted as ‘Maša told us to tell Petja to come.’ in a more intuitive sense.

- (6) Maša mə-lan-na [CP **Petja-lan**_i [FinP **PRO**_i tol-aš] (manən)] kalas-en.
 Maša we-DAT-POSS.1PL [CP Petja-DAT [FinP PRO come-INF] COMP] tell-PST2
 ‘Maša told us for Petja to come.’ (Burukina 2023:92)

One may ask whether it is more appropriate to treat the secondary DAT-marked argument *Petja-lan* in (6) as a Goal rather than an Addressee. One issue with assimilating *Petja-lan* to an internal argument (IA) bearing the Goal theta-role (θ -role) relates to the fact that the primary DAT-marked argument *mə-lan-na* is already unambiguously a Goal in the double dative construction. Since the only predicate in (6) that can assign a Goal θ -role, namely *kalasaš* ‘to tell,’ has to assign it to *mə-lan-na*, *Petja-lan* should be assigned a role that is not identical to the Goal. Burukina uses the term ‘goal of communication’ interchangeably with ‘addressee.’ For consistency, I use the term Addressee to describe the secondary DAT-marked argument in Meadow Mari.

Haddican & Etxeberria’s (2022) findings from southern dialects of Basque add weight to the claim that an Addressee can be base-generated in embedded Spec,CP. In (7), the vocative Addressee and the Addressee-oriented allocutive clitic *-k* are realized together inside the embedded clause.

- (7) Ez zokia-gu [ea bihar, **bihotza**, euria egin-go d-i-k-en].
 NEG know-1PL COMP tomorrow heart rain do-FUT EXPL-ROOT-2SG.FAM.M-C
 ‘We don’t know if tomorrow, sweetheart, it will rain.’

(Haddican & Etxeberria 2022:555)

Indexical shift observed in Magahi contributes to our discussion as well. Note that in (8) the allocutive agreement marker *-au* (non-honorific) in the matrix clause differs from the allocutive agreement marker *-ain* (honorific) in the embedded clause with respect to honorificity. Alok & Baker (2018) argue that the discrepancy between the two is attributed to the realization of multiple Addressees in syntax. A non-honorified Addressee which denotes an individual equal in social status to the speaker is represented in matrix CP, and an honorified Addressee which denotes an individual higher in social status than the speaker is represented in embedded CP. Both arguments trigger agreement, which gives rise to the mismatch at issue.

- (8) Santeeaa profesar saahab-ke kah-**au** ki Ram apne-ke
 Santee professor HH-DAT told-NH.ALOC that Ram you.HH-ACC
 dekhl-i-**ain** ha-l.
 saw-1.S-HH.AL be-PRF
 ‘Santee told the professor that Ram saw you(= the professor)’

(Alok & Baker 2018:30)

The empirical picture presented so far suggests that an argument can be introduced in both the matrix and embedded left peripheries. I wish to note, however, that not all languages allow an Addressee argument in embedded contexts (see Miyagawa 2017, 2022; Zu 2013, 2018; Portner et al. 2019, among others). I return to this issue in Chapter 4 and provide an analysis of the cross-linguistic variation with respect to the introduction of the Addressees.

1.3 Theta-roles and non-theta-roles

The proposal advanced in this thesis calls for a re-conceptualization of θ -roles. It is often assumed that all arguments receive a θ -role to satisfy the Theta-criterion (Chomsky 1981).

(9) Theta-criterion

Each argument bears one and only one θ -role, and each θ -role is assigned to one and only one argument. (Chomsky 1981:35)

However, this is not straightforward, given the discussion thus far. It is difficult to make the case that arguments base-generated in the matrix left periphery receive a θ -role since they are introduced well beyond the scope of the thematic domain. How, then, do these arguments introduced outside the thematic domain get interpreted in syntax? I argue that θ -roles belong to a larger kind. Under this view, all arguments are associated with a semantic-role (σ -role), which is determined by the syntactic configuration in which the arguments are realized (see Wood & Marantz 2017). For simplicity, a σ -role can be viewed as a cover term for θ -roles and non- θ -roles. This is illustrated in Figure 1.1. Non- θ -roles include pragmatic-roles (p -roles) that are assumed to be assigned to the Speaker and the Addressee arguments (see Speas & Tenny 2003; Akkuş & Hill 2021; Haddican & Etxeberria 2022; Burukina 2023). What is crucial for my analysis is that an argument need not rely on a θ -role. An Addressee is an argument of a proposition or the like whose σ -role is determined by the syntactic relationship it establishes with CP. The current analysis fares well with this re-conceptualization. An argument-introducing head (i^*) such as Appl is a relator that relates its complement to its specifier. The σ -role of an applied argument in Spec,ApplP is largely defined by the complement of Appl. Hence, labeling an argument as θ -role-bearing or not is epiphenomenal. The distinctions among nominal arguments arise primarily based on where their argument-introducing heads sit in syntax. (10) fleshes out the gist of the analysis based on the i^* -approach (Wood & Marantz 2017).

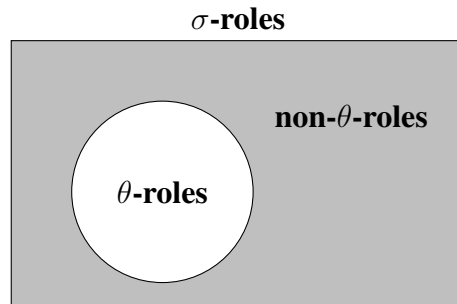
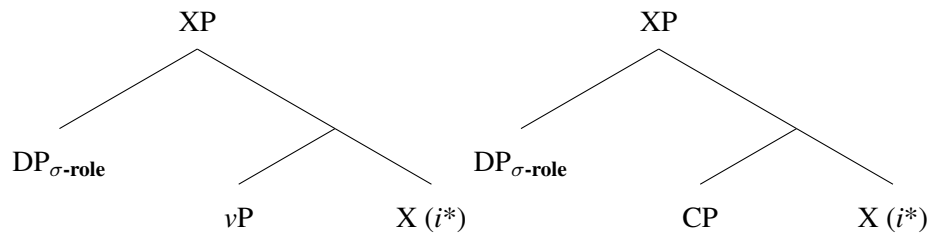


Figure 1.1: Semantic-roles (σ -role)

(10) Argument introduction in the thematic domain and the left periphery



(10) opens up the possibility of argument introduction beyond the thematic domain. This suggests that argument structure can be established in various corners of the grammar. In Chapter 4, I provide evidence suggesting that argument structure can be established in the clausal periphery. Overall, I highlight the proposal that argument structure can be decoupled from the thematic domain.

1.4 Overview of thesis

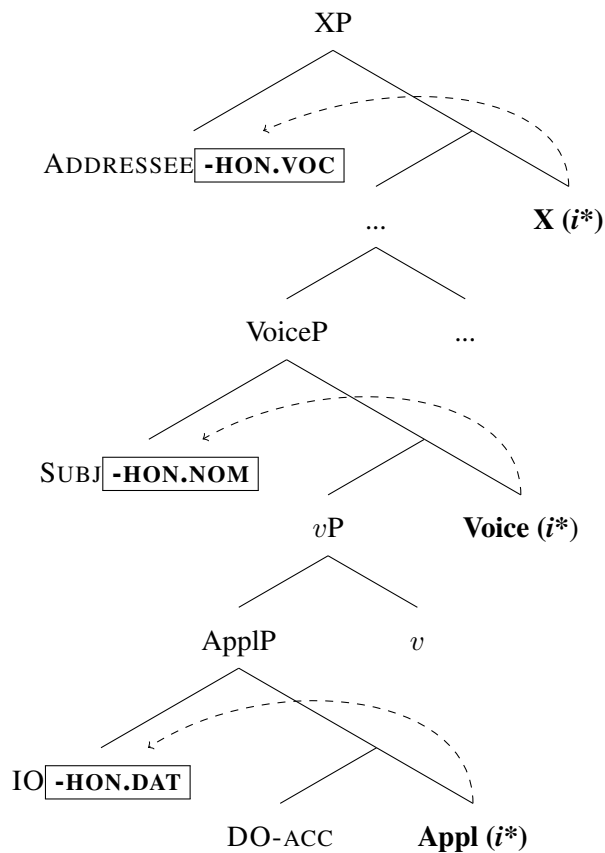
This thesis primarily addresses how nominal arguments are introduced in syntax. This section provides a summary of the chapters.

1.4.1 Chapter 2: Case assignment & argument structure

Chapter 2 focuses on the basic case distribution in Korean and its implications for argument introduction in the matrix left periphery. Korean exhibits HON case markers such as HON.NOM and HON.DAT, but not HON.ACC (Kim & Chung 2015). I claim that a syntactic approach to the puzzle offers a satisfactory solution. Specifically, I argue that a Spec-head configuration between an argument and its argument-introducing head yields the realization of HON case markers. Based on this view, I point out the shortcomings of the previous approaches to argument structure with a particular focus on DOCs and PDCs (Larson 1988; Harley 2002, among others) and of previous efforts to explain case realization (Levin 2017; Caha 2009, among others).

A prediction based on my proposal is that an honorified vocative noun phrase can be associated with HON.VOC. This is because the overt Addressee establishes a Spec-head relation with its argument-introducing head in the left periphery. I show that this prediction is borne out.

(11) HON case assignment in Korean⁵



An implication based on (11) is that A-properties such as argument introduction and case-assignment are observed in CP, which is usually taken to be an A'-domain. This adds weight to the view that the left periphery may be associated with both A- and A'-properties (see also Obata & Epstein 2011; van Urk 2015; Lohninger et al. 2022, among others).

1.4.2 Chapter 3: Case stacking & discourse effects

In Chapter 3, I examine the case stacking phenomenon in Korean and collect additional support for the analysis advanced in Chapter 2. Parallels can be drawn between HON case markers and inherent case markers such as DAT with respect to how they are realized in

⁵The root of the verb is adjoined to *v*. For simplicity, I omit the representation of the root.

Noun	Slot 1		Slot 2		Slot 3
	HON.NOM	<i>kkeyse</i>	‘only’	<i>man</i>	NOM <i>i~ka</i>
	HON.DAT	<i>kkey</i>	‘even’	<i>kkaci</i>	ACC <i>(l)ul</i>
	DAT	<i>hanthey</i>			TOP <i>(n)un</i>
	LOC	<i>ey</i>			

Table 1.2: Korean nominal template based on Cho & Sells (1995)

syntax. Both types of case markers are realized on their arguments before structural case markers such as NOM and ACC are assigned. Structural case markers serve the role of licensing *after* their arguments have been introduced in the derivation. If the current analysis is on the right track, HON case markers and inherent case markers should exhibit similar behaviors in case-stacked environments where multiple case markers are realized on a single nominal. To be more precise, we expect the two types of case markers to surface on their nominal arguments prior to the realization of a structural case marker. This prediction is borne out: HON case markers and inherent case markers always appear as the innermost markers on their nominals, as shown in Table 1.2. Overall, the findings from Chapter 3 suggest that HON case markers are closely related to the introduction of arguments, which is desirable under the current analysis. I further note that NOM and ACC in Korean induce a discourse effect when they surface in a case-stacked environment similar to the topic marker (TOP). A closer look at the Korean case stacking phenomenon poses a challenge to Levin’s (2017) phase-based Dependent Case analysis. An online experiment is conducted in order to better evaluate Levin’s approach. The results are provided in the Appendix.

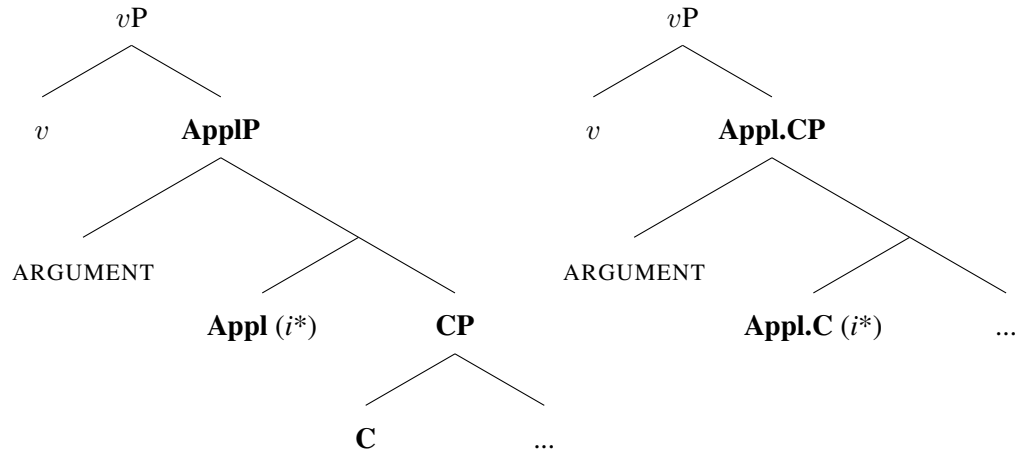
1.4.3 Chapter 4: Addressees as applied arguments

Chapter 4 provides data from a wide variety of languages and demonstrates that an argument can undergo EM even in the embedded left periphery (see also Baker 2008). A ques-

tion arises as to whether all languages allow an Addressee inside embedded clauses. It turns out that the cross-linguistic landscape is far from uniform in this regard, which adds a layer of complexity to our narrative. One mechanism that ensures the embedding of the Addressee relates to the bundling of heads. According to Pykkänen (2002, 2008), Harley (2017), and Akkuş (2022), an argument-introducing head can undergo bundling with another head in syntax. Lohninger et al. (2022) argue that some languages allow bundling of an argument-introducing head and C in complement clauses while other languages do not. This discrepancy leads to a significant syntactic consequence. Lohninger et al. (2022) argue that when bundling does not take place between an argument-introducer and an embedded C, the argument-introducer and its argument are placed in the next higher clause. From a configurational perspective, non-bundled *i** here resembles low Appl in that the ApplP is selected by a predicate in the higher clause except when the ApplP is realized in matrix CP. This captures the absence of embedded Addressees in languages such as Korean. That is, the non-bundled low Appl is placed outside the embedded left periphery and introduces a Goal argument instead of an Addressee. In fact, this is well in line with the empirical observation that Korean allocutive markers do not appear in embedded contexts (see Portner et al. 2019 among others).

The bundled head Appl.C, on the other hand, can introduce an argument in embedded CPs. Languages such as Meadow Mari can be analyzed in this fashion (see also Burukina 2020, 2023; Saito 2022). The derivations based on the (non-)bundling approach are provided in (12).

(12) Non-bundled and bundled Appls



Based on Rizzi's (1997) articulated left periphery, there are a number of C heads that *i** can target. The *i** in Magahi, for instance, can target Fin of FinP. This is evidenced by the fact that indexical shift in Magahi is only observed for finite clauses (Alok & Baker 2018; Alok & Haddican 2022). Based on the current analysis, embedded Spec,FinP hosts a nominal argument because Appl and Fin undergo bundling. The chapter also provides evidence for the introduction of arguments other than the Addressee in the left periphery (see Rivero 2009; Landau 2021; Martins & Nunes 2010; Lohninger et al. 2022).

1.4.4 Chapter 5: Conclusion

Chapter 5 summarizes the proposal. It also goes over the main theoretical contributions and outlines some open questions.

CHAPTER 2

Case assignment & argument structure

The syntax of argument-introducing heads comes in different shapes and sizes.¹ Extensive research has focused on how external and applied argument introducing heads such as Voice (Kratzer 1996), Appl (Pylkkänen 2002, 2008), and *i** (Wood & Marantz 2017), an overarching term for Voice and Appl, operate *inside* the thematic domain. A question arises as to whether Voice or Appl can reside *outside* the thematic domain. This chapter provides empirical evidence from Korean in suggesting that an argument can be introduced by Voice/Apppl (*i**) in the clause periphery. Specifically, it lends support to the claim that the discourse participant, addressee, is represented in syntax (Alok & Baker 2018; Alok & Haddican 2022; Baker 2008; Hill 2007; Haegeman & Hill 2013; Miyagawa 2017, 2022; Portner et al. 2019; Zu 2018 among others). In this regard, I draw parallels between the thematic domain and the speech act domain.

¹Some of the ideas in this chapter appear in Lee (2023).

The distribution of Korean case markers provides a clue to where nominal arguments sit in syntax. Korean exhibits nominative (NOM), dative (DAT), accusative (ACC), and vocative (VOC) case markers. NOM is often associated with the subject, DAT with the IO, ACC with the DO, and VOC with the Addressee. (13) shows the realization of these case markers with their arguments.

- (13) Yuli-**ya**, Kim-**i** ai-**hanthey** sathang-**ul** cwu-ess-ta.
 Yuli-VOC Kim-NOM child-DAT candy-ACC give-PST-DECL
 ‘Yuli, Kim gave the child a candy.’

Most of these case markers have an honorific counterpart. They are NOM(∼HON.NOM), DAT(∼HON.DAT), and VOC(∼HON.VOC).² In (14), all of the arguments introduced in the derivation can be honorified. However, only the Addressee, subject, and IO are eligible for HON case assignment. Despite the fact that the DO can be honorified noun phrase-internally, it is associated with plain ACC.

- (14) Kamtoknim-**∅**, halmeni-**kkeyse** sensayngnim-**kkey** halapeci-lul
 director-HON.VOC grandmother-HON.NOM teacher-HON.DAT grandfather-ACC
 sokayha-si-ess-eyo.
 introduce-HON-PST-YO
 ‘Director, grandmother introduced grandfather to the teacher.’

A question arises as to why HON.ACC is absent in the case paradigm as shown in Table 2.1 repeated from Table 1.1 (see also Kim & Chung 2015; Lee & Nie 2022). In this thesis, I argue that the lack of HON.ACC is predicted under a syntactic account. I propose that the HON case markers (HON.NOM, HON.DAT, and HON.VOC) are associated with Voice/Apl (*i**). Subjects and IOs are realized in the *specifier* position of *i** whereas DOs are realized in the

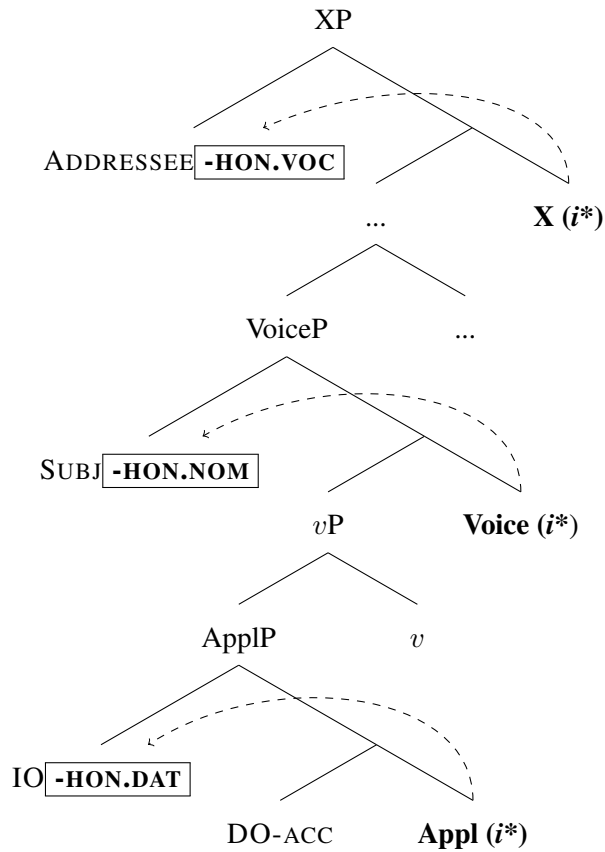
²Here, I emphasize that the *alternation* between (y)a∼∅ (VOC∼HON.VOC) is what matters rather than the overt vs. null status of the forms themselves. Note that the same type of alternation holds for familiar and formal allocutive markers in southern dialects of Basque (Haddican & Etxeberria 2022). The current analysis is also compatible with the analyses that characterize *-nim* as HON.VOC (see Yang 2012).

VOC	(y)a
HON.VOC	∅
NOM	i~ka
HON.NOM	kkeyse
DAT	hanthey
HON.DAT	kkey
ACC	(l)ul
*HON.ACC	N/A

Table 2.1: Korean (honorific) case markers (repeated from Table 1.1)

complement position of either *v* in simple transitive constructions or Appl in double object constructions. Here, I argue that the specifier of *i** is privileged for HON case assignment. This is equivalent to saying that HON case markers are assigned to nominal arguments that satisfy the EPP feature on *i**s. The absence of HON.ACC on DOs follows accordingly: a DO is not realized in Spec,Voice/Appl (*i**). In other words, a DO is not an external or applied argument. The current analysis also provides an account for the presence of HON.VOC on the Addressee: the Addressee is realized in the *specifier* of *i** above TP. Under this approach, the head that hosts the Addressee in the CP domain, call it X of XP (SAP for Haegeman & Hill 2013; cP for Portner et al. 2019; AddrP for Miyagawa 2022), is Voice/Appl (*i**). An idea highlighted in this thesis is that the Addressee is represented in the syntactic structure, just like subjects and IOs, which are eligible for HON case assignment. Moreover, I support the claim that an argument can be introduced *outside* the thematic domain. From a broader perspective, (i) argument introduction and (ii) case assignment in the left periphery suggest that A-properties can be observed in what is often viewed as an A'-domain. The gist of my proposal is fleshed out in (15) repeated from (11):

(15) HON-case assignment in Korean



This chapter is organized as follows. Section 2.1 focuses on the basic distribution of Korean case markers and how arguments are case-assigned in various constructions. Section 2.2 presents alternative approaches to handling argument structure and case realization in Korean and their shortcomings. Section 2.3 addresses how case distributes in small clauses (SCs), causatives, and exceptional case marking (ECM) constructions. Section 2.4 discusses further implications of the proposal. Section 2.5 summarizes the chapter.

2.1 Case assignment in and out of the thematic domain

2.1.1 NOM and HON.NOM

NOM and HON.NOM are often associated with the subject of a clause. The empirical picture becomes more complicated, however, when psych verb constructions and case stacking are taken into consideration. In this section, I argue that NOM and HON.NOM originate from different syntactic heads. Specifically, I posit that NOM is assigned from T and HON.NOM is assigned from Voice (Lee & Nie 2022).

Both NOM and HON.NOM appear on the subject of various constructions, including unaccusatives, passives, unergatives, and transitives. This is demonstrated in (16):

- (16) a. Halapeci{-ka/-kkeyse} tochakha-si-ess-ta.
grandfather-NOM/-HON.NOM arrive-HON-PST-DECL
'Grandfather arrived.' (unaccusative)
- b. Halapeci{-ka/-kkeyse} kyengchal-eyuyhay cap-hi-si-ess-ta.
grandfather-NOM/-HON.NOM police-by catch-PASS-HON-PST-DECL
'Grandfather was caught by the police.' (passive)
- c. Halapeci{-ka/-kkeyse} wus-usi-ess-ta.
grandfather-NOM/-HON.NOM laugh-HON-PST-DECL
'Grandfather laughed.' (unergative)
- d. Halapeci{-ka/-kkeyse} phyenci-lul ssu-si-ess-ta.
grandfather-NOM/-HON.NOM letter-ACC write-HON-PST-DECL
'Grandfather wrote a letter.' (transitive)

At first glance, NOM and HON.NOM seem to surface in the same syntactic environments. However, this is not the case. Unlike NOM, HON.NOM can co-occur with a topic marker (TOP) as shown in (17). In order for (17a) to maintain its topic interpretation, NOM has to be absent. In (17b), however, HON.NOM is preserved.

- (17) a. Sensayngnim(*-i)-**nun** wus-usi-ess-ta.
 teacher-NOM-TOP laugh-HON-PST-DECL
 ‘As for the teacher, (s)he laughed.’
- b. Sensayngnim-**kkeyse-nun** wus-usi-ess-ta.
 teacher-HON.NOM-TOP laugh-HON-PST-DECL
 ‘As for the teacher, (s)he laughed.’ (topicalization)

Another discrepancy between NOM and HON.NOM is observed in psych verb constructions. While NOM can appear on the object noun phrase inside psych verb constructions, HON.NOM cannot. This holds true even if the object is an honorified entity, as shown in (18).

- (18) Ai-hanthey halmeni{-ka/*-kkeyse} kulip-ta.
 child-DAT grandmother-NOM/-HON.NOM miss-HON-DECL
 ‘The child misses grandmother.’ (psych verb)

While the distribution of HON.NOM is restricted to subject noun phrases, NOM can appear on a variety of argument and non-argument constituents (see Sells 1995; Yoon 2005). In (19), for instance, the adjunct *paykakkwan* ‘inside the White House’ can be associated with NOM but not HON.NOM. Note that the NOM-assigned adjunct receives a focused interpretation (see Chapter 3).

- (19) Paykakkwan-an-ey{-ka/*-kkeyse} siwuenha-ci an-ass-ta.
 White.House-inside-LOC-NOM/-HON.NOM cool-CI NEG-PST-DECL
 ‘[Inside the White House]_F, it wasn’t cool at all.’

Quite interestingly, NOM and HON.NOM are not in complementary distribution. In other words, they can co-occur on the same noun phrase. (20) shows that NOM is obligatorily realized with HON.NOM in the presence of the negated copula *anila* inducing contrastive focus (Schütze 2001a).

- (20) Halmeni-**kkeyse*(-ka)** anila Mary-ka John-ul po-ass-ta.
 grandmother-HON.NOM-NOM but.not.be Mary-NOM John-ACC see-PST-DECL
 ‘Mary, not [grandmother]_F, saw John.’ (contrastive focus)

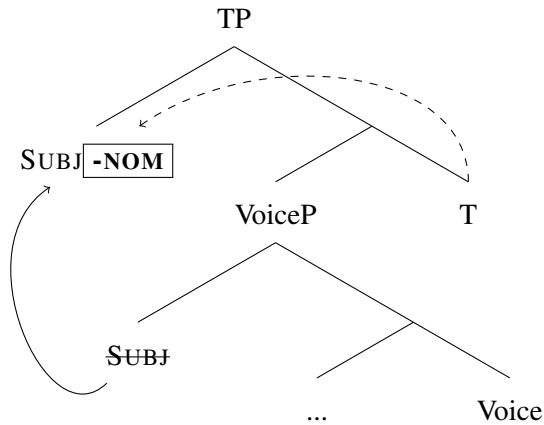
Switching the order of HON.NOM and NOM on *halmeni* ‘grandmother’ is not possible in (20). As shown in (21), HON.NOM (*kkeyse*) must precede NOM (*i* or *ka*, depending on the phonological context). To put it in another way, HON.NOM is always the inner marker, and NOM is always the outer marker. Two instances of the same marker are also ruled out.

(21) NOM and HON.NOM co-occurrence restrictions

- a. ARGUMENT HON.NOM NOM
- b. * ARGUMENT NOM HON.NOM
- c. * ARGUMENT HON.NOM HON.NOM
- d. * ARGUMENT NOM NOM

As we have seen in (17)–(20), the distributions of NOM and HON.NOM are not identical. I propose that NOM and HON.NOM differ with respect to where they appear in the syntax. First, I adopt the standard assumption that T assigns NOM. A non-honorified subject undergoes movement to Spec,TP and receives NOM. This is schematized in (22).

(22) NOM-assignment from T



In (21), we saw that HON.NOM-NOM is possible whereas *NOM-HON.NOM is not. Instead of T, I argue that HON.NOM is assigned by the external argument-introducing head Voice (Kratzer 1996). At first glance, it is possible to assume that the external argument (EA)

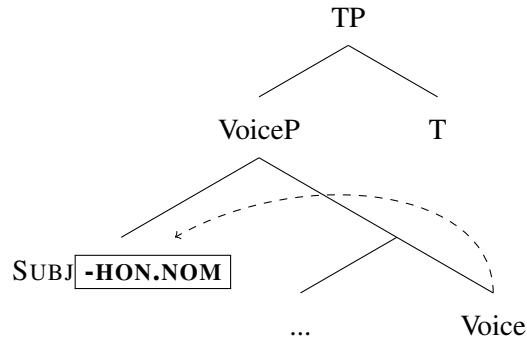
receives NOM from T via downward licensing and HON from Voice. This alternative view, however, faces challenges when nominalizations are brought into the picture. Nominalizations are often assumed to lack TP (see Stowell 1981, 1982; Wiltschko 2003; Rivero 2009 among others). Korean is not an exception. Sohn (2001) argues that the nominalizer *-um* ‘the act or fact of being/doing’ attaches to the base of the verb in Korean. Kim (2015) assumes that *-um* is realized in Voice. Crucially note that HON.NOM can be realized in *-um*-nominalizations as in (23a), but NOM cannot as in (23b).³

- (23) a. [Kim sensayngnim-**kkeyse-uy** kaluchi-si-**m**]-i insangcek-i-ta.
 Kim teacher-HON.NOM-UY teach-HON-NMZL-NOM memorable-COP-DECL
 ‘Teacher Kim’s teaching is memorable.’
- b. [Mina(*-ka)-uy kaluchi-**m**]-i insangcek-i-ta.
 Mina-NOM-UY teach-NMZL-NOM memorable-COP-DECL
 ‘Mina’s teaching is memorable.’

The mismatch observed between HON.NOM and NOM in *-um*-nominalizations suggests that the realization of HON.NOM does not depend on the realization of NOM. Hence, the association of HON.NOM with T does not follow in any straightforward way. In fact, this is one of the main claims put forward in this chapter. If an honorified subject is assigned HON.NOM by Voice, then it does not require NOM-assignment from T. This is illustrated in (24).

³Changguk Yim (p.c.) points out that both (23a) and (23b) are infelicitous under his intuition. In this case, it is difficult to adjudicate where NOM and HON.NOM originate from. For present purposes, I focus on the intuition of those who get a grammatical distinction between the two examples in (23).

(24) HON.NOM-assignment from Voice

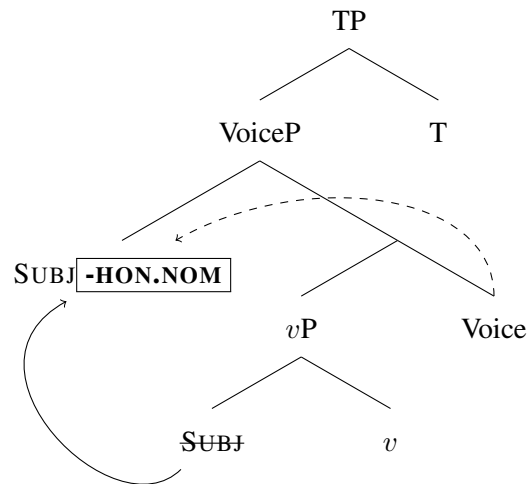


I posit that honorified subjects in unaccusatives and passives undergo movement to Spec, VoiceP in order to receive HON.NOM from Voice (see also Lee 2022 for the same proposal). Presumably, [+HON] on honorified subjects is checked in this position. This kind of approach is consistent with the view that the edge of VoiceP can be a derived position. Legate (2003), for instance, argues that the edge of VoiceP (a phase) is an intermediate landing site for constituents undergoing long-distance movement out of unaccusative and passive constructions (contra Chomsky 2000). Deal (2009) adds weight to the claim that Spec, VoiceP is available in unaccusatives and passives based on independent evidence collected from English expletive *there* constructions. According to Kastner (2020) and Nie (2020), all verbs come with Voice. Similar to how the presence of an internal argument (IA) is determined by the type of *v*, the presence of an EA is determined by the type of Voice introduced in the derivation (see Alexiadou et al. 2006, 2015; Schäfer 2008; Wood 2015; Kastner 2016, 2019; Nie 2020). Here, I endorse this view.

While HON.NOM appears to share some typical commonalities with inherent case, there is precedence in the literature suggesting that what is often labeled as inherent case can, at times, behave like structural case. Kayne (2004), for instance, argues that movement is involved in assigning what appears to be an inherent case in French transitive causative constructions, namely the prepositional dative *à*. Under Kayne's approach, the prepositional

dative is assigned to a Causee via Internal Merge (IM) rather than EM. This, in many ways, shares derivational commonalities with how HON.NOM in Korean is assigned to the subject of unaccusatives and passives. This approach is also reminiscent of raising to ergative constructions in Shipibo (Baker 2014) and Nez Perce (Deal 2019), where an IA argument moves into Spec,VoiceP and is assigned ergative case. Adopting the idea that Voice need not introduce an argument in Korean (see Kim 2011b), I provide (25) as the derivation for HON.NOM-marked subjects in Korean unaccusatives and passives.⁴

(25) HON.NOM-assignment in unaccusatives and passives



Choi & Harley (2019) provide independent evidence that Voice can host an honorific feature. Their evidence is obtained from verbal root suppletion. Chung (2009) initially argues that the verb *kyey~eps~iss* ‘to exist’ in Korean is a suppletive triplet, which is sensitive to the presence of negation (NEG) and HON:

- (26) a. $\sqrt{\text{EXIST}} \leftrightarrow \textit{kyey} / \text{--- HON}$
 b. $\sqrt{\text{EXIST}} \leftrightarrow \textit{eps} / \text{NEG ---}$
 c. $\sqrt{\text{EXIST}} \leftrightarrow \textit{iss} / \text{elsewhere}$

⁴I assume that plain NOM-marked subjects also target the edge of VoiceP for phase-related reasons.

According to Choi & Harley, the suppletion rules in (26) are modulated by structural locality. When the root does not appear with NEG or HON, the default form *iss* is realized as shown in (27a). When the root co-occurs with NEG, the suppletive form of the root *eps* is realized as in (27b). When the root co-occurs with HON, the suppletive form *kyey* is realized as in (27c).

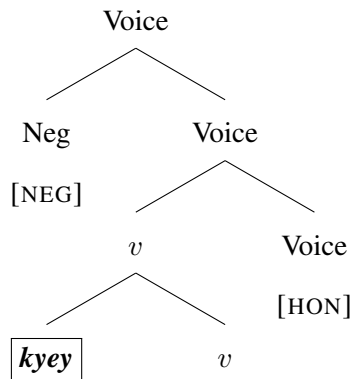
- (27) a. Ai-ka cip-ey **iss-ta**.
 child-NOM house-LOC exist-DECL
 ‘The child is home.’
- b. Ai-ka cip-ey **eps-ta**.
 child-NOM house-LOC NEG.exist-DECL
 ‘The child is not home.’
- c. Apeci-kkeyse cip-ey **kyey-si-ta**.
 father-HON.NOM house-LOC exist-HON-DECL
 ‘Father is home.’

The NEG form *eps*, however, is blocked in the presence of HON, realized as *-(u)si* on the verb; this is shown in (28a) and (29a). The HON form *kyey* must be realized instead as shown in (28b) and (29b).

- (28) a. *Apeci-kkeyse silhemsil-ey **eps-usi-ta**.
 father-HON.NOM lab-LOC NEG.exist-HON-DECL
 Intended: ‘Father is not in the lab.’
- b. Apeci-kkeyse silhemsil-ey an-**kyey-si-ta**.
 father-HON.NOM lab-LOC NEG-exist-HON-DECL
 ‘Father is not in the lab.’ (modified gloss, Chung 2009:545)
- (29) a. *Halapeci-kkeyse pang-ey **eps-usi-ess-ta**.
 grandfather-NOM.HON room-LOC NEG.exist-HON-PST-DECL
 Intended: ‘Grandfather was not in the room.’
- b. Halapeci-kkeyse pang-ey an-**kyey-si-ess-ta**.
 grandfather-NOM.HON room-LOC NEG-exist-HON-PST-DECL
 ‘Grandfather was not in the room.’ (modified gloss, Choi & Harley 2019:1349)

This blocking effect indicates that HON is structurally closer to the verbal root than NEG is. Choi & Harley thus propose that HON originates below Neg (contra Chung 2009), as a feature on Voice.⁵ The complex head schematized in (30) captures the blocking effect.

(30) Suppletion based on structural locality



We collect independent evidence from root suppletion that lends credence to the claim that Voice is a locus of honorification. HON.NOM on the subject and HON on the verb both originate from Voice.

2.1.2 DAT and HON.DAT

DAT and HON.DAT are associated with Goals in ditransitive constructions, Beneficiaries in benefactive constructions, Causees in transitive causative constructions, and experiencer subjects in psych verb constructions. I posit that both DAT and HON.DAT are assigned by Appl (Pylkkänen 2002, 2008).

A Goal can receive either DAT or HON.DAT. For instance, the non-honorified Goal *ai* ‘child’ in (31a) receives DAT and the honorified Goal *halmeni* ‘grandmother’ in (31b) receives HON.DAT.

⁵Choi & Harley (2019) identify the HON-bearing head as the external argument-introducing *v*, which is equivalent to Voice in our analysis. Following Han & Lee (2007), Choi & Harley posit that Neg is adjoined to *v*P/VoiceP.

- (31) a. Mina-ka ai-**hantey** chayk-ul cwu-ess-ta.
 Mina-NOM child-DAT book-ACC give-PST-DECL
 ‘Mina gave the child a book.’
- b. Mina-ka halmeni-**kkey** chayk-ul tuli-ess-ta.
 Mina-NOM grandmother-HON.DAT book-ACC give.HON-PST-DECL
 ‘Mina gave grandmother a present.’ (ditransitive)

Based on the current assumption that only external and applied arguments are eligible for HON case assignment, it is predicted that honorified Beneficiaries, which are applied arguments, should receive an HON case marker. This prediction is borne out. The non-honorified Beneficiary *ai* ‘child’ in (32a) receives plain DAT and the honorified Beneficiary *halmeni* ‘grandmother’ in (32b) receives HON.DAT.

- (32) a. Mina-ka ai-**hanthey** khayikh-ul kwuwe-cwu-ess-ta.
 Mina-NOM child-DAT cake-ACC bake-give-PST-DECL
 ‘Mina baked a cake for the child.’
- b. Mina-ka halmeni-**kkey** khayikh-ul kwuwe-tuli-ess-ta.
 Mina-NOM grandmother-HON.DAT cake-ACC bake-give.HON-PST-DECL
 ‘Mina baked a cake for grandmother.’ (benefactive)

DAT and HON.DAT can also be assigned in morphological causatives. In particular, they are assigned to the Causee of a causative built on a transitive predicate. For example, the non-honorified Causee *ai* ‘child’ in (33a) receives plain DAT and the honorified Causee *halmeni* ‘grandmother’ in (33b) receives HON.DAT.

- (33) a. Mina-ka ai-**hantey** chayso-lul mek-i-ess-ta.
 Mina-NOM baby-DAT vegetable-ACC eat-CAUS-PST-DECL
 ‘Mina made the child eat vegetables.’
- b. Mina-ka halmeni-**kkey** chayso-lul mek-i-ess-ta.
 Mina-NOM grandmother-HON.DAT vegetable-ACC eat-CAUS-PST-DECL
 ‘Mina made grandmother eat vegetables.’ (causative)

While agentive subjects are assigned NOM or HON.NOM, experiencer subjects of psych predicates can be assigned DAT or HON.DAT. In (34a), the non-honorified Causee *ai* ‘child’ receives plain DAT. In (34b), the honorified Causee *emeni* ‘mother’ receives HON.DAT. Note that the object is marked NOM in psych verb constructions.

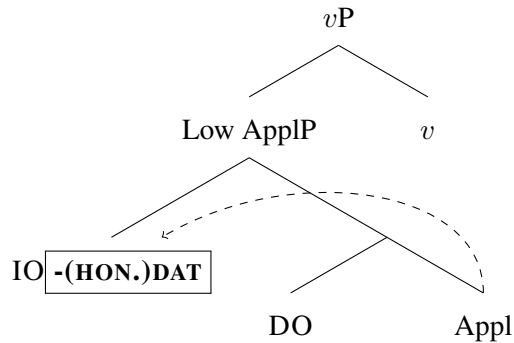
- (34) a. Mina-**hantey** ai-ka kulip-ta.
 Mina-DAT child-NOM miss-DECL
 ‘Mina misses the child.’
- b. Emeni-**kkey** ai-ka kulip-ta.
 mother-HON.DAT child-NOM miss-DECL
 ‘The mother misses the child.’ (psych verb)

Unlike NOM and HON.NOM, DAT and HON.DAT cannot co-occur. This suggests that DAT and HON.DAT are in complementary distribution. Two instances of the same marker are also ruled out. This is shown in (35).

- (35) DAT and HON.DAT co-occurrence restrictions
- a. * ARGUMENT HON.DAT DAT
- b. * ARGUMENT DAT HON.DAT
- c. * ARGUMENT HON.DAT HON.DAT
- d. * ARGUMENT DAT DAT

I suggest that in all of the above constructions, DAT and HON.DAT are assigned by Appl to its specifier. Following Kim (2011a), I assume that there are three types of Appl heads in Korean: Low Appl, High Appl, and Peripheral Appl. All of these Appls can assign DAT or HON.DAT. Low Appl, for instance, merges below *v*P and assigns case to honorified and non-honorified Goals, as shown in (36). (36) correctly represents the asymmetric c-command relation between the Goal and the Theme in Korean ditransitives as pointed out by Jung & Miyagawa (2004) and Kim (2008); Kim (2012); Kim (2015) among others.

(36) (HON.)DAT-assignment from Low Appl



Applying one of Pylkkänen’s (2008) high applicative diagnostics, Kim (2011b) shows that Korean can host High ApplP, which takes *v*P as its complement. The test involves static predicates such as *tul* ‘to hold.’ Static predicates cannot be used to denote a source or recipient relation between two different nominal arguments but to express a relation between a nominal argument and an event. This suggests that the static predicates are compatible with High ApplP rather than Low ApplP.

