Focus Licensing on Nominalized VPs in Korean LFN Constructions

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Abstract

In this paper, I review what has hitherto been called the "optional Case marking" on nominalized predicates in Korean Long Form Negation (LFN) constructions. I investigate the syntactic structure of LFN constructions under the recently held assumption about *ha*-support in Korean. I then argue that Nom and Acc particles that occur after the nominalized predicates are not genuine Case markers, but in fact markers of information focus. One of these particles, *ka* 'Nom', is reported to be conditioned in its occurrence by some property of the predicate being nominalized. I demonstrate that the conditioned occurrence of *ka* is correctly predicted by the presence/absence of an external argument, not by the Case assignability or the agentivity property of the verb. Drawn from this observation, I propose a theory in which external arguments are inherently correlated with the expression of information focus in Korean, to account for the phenomenon. Furthermore, I discuss the implications of such a theory to the distribution of focus markers in other domains, namely "case stacking" constructions presented by Schütze (2001).

Keywords: Focus, Negation, Optional Case Marking, External Arguments, case stacking, Korean

1 Introduction

Korean has two forms of negation: a short form and a long form. Short negation occurs before the verb, as in $(1-a)^1$. Long negation occurs after the main verb and is followed by the light verb ha- 'do', as in (1-b). In colloquial speech, sentences with long negation are often used with anh-, a phonologically contracted form of ani ha-, as in (1-c).

- (1) a. Siwu-nun pap-ul *an* mek-ess-ta.

 Siwu-Top rice-Acc Neg eat-Pst-Decl

 'Siwu did not eat rice.'
 - b. Siwu-nun pap-ul mek-ci ani ha-yess-ta.
 Siwu-Top rice-Acc eat-Nmlz Neg do-Pst-Decl 'Siwu did not eat rice.'
 - c. Siwu-nun pap-ul mek-ci anh-ass-ta.
 Siwu-Top rice-Acc eat-Nmlz Neg.do-Pst-Decl
 'Siwu did not eat rice.'

The two forms of negation have distinct properties in a number of aspects. One of them is the optional Case marking of nominalized predicates. As illustrated in (2), the nominalized predicate *paykophu-ci* 'hungry-Nmlz' can appear with either Nom or Acc case.

- (2) a. Siwu-nun paykophu-ci anh-ta.

 Siwu-Top hungry-Nmlz Neg.do-Decl
 'Siwu isn't hungry.'
 - b. Siwu-nun paykophu-ci-{ka/lul} anh-ta.
 Siwu-Top hungry-Nmlz-Nom/Acc Neg.do-Decl
 'Siwu isn't hungry.'

However, not all nominalized predicates in Korean Long Form Negation (LFN) constructions allow both Nom and Acc Case marking. In example (1-c), repeated here as (3), the nominalized predicate *mek-ci* 'eat-Nmlz' can only be followed by the Acc Case marker *lul*.

¹The abbreviations used in this study are the following: Top (topic), Foc (focus), Nom (nominative), Acc (accusative), Dat (dative), Pst (past tense), Pres (present tense), Decl (declarative), Q (question), Neg (negation), Caus (causative), Pass (passive), Nmlz (nominalizer), Comp (complementizer), Conn (connective).

- (3) a. Siwu-nun pap-ul mek-ci anh-ass-ta.

 Siwu-Top rice-Acc eat-Nmlz Neg.do-Pst-Decl
 'Siwu did not eat rice.'
 - b. Siwu-nun pap-ul mek-ci-{*ka/lul} anh-ass-ta.
 Siwu-Top rice-Acc eat-Nmlz-Nom/Acc Neg.do-Pst-Decl 'Siwu did not eat rice.'

Most of the previous studies have agreed upon the generalization that the occurrence of the Nom Case marker ka is conditioned by some property of the nominalized predicate in LFN constructions. It is important to note that this generalization comes with a serious theoretical challenge. Given that Korean is a head-final language, Case assigner (or licenser) must occur after the element that requires Case assignment (or checking). If the predicate on the left of the nominalizer -ci is what decides the pattern of Case marking, greater elaboration on how such conditioned Case marking actually works is needed.

The existing analyses for conditioned Case marking in Korean LFN constructions can be roughly divided into two groups. The transfer-based analysis claims that some feature of the predicate 'transfers' or 'percolates up' to the Case assigner, blocking the assignment of Nom Case under relevant conditions. For Kang (1988), it is the main verb's capability of Acc Case assignment that is inherited by the light verb *ha*-. On the other hand, Park and Dubinsky (2021) argues that the semantic [+Agent] feature percolates up to the negative auxiliary verb *anh*-.

The non-transfer-based analysis aims to provide an alternative explanation based on syntactic derivations, dispensing with the process of 'transfer'. Under the assumption that -ci attaches to the lexical projection of the verb, Park (2011) argues for a typology of ha--ha- as a heavy verb, as a light verb and as a dummy verb — to be the determining factor of conditioned Case marking in LFN constructions. In (3-b), for instance, anh- involving the heavy verb ha- takes the nominalized predicate as its complement. The heavy verb ha- is only capable of checking the Acc Case, hence the pattern of (3-b).

