# A new account of the case alternation in Korean complex predicates

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#### Abstract

This paper investigates the phenomenon referred to as 'case alternation' in the complex predicate with the auxiliary verb *siph*- 'want' in Korean. It provides an account for the analysis within the framework of Head-Driven Phrase Structure Grammar (HPSG). It begins by reviewing previous analyses that case alternation in the construction of the complex predicate -ko siph- 'want to' can be accounted for by a dual inheritance property specified in the lexicon. This study, by contrast, proposes a new account of case alternation in the complex predicate -ko siph- 'want to'. It introduces a new classification of the particle -i/ka, arguing that it functions not only as a subject case marker but also as an information structure marker. Furthermore, it argues that the grammatical case of the second argument marked with the particle -i/ka has not changed. Instead, the particle -i/ka enables the argument to be focused. Through a detailed analysis of the complex predicate -ko siph- 'want to', this research proposes a lexical entry for the particle -i/ka as an information structure marker, elucidating its role in the complex predicate construction -ko siph- 'want to'. The findings have implications for our understanding of case marking and the argument structure of the Korean complex predicate -ko siph- 'want to'.

# 1 Introduction

The interesting phenomenon of case alternation can be observed in Korean complex predicates. Typically, the arguments of complex predicates receive the case marking assigned by the embedded verb. For example, the verb *mek*-'eat' selects two NPs that are realized as a nominative and accusative NP, as illustrated in (1a) and the verb *toy*- 'become' selects two NPs that are both marked with the particle -i/ka, as shown in (2a). Similarly, when an auxiliary verb (e.g. *po*- 'try') is combined with these verbs, the case marking remains consistent, as shown in (1b) and (2b). This pattern of case assignment applies to complex predicate constructions with auxiliary verbs in Korean. The examples provided show the typical case marking system in complex predicate constructions with auxiliary verbs.

- (1) a. Hyenwu-ka sakwa-lul mek-ess-ta. Hyenwu-NOM apple-ACC eat-PST-DECL 'Hyenwu ate an apple.'
  - b. Hyenwu-ka sakwa-lul mek-e po-ass-ta. Hyenwu-NOM apple-ACC eat-CONN try-PST-DECL 'Hyenwu tried to eat an apple.'
- (2) a. Hyenwu-ka sensayng-nim-i toy-ess-ta. Hyenwu-NOM teacher-HON-NOM become-PST-DECL 'Hyenwu became a teacher.'

b. Hyenwu-ka sensayng-nim-i toy-e po-ass-ta. Hyenwu-NOM teacher-HON-NOM become-CONN try-PST-DECL 'Hyenwu tried to become a teacher.'

However, the auxiliary verb siph- 'want' (cf. Sohn 1999; Kim 2016; Lee 2016b; Song 2020, a.o.) exhibits idiosyncratic properties in terms of case assignment, deviating from the typical patterns observed with other auxiliary verbs. In the complex predicate construction with the auxiliary verb siph- 'want', the second argument can be realized as either a nominative or accusative NP, as illustrated in (3a). This demonstrates that the second argument can be marked not only with the accusative marker -ul/lul but also with the nominative marker -i/ka. On the other hand, when the auxiliary verb siph- 'want' combines with verbs like toy- 'become', the second argument must be realized as an NP marked with the marker -i/ka, as shown in (3b).

- (3) a. Hyenwu-ka {sakwa-lul / sakwa-ka} mek-ko siph-ta. Hyenwu-NOM apple-ACC apple-NOM eat-CONN want-DECL 'Hyenwu wants to eat an apple.'
  - b. Hyenwu-ka {\*sensayng-nim-ul / sensayng-nim-i} Hyenwu-NOM teacher-HON-ACC teacher-HON-NOM toy-ko siph-ta. become-CONN want-DECL 'Hyenwu wants to become a teacher.'

There has been a lot of research on the phenomenon commonly referred to as case alternation in complex predicate constructions (cf. Chang & Cho 1991; Kim & Maling 1998; Um 2003; Chae 2015, a.o.). However, controversy persists over whether the grammatical case of the argument actually changes in constructions involving the auxiliary verb siph- 'want'. This paper proposes that there is no evidence to support a change in the grammatical case of the second argument in the construction with the auxiliary verb siph- 'want', by examining the function of the Korean particle -i/ka. Instead, it is argued that there is potential for emphasizing the second argument of the complex predicate  $-ko \ siph$ - 'want to'. Furthermore, it contributes to this discussion by demonstrating that the particle -i/ka can also function as an information structure marker, specifically indicating focus.

Based on this observation, this paper provides a new account of case alternation in the Korean complex predicate within the framework of Headdriven Phrase Structure Grammar (HPSG, Pollard & Sag 1994, Müller et al. 2021).