- (37) Swuni-ka Minswu-eykey chayk-lul **tul**-li-ess-ta.
 Suni-NOM Minsu-DAT book-ACC hold-CAUS-PST-DECL
 ‘Suni had Minsu hold the book.’ (modified gloss, Kim 2011b:498)

Kim (2011a,b) further argues that Causees in Korean morphological causatives are introduced by High Appl rather than Voice. According to Kim, these Causees cannot be modified by the agent-oriented adverb *ilpwule* ‘on purpose’ as shown in (38) (see also Song 1993; Baek 1997). Note that the non-agent-oriented adverb *ppali* ‘quickly’ is possible instead.

- (38) Swuni-ka Minswu-eykey chayk-lul **ppali**/***ilpwule** ilk-hi-ess-ta.
 Suni-NOM Minsu-DAT book-ACC quickly/on.purpose read-CAUS-PST-DECL
 ‘Suni had [Minsu read the book quickly/*on purpose].’
 (modified gloss, Kim 2011b:500)

Jo (2020, 2021) mentions that the agent-oriented adverb *ilpwule* ‘on purpose’ cannot modify the Causee due to pragmatic reasons. That is, the Causee cannot perform an action on pur-

pose when the Causer imposes the action on the Causee against their will. Jung (2014), however, shows that the Causee of a morphological causative cannot be modified by an agent-oriented participial either. Here, no pragmatic clash is expected since the Causee should be able to perform an action regardless of their intention. (39) shows that an agent-oriented participial can modify the Causer, but not the Causee.

- (39) Yenghi₁-ka ai₂-eykey kyokwase-lul **mitcwul-ul** **chye.ka-mye**_{1/*2}
 Yenghi-NOM child-DAT textbook-ACC underline-ACC draw.go-PPL
 ilk-hi-ess-ta.
 read-CAUS-PST-DECL
 ‘Yenghi, underlining (the important parts), made the child read the textbook.’
 (modified gloss, Jung 2014:47)

Note that the Causee of a periphrastic causative can be modified by the same agent-oriented participial as shown in (40). This suggests that the Causee in (40) is agentive, unlike the Causee in (39).

- (40) Yenghi₁-ka ai₂-eykey kyokwase-lul **mitcwul-ul** **chye.ka-mye**_{1/2} ilk-key
 Yenghi-NOM child-DAT textbook-ACC underline-ACC draw.go-PPL read-CAUS
 ha-ess-ta.
 do-PST-DECL
 ‘Yenghi, underlining (the important parts), made the child read the textbook.’
 (modified gloss, Jung 2014:47)

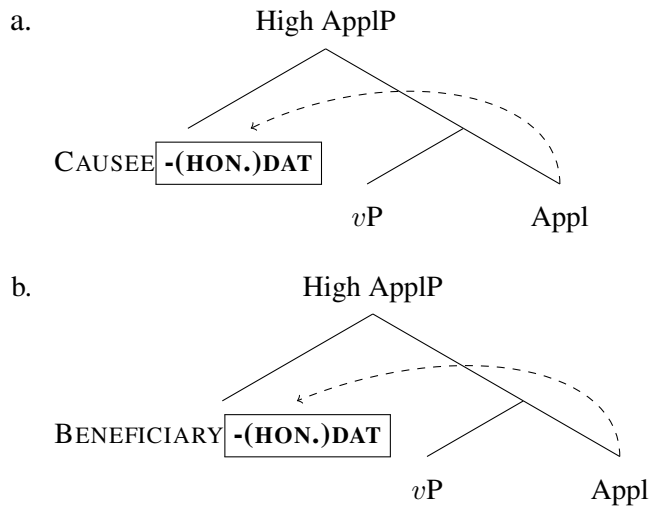
Since the Causee of a morphological causative does not show full-scale agentivity, Jung (2014) argues alongside Kim (2011a,b) that High Appl instead of Voice introduces the Causee in morphological causatives.⁶ Following Kim (2011a,b) and Jung (2014), I assume that Beneficiaries are also introduced by High Appl.⁷ This suggests that Causees and Ben-

⁶I discuss Causees of unergatives in section 2.3.1 since further elaboration is needed especially when their case assignment is given consideration.

⁷Tomioka & Kim (2017) argue that benefactive readings are established via pragmatic inference. However, the idea that Appl introduces a DAT-marked argument is maintained in their analysis.

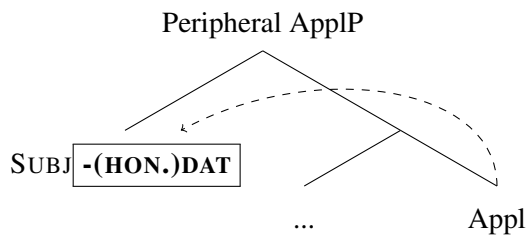
eficiaries form a Spec-head relation with Appl. Under the current analysis, honorified and non-honorified Causees and Beneficiaries are (HON.)DAT-assigned by Appl, as shown in (41).

(41) (HON.)DAT-assignment from High Appl



Kim (2011a) assumes that there is ApplP which is higher than High ApplP. This is referred to as Peripheral ApplP. Peripheral ApplP introduces an experiencer subject. I take this Appl as a (HON.)DAT-assigner as well as shown in (42).

(42) (HON.)DAT-assignment from Peripheral Appl



The need for Peripheral Appl is observed in case stacking environments. DAT-marked experiencer subjects undergo case stacking with NOM as shown in (43a), while DAT-marked Causees and Goals undergo case stacking with ACC as shown in (43b) and (43c), respectively.

- (43) a. Mina-**hantey**-man{-i/*-ul} ai-ka kulip-ta.
 Mina-DAT-only-NOM/-ACC child-NOM miss-DECL
 ‘Only Mina misses the child.’ (psych verb)
- b. Kim-i Mina-**hantey**-man{-ul/*-i} pap-lul mek-i-ess-ta.
 Kim-NOM Mina-DAT-only-ACC/-NOM rice-ACC eat-CAUS-PST-DECL
 ‘Kim made only Mina eat rice.’ (causative)
- c. Kim-i Mina-**hantey**-man{-ul/*-i} chayk-ul cwu-ess-ta.
 Kim-NOM Mina-DAT-only-ACC/-NOM book-ACC give-PST-DECL
 ‘Kim gave only Mina a book.’ (ditransitive)

The difference in case stacking can be explained if we assume that Low Appl and High Appl are merged inside the domain where ACC is assigned while Peripheral Appl is merged outside the ACC-assignment domain and in the NOM-assignment domain (see Chapter 3).

Based on the empirical data provided in this section, the generalization that emerges for datives seems to be quite straightforward. As long as an argument is realized in Spec,ApplP, the argument is DAT or HON.DAT-marked (see also Chapter 4).

2.1.3 ACC but no HON.ACC

The association of ACC with a Theme argument is commonly observed in Korean. In (44a), ACC is assigned to the Theme of a simple transitive. In (44b), ACC is assigned to the Theme of a ditransitive.

- (44) a. Kim-i Mina-**lul** ttayli-ess-ta.
 Kim-NOM Mina-ACC hit-PST-DECL
 ‘Kim hit Mina.’ (transitive)
- b. Kim-i Mina-hantey sakwa-**lul** cwu-ess-ta.
 Kim-NOM Mina-DAT apple-ACC give-PST-DECL
 ‘Kim gave Mina an apple.’ (ditransitive)

When the Theme argument is promoted to the subject position, however, ACC is lost, as shown in (45).

- (45) a. Mina{-**ka**/*-**lul**} mac-ass-ta.
Mina-NOM/-ACC hit.PASS-PST-DECL
'Mina was hit.'
- b. Sakwa{-**ka**/*-**lul**} Mina-hanthey cwu-eci-ess-ta.
apple-NOM/-ACC Mina-DAT give-PASS-PST-DECL
'An apple was given to Mina.'

According to Wechsler & Lee (1996), Jung & Miyagawa (2004), Jung (2014), among others, the basic distribution of ACC in Korean follows Burzio's Generalization (Burzio 1986). This accounts for the realization of ACC in (44) and the absence of ACC in (45).

- (46) Burzio's Generalization (Burzio 1986:178)

All and only the verbs that can assign a theta-role to the subject can assign accusative Case to an object.

Here, it is worth mentioning that Korean allows multiple ACC constructions (MACs). Jung & Miyagawa (2004) argue that both the IO and the DO can be ACC-marked resulting in MACs as shown (47). According to Jung & Miyagawa, DOCs are MACs in Korean (see section 2.2.1).

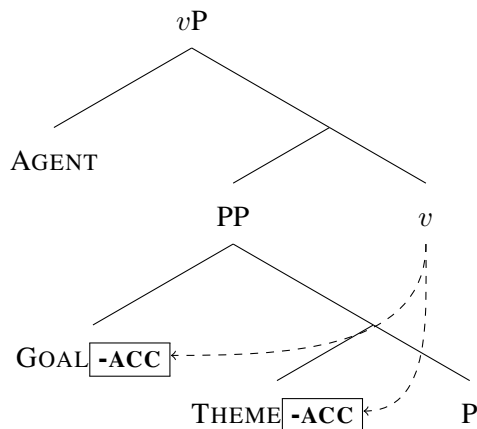
- (47) Mary-ka John-**ul** chayk-**ul** cwu-ess-ta.
Mary-NOM John-ACC book-ACC give-PST-DECL
'Mary gave John a book.' (DOC, Jung & Miyagawa 2004:117)

Both instances of ACC, however, are lost under passivization. This is demonstrated in (48):

- (48) John-**i** chayk-**i** cwu-eci-ess-ta.
John-NOM book-NOM give-PASS-PST-DECL
'John was given a book.' (Jung & Miyagawa 2004:117)

Based on the empirical picture provided in (47) and (48), Jung & Miyagawa (2004) claim that ACC originates from *v*. When *v* is intransitive or is associated with a non-causative construction, it loses the ability to assign ACC.⁸ This is in many ways consistent with Burzio's Generalization. (49) sketches out Jung & Miyagawa's take on MACs.

(49) Tree for (47) based on Jung & Miyagawa (2004:119)



An alternative analysis to Jung & Miyagawa (2004) is suggested by Kim (2012); Kim (2015). According to Kim, the Goal is introduced by an Appl that selects the verb phrase as its complement. Kim's tree is schematized in (50). This is consistent with Marantz's (1993) take on Chicheŵa DOCs and Bruening's (2010b) take on English DOCs.⁹

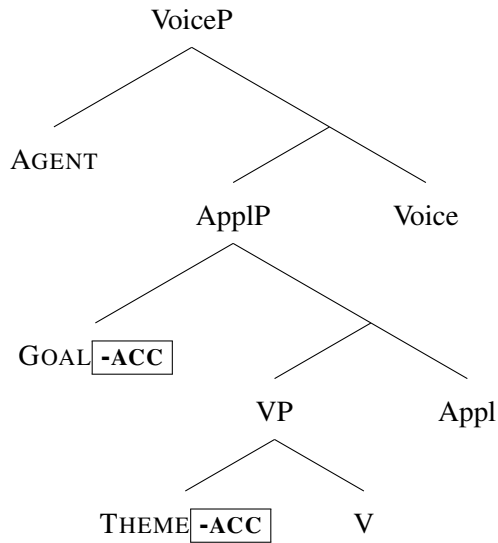
⁸Maling (1989) and Wechsler & Lee (1996) point out that adjuncts that can be ACC-marked in active sentences cannot be ACC-marked in passive sentences. Here, Korean seems to showcase an extreme version of Burzio's Generalization.

⁹Kim (2015) adopts Bruening's (2010a) semantic definition of the applicative head:

(1) $[[\text{Appl}]] = \lambda x. \lambda y. \lambda e. \text{HAVE}(e) \ \& \ \text{THEME}(e,x) \ \& \ \text{POSSESSOR}(e,y)$ (Bruening 2010a:550)

See Bruening (2010a) for an argument that the IO in English DOCs is introduced by High Appl instead of Low Appl. See also Georgala et al. (2008) for an argument that the IO raises to Spec,High ApplP during the course of the derivation.

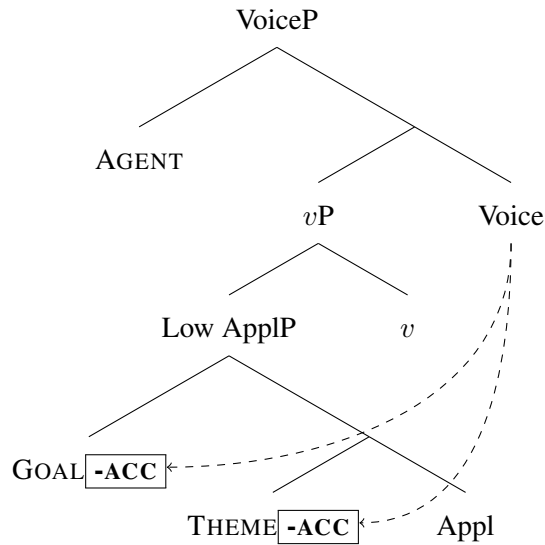
(50) Tree for (47) based on Kim (2012); Kim (2015)



Lee (2020, 2022), however, provides a critical review of Kim’s (2015) analysis. Lee (2020, 2022) argues that Kim’s (2015) quantifier scope data in Korean are misleading and that her conclusion about Korean DOCs is untenable. Lee’s proposal on Korean ditransitives is more or less in harmony with Jung & Miyagawa (2004).

Adjudicating between Jung & Miyagawa’s (49) and Kim’s (50) is not necessary for present purposes (see also section 2.2.1). Both analyses are compatible with my proposal on DOCs and how case assignment is done in Korean. For the sake of consistency, I continue adopting Kratzer’s (1996) VoiceP and Pykkänen’s (2008) ApplP in terms of fleshing out the details to deriving Korean ditransitives. I update the structure given in (49) and put forward (51) as the configuration reflecting MACs. In (51), Voice assigns ACC downwards to the Goal and the Theme, respectively. More details on how IAs undergo ACC case-stacking are provided in Chapter 3.

(51) Tree for (47) adopting VoiceP (Kratzer 1996) and ApplP (Pylkkänen 2008)



The lack of HON.ACC can be accounted for if the assignment of HON-sensitive case is limited to a Spec-head relation between an argument and the ACC-assigning Voice. At no point during the derivation in (51) does the Goal or the Theme form a Spec-head relation with Voice. For concreteness, I propose (52) as the necessary condition for HON case assignment.

(52) An honorified argument receives HON-sensitive case from i^* if the argument and i^* form a Spec-head configuration.

If (52) is on the right track, the absence of HON.ACC follows. The asymmetric c-command relation established between an object and Voice does not satisfy the Spec-head relation required for HON case assignment.¹⁰ This also applies to causative constructions hosting multiple ACCs. In (53a), for instance, the Causee and the Theme are both ACC-marked.

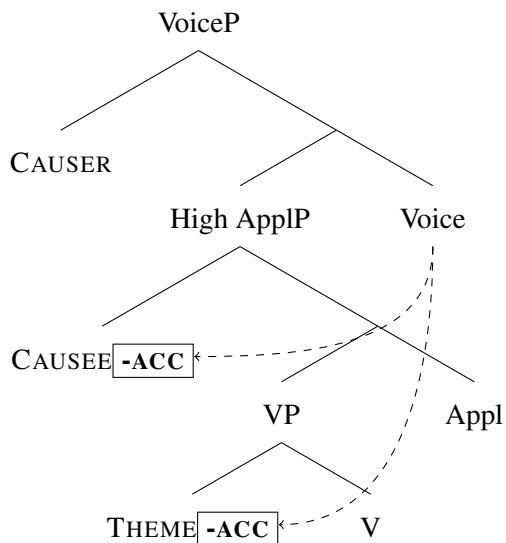
¹⁰The Goal does not receive (HON.)DAT from Appl in (51). One possibility is that a DP-less nominal, call it nP , is introduced in Spec,ApplP. Here, DAT is not assigned to nP , since nP is not initially realized together with D that hosts case-related features. At some point in the derivation, nP undergoes external remerge with D, which projects a DP based on a layering derivation (Thoms 2019). The DP is assigned ACC from Voice via downward licensing. While I am open to alternative analyses, I wish to emphasize that the Goal need not be assigned (HON.)DAT in MACs.

(53b) shows that both instances of ACC are taken away under passivization. This is very much in line with the pattern observed in (47) and (48).

- (53) a. Mary-ka John-**ul** os-**ul** ip-hi-ess-ta.
 Mary-NOM John-ACC clothes-Acc put.on-CAUS-PST-DECL
 ‘Mary made John put on the clothes.’
- b. John-**i** os-**i** ip-hi-eci-ess-ta.
 John-NOM clothes-NOM put.on-CAUS-PASS-PST-DECL
 ‘John was made to put on the clothes.’ (modified gloss, Jung & Miyagawa 2004:118)

(54) schematizes the derivation for (53a). (54) shows that Voice assigns ACC downwards to the Causee and the Theme. Crucially, neither of the two arguments establishes a Spec-head relation with Voice. Further elaboration on the ACC-assignment of Causees in a case-stacked environment is provided in Chapter 3.

- (54) Tree for (53a) adopting VoiceP (Kratzer 1996) and ApplP (Pylkkänen 2008)



Before moving on, I emphasize that the lack of HON.ACC cannot be reduced to a purely semantic phenomenon. There is no HON.ACC even if a predicate semantically

associates the Theme with honorificity or deference. In (55), for instance, the predicate *conkyengha* ‘to respect’ associates the Theme with honorificity or deference. However, the Theme has to be assigned plain ACC.

- (55) Kim-i sacangnim-**ul conkyengha**-n-ta.
 Kim-NOM boss-ACC respect-PRS-DECL
 ‘Kim respects her boss.’

While Theme arguments can be semantically honorified, the lack of HON.ACC suggests that the distribution of HON case markers is syntactically restricted.

2.1.4 No GEN and no HON.GEN

A question arises as to whether Korean allows genitive (GEN) case marking. If a possessor is introduced in a Spec-head relation with a nominal-internal head capable of assigning GEN, it is predicted from the current analysis that the possessor-introducing head should also assign HON.GEN. Quite interestingly, the empirical facts suggest that a reserved morphological form for HON.GEN does not exist in contemporary Korean.¹¹ The phonological form *uy* has been traditionally described as GEN, but for reasons to come I avoid labeling it as GEN. First, the GEN-like distribution of *uy* is presented in (56).

- (56) a. Ai-**uy** kapang-i mwukep-ta.
 child-UY bag-NOM heavy-DECL
 ‘The child’s bag is heavy.’
 b. Halapeci-**uy** kapang-i mwukep-ta.
 grandfather-UY bag-NOM heavy-DECL
 ‘Grandfather’s bag is heavy.’

¹¹Changguk Yim (p.c.) points out that, in Middle Korean, *uy* attached to animate, plain nouns, and *-s* attaches to either inanimate or honorific nouns. This suggests that there was a way to differentiate honorific nouns from their non-honorific counterparts.

Despite (56), however, the distribution of *uy* under scrutiny shows that *uy* can be associated with constituents other than just possessors. For instance, *uy* attaches to already case-assigned DPs, PPs, numerals, and modifiers. The empirical data provided in (57) suggest that the distribution of *uy* contrasts with that of GEN. In fact, An (2014) argues that *uy* is not a genuine case marker, but rather a marker for a prenominal modifier (or a prenominal linker). (57b)–(57e) are taken from An (2014:364). In (57a), *uy* is associated with a DAT-marked argument. If *uy* were GEN, the co-occurrence of DAT and *uy* would suggest that multiple case assignment is possible on a single nominal. The motivation for GEN-assignment after DAT-assignment, however, is not straightforward under this view. In (57b) and (57c), *uy* is associated with a PP. If *uy* were GEN, it is not clear why a self-licensed PP would require case. In (57d), *uy* is realized together with a classifier. Note that Korean is a language that often requires a classifier for count nouns. It would be puzzling to explain why *uy* would attach to a classifier if *uy* were GEN. Finally, (57e) shows that *uy* attaches to a nominal modifier. Again, this suggests that *uy* does not behave like GEN.

- (57) a. Haksayng-hanthey-**uy** senmwul
 student-DAT-UY present
 ‘a present to the student’ (DAT-assigned nominal)
- b. Ywulep-ulo-**uy** yehayng
 Europe-to-UY trip
 ‘a trip to Europe’ (destination)
- c. Mikwuk-ulopwuthe-**uy** pyenci
 America-from-UY letter
 ‘a letter from America’ (source)
- d. Sey-kwen-**uy** chayk
 three-CL-UY book
 ‘three books’ (numeral)
- e. Hayngpok-**uy** swunkan
 happy-UY moment
 ‘a happy moment’ (modifier)

Instead of assuming that *uy* is a case marker, An (2014) posits that *uy* is an allomorph of the prenominal modifier $n \sim l$ shown in (58). The form *n* surfaces when past tense, perfect aspect, or realis mood is associated with the nominal as in (58a). The form *l*, on the other hand, surfaces when future tense, imperfect aspect, or irrealis mood is associated with the nominal as in (58b).

- (58) a. Cip-ey ka-**n** ai
 home-to go-N child
 ‘the child who went home’
- b. Cip-ey ka-**l** ai
 home-to go-L child
 ‘the child who will go home’ (An 2014:370)

The Vocabulary Insertion (VI) rules for the suppletive triplet $n \sim l \sim uy$ are provided below. *K* stands for the abstract feature that corresponds to the phonological forms. Here, *uy* is the elsewhere form.

- (59) Insertion of the prenominal modifier (*K*) (An, 2014:372)
- a. $K \leftrightarrow n / [NP \emptyset_{\text{past/perfect/realis}} \text{ — } N]$
- b. $K \leftrightarrow l / [NP \emptyset_{\text{future/imperfect/irrealis}} \text{ — } N]$
- c. $K \leftrightarrow uy / \text{elsewhere}$

Adopting An’s proposal, I posit that GEN is absent in Korean. This accounts for the absence of HON.GEN as well. HON.GEN does not exist in the Korean case paradigm because there is no GEN in the first place.

2.1.5 VOC and HON.VOC

The current proposal makes predictions about where arguments are introduced in the syntax. Specifically, it predicts that arguments can be introduced outside the thematic domain. The

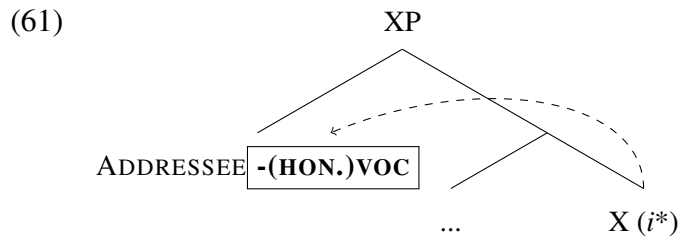
Korean vocative marker (VOC) has alternating forms, $(y)a \sim \emptyset$, which depends on the honorificity of the Addressee. This is shown in (60). Honorification also correlates with the presence of the clausal politeness marker *yo* (see Choi 2016; Yim 2016, among others). In the presence of VOC $(y)a$, the clausal politeness marker *yo* cannot surface, as demonstrated in (60a). In the presence of HON.VOC \emptyset , however, *yo* surfaces as in (60b).

- (60) a. Sarah-**ya**, halmeni-kkeyse cip-ey ka-si-ess-e(***-yo**).
 Sarah-VOC, grandmother-HON.NOM house-LOC go-HON-PST-DECL-YO
 ‘Sarah, grandmother went home.’
- b. Halmeni(***-ya**), Sarah-ka cip-ey ka-ss-e-**yo**.
 grandmother-HON.VOC, Sarah-NOM house-LOC go-PST-DECL-YO
 ‘Grandmother, Sarah went home.’

Here, I emphasize that the *alternation* between $(y)a \sim \emptyset$ is what matters rather than the phonologically overt vs. null status of the forms themselves. Note that the same kind of alternation holds for familiar and formal allocutive markers in southern dialects of Basque (Haddican & Etxeberria 2022). Further, Middle Korean had a (VOC) $\sim ha$ (HON.VOC) alternation where both VOC and HON.VOC were overt (Lee & Ramsey 2011).

I assume that the participants of a conversation are introduced as arguments in the syntax. The Addressee sits in a specifier position of the Speech Act Phrase (SAP), which is the topmost layer of the matrix clause (see Hill 2007 and Haegeman & Hill 2013). Park (2021) provides evidence from Korean supporting the claim that the Addressee is introduced by a head via predication. This is in accordance with the idea that the Addressee can be assigned a σ -role and assigned case just like other applied arguments in syntax. These approaches come close to my take on how the Addressee can be licensed in the left periphery. In fact, Burukina (2020) argues that the complementizer that introduces the embedded Addressee in Meadow Mari (Uralic) derives from the verb *manas* ‘to say’ (see Chapter 4). Drawing evidence from examples such as (60), Choi (2016) argues that the clausal politeness

marker *yo* is spelled out in SA if the Addressee is honorified. Just like Voice and Appl, then, SA is also HON-sensitive. I argue that *ya* (VOC) and its honorific counterpart \emptyset (HON.VOC) are assigned to the Addressee by the same head. The head that introduces the Addressee has received different labels in the recent years: SA of SAP under Haegeman & Hill (2013), c of cP under Portner et al. (2019), Addr of AddrP under Miyagawa (2022). Irrespective of what the label is, I argue that it is an external/applied argument introducing head (i^*) that assigns VOC and HON.VOC to the Addressee similar to the i^* that assigns DAT and HON.DAT to the IO in the thematic domain.



Summing up, the head that hosts the Addressee in the CP domain is an argument-introducer. Based on the discussion so far, all instances of HON-sensitive case markers (HON.NOM, HON.DAT, and HON.VOC) are assigned via the same type of head, namely i^* . Thus, i^* can exhibit honorification in both the thematic domain and the speech act domain. In Chapter 4, we delve deeper into the topic of argument introduction in the left periphery, drawing insights from cross-linguistic data.

2.2 Alternative analyses and their shortcomings

I briefly summarize my take on Korean argument structure and case assignment. I have argued that the Theme is base-generated in a complement position and that the Goal is base-generated in a specifier position that asymmetrically c-commands the Theme in ditransitives

(see Jung & Miyagawa 2004; Kim 2008; Kim 2012; Kim 2015). I have also argued that NOM is assigned from T and ACC from Voice via Burzio’s Generalization. I proposed that HON case markers are assigned in a Spec-head configuration with an argument-introducing head.

Alternative analyses of argument structure and case assignment have been put forward in the literature. We examine these proposals and their shortcomings when they are applied to Korean.

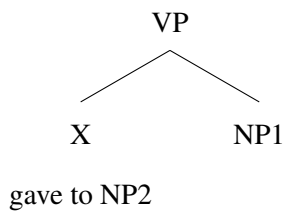
2.2.1 Alternative analyses to ditransitive constructions

One of the earliest works on English ditransitives in generative grammar dates back to Chomsky (1955). Under this analysis, (62a) is derived from (62b). In (62b), the Goal *to him* forms a constituent with the verb before the Theme *books* does.

- (62) a. The instructor gave books to him.
 b. The instructor [*gave to him*] books. (PDC)

Chomsky’s (1955) interpretation of PDCs is provided in (63). Note that NP1 is the Theme, and NP2 is the Goal. NP1 asymmetrically c-commands NP2.

(63) PDC based on Chomsky (1955)



(63) captures a fact about English idioms: A verb and a Goal can form an idiomatic expression to the exclusion of a Theme. Based on the idea that idioms form a constituent, (64) provides support for the structure fleshed out in (63).¹² The italicized parts in (64) indicate

¹²See Bruening (2010a) for further discussion on English idioms and a selection-based approach to the phenomenon.

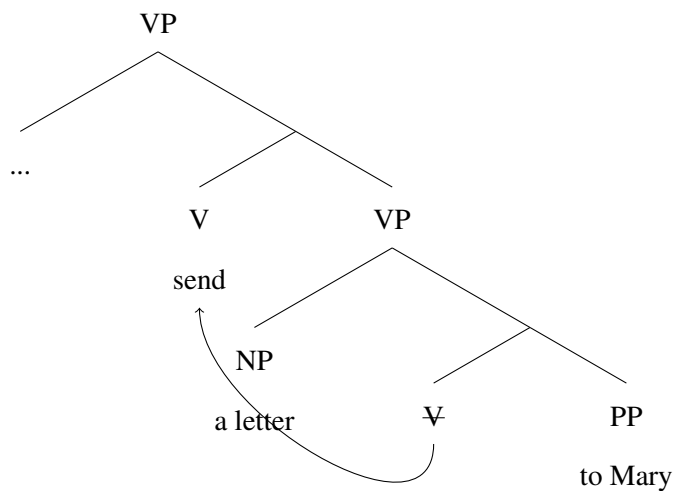
the idiomatic expressions. They are referred to as ‘discontinuous idioms’ (Larson 1988) due to the lack of linear adjacency between the verb and the Goal, which constitute an idiomatic expression.

- (64) a. Lasorda *sent* his starting pitcher *to the showers*.
 b. Mary *took* Felix *to the cleaners*.
 c. Felix *threw* Oscar *to the wolves*.
 d. Max *carries* such behavior *to extremes*. (Larson 1988:340)

Adopting Chomsky, Larson (1988) argues that a verb and a Goal can form a constituent to the exclusion of a Theme in PDCs. In (66), which is based on the example in (65), the Goal PP *to Mary* is base-generated in a complement position whereas the Theme NP *a letter* is base-generated in a specifier position.

(65) John sent a letter to Mary. (PDC)

(66) PDC based on Larson (1988:343)

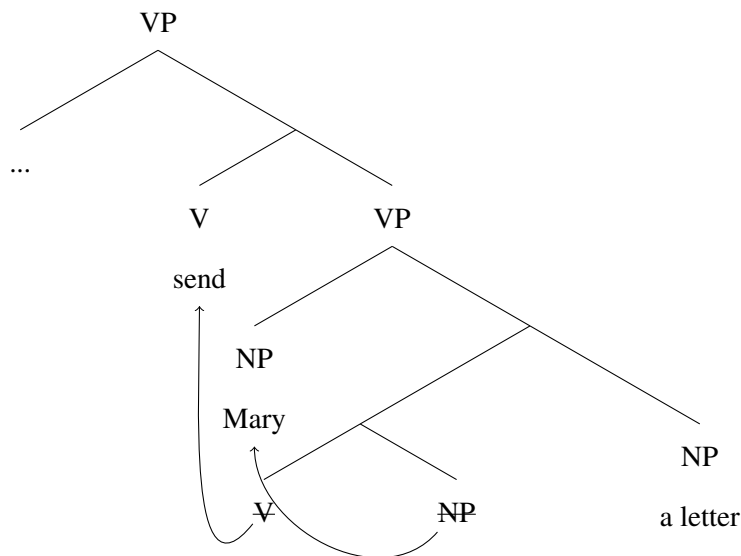


Larson claims that DOCs such as (67) are derived from PDCs. As shown in (68), the derivation involves the promotion and the demotion of arguments similar to the ones observed in

passivization. The Goal NP *Mary* undergoes movement to Spec,VP in a manner comparable to how an IA is promoted to the subject position in passivization. The Theme NP *a letter* is placed in an adjunct position which shows resemblances to the demotion of a *by*-phrase in passivization.

(67) John sent Mary a letter. (DOC)

(68) DOC based on Larson (1988:353)



Larson’s analysis, however, is not without challenges. (68) shows that the Theme must asymmetrically c-command the Goal at some point in the derivation. This makes predictions about scope interpretations in DOCs. Bruening (2001, 2010b) reports that an inverse scope reading is possible under PDCs but not under DOCs as shown in (69) and (70). (70) is puzzling under Larson’s account: the universal quantifier (\forall) associated with the Theme cannot take scope over the indefinite determiner (\exists) associated with the Goal even though the Theme asymmetrically c-commands a copy of the Goal. Hence, the empirical fact provided in (70) does not line up with the derivation presented in (68).

- (69) I gave a taser gun to every security guard. (PDC)
- ✓ Surface scope ($\exists > \forall$): A particular taser gun was given to every security guard.
 - ✓ Inverse scope ($\forall > \exists$): Every security guard was given a different taser gun.
- (70) I gave a security guard every taser gun. (DOC)
- ✓ Surface scope ($\exists > \forall$): A particular security guard was given every taser gun.
 - ✗ Inverse scope ($*\forall > \exists$): Every security guard was given a different taser gun.

Burzio (1986) mentions that *each* in English has a c-command requirement. (71a) suggests that the plural subject *they* c-commands *each*. (71b) suggests that the plural object *them* cannot c-command *each* and thus the derivation crashes.

- (71) a. They taught one pilot each.
 b. *One pilot each taught them.

The c-command requirement in (71) can be applied to DOCs. This allows us to examine whether the Theme can c-command the Goal. If Larson (1988) is on the right track, we expect DOCs with a plural Theme argument and a Goal argument associated with *each* to be well-formed. This is because the former c-commands the latter at some point in the derivation. This prediction, however, is not borne out as Collins (2024) mentions. (72) shows that a DOC hosting a plural Theme and a Goal associated with *each* is ungrammatical. This suggests that the Theme does not c-command the Goal in DOCs. The opposite pattern, however, holds. (73) shows that a DOC hosting a plural Goal and a Theme associated with *each* is well-formed. Larson's proposal, in this regard, falls short of capturing the facts.

- (72) a. *John assigned one visitor each the interpreters.
 b. *John gave one child each the toy cars.
 c. *John sent one student each the letters. (Collins 2024)

- (73) a. John assigned [the visitors] one interpreter each.
 b. John gave [the kids] one present each.
 c. John sent [the students] one letter each. (Collins 2024)

Further challenges arise when Larson’s analysis is applied to Korean. Evidence from anaphor binding suggests that the Goal *c*-commands the Theme, but not vice versa. Kim (2008, 2015) shows that Korean displays the chain condition effect (Rizzi 1986). This effect comes to life when a copy of an R-expression is under the local *c*-command environment of its anaphor within a chain. As a result, the derivation crashes. (74) demonstrates this point. (74a) is subject to the chain condition effect, since the lower copy of the R-expression *John* is *c*-commanded by its reflexive anaphor *cakicasin* ‘self’. (74b), however, is not subject to this effect, since the lower copy of the R-expression is not *c*-commanded by its anaphor. Here, the anaphor is the possessor of the subject head noun.

- (74) a. ***John-*ul***_{*i*} cakicasin-*i* **t**_{*i*} po-ass-ta.
 John-ACC self-NOM see-PST-DECL
 Intended: ‘Self saw John.’
- b. **John-*ul***_{*i*} cakicasin-uy_{*i*} hyeng-*i* **t**_{*i*} po-ass-ta.
 John-ACC self-UY brother-NOM see-PST-DECL
 ‘Self’s brother saw John.’ (modified gloss, Kim 2008:121)

As Kim (2008, 2015) points out, the chain condition effect has implications for the underlying structure of Korean PDCs. If the DO asymmetrically *c*-commands the IO in the underlying structure, the effect should appear in the word order S-IO-DO-V, where the IO is an R-expression, and the DO is its co-referential anaphor. This is because the lower copy of the R-expression is *c*-commanded by the anaphor after movement takes place similar to (74a). (75), however, shows that the chain condition effect does not result. This suggests

that the DO does not asymmetrically c-command the IO in the underlying structure contrary to (66).

- (75) Sue-ka John-eykey_i cakicasin-ul_i poyecwu-ess-ta.
 Sue-NOM John-DAT self-ACC show-PST-DECL
 ‘Sue showed self to John.’ (modified gloss, Kim 2008:122)

Under the assumption that S-IO-DO-V is the underlying order, the ungrammaticality of (76) follows straightforwardly. In (76), the DO is an R-expression, and the IO is its anaphor. The movement of the R-expression leaves a copy below the anaphor. This gives rise to the chain condition effect. If S-DO-IO-V were the canonical word order, the ungrammaticality of (76) is hard to capture. Under this assumption, the anaphor would be bound within its local domain by the R-expression without inducing the chain condition effect. The empirical fact, however, suggests otherwise. Hence, examples such as (76) provide evidence that the IO asymmetrically c-commands the DO in the underlying structure contrary to Larson’s (66).

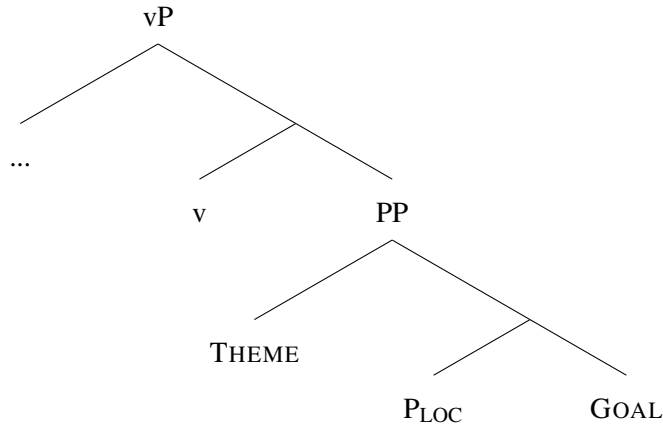
- (76) *Sue-ka **John-ul**_i cakicasin-eykey_i t_i poyecwu-ess-ta.
 Sue-NOM John-ACC self-DAT show-PST-DECL
 Intended: ‘Sue showed John to self.’ (modified gloss, Kim 2008:122)

Quite importantly, Larson’s analysis of ditransitives does not capture the distribution of HON case markers in Korean. The analysis fails to emphasize the similarities between subjects and IOs to the exclusion of DOs. Simply put, there is no obvious way of accounting for the presence of HON.NOM on subjects and HON.DAT on IOs as well as the absence of HON.ACC on DOs under this account. Hence, a different take on Korean ditransitives is necessary.

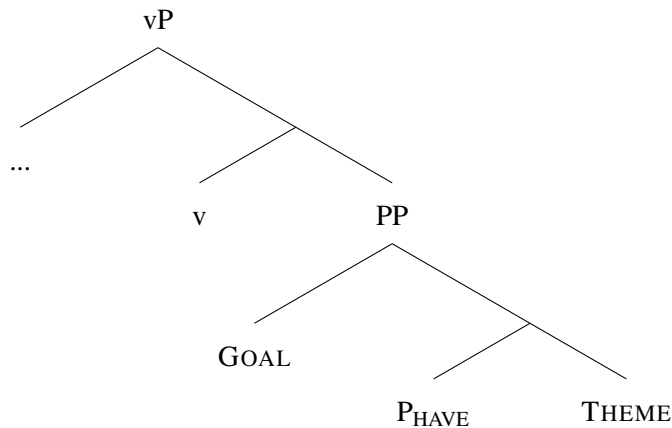
According to Harley (2002), English PDCs and DOCs have different underlying structures. Under this view, the IO is base-generated in a complement position in PDCs, unlike DOCs (see also Oehrle 1976, Kayne 1984, Gropen et al. 1989, Jackendoff 1990,

Bowers 1993, Hale & Keyser 1993, den Dikken 1995, Pesetsky 1995, Basilico 1998, Bruening 2001, Anagnostopoulou 2003, Beck & Johnson 2004, Harley & Jung 2015, Holmberg et al. 2019 among others). Harley's interpretation of ditransitives are provided in (77) and (78).

(77) PDC based on Harley (2002:32)



(78) DOC based on Harley (2002:32)



Kim (2008; 2012; 2015) shows that Harley's approach does not carry over to Korean ditransitives. Recall that the chain condition effect is observed in (76), but not in (75). They suggest that the Goal c-commands the Theme, but not vice versa. This suggests that (77) cannot be applied to Korean PDCs. While Jung & Miyagawa (2004) largely adopt Harley's

way of analyzing ditransitives for Korean, they too depart from the view that the Theme commands the Goal in the underlying structure of PDCs. Lee (2020, 2022) also advocates for this type of departure. Overall, Kim's, Jung & Miyagawa's, and Lee's analyses converge with respect to the order of Theme and Goal introduction.¹³

The distribution of Korean HON case markers provide independent evidence favoring Jung & Miyagawa's (2004), Kim's (2008; 2012; 2015), and Lee's (2020; 2022) interpretations of Korean ditransitives. Subjects and IOs pattern alike in that they are eligible for HON case assignment. DOs are excluded from this alliance since they are not eligible for HON case assignment. If my analysis is on the right track, the discrepancy boils down to whether or not an argument is realized in a specifier position of an argument-introducing head. Kim (2015), for instance, argues that the Goal is base-generated in Spec,ApplP, whereas the Theme is base-generated in the complement position of a verb. Hence, the presence of HON case-marking on the Goal and the absence of HON case-marking on the Theme is correctly predicted. Harley's analysis of PDCs, on the other hand, does not make this prediction. This is because the Theme is base-generated in a specifier position, and the Goal is base-generated in a complement position. At the very least, this would suggest that the Theme realized as the DO in Korean ditransitives is eligible for HON case assignment, contrary to fact.

2.2.2 Alternative analyses to case

A lot of ink has been spilled about how case markers are realized on nominal arguments. Under the original dependent case analysis (Marantz 1991), for instance, case is realized based on the hierarchical relation between two different nominal arguments after spell-out. This

¹³The three approaches differ with respect to which head introduces the Goal; however, this distinction is not crucial for the current discussion. The primary focus is on the syntactic configuration that the argument establishes with its introducer.

approach assumes that nominative-accusative languages and ergative-absolutive languages receive a parallel treatment with respect to dependent case assignment. ACC and ergative (ERG) are realized as the dependent case markers when a nominal argument asymmetrically c-commands another nominal argument. This is captured under Marantz's disjunctive hierarchy shown in (79). The realization of the case markers follows a strict order. Certain case markers take precedence over others. The list runs down in order from (79a) to (79d).