While both analyses propose some interesting ideas in accounting for conditioned Case marking in Korean LFN constructions, there are some remaining issues. Numerous works on Korean LFN constructions assume *ha*-support to take place in order to carry verbal inflections, an equivalent operation to the English *do*-support (Hagstrom 1995, 2000, Han et al. 2007, Han and Lee 2007). Case assignment by *ha*- (or the contracted form *anh*-) is no longer an available option if *ha*-support is a purely phonological process (Han et al. 2007, see Halle et al. 1993 for the English *do*-support).

This leaves us with the question of how is it that the nominalized predicate under negation is assigned Case, if *ha*- is absent from the syntax. I argue that the optional Case marking in Korean LFN constructions is in fact an instance of VP focus licensed by the Neg head. Although such analysis has received little or no attention in the literature, "case" particles *ka* and *lul* have oftentimes been claimed to be focus particles in elsewhere domains (Schütze 2001, Cho 2006, Chung 2013). I present evidence supporting the claim that *ka* and *lul* occurring after the nominalized predicate in LFN constructions, too, are focus markers that have nothing to do with Case.

The rest of this article is organized as follows. In section 2, I review the syntactic structure of Korean LFN constructions, adopting the view that *ha*-support is a post-syntactic operation. In section 3, I argue for an analysis of *ka* and *lul* as focus markers. Section 4 returns to the problem of the restricted occurrence of *ka*. I show that the introduction of external arguments is the crucial factor; whenever an external argument is present in the clause, *ka* cannot occur after the nominalized predicate. The so-called "conditioned Case marking" in Korean LFN constructions will then have to be accounted for in new terms. In section 5, I present one such proposal and discuss its implications on the distribution of focus particles in Korean. Section 6 concludes.

2 Syntactic structure of LFN constructions

Traditionally, Korean LFN constructions have been analyzed as involving *ha*-support, an operation parallel to *do*-support in English. The fact that main verbs require ha-support indicates that long negation in Korean is a head that projects a phrase of its own (Han et al. 2007, Han and Lee 2007). As shown in (4), long negation *ani* blocks the verb from coming together with inflections and, hence, *ha*- is inserted as *Last Resort*.²

(4) Siwu-nun pap-ul mek-ci *ani* ha-yess-ta. Siwu-Top rice-Acc eat-Nmlz Neg do-Pst-Decl 'Siwu did not eat rice.'

Although there is a general consensus on the status of long negation and *ha*-support, the nominalizer *-ci* has been treated in multiple different ways. One of the main views on *-ci* is that it is a nominalizer that introduces a new clause (Hagstrom 2002). However, subsequent works have argued otherwise with evidence from the distribution

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²There is an ongoing debate on whether Korean is a V-raising or I-lowering language (Han et al. 2007, Han and Lee 2007). I will not take sides on this issue here, partly because choosing between the two options does not make any significant difference for the current discussion. The key idea is that the Neg head *ani* will block the verb from coming together with inflectional morphemes, regardless of the specific type of movement required to do so.

of Negative Polarity Items (NPIs) in Korean. NPIs in Korean are licensed by negation in the same clause (Clausemate Condition; Choe 1988). If -ci were to introduce a new clause, long negation in the matrix clause would not be able to license an NPI in the embedded clause headed by -ci. Han et al. (2007) shows that this is not the case, as in (5), insisting on treating -ci as an inflection on the verb selected by negation and not as a nominalizer that introduces a new clause.

(5) Toli-ka *amwukesto* mek-ci ani ha-yess-ta.

Toli-Nom anything eat-CI Neg do-Pst-Decl
'Toli didn't eat anything.'

(Han et al. 2007: 19)

Here I adopt the view of Park and Dubinsky (2021) that -ci is best analyzed as a nominalizer that does not posit clause boundaries. Park and Dubinsky (2021) compares (5) with similar NPI facts in English, as shown in (6), from which they conclude the structure of (5) to be analogous to that of (6-b). In (6-b), the nominalized VP complement of *like* contains an NPI that is licensed by negation. In contrast, we see that a complex NP which introduces a new clause is opaque for the purpose of NPI licensing, as shown in (6-c).³

- (6) a. John doesn't like [TP Sarah to speak with anyone].
 - b. John doesn't like [NP Sarah's [VP speaking with anyone]].
 - c. *John doesn't like [$_{NP}$ the tendency [$_{CP}$ for [$_{TP}$ Sara to speak with anyone]]]. (Park and Dubsinky 2021: 16)

My intuition is that the distinct behavior of -ki and -ci with respect to NPI licensing has to do with the syntactic domain these nominalizers attach to. That is, -ki attaches to a full clause whereas -ci attaches to a relatively smaller domain (i.e. VP). This analysis is further supported by the fact that tense morphemes cannot occur in the left of -ci, unlike -ki, as shown in (ii).