This paper is structured as follows: In Section 2, I provide a brief review of previous analyses of the phenomenon. This is followed by an exploration of the function of the particle -i/ka in Korean, based on double nominative constructions. Section 4 examines the case alternation phenomenon in the



Figure 1: Classification of agentive types

complex predicate *-ko siph-* 'want to', specifically investigating whether the grammatical case changes from accusative to nominative. Formal analyses of this phenomenon in the Korean complex predicate *-ko siph-* 'want to' are presented in Section 5. The final section summarizes the conclusions of the study.

### 2 Previous analyses

It has been argued that predicates exhibit varying degrees of agentivity, typically contingent upon the presence or absence of agent subjects (cf. Yoo 2002: 1026; Kim 2016: 76–77). For the determination of structural case values, predicates possess [Agentive  $\pm/-$ ] values (henceforth, [AG  $\pm$ ]), which are broadly based on whether they have agentive subjects (cf. Kim 1990; Bratt 1997). It has also been proposed to classify the AG value in the type hierarchy, as shown in Figure 1 (cf. Yoon 2012: 1026).<sup>1</sup>

While the agentive value of non-auxiliary verbs can be determined lexically by considering their argument structure and content value, auxiliary verbs demonstrate transparency regarding their agentive value. They inherit the value of their embedded verbs. Specifically, it has been suggested that the auxiliary verb *siph*- 'want' has two lexical entries, as seen in (4) (cf. Yoon 2012: 1029).

When the auxiliary verb *siph-* 'want' does not express an agentive relation and combines with a verb, its agentive value is inherited from the embedded verb, as illustrated in (4a). Additionally, the auxiliary verb *siph-* 'want' can inherently exhibit a non-agentive value when combined with an inherently agentive verb, as shown in (4b).

<sup>&</sup>lt;sup>1</sup>In Figure 1 the values such as i+, and ni+ are used as shorthand for the full value names in the parentheses, i.e., *inherently agentive*, *non-inherently agentive*.

(4) 
$$siph$$
- 'want'  
a.  $\left[AG ni \alpha, \text{ GOV}\langle V[AG \alpha] \rangle \right]$   
b.  $\left[AG i$ -,  $GOV\langle V[AG i+] \rangle \right]$ 

It has been argued that the sentence in (5) illustrates only one possible constituent structure. However, the two potential AG values of the complex predicate with the auxiliary verb *siph*- 'want' result in different case values. Specifically, when the auxiliary verb *siph*- 'want' does not exhibit agentive values, its agentive value is passed on from the embedded verb (e.g. *mek*-'eat' in (5)), and the second argument is realized as an accusative NP (e.g. *sakwa-lul* 'apple-ACC' in (5)), according to the AVM in (4a). On the other hand, when the auxiliary verb *siph*- 'want' inherently has a non-agentive value, the second argument can be realized as a nominative NP (e.g. *sakwa-ka* 'apple-NOM' in (5)). This is because the auxiliary verb *siph*- 'want' can also take on a non-agentive value, as demonstrated by the AVM in (4b).

(5) na-nun {sakwa-lul / sakwa-ka} mek-e po-ko siph-ta. I-TOP apple-ACC apple-NOM eat-CONN try-CONN want-DECL 'I want to try to eat an apple.'

ĺ	nanun	sakwalul/sakwaka	meke	poko	siphta.
		ACC	[AG i+]	[AG i+]	$[\mathrm{AG} \; ni+]$
		NOM	[AG i+]	$[\mathrm{AG} \ i+]$	[AG <i>i</i> -]

(from Yoo 2002: 1031)

In contrast, when siph- 'want' combines with a non-agentive verb, as shown in (6), the entire complex predicate is simply [AG ni-], because (4a) does not apply.

(6) nay-ka {\*tayphyo-lul / tayphyo-ka} toy-ko siph-ta.
I-NOM chef-ACC chef-NOM become-CONN want-DECL
'I want to become a chef.'

nay-ka	tayphyo-ka	toy-ko	siph-ta.
	NOM	[AG <i>i</i> -]	[AG <i>ni</i> -]

(from Yoo 2002: 1031)

However, I propose that there is no evidence to support that the grammatical case of the second argument in the construction with the auxiliary verb *siph*- 'want' was changed. Additionally, it does not strictly necessitate the dual lexical entry of *siph*- 'want'. Instead, I argue that the potential in the complex predicate *-ko siph*- 'want to' exists to emphasize the second argument through an information structure marker. For this assumption, I contribute by demonstrating that the particle -i/ka can also serve as an information structure marker, particularly indicating focus.