(79) Disjunctive hierarchy (Marantz 1991:24)

- a. lexically governed case
- b. "dependent" case (accusative and ergative)
- c. unmarked case (environment-sensitive)
- d. default case

(79a) can be viewed as 'quirky' case that can be realized as DAT in languages such as Icelandic. It is uniquely assigned from a particular set of lexical items (e.g., verbs). The surrounding syntactic context does not interfere with the realization of (79a). We know this because (79a) survives passivization and ECM. (80a), for instance, shows that the promoted IA in Icelandic receives NOM, which is in line with what we would expect in a typical passive construction. (80b), on the other hand, shows that the promoted IA receives DAT. This is assumed to be related to the lexical property of the verb *hent* 'to discard,' which requires its argument to be DAT-marked.

- (80) a. **Fiskurinn** hefur verið étinn.
 fish.the.NOM has been eaten
 'The fish has been eaten.'
- b. **Fiskinum** hefur verið hent.
 fish.the.DAT has been discarded
 'The fish has been discarded.' (modified gloss, Thráinsson 2007:183)

(81a) shows that an argument receives ACC in an ECM position. This is observed in languages other than just Icelandic. (81b), however, shows that DAT is preserved even when its argument is in an ECM position. Once again, a syntactic manipulation does not override the lexical property of *hent* ‘to discard’. That is, *hent* ‘to discard’ does not lose the ability to assign DAT. The evidence thus far suggests that (79a) takes precedence over structural case (i.e., NOM and ACC).

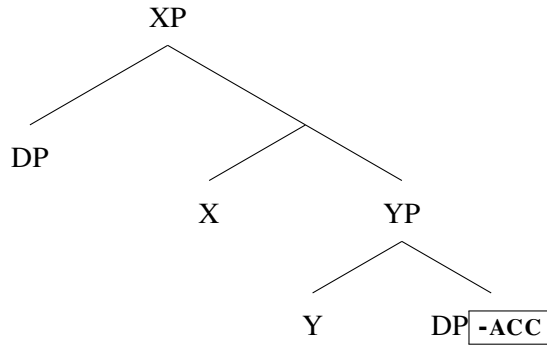
- (81) a. Við teljum **fiskinn** hafa verið étinn.
 we believe fish.the.ACC have.INF been eaten
 ‘We believe the fish to have been eaten.’
- b. Við teljum **fiskinum** hafa verið hent.
 we believe fish.the.DAT have.INF been discarded
 ‘We believe the fish to have been discarded.’ (Thráinsson 2007:183)

(79b) is at the heart of Marantz’s proposal. An asymmetric c-command relation has to be established between two different nominal arguments within a clausal domain for (79b) to come to life. This can be viewed as a case competition between two non-lexically case-assigned arguments (see also Bittner & Hale 1996). A rough sketch of how (79b) is assigned is provided in (82).

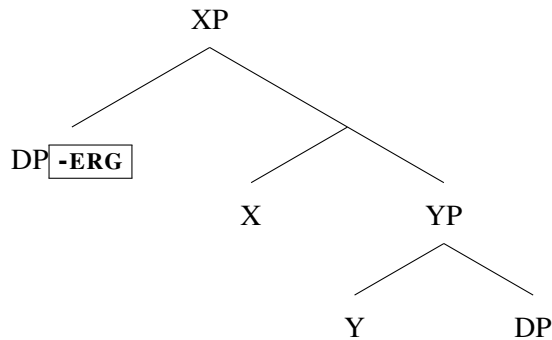
- (82) Dependent case assignment (Marantz 1991:25)
- a. Dependent case assigned down to object: accusative
- b. Dependent case assigned up to subject: ergative

Toy configurations based on (82a) and (82b) are provided in (83) and (84), respectively.

(83) Dependent case assignment in nominative-accusative languages



(84) Dependent case assignment in ergative-absolutive languages



In nominative-accusative languages, (79b) is ACC. ACC is assigned to the lower argument. The higher argument receives NOM as (79c). Icelandic showcases this pattern as given in (85).

(85) *Álfurinn hefur étið ostinn.*
 elf.the.NOM has eaten cheese.the.ACC
 ‘The elf has eaten the cheese.’ (modified gloss, Thráinsson 2007:147)

In ergative-absolutive languages, (79b) is ERG. Unlike ACC, ERG is assigned to the higher argument. The lower argument receives ABS as (79c) (see also Preminger 2014; Baker 2015). Basque displays this pattern, as shown in (86).

(86) *Nik libura ekarri dut.*
 1.SG.ERG book.ABS bought have-1.SG
 ‘I have bought the book.’ (modified gloss, Marantz 1991:13)

(79c) can appear without (79b). Perhaps this is why (79c) is also referred to as ‘independent case’ (Marantz 1991:26). When there is no case competition between two non-lexically case-assigned arguments, (79c) surfaces. Returning to Icelandic, we see that even an object can be NOM-marked in such cases. This is observed in psych verb constructions such as (87).

- (87) Henni líkuðu **hestarnir**.
 her.DAT liked.PL horse.the.PL.NOM
 ‘She liked the horses.’ (modified gloss, Thráinsson 2007:172)

Marantz (1991) posits that (79d) is realized when none of the higher ranked case markers in (79a)–(79c) is realized. (79d) has a ‘last resort’ flavor to its definition. Schütze (2001b) argues that (79d) is ACC in English. In tricky environments where (79a)–(79c) do not apply, ACC surfaces as shown in (88).

- (88) Default case in English (Schütze 2001b:210)
- a. **Me**/*I, I like beans. (topic)
 - b. The best athlete, **her**/*she, should win. (appositive)

Updates have been made to Marantz’s dependent case analysis. In recent years, the computation of dependent case has been argued to be phase-based and a part of narrow syntax (see Baker & Vinokurova 2010; Preminger 2014; Levin & Preminger 2015; Baker 2015; Levin 2017, among others). The transition is in part due to the developments in syntactic theory (see Chomsky 2000, 2001). Since the primary concern of this thesis relates to Korean case assignment, I show how dependent case analysis may be applied in Korean. In what follows, I summarize Levin’s (2017) analysis of Korean case distribution and its shortcomings.¹⁴ Similar to Icelandic, Korean is a nominative-accusative language. This suggests that

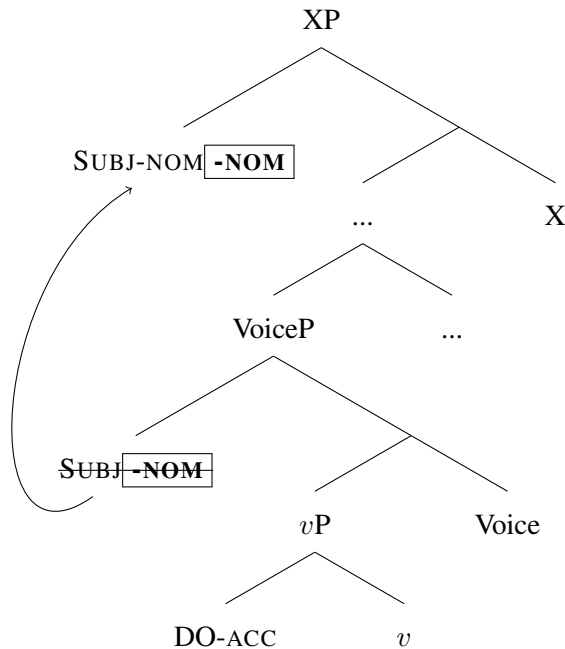
¹⁴I spell out a thorough criticism towards Levin’s treatment of Korean case stacking in Chapter 3 (also refer to the Appendix).

the lower nominal argument that competes for case is associated with the dependent case ACC. The higher nominal argument that participates in the case competition is associated with an unmarked case which is NOM as in (89).

- (89) Ai-ka Mina-lul an-ass-ta.
 child-NOM Mina-ACC hug-PST-DECL
 ‘The child hugged Mina.’

For Levin, case assignment is phase-based. Under this assumption, subjects undergo nominative case stacking when they move from their base-generated position to Spec,TP. The subject in (89), for instance, receives NOM in the VoiceP (*v*P) phase, and another NOM in the CP phase. Note that multiple instances of NOM are assigned because the subject is not eligible for lexical case or dependent case in either of the two phase domains. (90) schematizes how this works based on Levin’s account.

- (90) NOM case stacking based on Levin (2017)



A question arises as to why only a single NOM is phonologically realized in (89). Levin comes up with the following rule adapted from Pesetsky's (2013) 'One Suffix Rule' which circumvents this issue.

(91) Generalized one suffix rule (Levin 2017:480)

Delete all but one case suffix.

(91) is not obligatory, however, since the overt realization of multiple nominatives is possible in focused environments as shown in (92). Levin's analysis is that HON.NOM is the same as NOM except that HON.NOM is used for honorified nominals whereas NOM is not.

(92) Halameni-**kkeyse**-man-**i** Mina-lul an-usi-ess-ta.
grandmother-HON.NOM-only-NOM Mina-ACC hug-HON-PST-DECL
'Only grandmother hugged Mina.'

Levin, however, fails to capture important facts about HON case makers in Korean. For one, the fact that HON.NOM only appears on the subject poses a serious challenge (Sells 1995; Yoon 2005). In (92), ACC is assigned to the object, whereas HON.NOM is assigned to the subject. At first glance, it appears as if ACC is realized on the lower argument as the dependent case and HON.NOM on the honorified argument as an unmarked case similar to NOM. In fact, this is Levin's take on the issue. Note that HON.NOM cannot be a lexical case under this view. Otherwise, the object in (92) cannot receive ACC because there would be no other argument that can participate in the dependent case calculus. Recall from section 2.1.1 that the object of a psych verb construction receives NOM, but not HON.NOM. If HON.NOM were an unmarked case, it should behave just like NOM, contrary to fact. In (93), the subject bears lexical case, namely DAT (see also Levin 2017). This means that the object is the only argument that can compete for case. However, case competition has to be carried out between two different arguments. Hence, dependent case cannot be assigned in (93). Based on the

disjunctive hierarchy given in (79), we expect the object to be associated with an unmarked case. NOM is well-behaved as an unmarked case since it appears on the object. HON.NOM, on the other hand, cannot appear on the object. From this, it is evident that HON.NOM cannot be treated on a par with NOM.

- (93) a. Ai-hanthey halmeni{-**ka**/*-**kkeyse**} kulip-ta.
 child-DAT grandmother-NOM/-HON.NOM miss-DECL
 ‘The child misses grandmother.’
- b. Mina-hanthey halapeci{-**ka**/*-**kkeyse**} coh-ta.
 Mina-DAT grandfather-NOM/-HON.NOM like-DECL
 ‘Mina likes grandfather.’
- c. Senswu-hanthey kamtoknim{-**i**/*-**kkeyse**} mwusep-ta.
 player-DAT coach-NOM/-HON.NOM be.afriad-DECL
 ‘The player is afraid of the coach.’
- d. Yuli-hanthey sensayngnim{-**i**/*-**kkeyse**} silh-ta.
 Yuli-DAT teacher-NOM/-HON.NOM hate-DECL
 ‘Yuli hates the teacher.’

Based on (92) and (93), we come to a conclusion that HON.NOM cannot be accommodated by Levin’s dependent case analysis. (92) suggests that HON.NOM is an unmarked case, whereas (93) suggests that it is not. This seems to be a contradiction. We come to a similar conclusion when (94) is taken into consideration.

- (94) a. Kim-kyoswunim{-**i**/-**kkeyse**} chongcangnim-**i** toy-si-ess-ta.
 Kim-professor-NOM/-HON.NOM president-NOM become-HON-PST-DECL
 ‘Professor Kim became the (university) president.’
- b. Kim-kyoswunim{-**i**/-**kkeyse**} chongcangnim-**i** ani-si-ta.
 Kim-professor-NOM/-HON.NOM president-NOM NEG.COP-HON-DECL
 ‘Professor Kim is not the (university) president.’ (Yoon 2005:258–259)

In (94), the object is NOM-marked suggesting that the subject should be assigned lexical case (i.e., DAT) in the lower phase where the subject resides together with the object in the same

case-assigning domain. Here, Levin is forced to say that DAT is deleted via (91). However, (91) does not specify which of the two case markers at issue should be deleted. In fact, there is a loose end to (91), and Levin uses this to accommodate the case alternation phenomena in Korean. A natural prediction here is that when (HON.)NOM in (94) is deleted via (91), DAT (or HON.DAT) should be spelled out on the subject. This prediction, however, is not borne out as shown in (95).

- (95) a. *Kim-kyoswunim{-**hanthey/-kkey**} chongcangnim-i toy-si-ess-ta.
 Kim-professor-DAT/-HON.DAT president-NOM become-HON-PST-DECL
 Intended: ‘Professor Kim is not the (university) president.’
- b. *Kim-kyoswunim{-**hanthey/-kkey**} chongcangnim-i ani-si-ta.
 Kim-professor-DAT/-HON.DAT president-NOM NEG.COP-HON-DECL
 Intended: ‘Professor Kim is not the (university) president.’

Another issue is that the object cannot be marked HON.NOM as demonstrated in (96). Again, this runs counter to Levin’s prediction. HON.NOM does not look like an unmarked case and does not seem to have a place in the dependent case analysis.

- (96) a. *Kim-kyoswunim{-i/-kkeyse} chongcangnim-**kkeyse**
 Kim-professor-NOM/-HON.NOM president-HON.NOM
 toy-si-ess-ta.
 become-HON-PST-DECL
 Intended: ‘Professor Kim became the (university) president.’
- b. *Kim-kyoswunim{-i/-kkeyse} chongcangnim-**kkeyse** ani-si-ta.
 Kim-professor-NOM/HON.NOM president-HON.NOM NEG.COP-HON-DECL
 Intended: ‘Professor Kim is not the (university) president.’ (Yoon 2005:259)

While I cannot do justice to the entire literature on dependent case, I wish to point out that the analyses currently available on the market and their applications to Korean yield false predictions.

As a final note, I wish to highlight that even the assignment of ‘dependent’ case can be implemented under an Agree-based system where a head probes for DPs.¹⁵ Poole (2024), in particular, claims that an Agree-based system where multiple probing of DPs is possible does as well as a system where case is assigned based on the competition between DPs. Hence, it is unclear to me whether the dependent case analyses account for empirical facts that cannot be captured under a probing or licensing approach. If the two competing analyses predict exactly the same amount of case-related phenomena as Poole (2024) mentions, then, by way of parsimony, it would be desirable to choose the one that applies to other aspects of the grammar. In this respect, the case-unique apparatuses adopted in the literature, including Levin (2017), seem to face theoretical challenges. Now, I turn to other approaches.

Koopman (2005) provides a syntactic analysis of the empirical facts laid out by Sells (1995) and Cho & Sells (1995). Unlike Koopman (2005), we assume that Korean has a head-final structure. What is more crucial, however, is that we do not appeal to the extremely local remnant/roll-up movement (i.e., Comp-to-Spec movement) posited in Koopman (see Abels 2003 and Pesetsky & Torrego 2001). Further, Koopman does not give consideration to how exactly Korean HON-sensitive case markers are assigned. Under Koopman’s view, it remains a puzzle why Korean has HON.NOM and HON.DAT, but no HON.ACC. See Chapter 3 for further discussion of Koopman (2005).

Kim (2012), on the other hand, argues that *kkeyse* and *kkey* are associated with noun class gender instead of case. According to Kim, *kkeyse* participates in subject-verb agreement just like gender does.

¹⁵Quite relatedly, Marantz’s (1991) original proposal of the dependent case analysis factors in the idea that case assignment is mediated by a head. Bittner & Hale (1996) provides a similar way of analyzing case assignment.

- (97) Sensayngnim-**kkeyse** wus-**usi**-ess-ta.
 teacher-HON.NOM laugh-HON-PST-DECL
 ‘The teacher laughed.’

Under this view, however, it is not clear why subject-verb agreement is possible in the absence of *kkeyse* as shown in (98).

- (98) Sensayngnim-**i** wus-**usi**-ess-ta.
 teacher-NOM laugh-HON-PST-DECL
 ‘The teacher laughed.’

Moreover, it is a puzzle why *kkey* cannot be realized on DOs. If *kkey* is the gender that is associated with nouns, why should it be selective about the type of nouns it attaches to? In fact, this issue has been pointed out by Kim & Chung (2015). As shown in (99), an honored DO cannot appear with *kkey*.

- (99) Mina-ka halmeni(*-**kkey**)-lul an-ass-ta.
 Mina-NOM grandmother-HON.DAT-ACC hug-PST-DECL
 ‘Mina hugged grandmother.’

Departing from Kim (2012), Kim & Chung (2015) argue that *kkey* is the realization of [+HON] when it is realized inside a noun phrase. Under this view, *kkeyse* decomposes into *kkey* and *(ey)se*. Here, *(ey)se* is taken to be an allomorph of *i~ka* (NOM). Kim & Chung further posit that NOM is assigned from T. This way of approaching the phenomenon, however, runs into issues. Recall that *kkeyse* and *i~ka* can be realized together on a single nominal. A question arises as to why T would assign NOM twice to a single nominal argument. Kim & Chung do not engage with this issue.

- (100) Halameni-**kkeyse**-man-**i** Mina-lul an-usi-ess-ta.
 grandmother-HON.NOM-only-NOM Mina-ACC hug-HON-PST-DECL
 ‘Only grandmother hugged Mina.’

Recall that HON.NOM can surface inside TP-less nominalizations whereas NOM cannot. (101) is repeated from (23).

- (101) a. [Kim sensayngnim-**kkeyse-uy** kaluchi-si-**m**]-i insangcek-i-ta.
 Kim teacher-HON.NOM-UY teach-HON-NMZL-NOM memorable-COP-DECL
 ‘Teacher Kim’s teaching is memorable.’
- b. [Mina(*-**ka**)-uy kaluchi-**m**]-i insangcek-i-ta.
 Mina-NOM-UY teach-NMZL-NOM memorable-COP-DECL
 ‘Mina’s teaching is memorable.’

The puzzle dissolves if we assume that HON.NOM is assigned by Voice to its specifier, which is different from how NOM is assigned as we have discussed in section 2.1.1. Further discussion on HON.NOM-NOM stacking as shown in (100) will be provided in Chapter 3. Before moving on, I wish to mention that HON.NOM cannot be analyzed as a postposition (P) contra Martin (1992) and Yoon (2005). Under this assumption, it is a mystery why an HON.NOM-bearing PP can be realized in a subject position, but not in an object position. Yoon (2005) entertains the idea that HON.NOM has to trigger agreement on the predicate. Note that contemporary Korean only allows subject-verb agreement. According to Yoon (2005), this restricts the distribution of HON.NOM. A genuine explanation, however, seems to be far from reach based on this view. For one, no other P in Korean triggers agreement. This applies to HON.DAT, which is taken to be P under Yoon’s analysis. Recall that HON.DAT can be associated with IOs. Contrary to expectation, Korean does not exhibit object-verb agreement. Simply put, there is no overt object agreement marker that surfaces on the predicate. No sign of agreement is observed between other HON.DAT-bearing applied arguments (e.g., the Beneficiary) and the predicate. On a slightly different note, it is also a mystery what kind of semantics is introduced by P, especially since HON.NOM-bearing nominals behave just like any other nominals that do not host P (see Sells 1995; Cho & Sells 1995).¹⁶

¹⁶I address the drawbacks of Cho & Sells’s morphological approach to Korean case markers in Chapter 3.

	F ₁	F ₂	F ₃	F ₄	F ₅	F ₆
NOM	a					
ACC	a	u				
GEN	a	u	y			
LOC	a	u	y	e		
DAT	a	u	y	e	e	
INS	a	u	y	e	e	oj

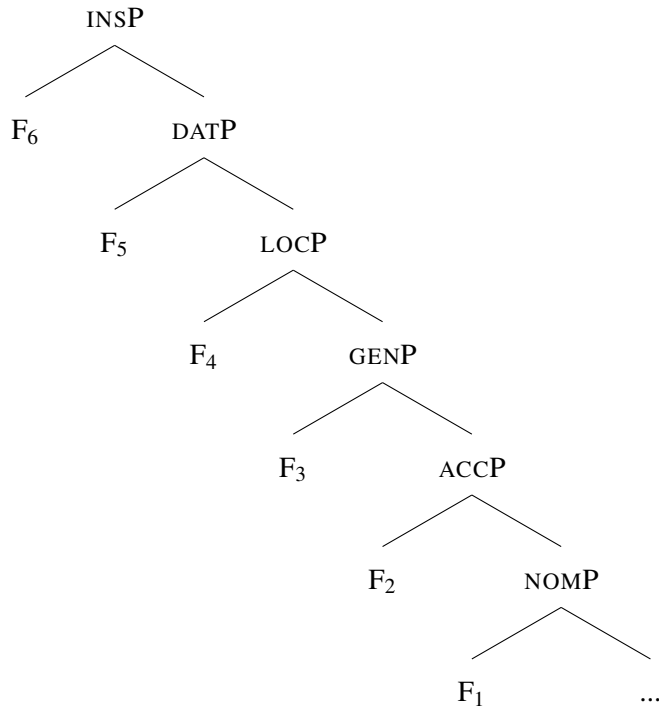
Table 2.2: A Nanosyntax account to Russian case markers for the noun *gub* ‘lip’ (singular, declension II) based on Caha (2020:27)

Approaches based on Nanosyntax may be entertained to capture the case distribution in Korean. Let us first consider the Russian case hierarchy assumed in Caha (2009, 2020). To demonstrate how the case markers are spelled out under this system, I provide a concrete example in Table 2.2. The table shows that different sets of case features correspond to different vocabulary items. For instance, NOM ($\{F_1\}$) corresponds to *a*, ACC ($\{F_1, F_2\}$) corresponds to *u*, GEN ($\{F_1, F_2, F_3\}$) corresponds to *y*, and INS ($\{F_1, F_2, F_3, F_4, F_5, F_6\}$) corresponds to *oj*. Both LOC ($\{F_1, F_2, F_3, F_4\}$) and DAT ($\{F_1, F_2, F_3, F_4, F_5\}$) correspond to *e* via the Superset Principle (Starke 2009). The features and their c-command relations are based on a universal functional sequence. Thus, they apply to all languages. The Russian case hierarchy is represented in (103).

(102) Superset Principle (Starke 2009:3)

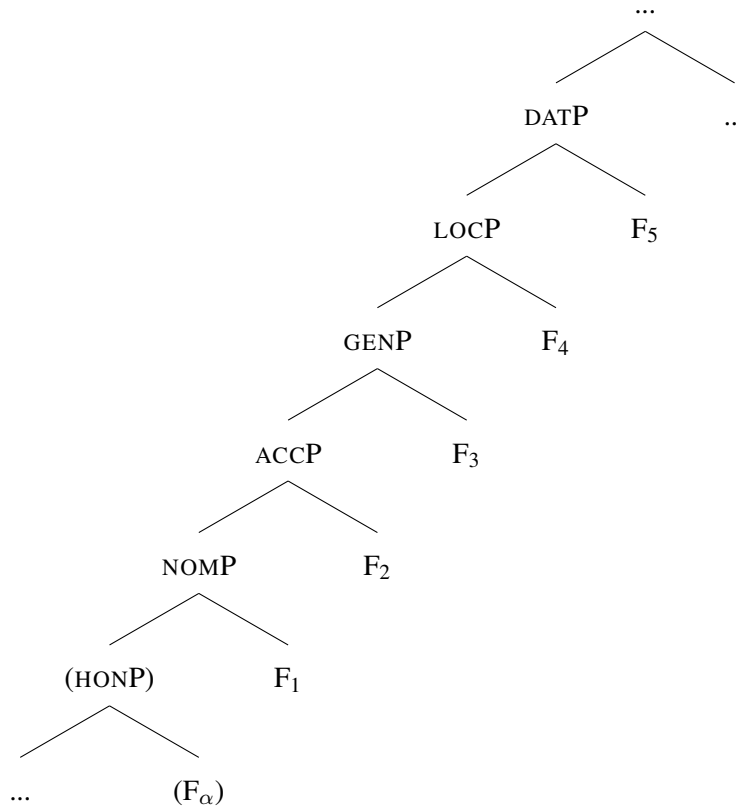
A lexically stored tree matches a syntactic node iff the lexically stored tree contains the syntactic node.

(103) Russian case hierarchy (based on Caha 2020:25)



Due to the fact that Korean has HON case markers, HON should be somehow accommodated by the hierarchy provided in (103). Let us assume that HON can be represented using the feature F_α . For Korean, I adopt a head-final structure where all of the features are placed to the right of their complements. This is in keeping with the structures we have seen for Korean so far. Let us closely examine the positions in which F_α can be realized in the hierarchy. First, one may assume that HON is simply associated with the noun phrase, which is taken to be the complement of F_1 . If this is the case, the realization of HON is optional since it is determined by the noun phrase entering the derivation. (104) schematizes this analysis.

(104) First scenario: NOMP dominates the noun phrase and HONP¹⁷



(104) suggests that the difference between NOM and HON.NOM, as well as the difference between DAT and HON.DAT, solely depends on whether the noun phrase at issue is honored or not. Recall, however, that there are specific environments in which NOM cannot be replaced by HON.NOM and vice versa. (105)–(107) provide such contexts. The mismatch between NOM and HON.NOM observed in all of these examples poses a serious challenge to the analysis entertained above.

(105) a. Ai-hanthey halmeni{-ka/*-kkeyse} kulip-ta.
 child-DAT grandmother-NOM/-HON.NOM miss-HON-DECL
 ‘The child misses grandmother.’

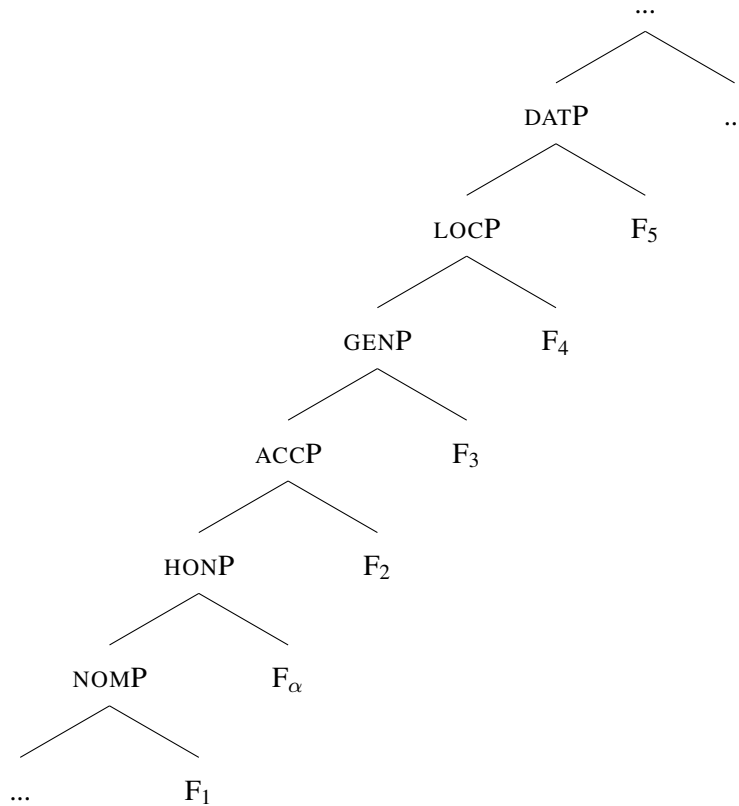
¹⁷As we discussed in section 2.1.4, Korean does not have GEN. For present purposes, I leave out the discussion on GENP.

- b. Mina-hanthey halapeci{-**ka**/*-**kkeyse**} coh-ta.
 Mina-DAT grandfather-NOM/-HON.NOM like-DECL
 ‘Mina likes grandfather.’
- c. Senswu-hanthey kamtoknim{-**i**/*-**kkeyse**} mwusep-ta.
 player-DAT coach-NOM/-HON.NOM be.afriad-DECL
 ‘The player is afraid of the coach.’
- d. Yuli-hanthey sensayngnim{-**i**/*-**kkeyse**} silh-ta.
 Yuli-DAT teacher-NOM/-HON.NOM hate-DECL
 ‘Yuli hates the teacher.’
- (106) a. Kim kyoswunim-kkeyse chongcangnim-**i** toy-si-ess-ta.
 Kim professor-HON.NOM president-NOM become-HON-PST-DECL
 ‘Professor Kim became the (university) president.’
- b. *Kim kyoswunim-kkeyse chongcangnim-**kkeyse** ani-si-ta.
 Kim professor-HON.NOM president-HON.NOM NEG.COP-HON-DECL
 Intended: ‘Professor Kim is not the (university) president.’
- (107) a. [Kim sensayngnim-**kkeyse**-uy kaluchi-si-**m**]-i insangcek-i-ta.
 Kim teacher-HON.NOM-UY teach-HON-NMZL-NOM memorable-COP-DECL
 ‘Teacher Kim’s teaching is memorable.’
- b. [Mina(*-**ka**)-uy kaluchi-**m**]-i insangcek-i-ta.
 Mina-NOM-UY teach-NMZL-NOM memorable-COP-DECL
 ‘Mina’s teaching is memorable.’

Let us turn to an alternative analysis. In (108), HONP immediately dominates NOMP.

This implies that NOM ($\{F_1\}$) is a proper subset of HON ($\{F_1, F_\alpha\}$).

(108) Second scenario: HONP immediately dominates NOMP



At first glance, (108) may seem desirable since it captures the presence of vocabulary items for NOM (*i~ka*), HON.NOM (*kkeyse*), and ACC (*lul*) to the exclusion of HON.ACC:

- (109) a. $\text{NOMP}(\{F_1\}) \leftrightarrow i\sim ka$
 b. $\text{HONP}(\{F_1, F_\alpha\}) \leftrightarrow kkeyse$
 c. $\text{ACCP}(\{F_1, F_\alpha, F_2\}) \leftrightarrow lul$

Among other issues, the alternation between DAT (*hanthey*) and HON.DAT (*kkey*) is puzzling under (108). This is because HONP ($\{F_1, F_\alpha\}$) is a proper subset of DATP ($\{F_1, F_\alpha, F_2, F_3, F_4, F_5\}$), suggesting that the vocabulary item corresponding to DAT and HON.DAT should be identical, contrary to fact. This is illustrated in (110).

(110) Two vocabulary items target the same phrasal node

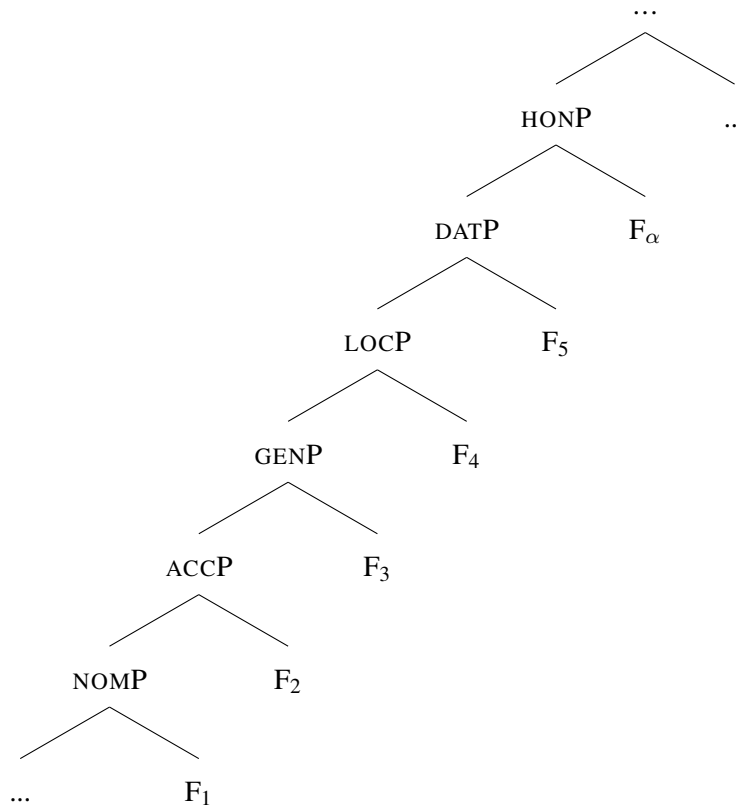
a. DATP ($\{F_1, F_\alpha, F_2, F_3, F_4, F_5\}$) \leftrightarrow *hanthey*

b. DATP ($\{F_1, F_\alpha, F_2, F_3, F_4, F_5\}$) \leftrightarrow *kkey*

The same issue arises if HONP dominates ACCP or any other phrasal node below DATP. That is, both *hanthey* and *kkey* target DATP.

Suppose that HONP immediately dominates DATP, as in (111). This captures the presence of *hanthey* and *kkey* since the former targets DATP and the latter targets HONP.

(111) Third scenario: HONP immediately dominates DATP



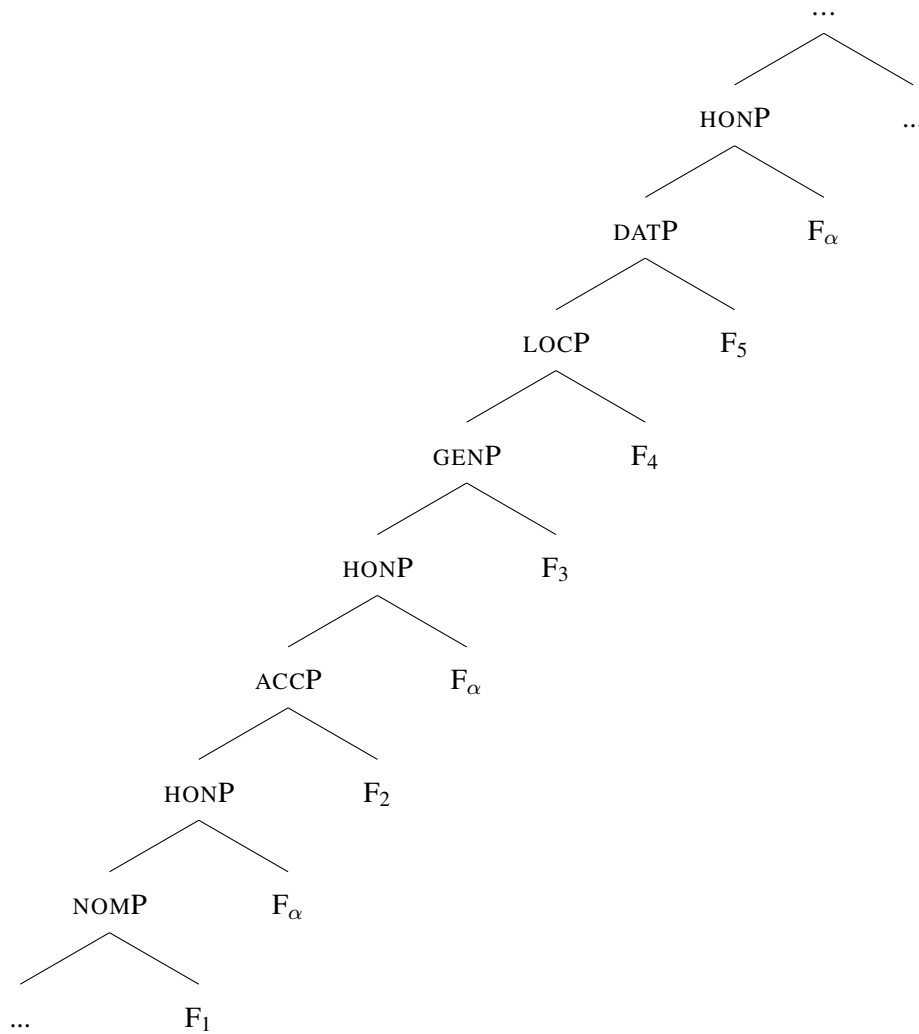
However, the structure fails to accommodate HON.NOM (*kkeyse*). Hence, (111) does not capture the alternation between NOM (*i~ka*) and HON.NOM (*kkeyse*). The VI rules in (112) are based on (111). Note that *kkeyse* is missing suggesting that (111) under-generates.

(112) The vocabulary item for HON.NOM (*kkeyse*) is missing

- a. NOMP ($\{F_1\}$) $\leftrightarrow i\sim ka$
- b. ACCP ($\{F_1, F_2\}$) $\leftrightarrow (l)ul$
- c. DATP ($\{F_1, F_2, F_3, F_4, F_5\}$) $\leftrightarrow hanthey$
- d. HONP ($\{F_1, F_2, F_3, F_4, F_5, F_\alpha\}$) $\leftrightarrow kkey$

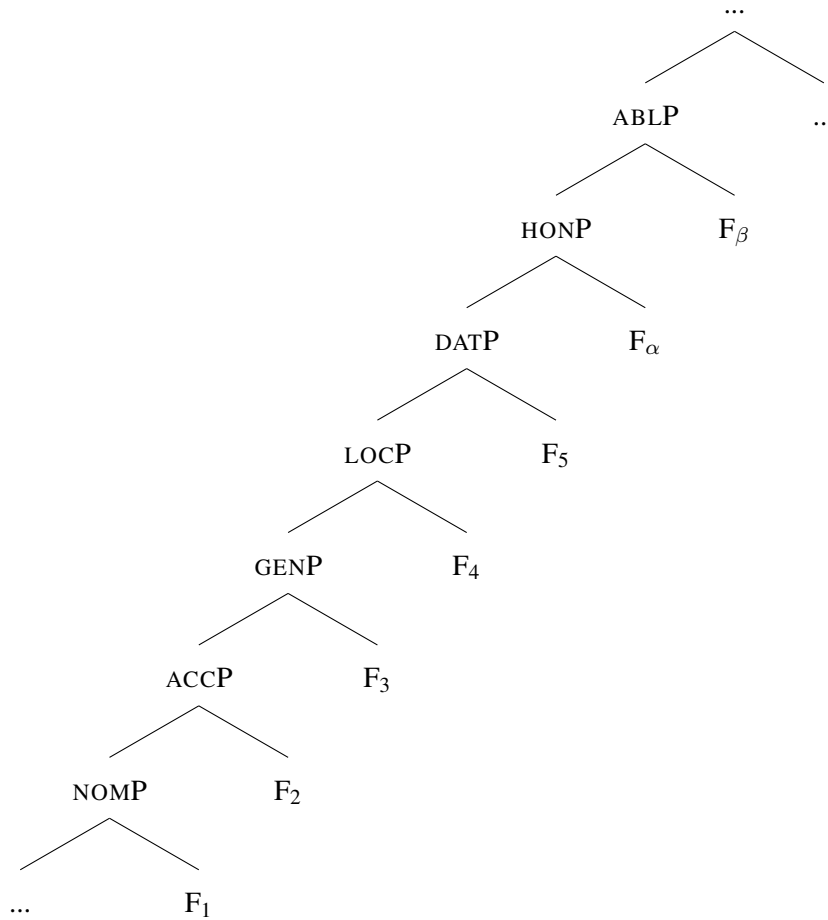
Another analysis may be entertained if one posits multiple HONPs in the hierarchy. If HONP immediately dominates NOMP and another HONP immediately dominates DATP, as shown in (113), the presence of HON.NOM and HON.DAT can be captured. However, we are now back to the question of why HON.NOM and HON.DAT are possible but not HON.ACC. Under the assumption that HONP can be projected multiple times, there is no reason why HONP cannot immediately dominate ACCP. In other words, the analysis does not rule out the possibility of HON.ACC. Hence, this alternative way of viewing the hierarchy lacks restrictiveness and over-generates.

(113) Fourth scenario: Multiple HONPs



Yet another alternative involves positing a case marker that corresponds to an ablative feature, call it F_β . In Korean, the ablative marker can be spelled out as *se*, which is phonologically identical to *se* in *kkeyse*. One may assume that ablative phrase (ABLP) is represented in the case hierarchy and that *se* in *kkeyse* spells out ABLP. Under this view, ABLP dominates HONP since *kkey* targets HONP and *se* targets ABLP, which captures the correct morpheme order (*kkey-se*). The full picture is provided in (114).

(114) Fifth scenario: ABLP dominates HONP and HONP dominates DATP



(114) yields the VI rules in (115).