³These observations on NPI facts in English can be easily extended to the distinction between -ki and -ci in Korean. -ki and -ci have often been assumed to belong to the same syntactic category in the area of Korean syntax (Kang 1988 and references therein). However, an NPI in a nominalized clause headed by -ki cannot be licensed by negation in the higher clause, as demonstrated in (i).

⁽i) *Toli-ka *amwukesto* mek-ki-lul an wonha-n-ta.
Toli-Nom anything eat-Nmlz-Acc Neg want-Pres-Decl
'Toli does not want to eat anything.'
(Han et al. 2007: 19)

⁽ii) a. *Siwu-nun pap-ul mek-ess-ci anh-ta.

Siwu-Top rice-Acc eat-Pst-Nmlz Neg.do-decl
'Siwu did not eat rice.'

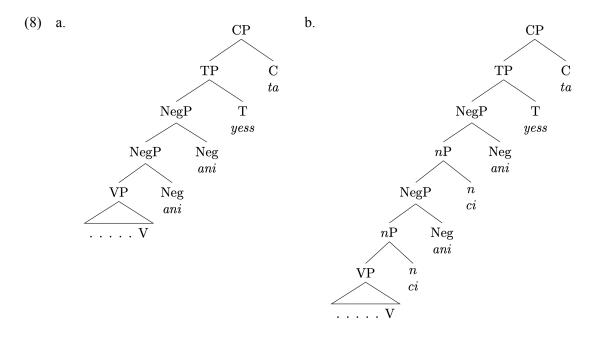
b. Siwu-ka pap-ul mek-ess-ki-lul pala-n-ta.
Siwu-Nom rice-Acc eat-Pst-Nmlz-Acc want-Pres-Decl
'(I) want Siwu to have eaten rice.'

The reason why I am inclined to analyze -ci as a nominalizer and not as an inflection on the verb selected by negation is because -ci has to be present in the syntax once we assume ha- to be a PF-artifact. Korean allows 'double negation' constructions where the nominalizer -ci, long negation ani, and the inserted ha- each occur twice, as in (7-a). If we take -ci to be absent from the syntax, there would be no reason for ha- to be inserted between the two negations as there is no stranded inflection to 'support' in the first place; see (8-a). The view that -ci is an inflection on the verb is also flawed because there is nothing verbal in this position prior to ha-support. This leads us to an ungrammatical construction shown in (7-b). Thus, I argue that -ci is nominalizer that has a projection of its own, as in (8-b). 4,5

- (7) a. Siwu-nun pap-ul mek-ci ani ha-ci ani ha-yess-ta.

 Siwu-Top rice-Acc eat-Nmlz Neg do-Nmlz Neg do-Pst-Decl

 'Siwu did not not eat rice.' (='Siwu ate rice.')
 - b. *Siwu-nun pap-ul mek-ci ani ani ha-yess-ta.
 Siwu-Top rice-Acc eat-Nmlz Neg Neg do-Pst-Decl
 'Siwu did not not eat rice.' (='Siwu ate rice.')



⁴For the sake of simplicity, I omit all specifiers from the structures in (8).

⁵An alternative account for the obligatory *ha*-support in Korean LFN constructions can be formulated by assuming that it is the nominalizer *-ci* that blocks the verb from coming together with inflections. This analysis is in line with the idea that *-ci* functions as a 'morphological closure' of the verb (see Kang 1988).

Finally, I address the question of what it is that the nominalizer *-ci* attaches to. Several authors have assumed *-ci* to attach the lexical projection of the verb (Kang 1988, Hagstrom 1995, Park 2011). However, causative and passive morphemes can intervene between the verb and *-ci*, as demonstrated in examples (9) and (10).

- (9) Emma-ka ai-eykey pap-ul mek-i-ci anh-ass-ta. Mother-Nom child-Dat rice-Acc eat-Caus-Nmlz Neg.do-Pst-Decl 'Mother did not feed rice to the child.'
- (10) Chayk-i cal ilk-eci-ci anh-nun-ta.

 Book-Nom well read-Pass-Nmlz Neg.do-Pres-Decl

 'Lit. Book is not well read.' (='Book is hard to read.')

Functional elements of the sort have been referred to by several terms — little/light v or Voice — under the assumption that VP is made up of at least two projections, since the split-VP hypothesis initiated by Larson (1988). I assume a tripartite structure for verb phrases in Korean, building on Harley (2013)'s proposal on the distinctness of Voice and v. As discussed by Harley (2013) on Hiaki (Yaqui) verbs, the 'passive-on-causative' construction in Korean, too, provides evidence directly from morphology. For example, in (11), the nominalizer -ci attaches to a verb phrase consisted of at least three parts: the root verb mek- 'eat', the little v_{CAUSE} -y- (phonologically conditioned allomorph of -i-), and the passive Voice -eci-.6

⁶In fact, passives in Korean can be realized in two distinct forms, as shown in (i). Passive constructions involving the morpheme *-eci-*, as in (i-a), are often referred to as the CI passive. The other type is the HI passive, as in (i-b), which shows allomorphy in four ways (i.e. *-i-*, *-hi-*, *-li-*, *-ki-*).

