# Keunhyung Park · Stanley Dubinsky (University of South Carolina)

Park, Keunhyung and Stanley Dubinsky. 2021. [+Agent] conditioned Case assignment to nominalized VPs in Korean LFN constructions. Linguistic Research 38(1): 1-26. The aim of the current paper is to investigate how Case is assigned to non-canonical nominal expressions which are distinct from Case-marking on canonical subject and object arguments. More specifically, we focus on Case marking to nominalized verbs in Korean Long-Form negation constructions. As other nominal expressions get Case in Korean, the nominalized verbs with the -ci marker in Long-Form negation constructions can also get either NOM or ACC. However, the distributions of Case marking in this paper show that Case markers attached to the nominalized verbs are not randomly assigned, but it is systematically given depending on syntactic and semantic properties of the nominalized verbs. This paper proposes two distinct conditions as follows: the negated auxiliary verb anh (i) assigns only ACC Case to its nominalized verb complement or (ii) assigns either NOM or ACC Case allowing free Case alternation. To solve the puzzle of distinct Case assignment, this paper argues that agentivity is the important factor in deciding Case marking on the nominalized verb. Evidence from the data further proves that if nominalized verbs have +Agent feature, then the feature can percolate up to the Case assigner anh, and it eventually forces to assign only ACC Case back onto the nominalized verb. If not, the auxiliary verb anh cannot have +Agent feature and assigns either NOM or ACC. (University of South Carolina)

Keywords syntax, semantics, Korean, Case assignment, Case alternation, agentivity, Long-Form negation (LFN)

## 1. Introduction

Korean nominative (NOM) and accusative (ACC) Case markers, (-*i*/-*ka*) and (-*u*//-*lul*), are canonically attached to subjects and objects, respectively. However, these Case markers are sometimes also affixed to non-argument expressions. In this vein, the current paper investigates the Case marking of nominalized argument-taking verbs as they appear

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in sentential negation constructions in which these nominalized predicates can appear (depending on conditions) with either NOM or ACC Case. Korean has two structurally distinct forms of negation, Short-Form negation (SFN) and Long-Form negation (LFN), and it is the latter construction, which contains these nominalized predicates, with which we are concerned here. In the LFN construction, we note that i) the main verb is nominalized with a special marker -ci and ii) a *ha*-verb 'do' is inserted (as *Last Resort*) to support other syntactic morphemes denoting properties such as tense, negation, and honorification. Examples in (1) and (2) below illustrate the negation of a thematic verb and a predicate adjective, respectively, in the LFN construction.

(1)	Hana-ka	sakwa-lul	mek-	ci	anh-ass-ta.		
	Hana-NOM	apple-ACC	eat-N	MIZ	NEG.do-PST-DECL		
	'Hana didn't eat apples.'						
(2)	Apeci-kkeyse	payko	phu-ci	anh	-usi-ess-ta.		
	father-HON.NO	M hungr	y-NMIZ	NEC	G.do-HON-PST-DECL		
	'My father wasn't hungry.'						

In both examples, the verbal predicates are nominalized with *-ci*, and the negative auxiliary complex *anh-ass-ta* 'didn't' is preceded by the nominalized verb. What is of interest to us here is optional Case marking of the nominalized predicates, *mek-ci* 'eat-NMIZ' in (1) and *paykophu-ci* 'hungry-NMIZ' in (2). In (1'), *mek-ci* can appear with ACC Case, and in (2'), *paykophu-ci* can appear marked with either NOM Case or ACC Case.

(1')	Hana-ka	sakwa-lul	mek-ci-(lul/*ka)		anh-ass-ta.		
	Hana-NOM	apple-ACC	eat-NMIZ-ACC	/NOM	${\tt NEG.} do {\tt -PST-DECL}$		
'Hana didn't eat apples.'							
(2′)	Apeci-kkeyse	paykophu-	ci-(lul/ka)	anh-usi	i-ess-ta.		
	father-HON.NOM	hungry-NM	IZ-ACC/NOM	NEG.do	-HON-PST-DECL		
	'My father wasn't hungry.'						