# 3 The particle -i/ka in Korean

The Korean particle -i/ka is widely recognized as a subject case marker, signifying that the nominal phrase with -i/ka serves as the subject of a sentence as seen in (7). According to this explanation, it can be used to identify double-subject constructions in Korean. Ko (2001: 12–16) has suggested these constructions depend on the semantic property of the verb, specifically on the factor of agentivity. It refers to the degree of control or volition exerted by the subject of a verb in an action. Testing for the property of agentivity involves verifying whether an event can be appropriately modified by the adverb 'intentionally' as shown in the examples (8a) and (8b) (cf. Verhoeven 2010: 224–227). It has been argued that double-subject constructions can be formed with verbs that do not have the property of agentivity. Accordingly, the double-subject constructions can only be formed with adjectives as seen in the example (8a), and with non-agentive verbs as seen in (8b) (from Ko 2001: 13).

- (7) Cwunhuy-ka ilccik hakkyo-ey ka-n-ta.
  Cwunhuy-NOM early school-LOC go-PRS-DECL
  'Cwunhuy goes to school early.'
- (8) a. ku salam-i son-i (\*uytocekulo) kkway khu-ta. the person-NOM hand-NOM intentionally pretty big-DECL
  'The person's hands are (\*intentionally) pretty big.'
  - b. namwu-ka saylo iph-i (\*uytocekulo) tot-ass-ta.
    tree-NOM newly leaf-NOM intentionally sprout-PST-DECL
    'New leaves (\*intentionally) sprouted on the tree.'

On the other hand, it has been claimed that although double nominative NPs may appear in a sentence, only one constituent can function as the subject (cf. Song 2009: 454–468; Kim et al. 2007: 25–29). These constructions will therefore be referred to as double nominative constructions<sup>2</sup>. In sentences (8a) and (8b), the first NP is not an obligatory argument. They remain grammatically well-formed even when the initial NP is omitted, as you can see in (9a) and (10a). Additionally, the particle -i/ka attached to the first NP (e.g. ku salam-i 'the person-NOM' in (8a)) can be replaced by the genitive particle -uy, as shown in (9b), and the first NP (e.g. namwu-ka 'tree-NOM' in (8b)) can also be replaced with the PP, as seen in (10b).

<sup>&</sup>lt;sup>2</sup>In this paper, it is crucial to maintain a strict differentiation between 'double nominative constructions', where two NPs marked with -i/ka are present in a sentence, and 'double-subject constructions' defined as sentences containing two subjects.

- (9) a. son-i kkway khu-ta. hand-NOM pretty big-DECL 'The hands are pretty big.'
  - b. ku salam-uy son-i kkway khu-ta.the person-GEN hand-NOM pretty big-DECL'The person's hands are pretty big.'
- (10) a. saylo iph-i tot-ass-ta. newly leaf-NOM sprout-PST-DECL 'New leaves sprouted.'
  - b. namwu-ey saylo iph-i tot-ass-ta.
    tree-PREP newly leaf-NOM sprout-PST-DECL
    'New leaves sprouted on the tree.'

Based on this observation, it is essential to consider the functions of the first NP marked with -i/ka in a sentence, specifically whether it serves as the subject of a sentence. Various methods have been suggested to test for subjecthood, including the agreement with honorific inflected form  $-(u)si^3$  and plural morpheme -tul, the scope of adverbs, the substitutability of a Korean subject case marker for the honorific form -kkeyse, and the acceptability of relative clauses (cf. Hong 1994: 100–115; Rhee 1999: 401–413; Park 2004: 107–110; Park & Kim 2022: 1504–1507, a.o.). To examine whether the first NP assumes the role of the subject in the sentence, it will be shown with some tests in this paper.

Firstly, the agreement of the inflected form -(u)si is assessed. It is claimed that the first nominative NP does not fulfill the subject function, as evidenced by the sentence (11a). Namely, since the first nominative NP (e.g. *sensayngnim-i* 'teacher-HON-NOM') does not function as the subject of the sentence, it is not acceptable for it to agree with the predicate inflected with the honorific form -(u)si (e.g. *chincelha-si-ta* 'kind-HON-DECL'). If the first nominative NP (e.g. *sensayng-nim-i* 'teacher-HON-NOM') is the subject of the sentence, it should agree with the honorific-inflected predicate (e.g. *chincelha-si-ta* 'kind-HON-DECL'). However, this agreement is not observed, which suggests that the first nominative NP may not function as the subject in (11a). Otherwise, since the subject in the sentence (11b) is the second nominative NP (e.g. *sensayng-nim-i* 'teacher-HON-NOM'), it can be agreed with the predicate with the inflected form -(u)si (e.g. *yeyppu-si-ta* 'pretty-HON-DECL').

(11) a. sensayng-nim-i haksayng-i chincelha-ta / \*chincelha-si-ta. teacher-HON-NOM student-NOM kind-DECL kind-HON-DECL 'The teacher's student is kind.'

<sup>&</sup>lt;sup>3</sup>The Korean honorific system requires that when the subject is in the honorific form (usually with the marker -nim), the predicate also be inflected with the honorific form -(u)si. (cf. Kim 2016: 318)

b. chinkwu-ka sensayng-nim-i yeyppu-ta / yeyppu-si-ta. friend-NOM teacher-HON-NOM pretty-DECL pretty-HON-DECL 'The friend's teacher is pretty.'