While both passives are very productively used in Korean and can appear in LFN constructions, I only address the CI passive in following discussions for mainly two reasons. First, HI passives never co-occur with causative morphemes. Interestingly, the causative morphology in Korean exhibits a great deal of isomorphism with HI passives; the allomorphs are: -i-, -hi-, -li-, -ki-, -wu-, -kwu-, -chwu-. These facts have often led researchers to assume a close correlation between causatives and HI passives in Korean (Yeon 1991, Aoyagi 2007). Second, it has been observed that the two types of passive show different syntactic behaviors. HI passives behave more like adjectival passives and middles, whereas CI passives are parallel to verbal passives in English (Park 2005). I take these facts as evidence towards analyzing CI passive as a Voice head and HI passive as occupying a lower position in the structure. The exact position of HI passive, however, remains unclear.

⁽i) a. Chayk-i cal ilk-eci-ci anh-nun-ta.

Book-Nom well read-Pass-Nmlz Neg.do-Pres-Decl

'Lit. Book is not well read.' (='Book is hard to read.')

b. Chayk-i cal ilk-hi-ci anh-nun-ta.

Book-Nom well read-Pass-Nmlz Neg.do-Pres-Decl

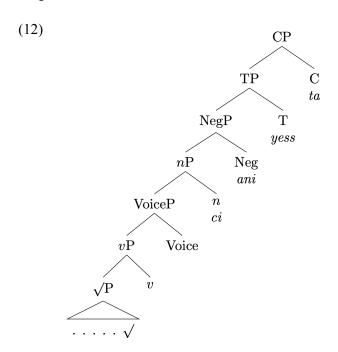
'Lit. Book is not well read.' (='Book is hard to read.')

(11) Ai-eykey pap-i mek-*y-eci*-ci anh-ass-ta.

Child-Dat rice-Nom eat-Caus-Pass-Nmlz Neg.do-Pst-Decl

'The rice was not fed to the child.'

The division of work between Voice and v is pretty straightforward; v is a verbalizer that may come with various 'flavors' (e.g. v_{CAUSE} , v_{DO} , v_{BECOME} , or v_{BE} ; see Folli and Harley 2005), while Voice is responsible for the introduction of external arguments (Kratzer 1996). Within the framework of Distributed Morphology (Halle et al. 1993), the full structure of Korean LFN constructions is as illustrated in (12). The notion that the Voice head essentially has to do with the introduction of external arguments will turn out to be useful in section 4 where I attribute the "conditioned Case marking" to the presence of external arguments. But before diving into that matter, I first examine if ka and lul occurring after the nominalized VP in LFN constructions can be considered as genuine Case markers.⁷



⁷Throughout this article, I use the notation VP to refer to the entire verb phrase (i.e. VoiceP) in the general sense.

3 ka and lul are focus markers

As mentioned earlier, nominalized predicates in Korean LFN constructions can appear with *ka* or *lul*, as in (2), repeated below as (13). I argue that *ka* and *lul* in these instances are not true realizations of Nom and Acc Case, but instead, discourse particles that mark focus.⁸

- (13) a. Siwu-nun paykophu-ci anh-ta.

 Siwu-Top hungry-Nmlz Neg.do-Decl
 'Siwu isn't hungry.'
 - Siwu-nun paykophu-ci-{ka/lul} anh-ta.
 Siwu-Top hungry-Nmlz-Nom/Acc Neg.do-Decl 'Siwu isn't hungry.'

Similar arguments in favor of a focus treatment of ka and lul have been developed in other domains, for example, in Schütze (2001), for the "case stacking" construction in Korean. He claims that ka and lul "stacked" on top of eykey 'Dat', shown in examples (14), cannot be analyzed as genuine Case markers. ^{9,10} In this section, I extend the arguments given in Schütze (2001) to what has been called the "optional Case marking" in Korean LFN constructions. The following aspects of "optional Case marking" constitute evidence for the status of ka and lul as focus markers.

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 $^{^8}$ Nevertheless, I continue to gloss ka and lul as Nom and Acc in a purely descriptive way. I would also like to clarify that these particles may sometimes surface as their phonologically conditioned allomorphs i and ul. While a more precise way to refer to these particles would be i/ka and lul/ul, I will refer to them as ka and lul in this article, for the sake of simplicity (and because they always surface as ka and lul when attached to the nominalizer -ci).

⁹To be clear, theories on the non-case use of case particles in Korean do not assume these particles to never realize case features at all. For example, *Swunhi-ka* and *chayk-ul* in (14-b) are canonical subject and object, each marked with Nom and Acc Case proper. The central claim is that *ka* and *lul* are ambiguous between a Case marker and a focus marker, the latter being of particular interest (Schütze 2001).