The salient questions arising from the above data are (i) how is it that nominalized predicates under negation are assigned Case in the first place, and (ii) what conditions the Case assignment. In particular, we seek to explore the mechanism by which Case is

assigned to the -ci nominalizations and also to understand why it is that the -ci nominalization in (1') only get ACC Case and why the -ci nominalization in (2') freely alternate between NOM and ACC Case.

Sections 2 and 3 of the current paper show how canonical grammatical Case and semantic Case are assigned in Korean. Presenting the examples of Case assignment in complex auxiliary constructions, Section 4 explains how free Case alternation is allowed on the complements of complex auxiliary constructions. Next, Section 5 briefly introduces two forms of sentential negation, gives an overview of Case assignment to nominalized verbs, and discusses Case assignment in the particular case of the Korean LFN construction. Extending the observations made in Section 4 with non-negated complex verb constructions. The pattern of Case assignment in these constructions supports the following claims: i) the negative auxiliary *anh* 'NEG.do' is a Case assignment in Complex verb constructions. Finally, Section 6 presents an operationalization of Case assignment in the LFN construction.

## 2. Canonical Case-marking in Korean

This section contrasts the canonical use of Korean NOM and ACC Case markers of subjects and objects, with other thematically generated postpositions. Generally, Case markers in Korean are attached to nominals, and indicate their syntactic and semantic functions. In (3) below, the NOM Case marker -i/ka and the ACC Case marker -ul/lul are attached to the arguments of predicate functioning as typical subject and object, respectively.

(3) a. Hana-ka sakwa-lul mek-ess-ta. Hana-NOM apple-ACC eat-PST-DECL 'Hana ate an apple.'
b. cangmikkoch-i yeyppu-ta. rose-NOM pretty-DECL 'The rose is pretty.'

c. kong-ul tencye! ball-ACC throw.IMP 'Throw the ball!'

As shown in (3), nominal arguments in the canonical subject position are realized with a NOM Case marker, and those in canonical object position are realized with an ACC Case marker. The nominative subjects in (3a) and (3b) show that NOM Case is consistently applied to arguments in subject position, even when they are thematically distinct. In (3a), Hana is an external argument of the agentive transitive verb *mek* 'eat' and, in (3b), *cangmikkoch* 'rose' is an internal argument of the predicate adjective *yeyppu* 'pretty'. In (3c), we see that the sentence-initial object *kong* 'ball' of a transitive verb is marked with ACC Case, even in the absence of an overt subject (here, the subject of an imperative). Therefore, it can safely be said for the examples in (3) that NOM and ACC Case reflect surface grammatical functions, when subjects and objects are involved.

In addition to the NOM and ACC Case markers described above, Korean also uses postpositional markers with nominal adverbial expressions which reflect their semantic roles, rather than their grammatical functions. As in (4), the adverbial nominals typically express, among other things, instrument, time, duration, or direction, and are marked with postpositional affixes such as *-ey* 'to', *-ey* 'at', *-(u)lo* 'to, with', and *-eyse* 'at, in, from'. One might consider these markers to be semantic markers and distinguished from grammatical Case markers.<sup>1</sup>

- (i) Hana(-ka) sakwa(-lul) son\*(-ulo) mek-ess-ta. Hana-NOM apple-ACC hand-with eat-PST-DECL 'Hana ate an apple with her hands.'
- (ii) Hana-ka sakwa-lul(\*-man) son-ulo-man mek-ess-ta. Hana-NOM apple-ACC-only hand-with-only eat-PST-DECL
   'Hana ate an apple only with her hands.'

<sup>1</sup> A reviewer points out that it is unclear i) whether nominative and accusative Case markers are postpositions or not and ii) whether -ulo marked elements are adverbials or arguments. Korean suffixes are broadly divided into grammatical Case markers (such as NOM -i/ka, ACC -ul/lul, and GEN -uy) and postpositional semantic markers (such as -ey 'to', -eyse 'from', -(u)lo 'with', etc.). There are some tests to distinguish these two classes of markers from one another. First, as in (i), Case markers, e.g. -ka and -lul, can frequently be deleted in spoken language, but postpositions, e.g. -ulo, cannot. Second, as in (ii), some other markers (e.g. man 'only') can be attached after postpositions, but Case markers cannot host other suffixes. In (i), -ulo 'with' is attached to a non-argument, and the postpositional phrase son-ulo 'with hands' functions as an instrumental modifier (i.e. adjunct) of the main verb mek- 'eat'.