(115) The vocabulary items for Korean case markers

- a. NOMP ($\{F_1\}$) $\leftrightarrow i\sim ka$
- b. ACCP ($\{F_1, F_2\}$) $\leftrightarrow (l)ul$
- c. DATP ($\{F_1, F_2, F_3, F_4, F_5\}$) $\leftrightarrow hanthey$
- d. HONP ($\{F_1, F_2, F_3, F_4, F_5, F_\alpha\}$) $\leftrightarrow kkey$
- e. ABLP ($\{F_\beta\}$) $\leftrightarrow se$

		NOM	ACC	DAT
Icelandic ‘valley’	SG	dal-ur	dal	dal
	PL	dal-i-r	dal-i	döl-um
Gothic ‘town’	SG	baúrg-s	baúrg	baúrg
	PL	baúrg-s	baúrg-s	baúrg-im

Table 2.3: Dative forms surface-contained in nominative forms (Einarsson 1949:35; Braune 2004:109)

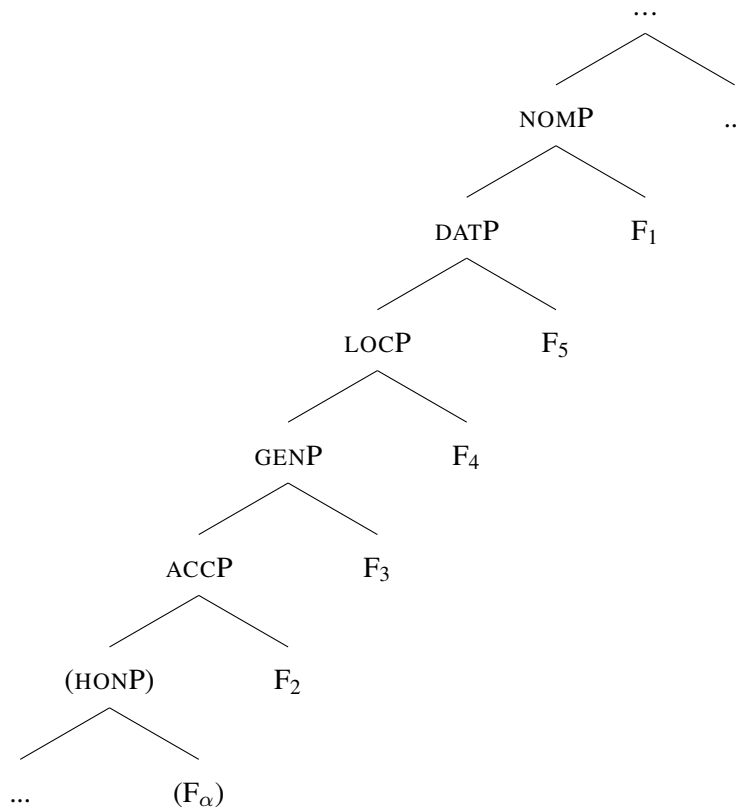
The analysis, however, runs into problems. (115) predicts that *kkeyse* should be associated with an ablative meaning (‘from’). This prediction is not borne. In a place where *se* (ABL) surfaces, *kkeyse* cannot, as shown in (116). This suggests that *se* (ABL) and *se* in *kkeyse* (HON.NOM) are homophonous. Hence, (114) and (115) cannot accommodate the syntactic distribution of *kkeyse*.

- (116) a. Phyenci-ka Pusan-**ey-se** wa-ss-ta.
letter-NOM Pusan-LOC-ABL come-PST-DECL
‘The letter came from Pusan.’
- b. Phyenci-ka Mina-**hanthey-se** wa-ss-ta.
letter-NOM Mina-DAT-ABL come-PST-DECL
‘The letter came from Mina.’
- c. *Phyenci-ka halapeci-**kkeyse** wa-ss-ta.
letter-NOM grandfather-HON.NOM come-PST-DECL
Intended: ‘The letter came from grandfather.’

Taking a departure from the universal functional sequence, Christopoulos & Zompì (2023) argue that NOM need not be contained inside DAT.¹⁸ In other words, NOMP can dominate DATP. Christopoulos & Zompì (2023) provide empirical evidence from Icelandic and Gothic, as shown in Table 2.3. (117) schematizes the hierarchy in which NOMP dominates DATP. Here, HONP is taken to be a part of the noun phrase if it bears one.

¹⁸Christopoulos & Zompì (2023) also argue that NOM need not be contained inside ACC.

(117) Sixth scenario: NOMP dominates DATP



(117) yields the following VI rules in Korean.

(118) The vocabulary items for Korean case markers based on (117)

- a. ACCP ($\{F_2\}$) \leftrightarrow *(l)ul*
- b. DATP ($\{F_2, F_3, F_4, F_5, F_5\}$) \leftrightarrow *hanthey*
- c. DATP ($\{F_\alpha, F_2, F_3, F_4, F_5\}$) \leftrightarrow *kkey*
- d. NOMP ($\{F_2, F_3, F_4, F_5, F_1\}$) \leftrightarrow *i~ka*
- e. NOMP ($\{F_\alpha, F_2, F_3, F_4, F_5, F_1\}$) \leftrightarrow *kkeyse*

Among other issues, we are now back to the question of why NOM cannot be replaced by HON.NOM and vice versa in certain syntactic environments. Recall that (105)–(107) show-

case such environments. The problem is attributed to the idea that all of the information about case realization is done within the nominal domain. In order to capture the facts in (105)–(107), the interaction between a nominal argument and the clausal spine has to be taken into account.

Overall, analyses based on Nanosyntax are not without issues. While other alternatives based on Nanosyntax may be put forward, I do not see a more plausible way of handling the empirical facts in Korean than the ones offered above. Further, an additional component of the Korean grammar that needs to be factored in is VOC ((*y*)*a*) and HON.VOC (\emptyset) and their alternation. Without additional elaboration on this issue, the picture seems incomplete. See Chapter 1 and section 2.1.5 for my take on VOC and HON.VOC in Korean.

2.3 More constructions

I have argued that HON case assignment is carried out between a nominal argument and an argument-introducing head in a Spec-head configuration. The primary source of evidence has come from unergative, (di)transitive, benefactive, and psych-verb constructions. We have seen in section 2.2 that the analysis put forward in this thesis has implications for Korean argument structure and that other case-related theories, namely the Dependent Case analysis and Nanosyntax, do not offer a satisfactory account. In this subsection, we discuss SCs, causatives of unergatives, and ECM. I maintain my claim and demonstrate how my analysis can accommodate the facts about these additional constructions.

2.3.1 Small clauses

SCs are tenseless but often host a nominal argument and a predicate, such as the one boldfaced in (119).

(119) Mary considers **John extremely brilliant at math**.

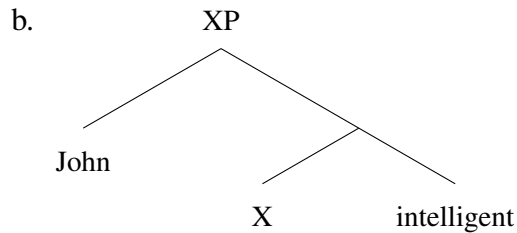
Various syntactic analyses of SCs have been presented in the literature. I will cover four major ones, which are shown in (120).

- (120) a. [_{VP} V **DP Predicate**] (Williams 1980)
b. [_{VP} V [**DP Predicate**]] (Kayne 1984)
c. [_{VP} V [_{XP} **DP** [X **Predicate**]]] (Bowers 1993)
d. [_{VP} V [_{XP} **Predicate** [X **DP**]]] (den Dikken 2006)

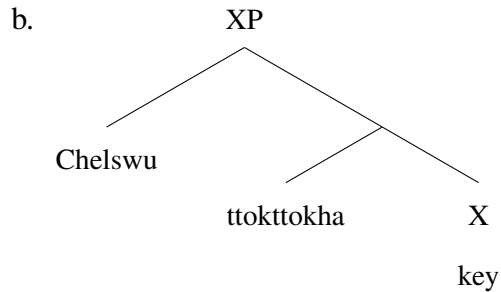
First, (120a) exhibits a flat structure. I rule out this possibility since the structure is non-binary and is thus inconsistent with the basic assumptions of the syntactic theory adopted here. (120b), on the other hand, abides by binary branching. While (120b) is desirable for capturing the SC facts in Korean, as we will see later, it fails to capture the idea that XP (a maximal projection) is always headed by X. Hence, when DP and the predicate undergo merge, it is unclear what the label of the resulting constituent would be. In (120c), X projects XP and the structure is based on binary branching. Here, the predicate is the complement of X, and DP is realized in Spec,XP. X can be viewed as a type of ‘relator’ that is semantically vacuous. As a contender to (120c), (120d) has been proposed. One major difference between the two is the c-command relation between DP and the predicate. In (120d), DP is the complement of X, and the predicate is placed in Spec,XP, displaying the opposite structure in (120c).

For the remaining discussion, we consider (120c) and (120d) as the two possible candidates for the structural representation of SCs. (120c) has been assumed for both English and Korean SCs (see Bowers 1993, 2001). Consider the examples and the structures for the SCs schematized in (121) and (122). Setting aside the issue of whether the structure is head-initial or head-final, (121b) and (122b) are identical in that the subject DP asymmetrically c-commands the predicate. Bowers (2001) correctly points out that the particle *key* in Korean marks predication in SCs. For Bowers, *key* is realized as the head of the SC. Here, we take this to be X of XP.

(121) a. Mary considers [XP John intelligent].



(122) a. Mina-ka [XP Chelswu-lul ttokttokha-key] sayngkakha-n-ta.
 Mina-NOM [Chelswu-ACC intelligent-KEY] think-PRS-DECL
 ‘Mina considers Chelswu intelligent.’



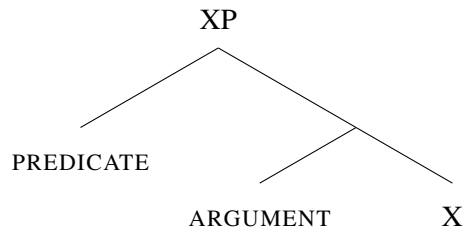
The introduction of an SC argument in (121) and (122) and the introduction of an EA receive a parallel treatment. However, this need not be the case. If the predicated argument of an SC is a subject, the argument may well be introduced in the same way that the subject of

an unaccusative is introduced. Here, an SC argument and an IA receive a parallel treatment. Hence, a question arises as to whether SC arguments should be assimilated to EAs. A similar inquiry has been put forward by den Dikken (2006), which has led to the proposal sketched in (120d). Quite interestingly, an SC argument cannot be associated with an HON case marker in Korean. It can only be associated with ACC. These facts are given in (123).

- (123) a. Mina-ka halmeni-**lul** alumtap-key sayngkakha-n-ta.
 Mina-NOM grandmother-ACC beautiful-KEY think-PRS-DECL
 ‘Mina considers grandmother beautiful.’
- b. *Mina-ka halmeni-**kkeyse** alumtap-key sayngkakha-n-ta.
 Mina-NOM grandmother-HON.NOM beautiful-KEY think-PRS-DECL
 Intended: ‘Mina considers grandmother beautiful.’
- c. *Mina-ka halmeni-**kkey** alumtap-key sayngkakha-n-ta.
 Mina-NOM grandmother-HON.DAT beautiful-KEY think-PRS-DECL
 Intended: ‘Mina considers grandmother beautiful.’

Based on the analysis put forward in section 2.1, (123) suggests that an SC argument cannot be introduced in a specifier position. Otherwise, we run the risk of assigning HON.NOM or HON.DAT to the SC argument. Adopting den Dikken (2006), I argue that the subject of an SC in Korean is base-generated in the complement position of X, as in (120d). (124) schematizes a head-final structure based on (120d). Here, X undergoes merge with the SC argument before it undergoes merge with the predicate.

(124) A head-final tree structure based on (120d)



If (124) is on the right track, we would not expect the honorific marker *si* to surface inside SCs even if the SC argument is honorified. One reason is because the argument and X do not form a Spec-head relation. This prediction is borne out (see also Kim & Maling 1998 and Bowers 2001).

- (125) Mina-ka halmeni-lul alumtap(*-si)-kye sayngkak-ha-n-ta.
 Mina-NOM grandmother-ACC beautiful-HON-KEY think-do-PRS-DECL
 ‘Mina considers grandmother beautiful.’

The semantic composition of the SC argument and the predicate based on (124) works just as well as the composition based on the assumption put forward by Bowers (1993) in (120c). den Dikken (2006) argues that X is simply a placeholder that serves the role of relating the nominal argument to the predicate. Hence, the directionality of predication is not at issue. That is, it is not crucial whether X undergoes first merge with the predicate or with the nominal argument. The semantic output is the same because the predicate and the argument come together at the end of the day.

With respect to the word order, I assume that the SC argument undergoes movement over the SC predicate. Hong (2002) argues that the SC argument, which is base-generated inside the SC, raises to an object position similar to ECM-ed arguments. Evidence from negative polarity item (NPI)-licensing supports Hong’s claim. In Korean, an NPI and its licenser have to be placed in the same clause (Suh 1990, Ahn 1991, Hong 2002, among others). Otherwise, the NPI cannot be licensed. (126) demonstrates this point.

- (126) a. John-i amwuto ttayli-ci ahn-ass-ta.
 John-NOM anyone hit-CI NEG-PST-DECL
 ‘John did not hit anyone.’
- b. *John-i Mary-ka amwuto ttayli-ess-ta-ko malha-ci ahn-ass-ta.
 John-NOM Mary-NOM anyone hit-PST-DECL-COMP say-CI NEG-PST-DECL
 Intended: ‘John did not say that Mary hit anyone.’

When an SC argument is an NPI, the licenser cannot be a part of the SC. Otherwise, the derivation crashes, as shown in (127a). Instead, the licenser has to be *outside* the SC, as shown in (127b). This suggests that the SC argument is placed in a higher clause, adding weight to the current analysis that the argument undergoes movement across the SC predicate.

- (127) a. *John-i amwuto taytanha-ci **ahn**-key sayngkakha-n-ta.
 John-NOM anyone great-CI NEG-KEY think-PRS-DECL
 Intended: ‘John considers no one great.’
- b. John-i amwuto taytanha-key sayngkakha-ci **ahn**-nun-ta.
 John-NOM anyone great-KEY think-CI NEG-PRS-DECL
 ‘John does not consider anyone great.’ (modified gloss, Hong 2002:104)

The motivation for the movement may be related to case assignment. I assume ACC-marked SC arguments are subject to Burzio’s Generalization. This is evidenced by the fact that NOM replaces ACC in passives, as shown in (128) (see also Hong & Lasnik 2010).

- (128) a. Mina-ka Yuli-**lul** mitep-kye sangkakha-n-ta.
 Mina-NOM Yuli-ACC reliable-KEY think-PRS-DECL
 ‘Mina considers Yuli reliable.’ (active)
- b. Yuli-**ka** mitep-kye sangkak-toy-n-ta.
 Yuli-NOM reliable-KEY think-PASS-PRS-DECL
 ‘Yuli is considered to be reliable.’ (passive)

While I am open to alternative analyses, case-driven movement seems to be a plausible option. See Chapter 3 for further elaboration on the interaction between movement and ACC-assignment.

2.3.2 More on causatives

In section 2.1.2, we have seen that the Korean Causees of transitives are realized in Spec,ApplP. Here, we focus on where the Causees of intransitives are base-generated in Korean. Jung (2014) shows that Korean unaccusative predicates such as *cwuk* ‘to die’ cannot be associated with the applicative suffix *cwu*, whereas unergative predicates can. (129) illustrates this point.

- (129) a. *Sinha-ka wang-eykey cwuk-ecwu-ess-ta.
courtier-NOM king-DAT die-APPL-PST-COMP
Intended: ‘The courtier died for the king.’
- b. Ku namca-ka yeca chinkwu-eykey nolayhay-cwu-ess-ta.
the man-NOM girl friend-DAT sing-APPL-PST-COMP
‘The man sang for (his) girlfriend.’ (Jung 2014:41)

Predicates such as *cry* and *fly* are considered to be unergatives in many languages, including English (Hale & Keyser 1993). For one, these predicates can take a cognate object.

- (130) a. The pilot flew a night flight.
b. The lady cried a shrill cry. (Jung 2014:41)

Korean predicates such as *wul* ‘to cry’ and *nal* ‘to fly’ are also considered to be unergatives (Park 1993, Son 2006, and Oh 2010). Quite interestingly, these predicates are not compatible with *cwu*, as shown in (131). This suggests that they behave like unaccusative predicates, at least to some extent.

- (131) a. *Yepaywu-ka kamtok-eykey wul-ecwu-ess-ta.
actress-NOM director-DAT cry-APPL-PST-COMP
Intended: ‘The actress cried for the director.’
- b. *Cakun say-ka Chelswu-eykey nal-acwu-ess-ta.
little bird-NOM Chelswu-DAT fly-APPL-PST-COMP
Intended: ‘A little bird flew for Chelswu.’ (Jung 2014:41)

The two types of predicates pattern together in other parts of the grammar as well. For instance, unaccusative predicates and unergative predicates under causatives share commonalities. Causees of unaccusatives and unergatives can be realized with ACC, but no other case markers in Korean. This is shown in (132) and (133).¹⁹

- (132) a. Mina-ka halmeni-**lul** cwuk-i-ess-ta.
 Mina-NOM grandmother-ACC die-CAUS-PST-DECL
 ‘Mina made grandmother die.’ (‘Mina killed grandmother.’)
- b. *Mina-ka halmeni-**kkeyse** cwuk-i-ess-ta.
 Mina-NOM grandmother-HON.NOM die-CAUS-PST-DECL
 Intended: ‘Mina made grandmother die.’
- c. *Mina-ka halmeni-**kkey** cwuk-i-ess-ta.
 Mina-NOM grandmother-HON.DAT die-CAUS-PST-DECL
 Intended: ‘Mina made grandmother die.’
- (133) a. Mina-ka halmeni-**lul** wul-li-ess-ta.
 Mina-NOM grandmother-ACC cry-CAUS-PST-DECL
 ‘Mina made grandmother cry.’
- b. *Mina-ka halmeni-**kkeyse** wul-li-ess-ta.
 Mina-NOM grandmother-HON.NOM cry-CAUS-PST-DECL
 Intended: ‘Mina made grandmother cry.’
- c. *Mina-ka halmeni-**kkey** wul-li-ess-ta.
 Mina-NOM grandmother-HON.DAT cry-CAUS-PST-DECL
 Intended: ‘Mina made grandmother cry.’

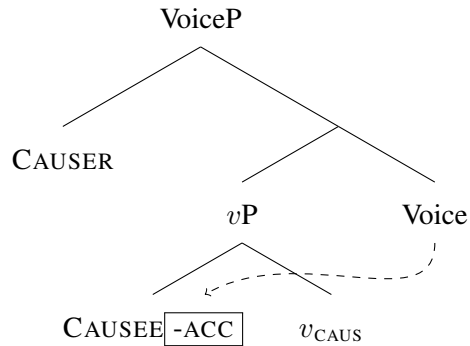
The type of analysis put forward for SC arguments, I argue, can be extended to Causees of unergative predicates. From a structural perspective, the Causee of these predicates undergoes EM in a complement position rather than in a specifier position. Following Burzio’s

¹⁹It is also worth mentioning that HON that is assumed to be realized in Voice when the subject is honorified is ruled out even when the causativized predicate is unergative:

- (1) Sarah-ka halmeni-lul wul(*-**usi**)-li-ess-ta.
 Sarah-NOM grandmother-ACC cry-HON-CAUS-PST-DECL
 ‘Sarah made grandmother cry.’

Generalization, I posit that the ACC-marking of the Causees in (132) and (133) can be captured, as shown in (134).

(134) Intransitive causatives in Korean



The derivation provided in (134) has been advanced for other languages. Legate (2014) argues that Acehnese Causees in unergatives are base-generated in the complement position of the verb. Under Legate’s analysis, a convergence between unergatives and unaccusatives occurs under a causative construction. In (135), the Causee of the unergative predicate *peu-grôp* ‘cause-jump’ is interpreted as a Theme instead of an Agent according to Legate. The reading available for (135) roughly translates as someone ‘holding a baby, moving the baby up and down.’ (Legate 2014:120).

(135) Lôn peu-grôp aneuk nyan.
 1SG CAUS-jump child DEM
 ‘I made the child jump.’

(Legate 2014:120)

Further note the contrast between (136a) and (136b). The active Voice morpheme *ji* in Acehnese cannot be realized with a causativized unergative predicate, as in (136a). However, it can with a simple unergative predicate, as shown in (136b). Legate (2014) argues that the Causee introduced in (136a) is non-agentive and, therefore, should be treated in a manner similar to an unaccusative argument. The structure Legate provides for Acehnese intransitive causatives is parallel to the one provided in (134).

- (136) a. *Lôn peu-**ji**-grôp aneuk nyan.
 1SG CAUS-3FAM-jump child DEM
 Intended: ‘I made the child jump.’ (Legate 2014:121)
- b. Apolô **ji**-phö u buleuen.
 Apollo 3FAM-fly to moon
 ‘The Apollo flew to the moon.’ (Durie 1985:68)

A Condition B effect observed in Korean offers additional support for the argument that the Causee in an intransitive construction behaves more like an IA rather than an EA. While Jo (2021) presents empirical evidence to support the notion that the Causee in an unergative undergoes EM in Spec, VoiceP, I will demonstrate that the same observations imply that, in fact, Voice does not introduce the Causee. In (137), the pronominal DO refers to the Causer.

- (137) Cheli_i-nun cese-lul thonghay taycwung-eykey ku_i-lul al-li-ess-ta.
 Cheli_i-TOP book-ACC through public-DAT he_i-ACC know-CI-PST-DECL
 ‘Through the book, Cheli made the public know him.’ (Jo 2021:146)

Jo (2021) adopts the following definition of Condition B (Lee-Schoenfeld 2004) to account for (137).

- (138) A pronominal must be free within the minimal phase containing it.

Based on (138), Jo (2021) concludes that the Causee in (137) is introduced by Voice. Here, Voice is a phase head. Hence, a Condition B effect does not result since the local binding domain does not contain both the Causer and the DO. Note, however, that Condition B is not violated even when a pronominal DO refers to the subject of a ditransitive, as shown in (139).

- (139) Cheli_i-nun haksayngtul-eykey ku_i-lul sokayhay-ss-ta.
 Cheli_i-TOP students-DAT he_i-ACC introduce-PST-DECL
 ‘Cheli introduced himself to the students’

An IO in a ditransitive is not introduced by Voice. Hence, (139) suggests that the absence of a Condition B effect is not due to an intervening VoiceP between the antecedent and the pronominal contra Jo (2021).

Quite interestingly, a Condition B effect results when a pronominal Causee is coindexed with the Causer under an unaccusative predicate, as in (140).

- (140) Cheli_i-ka pithonghan simceng-ulo ku_{*₁}-lul cwuk-i-ess-ta.
 Cheli_i-NOM grief.stricken feeling-with he_{*₁}-ACC die-CAUS-PST-DECL
 ‘Cheli killed him grief-stricken.’ (Jo 2021:165)

Jo (2021) argues that a specifier-less expletive VoiceP is realized inside unaccusative causatives. Jo assumes that there is no evidence to the contrary that rules out the specifier-less expletive VoiceP approach. The fact that the subject of a plain unaccusative can be HON.NOM-marked as in (141a), however, poses a challenge to Jo’s analysis. Contrast this with the Causee of an unaccusative, which cannot be HON.NOM-marked, as shown in (141b). The Causee of an unaccusative is always ACC-marked, which is similar to how the DO of a transitive is ACC-marked. This is captured under Burzio’s Generalization. The case mismatch observed between the subject of an unaccusative and the Causee of an unaccusative suggests that their derivations are different. A question arises as to whether an expletive VoiceP should have a specifier in one case and that it should not in another for the same type of unaccusative predicates.

- (141) a. Halapeci-**kkeyse** nemeci-si-ess-ta.
 grandfather-HON.NOM fall-HON-PST-DECL
 ‘Grandfather fell.’
 b. Kim-i halapeci{***-kkeyse/-lul**} cwuk-i-ess-ta.
 Kim-NOM grandfather-HON.NOM/-ACC die-CAUS-PST-DECL
 ‘Kim killed grandfather.’

Note that a Condition B effect is observed even in simple transitives, as in (142). A DO cannot be introduced by Voice. Otherwise, the antecedent and the pronominal would not be contained within the same local domain, resulting in well-formedness, contrary to fact. I argue that the same can be said about the Causee in (140).

- (142) Cheli_i-ka pithonghan simceng-ulo ku*_i-lul ttayli-ess-ta.
 Cheli_i-NOM grief.stricken feeling-with he*_i-ACC hit-PST-DECL
 ‘Cheli hit him grief-stricken.’

Independent evidence from scope ambiguity induced by the adverb *tasi* ‘again’ in Korean suggests that the Causee of an unaccusative and the Causee of an unergative pattern alike (Jo 2021). This challenges the view that the Causee of an unergative is introduced in Spec, VoiceP. For present purposes, let us focus on two possible readings made available with the adverb *tasi* ‘again’ in transitive causatives, as shown in (143).²⁰ The adverb ‘again’ modifies event-denoting nodes in syntax (Son 2006, Pytkänen 2008, among others). According to Jo (2021), each of the interpretations provided in (143) indicates which maximal projection *tasi* ‘again’ modifies. (143a) shows that the adverb modifies an event that includes the Causee *Swuni*. Hence, (143a) implies that *Swuni* participated in the event. (143b), on the other hand, shows that the adverb modifies an event that excludes the Causee. Hence, (143b) implies that someone other than *Swuni* participated in the event.

- (143) Kim sensayng-i Swuni-hanthey yeymwun-ul tasi
 Kim teacher-NOM Swuni-DAT example.sentence-ACC again
 ilk-hi-ess-ta.
 read-CAUS-PST-DECL
 a. ‘Mr. Kim made [Swuni read the example sentence again].’
 → Swuni read the example sentence before.

²⁰A total of four readings are possible according to Jo (2021). Two of them are relevant to our discussion.

b. ‘Mr. Kim made Swuni [read the example sentence again].’

→ Someone other than Swuni read the example sentence before.

(adapted from Jo 2021:167)

Crucially, the type of ambiguity observed in (143) is lost in intransitive causatives. (144) hosts the unaccusative predicate *nok* ‘to melt’ under a causative construction. (144a) shows that the adverb *tasi* modifies an event that includes the Causee *aisukhulim* ‘ice cream.’ This suggests that the adverb takes scope over the Causee, namely *aisukhulim* ‘ice cream.’ (144b), however, is not available. In (144b), the adverb cannot modify an event that excludes the Causee. The unavailability of (144b) implies that the adverb takes scope over the Causee.

(144) Kim-i aisukhulim-ul tasi nok-i-ess-ta.
Kim-NOM ice.cream-ACC again melt-CAUS-PST-DECL

a. ‘Kim made [the ice cream melt again].’

→ The ice cream melted before.

b. #‘Kim made the ice cream [melt again].’

→ #Something other than the ice cream melted before.

The same scope pattern is observed in (145). (145) hosts an unergative predicate under a causative construction. (145a) shows that the adverb *tasi* ‘again’ modifies an event that includes the Causee *ai* ‘child.’ (145a) implies that *ai* ‘child’ participates in the event and that the adverb takes scope over the Causee. (145b), on the other hand, is not a valid reading. This suggests that the adverb cannot modify an event without the Causee.

(145) Kim-i ai-lul tasi wus-ki-ess-ta.
Kim-NOM child-ACC again laugh-CAUS-PST-DECL

a. ‘Kim made [the child laugh again].’

→ The child laughed before.

- b. #‘Kim made the child [laugh again].’
 → #Someone other than the child laughed before.

The empirical evidence based on (144) and (145) suggests that the Causee and the predicate both originate inside the same maximal projection. Based on my assumption, the Causee of an intransitive in Korean is base-generated as the complement of *v*.²¹ Similarly, Legate (2014) argues that intransitive causatives and simple transitives in Acehnese receive parallel treatment in syntax. If this analysis is on the right track, we expect simple transitives to exhibit the same scope patterns as the intransitive causatives. This prediction is borne out, as shown in (146).

- (146) Kim-i ai-lul tasi an-ass-ta.
 Kim-NOM child-ACC again hug-PST-DECL
 a. ‘Kim [hugged the child again].’
 → Kim hugged the child before.
 b. #‘Kim [hugged again] the child.’
 → #Someone other than the child was given a hug before.

All in all, I argue that the Causee of intransitives and the DO of transitives pattern alike in that they are both base-generated in a complement position. This captures the lack of HON case markers on these nominal arguments.

²¹This approach departs from Baker’s (1988) Uniformity of Theta Assignment Hypothesis (UTAH).

(1) Uniformity of Theta Assignment Hypothesis (UTAH, Baker 1988:46)
 Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure.

2.3.3 ECM

ECM constructions in English host an infinitival embedded subject that receives ACC instead of NOM, as shown in (147).

(147) Mary believes {**him/*he**} to have met Bill.

Korean ECM is different from English ECM in three major ways: (i) the embedded clause is associated with a complementizer and a tense marker, (ii) the subject of the embedded clause can be NOM-marked or ACC-marked, and (iii) the embedded predicate has to be either stative, unaccusative, or passive when the ECM-ed argument is ACC-marked. (148)–(150) demonstrate these points.

(148) John-i Mary-**ka/-lul** yepp-ess-tako mit-nun-ta.
 John-NOM Mary-NOM/-ACC be.pretty-PST-COMP believe-PRS-DECL
 ‘John believes that Mary was pretty’ (stative)

(149) John-i Mary-**ka/-lul** o-ass-tako mit-ess-ta.
 John-NOM Mary-NOM/-ACC come-PST-COMP believe-PST-DECL
 ‘John believed that Mary came.’ (unaccusative)

(150) Mary-ka John-**i/-ul** cap-hi-ess-tako mit-ess-ta.
 Mary-NOM John-NOM/-ACC catch-PASS-PST-COMP believe-PST-DECL
 ‘Mary believed that John was caught.’ (passive)

(modified gloss, Kim 2002:205, 208, 210, 211)

Quite surprisingly, unergative and transitive predicates do not allow ACC marking on the embedded subject, as shown in (151) and (152).

(151) John-i Mary-**ka/*-lul** (mayil achim) tali-n-tako mit-nun-ta.
 John-NOM Mary-NOM/-ACC every morning run-PRS-COMP believe-PRS-DECL
 ‘John believed that Mary runs (every morning).’ (unergative)

(152) John-i Mary-**ka/*-lul** Bill-ul manna-ss-tako mit-nun-ta.
 John-NOM Mary-NOM/-ACC Bill-ACC meet-PST-COMP believe-PRS-DECL
 ‘John believed that Mary met Bill.’ (transitive)

(modified gloss, Kim 2002:208, 210)

I argue alongside Kim (2002) that the embedded subject of an ECM construction in Korean is base-generated in a complement position. This is also the case for the subject of an SC and the Causee of an intransitive. Kim (2002) argues that the assignment of ACC in Korean ECM is sensitive to phases (e.g., Voice and C). Specifically, Kim abides by Chomsky's (2000; 2001) Phase Impenetrability Condition (PIC).

(153) The Phase Impenetrability Constraint (PIC, Kim 2002:207)

In a (strong) phase HP, in the configuration [_{ZP} Z ... [_{HP} XP [H YP]]], ZP being the next (strong) phase:

- a. The domain of H is not accessible to operations outside of HP; only H and its edge (=Spec) are accessible to such operations.
- b. The evaluation for phase 1 (PH1) is at the next (strong) phase PH2.

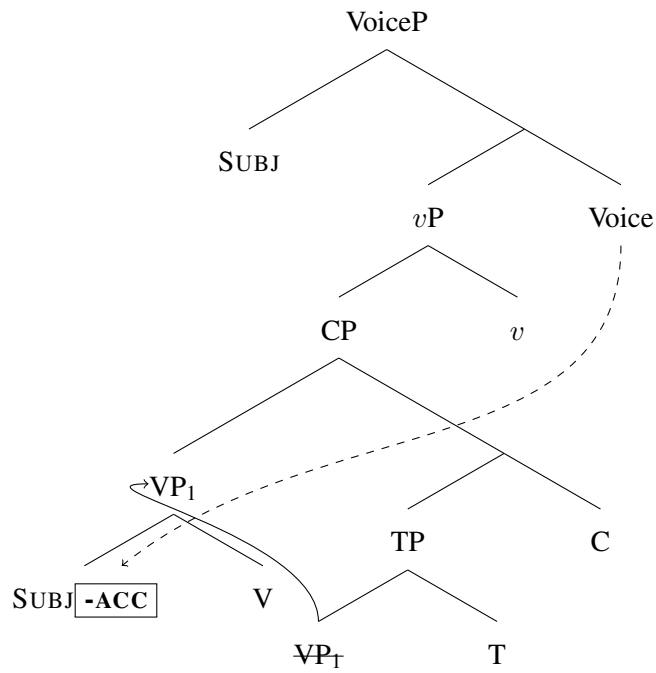
Stative, unaccusative, and passive predicates in ECM constructions do not project VoiceP (i.e., a phase head).²² Note that the embedded C in (155) is a phase head, and thus the ECM-ed subject needs to move to a higher position where ACC can be assigned by the matrix Voice in a local fashion. In (155), VP containing the ECM-ed subject moves to Spec,CP. This type of derivation does not hold for non-ECM-ed arguments. In order to rule out a situation where the embedded subject of an unergative or transitive predicate receives ACC, VoiceP instead of VP moves to Spec,CP, as shown in (156). Based on Kim's analysis, the embedded subject is not visible to matrix Voice. Note that there are three phase domains in (156). The embedded VoiceP is PH1, CP is PH2, and the matrix VoiceP is PH3. Based on the PIC, PH1 is visible to PH2, and PH2 is visible to PH3. Kim argues that an element inside PH1 is not accessible

²²As we have seen in section 2.1.1, honorified subjects of simple unaccusatives and passives are eligible for HON.NOM-assignment. This is not the case for ACC-marked ECM subjects. I assume VoiceP is absent in the embedded clause since HON.NOM cannot be assigned to the subject even if it is honorified.

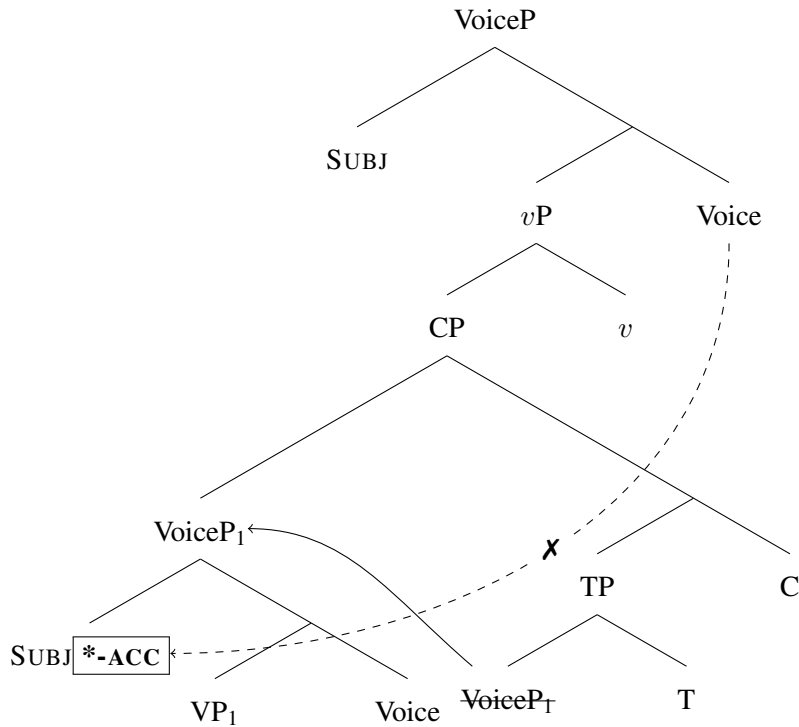
to an operation taking place at PH3. Simply put, PH1 is forgotten by the time PH3 takes part in the derivation.

(154) An element inside a phase, PH1, is accessible only up to the next phase PH2. It is not accessible to operations at PH3. (Kim 2002:209)

(155) ECM: PH1 is accessible to PH2



(156) No ECM: PH1 is not accessible to PH3



The current analysis correctly rules out the stacking of HON.NOM and ACC. If the embedded subject receives HON.NOM inside VoiceP, ACC cannot be assigned by matrix Voice due to the PIC. Hence, the absence of *HON.NOM-ACC is captured under (156).

- (157) a. Kim-i halapeci-**kkeyse**(*-lul) o-si-ess-tako
 Kim-NOM grandfather-HON.NOM-ACC come-HON-PST-COMP
 mit-nun-ta.
 believe-PRS-DECL
 ‘Kim believes that grandfather came.’
- b. Kim-i halapeci-**kkeyse**(*-lul) cap-hi-si-ess-tako
 Kim-NOM grandfather-HON.NOM-ACC catch-PASS-HON-PST-COMP
 mit-nun-ta.
 believe-PRS-DECL
 ‘Kim believes that grandfather was caught.’

Moreover, the absence of HON.ACC is accounted for. The ECM-ed subject does not form a Spec-head configuration with an argument introducer in any given stage of the derivation. Hence, the analysis under discussion seems to be on the right track.

2.4 More on honorifics in Korean

Argument-introducing heads are associated with HON case marking. A question arises as to why such heads should be associated with honorificity in the first place. I would like to put forward an analysis that places this issue on a par with the restrictions observed in Person Case Constraint (PCC). The PCC, in its strongest form, states that a direct object clitic cannot be first-person or second-person (1/2P) when an indirect object clitic is 1/2P. The PCC is observed in various languages, including Catalan, French, Greek, and Spanish.

(158) IO_{1/2P} ... DO_{*1/*2P} (1/2P > 3P)

Adger & Harbour (2007) and Pancheva & Zubizarreta (2018) argue that an IO is introduced by Appl and that Appl checks 1/2P on the IO. Pancheva & Zubizarreta claim that Appl is the locus of perspective ('point-of-view'), which encodes semantic information about the speaker (1P) and the addressee (2P). Since 1/2P licensing is reserved for IOs, DOs cannot be licensed as 1/2P. This gives rise to the PCC effect shown in (158). The analysis at hand has implications for the distribution of the HON case markers in Korean. Recall that IOs can be HON case-marked, but DOs cannot, even though both IAs can be honorified.

(159) IO_{HON} ... DO_{*HON}

When it comes to honorificity, the PCC effect is manifested in a slightly different way. It is not necessarily about the IAs' person features per se but whether or not 1/2P is *added*

to the featural make-up of these IAs (see Stegovec 2020). The level of honorificity cannot be measured without the information about the speaker (1P) and the addressee (2P). Quite interestingly, honorification can be suppressed by the social status of the addressee in relation to those of the speaker and the referent, as shown in (160). In (160a), 1P is Mina’s friend, and 2P is Mina’s father. The referent, grandmother, receives HON.DAT because neither the speaker nor the addressee is in a socially higher position than the referent. (160b), on the other hand, shows that HON.DAT-assignment is suppressed because the utterance is directed towards the addressee, grandfather, who has the same social status as the referent, grandmother.

- (160) a. Mina-ka halmeni-**kkey** Yuli-ul sokayhay-ss-e-yo.
 Mina-NOM grandmother-**HON.DAT** Yuli-ACC introduce-PST-DECL-YO
 ‘Mina introduced Yuli to grandmother.’ (1P = Mina’s friend, 2P = father)
- b. Mina-ka halmeni-**hanthey** Yuli-ul sokayhay-ss-e-yo.
 Mina-NOM grandmother-**DAT** Yuli-ACC introduce-PST-DECL-YO
 ‘Mina introduced Yuli to grandmother.’ (1P = Mina’s friend, 2P = grandfather)

(160) suggests that the 1/2P information is necessary when HON case assignment is at play. (161) shows that the featural make-up [1/2P, R(EFERENT)] on the IO determines the presence of HON case-marking whereas [__, R(EFERENT)] on the DO leads to the lack of HON case-marking. This parallels the PCC effect: DOs cannot be 1/2P when IOs are 1/2P. The information about the referent comes for free since the referent refers to the nominal argument that it is associated with (e.g., the IO or the DO). Note that the referent itself can be 1st person (*I*) or 2nd person (*you*). The referent in this case, however, does not provide the information about 1/2P that is necessary for computing HON, because the person feature on the referent is always used up to feed R(EFERENT) in [__, **R(EFERENT)**]. 1/2P must be supplied by an argument introducing head in order to complete the process: [**1/2P**, R(EFERENT)]. Otherwise, HON is not generated as is the case for (*HON).ACC.

- (161) a. $IO_{1[1/2P, R_1]} \rightarrow IO-(HON.)DAT$ (✓ honorificity measured)
 b. $DO_{2[_, R_2]} \rightarrow DO-(*HON.)ACC$ (✗ honorificity measured)

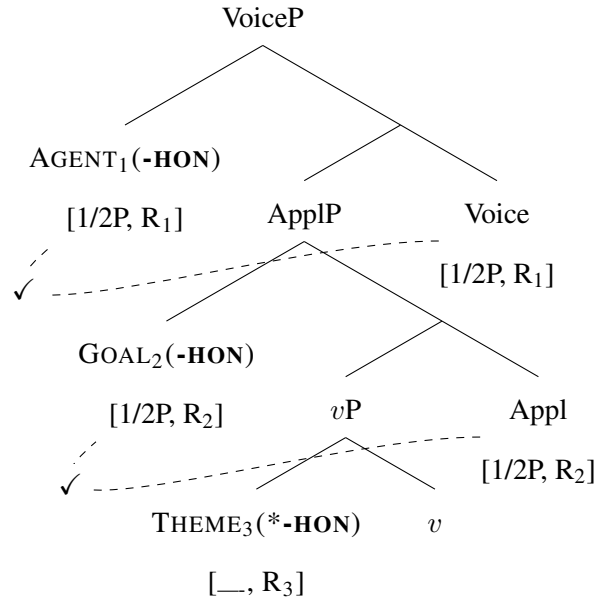
Adger & Harbour (2007) argue that person feature agreement and argument-introduction are closely tied together. Under this view, 1/2P on Appl is licensed only to the argument introduced by Appl. I argue alongside Adger & Harbour and Pancheva & Zubizarreta in that the licensing of 1/2P is carried out between Appl and its applied argument (e.g., the IO).²³ This correctly predicts that other applied arguments introduced by Appl, such as Beneficiaries, should be eligible for HON case assignment (see section 2.1.2). Based on the analysis that Appl is the locus of 1/2P, another prediction can be established: DOs should not be eligible for HON case assignment even in simple transitives. This is because Appl, along with its applied argument, does not take part in the derivation. Hence, there is no functional head that can supply 1/2P to the DO. This prediction is borne out, as we have discussed in section 2.1.3.