¹⁰There is an alternative view in the literature that draws a distinction between two functions of *ka*: [+Nom] and [+Nom, +Foc] (Yoon 2004). Under this analysis, *ka* in certain environments may simultaneously mark Nom Case and focus. However, as argued by Schütze (2001), evidence to be presented in this section points towards the conclusion that the focus use of *ka* should be distinguished from the canonical Case use of *ka*. Just like "stacked" *ka* and *lul*, "optional Case marking" in LFN constructions is also demonstrated to have no clear relationship with Case.

(14) "Case stacking" constructions

a. Na-eykey-ka paym-i mwusep-ta.
I-Dat-Nom snake-Nom fearful-Decl
'I am afraid of snakes.'
(Yoon 1996: 110)

b. Swunhi-ka Yenghi-eykey-lul chayk-ul cwu-ess-ta.
 Swunhi-Nom Yenghi-Dat-Acc book-Acc give-Pst-Decl
 'Swunhi gave Yenghi the book.'
 (Schütze 2001: 207)

First, sentences like (13-b) require a specific prosody to sound felicitous: the ka/lul-marked nominalized predicate must be stressed. Such requirement does not hold in (13-a). This supposes that there is something special about the discourse status of the nominalized predicate in (13-b). I argue that this has to do with the expression of focus. If ka and lul are indeed focus markers, this prosodic effect can be easily explained as focal stress is widely attested across languages. However, if ka and lul were simply Case markers, the requirement of a specific prosody would demand an additional explanation, as such requirement does not extend to other instances where ka and lul mark genuine Case.

Second, *ka/lul*-marking in Korean LFN constructions is completely optional. It is important to note that sentences without *ka* or *lul* are the unmarked forms of LFN in Korean, whereas the optional *ka/lul* is reported to add a slight difference in meaning. This should be distinguished from the "case drop" constructions in Korean. "Case drop" in Korean is extremely marked in that it implies an informal speech register (Schütze 2001). Also, as illustrated in (15), it is well known that "case drop" is most facilitated for some prominent arguments of the verb (Lee 2006). Neither of these facts apply to the optional *ka/lul*-marking in LFN constructions.

(15) "Case drop" constructions Na-(ka) pap-(ul) an mek-ess-e. I-(Nom) rice-(Acc) Neg eat-Pst-Decl 'I didn't eat rice.'

Third, given that Nom and Acc are structural Cases in Korean, free alternation between ka and lul in sentences like (13-b) cannot be readily explained. In general, case alternation in Korean has been understood as indicators of structural difference. For examples, in Exceptional Case Marking (ECM) constructions in Korean, it has been assumed that the nominative NP in (16-a) is the subject of the embedded clause,

whereas the accusative NP in (16-b) belongs to the matrix clause (Yoon 2007). It is difficult to assume two different structural positions for the *ka*-marked versus *lul*-marked nominalized predicate in (13-b) due to the mono-clausal nature of Korean LFN constructions discussed earlier.

(16) ECM constructions in Korean

- a. Cheli-nun Yenghi-ka yenglihay-ss-ta-ko mit-nun-ta.
 Cheli-Top Yenghi-Nom smart-Pst-Decl-Comp believe-Pres-Decl
 'Cheli believes that Yenghi was smart.'
- b. Cheli-nun Yenghi-*lul* yenglihay-ss-ta-ko mit-nun-ta.
 Cheli-Top Yenghi-Acc smart-Pst-Decl-Comp believe-Pres-Decl
 'Cheli believes Yenghi to have been smart.'

(Yoon 2007: 616)

Taken together, these observations suggest that ka and lul occurring after the nominalized predicate in Korean LFN constructions are not manifestations of structural Nom and Acc Case. Instead, they are focus markers. I argue that the "optional Case marking" in LFN constructions is, in fact, an instance of VP focus licensed by the Neg head. This conclusion is consistent with claims in the literature that focus features must be licensed by a head (Horvath 1995, Choe 1995). My proposal is also compatible with the assumption that ha-support is a PF phenomenon. A Case analysis of ka and lul has relied on the presence of the light verb ha- for Case assignment reasons. In a focus analysis, however, the licensing of ka and lul can be explained even if one were to suppose ha- to be inserted in the PF.

The relevant question is, then, where the focus position for this nominalized VP would be: Does it move to the specifier of NegP, or is there another functional projection reserved exclusively for focus (i.e. FocusP)? Kiss (1998) argues that there are two types of focus: identificational focus, which occupies the specifier of a functional projection, and information focus, which involves no syntactic reordering. From what can be shown about the syntactic and semantic properties of *ka/lul*-marking in LFN constructions, I conclude *ka* and *lul* are markers of information focus and thus will not include a designated position in structural representations.