Secondly, the particle -i/ka of the first nominative NP (e.g. sensayngnim-i 'teacher-HON-NOM') cannot be substituted by the subject case marker for the honorific form -kkeyse, as shown in (12). Based on this evidence, it is claimed that only the second nominative NP in a sentence functions as a subject, even though there are two nominative NPs in the sentence.<sup>4</sup>

- (12) a. sensayng-nim-i haksayng-tul-i chincelha-ta. teacher-HON-NOM student-PL-NOM kind-DECL 'The teacher's students are kind.'
  - b. \* sensayng-nim-kkeyse haksayng-tul-i chincelha-ta. teacher-HON-HON.NOM student-PL-NOM kind-DECL

Hence, a question arises regarding the role of the first NP in a sentence. I assume that the first NP marked with -i/ka does not serve as the subject of a sentence and the particle -i/ka is used as an information structure marker (cf. Park 2004: 113–114; Kim et al. 2007: 27–35; Kim 2014: 13–14; Kim 2015: 45–50, a.o.). This research suggests that the Korean particle system is initially classified into case markers and information structure markers, with the former being further subdivided into the structural and lexical case (cf. Kim 1990; Hong 1992; Lee 2006: 86–87). As represented in Figure 2, I propose that the particle -i/ka functions as a case marker and an information structure marker. An information structure marker is defined as a particle that adds information structure properties—such as focus or topic—to the NP.

- (i) sensayng-nim-i khi-ka khu-ta / khu-si-ta. teacher-HON-NOM height-NOM tall-DECL tall-HON-DECL
   'The teacher is tall.'
- (ii) sensayng-nim-kkeyse khi-ka khu-ta. teacher-HON-HON.NOM height-NOM tall-DECL

<sup>&</sup>lt;sup>4</sup>In sentences where the semantic relation between the first nominative NP and the second NP is 'object-property' or 'whole-part', some subjecthood tests are met only when the referent of the first NP is identical to the referent of the possessor of the second NP, as seen in (i) and (ii). However, when the referent of the first NP differs from the referent of the second NP's possessor, the subjecthood tests are not satisfied (cf. Lee 2018: 286–290). According to Lee (2018), the first nominative NPs in state-property adjective sentences are not arguments of the adjectives but syntactic topics of the sentences.



Figure 2: Different functions of the particle -i/ka in Korean

# 4 Reevaluating case alternation in the complex predicate -ko siph- 'want to'

This section investigates the phenomenon of case alternation in the complex predicate construction with the auxiliary verb *siph*- 'want' (cf. Kim & Maling 1998; Jung 2011). When the auxiliary verb *siph*- 'want' combines with verbs, the particle<sup>5</sup> -i/ka can be attached to the second argument of the complex predicate  $-ko \ siph$ - 'want to', as already seen in (3a). Some researchers argue that the grammatical case of the second argument changes from accusative to nominative. This section will test whether the second argument marked with the particle -i/ka functions as the subject of a sentence.

I now proceed with testing the subjecthood of the second argument (cf. Lee 2016a: 281–297; Park & Kim 2022: 1504–1508). To begin with, as seen in (13b), when examining the agreement between the predicate inflected in the honorific form -(u)si and the immediately preceding NP marked with -i/ka, it becomes evident that subjecthood is not confirmed. This is to say that the example (13b) demonstrates that the predicate (e.g. siph-usi-ta 'want-HON-DECL') cannot agree with the second NP (e.g. halmeni-ka 'grandmother-ka'). Otherwise, the first NP (e.g. halmeni-ka 'grandmother-NOM' in (13a)) can agree with the predicate inflected in the honorific form -(u)si, This implies that the second NP of the complex predicate -ko siph- 'want to' does not function as the subject of the sentence.

- (13) a. halmeni-ka soncwu-ka po-ko siph-usi-ta. grandmother-NOM grandchild-NOM see-CONN want-HON-DECL 'The grandmother wants to see a grandchild.'
  - b. \*soncwu-ka halmeni-ka po-ko siph-usi-ta. grandchild-NOM grandmother-NOM see-CONN want-HON-DECL (Lit.) 'The grandchild wants to see a grandmother.'

Regarding the test of the plural morpheme -tul, the morpheme can recur in a sentence, when the subject is plural. Through this examination, it also

 $<sup>^{5}</sup>$ In this paper, the term "particle" is introduced as a supertype to delineate between the case marker and information structure marker categories.

becomes evident that the second NP (e.g. *cokha-tul* 'niece-PL' in (14b)) does not function as the subject, as it fails to correlate with the embedded verbal element marked with the plural morpheme *-tul*. Conversely, the initial NP marked for plurality (e.g. *samchon-tul* 'uncle-PL' in (14a)) appropriately coincides with the verbal element affixed with the plural morpheme *-tul*.