(4)	a.	Hana-ka	sakwa-lul	son-ulo	mek-e	ss-ta.
		Hana-NOM	apple-ACC	hand-with	eat-PS	F-DECL
		'Hana ate an	apple with h	er hands.'		
	b.	Hana-ka	mikwuk-eyse	hankwu	ık-ulo	ka-ss-ta.
		Hana-NOM	America-fron	n Korea-t	0	go-PST-DECL
		'Hana went to	o Korea from	America.'		
	c.	yesessi-ey	hakkyo-ey	wa!		
		6 o'clock-at	school-to	come.IMP		
		'Come to sch	ool at 6 o'clo	ock!'		

In contrast to NOM and ACC Case markers, which are structurally assigned as a reflex of a nominal's syntactic configurations, the semantic markers above are assumed to be lexically assigned in accordance with the semantic properties of marked expressions. The semantic markers are regarded as postpositions, analogous to English prepositions, and add semantic role information to the marked expressions rather than specifying Case. Having shown here the canonical distribution of Case markers and semantic postpositions on Korean nominal expressions, we now turn, in Section 3, to an examination of non-canonical NOM and ACC Case assignment.

# 3. Non-canonical NOM and ACC Case-marking in Korean

Example (5), below, illustrates a class of nominals which can have ACC Case, even though they appear not to be true direct objects. These particular ACC Case marked nominals fall into a class of what are durational, distance, or frequency adverbs, and can optionally be marked with ACC Case -(l)ul (Wechsler and Lee 1996: 631).

(5)	a.	Tom-i	twu sikan-tonga	n-ul	tali-ess	-ta.		
		Tom-NOM	two hours-for-A	CC	run-PST	-DECL		
		'Tom ran for	two hours.'					
	b.	Tom-i	mikwuk-ul twu p		en-ul	pangmwunha-yess-ta.		
		Tom-NOM	America-ACC twice-A		ACC	visit-PST-DECL		
		'Tom visited	America two times.'					

c.	Tom-i	isip	mail-ul	tali-ess-ta.
	Tom-NOM	twenty	miles-ACC	run-PST-DECL
	'Tom ran tw			

The *ul*-marked adverbs in (5) share certain semantic properties, according to Wechsler and Lee (1996). They propose that these adverbs are all "situation-delimiting," in that they quantify the event denoted by the predicate. However, they note, not all situation-delimiting adverbs take ACC Case. As they point out, situation-delimiting adverbs can only get ACC Case if they have an external co-argument (i.e. an underlying Agentive Subject). This semantically conditioned assignment of ACC Case will turn out to have further application in our analysis below.

There are also instances of non-subjects being marked with NOM Case, as we see in (6). Example (6) shows a complement taking the adjective *coh* 'fond of' and the durational adverb *twu pen* 'twice', both being marked with NOM Case. What both of these sentences have in common is that their surface subjects, an Experiencer Hana in (6a) and a passivized object *cip* 'house' in (6b), are not agentive. Notice, crucially, that the same frequency adverb *twu pen* 'twice' gets ACC Case in (5b) and NOM Case in (6b), and that this contrast correlates with the presence or absence of an Agent argument.<sup>2</sup> We will return to this conditioning factor further on in this paper.

(6)	a.	Hana-ka	sakwa-ka	coh-ass-ta.		
		Hana-NOM	apple-NOM	fond-PST-D	ECL	
		'Hana was for	nd of apples.'			
	b.	b. Cip-i Swuni-eyuyha		ay pheyinthu-ka		twu pen-i
		house-NOM	Swuni-by	paint-1	NOM	twice-NOM
		chilhay-ci-ess-	ta.			
brush-PASS-PST-DECL 'The house was painted twice by Swumi.'						

<sup>2</sup> It is noted by a reviewer that the *eyuyhay* 'by' suffix sounds like a direct translation of English 'by', and is dispreferred by some in opposition to *eykey* DAT. Of more central import to the data presented above, this reviewer also suggests that accusative marked *twu pen-ul* 'twice-ACC' is also acceptable in (6b). We have no precise analysis to offer for this possible alternation, other than the speculation that Agentivity might affect Case assignment at different points in the derivation. That is, the Agent of the transitive verb *chilha* 'brush' might license ACC Case on *twu pen* prior to passivization for some speakers.