When it comes to the PCC, some have argued that 1/2P is localized on Voice (see Béjar & Rezac 2003, Anagnostopoulou 2005, Nevins 2007, and Stegovec 2020). In fact, this is desirable under the current analysis. The DO remains HON-less in simple transitives because 1/2P is licensed to the subject that is introduced by Voice. In cases where Voice does not introduce an argument, as in passives, the IA undergoes movement to Spec, VoiceP where it can be licensed 1/2P (see section 2.1.1). This is mainly possible because no higher nominal is present in Spec, VoiceP. This provides the necessary condition for an HON case marker to be assigned to the IA. Licensing here takes the form of feature sharing. That is, the head and the nominal argument that participate in licensing share all of their features (i.e.,

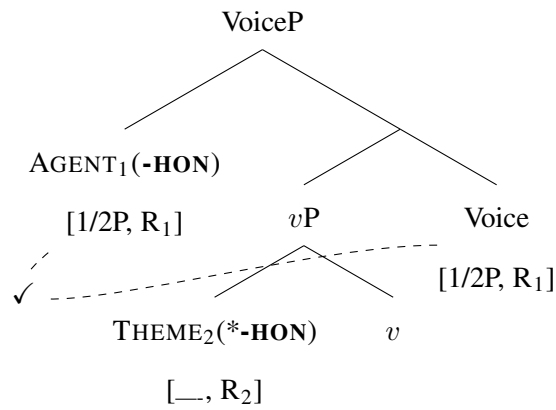
²³It may be the case that EPP and φ -features are bundled together when it comes to HON case assignment (see Baker 2003, Collins 2004, and Carstens 2005 for discussions on EPP and φ -feature bundling in Bantu languages). Here, EPP and 1/2P on Appl would be checked together by the applied argument in Spec, ApplP.

1/2P and R). (162) schematizes how HON is licensed in ditransitives, simple transitives, and passives.

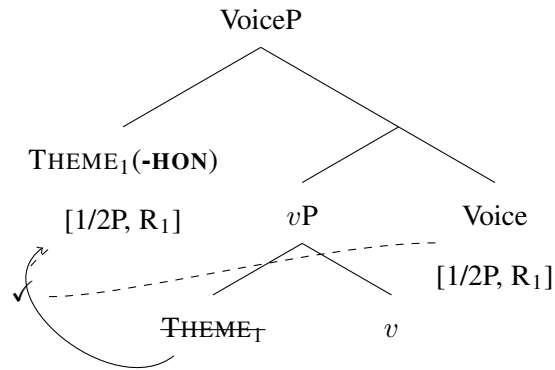
(162) a. A tree for ditransitives



b. A tree for simple transitives



c. A tree for passives



Based on the discussion on the PCC, we gain independent evidence for encoding 1/2P on argument introducers. This takes us back to the question we started out with. That is, why are argument-introducers recruited for HON case assignment? Note that the same inquiry can be leveled at why the PCC should hold. While there remain open ends to this question, I believe the PCC and the restriction on HON case assignment can receive a parallel treatment in the way that is fleshed out above. Hopefully, this brings us closer to a unified approach that provides a fuller explanation as to why these restrictions should hold in syntax.

2.5 Summary

In this chapter, I have argued that HON is a property of external and applied argument introducing heads (Voice and Appl), which captures the fact that HON.NOM and HON.DAT are possible in Korean, whereas HON.ACC is not. I have also shown that alternative analyses of argument structure and case are not entirely satisfactory when accounting for the empirical facts in Korean. I have argued that the specifier versus complement distinction coupled with the role of *i** gets at the subject & IO vs. DO divide. Further, I have argued that Causees of intransitives and subjects of ECM and SCs have commonalities with DOs. Based on the

analysis presented in this chapter, Addressee has been considered to be a part of syntax; just like subjects and IOs, which are eligible for HON case assignment.

Case stacking & discourse effects

3.1 Introduction

Korean exhibits what has been called *case stacking* where a single nominal can appear with more than one suffix associated with case.¹ Subjects that have already been assigned DAT or HON.NOM, for example, can appear with an additional marker *-i~-ka*, which is associated with plain NOM; this is shown in (163) and (164). DAT and HON.NOM can be viewed as inner markers and NOM as an outer marker.

- (163) Sensayngnim-**hanthey**-man-**i** Jill-i kulip-ta.
 teacher-DAT-only-NOM Jill-NOM miss-DECL
 ‘Only the teacher misses Jill.’
- (164) Sensayngnim-**kkeyse**-man-**i** Jill-ul an-ass-ta.
 teacher-HON.NOM-only-NOM Jill-ACC hug-PST-DECL
 ‘Only the teacher hugged Jill.’

¹Some of the ideas in this chapter appear in Lee & Nie (submitted).

Case markers are strictly ordered with respect to each other as well as other nominal markers, such as the focus particle *-man* ‘only.’ As the co-occurrence possibilities in (165) demonstrate, HON.NOM (*-kkeyse*) must precede *-man* and NOM (*-i* or *-ka*), with NOM as the outermost marker. Two instances of the same marker are ruled out.

(165) Case stacking co-occurrence restrictions

- | | | | | |
|----|---------------|---------|------|---------|
| a. | sensayngnim | -kkeyse | | |
| b. | sensayngnim | | | -i |
| c. | sensayngnim | -kkeyse | -man | |
| d. | sensayngnim | | -man | -i |
| e. | sensayngnim | -kkeyse | -man | -i |
| f. | * sensayngnim | -i | -man | -kkeyse |
| g. | * sensayngnim | -kkeyse | -man | -kkeyse |
| h. | * sensayngnim | -i | -man | -i |

Stacking of case morphemes is just one pattern exhibited by a wider system of nominal morphemes that occur on Korean nominals. For instance, the contexts in which case stacking is available are the same contexts in which the topic marker (TOP) *-(n)un* can appear.

- (166) Sensayngnim-**hanthey**-man-**un** Jill-i kulip-ta.
 teacher-DAT-only-TOP Jill-NOM miss-DECL
 ‘As for the teacher, only she misses Jill.’

- (167) Sensayngnim-**kkeyse**-man-**un** Jill-ul an-ass-ta.
 teacher-HON.NOM-only-TOP Jill-ACC hug-PST-DECL
 ‘As for the teacher, only she hugged Jill.’

As we have discussed in Chapter 1, Cho & Sells (1995) establish the templatic order of Korean nominal markers. Table 3.1 is repeated from Table 1.2. Cho & Sells argue that several properties of the Korean nominal template cannot be straightforwardly derived by the syntax but must be enforced in an independent morphological component of the grammar. Such properties include HON.NOM appearing in the same slot (Slot 1) as DAT rather than NOM,

Noun	Slot 1		Slot 2		Slot 3
	HON.NOM	<i>kkeyse</i>	‘only’	<i>man</i>	NOM <i>i~ka</i>
	HON.DAT	<i>kkey</i>	‘even’	<i>kkaci</i>	ACC <i>(l)ul</i>
	DAT	<i>hanthey</i>			TOP <i>-(n)un</i>
	LOC	<i>ey</i>			

Table 3.1: Korean nominal template based on Cho & Sells (1995) (repeated from Table 1.2)

and TOP being able to co-occur with DAT but not NOM. Most previous syntactic analyses of Korean case stacking have, therefore, had to assume significant post-syntactic reordering of the morphemes in order to get the correct morpheme order (Schütze 2001a, Levin 2017).

Two main approaches to Korean nominal stacking have been advanced in the literature. The first approach assumes that both the inner (Slot 1) and outer (Slot 3) markers reflect multiple case assignment. Here, case is a morphosyntactic feature assigned to nominals based on their grammatical function (e.g., Gerdtts & Youn 1988; Cho & Sells 1995; Yoon 2005; Levin 2017). However, it has been noted that case stacking induces a focus interpretation on the stacked nominal (Yoon, 1996; Schütze, 2001a). Thus the second approach to case stacking takes the outer marker to be an instance of the focus NOM rather than the plain case NOM (Schütze 2001a). However, proposals along both sets of approaches have nonetheless had to appeal to a morphological template in order to capture the ordering of nominal markers in Korean. I show that the co-occurrence restrictions on nominal markers can be captured transparently in the mapping between syntax and morphology (see also Koopman 2005).

I propose that while the inner markers spell out case only, the outer markers spell out a *bundle* of structural case and discourse features. These case and discourse features originate from C and are inherited onto T (Chomsky, 2008; Miyagawa, 2009, 2017, 2022), which assigns this bundle of features to a nominal in its specifier. These features are then spelled out by a single Vocabulary Item, which captures the fact that TOP never co-occurs with NOM and ACC.

The remainder of this chapter proceeds as follows. Section 3.2 provides a brief survey of case stacking from a cross-linguistic perspective. I then critically evaluate previous proposals for Korean and show that they require reference to an independent morphological template in order to capture the morpheme order. I then establish three explananda for Korean nominal stacking, relating to (i) the focus interpretation associated with case-stacked nominals, (ii) the co-occurrence restrictions against structural case and discourse morphology, and (iii) the divergence of HON.NOM from NOM and ACC with respect to its stacking behavior. In section 3.3, I show that the first two properties can be captured if we assume that the outer (Slot 3) markers spell out a bundle of structural case and discourse features; these features are inherited by T from C, which accords with the mixed A/A'-properties of movement in Korean. Section 3.4 puts the pieces together, demonstrating how a nominal that is assigned case within VoiceP can move to Spec,TP for additional case-discourse marking. My analysis extends to ACC stacking on IAs. Section 3.5 concludes.

3.2 Previous work

3.2.1 Multiple case assignment

Instances of multiple case assignment reported in the literature have often appeared in the guise of *Suffixaufnahme*, whereby each case marker signals the assignment of a different grammatical role (e.g. Moravcsik, 1995; Plank, 1995). For instance, in the Kayardild example in (168), *thabuju* 'brother' receives genitive marking as a possessor as well as instrumental marking as part of the larger instrumental noun phrase.

- (168) *thabuju-karra-nguni mijil-nguni*
 brother-GEN-INSTR net-INS
 'with brother's net' (Evans 1995:398)

Also related are examples in which one case appears to overwrite or replace another. In Russian, numerals five and higher govern genitive plural case on the head noun and its modifiers; as shown in (169), this leads to overwriting of structural cases such as accusative.

- (169) a. bol'šie butylki vina
 big.ACC.PL bottle.ACC.PL wine.GEN
 'big bottles of wine'
- b. pjat' bol'six butylok vina
 five.ACC big.GEN.PL bottle.GEN.PL wine.GEN
 'five big bottles of wine' (Babby 1985:2)

Such cases of overwriting have been thought of as multiple case assignment followed by suppression or deletion of the structural case marker (e.g. Babby, 1985) or of the outermost case (e.g. Pesetsky, 2013).² The idea that it is the structural case marker that undergoes deletion is evidenced by the fact that lexical/inherent cases, such as the instrumental, never get overwritten by the genitive, as shown in (170).

- (170) a. s bol'simi butylkami vina
 with big.INSTR.PL bottle.INSTR.PL wine.GEN
 'with big bottles of wine'
- b. s pjat'ju bol'simi butylkami vina
 with five.INS big.INSTR.PL bottle.INSTR.PL wine.GEN
 'with five big bottles of wine' (Babby 1985:2)

The Russian pattern and those like it have led to the observation that structural and inherent cases can behave differently with respect to additional nominal morphology (e.g., Babby 1985; Moravesik 1995; Yoon 2004; Richards 2013). While not an instance of multiple case assignment, the same point is demonstrated by nominal stacking in Japanese, whereby the

²Caha (2020) provides an alternative way of viewing the overwriting effects in Russian. According to Caha's hierarchy of case features, as discussed in Chapter 2, the feature responsible for GEN is placed higher than the one responsible for ACC. This suggests that the form that corresponds to GEN *consumes* the form that corresponds to ACC. This produces the effect of GEN overwriting ACC. However, a question arises as to how Caha's analysis based on Nanosyntax captures data on case stacking such as (168).

topic marker *-wa* can co-occur with dative case and postpositions (171a) but not with nominative or accusative case, which *-wa* instead appears to overwrite (171b). An identical effect is found in Korean (172).

- (171) a. Taro{-ni/-kara}-wa
 Taro-DAT/-from-TOP
- b. Taro{* -ga/* -o}-wa
 Taro-NOM/-ACC-TOP (Richards 2013:42)
- (172) a. Chelswu{-hanthey/-pwuthe}-nun
 Chelswu-DAT/-from-TOP
- b. Chelswu{* -ka/* -lul}-un
 Chelswu-NOM/-ACC-TOP

A final class of multiple case assignment effects comes from cross-clausal movement (e.g., Massam 1985; Young 1988; Ura 1996; Bejar & Massam 1999; Chen 2018). In raising-to-object constructions in Janitzio P’urepecha (language isolate; Michoacán, Mexico), the nominative subject of a finite embedded clause can raise into the matrix clause, where it additionally receives accusative case (Zyman, 2017), as illustrated in (173); that two cases are assigned is indicated by the fact that the moved accusative argument in the matrix clause can strand a nominative floating quantifier in the embedded clause.

- (173) Ueka-sin-∅-ga=ni Alonsu-**ni** Paku-**ni** ka Puki-**ni** eska=sī
 want-HAB-PRS-IND1=1SS Alonzo-ACC, Paco-ACC and Wildcat-ACC that=pS
 iamindu-**eecha** ch’ana-a-∅-ka.
 all-NOM.PL play-FUT-PRS-SBJV
 ‘I want Alonzo, Paco, and Puki [= three dogs] to all play.’ (Zyman 2017:12)

Multiple overt case markers are permitted to surface in Amis (Formosan; Taiwan) raising-to-object constructions (Chen, 2018). An example is given in (174), where the genitive

2017); both the inner and outer markers in case stacking contexts are thus taken to involve morphosyntactic case features. The primary empirical argument that has been marshalled in favor of a multiple case assignment approach comes from floating quantifiers (FQs). According to Yoon (2004) and Levin (2017), FQs can also undergo case stacking, as in (175), which suggests that stacked cases can feed case concord between the FQ and the head nominal. Since nominal concord should only be available with nominal features such as case, this evidence would indicate that the inner and the outer markers in stacking contexts are both reflexes of case.

- (175) %Kyoswunimtul-**kkeyse**-man-**i** ppali twu-pwun-**kkeyse**-**ka**
 professors-HON.NOM-only-NOM quickly two-CLF-HON.NOM-NOM
 osi-ess-ta.
 come-PST-DECL
 ‘Only two professors quickly came.’ (Levin 2017:493)

However, these concord data are disputed, as noted by Yoon (2004) and Levin (2017) themselves. Schütze (2001a) reports that case stacking on FQs is not, in fact, available in Korean. The native speakers I consulted for this work similarly rejected sentences like (175). Due to the disputed nature of these data, I conducted a grammaticality judgment task testing the availability of case concord and case stacking on FQs with 30 native-speaker participants online. I found that target sentences such as (175) involving concord of the stacked markers on the FQ were categorically judged to be indistinguishable from ungrammatical filler sentences, aligning with Schütze (2001a). Thus, evidence from concord does not, in fact, provide a compelling argument for case stacking as multiple case assignment. The full description and results of the experiment are included in Chapter 6.

Even if stacked markers cannot undergo concord in Korean, it is still nonetheless possible that stacking arises from multiple case assignment. I outline here a recent analysis along these lines from Levin (2017) (see also Chapter 2). Assuming a dependent case approach

(Marantz, 1991; Baker, 2015), Levin suggests that nominals in Korean can be assigned case in two different phase domains, vP (which I will henceforth call VoiceP, following Kratzer 1996) and CP. Under this analysis, an experiencer subject that receives, for instance, inherent DAT case within the VoiceP domain can move into the CP domain, where it is additionally assigned NOM case as the highest nominal in that domain. Evidence for this movement comes from quantifier scope. In canonical SOV psych verb constructions, a quantified dative or plain nominative subject takes wide scope with respect to negation, as shown in (176).

- (176) a. Motun namhaksayng-**hanthey** holangi-ka an-mwusewe
 all male.student-DAT tiger-NOM NEG-be.afraid
 ‘Every male student doesn’t fear tigers.’ $(\forall > \neg; * \neg > \forall)$
- b. Motun namhaksayng-**i** holangi-ka an-mwusewe
 all male.student-NOM tiger-NOM NEG-be.afraid
 ‘Every male student doesn’t fear tigers.’ $(\forall > \neg; * \neg > \forall)$
- (Levin 2017:464)

Levin (2017) shows that in scrambled OSV clauses, however, a NOM-marked subject with a universal quantifier always takes scope over negation (177a), while a DAT-marked subject can either scope over or below negation, resulting in scope ambiguity (177b). This suggests that DAT subjects can be interpreted low, below the position for NOM subjects.³

- (177) a. Holangi-ka, motun namhaksayng-**i** an-mwusewe.
 tiger-NOM all male.student-NOM NEG-be.afraid
 ‘Tigers, every male student doesn’t fear (them).’ $(\forall > \neg; * \neg > \forall)$
- b. Holangi-ka, motun namhaksayng-**hanthey** an-mwusewe.
 tiger-NOM all male.student-DAT NEG-be.afraid
 ‘Tigers, every male student doesn’t fear (them).’ $(\forall > \neg; \neg > \forall)$
- (Levin 2017:476)

³Levin (2017) does not explain why NOM-marked subjects, which originate below negation, cannot receive a low interpretation. I suggest that NOM-marked subjects may move past negation and display a scope freezing effect whereby the quantifier scopes over negation. DAT-marked subjects, on the other hand, seem to remain in situ below negation and undergo quantifier raising (QR) at LF.

The scope facts suggest that DAT is assigned in a lower domain than NOM. This supports the idea that in case stacking contexts, the DAT subject moves from the VoiceP domain into the CP domain to receive the additional marker, NOM.

While the core of Levin's proposal seems straightforward at first glance, his approach over-generates. Case assignment in both the VoiceP and CP phases is assumed to be obligatory, which has the consequence that *all* nominals should undergo case stacking if they cross a phase boundary. In order to capture the fact that most nominals do not, in fact, surface with case stacking in Korean, Levin suggests that case morphemes, after being assigned, can be optionally deleted. The double case assignment approach also predicts the possibility that dependent and unmarked cases can be assigned twice on the same nominal (once per phase), giving rise to stacking combinations such as NOM-NOM and ACC-ACC, as well as NOM-(NOM-)TOP and ACC-(NOM-)TOP (TOP marking will be discussed in section 3.2.3). However, these combinations are unattested. Like in Japanese and Russian, inherent and structural cases generally have different behavior in Korean. While inherent cases may allow stacking, structural cases do not. Levin's phase-based proposal does not capture this difference in stacking behavior.⁴ Following Cho & Sells (1995), then, Levin resorts to assuming that all nominals in Korean are filtered through an independent morphological template which essentially rearranges and deletes case morphemes as needed to derive only the attested case stacking combinations (see also Baker 2015:283).

While we focus on Levin (2017) for the purposes of illustrating a recent multiple case assignment analysis of Korean, Yoon (2005) deserves mention as a notable previous incarnation of such an approach. Yoon crucially assumes that nominals in Korean have two slots for case assignment: one inherent and one structural. He is, therefore, able to account

⁴The unavailability of *NOM-NOM and *ACC-ACC stacking cannot be explained by a simple adjacency-based haplology constraint, since Slot 2 markers such as *-man* 'only' might be expected to ameliorate the effect; however, combinations such as *NOM-only-NOM are also ungrammatical.

for the fact that inherent cases appear to undergo case stacking while structural cases do not. He also notes that HON.NOM patterns with the inherent cases and suggests that, despite the label of “nominative,” it is actually an inherent case. I similarly analyze HON.NOM as an inherent case, assigned by Voice to an honorified subject, although see Chapter 2 on how HON.NOM can pattern like raising-to-ERG in certain contexts. Like Levin, however, Yoon assumes that the outer marker in case stacking contexts solely marks morphosyntactic case and has no direct relation to any discourse function. In contrast, I show in section 3.2.3 that stacked NOM and ACC obligatorily induce a focus interpretation; NOM can furthermore mark focus even in non-case-stacking contexts. This, along with other evidence, motivates Schütze (2001a) to propose that case stacking is a reflex of focus marking.

3.2.3 Korean case stacking as focus marking

NOM and ACC can appear on a variety of non-DP constituents, where they induce a focus interpretation. While temporal and locative adjuncts can generally appear in their bare form, when they occur with NOM or ACC, they are interpreted as focused, as shown in (178) and (179). If NOM and ACC were exclusively a marker of case, their appearance on adjuncts and their focus interpretation would be unexpected.⁵ NOM and ACC must thus mark focus at least some of the time (Schütze 2001a; Chung 2012).

- (178) a. Ecey-**ka** Li-ka cengmal aph-ass-ta.
 yesterday-NOM Li-NOM really sick-PST-DECL
 ‘[Yesterday]_F, Li was really sick.’
- b. Paykakkwan-an-ey-**ka** siwuenha-ci-ka an-ass-ta.
 White.House-inside-LOC-NOM cool-CI-NOM NEG-PST-DECL
 ‘[Inside the White House]_F, it wasn’t cool at all.’

⁵Wechsler & Lee (1996) argue that not all adjuncts can receive case. For Wechsler & Lee, case is optionally assigned to adverbs that are event-bounding, referred to as ‘situation delimiters.’ Hence, there seems to be a semantic prerequisite in terms of which adverbs allow case and which ones do not.

- (179) a. Li-ka san-**ul** sey pen-**ul** ol-ass-ta.
 Li-NOM mountain-ACC three times-ACC climb-PST-DECL
 ‘Li climbed the mountain [three times]_F.’
- b. Li-ka sakwa-**lul** twu sikan-tongan-**ul** mek-ess-ta.
 Li-NOM apple-ACC two hour-for-ACC eat-PST-DECL
 ‘Li ate the apple [for two hours]_F.’

Schütze (2001a) argues that the outer case markers on case-stacked nominals are a focus variant of NOM and ACC. Case-stacked nominals quite clearly induce a focus interpretation (Yoon 1996), supported by the fact that case stacking is usually accompanied by a focus particle such as *-man* ‘only,’ as shown in (180).

- (180) Sensayngnim-hanthey-**man-i** Jill-i kulip-ta.
 teacher-DAT-only-NOM Jill-NOM miss-DECL
 ‘Only [the teacher]_F misses Jill.’

Additional evidence that stacked NOM has a focus function comes from a contrastive focus construction involving the negated copula *anila* (Schütze 2001a). NOM is obligatory on the contrastive nominal, even if it already bears case, as shown in (181).

- (181) Halmeni-kkeyse*(-**ka**) anila Mary-ka John-ul po-ass-ta.
 grandmother-HON.NOM-NOM but.not.be Mary-NOM John-ACC see-PST-DECL
 ‘Mary, not [grandmother]_F, saw John.’

Furthermore, NOM and ACC exist in complementary distribution with the topic marker *-(n)un* in Korean. (182) illustrates this point.

- (182) a. Li(*-**ka**)-**nun** sakwa-lul mek-ess-ta.
 Li-NOM-TOP apple-ACC eat-PST-DECL
 ‘As for Li, he/she ate the apple.’
- b. Sakwa(*-**lul**)-**nun** Li-ka mek-ess-ta.
 apple-ACC-TOP Li-NOM eat-PST-DECL
 ‘As for the apple, Li ate it.’

Strikingly, TOP has identical stacking behavior to the outer NOM and ACC; (183) shows that TOP can be stacked above HON.NOM, HON.DAT, and DAT.

- (183) a. Halapeci-**kkeyse-nun** Kim-hanthey phyenci-lul ponay-ss-ta.
grandfather-HON.NOM-TOP Kim-DAT letter-ACC send-PST-DECL
'As for grandfather, he sent Kim a letter.'
- b. Emeni-**kkey-nun** Kim-i phyenci-lul ponay-ss-ta.
Mother-HON.DAT-TOP Kim-NOM letter-ACC send-PST-DECL
'As for mother, Kim sent her a letter.'
- c. Kim-**hanthey-nun** John-i phyenci-lul ponay-ss-ta.
Kim-DAT-TOP John-NOM letter-ACC send-PST-DECL
'As for Kim, John sent him/her a letter.'

The parallel and complementary distribution between NOM/ACC and TOP thus further supports an analysis of stacked NOM and ACC as markers of focus or discourse more broadly construed.

In order to capture case stacking, Schütze (2001a) assumes that IP(/TP) and VP each permit a specifier as well as multiple focus adjunction sites above their specifier. A nominal in the specifier of TP can thus move into a TP-adjoined focus position, where it receives a stacked NOM focus marker. However, this analysis predicts that markers assigned in case positions (specifier of TP and VP) can co-occur with markers assigned in focus positions (adjuncts to TP and VP), predicting the availability of unattested NOM-NOM and ACC-ACC combinations. Like Levin (2017), then, Schütze's particular analysis is unable to capture the morpheme co-occurrence restrictions in the Korean nominal template. Both authors have, therefore, had to assume a morphological component that enforces this template post-syntactically in Korean (Cho & Sells 1995).

Koopman (2005), by contrast, argues that morpheme order in Korean can and should arise from the syntax, respecting the Mirror Principle (Baker 1985).

(184) The Mirror Principle (Baker 1985:375)

Morphological derivations must directly reflect syntactic derivations (and vice versa).

Assuming a head-initial structure, Koopman captures the ordering of a subset of post-nominal morphemes via multiple instances of local Comp-to-Spec remnant movement.⁶ While this thesis assumes a head-final analysis of Korean, I extend Koopman's general approach to morphology-syntax mapping to the entire nominal template, including HON-sensitive case markers, showing that a Mirror Principle-respecting analysis is indeed possible.

Before turning to the proposal, I would like to point out that acknowledging outer stacked nominal markers as reflexes of discourse function accords with properties of nominal stacking phenomena cross-linguistically. We saw, in section 3.2.1, examples of multiple nominal marking as a result of *Suffixaufnahme* and cross-clausal movement. However, nominal stacking can also arise from discourse effects. As we have seen, Japanese allows datives and locatives to receive additional topic marking:

(185) Taro{-**ni**/**-kara**}-**wa**

Taro-DAT/-from-TOP

(Richards 2013:42)

In Miyara Yaeyaman (Ryukyuan; Japan), the focus particle *du* can appear on a variety of constituents, including arguments already marked for case (Davis 2013).

(186) a. Taa=**du** suba tsukur-ee-ru?
who=DU soba make-RES-PRS
'Who made soba?'

b. jurie=**n=du** tsukur-ee-ru.
Yurie=**NOM=DU** make-RES-PRS
'Yurie made (soba).'

(Davis 2013:30)

⁶Though see Abels (2003) and Pesetsky & Torrego (2001) for arguments against this type of movement in syntax.

Although the details differ by language, in each of these stacking patterns, the inner marker is a true reflex of case, while the outer marker indicates, at least in part, a discourse function. Following Schütze (2001a), then, I also take the outer NOM and ACC markers in case stacking contexts to be associated with focus. Crucially, however, I propose that NOM and ACC can mark case and focus concurrently; that is, they spell out a *bundle* of case and discourse features.

3.2.4 Explananda for Korean case stacking

All previous approaches to Korean nominal stacking have had to hard-code the ordering and co-occurrence restrictions of the case and discourse markers in some way. Given Table 3.1, as well as the cross-linguistic patterns discussed above, I posit the following minimal explananda for any adequate analysis of nominal stacking in Korean:

- (187)
- a. Why case-stacked nominals have a special discourse interpretation, namely focus
 - b. Why Slot 3 markers never co-occur with each other; why NOM-TOP stacking, for example, is impossible
 - c. How case markers are distributed between Slot 1 vs Slot 3; in particular, why HON.NOM appears in Slot 1

Following Schütze (2001a), I assume that the outer stacked case marker is associated with focus, accounting for (187a). As (187b) states, NOM and ACC never co-occur with discourse marking, that is, with a stacked NOM/ACC or TOP. I propose that case and discourse features are assigned concurrently from the same functional head. (187c) relates to the distinct behavior of inherent and structural cases with respect to stacking, and why HON.NOM and

NOM appear in different slots. Here, I maintain my claim that while NOM is assigned by T, HON.NOM is assigned by a lower head, Voice. In the following sections, I flesh out my proposal for an explanatory, non-templatic analysis of Korean nominal stacking.

3.3 A mixed discourse-case approach

I propose a mixed discourse-case approach to outer (Slot 3) markers. Case has traditionally been associated with A-movement and discourse with A'-movement (see Déprez 1989; Saito 1989; Mahajan 1990). A-movement and A'-movement have long been noted to exhibit different properties (Mahajan 1990; Chomsky 2007, 2008; Miyagawa 2009, 2017, among others), for example, with respect to weak crossover (WCO; Mahajan 1990; Lee 1993; Cho 1994, among others). As shown in (188), A-movement is exempt from a WCO violation, whereas A'-movement incurs the violation.

- (188) a. Who₁ *t*₁ appears to her₁ mother *t*₁ to be pretty? (✗ WCO effect)
 b. *Who₁ does her₁ mother love *t*₁? (✓ WCO effect)

In some languages, however, discourse-associated movement that is normally associated with A'-movement seems to be exempt from WCO violations. For example, van Urk & Richards (2015) show that in Dinka (Nilotic; South Sudan), fronted topicalized objects do not induce the expected WCO effect, as shown in (189). van Urk & Richards argue that in Dinka A-features such as case are assigned together with A'-features from the same heads.

- (189) a. Thɔ̌k-dè à-cé dhùk ében kâac.
 goat-SG.his 3SG-PRF boy every bite
 'His_{j/*i} goat bit every boy_i.'
 b. **Dhùk ében** á-c̣i thɔ̌k-dè kâac.
 boy every 3SG-PRF.NS goat-SG.his bite
 'Every boy_i, his_i goat bit.'

- c. **Kitɛɛp-kè** àa-nhiɛɛr dhùk ɛ̀bɛn ké.
 books-PL.3SG 3PL-love.NS boy.GEN every PL
 ‘His_i books, every boy_i loves.’ (van Urk & Richards 2015:121)

Miyagawa (2009, 2017, 2022) reports similar findings from Japanese (see also Saito 1992). Fronted objects in Japanese, which are topicalized via scrambling, do not induce a WCO violation, as shown in (190).⁷

- (190) a. *Otagai_i-no sensei-ga [Taroo-to Hanako]_i-o suisensita.
 each.other-GEN teacher-NOM Taro-and Hanako-ACC recommended
 Intended: ‘Each other’s teachers recommended Taro and Hanako.’
 b. [Taroo-to Hanako-o]_i otagai-no sensei-ga t_i suisensita.
 Taro-and Hanako-ACC each.other-GEN teacher-NOM t_i recommended
 ‘Taro and Hanako, each other’s teachers recommended.’

(Miyagawa 2017:6)

Miyagawa (2009, 2017, 2022) suggests that the reason a WCO violation does not result in (190b) is because the topicalized object targets Spec,TP, an A-position, instead of Spec,CP, an A’-position. Thus the generalization that A-movement circumvents WCO violations is maintained. Developing an analysis based on feature inheritance (Chomsky 2008), Miyagawa posits that discourse features from C can be inherited by T in Japanese. Nominals, thus, interact with T rather than C for the assignment or checking of discourse features.

Returning to Korean, we find that the language patterns with Dinka and Japanese with respect to WCO. As demonstrated in (191), fronted TOP-marked objects in Korean are exempt from a WCO violation.

- (191) a. *Selo_i-uy sensayng-i [John-kwa Mary-nun]_i chwuchenhayssta.
 each.other-UY teacher-NOM John-CONJ Mary-TOP recommended
 Intended: ‘Each other’s teachers recommended John and Mary.’

⁷Richard Kayne (p.c.) mentions that in languages such as German and Dutch, topicalization induces V-2, but scrambling does not. Korean does not have V-2, and perhaps topicalization is carried out via scrambling. Future research remains to be done on this issue.

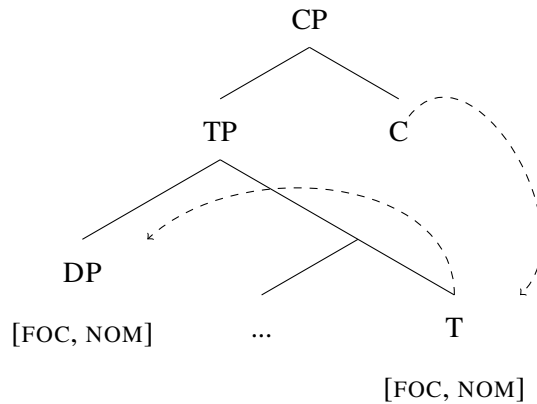
- b. [**John-kwa Mary-nun**]_i selo_i-uy sensayng-i chwuchenhayssta.
 John-CONJ Mary-TOP each.other-UY teacher-NOM recommended
 ‘John and Mary, each other’s teachers recommended.’

Following Miyagawa’s proposal for Japanese, I assume that discourse-associated nominals in Korean also undergo movement to A-positions such as Spec,TP rather than to the CP domain.

3.3.1 Feature inheritance

Chomsky (2008) proposes that phase heads (C and Voice) are the locus of probing features and the EPP (see also Richards 2007). Any such features that are borne by T must, therefore, be “inherited” from C. As discussed above, discourse-associated movement in Korean and Japanese appears to target an A-position, Spec,TP. I assume that the discourse features [FOC] and [TOP], along with the structural case feature [NOM], are inherited by T from C. The same head can thus probe for both A- and A’-features. The feature inheritance approach is illustrated in (192) for a focused nominal (slight revisions will be made in section 3.3.2). T inherits both a discourse feature and a case feature from C and probes for a goal bearing both features. After T agrees with a suitable goal, the goal raises to Spec,TP and has its features checked or valued in a Spec-head relation with T.

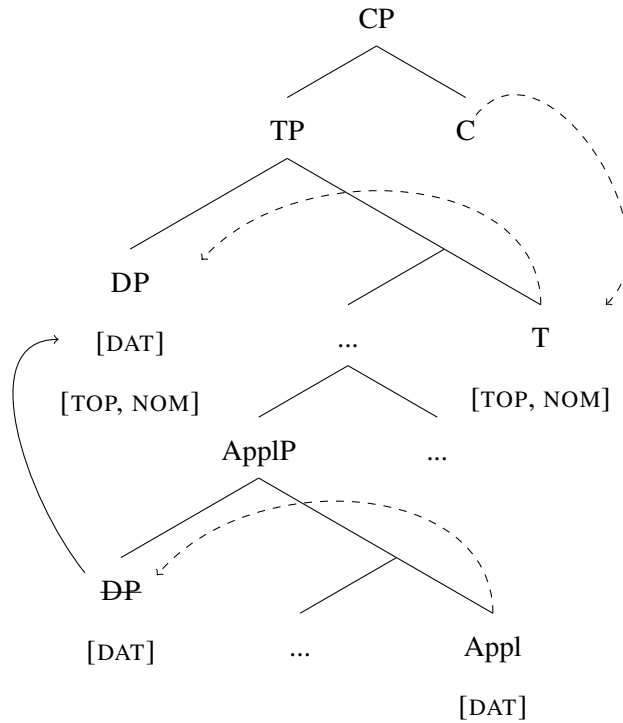
(192) Feature inheritance of discourse and structural case features



Feature inheritance of discourse features allows focused and topicalized nominals to target an A-position and thus avoid a WCO violation. Both a discourse feature and a structural case feature are assigned by a single head T, an approach which aligns closely with Schütze (2001a) for Korean and proposals for other discourse-configurational languages, such as Horvath (1995) for Hungarian.

Importantly, only *structural* case features (NOM, ACC) are inherited from a phase head, along with discourse features. I propose that these structural case and discourse features are assigned together as a bundle, and this bundle of features is realized by a single Vocabulary Item (VI); this captures the mixed discourse-case properties of the outer (Slot 3) markers. Inherent cases such as DAT, by contrast, are assigned by thematic role-assigning heads within the thematic domain (VoiceP); these inherent cases are spelled out by the inner (Slot 1) markers and can then additionally be stacked with Slot 3 forms. A simplified derivation involving a topicalized DAT subject is sketched in (193). [NOM], a structural case feature, is inherited with [TOP] from C to T and assigned as a bundle to an already DAT-assigned nominal. When transferred to the PF interface, this [TOP, NOM] bundle will be spelled out by a single VI.

(193) Structural case is bundled with a discourse feature in case stacking



Recall that inherent and structural cases generally differ with respect to nominal stacking, cross-linguistically and in Korean. As shown in Table 3.1, while inherent cases appear in Slot 1 and can be stacked by Slot 3 markers, structural cases appear in the Slot 3 position and thus cannot co-occur with discourse markers.

In an approach that separates the assignment of structural case and discourse marking, there is no principled reason why inherent cases such as DAT should be permitted to co-occur with TOP marking, while structural cases such as NOM cannot. A nominal which is assigned NOM from T and TOP from C would end up with more or less the same type of featural configuration as a nominal which receives DAT from Appl and TOP from C. An independent morphological component must, therefore, be assumed in order to capture these morpheme co-occurrence restrictions. In Levin (2017), for instance, a nominal can be assigned both

NOM and TOP, but is then subject to arbitrary morpheme deletion rules to ensure that only one of these morphemes is realized overtly.

Feature inheritance allows us to place both structural case and discourse features on a single head in Korean. This explains why discourse-associated nominals in Korean exhibit A-properties, in addition to providing a principled distinction between inherent and structural cases with respect to stacking.

3.3.2 Outer markers & inner markers

I have so far proposed that structural case and discourse features are assigned together as a feature bundle, which gets realized by a single Slot 3 VI. However, Slot 3 markers exhibit interesting patterns of syncretism that must be accounted for. These can be seen most clearly if we assume a binary distinction for the topic feature ($[\pm\text{TOP}]$) and the focus feature ($[\pm\text{FOC}]$), as in (194). Any nominal specified for $[\text{+TOP}]$ receives $-(n)un$ marking, regardless of whether its case feature is $[\text{NOM}]$ or $[\text{ACC}]$. $[-\text{TOP}]$ nominals, by contrast, are sensitive to case: they are marked $-i\sim-ka$ if NOM and $-(l)ul$ if ACC ; however, $[-\text{TOP}]$ nominals are not morphologically distinguished by their $[\pm\text{FOC}]$ specification.⁸

(194) a. $[\text{NOM}]$

	$[-\text{TOP}]$	$[\text{+TOP}]$
$[-\text{FOC}]$	$-i\sim-ka$	$-(n)un$
$[\text{+FOC}]$	$-i\sim-ka$	N/A

⁸While I assume feature bundling cannot be imposed to generate $[\text{+TOP}, \text{+FOC}]$ in Korean, we will see that the two features can be realized separately as shown in (206b).

	[−TOP]	[+TOP]
	[−FOC]	[+FOC]
	−(<i>l</i>) <i>ul</i>	−(<i>n</i>) <i>un</i>
	−(<i>l</i>) <i>ul</i>	N/A

The pattern in (194) can be captured by the Vocabulary Insertion rules in (195). (195a) states that the feature bundle assigned by T is realized phonologically as *−(n)un* whenever [+TOP] is present, regardless of the case specification. [−TOP, NOM] are spelled out together as *−i~ka* as shown in (195b) and [−TOP, ACC] as *−(l)ul* as shown in (195c). Note that [±FOC] need not be specified in the VIs, since a nominal’s focus specification does not affect its phonological realization. I assume that [±FOC] features are nonetheless active in the syntax and result in interpretive differences at LF, even if they are not distinguished at PF.

(195) Outer marker Vocabulary Items

- a. [+TOP] ↔ *−(n)un*
- b. [−TOP, NOM] ↔ *−i~ka*
- c. [−TOP, ACC] ↔ *−(l)ul*

The mixed discourse-case analysis of the outer markers captures the descriptive fact that structural cases and discourse marking cannot co-occur on the same nominal; this addresses (196b) in our list of core explananda, repeated below.

- (196)
- a. Why case-stacked nominals have a special discourse interpretation, namely focus
 - b. Why Slot 3 markers never co-occur with each other; why NOM-TOP stacking, for example, is impossible
 - c. How case markers are distributed between Slot 1 vs Slot 3; in particular, why HON.NOM appears in Slot 1

My approach furthermore provides an account for how inherent and structural case markers interact with discourse markers differently, without requiring any machinery beyond ordinary spell-out mechanisms available in any realizational approach to morphology.

Having accounted for (196b) regarding the form of the outer markers, we now briefly turn to (196c), which concerns the inner (Slot 1) markers, particularly HON.NOM. Previous analyses of Korean nominal stacking have had difficulty accounting for the distribution of HON.NOM. HON.NOM and non-honorific NOM appear in different slots in the nominal template; while NOM is an outer (Slot 3) marker, and HON.NOM is an inner (Slot 1) marker and can therefore co-occur with the outer markers. As extensively discussed in Chapter 2, HON.NOM, HON.DAT, and DAT are assigned from external and applied argument-introducing heads, namely Voice and Appl. Under this view, the stacking of Slot 1 and Slot 3 markers is possible mainly because different heads in the clause assign Slot 1 and Slot 3 markers. As shown in (197), HON.NOM can co-occur with TOP, while NOM cannot. (198) shows a similar pattern with focus.