- (14) a. samchon-tul-i cokha-ka po-ko / po-ko-tul siph-ta. uncle-PL-NOM niece-NOM see-CONN see-CONN-PL want-DECL 'The uncles want to see a niece.'
  - b. samchon-i cokha-tul-i po-ko / \*po-ko-tul siph-ta. uncle-NOM niece-PL-NOM see-CONN see-CONN-PL want-DECL 'An uncle wants to see nieces.'

Furthermore, as for the substitutability of the Korean subject case marker for the honorification *-kkeyse*, if the subject were *apeci*<sup>6</sup> 'father' in the sentence (15), the honorific marker *-kkeyse* would be applicable for subject honorification. The example sentence (15) illustrates that the second NP marked with *-i/ka* cannot be substituted with the subject honorific marker *-kkeyse*. This shows the second NP (e.g. *apeci* 'father' in (15)) does not serve as the subject.<sup>7</sup>

(15) Hyenwu-ka apeci-ka / \*apeci-kkeyse po-ko siph-ta. Hyenwu-NOM father-NOM father-HON.NOM see-CONN want-DECL 'Hyenwu wants to see his father.'

The examples (13) - (15) for the subjecthood test indicate that the second argument marked with -i/ka does not exhibit subjecthood in a sentence (cf. Lee 2016a: 281–297; Park & Kim 2022: 1504–1508). As indicated by the subjecthood test, I argue that the grammatical case of the second argument remains unchanged. Instead, I propose that the particle -i/ka attached to the second argument of the complex predicate -ko siph- 'want to' functions as an information structure marker, thereby emphasizing the constituent.

- (i) a. apeci-ka atul-i po-ko siph-ta. father-NOM son-I see-CONN want-DECL 'The father wants to see his son.'
  - b. apeci-kkeyse atul-i po-ko siph-ta. father-hon.nom son-i see-conn want-decl

<sup>&</sup>lt;sup>6</sup>The NP *apeci* 'father' can be honored with the subject honorific marker *-kkeyse* 

<sup>&</sup>lt;sup>7</sup>When the constituent serves as the subject of a sentence, the particle -i/ka attached to the first NP *apeci-ka* 'father-NOM' in the example (i.a) can be substituted with the subject honorific form *-kkeyse*, as seen in (i.b).

# 5 Analysis for constructions with the complex predicate -ko siph- 'want to'

This section<sup>8</sup> analyzes the previously mentioned phenomenon in the complex predicate construction with the auxiliary verb *siph*- 'want' within an HPSG framework. Firstly, I propose the lexical entry of the auxiliary verb *siph*- 'want' as seen in (16) (cf. Müller 2002: 86; Müller 2013: 243). The auxiliary verb *siph*- 'want' combines with the dependent verbal element with the connective marker  $-ko^9$ . I assume that the auxiliary verb *siph*- 'want' functions as the head of the complex predicate. The lexical entry (16) specifies that the auxiliary verb functioning as the head combines with a complement that has a [LEX +] value. The arguments of the embedded verb are attracted to be the arguments of the complex predicate (cf. Hinrichs & Nakazawa 1989; Hinrichs & Nakazawa 1994). The combination of the auxiliary verb *siph*- 'want' and its complement verbal element (e.g. *mek-ko* 'eat-CONN') is represented in Figure 3.

(16) Lexical entry of the auxiliary verb *siph*- 'want':  

$$\begin{bmatrix}
PHON \langle siph \rangle \\
SYNSEM|LOC|ARG-ST ] \oplus 2 \oplus 3 \\
\begin{pmatrix}
V[VFORM -ko, LEX+, \\
SUBJ ], COMPS 2 \end{bmatrix}
\end{bmatrix}$$

As already indicated in (3a)—repeated here as (17)— the particle -i/ka can be attached to the second argument of the complex predicate -ko siph-'want to'. According to the subjecthood test in section 4, it was confirmed that the particle -i/ka attached to the second argument does not function as the subject case marker. Instead, I propose that it may serve as an information structure marker. In this paper, the information structure introduce as part of the CONTEXT value. This is because, although the proposition conveyed by both sentences in (17a) and (17b) remains the same, the speaker's intention is additionally included by means of the information structure marker -i/kaattached to the second argument (e.g. sakwa-ka 'apple-KA' in (17b)).<sup>10</sup> I assume that using the information structure marker -i/ka in the complex predicate construction with siph 'want' creates a contrastive expression. This

<sup>&</sup>lt;sup>8</sup>Previously, the particle -i/ka was glossed as NOM. However, from now on, when it is used as an information structure marker in the complex predicate *-ko siph-* 'want to', it should be glossed as -I/KA.