There are, in addition to the cases noted above, other cases of non-objects being marked with ACC Case. One of these involves symmetrical predicates, such as the verb *talm* 'resemble'. As (7) shows, the verb *talm* involves two arguments, such that each 'resembles' the other. For this predicate, the two arguments can surface either as a coordinated subject, as in (7a), or as a pair of independent arguments, marked NOM and ACC, respectively, as in (7b).

(7)	a.	na-wa	hyeng-i	talm-ass-ta.			
		I-and	brother-NOM	resemble.each.other-PST-DECL			
	'I and my brother resemble each other.'						
	b.	nay-ka	hyeng-ul	talm-ass-ta.			
		I-NOM	brother-ACC	resemble-PST-DECL			
	'I resemble my brother.'						

One might imagine that *hyeng* 'brother' in (7b) is a direct object, based on its being marked with ACC Case. However, this would be wrong, as we can see in (8), since (7b) cannot be passivized as in (8a), and the ACC argument cannot float a quantifier (compare (8b) and (8c)).<sup>3</sup> In this respect, the ACC argument in (7b) is no more a syntactic direct object than are the complements in examples (5).

(i) na-wa hyeng-i talma-ci-ess-ta. I-and brother-NOM resemble.each.other-PASS-PST-DECL 'I and my brother came to resemble each other.'

In regard to (8c), a reviewer suggests that the numeral quantifier with a classifier associated with the accusative *-ul* can be floated as in (ii). However, given that either *hyeng* 'brother' or *twu myeung* 'two people' can each stand alone as the object of *talm* 'resemble', we take example (ii) here below not to be an instance of Quantifier Float. In (iii), we see that *twul* 'two' cannot stand alone as an object of *talm*, with or without Case marking.

(ii)	nay-ka	hyeng-ul	twu myeung-ul	talm-ass-ta.				
	I-NOM	brother-ACC	two people-ACC	resemble-PST-DECL				
	'I resemble two brothers.'							
(iii)	) *nay-ka	twul(-ul)	talm-ass-ta.					
	I-NOM	two	resemble-PST-DECL					
	('I resemble two.')							

<sup>3</sup> It is worth noting that *talm* 'resemble' can itself be passivized, as shown here in (i). This proves that the ungrammaticality of (8a) is attributable to *hyeng-ul* 'brother-ACC' in (7b) not being a direct object, rather than any restrictions on passivization of the verb.

(8)	a.*hyeng-i	na-eyuy	hay	talma-ci-ess-ta.
	brother-No	OM I-by		resemble-PASS-PST-DECL
	'My broth	her is resembl	ed by	me.'
	b. nay-ka	twu hyeng-ul		talm-ass-ta.
	I-NOM	two brother-A	CC	resemble-PST-DECL
	'I resemb	le two brothe	rs.'	
	c.*nay-ka	hyeng-ul	twul	talm-ass-ta.
	I-NOM	brother-ACC	two	resemble-PST-DECL
	'I resemb	le two brothe	rs.'	

The ACC Case marking of verbal nouns (VNs) in Korean light verb constructions yet another instance of non-objects getting ACC Case. In (9a), the VN *kongpwu* 'study' in the light verb compound *kongpwu-ha* 'do-study' optionally appears with ACC Case. This ACC Case is presumed to be sanctioned, in part, by *kongpwu* being a nominal element in the *kongpwu-ha* compound, as noted by Choi and Wechsler (2001). However, *kongpwu* (despite being a nominal morpheme) is still not a direct object complement of *ha* 'do'. This is confirmed by the fact that it cannot passivize, as in (9b). In addition, we see that optional ACC marking of the VN is not allowed when the VN is stative as in (9c).