- (197) a. Sensayngnim(*-i)-**un** wus-usi-ess-ta.
 teacher-NOM-TOP laugh-HON-PST-DECL
 ‘As for the teacher, he/she laughed.’
- b. Sensayngnim-**kkeyse-nun** wus-usi-ess-ta.
 teacher-HON.NOM-TOP laugh-HON-PST-DECL
 ‘As for the teacher, he/she laughed.’
- (198) a. Sensayngnim(*-i)-man-**i** wus-usi-ess-ta.
 teacher-NOM-only-NOM laugh-HON-PST-DECL
 ‘Only the teacher laughed.’
- b. Sensayngnim-**kkeyse-man-i** wus-usi-ess-ta.
 teacher-HON.NOM-only-NOM laugh-HON-PST-DECL
 ‘Only the teacher laughed.’

The analysis provided in Chapter 2 captures the differences between HON.NOM and NOM in both their syntactic distribution (e.g., HON.NOM only appears on subject arguments, while NOM is much freer) as well as their morphological distribution with respect to stacking.

In (199a), a DAT experiencer subject undergoes case stacking with NOM. In (199b) and (199c), a DAT IO and a Causee undergo case stacking with ACC, respectively.⁹

- (199) a. Yuli-**hantey**-man{-i/*-ul} ai-ka kulip-ta.
 Yuli-DAT-only-NOM/-ACC child-NOM miss-DECL
 ‘Only Yuli misses the child.’
- b. Kim-i Yuli-**hantey**-man{-ul/*-i} chayk-ul cwu-ess-ta.
 Kim-NOM Yuli-DAT-only-ACC/-NOM book-ACC give-PST-DECL
 ‘Kim gave only Yuli a book.’
- c. Kim-i Yuli-**hantey**-man{-ul/*-i} pap-lul mek-i-ess-ta.
 Kim-NOM Tom-DAT-only-ACC/-NOM rice-ACC eat-CAUS-PST-DECL
 ‘Kim made only Yuli eat rice.’

The same stacking pattern holds for HON.DAT-marked arguments as shown in (200).

- (200) a. Emeni-**kkey**-man{-i/*-ul} ai-ka kulip-ta.
 mother-HON.DAT-only-NOM/-ACC child-NOM miss-DECL
 ‘Only mother misses the child.’
- b. Kim-i emeni-**kkey**-man{-ul/*-i} chayk-ul cwu-ess-ta.
 Kim-NOM mother-HON.DAT-only-ACC/-NOM book-ACC give-PST-DECL
 ‘Kim gave only mother a book.’
- c. Kim-i emeni-**kkey**-man{-ul/*-i} pap-lul mek-i-ess-ta.
 Kim-NOM mother-HON.DAT-only-ACC/-NOM rice-ACC eat-CAUS-PST-DECL
 ‘Kim made only mother eat rice.’

Based on our discussion in Chapter 2, we can explain the difference in the case stacking patterns if we assume that Low Appl and High Appl, which introduce an IO and a Causee,

⁹As mentioned in Chapter 2, ACC-assignment in Korean follows Burzio’s Generalization. The derivations for ACC-stacking is provided in (219) and (221).

respectively, are merged inside the domain where ACC is assigned. Peripheral Appl, by contrast, introduces an experiencer subject and is merged outside the ACC assignment domain and in the NOM assignment domain.

Taken together, the locus of (HON.)DAT and HON.NOM assignment in syntax provides a principled distinction between the Slot 1 markers and Slot 3 markers, thus capturing explanandum (196c).

3.4 Deriving the nominal template

Having discussed the distribution of the outer markers and the inner markers, we can now put the pieces together and show how case and discourse marker stacking in Korean may be derived. I begin with stacking on subjects and then extend my approach to stacking of ACC on lower arguments.

3.4.1 Stacking of NOM

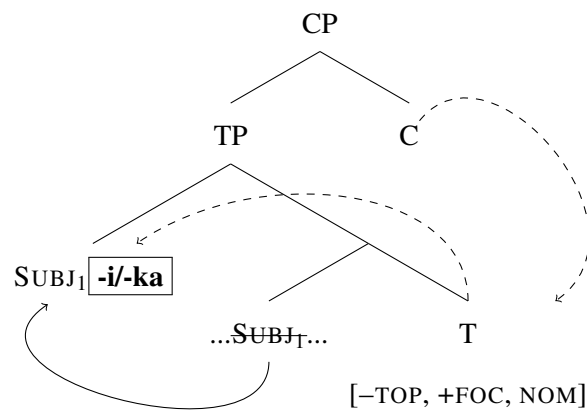
I assume that all nominals in Korean must be assigned case. Non-honorified subjects are assigned NOM in Spec,TP; as I argued in section 3.3, the NOM case feature is inherited by T from C and is assigned as a bundle along with discourse features [\pm TOP] and [\pm FOC]. Following Horvath (1995), I assume that *discourse-salient* feature specifications, namely [+TOP] and [+FOC], trigger movement of a nominal.¹⁰ [-TOP] and [-FOC], by contrast, are not discourse-salient and therefore do not trigger movement. Thus, in the current system, a nominal moves to Spec,TP either to receive case or to receive a discourse-salient feature

¹⁰I assume that discourse-salient features trigger movement via some feature transfer mechanism that is distinct from standard Agree (Horvath 1995). I remain agnostic as to whether a nominal enters the derivation with an uninterpretable discourse feature.

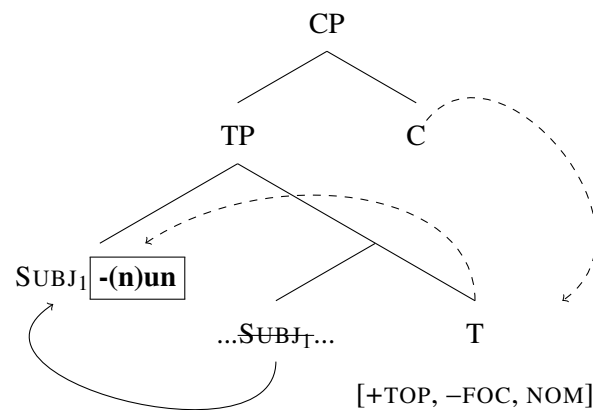
if the nominal is already case-marked. In discourse-neutral clauses specified with [-TOP, -FOC], nominals that are already case-marked do not move to Spec,TP but remain in situ.

We see movement triggered by the discourse-salient features [+FOC] and [+TOP] illustrated in (201) and (202), respectively. Feature inheritance places both structural case and discourse features on T. These features are assigned together as a bundle, realized as a single exponent, in accordance with the VIs established for outer markers in section 3.3.2.

(201) Focus configuration



(202) Topic configuration



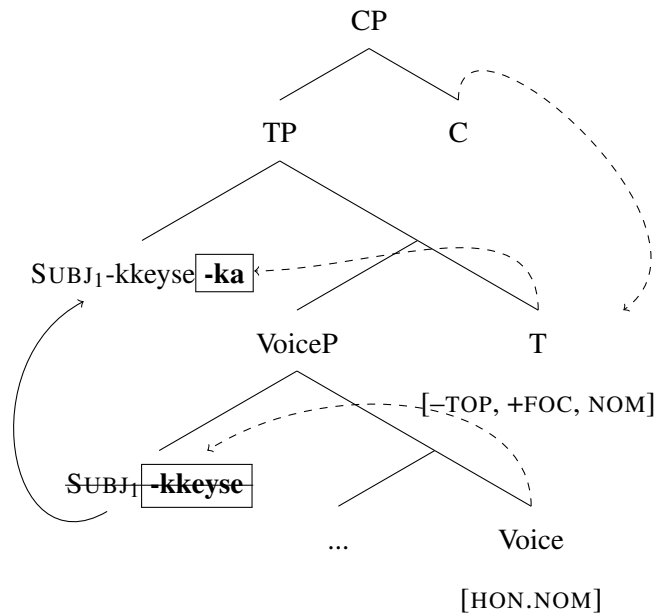
Nominal stacking, exemplified in (203), arises when nominals are first assigned case below T and then move to Spec,TP in order to be marked for discourse. For example,

HON.NOM is first assigned in Spec,VoiceP. A [+TOP] or [+FOC] feature can then trigger movement of the HON.NOM-marked nominal to Spec,TP, where it receives the appropriate outer marker. (203a) shows HON.NOM-NOM stacking and (203b) shows HON.NOM-TOP stacking.

- (203) a. Halmeni-**kkeyse-ka** anila Li-ka Kim-ul po-ass-ta.
 grandmother-HON.NOM-NOM but.not.be Li-NOM Kim-ACC see-PST-DECL
 ‘Li, not [grandmother]_F, saw Kim.’
- b. Halmeni-**kkeyse-nun** wus-usi-ess-ko ai-nun wul-ess-ta.
 grandmother-HON.NOM-TOP laugh-HON-PST-CONJ child-TOP cry-PST-DECL
 ‘[Grandmother]_{CT} laughed and [the child]_{CT} cried.’

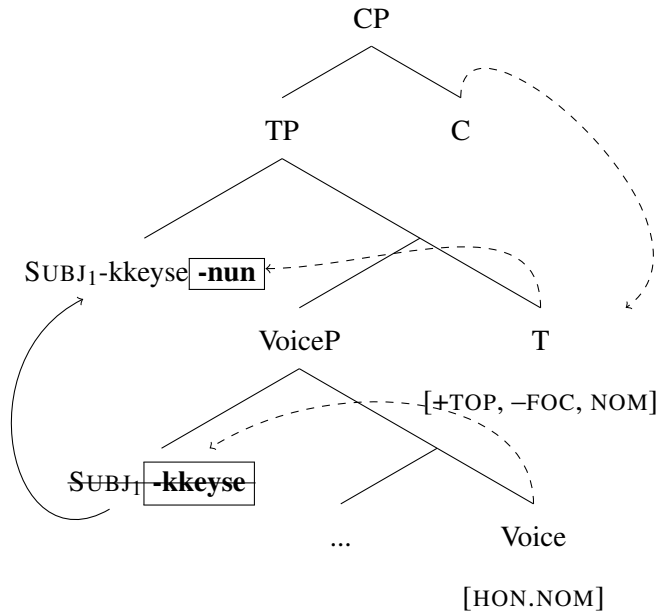
(204) fleshes out the details of how a focused, honored subject is assigned HON.NOM in Spec,VoiceP and then moves to Spec,TP in order to receive *-i~-ka*, which realizes the features [-TOP, +FOC, NOM] as a bundle.

(204) Stacking for focused and honored subjects



(205) illustrates how a topicalized, honored subject is assigned HON.NOM in Spec, VoiceP and then moves to Spec, TP in order to receive *-(n)un*, which realizes the features [+TOP, -FOC, NOM] as a bundle.

(205) Stacking for topicalized and honored subjects



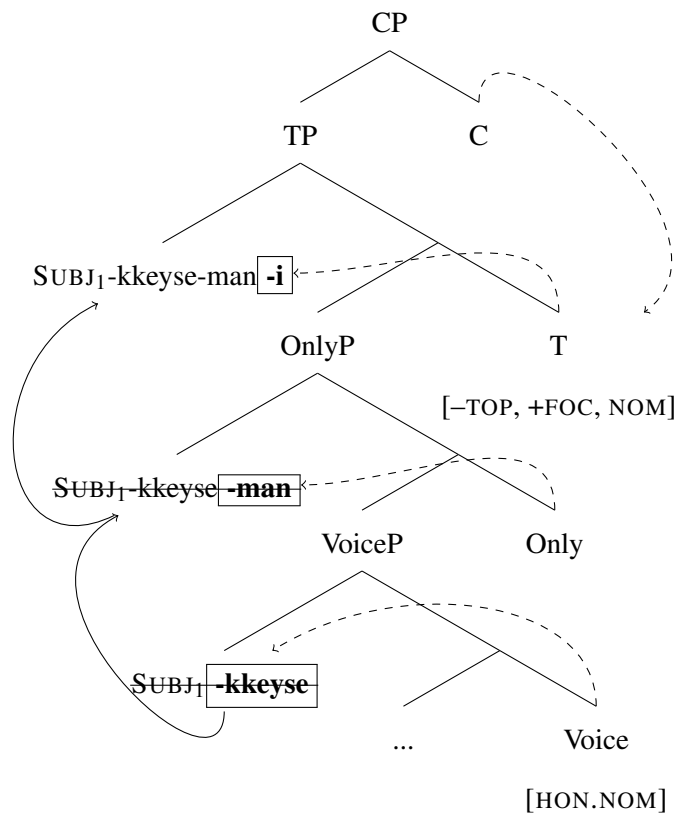
Stacking with NOM is generally only possible within a focus context (see section 3.2.3), which can be licensed by markers such as *-man* ‘only.’ Like other nominal markers, the position of *-man* ‘only’ is fixed, appearing after HON.NOM and before an outer marker.¹¹

- (206) a. Sensayngnim-kkeyse-**man**-i wus-usi-ess-ta.
 teacher-HON.NOM-only-NOM laugh-HON-PST-DECL
 ‘Only the teacher laughed.’
- b. Sensayngnim-kkeyse-**man**-un wus-usi-ess-ta.
 teacher-HON.NOM-only-TOP laugh-HON-PST-DECL
 ‘As for the teacher only, he/she laughed.’

¹¹The exhaustive interpretation induced by *-man* ‘only’ is compatible with TOP as shown in (206b). Here, I assume that exhaustivity can be topicalized (see also Lee 2005).

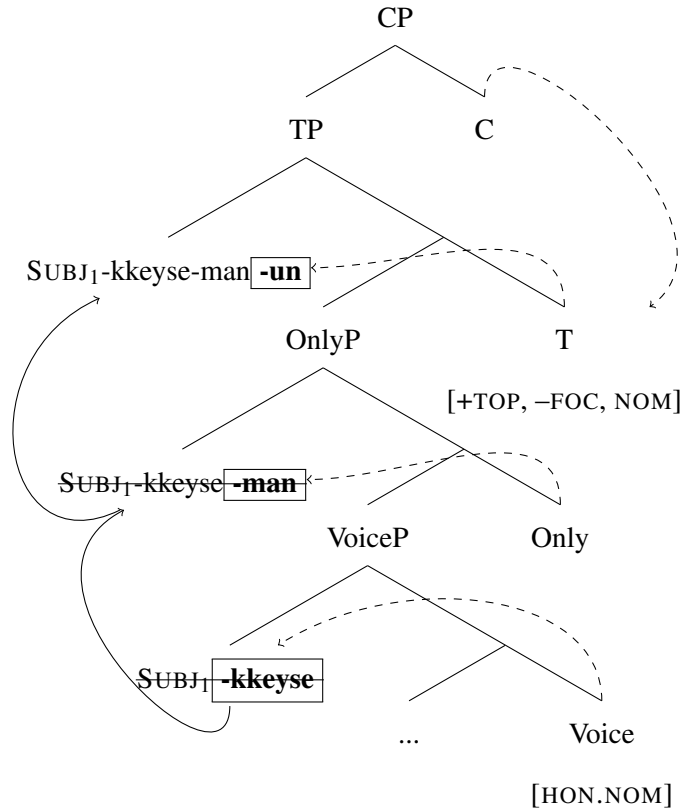
Under Lee's (2005) analysis, *-man* 'only' on a nominal is an agreement marker licensed in Spec,OnlyP. The semantic interpretation of *-man* 'only' derives from the head Only (of OnlyP) itself. Lee (2005) and Koopman (2005), in keeping with the Mirror Principle (Baker 1985), assume that the order of the post-nominal markers is the reverse of the hierarchical order of the functional heads. A nominal receives *-man* 'only' when it moves to Spec,OnlyP.¹² Prior to movement, an honorified nominal can receive HON.NOM from Voice. Otherwise, the ordering of HON.NOM-only would not be generated. Following Lee (2005), I assume that OnlyP is merged between TP and VoiceP. The derivation for (206a) is given in (207), and the derivation for (206b) is given in (208)

(207) The derivation for the subject in (206a)



¹²Kayne (1998) argues that Spec,OnlyP is occupied by an argument in English, which is consistent with my take on Korean *-man*-associated arguments.

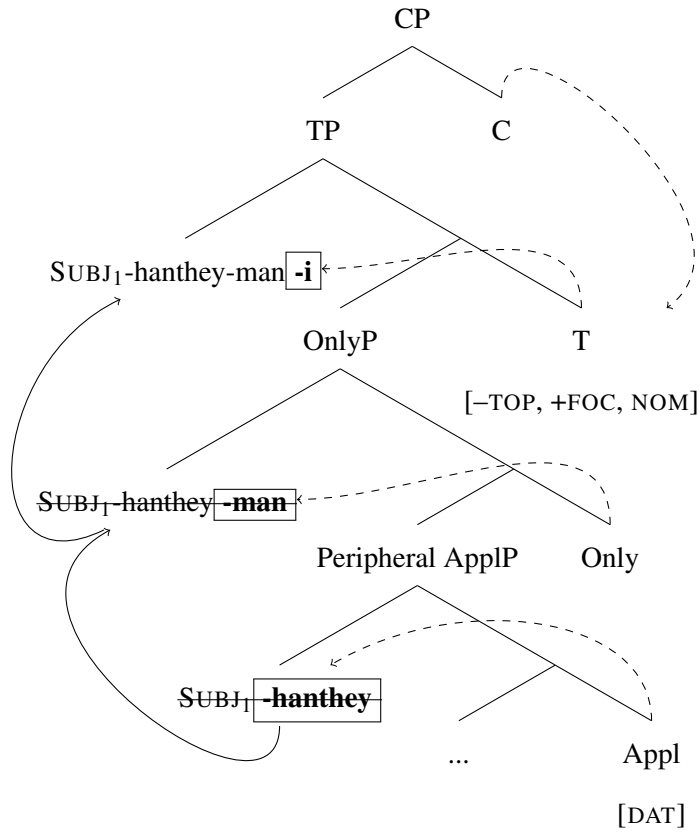
(208) The derivation for the subject in (206b)



Case and discourse marker stacking proceeds similarly for DAT and HON.DAT-marked arguments. Experiencer subjects are assigned (HON.)DAT below T and can therefore undergo stacking, as shown in (209). DAT on an experiencer subject is assigned from Peripheral Appl. After being assigned DAT, the subject moves to Spec,OnlyP where it receives *-man* ‘only,’ and then to Spec,TP, where it receives *-i~ka* associated with focus.

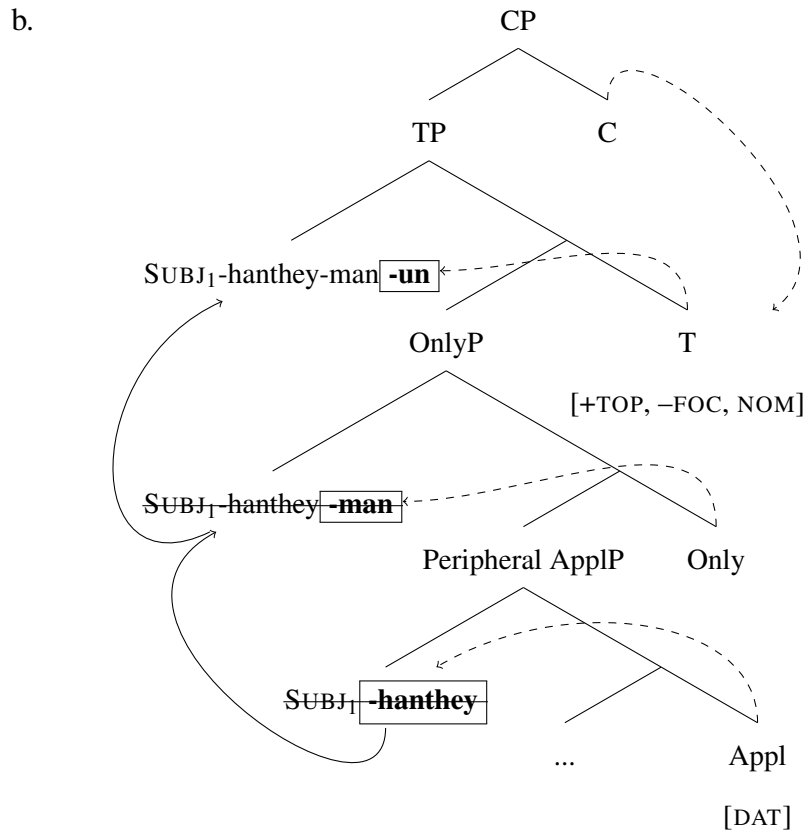
- (209) a. John-**hanthey**-man-**i** koyangi-ka silh-ta.
 John-DAT-only-NOM cat-NOM hate-DECL
 ‘Only John hates cats.’

b.



A similar type of derivation holds for (210). DAT on an experiencer subject is assigned from Peripheral Appl. After being assigned DAT, the subject moves to Spec,OnlyP where it receives *-man* ‘only,’ and then to Spec,TP, where it receives *-(n)un* associated with topic.

- (210) a. John-**hanthey**-man-**un** koyangi-ka silh-ta.
 John-DAT-only-TOP cat-NOM hate-DECL
 ‘Only John hates cats.’



So far, I have shown how my analysis of the inner and outer markers captures nominal stacking on the subject. In the following subsections, I demonstrate how my approach extends to derivations involving stacking on the object, which involves the stacking of discourse-associated ACC.

3.4.2 Stacking of ACC

3.4.2.1 ACC assignment

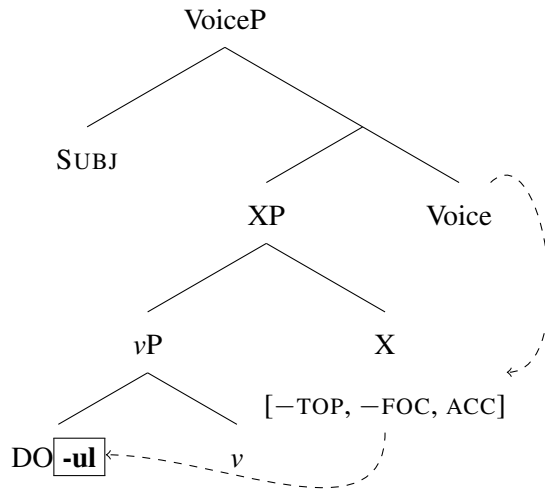
As discussed in Chapter 2, ACC in Korean follows Burzio's Generalization (Burzio 1986) and is usually found on the DO of a simple transitive and ditransitive verb. This is shown in (211).

- (211) a. Kim-i Yuli-**lul** ttayli-ess-ta.
 Kim-NOM Yuli-ACC hit-PST-DECL
 ‘Kim hit Yuli.’
- b. Kim-i Yuli-hanthey sakwa-**lul** cwu-ess-ta.
 Kim-NOM Yuli-DAT apple-ACC give-PST-DECL
 ‘Kim gave Yuli an apple.’

Assuming that phase heads are the source of agreeing features within a phase domain, and that Voice is a phase head, I take transitive Voice to bear an ACC case feature as well as the discourse features [\pm TOP] and [\pm FOC](see Miyagawa 2017:165–166). This type of approach is also relevant to the claim that discourse features can originate below TP (e.g., Jayaseelan, 2001; Belletti, 2004). I propose that similar to how feature inheritance proceeds from the phase head C to the non-phase head T, the features on the phase head Voice are inherited by a non-phase head located just below it, which I simply refer to as X. This XP is reminiscent of previous proposals of a derived object position located below the merged position of the EA (e.g., Chomsky 1995; Koizumi 1995; Sportiche 1998; Travis 2010).

An updated version of the derivation for the discourse-neutral ACC case assignment is provided in (212). A structural [ACC] case feature and the non-discourse-salient features [$-$ TOP, $-$ FOC] originate on transitive Voice, a phase head. These features on Voice are inherited by a functional projection X that merges below Voice. The DO must be assigned case; X assigns it [ACC], bundled with [$-$ TOP, $-$ FOC] features, in situ. This feature bundle is spelled out as *-(l)ul*, following the VIs given in section 3.3.2.

(212) Discourse-neutral ACC-marked DO



Evidence for XP comes from discourse-driven object shift (OS) behavior in Korean (Lee, 2003). For example, while a discourse-neutral DO generally follows the IO in Korean as shown in (213a), a discourse-sensitive DO can undergo OS over the IO, which induces a focus interpretation as in (213b). I assume that this OS position is Spec,XP.

- (213) a. Chelswu-ka ai-hanthey **sakwa twu kay-lul** cwu-ess-ta.
 Chelswu-NOM child-DAT apple two CLF-ACC give-PST-DECL
 ‘Chelswu gave the two apples to the child.’
- b. Chelswu-ka **sakwa twu kay-lul** ai-hanthey t_i cwu-ess-ta.
 Chelswu-NOM apple two CLF-ACC child-DAT give-PST-DECL
 ‘Chelswu gave [the two apples]_F to the child.’

While some have proposed low topic and focus positions situated between TP and VoiceP (e.g., Jayaseelan, 2001; Belletti, 2004), there is evidence that focused and topicalized DOs remain within VoiceP in Korean. Lee (2005) reports the unavailability of an inverse scope reading between a subject bearing a quantifier and a DO bearing *-man* ‘only.’ Recall that *-man* is an agreement marker assigned from the actual scope-bearing head Only. In (214), note that the inverse scope reading does not hold even when the object undergoes scrambling

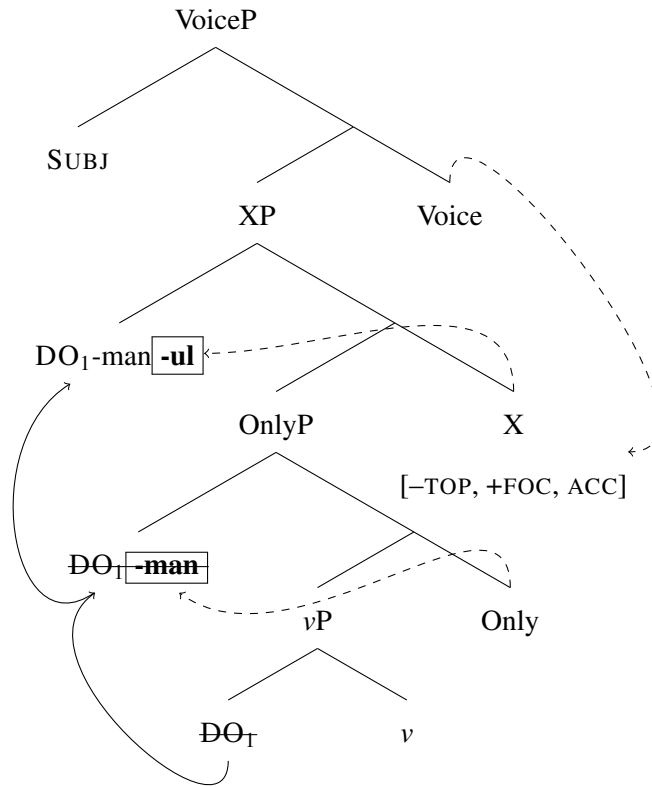
to the initial position of the sentence. The universal quantifier takes scope over exhaustive focus, but not vice versa, supporting the idea that the head *Only* of *OnlyP* remains low, below the first merge position of the EA.

- (214) a. **Motun**-salam-i John-**man**-ul salanghanta.
 every-person-NOM John-only-ACC love
 (i) Everyone loves John and no one else. ($\forall > \textit{only}$)
 (ii) *John is the only one whom everyone loves. ($*\textit{only} > \forall$)
- b. John-**man**-ul **motun**-salam-i salanghanta.
 John-only-ACC every-person-NOM love
 (i) Everyone loves John and no one else. ($\forall > \textit{only}$)
 (ii) *John is the only one whom everyone loves. ($*\textit{only} > \forall$)
- (Lee 2005:170)

Notice the relative ordering of *-man* ‘only’ and ACC in the above examples: just like NOM, ACC is ordered strictly after *-man*. Assuming a strong correlation between morpheme order and syntactic projections à la the Mirror Principle, I posit that ACC must be assigned after *-man* attaches (Koopman, 2005; Lee, 2005).

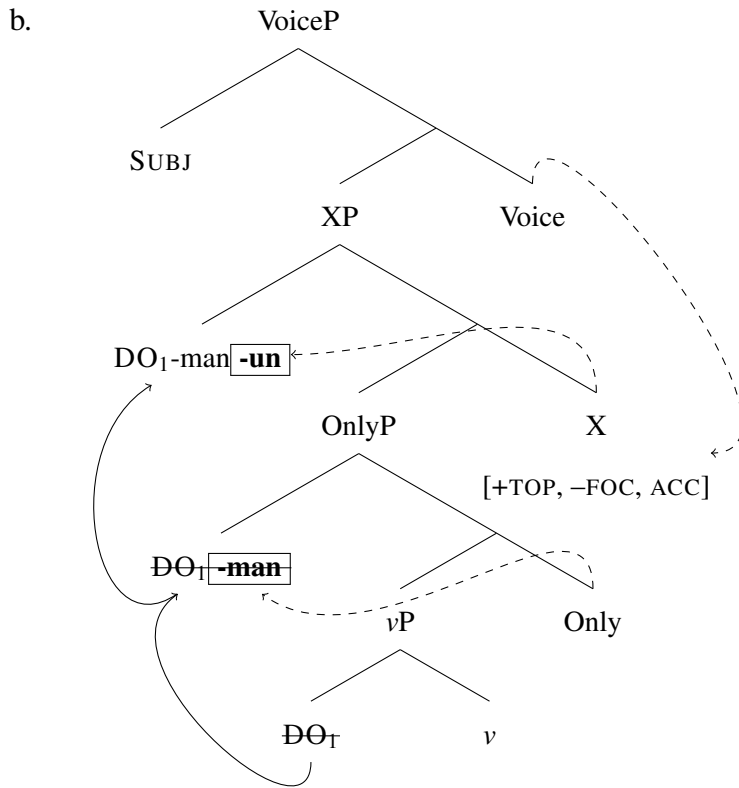
A derivation for a focused ACC-marked DO is given in (215). X inherits a bundled set of [ACC] case and [–TOP, +FOC] discourse features from Voice. I assume that discourse-salient features bear an EPP feature, which triggers movement of the DO (Chomsky, 2001) and that *OnlyP* for objects sits between VoiceP and *vP* (Lee, 2005). Focused DOs can therefore move through Spec,*OnlyP* on their way up to Spec,XP, where they are case and discourse-marked.

(215) Focused ACC-marked DO with *-man* ‘only’



We have seen that $[-TOP]$ nominals are syncretic regardless of whether they are $[\pm FOC]$; that is, discourse-neutral and focused ACC objects would both be marked $-(l)ul$. $[+TOP]$ nominals, by contrast, would be realized with $-(n)un$. (216) shows a relevant example and its derivation.

- (216) a. Mina-ka sakwa-man-un mek-ess-ta.
 Mina-NOM apple-only-TOP eat-PST-DECL
 ‘As for the apple only, Mina ate it.’



3.4.2.2 ACC stacking

In addition to appearing on DOs, ACC may be stacked on IOs already marked with (HON.)DAT, as shown in (217). Like NOM stacking on subjects, ACC stacking on IOs induces a discourse-salient interpretation (Yoon, 1996; Schütze, 2001a).

- (217) a. Kim-i ai-**hanthey-man-ul** senmwul-ul cwu-ess-ta.
 Kim-NOM child-DAT-only-ACC present-ACC give-PST-DECL
 ‘Kim gave only the child a present.’
- b. Kim-i ai-**hanthey-nun** senmwul-ul cwu-ess-ta.
 Kim-NOM child-DAT-TOP present-ACC give-PST-DECL
 ‘As for the child, Kim gave him/her a present.’
- c. Kim-i sensayngnim-**kkey-man-ul** senmwul-ul tuli-ess-ta.
 Kim-NOM teacher-HON.DAT-only-ACC present-ACC give.HON-PST-DECL
 ‘Kim gave only the teacher a present.’

- d. Kim-i sensayngnim-**kkey-nun** senmwul-ul tuli-ess-ta.
 Kim-NOM teacher-HON.DAT-TOP present-ACC give.HON-PST-DECL
 ‘As for the teacher, Kim gave him/her a present.’

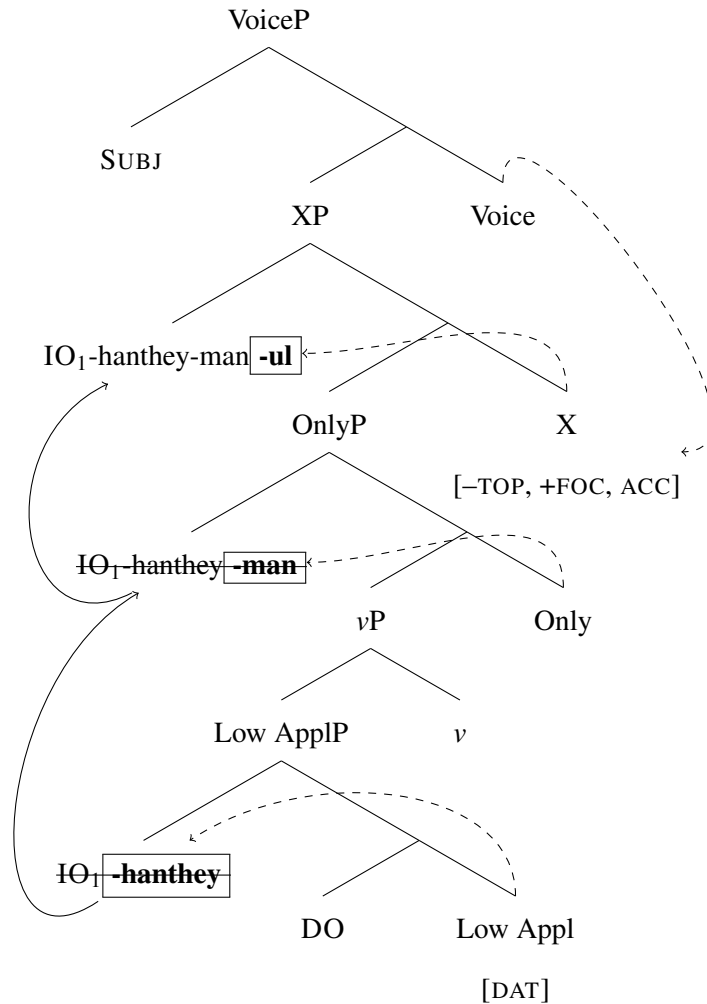
The scope pattern observed in (214) can be replicated for a quantifier-bearing subject and a *-man*-bearing IO in ditransitive constructions. (218) once again suggests that OnlyP can sit between VoiceP and *v*P.

- (218) a. **Motun**-salam-i John-hanthey-**man**-ul chayk-ul cwu-ess-ta.
 every-person-NOM John-DAT-only-ACC book-ACC give-PST-DECL
 (i) Everyone gave a book to John and no one else. (∀ > *only*)
 (ii) *John is the only one whom everyone gave a book to. (**only* > ∀)
- b. John-hanthey-**man**-ul **motun**-salam-i chayk-ul cwu-ess-ta.
 John-DAT-only-ACC every-person-NOM book-ACC give-PST-DECL
 (i) Everyone gave a book to John and no one else. (∀ > *only*)
 (ii) *John is the only one whom everyone gave a book to. (**only* > ∀)

I propose that the stacked IOs are first assigned (HON.)DAT case from Appl and they move to a higher position to receive ACC. This is shown in (219) for a focused IO. The IO is first assigned an inner DAT case marker, in Spec,Low Appl. The DAT-marked IO can then move through Spec,OnlyP on its way up to Spec,XP, where it collects an outer ACC marker associated with focus.¹³

¹³I assume that ACC on a discourse-neutral DO is assigned in situ, as in (212). If the DO is discourse-salient, then it undergoes OS to an additional specifier of XP (see also Schütze 2001a).

(219) Focused ACC-stacked IO with *-man* ‘only’



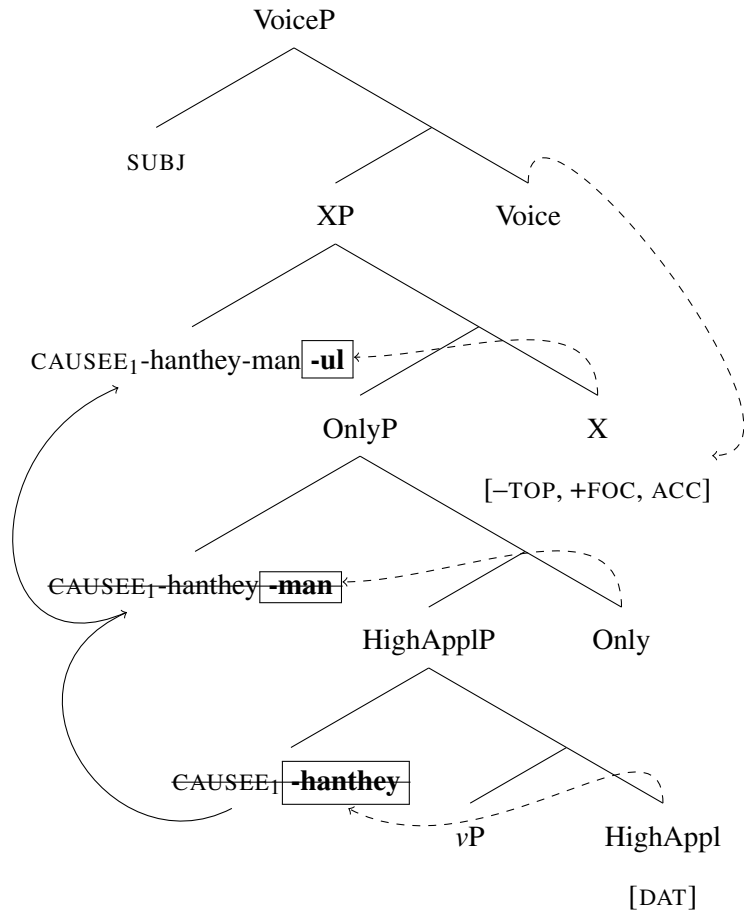
To my knowledge, the discussion of causative constructions has been absent from any previous work on case and discourse marker stacking in Korean. However, just like ditransitive IOs, a (HON.)DAT-marked Causee of a causative can undergo stacking.

- (220) a. Mina-ka ai-hantey-man-ul chayso-lul mek-i-ess-ta.
 Mina-NOM child-DAT-only-ACC vegetable-ACC eat-CAUS-PST-DECL
 ‘Mina made only the child eat vegetables.’
- b. Mina-ka ai-hantey-nun chayso-lul mek-i-ess-ta.
 Mina-NOM child-DAT-TOP vegetable-ACC eat-CAUS-PST-DECL
 ‘As for the child, Mina made him/her eat vegetables.’

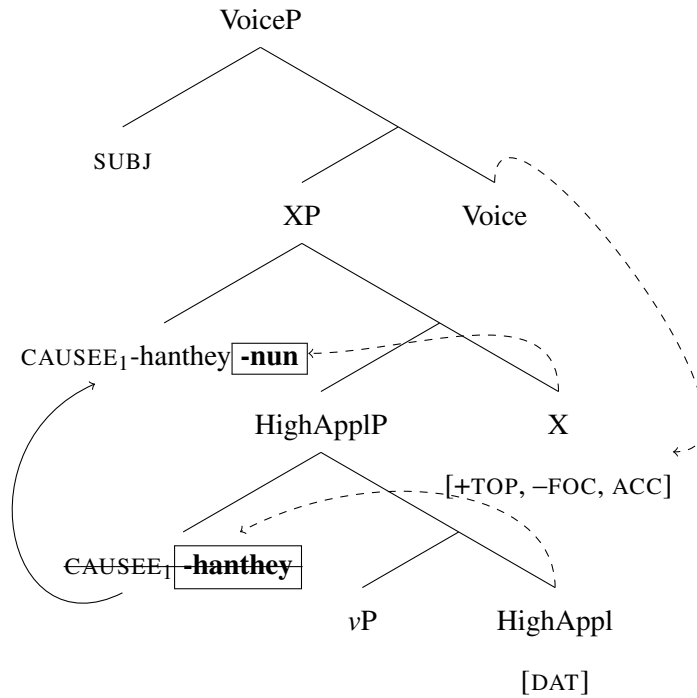
- c. Mina-ka halmeni-**kkey-man-ul** chayso-lul
 Mina-NOM grandmother-HON.DAT-only-ACC vegetable-ACC
 mek-i-ess-ta.
 eat-CAUS-PST-DECL
 ‘Mina made only grandmother eat vegetables.’
- d. Mina-ka halmeni-**kkey-un** chayso-lul mek-i-ess-ta.
 Mina-NOM grandmother-HON.DAT-TOP vegetable-ACC eat-CAUS-PST-DECL
 ‘As for grandmother, Mina made her eat vegetables.’

Recall that Causees are introduced by a HighAppl head merged above vP (see Chapter 2).
 The derivations for an outer marker-stacked Causee proceed as in (221) and (222).

(221) Focused ACC-marked honorified Causee with *-man* ‘only’ in (220a)



(222) TOP-marked non-honorified Causee with *-man* ‘only’ in (220b)



Overall, stacking on subjects and objects receives parallel derivations under the current analysis. There are two discourse-structural case domains in Korean; outer markers can originate in CP, associated with NOM-stacking, or VoiceP, associated with ACC-stacking.