Information focus differs from identificational focus in a number of aspects. First, identificational focus expresses exhaustive and/or contrastive meaning, whereas information focus merely conveys new, nonpresupposed information, the latter of which appears to be true of focus markers ka and lul. In the context of answering simple yes/no questions, marking the nominalized VP with ka or lul results in an odd utterance, as demonstrated in (17-b). This is because the focused material is already

presented in the question (asking for confirmation) and is not an entirely new, nonpresupposed information being first brought up in the conversation. The response is improved if the respondent uses the unmarked form, as in (17-a), or the identificational focus marker *nun* to deliver a contrastive meaning, as in (17-c).

- (17) Siwu-ka pap-ul mek-ess-ni?
 Siwu-Nom rice-Acc eat-Pst-Q
 'Did Siwu eat rice?'
 - a. Siwu-ka pap-ul mek-ci anh-ass-e.
 Siwu-Nom rice-Acc eat-Nmlz Neg.do-Pst-Decl
 'Siwu did not eat rice.'
 - b. ?Siwu-ka pap-ul mek-ci-*lul* anh-ass-e.
 Siwu-Nom rice-Acc eat-Nmlz-Acc Neg.do-Pst-Decl 'Siwu did not eat rice.'
 - c. Siwu-ka pap-ul mek-ci-*nun* anh-ass-e. Siwu-Nom rice-Acc eat-Nmlz-Foc Neg.do-Pst-Decl 'It is not the case that Siwu ate rice.'

Second, scope effects are observed in identificational focus but not in information focus, as identificational focus is the one that involves movement to a specific position in the structure. This is demonstrated in the following examples of Korean LFN constructions. The information focus marker *lul* bears no scope effect; there is no difference between (18-a) and (18-b) in terms of scope interpretation. However, when the nominalized VP is focus-marked with *nun*, negation must have scope over the quantifier, as shown in (18-c).

- (18) a. Hana-ka motun mwuncey-lul phwul-ci anh-ass-ta.

 Hana-Nom every question-Acc answer-Nmlz Neg.do-Pst-Decl

 'Hana didn't answer every question.' (✓ every>neg, ✓ neg>every)
 - b. Hana-ka motun mwuncey-lul phwul-ci-lul anh-ass-ta.
 Hana-Nom every question-Acc answer-Nmlz-Acc Neg.do-Pst-Decl 'Hana didn't answer every question.' (✓ every>neg, ✓ neg>every)
 - c. Hana-ka motun mwuncey-lul phwul-ci-*nun* anh-ass-ta.

 Hana-Nom every question-Acc answer-Nmlz-Foc Neg.do-Pst-Decl

 'Hana didn't answer every question.' (*every>neg, ✓neg>every)

 (Park and Dubinsky 2020: 102)

Given the set of observations presented so far, I conclude that ka and lul are markers of information focus on nominalized VPs.¹¹ As one may have noticed, these can be replaced by (but cannot co-occur with for morphological reasons; see Cho and Sells 1995) other identificational focus markers. (Although they are not of primary concern in this article, nominalized VPs can be marked by nun or man for contrastive and exhaustive focus, respectively.) Note that, however, identifying ka and lul as focus markers would render it difficult to account for the restricted distribution of ka, as it parts with the distinction between Nom and Acc Case. In the next section, I address this issue by starting with three hypotheses that can be founded upon the findings of the extensive research on the internal structure of verb phrases.

4 On the distribution of ka

The internal structure of verb phrases has been a topic of great theoretical interest in the field of linguistics, as it is where the theory of syntax and semantics greatly overlap. Burzio (1986)'s generalization is one finding in this respect that captures a close relation between the assignment of theta roles (to the subject) and the assignment of Acc Case (to the object). Althought the details differ, the idea that the argument structure of the verb is somehow represented, and is related to certain syntactic operations has been shared and explored by many scholars. Building on this idea, I propose three hypothetical factors that might have to do with the restricted distribution of focus marker ka on nominalized VPs in Korean LFN constructions.

- (19) Hypothesis: The distribution of ka is restricted by...
 - A. the Acc Case assignability of the verb
 - B. the agentivity feature of the verb
 - C. the introduction of external arguments

Hypothesis A is one that has been claimed by Kang (1988) to be the determining factor of "conditioned Case marking" in LFN constructions. To put it short, whenever the verb is capable of assigning Acc Case, the nominalized VP must be marked only by *lul* and not *ka*. This generalization accounts for the following set of examples

 $^{^{11}}$ A reviewer suggests that there seems to be a slight difference in meaning between the ka-marked and lul-marked sentences, and asks how this would affect my theory of ka and lul as focus markers. As a matter of fact, native speakers of Korean including myself and my consultants largely disagree on whether the meaning difference actually exists, and even if there is one, have a very hard time putting into words what that difference is. Regardless of the authenticity and identity of the meaning difference, however, the theory stands mostly unaffected as long as ka and lul are both identified as information focus markers. It is possible that the meaning space of information focus is divided into at least two parts, as the feature specification of identificational focus is also known to be associated with two features: [\pm constrastive] and [\pm exhaustive].

including transitive verbs (20), stative verbs¹² (21), passives (22), and *toy* 'become' (23). Transitive verb *mek* 'eat' assigns Acc Case to its object, *pap* 'rice', and as a result cannot be marked by *ka*. On the other hand, *paykophu* 'hungry' and *toy* 'become' inherently lack Acc Case assignability, and in the passive construction, the Acc Case assignability of *ilk* 'read' is absorbed by the passive morpheme *-eci-*, thus *ka* and *lul* can both appear.