<sup>&</sup>lt;sup>9</sup>-ko is a connective ending that links the preceding verb to another verb. In other words, the auxiliary verb *siph*- 'want' only selects the embedded verbal element with this connective marker -ko. Therefore, it could be said that the dependent verbal element *mek-ko* 'eat-CONN' is an inflected form of the verb *mek*- 'eat', allowing it to combine with the auxiliary verb *siph*- 'want'.

<sup>&</sup>lt;sup>10</sup>Additionally, the first argument, which functions as the subject, can also be topicalized using the information structure marker -un/nun. Building upon this, the following sentence (i) can be constructed.



Figure 3: Analysis of *mek-ko siph-ta* 'want to eat'

is illustrated in the following example: It is an apple that Hyenwu wants to eat, not a pear. So, I propose that the information structure marker -i/ka, by its inherent characteristics, serves a semantic function of focusing on the constituent. However, when the NP marked with the marker -i/ka is realized, it creates a contextual meaning, particularly in the complex predicate construction with siph- 'want'.

The AVM for the information structure marker -i/ka is suggested as shown in (18). The MKG (MarKinG) value is indicated as  $fc^{11}$  and is not co-referenced with any other element<sup>12</sup>. Additionally, the ICONS (Individual CONStraints) element specifies the relation of the complement. The ICONS-KEY feature is used to impose a more specific constraint to an information structure element that has already been enhanced within the ICONS list. This implies that, given the particle -i/ka's ability to function as markers for various information structures such as topic or focus, it becomes necessary to

<sup>(</sup>i) Hyenwu-nun sakwa-ka mek-ko siph-ta.

Hyenwu-TOP apple-FOC eat-CONN want-DECL

<sup>&#</sup>x27;HYENWU wants to eat an APPLE.'

<sup>&</sup>lt;sup>11</sup>MKG features are exclusively concerned with markings of information structure. The types of MKG are underspecified with regard to fc (focus), non-fc (non-focus), tp (topic), and non-tp (non-topic). (Song 2017: 121–124)

<sup>&</sup>lt;sup>12</sup>The information structure marking is encoded through a morphosyntactic feature MKG, within SYNSEM|CAT. This feature imposes lexical and syntactic constraints on forms that convey information structure meanings. MKG features specifically address information structure markings. While the MKG value represents the morphosyntactic marking, it does not always align with the semantic value(cf. Song 2017: 121–125).

constrain its meaning accordingly (cf. Song 2017: 118).<sup>13</sup>

- (17) a. Hyenwu-ka sakwa-lul mek-ko siph-ta. Hyenwu-NOM apple-ACC eat-CONN want-DECL 'Hyenwu wants to eat an apple.'
  - b. Hyenwu-ka sakwa-ka mek-ko siph-ta. Hyenwu-NOM apple-KA eat-CONN want-DECL

(18) 
$$-i/ka \ marker \Rightarrow \begin{bmatrix} PHON & \langle i/ka \rangle \\ ICONS-KEY [2] \\ MKG & fc \\ COMPS & \left\langle \left[ INDEX [1] \right\rangle \\ ICONS & \left\langle ! [2] \begin{bmatrix} focus \\ TARGET [1] \end{bmatrix} ! \right\rangle \end{bmatrix}$$

As previously mentioned in (3b)—repeated here as (19)— it should be noted that when the auxiliary verb *siph*- 'want' is combined with a nonagentive verbal complement like *toy*- 'become', the second argument is not grammatically allowed to bear the accusative case marker -ul/lul. I suggest that since the verb requires two arguments with structural and lexical case (cf. Müller 2002: 12–16; Müller 2013: 221–225), it is not acceptable for the argument with lexical case to be changed to another marker, such as the accusative marker -ul/lul. As indicated in the lexical entries (20) and (21), since the verb *mek*- 'eat' selects two arguments with a structural case, the second argument with a structural case can be focused using the information structure marker -i/ka. Conversely, when the argument of the verb *toy*-'become' has a lexical case, it cannot be exchanged for another marker different from the nominative marker -i/ka regardless of the syntactic structure.<sup>14</sup>

(i) Hyenwu-ka sensayngnim-to toy-ko siph-ess-ta. Hyenwu-NOM teacher-TO become-CONN want-PST-DECL 'Hyenwu also wanted to become a teacher.'

<sup>&</sup>lt;sup>13</sup>As seen in the works of Song (2017) and Song & Bender (2012), the ! symbol is used to mark the boundaries of a *diff-list* representation for RELS, HCONS, and ICONS. This notation helps to clearly delineate the different parts of the list, making the relationships between grammatical information and semantic constraints more explicit. Using the symbol !, we can efficiently handle these constraints, ensuring that the boundaries between different components are easily identifiable. So, this paper accepts the use of the *diff-list* representation and the ! symbol, as proposed by Song (2017) and Song & Bender (2012).