In summary, my proposal captures both the syntactic and morphological properties of Korean case stacking. The approach allows the order of Korean nominal markers to be derived in the syntax without appeal to an independent morphological template.

3.5 Summary

I have argued that the stacking of nominal markers in Korean can be best understood if we embrace the discourse-configurational nature of the language. While the inner marker in nominal stacking is solely a reflex of case assigned from within VoiceP, the outer marker

spells out a combination of case and discourse features assigned at the TP level. My approach explains why stacked nominals have either a topic or focus interpretation, and why structural case and discourse marking share the same slot in the nominal template. I also argued that HON.NOM is assigned within VoiceP, which accounts for its distribution as an inner marker rather than an outer marker. By assuming that case and binary discourse features [\pm TOP] and [\pm FOC], which are inherited by T from C, are assigned and spelled out as a bundle, I am able to capture the pattern of syncretism exhibited by the outer markers. I have thus shown that adopting a combination of independently motivated syntactic operations and basic assumptions about morphological underspecification can capture the Korean nominal template, obviating the need for an independent morphological component.

The conclusions about case and discourse marking will, I hope, offer insight into related phenomena in Korean and other languages showing discourse effects when case assignment is involved in the derivation. I suggest two lines of further research in Korean here. The first concerns the distribution of ACC. Korean allows multiple ACC constructions (MACs), in which both the IO and DO of a ditransitive surface with ACC, as shown in (223). Korean also has exceptional case marking (ECM) constructions, where the subject of an embedded clause is marked ACC, as in (224).

(223) Mary-ka John-**ul** chayk-**ul** cwu-ess-ta.
 Mary-NOM John-ACC book-ACC give-PST-DECL
 ‘Mary gave John a book.’

(224) Mary-ka John-**ul** yengli-ha-tako mit-nun-ta.
 Mary-NOM John-ACC smart-do-C believe-PRES-DECL
 ‘Mary believes John to be smart.’

Levin (2017) suggests that MACs are actually case-stacking configurations in which the IO gets assigned both DAT and ACC. The two case markers then undergo optional deletion rules:

the inner DAT is deleted in MACs, the outer ACC is deleted to produce standard DAT-marked IOs, or both markers are retained to produce case stacking. As my approach does not invoke deletion, my stance is that DAT does not need to be assigned in MACs.¹⁴ Extending this perspective to ECM, I posit that the ECM subject only receives ACC from the matrix Voice head and no case from within the embedded clause. Recall that the predicates compatible with ECM in Korean are stative, unaccusative, and passive (see Chapter 2 for a more elaborated discussion on this topic).

¹⁴See footnote 10 in Chapter 2.

CHAPTER 4

Addressees as applied arguments

It is often assumed that all arguments undergo external merge (EM) inside the thematic domain. Based on this standard assumption, applied arguments are introduced inside VoiceP. This chapter provides cross-linguistic evidence suggesting that not all applied arguments are introduced in this fashion. It shows that discourse participants are, in fact, applied arguments introduced in the left periphery. We collect evidence from Meadow Mari (Uralic), southern dialects of Basque (Isolate), Galician (Romance), Lebanese Arabic (Semitic), and Magahi (eastern Indo-Aryan). The phenomena involve control constructions, case assignment, clitic realizations, honorific mismatches, and clause embedding. A theoretical implication of this chapter is to show that an argument-introducing head can be realized in CP. Hence, A-properties can be observed in what is often considered to be an A'-domain. This chapter also calls for a re-conceptualization of θ -roles. The semantic-role (σ -role) that a nominal argument bears is largely determined by the syntactic context in which the argument is introduced.

4.1 Introduction

The following questions are addressed in this chapter: (i) Can arguments be introduced in the left periphery? (ii) Can the speech act projection (e.g., SAP Haegeman & Hill 2013, cP Portner et al. 2019, and AddrP Miyagawa 2022) in the left periphery be reduced to a projection that already exists elsewhere in the grammar? I argue that the discourse participant, Addressee, is a syntactic argument introduced in CP. I highlight that the Addressee is not an argument of the main predicate, but rather an argument of an entire proposition or the like (see Akkuş & Hill 2021, among others). Hence, the Addressee does not receive a θ -role from the thematic domain, but rather a σ -role that is determined by the syntactic relationship established between the Addressee and the CP. Under this view, θ -roles are merely a subset of a broader category: σ -roles. In addition to High and Low Appl(licative)s (Pylkkänen, 2008), there seems to be another type of Appl that sits in the left periphery (see also Rivero 2009; Tsai 2018). Under the current proposal, the Addressee is introduced by Appl in CP. A broader implication of this chapter is that A-properties can be observed in what is often assumed to be an A'-domain (i.e., the left periphery). Specifically, I argue that the speech act domain can host A-properties which adds weight to the view that CPs host both A and A'-properties (see Obata & Epstein 2011; van Urk & Richards 2015; Lohninger et al. 2022, among others).

Drawing evidence from various languages, I show that Addressees can participate in control, receive case, behave like thematic clitics, and reside in embedded contexts. Parallels can be drawn between the speech act domain and the thematic domain based on the idea that i^* (Wood & Marantz 2017) introduces an argument in both domains. Under this view, additional labels for the head that introduces the Addressee need not be assumed (see also Catasso 2023):

$$(225) \left\{ \begin{array}{l} \text{SA of SAP (Haegeman \& Hill 2013)} \\ \text{c of cP (Portner et al. 2019)} \\ \text{Addr of AddrP (Miyagawa 2022)} \end{array} \right\} \leftrightarrow i^* \text{ (Wood \& Marantz 2017)}$$

The layout of this chapter is as follows: Section 4.2 summarizes the previous analyses on discourse participants. Section 4.3 provides evidence from control constructions in Meadow Mari, suggesting that an overt Addressee can control PRO and be case-marked. Section 4.4 draws parallels between thematic and allocutive clitics in southern dialects of Basque, Galician, and Lebanese Arabic. Section 4.5 deals with honorific mismatches observed in Magahi suggesting that Addressees can be represented in the matrix and embedded contexts. Section 4.6 discusses the introduction of arguments other than the Addressee in the left periphery. Section 4.7 addresses the re-conceptualization of θ -roles and how it accounts for the argument-introduction in the left periphery. Section 4.8 concludes.

4.2 Background

According to Ross' (1970) Performative analysis, syntactic representations make reference to discourse participants (i.e., the speaker and the addressee). More specifically, Ross (1970) argues that every sentence contains unpronounced Speaker and Addressee arguments along with an unpronounced predicate above the actual propositional content of a given sentence, carrying a truth value. A truth value can be assigned to (226a), for instance. (226a) is true if it is raining at the time of the utterance, or it can be false if it is not. Under Ross' analysis, (226a) is, in fact, (226b), where the part in parentheses is phonologically null but syntactically present.

- (226) a. It is raining.
b. (**I declare to you**) it is raining.

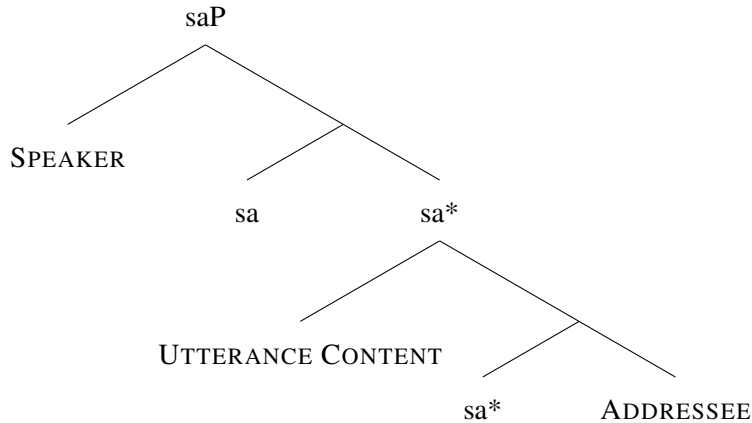
The nominal arguments introduced in the superordinate structure in (226b) are 1st person and 2nd person pronouns. They reflect the speaker and the addressee of the conversation. While Ross' idea of representing the speaker and the addressee in syntax has been picked up by a line of recent literature, positing an unpronounced performative predicate has received major criticisms (see Speas & Tenny 2003, Haegeman & Hill 2013, Miyagawa 2017, Miyagawa 2022, among others). One issue with (226b) is that it is not subject to a truth-value evaluation. Instead, (226b) is a performative expression, which lacks a truth value. However, we know from (226a) that a truth value is assigned when *I declare you* is not spelled out. Hence, Ross' Performative analysis does not seem to adequately capture what is going on in (226). Applying Ross' proposal to Korean gives rise to more challenges. For one, assimilating the Addressee with an IO raises a question related to the politeness marker *yo* (see Chapter 2). Note that the Addressee can be associated with *yo* while an IO cannot. If Ross is right to assume that the Addressee is an argument of a predicate just like an IO, it is a mystery why the presence of *yo* is determined by the status of the Addressee and not the IO.

Building on and adjusting Ross' original proposal, Speas & Tenny (2003) argue that the Speaker and the Addressee are represented in the absence of the performative predicate in the superordinate structure. The syntactic projection that hosts the interlocutors is referred to as the Speech Act Phrase. Inside the Speech Act Phrase, the discourse participants, namely the Speaker and the Addressee, are assigned pragmatic-roles (P-roles).¹ Speas & Tenny mention that the Speech Act structure in which the Speaker and the Addressee are realized

¹Speas & Tenny (2003) draw parallels between P-roles and θ -roles (see also Akkuş & Hill 2021).

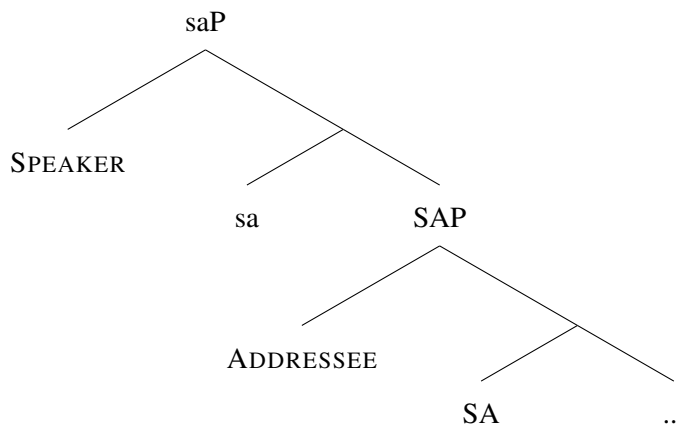
parallels the argument structure in which thematic arguments are introduced. (227) shows the syntactic representation of the speech act domain in declarative sentences.

(227) Tree based on Speas & Tenny (2003)



According to Haegeman & Hill (2013), the speech act domain is, in fact, a complex structure which decomposes into a speaker-sensitive layer (i.e., saP) and an addressee-sensitive layer (i.e., SAP) in the left periphery. According to Haegeman & Hill, saP/SAP resembles Larson’s (1988) vP/VP shell structure (see also Chapter 2).

(228) Tree based on Haegeman & Hill (2013)



Miyagawa (2012, 2017, 2022), Zu (2013, 2018), and Portner et al. (2019) claim that the speech act domain is syntactically restricted. Under their view, the speech act domain is

showcased only in the matrix clause. More specifically, it is recognized as a part of syntax that only appears in the uppermost domain of the matrix clause. Oyharçabal (1993) and Zu (2013) suggest that speech act projections are not embeddable, since allocutive (Addressee-oriented) agreement is only observed in the matrix clause. This leads Zu (2013, 2018), for instance, to conclude that saP/SAP surface only once per sentence.

Portner et al. (2019) discuss a slightly different take on speech act projections. Despite there being a single locus for discourse information within the matrix clause (i.e., cP in their term), they distinguish utterance-oriented politeness markers from content-oriented politeness markers. Unlike the former, the latter can be realized in embedded clauses. Hence, the embeddability of certain discourse-relevant markers is possible under Portner et al. (2019).

Taking a departure from the analyses mentioned above, Alok & Haddican (2022) show evidence from typologically diverse languages (e.g., Galician, Japanese, Magahi, and innovative southern dialects of Basque) and suggest that Addressees can be realized inside embedded clauses. Relatedly, Ritter & Wiltschko (2018, 2019) claim that multiple speech act structures can be represented within a single sentence structure. Ritter & Wiltschko (2018, 2019) explore the possibility of encoding speech act projections within the nominal domain. In light of Chomsky (1970) and Abney (1987), Ritter & Wiltschko (2019) draw parallels between the clausal and the nominal architectures. Under their analysis, CPs and DPs can each host a speech act-sensitive phrase. The nominal speech act structure has the function of naming (via proper names), describing (via common noun phrases), and tracking (via pronouns).

In the following sections, I show that the syntactic distribution of the Addressee in the speech act domain can be captured if we assume that discourse participants are introduced

by an argument-introducing head. Extending Pylkkänen's (2008) typology of ApplPs, I propose that an Addressee can be introduced by Appl (*i**) in the matrix and embedded left peripheries.

4.3 Control constructions

Evidence from control constructions suggests that discourse participants take part in syntax. Based on the empirical data from English and Meadow Mari, we gain support for our proposal from the fact that the Speaker and the Addressee can control PRO, similar to how nominal arguments can do so in general.

Landau (2021) argues that the Speaker is represented in syntax. According to Landau, there are obligatory control (OC) adjuncts in English that adjoin to the left periphery. These OC adjuncts can host the Speaker as the controller of the adjunct-internal PRO.² Consider (229) where Speaker A and Speaker B are the interlocutors of a conversation. In (229b), the sloppy reading suggests that PRO_{B/*A} inside the SA-oriented adverb undergoes obligatory control, which requires a syntactic controller, namely Speaker B. Note that the strict reading is ruled out and for that matter PRO_{B/*A} cannot refer to anyone else but Speaker B. Hence, the discourse participant, Speaker B, has to be represented in syntax as the controller of PRO_{B/*A}.

(229) Speech-act(SA)-oriented adjuncts (Landau 2021:88)

- a. Speaker A: [PRO_A to be honest], there is little to be done.
- b. Speaker B: [**PRO**_{B/*A} to be honest], it doesn't matter.

²See also Woods' (2014) analysis of Speech Act (SA)-oriented adverbs such as *honestly* and *frankly*.

Landau (2021) posits that Speaker B (but the Speaker more broadly construed) occupies the specifier of a Speech Act projection above the SA-oriented adjunct. This ensures the c-command relation necessary for Speaker B (the controller) and PRO_{B/*A}. Consequently, the Speaker participates in OC.

Landau (2021) further argues that PRO inside SA-oriented adjuncts can be controlled by either the Speaker or the Addressee, depending on the clause type. If the clause is declarative, the Speaker is the controller, as shown in (230). If the clause is interrogative, the Addressee is the controller, as in (231).

(230) SA-oriented adjuncts reflecting the speaker's attitude (Landau 2021:85)

- a. [PRO judging from my/*your experience], John would be better off without Mary.
- b. [PRO putting myself/*yourself in his shoes], John should consult a doctor.

(231) SA-oriented adjuncts reflecting the addressee's attitude (Landau 2021:85)

- a. [PRO judging from your/*my experience], would John be better off without Mary?
- b. [PRO putting yourself/*myself in his shoes], should John consult a doctor?

(230) and (231) are by no means matrix clause phenomena since SA-oriented adjuncts in embedded clauses show a similar behavior. (232) illustrates this point.

(232) Embedded SA-oriented adjuncts (Landau 2021:86)

- a. Mary_i told John_j that [PRO_{i/*j} judging from experience], such offers were very rare. (PRO = embedded speaker)
- b. Mary_i asked John_j whether, [PRO_{*i/j} judging from experience], such offers were very rare. (PRO = embedded addressee)

It is worth mentioning that SA-oriented adjuncts are distinct from non-obligatory control (NOC) adjuncts. This is evidenced by the contrast between (232) and (233). PRO in (232) is unambiguous in terms of what it refers to. The controller is strictly determined by the clause type. This, however, is not the case for PRO in (233).

(233) A NOC-adjunct (Landau 2021:86)

Mary_i told John_j that [PRO_{ij} having such experience], this job would be a piece of cake. (PRO = embedded speaker/addressee)

Based on the evidence from English so far, SA-oriented adjuncts are a type of OC. Hence, the Speaker and the Addressee have to be represented as nominal arguments in syntax.³

Empirical evidence that an overt Addressee is introduced by Appl comes from Meadow Mari. Burukina (2020, 2023) provides empirical data suggesting that an argument can undergo EM in an embedded Spec,CP. Burukina (2020, 2023) points out that this argument is an overt Addressee embedded under a speech-act verb, such as *kalasaš* ‘to tell.’ In Burukina’s term, the overt Addressee is described as the ‘intermediary that receives the original message.’ An example is provided in (234), which can be interpreted as ‘Maša told us to tell Petja to come.’ in a more intuitive sense. (234) is referred to as a ‘double dative’ construction since there are two DAT-marked arguments in the derivation.

(234) Maša mə-lan-na [CP **Petja-lan**_i [FinP PRO_i tol-aš] (manən)] kalas-en.
 Maša we-DAT-POSS.1PL [CP Petja-DAT [FinP PRO come-INF] COMP] tell-PST2
 ‘Maša told us for Petja to come.’ (Burukina 2023:92)

One may ask whether it is more appropriate to treat the secondary DAT-marked argument *Petja-lan* in (234) as a Goal rather than an Addressee. One issue with assimilating *Petja-lan* to an internal argument (IA) bearing the Goal θ -role relates to the fact that the primary

³See Spadine (2020) and Akkuş & Hill (2021) for more discussion on overt Speakers in syntax.

DAT-marked argument *mə-lan-na* is already unambiguously a Goal in the double dative construction. Since the only predicate in (234) that can assign a Goal θ -role, namely *kalasaš* ‘to tell,’ has to assign it to *mə-lan-na*, *Petja-lan* should be assigned a semantic role that is not identical to the Goal. Burukina uses the term ‘goal of communication’ interchangeably with ‘addressee.’ For consistency, I use the term Addressee to describe the secondary DAT-marked argument in Meadow Mari. Note that double datives are prohibited in the matrix clause:

- (235) Məj Maša-lan (*tə-lan-ət) vurgem-əm nal-ən-am.
 I Maša-DAT you-DAT-POSS.2SG clothes-ACC buy-PST2-1SG
 ‘I bought clothes for Maša, on her behalf.’ (Burukina 2023:89)

Double datives are also ruled out when the embedded clause hosts a predicate with a finite subjunctive marker, as shown in (236).

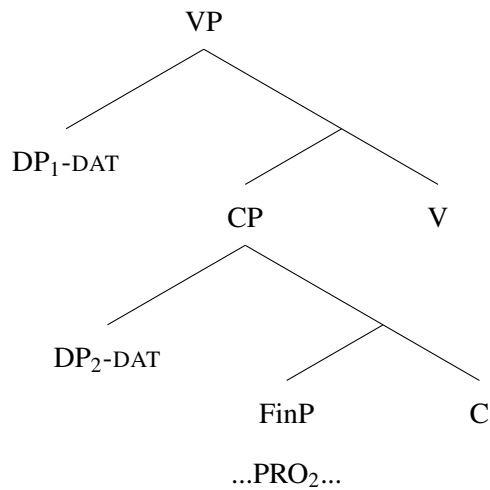
- (236) Maša t-lat [*Petja-lan/Petja tol-žo manən] kalas-en.
 Maša you-DAT.2SG Petja-DAT/Petja come-JUS COMP tell-PST2
 ‘Maša told you that Petja should come.’ (Burukina 2023:100)

The restrictions on the double dative constructions suggest that they are possible only when the secondary DAT-marked argument is realized inside an embedded infinitival clause, as shown in (234). A question arises as to whether the construction involves control or raising. Double dative constructions do not pass the idiom test, which is often used to separate the two. The idiom chunk *šem pərəs koklaštəna kudal ertəš* means ‘we quarreled.’ The literal interpretation of the phrase is ‘the black cat ran between us.’ (237) shows that only the literal meaning survives when the expression is placed under an embedded clause.

- (237) Maša Petja-lan [šem pərəs-lan koklaštə-na kudal ert-aš manən] kalas-əš.
 Maša Petja-DAT black cat-DAT between-POSS.1PL run-INF COMP tell-PST
- ✓ Literal: ‘Maša told Petja to tell the cat to run between us.’
 - ✗ Idiomatic: ‘Maša told Petja for us to quarrel.’ (Burukina 2023:91)

Note that idiomatic interpretations are ruled out in control constructions, but not in raising constructions. Hence, (237) suggests that double datives are a type of control constructions. This implies that PRO has to be the subject of the embedded clause instead of the secondary DAT-marked DP. Burukina (2020, 2023) concludes from these findings that the secondary DAT-marked DP is base generated in embedded Spec,CP. This correctly captures the notion that the secondary DAT-marked DP is the closest argument that c-commands PRO. The derivation is fleshed out in (238).

(238) Tree based on Burukina (2023)



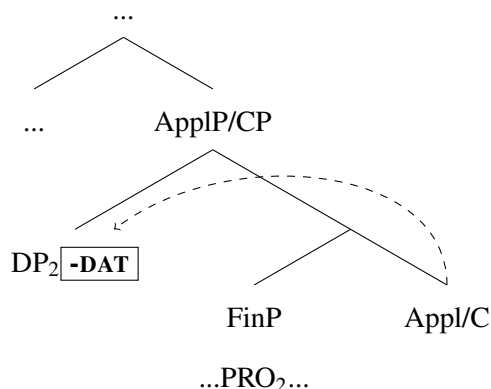
Evidence from Meadow Mari adds weight to the claim that the Addressee is a nominal argument that participates in control. Saito (2022) argues that the empirical facts from Mari can be reanalyzed using Pykkänen’s applicative framework. Under this approach, the secondary DAT-marked DP is introduced in Spec,AppIP (Spec,AddP for Saito 2022), similar to how an applied argument is introduced in syntax. Saito (2022) provides (239) as the derivation for the double dative constructions.

(239) [_{vP} Subj [_{AddP} DP_{DAT1} [[_{AddP} DP_{DAT2} [[Clausal complement ... (C)] $\sqrt{\text{SAY}}$ Add] $\sqrt{\text{TELL}}$ (matrix predicate)] Add] v] (Saito 2022:7)

Saito (2022) assumes that the heads Add and $\sqrt{\text{SAY}}$ in (239) undergo fusion in PF (Halle & Marantz 1993) in order to spell out *manən*. C is assumed to be phonologically null under this approach. As an alternative, Saito (2022) mentions that C also undergoes fusion and spells out *manən*. My take on the issue relates to this alternative view. I posit that the bundling of Appl and C yields *manən* (see section 4.5 for more discussion on bundling and the embeddability of Addressees).

Before moving on, I highlight the fact that the embedded overt Addressee in double dative constructions is always DAT-marked. One of the most notable properties of DP arguments is their ability to receive case. Based on this, a prediction can be established: If an Addressee is a DP, it should be eligible for case assignment. I show that this prediction is borne out. The DAT-marked Addressee in Meadow Mari undergoes EM in embedded Spec,CP. Burukina (2023) argues that DAT can be assigned to the Addressee from C. If we follow Saito (2022) in that a flavor of Appl introduces the overt Addressee in Meadow Mari, it is plausible to assume that Appl assigns DAT to the Addressee. In fact, this is desirable, since it has been reported that case (often inherent case) is assigned to an applied argument by Appl (see Cuervo 2003; van der Wal 2017; Holmberg et al. 2019; Wood 2023, among others). Note, for instance, that DAT is associated with Goals and Beneficiaries. Here, we observe another property shared between Addressees and applied arguments, which can be accounted for if Appl introduces *both* types of nominals.

(240) ApplP-based structure for the DAT-assigned Addressee in embedded CP



Summing up, overt Addressees in Meadow Mari participate in control and case assignment. I have argued that the head that hosts the Addressee is a flavor of Appl which is responsible for assigning DAT (Cuervo, 2003).⁴ This provides support that the Addressee behaves like applied arguments. Here, I mainly wish to emphasize that Appl can be merged in both the thematic domain and the speech act domain. Hence, argument introduction and case assignment are possible in both domains.

4.4 Thematic & allocutive markers

2nd person thematic clitics and the Addressee-denoting allocutive clitics pattern together in innovative southern dialects of Basque and Galician.⁵ For one, the clitics look alike in terms of their phonological form. If we assume anti-homophony, which is a plausible and even

⁴In connection with this idea, Jim Wood (p.c.) points out that the Icelandic *oj* is the English counterpart of *eww*, indicating something gross. *Oj* looks like an applicative since it can introduce a dative 2nd person pronoun. Note that the pronoun is DAT-marked:

- (1) *Oj* *θér!*
 Eww you.DAT
 ‘Eww you!’

⁵Allocutive markers are different from ethical datives in the sense that the Addressee does not need to receive an affected or experiencer-associated reading (see Oyharçabal 1993 and Haddican 2018).

a desirable thing to do for the sake of economy, the difference between the thematic and allocutive clitics cannot be lexically specified. They would be the same clitic in syntax. The semantic differences between the two would be attributed to *where* they merge in syntax. Based on this view, I argue that the 2nd person thematic clitics and the allocutive clitics are associated with the same kind of argument-introducer (e.g., Appl). Hence, the syntactic surroundings of this head disambiguate whether the clitic at issue is thematic (below TP) or allocutive (above TP). Assuming that Appl assigns DAT (Cuervo 2003), I posit that allocutive clitics are associated with Appl. Further evidence supporting this view comes from Lebanese Arabic. Lebanese Arabic Addressee-denoting ‘attitude datives’ are DAT-marked (Haddad 2013, 2014). Once again, parallels can be drawn between Addressees and applied arguments with respect to case.⁶

In southern dialects of Basque, the thematic clitics and the allocutive clitics show common properties. The 2nd person familiar pronoun *hi* in (241a) and the covert familiar Addressee DP in (241b) are both associated with the clitic *-a/na* depending on their gender feature: *-a* is associated with the 2nd person familiar masculine feature whereas *-na* is associated with the 2nd person familiar feminine feature.

(241) a. Hi-ri ema-n di-**a/na**-t.

2SG.FAM-DAT give-PRF AUX-2SG.FAM.M/2SG.FAM.F-1SG.ERG

‘I have given it to you.’

(Haddican & Etxeberria 2022:550)

⁶Even if a language does not recycle a 2nd person thematic clitic for its allocutive clitic, this does not speak in favor of one approach over the other. After all, the nominal arguments introduced by Appl do not need to be phonologically identical. In fact, they are different in many cases. However, it is interesting when a language does recycle the thematic clitic to refer to its allocutive counterpart. This suggests that the mechanism used to introduce the former applies to the latter.

b. Jon ikus-i d-i-**a/na**-t.

Jon see-PRF EXPL-ROOT-2SG.FAM.M/2SG.FAM.F-1SG.ERG

‘I’ve seen John.’

(Haddican & Etxeberria 2022:549)

Moreover, the thematic and allocutive clitics undergo the same type of allomorphy (-*alna*~*-k/n*). When the clitics are word-final, they are both realized as *-k/n*: *-k* is associated with the 2nd person familiar masculine feature, and *-n* is associated with the 2nd person familiar feminine feature. (242) illustrates these points.⁷

(242) a. Hi-k egi-n du-**k/n**.

2SG.FAM-ERG do-PRF AUX-2SG.FAM.M/2SG.FAM.F

‘You have done it.’

(Haddican & Etxeberria 2022:550)

b. Jon etorr-i d-u-**k/n**.

Jon come-PRF EXPL-ROOT-2SG.FAM.M/2SG.FAM.F

‘John has come.’

(Haddican & Etxeberria 2022:549)

The allomorphy rule applies even in contexts where the Addressee is overtly expressed as a vocative, as shown in (243) (# indicates an intonational break). (243) suggests that the association of the Addressee and the allocutive clitic is real.

(243) **Bihotza/laztana/tontoa/motel** # berandu d-u-**k**.

heart/caress/stupid/boy late EXPL-ROOT-2SG.FAM.M

‘Sweetheart/honey/dumbass/dude, it’s late.’

(Haddican & Etxeberria 2022:554)

Based on their empirical data, Haddican & Etxeberria (2022) argue that these clitics have applicative-like properties in that they are associated with argument introduction. This is very much in line with the current proposal.

The thematic and allocutive clitics in Galician work in a similar fashion as the ones in the innovative southern dialects of Basque (see Alok & Haddican 2022). In (244), *cha* is a

⁷In (242a), the subject 2nd person pronoun is assigned ERG. If the thematic clitic is associated with Voice (*i**), the realization of ERG (instead of DAT) makes sense.

portmanteau denoting 2nd person singular familiar dative and 3rd person singular accusative feminine.

- (244) Merquei-**cha**
 bought.1SG-2SG.FAM.DAT.3SG.ACC.F
 ‘I bought it.’ / ‘I bought you it.’ (Alok & Haddican 2022:17)

As shown in (245), the portmanteau *cha* can be broken up into the following contents: (i) *che* which denotes 2nd person singular familiar dative and (ii) *a* which denotes 3rd person singular accusative feminine. For present purposes, we focus on *che*.

- (245) Decomposing the portmanteau *cha* (Alok & Haddican 2022:17)

cha	→	che	+ a
2SG.FAM.DAT.3SG.ACC.F		2SG.FAM.DAT	3SG.ACC.F

When the allocutive clitics are used in a narrative, they involve a request for solidarity/empathy (Haddican 2019; Huidobro 2022). Crucially, the thematic and the allocutive clitics share the same form *che*.⁸ The allocutive use of *che* is showcased in (246).

- (246) Creo que **che** está tolo.
 1SG.think that 2SG.DAT.FAM COP.3SG crazy
 ‘I think that he/she/it is crazy.’ (Haddican 2019:383)

One other important aspect of *che* is that it is case-marked. Note that *che* in (246) is associated with DAT. This is in accordance with the analysis that allocutive clitics are introduced by Appl.

In Lebanese Arabic, ‘attitude dative’ markers are co-referential with the speaker or the addressee (Haddad 2013, 2014). Haddad (2014) shows that Lebanese Arabic allocutive forms mark evaluative perspective, “anchored to the speaker’s (and hearer’s) values, beliefs

⁸I emphasize that the languages provided in this chapter are not exhaustive. More languages show similar patterns between their thematic and allocutive clitics.

and what she considers culturally acceptable or unacceptable” (p.79). In (247), the attitude dative *lak* is used. Here, *lak* is not the Beneficiary. Instead, *zǎwz-a*: ‘her husband’ is. This is confirmed by the fact that the attitude dative does not contribute to the truth condition of the proposition.

- (247) Layla štare**t-lak** hidiyye bitzǎnnin la-zǎwz-a:
 Layla bought-you.DAT gift stunning for-husband-her
 ‘Layla bought [you] a great gift for her husband.’ (Haddad 2014:87)

Note that the addressee-denoting *lak* is DAT-marked in (247). As expected, replacing the DAT-marked *lak* with its ACC counterpart *ak* does not work. (248) demonstrates this point.

- (248) *Layla štare**-ak** hidiyye bitzǎnnin la-zǎwz-a:
 Layla bought-you.ACC gift stunning for-husband-her
 Intended: ‘Layla bought [you] a great gift for her husband.’ (Marianne Azar p.c.)

Based on the facts mentioned above, a pattern emerges: If an allocutive marker bears case, it is DAT (e.g., Galician *che* and Lebanese Arabic *lak*). In section 4.3, we have also seen that the embedded Addressee in Meadow Mari receives DAT. This provides further support that Addressees in the left periphery behave like applied arguments. In Chapter 2, I have established that vocative Addressees in Korean are introduced by an argument-introducing head (*i**) in the left periphery.⁹ Based on all of these findings, parallels can be drawn with respect to how Addressees figure into the syntax cross-linguistically. In recent years, the head that introduces the Addressee has received various names: SA of SAP under Haegeman & Hill (2013), c of cP under Portner et al. (2019), Addr of AddrP under Miyagawa (2022). By adopting a head that is already present in the thematic domain, we maintain parsimony.

(249) is repeated from (225):

⁹A vocative Addressee receives VOC instead of DAT in Korean. Perhaps, VOC and DAT are allomorphs conditioned by the features on the nominal argument, as well as the syntactic environment in which *i** is realized in the derivation.

$$(249) \left\{ \begin{array}{l} \text{SA of SAP (Haegeman \& Hill 2013)} \\ \text{c of cP (Portner et al. 2019)} \\ \text{Addr of AddrP (Miyagawa 2022)} \end{array} \right\} \leftrightarrow i^* \text{ (Wood \& Marantz 2017)}$$

In the following subsection, we dive deeper into the syntactic distribution of the Addressees and how it is regulated. This will provide insights into the embeddability of the Addressees and its cross-linguistic variations.

4.5 Embeddability & mismatches

Applied arguments can be realized inside embedded clauses. For instance, Causees and Beneficiaries can surface in finite and non-finite embedded contexts:

- (250) a. John said that Mary made **the child** eat the broccoli.
 b. John₁ promised [PRO₁ to make **the child** eat the broccoli].
- (251) a. Bill said that Jane baked a cake for **the students**.
 b. Bill₁ promised [PRO₁ to bake a cake for **the students**].

If Addressees behave like applied arguments, they should be able to surface in embedded clauses. This prediction is empirically borne out, as we will soon see. It should be mentioned, however, that not all languages allow the inclusion of the Addressee in embedded contexts. Korean, for instance, is a language with this restriction (Portner et al. 2019). In order to engage with this issue, I adopt a bundling mechanism advanced by Lohninger et al. (2022). Overall, I assume that the interaction between an argument-introducing head and embedded C largely determines the availability of the Addressee in embedded clauses.

4.5.1 Addressees in embedded clauses

Meadow Mari, innovative southern dialects of Basque, and Galician allow an overt Addressee inside embedded clauses. As we have already discussed, the DAT-marked overt Addressee in Meadow Mari is externally merged in embedded Spec,CP. This is shown in (252), repeated from (234).

- (252) Maša mə-lan-na [CP **Petja-lan**_i [_{FinP} PRO_i tol-aš] manən] kalas-en.
Maša we-DAT-POSS.1PL [CP Petja-DAT [_{FinP} PRO come-INF] COMP] tell-PST2
'Maša told us for Petja to come.' (Burukina 2023:92)

In the innovative southern dialects of Basque, the vocative DP and its corresponding allocutive clitic can appear together inside an embedded context. In (253), the vocative DP *bihotza* 'sweetheart' is a part of the embedded clause. Additionally, the allocutive clitic is associated with the expletive, which also belongs to the embedded clause. The example is taken from Haddican & Etxeberria (2022:555):

- (253) Ez zakia-gu [ea bihar, **bihotza**, euria egin-go d-i-k-en].
NEG know-1PL COMP tomorrow heart rain do-FUT EXPL-ROOT-2SG.FAM.M-C
'We don't know if tomorrow, sweetheart, it will rain.'

Recall that the solidarity/empathy-associated allocutive clitic in Galician is phonologically realized as *che*. *Che* can be positioned after the complementizer, which is a part of the embedded clause. This is exemplified in (254), which is repeated from (246).

- (254) Creo [que **che** está tolo].
1SG.think that 2SG.DAT.FAM COP.3SG crazy
'I think that he/she/it is crazy.' (Haddican 2019:383)

Attitude datives in Lebanese Arabic can be realized in embedded clauses as well. (255) illustrates this point.

- (255) Smiʕit [ʔinn-ak btiḥki:**-lak** xams liyya:t].
 I.heard that-you speak-you.DAT five languages
 ‘I heard that you speak [you] five languages.’ (Haddad 2014:87)

Magahi is another language that allows Addressees in embedded clauses (Alok & Baker 2018; Alok & Haddican 2022). Alok & Baker (2018) report that Magahi displays an honorific mismatch between the matrix and the embedded clauses. This mismatch is highlighted by the variation in allocutive agreement markers associated with the matrix and the embedded predicates. In (256), the speaker is talking to an addressee who is equal in social status. In this context, a non-honorific allocutive marker is realized in the matrix clause, but an honorific allocutive marker is realized in the embedded clause. According to Alok & Baker (2018), the non-honorific allocutive marker is associated with the addressee of the conversation, whereas the honorific allocutive marker is associated with the embedded Addressee referring to *profesar* ‘the professor,’ who is higher in social status than the speaker.

- (256) Santeeaa profesar saaheb-ke kah-**au** ki Ram apne-ke
 Santee professor HH-DAT told-NH.ALOC that Ram you.HH-ACC
 dekh*l-i-ain* ha-l.
 saw-1.S-HH.AL be-PRF
 ‘Santee told the professor that Ram saw you (professor).’ (Alok & Baker 2018:30)

The honorific mismatch observed in (256) would be difficult to account for if only a single Addressee is assumed in the sentence. This is because an Addressee can be either honored or non-honored, but not both. The honorific mismatch is readily accounted for if multiple Addressees are introduced in the derivation. Alok & Baker (2018) and Alok & Haddican (2022) posit that a covert Addressee DP is present in the embedded left periphery. This is evidenced by the allocutive agreement marker *ain* realized in (256). Alok & Baker (2018) argue that the matrix Goal controls the covert Addressee in embedded CP and that the covert Addressee binds the 2nd person pronoun *apne* ‘you.HH’ in the embedded clause. This type of

analysis provides a syntactic account of indexical shift. Note that the actual addressee of the conversation is represented as the Addressee in the matrix left periphery. In (256), the matrix Addressee is associated with the allocutive agreement marker *au*. Since the two Addressees assumed in the derivation are independent of each other, they may differ with respect to whether or not they are honorified. This captures the honorific mismatch phenomenon in Magahi.

The current analysis, which treats Addressees as applied arguments, accounts for the empirical facts addressed up to this point. This is mainly because applied arguments, including Addressees, can surface more than once when a given sentence hosts multiple clauses.

4.5.2 Bundling of heads

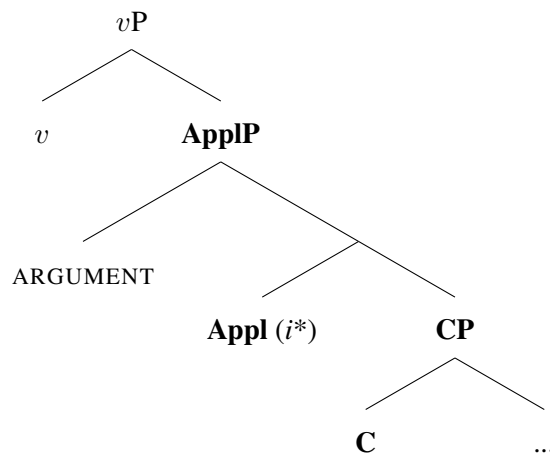
The primary focus so far has been to show that Addressees *can* be represented in embedded contexts. A question arises as to whether *all* languages allow an Addressee in this environment. In this subsection, I discuss why certain languages do not allow the embedding of their Addressees and offer my take on the issue.

Korean allocutive markers can appear in matrix clauses (257a). However, they cannot appear in embedded clauses (257b).

- (257) a. Kim-i sonnim-kkey [senmwul-i iss-ta-ko] malhay-ss-**supni**-ta.
 Kim-NOM guest-HON.DAT [gift-NOM exist-DECL-COMP] say-PST-AL-DECL
 ‘Kim told the guest that there is a gift.’
- b. *Kim-i sonnim-kkey [senmwul-i iss-**supni**-ta-ko] malhay-ss-ta.
 Kim-NOM guest-HON.DAT [gift-NOM exist-AL-DECL-COMP] say-PST-DECL
 Intended: ‘Kim told the guest that there is a gift.’

According to Lohninger et al. (2022), some languages allow an argument-introducing head and C to be bundled together, while other languages do not. Lohninger et al. (2022) argue that when bundling does not take place between an argument-introducer and an embedded C, the argument-introducer and its argument are placed in a higher clause. From a structural perspective, non-bundled Appl resembles Low Appl in that a predicate in the higher clause selects the ApplP as its complement:

(258) Non-bundled Appl and C in the embedded left periphery

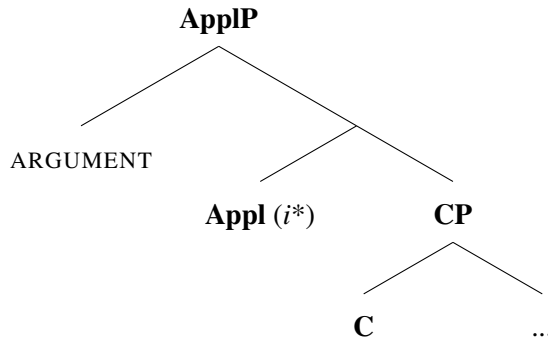


In (258), the non-bundled Low Appl is placed outside the embedded left periphery. The syntactic environment in which the non-bundled Appl is realized suggests that it is Low Appl. Thus, the argument that it introduces is a Goal instead of an Addressee. This is well in line with the empirical observation that Korean allocutive markers do not surface in embedded contexts, as demonstrated in (257b).

When the non-bundled Appl and C are introduced in the matrix left periphery, however, there is no higher predicate that selects the non-bundled ApplP. Hence, Appl, in this case, cannot be assimilated with Low Appl. Configurationally, Low ApplP is the complement of a predicate, whereas the non-bundled Appl in the matrix left periphery is not. (259)

fleshes out the details of how the non-bundled Appl and C are realized in the matrix left periphery.