(20) Transitive verb

Siwu-nun pap-ul mek-ci-{*ka/lul} anh-ass-ta.

Siwu-Top rice-Acc eat-Nmlz-Nom/Acc Neg.do-Pst-Decl 'Siwu did not eat rice.'

(21) Stative verb

Siwu-nun paykophu-ci-{ka/lul} anh-ta.

Siwu-Top hungry-Nmlz-Nom/Acc Neg.do-Decl 'Siwu isn't hungry.'

(22) Passive

Chayk-i cal ilk-eci-ci-{ka/lul} anh-nun-ta.

Book-Nom well read-Pass-Nmlz-Nom/Acc Neg.do-Pres-Decl
'Lit. Book is not well read.' (='Book is hard to read.')

(23) toy 'become'

Mwul-i elum-i toy-ci-{ka/lul} anh-ass-ta.

Water-Nom ice-Nom become-Nmlz-Nom/Acc Neg.do-Pst-Decl
'Water did not become ice.'

However, this hypothesis wrongly predicts ka/lul-marking patterns in unaccusative and unergative verbs. Nominalized VP with an unaccusative verb phi 'bloom' shows free alternation between ka and lul, as in (24), whereas unergative verbs like cic 'bark' may only be marked by lul, as in (25). Hypothesis A fails to provide an explanation for the distinction between unaccusative and unergative verbs, as they both belong to the class of intransitive verbs that do not assign Acc Case.

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¹²I identify the so-called 'adjectival predicates' in Korean as stative verbs and continue to use the notation VP as a cover term. For a detailed discussion on why Korean adjectives should be analyzed as stative verbs, see Kim (2002).

(24) Unaccusative verb

Kkoch-i phi-ci-{ka/lul} anh-nun-ta.

Flower-Nom bloom-Nmlz-Nom/Acc Neg.do-Pres-Decl 'Flower does not bloom.'

(25) Unergative verb

Kangaci-ka cic-ci-{*ka/lul} anh-nun-ta.

Puppy-Nom bark-Nmlz-Nom/Acc Neg.do-Pres-Decl

'Puppy does not bark.'

Hypothesis B is proposed by Park and Dubinsky (2021), who argues that the semantic [+Agent] feature of the verb percolates up to condition Case assignment by *anh*. This hypothesis accounts for the *ka/lul*-marking patterns in (24) and (25). *Kkoch* 'flower' in (24) is not an active agent of the action denoted by the verb, whereas *kangaci* 'puppy' is. In refining the notion of 'agentivity', Park and Dubinsky (2021) proposes volition and sentience to be a contributing property for the Proto-Agent Role of Dowty (1991). However, this definition of an agent is mostly overlooked in discussions of psych verbs in Korean. For example, in (26), the subject *Siwu* does not fit well into the category of an agent because it is hard to say that *Siwu* actively participates in the event (or state) of 'fearing' with his own volitions. The thematic role of *Siwu* in this case is better understood as an experiencer.

(26) Psych verb

Siwu-ka paym-ul mwusewe-ha-ci-{*ka/lul} anh-nun-ta.

Siwu-Nom snake-Acc fearful-do-Nmlz-Nom/Acc Neg.do-Pres-Decl 'Siwu is not afraid of snakes.'

Moreover, the distribution of ka is restricted in predicates of which the subject bears the thematic role of a causer. As illustrated in (27), even an inanimate subject like palam 'wind' suppresses the occurrence of ka after the nominalized predicate. The same effect is observed with organizational/institutional subject marked with eyse 'Dat', as illustrated in (28). Subjects of these sentences, palam 'wind' and hakkyo 'school', are ones that are impossible to have any kind of volition of sentience.

(27) Causer (Inanimate subject)

Palam-i namwu-lul ssule-ttuli-ci-{*ka/lul} anh-ass-ta.

Wind-Nom tree-Acc collapse-Caus-Nmlz-Nom/Acc Neg.do-Pst-Decl
'Wind did not make the tree collapse.'

(28) Organizational/Institutional subject

Hakkyo-eyse haksayng-ul ppop-ci-{*ka/lul} anh-nun-ta.

School-Dat student-Acc select-Nmlz-Nom/Acc Neg.do-Pres-Decl 'School does not select students.'

To conclude, I take these facts as evidence in favor of hypothesis C. Whenever an external argument is introduced, the nominalized predicate in LFN constructions can be focus-marked by lul but not ka. This generalization explains the wide range of data seen in this section, from (20) to (28). An additional note must be made on the class of stative verbs and toy 'become'. I assume that these verbs are composed of $v_{\rm BE}$ and $v_{\rm BECOME}$, respectively, and that these little/light v heads do not implicate external arguments. The assumption that these verbs do not introduce external arguments is necessary to account for the free alternation of ka/lul in examples (21) and (23). In contrast, $v_{\rm DO}$ and $v_{\rm CAUSE}$ semantically implicate external arguments, which are then introduced by the Voice head unless suppressed in passive constructions.