<sup>&</sup>lt;sup>14</sup>As already mentioned in this paper, the second argument marked with the nominative lexical case marker -i/ka of the complex predicate toy-ko siph-ta 'become-CONN want-DECL' cannot be attached to the accusative marker -ul/lul. However, this might not apply to auxiliary particles. In Korean, particles that add specific meanings are often referred to as auxiliary particles. These particles can be also attached to the second argument of verbs, such as toy- 'become', as illustrated in the example sentence (i). In the sentence (i), the use of the particle -to adds the meaning of 'also'.

- (19) a. Hyenwu-ka sensayng-nim-i toy-ko siph-ta. Hyenwu-NOM teacher-HON-NOM become-CONN want-DECL 'Hyenwu wants to become a teacher.'
  - b. Hyenwu-ka \*sensayng-nim-ul toy-ko siph-ta. Hyenwu-NOM teacher-HON-ACC become-CONN want-DECL
- (20) mek- 'eat':  $\begin{bmatrix}
  PHON & \langle mek \rangle \\
  SYNSEM|LOC|ARG-ST & \langle NP[str], NP[str] \end{pmatrix}$
- (21) toy- 'become':  $\begin{bmatrix}
  PHON & \langle toy \rangle \\
  SYNSEM|LOC|ARG-ST & \langle NP[str], NP[lex] \end{pmatrix}$

To summarize what has been said so far, when the argument of a verb can be assigned to structural cases, the second argument can be marked with the information structure marker -i/ka to indicate focus, particularly when combined with the auxiliary verb *siph*- 'want'. Based on this assumption, I propose that the lexical rule for the auxiliary verb *siph*- 'want' allows the second argument—namely, the accusative object— to be emphasized with the information structure marker -i/ka when it combines with a verb that has agentivity, as shown in (22).<sup>15</sup> The structure of the sentence (17b) is given in Figure 4.

(22) The lexical rule for the auxiliary verb *siph*- 'want' with agentive verbs:  $\begin{bmatrix}
\begin{bmatrix}
HEAD & verb \\
ARG-ST & \begin{bmatrix}
Icc|CAT|HEAD & \begin{bmatrix}
noun \\
CASE & str
\end{bmatrix}, & & & \\
\end{bmatrix} & \begin{bmatrix}
Loc|CAT|HEAD & \begin{bmatrix}
noun \\
CASE & str
\end{bmatrix}, & & \\
\end{bmatrix} & & \\
\begin{bmatrix}
HEAD & verb \\
ARG-ST & & & \\
\end{bmatrix} & & \\
\end{bmatrix} & & \\
\end{bmatrix} & & \\
\end{bmatrix} & & \\
\begin{bmatrix}
HEAD & verb \\
ARG-ST & & & \\
\end{bmatrix} & & \\
\end{bmatrix} & & \\
\begin{bmatrix}
HEAD & verb \\
ARG-ST & & & \\
\end{bmatrix} & & \\
\begin{bmatrix}
Loc|CAT|HEAD & \begin{bmatrix}
noun \\
CASE & str
\end{bmatrix}, & \\
\end{bmatrix} & & \\
\begin{bmatrix}
Loc \\
CAT & & \\
CAT & \\
CAT & & \\
ARG-ST & & \\
\end{bmatrix} & \\
\end{bmatrix}$ 

The structures resulting from the combination of (16) and (20) are illustrated in (23) and (24). The entry (23) shows that the complex predicate

<sup>&</sup>lt;sup>15</sup>In this paper, the value of INDEX, *agentivity* is used as an abbreviation to represent the index that serves as the argument of the agentive verb, reflecting its role in the verb's argument structure rather than an inherent property of the referent.



Figure 4: The structure of the complex predicate *-ko siph-* 'want to' with a focused second argument

mekko siphta 'want to eat' entails two arguments with structural cases, the second of which is marked with the accusative case marker -ul/lul. According to the lexical rule (22), when the auxiliary verb siph- 'want' combines with agentive verbs that select two arguments with structural cases, a non-structural case, namely the information structure marker -i/ka, can be attached to the second argument of the complex predicate -ko siph- 'want to' (e.g. sakwa 'apple' in (24)). When the second argument is focused using the information structure marker -i/ka, the sentence additionally acquires contextual value as information structure (cf. Paggio 2009: 105).