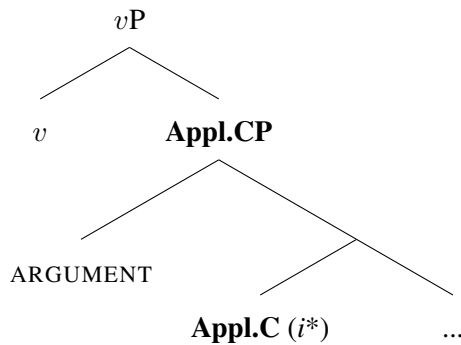
(259) Non-bundled Appl and C in the matrix left periphery



In (259), Appl cannot introduce a thematic argument, since it is placed beyond the thematic domain. A non-thematic argument has to be introduced based on the syntactic context in which Appl is merged in (259). The argument can be an Addressee, which aligns with the fact that Korean allocutive markers are realized in the matrix clause, as in (257a).

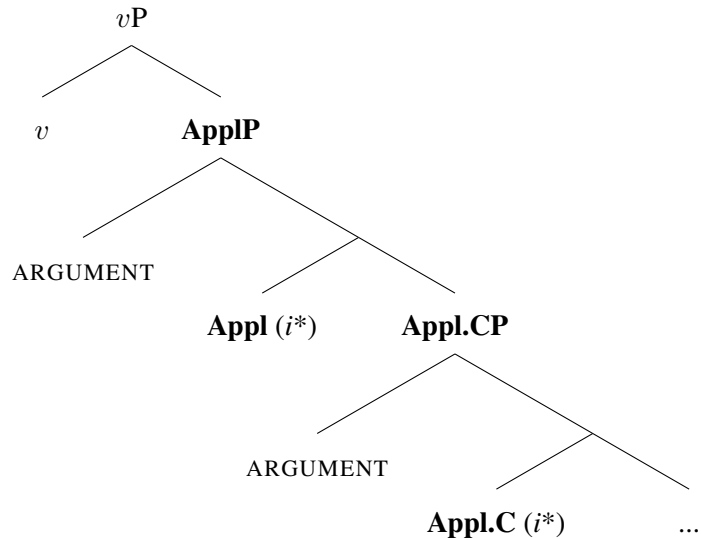
We turn to cases where bundled Appl and C (Appl.C) are introduced in syntax. Let us begin with embedded Appl.C. (260) shows that the argument introduced by Appl.C is a part of embedded CP, consistent with Lohninger et al.'s (2022) take on the issue. Appl.C's surrounding syntax suggests that it introduces an Addressee rather than a Goal. This contrasts with (258), where Appl is realized outside the domain of embedded CP.

(260) Bundled Appl and C (Appl.C) in the embedded left periphery



In cases where the matrix Goal and the embedded Addressee are realized together, Low Appl and Appl.C are both employed in the derivation, as shown in (261).

(261) Low Appl and Appl.C



(261) captures the facts about the double dative constructions in Meadow Mari: The matrix Goal receives DAT from Low Appl, and the embedded Addressee receives DAT from Appl.C. (261) bears resemblance with (240). In fact, (260) and (261) help account for the phenomena involving the embedded allocutive markers observed in southern dialects of Basque, Galician, Lebanese Arabic, and Magahi (see section 4.5.1).¹⁰

Recall that allocutive markers realized in embedded clauses can also appear in the matrix clause. This is not an issue under the bundling-based approach. Suppose that Appl.C enters the derivation in the matrix context. Because Appl.C introduces an argument in the clausal periphery, the argument cannot be a thematic argument. A non-thematic argument, such as the Addressee, on the other hand, can be introduced by Appl.C. This idea holds

¹⁰Alok & Haddican (2022) mention that embedded Addressees in Magahi are introduced in Spec,FinP based on Rizzi's (1997) articulated left periphery. This is mainly because indexical shift in Magahi is only observed for finite clauses, as in (256). Based on the current analysis, embedded Spec,FinP hosts a nominal argument because Appl and Fin undergo bundling.

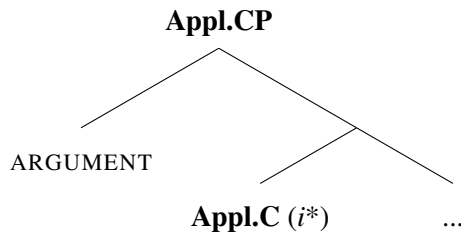
	Embedded C	Matrix C
Non-bundling Appl	GOAL (see (258))	ADDRESSEE (see (259))
Bundling Appl	ADDRESSEE (see (260))	ADDRESSEE (see (262))

Table 4.1: Arguments introduced by (non-)bundling Appl with embedded/matrix C

irrespective of whether the clause hosting Appl.C is embedded or not. (262) schematizes how Appl.C is realized in the matrix clausal periphery.

Table 4.1 summarizes the nominal arguments introduced by (non-)bundled Appl. It also captures the typological variations displayed by the languages discussed so far.

(262) Appl.C in the matrix left periphery



Before moving on, I highlight the following three points: (i) Appl.C cannot be characterized as either High or Low Appl assumed in Pykkänen (2002, 2008). Appl.C also cannot be characterized as Peripheral Appl assumed in Kim (2011a). Drawing a line here seems desirable since an Addressee introduced by Appl.C is not treated on a par with a Beneficiary introduced by High Appl, a Goal introduced by Low Appl, or an Experiencer introduced by Peripheral Appl. Recall that Addressees do not contribute to the truth-conditional (propositional) semantics, whereas thematic arguments (e.g., Beneficiaries, Goals, and Experiencers) do. The distinction comes for free if we posit that the fine-grained semantic contributions of the argument-introducers are determined by the syntactic context which the heads interact with. This brings us back to the discussion on *i** (Wood & Marantz 2017) and its parsimony: It is not a matter of the label put on the head per se, but rather the syntactic configuration in which the head is realized. (ii) The bundling mechanism addressed here finds its prece-

dence in the literature. Bundling has been applied to heads residing in the thematic domain. Pylkkänen (2008), for instance, argues that the heads Voice and Caus undergo bundling in English causatives. This is not the case for Voice and Caus in Japanese lexical causatives. The cross-linguistic variations observed in this part of the grammar can be captured using the bundling mechanism. Hence, nothing substantially new is added to our ‘toolbox.’ We can simply rely on a mechanism that is already posited for a different set of facts. (iii) The idea that a nominal argument can be introduced in CP suggests that the left periphery can host A-properties. This potentially opens up a broader discussion on the mixed A/A’-properties in the left periphery (see Obata & Epstein 2011; van Urk 2015; Lohninger et al. 2022 among others). Addressing the phenomena taken up in this chapter in connection with the interplay between A and A’-properties seems like a potential future topic.

4.6 Non-discourse participant arguments introduced in CP

In this section, I briefly present two analyses in support of the idea that argument-introducers can be decoupled from the thematic domain. I show that nominal arguments other than the Speaker and the Addressee can be introduced in the left periphery. Based on the overall findings, I highlight that the analysis developed in this chapter is applicable and relevant to other aspects of grammar, which adds weight to its theoretical value.

In Slavic languages, including Czech, Polish, Russian, and Slovak, the subject is often NOM-marked, as is usually the case for nominative-accusative languages. The verb shows agreement with the NOM-marked subject, as shown in the Polish example (263) (the gloss M stands for masculine).

- (263) Janek tańczył dobrze.
 Janek.NOM danced.M well
 ‘John danced/was dancing well.’ (Rivero et al. 2010:706)

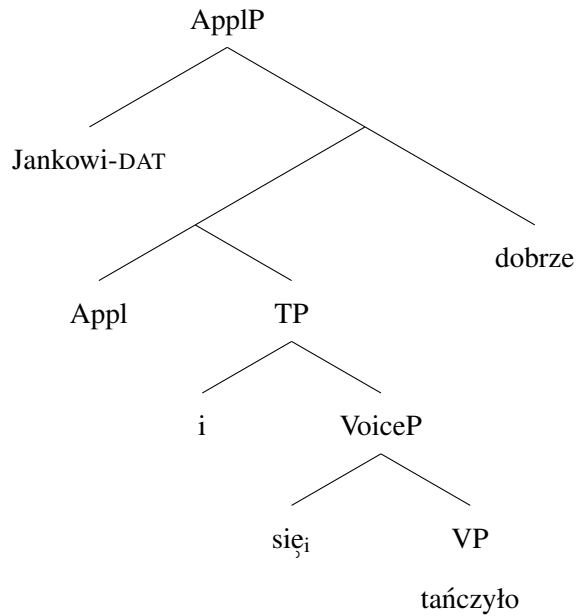
There are cases, however, where a DAT-marked subject is realized together with a reflexive pronoun. In these cases, the NOM-marked subject is absent, and the verb shows default agreement, as in (264) (the gloss N stands for neuter).

(264) Jankowi tańczyło się dobrze.
Janek.DAT danced.N REFL well
'Janek danced, and could not help enjoying it.' (Rivero et al. 2010:706)

(264) bears a unique semantic interpretation. Unlike the well-behaved manner adverb *dobrze* 'well' in (263), its counterpart in (264) does not modify the event, but it modifies the DAT-marked subject. To illustrate, in (263), the action of dancing was good, but, in (264), the action of dancing was good for *Janek*. (264) is valid even if *Janek*'s dance was terrible. What is important is that *Janek* enjoyed the dance. In fact, *Janek* had to have enjoyed it since the adverb is obligatory in (264). For this reason, (264) is referred to as an 'involuntary state' construction (ISC) (Rivero 2009; Rivero et al. 2010).¹¹ Rivero (2009) and Rivero et al. (2010) argue that the DAT-marked subject in ISCs is introduced by an Appl that selects TP as its complement. The fact that the subject in ISCs receives DAT is not coincidental given our discussion on DAT-marked arguments in sections 4.4 and 4.5. In (265), the reflexive pronoun *się* is base-generated inside VoiceP, and the index *i* in TP abstracts over the variable introduced by the reflexive in order to create a property of individuals at the level of TP (see also Benedicto 1995; Heim & Kratzer 1998). The derivation generates a property of individuals predicated of the DAT-marked argument in ApplP. The non-optional manner phrase in ISCs is also associated with this ApplP (see Rivero et al. 2010).

¹¹Rivero et al. (2012) distinguish factual ISCs from desiderative ISCs based on their semantic differences. I do not discuss this topic in detail since the syntactic analyses for the two are essentially the same.

(265) Tree for (264) based on Rivero et al. (2010)



Similar to High ApplP, ApplP dominating TP is optional. Impersonal passive reflexive constructions look like ISCs without the DAT-marked subject and the manner phrase, as shown in (266). The predicate undergoes default agreement, and the impersonal pronoun *się* participates in the derivation. According to Rivero et al. (2010), an impersonal passive reflexive construction is viewed as a structure without ApplP above TP. The pronoun *się* in (266) gives rise to an impersonal interpretation due to the absence of the DAT-marked argument.

(266) Tańczyło się.
 danced.N REFL
 'One/People/Someone danced.'
 (Rivero et al. 2010:707)

Rivero et al. (2012) argues that the syntax of (265) and (266) can be replicated in other Slavic languages. The ISCs in Czech, Russian, and Slovak are provided below:

(267) a. Janovi se pracovalo hezky
 Janovi.DAT REFL worked.N nicely
 'John worked with pleasure.'
 (Rivero & Sheppard 2003:148)

b. Nam xorošo rabotalo -s'.
 we.DAT well worked.N -REFL
 'We worked well.'

c. Dnes sa mi spalo dobre.
 today REFL I.DAT slept.N well
 'I slept well today.'

(Rivero et al. 2012:307)

The list of Slavic languages with ISCs mentioned here is by no means exhaustive. The take-home message is that Appl introduces a DAT-marked argument above TP. The set of facts from Slavic ISCs, therefore, adds weight to the overall analysis advocated in this chapter.

Another set of nominal arguments can be introduced outside of the thematic domain. Some topicalized arguments are not sensitive to island constraints, and they do not preserve idiomatic interpretations (see Lohninger et al. 2022). In Brazilian Portuguese, for instance, a topicalized argument, which appears to be a part of a relative clause (RC), can surface in the embedded left periphery, as in (268).¹² It can also show up as the subject of a higher clause, as shown in (269). The following examples are taken from Martins & Nunes (2010:155).

(268) Parece [que **esses carros** [as pessoas que compraram] se arrependeram].
 seem.3SG that these cars the people who bought REFL repented
 'It seems that people who bought these cars regretted it.'

(269) **Esses carros** parecem [que [as pessoas que compraram] se arrependeram].
 these cars seem.3PL that the people who bought REFL repented
 'It seems that people who bought these cars regretted it.'

Martins & Nunes (2010) argue that *esses carros* 'these cars' in (268) and (269) is base-generated in embedded Spec,TopP. A null object pronoun (*pro*) coreferential with *esses carros* is posited as the IA inside the RC. Under this analysis, the relationship between *esses carros* and *pro* is not subject to island constraints, which accounts for the grammaticality of (268) and (269). Martins & Nunes (2010) argue that *esses carros* in (268) receives a default

¹²In (268), a null expletive pronoun (*pro*_{EXPL}) is assumed in matrix Spec,TP (Martins & Nunes 2010).

Case (see also Schütze 2001b). *Esses carros* in (269), on the other hand, is assigned NOM by the matrix T and raises to Spec,TP.¹³

Testing the availability of idiomatic interpretations is another useful diagnostic for base-generation vs. movement. In addition to its literal meaning, (270) bears an idiomatic interpretation. (271), on the other hand, shows that the idiomatic reading is unavailable when a part of the idiom chunk, namely *a vaca* ‘the cow,’ is topicalized.

(270) *A vaca foi pro brejo.*
the cow went to-the swamp

- ✓ Literal: ‘The cow went to the swamp.’
- ✓ Idiomatic: ‘Things went bad.’

(271) **A vaca**, o João disse que foi pro brejo.
the cow the João said that went to-the swamp

- ✓ Literal: ‘John said that the cow went to the swamp.’
- ✗ Idiomatic: ‘John said that things went bad.’ (Martins & Nunes 2010:146)

A difference between the two examples above boils down to where *a vaca* ‘the cow’ is base-generated in the derivation. In (270), *a vaca* ‘the cow’ undergoes EM in the thematic domain, where the idiomatic interpretation can be established. *A vaca* is introduced outside of the thematic domain in (271), which fails to induce the intended idiomatic reading. (271) maintains its literal meaning by introducing *pro* coreferential with *a vaca* in the thematic domain.

The realization of overt resumptive pronouns also contributes to the current discussion. Idiomatic interpretations are preserved when hyper-raising is at play, as shown in (272).

¹³We have seen that nominal arguments introduced in CP are often DAT-marked. A question arises as to why *esses carros* in (268) and (269) is not assigned DAT. Recall our discussion on the absence of DAT in Korean MACs (see Chapter 2). One may advance an analysis based on a layering derivation (Thoms 2019): a DP-less nominal, call it *nP*, is introduced by an argument-introducer in the left periphery but does not receive DAT because it initially lacks D that hosts case-related features. At a later stage of the derivation, *nP* undergoes external remerge with D, which projects a DP. The DP, namely *esses carros*, is then assigned case.

According to Martins & Nunes (2010), an A-dependency between *a vaca* and its lower copy in the embedded clause is established via movement. Under this view, *a vaca* originates inside the embedded thematic domain, and it participates in the idiomatic interpretation. This is not the case when the lower copy is replaced with a resumptive pronoun, as in (273).¹⁴ In this case, *a vaca* is introduced in embedded Spec,TopP, and thus the A-dependency posited in (272) cannot be established. Consequently, the idiomatic interpretation does not come to life.

- (272) **A vaca** parece que foi pro brejo.
 the cow seems that went to-the swamp
- ✓ Literal: ‘It seems that the cow went to the swamp.’
 - ✓ Idiomatic: ‘It seems that things went bad.’ (Martins & Nunes 2010:146)
- (273) **A vaca** parece que **ela** foi pro brejo.
 the cow seems that it went to-the swamp
- ✓ Literal: ‘It seems that the cow went to the swamp.’
 - ✗ Idiomatic: ‘It seems that things went bad.’ (Martins & Nunes 2010:150)

Based on the empirical evidence from Brazilian Portuguese, the idea that topicalized arguments can be base-generated in the left periphery is attested. Lohninger et al. (2022) refer to these arguments as high topics. Their conclusion about high topics in Brazilian Portuguese corresponds to the structure provided in (260). The overall findings from Brazilian Portuguese are summarized in Table 4.2 (Lohninger et al. 2022). Table 4.2 shows that high topics in Brazilian Portuguese exhibit the following properties: (i) a topic interpretation is present, (ii) island constraints do not arise, (iii) idiomatic interpretations are absent, and (iv) overt resumptive pronouns can be realized.

¹⁴Ferreira (2004, 2009) assumes that finite T in Brazilian Portuguese is ambiguous with respect to its ability to assign Case. Based on this approach, the embedded T in (272) does not assign Case, whereas the embedded T in (273) does. The latter accommodates the resumptive pronoun. Nunes (2007) recasts the ambiguity of T by making use of person and number features, but the overall idea that finite T can be ambiguous remains the same.

High topics in Brazilian Portuguese	
(i) Topic interpretation	✓
(ii) Sensitivity towards island constraints	✗
(iii) Preservation of idiomatic readings	✗
(iv) Association with resumptive pronouns	✓

Table 4.2: Properties of high topics in Brazilian Portuguese (Lohninger et al. 2022:22)

Under the i^* approach, the σ -role of an argument is determined by the syntactic configuration in which the argument is realized. Those introduced outside the thematic domain are no exceptions. In the next section, I address how σ -roles are assigned.

4.7 Theta-roles and non-theta-roles

The proposal put forward in this chapter suggests a new way of conceptualizing θ -roles and σ -roles, more broadly construed. It is commonly believed that nominal arguments are assigned a θ -role according to the Theta-criterion (Chomsky 1981).

(274) Theta-criterion

Each argument bears one and only one θ -role, and each θ -role is assigned to one and only one argument. (Chomsky 1981:35)

Given the complexity of the discussion so far, it is challenging to assert that arguments originating in the left periphery are assigned a θ -role, particularly since their introduction occurs outside the thematic domain. This raises the following question: how are these arguments interpreted in syntax? My claim is that θ -roles are part of a broader category. All arguments are associated with a σ -role, determined by their syntactic surrounding, as detailed by Wood & Marantz (2017). For simplicity, σ -roles can be considered as an umbrella term encompassing both θ -roles and non- θ -roles, as illustrated in Figure 4.1.

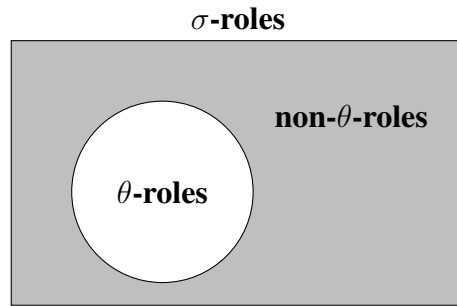
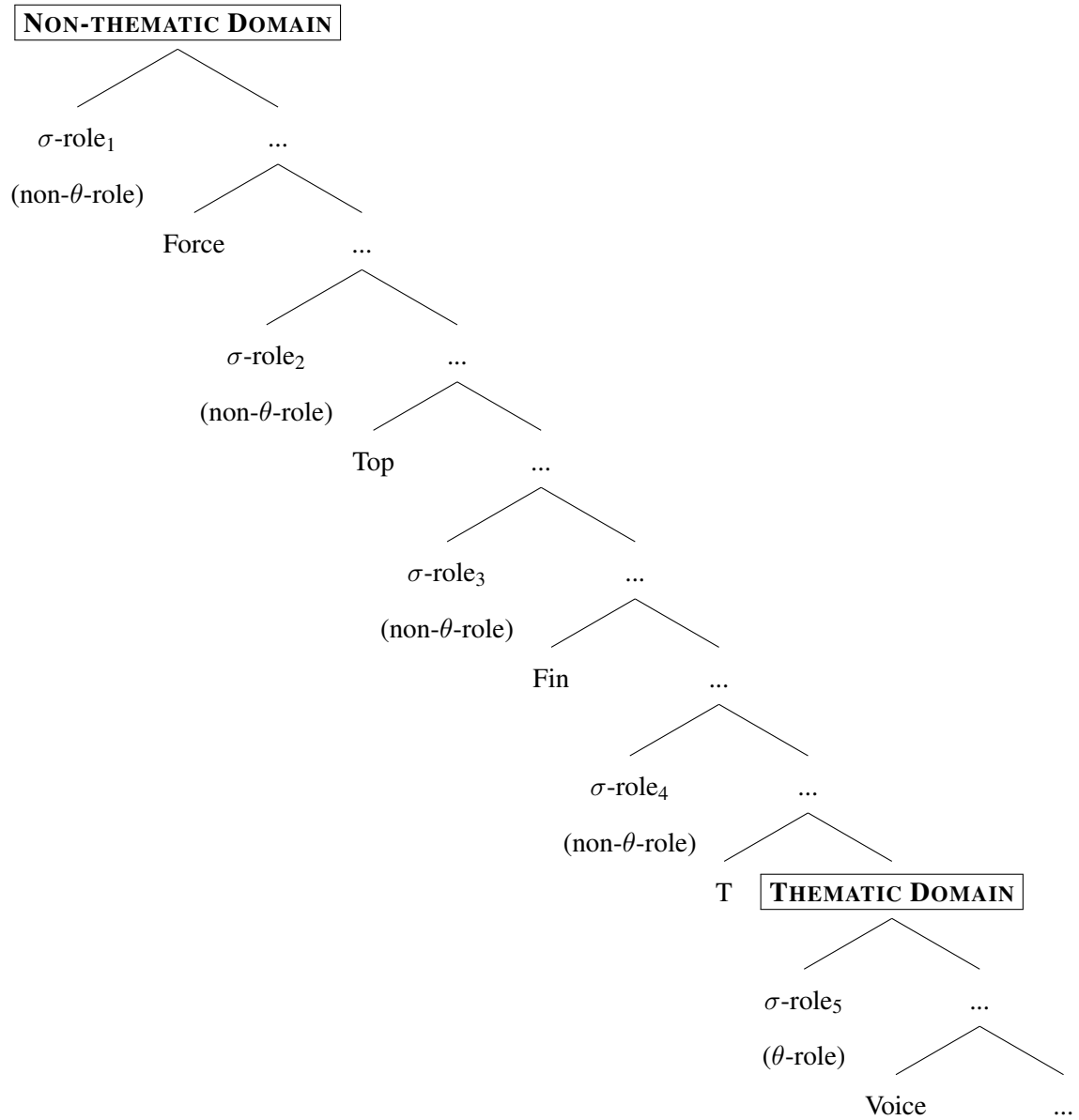


Figure 4.1: Semantic-roles (σ -role) (repeated from Figure 1.1)

Non- θ -roles include pragmatic roles (P-roles) assigned to Speaker and Addressee arguments referenced in Speas & Tenny (2003), Akkuş & Hill (2021), Haddican & Etxeberria (2022), Burukina (2023), among others. Importantly, my analysis posits that nominal argumenthood does not necessarily depend on whether it receives a θ -role or not. The σ -role of an Addressee, for instance, is defined by its syntactic relationship with CP. This reconceptualization aligns well with the current analysis. An argument-introducing head like Appl acts as a relator, associating its complement to its specifier. The σ -role of an argument in Spec,AppIP is largely determined by what Appl selects as its complement. Therefore, categorizing an argument as θ -role-bearing or not becomes secondary. The primary distinctions among nominal arguments are based on the *positioning* of their argument-introducers in syntax. Under this view, argument-introduction in the left periphery is not surprising. In fact, the arguments introduced in and out of the thematic domain are alike in that they rely on the same mechanism made available in syntax. I indicate where the cut between θ -roles and non- θ -roles are in the configuration schematized in (275), which is largely based on Rizzi (1997). Based on Rizzi's (1997) articulated left periphery, enough room can be secured to capture the various types of σ -roles that are assigned to nominal arguments in CP. Theoretically, I assume that an argument-introducer (i^*) can select or bundle with any of the projections provided in (275).

(275) The assignment of σ -roles in and out of the thematic domain



There may be cross-linguistic and language-internal restrictions determining the availability to certain σ -roles. Also, some σ -roles may not be associated with discourse participants. DAT-marked subjects in Slavic languages, including Czech, Polish, Russian, and Slovak, and high topics in Brazilian Portuguese are cases where a σ -role can be assigned to a non-

discourse participant. While more can be explored about the distribution of σ -roles, I leave much of the discussion for future research. For present purposes, I highlight that argument structure can be divorced from the thematic domain and that a unified approach to handling the semantic interpretation of the nominal arguments is possible under the current proposal.

4.8 Summary

This chapter examined whether or not an applied argument can be introduced above TP. Empirical evidence from various languages suggests that Addressees, along with other types of nominal arguments, undergo EM in the left periphery. This chapter has the following implications: (i) arguments can be introduced *outside* the thematic domain, and (ii) a speech act head is i^* . In essence, the left periphery *recycles* what is already assumed to be used downstairs in the derivation. The i^* -based approach additionally captures the distribution of the Addressees in embedded contexts. This way of handling the thematic domain and the speech act domain is parsimonious in that extra assumptions about the EM of Addressees need not be posited (e.g., no need to assume a speech act head in CP). All in all, Addressees and applied arguments are introduced in a parallel fashion.

CHAPTER 5

Conclusion

The empirical evidence from Korean case markers has played a significant role in identifying a unique relationship between i^* , an umbrella term for argument-introducing heads (Wood & Marantz 2017), and its specifier. The Spec-head configuration established between i^* and its nominal argument allows HON case marking while Head-complement relations do not. I have argued that, due to this correlation, *HON.ACC is absent and that the presence of HON.VOC signals the introduction of an Addressee by i^* outside the thematic domain. I have also claimed that the relationship accounts for the co-occurrence of HON.NOM and NOM and why HON.NOM, rather than NOM, is always the inner marker adjacent to the subject of a given clause. Based on the analysis developed in Chapter 2, I have shown that the phase-based Dependent Case approaches currently available on the market fall short of capturing the distribution of case in Korean. I have also shown that when a HON case marker and a non-HON case marker are realized together on a single noun phrase (e.g., HON.NOM-NOM, HON.DAT-NOM and HON.DAT-ACC), the HON case marker is always the inner case marker.

This, once again, boils down to the syntactic interaction between i^* and its nominal argument. I have also shown that the outer case marker in a case-stacked environment is always discourse-salient. From this, I have argued that case-stacking in Korean is discourse-driven instead of being purely case-driven.

As we have seen, the empirical facts from Korean have been just the tip of the iceberg. From a cross-linguistic perspective, the typology of non-thematic arguments is much more vast. One of the main goals of this thesis has been to demonstrate that nominal arguments can be decoupled from the thematic domain and that they can be introduced in the left periphery. Using i^* , I have shown that parallels can be drawn between θ -role-assigned and non- θ -role-assigned arguments. While the primary objective of this thesis is not about defining the exact semantics of these noun phrases, my general take on this issue has been that θ -roles are a proper subset of σ -roles and that every nominal argument is assigned a σ -role, regardless of whether it is a θ -role or not. Nominal arguments introduced beyond the thematic domain are assigned a σ -role that is largely determined by the surrounding syntactic context of the i^* involved. Depending on what i^* selects as its complement, for instance, the type of σ -role can be computed. In this regard, the syntactic environment in which i^* is realized defines the properties of its nominal argument.

While the list is by no means exhaustive, the languages mentioned in Table 5.1, many of which we have covered in Chapter 4, have been reported to host arguments introduced above VoiceP/TP. Based on Table 5.1, we see that multiple σ -roles are attested in this domain. While more remains to be done, I wish to highlight that future research on this aspect of grammar will enrich the typology of σ -roles, as well as the typology of nominal arguments introduced outside of the thematic domain. All in all, I have proposed that argument introduction is possible in and out of the thematic domain. A couple of implications that

ADDRESSEE	SPEAKER	TOPIC
Galician (Alok & Baker 2018)	English (Landau 2021)	B. Portuguese (Martins & Nunes 2010)
Magahi (Alok & Haddican 2022)	Mandarin (Tsai 2018)	Czech (Rivero 2009)
Meadow Mari (Burukina 2023)	Sason Arabic (Akkuş & Hill 2021)	Polish (Rivero et al. 2010)
Korean	Tigrinya (Spadine 2020)	Russian (Rivero 2009)
...

Table 5.1: Cross-linguistic landscape of non-thematic arguments (the list is not exhaustive)

come with this analysis are as follows: (i) Subjects and objects are not the only noun phrases in a sentence. (ii) Nominal arguments can undergo EM and receive case in the left periphery, which supports the idea that A-properties can be observed in an A'-domain.

A.1 Case concord on quantifiers

As noted in Chapter 3, the most prominent empirical argument for a multiple case assignment approach to Korean case stacking comes from (floating) quantifiers (FQs). It has been claimed that FQs can also be case-stacked in sentences like (276). Yoon (2004) and Levin (2017) suggest that stacking on the quantifier is possible due to nominal concord. Under the assumption that concord is available for case marking but not focus marking, the possibility of concord of the outer marker and case stacking would indicate that both the inner and the outer markers are true reflexes of case.

- (276) %Kyoswunim-tul-**kkeyse**-man-i ppali twu-pwun-**kkeyse**-ka
professor-PL-HON.NOM-only-NOM quickly two-CLF-HON.NOM-NOM
osi-ess-ta.
come-PST-DECL
'Only two professors quickly came.' (Levin 2017:493)

Schütze (2001a), however, reports that case stacking on quantifiers is not possible. Similarly, the native speakers I consulted for this work categorically rejected such sentences.¹

¹According to Park (2022), nominals with numeral classifiers of the form Noun-PL NUM-CL, like that in (276), have an “appositive DP-adjunction structure” whereby the numeral and classifier form a NumP adjoined

Yoon (2004) suggests that case stacking on quantifiers may be subject to inter-speaker variation.

Due to the disputed nature of these data, I conducted an experiment testing the availability of case concord and case stacking on quantifiers in Korean. I found that concord of the outer marker is not available in case stacking contexts; thus, concord does not provide a compelling argument in favor of a multiple case assignment approach to Korean case stacking.

A.2 Method

In order to test the availability of case concord in case stacking contexts in Korean, I conducted a web-based acceptability judgment task. I asked native-speaker participants to rate written Korean sentences on a scale from 1 to 7 (Likert-type scale). 7 is taken to be completely natural, and 1 is taken to be completely unnatural. All target sentences included a noun phrase with a quantifier (N+Q) in one of three contexts where it could potentially receive case stacking: as (i) an honorified subject (HonSubj), (ii) a dative experiencer subject (DatExp), or (iii) a dative indirect object (DatIO). Sentences in the HonSubj context always involved a transitive verb with an accusative object. DatExp sentences involved a psych predicate with a nominative object. DatIO sentences involved a ditransitive verb with an accusative object. Examples of each context are given below, with case stacking on both the noun and the quantifier:

to the DP nominal. Such an adjunction structure might not be expected to be a licit environment for concord phenomena to begin with, which may provide an independent reason for the unacceptability of such examples, as reported by Schütze (2001a) and in this thesis. However, since it is exactly these structures which Levin (2017), in particular, claims are subject to concord, I decided to choose these forms to investigate experimentally.

(277) *Concord with honorified subject (HonSubj)*

Tocisanimtul-**kkeyse-man-i** twu-pwun-**kkeyse-ka** chwulcang-ul
governors-HON.NOM-only-NOM two-CLF-HON.NOM-NOM business.trip-ACC
tanyewa-ss-ta.
come.back-PST-DECL

‘Only the two governors came back from their business trip.’

(278) *Concord with dative experiencer subject (DatExp)*

Kyengpiwentul-**hanthey-man-i** sey-myeng-**hanthey-ka** kamki-ka
security.guards-DAT-only-NOM three-CLF-DAT-NOM cold-NOM
kelli-ess-ta.
catch-PST-DECL

‘Only the three security guards caught a cold.’

(279) *Concord with dative indirect object (DatIO)*

Ywuncay-ka annaywentul-**hanthey-man-ul** ney-myeng-**hanthey-lul** cenhwa-lul
Ywuncay-NOM guides-DAT-only-ACC four-CLF-DAT-ACC phone-ACC
kel-ess-ta.
call-PST-DECL

‘Ywuncay called only the four guides on the phone.’

In each of the three target contexts, I varied the case marking on the target N+Q in order to test the availability of case concord of both the inner and outer markers involved in case stacking. The N+Q appeared in one of eight case combinations, as shown in Table A.1 for the HonSubj context.² Conditions A and B did not involve case concord or case stacking. Conditions C and D had concord of either the inner or outer marker but no stacking. Conditions E–H involved both case concord of the inner and/or outer marker and case stacking on the noun and/or quantifier.

²The focus particle *-man* ‘only’ appeared on the noun in each condition in the appropriate morphological position (following the inner marker and preceding the outer marker, if any).

Cond.	Noun	Quantifier	Case concord		Stacking	
			Inner	Outer	N	Q
A	N	Q-HON.NOM				
B	N	Q-NOM				
C	N-HON.NOM	Q-HON.NOM	+			
D	N-NOM	Q-NOM		+		
E	N-HON.NOM	Q-HON.NOM-NOM	+			+
F	N-HON.NOM-NOM	Q-HON.NOM	+		+	
G	N-HON.NOM-NOM	Q-NOM		+	+	
H	N-HON.NOM-NOM	Q-HON.NOM-NOM	+	+	+	+

Table A.1: Case combinations for the honorified subject context

The experiment was administered on Qualtrics, and participants were recruited through Prolific Academic. Participants saw two items in every N+Q context/case combination, for a total of 48 target sentences. Participants also rated 48 filler sentences; half of the fillers were grammatical and the other half were ungrammatical. Target and filler sentences were presented in a pseudo-random order. The results report the responses of 30 native speaker participants (19 female), after excluding 4 participants who performed at less than 75% accuracy on the filler sentences. The experiment took 15–20 minutes to complete, and participants were paid \$5 USD for completing the experiment.

A.3 Results

Figure A.1 gives the results for all target conditions, collapsed across the HonSubj, DatExp and DatIO contexts, as well as the results for the grammatical filler (Mean=6.13, SD=1.17) and ungrammatical filler (Mean=1.61, SD=1.1) items. A binomial GLM conducted in R (R Core Team, 2013) revealed no significant difference between the ungrammatical fillers and Conditions F–H ($p > 0.1$, pairwise lsmeans test). The mean ratings for the three target

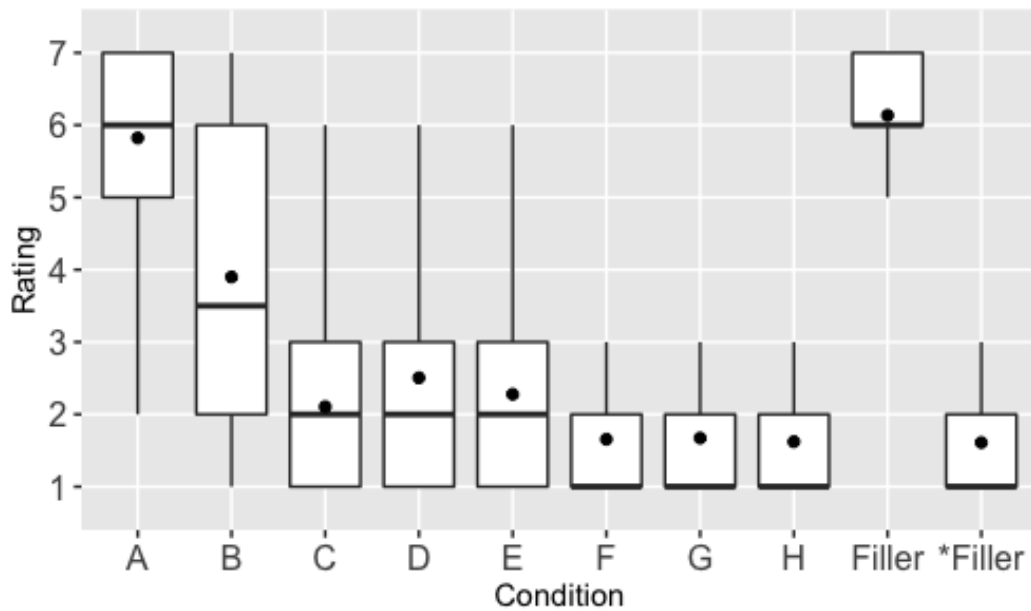


Figure A.1: Mean (point) and median (line) ratings of target conditions across HonSubj, DatExp, and DatIO contexts, and of grammatical Filler and ungrammatical *Filler items.

contexts differed significantly from each other ($p < 0.001$); HonSubj context sentences were rated the highest overall, followed by DatIO and then DatExp sentences.

The mean ratings for the case conditions in the HonSubj context are given in Table A.2. Conditions A and B, which involved a single case marker on the target N+Q, did not differ significantly from each other and were rated as high as the grammatical fillers. Condition D, where the outer marker appeared on both the noun and quantifier, was rated significantly lower than Conditions A and B ($p < 0.001$) but higher than Conditions C and E, which had concord with the inner marker ($p < 0.01$). Conditions F–H were indistinguishable from the ungrammatical fillers. Thus of the HonSubj conditions involving both concord and stacking, only Condition E was rated differently from ungrammatical fillers ($p < 0.01$).

The results for the DatExp context are given in Table A.3. Condition A was the highest-rated condition, followed by Condition B ($p < 0.001$). Conditions C–H were not

Cond.	Noun	Quantifier	Mean rating	SD
A	N	Q-HON.NOM	5.97	1.25
B	N	Q-NOM	6.15	1.07
C	N-HON.NOM	Q-HON.NOM	2.48	1.50
D	N-NOM	Q-NOM	3.77	1.91
E	N-HON.NOM	Q-HON.NOM-NOM	2.73	1.80
F	N-HON.NOM-NOM	Q-HON.NOM	1.85	1.25
G	N-HON.NOM-NOM	Q-NOM	1.87	1.20
H	N-HON.NOM-NOM	Q-HON.NOM-NOM	1.87	1.32

Table A.2: Mean ratings for the HonSubj conditions

Cond.	Noun	Quantifier	Mean rating	SD
A	N	Q-DAT	5.07	1.76
B	N	Q-NOM	3.30	1.80
C	N-DAT	Q-DAT	1.52	0.72
D	N-NOM	Q-NOM	2.15	1.40
E	N-DAT	Q-DAT-NOM	1.83	1.36
F	N-DAT-NOM	Q-DAT	1.63	0.86
G	N-DAT-NOM	Q-NOM	1.62	0.87
H	N-DAT-NOM	Q-DAT-NOM	1.60	0.98

Table A.3: Mean ratings for the DatExp conditions

rated significantly differently from each other or from the ungrammatical fillers. Thus no N+Q involving case concord or case stacking was judged to be acceptable or even marginal in the DatExp context.

Of the three target contexts, DatExp sentences received the lowest ratings overall. Even the highest condition, Condition A, was judged to be significantly worse than the grammatical fillers ($p < 0.001$).

Table A.4 reports the results for the DatIO case conditions. Condition A was the highest-rated target condition, on par with grammatical fillers. Conditions B, C, and E were judged to be marginal but better ($p < 0.01$) than Conditions D and F–H, which received ratings as low as the ungrammatical fillers. Like in the HonSubj context, of the target conditions with

Cond.	Noun	Quantifier	Mean rating	SD
A	N	Q-DAT	6.43	0.67
B	N	Q-ACC	2.25	1.31
C	N-DAT	Q-DAT	2.32	1.32
D	N-ACC	Q-ACC	1.60	0.87
E	N-DAT	Q-DAT-ACC	2.27	1.41
F	N-DAT-ACC	Q-DAT	1.48	0.75
G	N-DAT-ACC	Q-ACC	1.53	1.10
H	N-DAT-ACC	Q-DAT-ACC	1.40	0.76

Table A.4: Mean ratings for the DatIO conditions

both case concord and case stacking, only Condition E DatIO sentences were judged to be more acceptable than ungrammatical fillers.

A.4 Discussion

I note that the DatExp sentences received, across the board, lower ratings than expected. It is not clear to us why participants disliked the DatExp context. Whatever the reason may be, it seems to have caused a floor effect for Conditions C–H, and so I am unable to tease apart the effect of case concord and case stacking in this context. The remaining discussion thereby focuses on the other two contexts, HonSubj and DatIO.

The aim of this experiment was to determine whether case stacking configurations can undergo case concord. A positive result would support an analysis of the outer marker as a true reflex of case. However, the results of our experiment indicate that case concord of the outer marker is *not* generally available in case stacking contexts. Some case concord seems to be permitted for inner markers, as shown by the marginal acceptability of Conditions C (no case stacking) and E (with case stacking on the quantifier) for the HonSubj and DatIO contexts. By contrast, concord involving the outer marker was only found to be some-

what acceptable in Condition D (no case stacking) in the HonSubj context; Condition D was judged to be unacceptable in the DatIO context. Crucially, Conditions G and H, involving both concord of the outer marker and case stacking, were unacceptable in every N+Q context. The results show that while inner markers may undergo case concord in case stacking configurations in Korean, outer markers cannot.

The results of our experiment do not rule out the outer marker being a reflex of case; the relative acceptability of Condition D in the HonSubj context indicates that NOM can undergo concord on its own. I can conclude, however, that case concord does not provide a compelling argument for case stacking as multiple case assignment.

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