5 Linking external arguments to focus

Now that I have come up with the generalization that the distribution of ka is restricted by the introduction of an external argument, I discuss how this can be operationalized in the theory of syntax. Crucially, one such proposal should bear on newly discovered facts on the structure of LFN constructions - ha-support is a PF phenomenon, ani is a Neg head, and -ci has a projection of its own - and the status of ka and lul as focus markers. At the same time, it is important to note that what is being restricted is the morphological realization of focus particle as ka, and not the focus licensing itself. VP focus in LFN constructions can be marked by lul under all circumstances. One should also consider that the choice between ka and lul cannot be decided structurally, as the distinction between external and internal arguments will be blurred out once an NP moves to the subject position for EPP requirements.

The discussion developed in this article so far hints that this phenomenon is a product of the interaction between syntax, morphology, and pragmatics. I argue that a close correlation between external arguments and focus is encoded in the syntax of Korean. In other words, external arguments in Korean are introduced as having information focus features. This is not too awkward of a stipulation because external arguments are, by nature, 'new' to the event structure of the verb phrase. After moving to the specifier position of T for EPP and/or Case requirements, the Nom Case marker ka assigned by T simultaneously marks focus (see footnote 10). In addition, I speculate

that there is a morphological constraint that if the Nom Case marker ka is already used to mark focus, other information focus markers in the same clause must be realized as lul. This results in an exclusive usage of the focus marker ka by the external argument if it is present in the clause.

This proposal implies that focus marking on other elements, besides nominalized VPs in LFN constructions, are also subject to the same constraint. The prediction seems to be borne out, at least, for "case stacking" examples on non-arguments (i.e. PP and QP) presented by Schütze (2001). In both examples (29) and (30), focus marking on the preposition phrase *ecey-pwuthe* 'from yesterday' and the quantification phrase *twu pen* 'twice' is conditioned by the presence of an external argument. If the subject of the sentence is not an active agent or a causer, non-argument elements may be focus-marked by *ka*, as shown in (29-a) and (30-a). However, in the presence of an external argument, focus marking on these element cannot be realized as *ka*; see (29-b) and (30-b). Instead, they should be marked by *lul*; see (29-c) and (30-c).

(29) Preposition phrase

- a. Ecey-pwuthe-*ka* nalssi-ka coh-aci-ess-ta.

 Yesterday-from-Nom weather-Nom good-become-Pst-Decl

 'From yesterday, the weather became good.'

 (Yoon 1986: 156)
- b. *Ecey-pwuthe-*ka* cengpwu-ka swuip-ul kumcihay-ss-ta.
 Yesterday-from-Nom government-Nom imports-Acc ban-Pst-Decl
 'From yesterday, the government banned imports.'
- c. Ecey-pwuthe-*lul* cengpwu-ka swuip-ul kumcihay-ss-ta.

 Yesterday-from-Acc government-Nom imports-Acc ban-Pst-Decl

 'From yesterday, the government banned imports.'

 (Schütze 2001: 208)

(30) Quantification phrase

- a. Kkoch-i twu pen-i phi-ess-ta.
 Flower-Nom two times-Nom bloom-Pst-Decl
 'Flower bloomed twice.'
- b. *Siwu-ka pang-ul twu pen-*i* chengsohay-ss-ta. Siwu-Nom room-Acc two times-Nom clean-Pst-Decl 'Siwu cleaned the room twice.'
- c. Siwu-ka pang-ul twu pen-*ul* chengsohay-ss-ta. Siwu-Nom room-Acc two times-Acc clean-Pst-Decl 'Siwu cleaned the room twice.'

6 Conclusion

In this paper, I have revisited what has been called the "optional Case marking" on nominalized predicates in Korean LFN constructions. Given the assumption the ha-support is a PF phenomenon, I analyzed the structure of Korean LFN constructions in a top-down manner; I showed that the long negation ani and the nominalizer -ci are both heads with their own projections, and that -ci attaches to the functional projection of the verb. I have argued that ka and lul occurring with the nominalized VP are markers of information focus licensed by the Neg head. Then, I showed that the restricted distribution of ka should be attributed to the introduction of external arguments, not to the Case assignability or the agentivity property of the verb. These findings suggest that there is some correlation between external arguments and the expression of information focus in Korean. I have proposed that external arguments inherently bear focus features in Korean, and a morphological constraint on the distribution of focus markers accounts for the phenomenon. Since the details of such constraint seem obscure at the moment, it remains for future research to investigate 1. if this can be extended to the distribution of focus markers in general, and 2. how such constraint can be prescribed in terms of syntax, morphology, or pragmatics.

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