(23) Hyenwu-ka sakwa-lul mek-ko siph-ta ('Hyenwu wants to eat an apple'):

CAT	$\begin{bmatrix} \text{HEAD} & verb \\ \text{ARG-ST} & \left\langle \text{NP}[str]_{\boxed{1}}, \text{NP}[str]_{\boxed{2}} \right\rangle \end{bmatrix}$
CONT	$\begin{bmatrix} \text{IND} & \textcircled{0} \\ \\ \text{RELS} & \left\langle \begin{bmatrix} eat \\ \text{ARG0 } \boxed{3} \\ \text{ARG1 } \boxed{1} \\ \text{ARG2 } \boxed{2} \end{bmatrix}, \begin{bmatrix} want \\ \text{ARG1 } \boxed{3} \\ \text{ARG1 } \boxed{3} \end{bmatrix} \right\rangle \end{bmatrix}$

I assume that the two structures, namely the second argument marked with the information structure marker -i/ka and the accusative marker -eul/reul, deliver the same proposition: "He wants to eat an apple." However, by using the information structure marker -i/ka, the speaker indicates their intention

to focus on the complement. To account for this point, the information is incorporated into the CONTEXT value, as illustrated in (24).<sup>16</sup>

#### (24) Hyenwu-ka sakwa-ka mek-ko siph-ta

('Hyenwu wants to eat an apple', with the focused element):



<sup>16</sup>In response to a reviewer's query about how the analysis addresses instances where an auxiliary verb like ha- 'do' is followed by a verb such as siph- 'want'. I provide the following comment. It is proposed that the verb ha- 'do' is polysemous, necessitating a detailed classification of its various functions, as multiple types can be discerned in constructions involving the verb ha- 'do'. For instance, when the verb ha- 'do' is combined with a verbal noun (e.g. kongpwu 'study'), both markers -ul/lul and -i/ka can be attached to the second argument of the complex predicates -ko siph- 'want to', as seen in (i). However, when the verb ha- 'do' is combined with a stative verb (e.g. mwusep- 'fearful'), it is unacceptable for the accusative case marker -ul/lul attached to the second argument to change to the marker -i/ka, as shown in (ii). This structure, involving a stative verb, is perceived to lack the property of agentivity, as evidenced by its limited compatibility with modifying adverbs such as 'intentionally', as demonstrated in (iii.b), which differs from the example sentence (iii.a). Additional research will be conducted through testing with native Korean speakers to identify whether these stative verbs, when combined with the verb ha- 'do', have the semantic property of agentivity.

- (i) Hyenwu-ka {yenge-lul / yenge-ka} kongpwu-ha-ko siph-ess-ta. Hyenwu-NOM English-ACC English-KA study-DO-CONN want-PST-DECL
   'Hyenwu wanted to study English.'
- (ii) Hyenwu-ka {kangaci-lul / \*kangaci-ka} mwuse-we ha-ko Hyenwu-NOM puppy-ACC puppy-KA fearful-CONN DO-CONN siph-ess-ta. want-PST-DECL
  'Hyenwu wanted to be afraid of the puppy.'
- (iii) a. Hyenwu-ka yenge-lul yilpwule kongpwu-hay-ss-ta. Hyenwu-NOM English-ACC intentionally study-DO-PST-DECL
   'Hyenwu intentionally studied English.'
  - b. ?Hyenwu-ka kangaci-lul ilpwule mwuse-we hay-ss-ta. Hyenwu-NOM puppy-ACC intentionally fearful-CONN DO-PST-DECL (Lit.) 'Hyenwu intentionally was afraid of the puppy.'

# 6 Conclusion

This research argued that the phenomenon in which the second argument of the complex predicate -ko siph- 'want to' is marked with the particle -i/ka should not be regarded as case alternation. Instead, I have argued in this paper that the second argument of the complex predicate -ko siph- 'want to' can be focused by means of the information structure marker -i/ka, suggesting that this construction may involve a focused NP.

To examine whether the second accusative argument of the complex predicate -ko siph- 'want to' changes to the nominative argument, I initially investigated the function of the particle -i/ka based on double nominative constructions. By conducting subjecthood tests—such as agreement with the honorific inflected form -(u)si, agreement with the plural morpheme -tul, and the substitutability of the Korean subject case marker for the honorific form -kkeyse— on the second argument, it was confirmed that the particle -i/ka does not always function as a subject case marker. Based on the test, I argued that the particle -i/ka can function as a case marker and an information structure marker, adding information structure properties to the NP. Moreover, I concluded that the particle -i/ka, when attached to the second argument in the complex predicate construction -ko siph-'want to', does not change its grammatical case. Rather, it imbues an additional pragmatic meaning, particularly regarding information structure. This conclusion was further supported by the subjecthood test, which confirms that the second argument marked with the particle -i/ka does not function as the subject of a sentence.

I have integrated these findings into an HPSG fragment of Korean. It was claimed that when the auxiliary verb siph- 'want' combines with an agentive verb, the second argument with a structural case can be realized through the accusative case marker and can also be focused using the information structure marker -i/ka. I also hypothesized that the information structure marker -i/ka attached to the argument leads to additional interpretations in the context. Therefore, it was suggested that the value acquired from the information structure marker -i/ka is added to the CONTEXT feature, as the proposition of the sentence remains unchanged. To further elucidate the phenomenon in which it is impermissible for the marker attached to the second argument to change—particularly when the auxiliary verb siph-'want' combines with a verb that selects two NP marked with -i/ka (e.g. toy-'become')— the grammatical case was classified into the structural and lexical case.

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