(9)	a. Hana-ka	yelsimhi/elye	wun kongp	wu(-lul)	ha-yess-ta.
	Hana-NOM	hard/difficult	study(	-ACC)	do-PST-DECL
	'Hana studie	ed hard.'; 'Ha	na studies son	nething diff	ficult.'
	b.*kongpwu-ka	Hana-eyuyh	ay yelsimhi	hay-ci-es	ss-ta.
	study-NOM	Hana-by	hard	do-PASS-	PST-DECL
	'Study was	done by Hana	a hard.'		
	c. kyosil-i	acwu	coyong(*-ul)	ha-yess-ta	
	classroom-No	OM very	quiet(-ACC)	do-PST-DE	CL
	'The classro	om was very	quiet.'		

Previous analyses (e.g. Grimshaw and Mester 1988) have sought to explain non-canonical Case assignment in light verb constructions through the mechanism of argument transfer. This involves the nominal (predicate) VN transferring its argument structure up to the auxiliary verb ha 'do' and transforming it into a Case assigner. The auxiliary verb then Case marks the VN itself as a result of its being a complement of that auxiliary verb.

Having examined canonical and non-canonical uses of NOM and ACC Case so far, we now turn to instances in which Case can alternate in non-subject arguments.

## 4. Case alternation

Before delving into the distribution of Case in negation constructions, we note instances in which a non-subject might obligatorily have NOM Case as in (10), ACC Case as in (11), or optionally have either of NOM and ACC as in (12).

(10) a.	Hana-ka	sakwa-ka/*lul	coh-ass-ta.
	Hana-NOM	apple-NOM/ACC	C fond-PST-DECL
	'Hana was	s fond of apples.'	
b.	nay-ka	pam-i/*ul	mwusep-ta.
	I-NOM	snake-NOM/ACC	fear.PRES-DECL
(11) a.	Hana-ka	sakwa-lul/*ka	coh-a-ha-n-ta.
	Hana-NOM	apple-ACC/NOM	M fond-CONN-act-PRES-DECL
	'Hana acts	s fond of apples.'	
b.	nay-ka	pam-ul/*i	mwusew-e-ha-n-ta.
	I-NOM	snake-ACC/NOM	fear-CONN-act-PRES-DECL
	'I act fear	ful of snakes.'	

In (10), according to Kim (2016), the obligatory NOM Case on the second argument is attributed to the lack of agentivity or to a stativity feature of the head psych verb *coh*'fond' which precludes the assignment of ACC Case to the complement position, and results in *sakwa* 'apple' getting NOM Case instead (Bratt 1996; Kang 1986; Kim 1990). However, when the psych verbs *coh-a* 'fond' or *mwusew-e* 'fear' are combined with the transitive verb *ha-* 'do' in (11), the Case marking options for the complements are reversed, with *sakwa* 'apple' and *pam* 'snake' being obligatorily marked with ACC Case. In these instances, we might assume that the merger of the argument frames associated with the two predicates in each of (11a) and (11b) results in a compound predicate which inherits an agentivity feature from the affixal verb.

(11a')  $[_{V} \text{ coh-a}] + [_{V} [+AGENTIVE] \text{ ha-n-ta}] \rightarrow [_{V} [+AGENTIVE] \text{ coh-a-ha-n-ta}]$ (11b')  $[_{V} \text{ mwusew-e}] + [_{V} [+AGENTIVE] \text{ ha-n-ta}] \rightarrow [_{V} [+AGENTIVE] \text{ mwusew-e-ha-n-ta}]$ 

The derivation of this complex predicate with an [+AGENTIVE] feature that determines obligatory assignment of ACC Case to the complement is shown in (11a') and (11b') above.

In contrast to (10) and (11), we find that some complex verb constructions such as *mek-ko siph-ta* 'want to eat' allow free Case alternation between NOM and ACC on the complement argument, *sakwa* 'apple', as in (12). The distinct argument structures with NOM and ACC Case markings could lead slightly different interpretations.

(12) a.	Hana-ka	[sakwa-lul	mek-ko]		siph-ess-ta.				
	Hana-NOM	apple-ACC	eat-CONN		want-PST-DECL				
	'Hana wanted [to eat apples].'								
b.	Hana-ka	sakwa <sub>1</sub> -ka	$[pro_1$	mek-k	<b>[</b> 0]	siph-ess-ta.			
	Hana-NOM	apple-NOM	them	eat-co	DNN	want-PST-DECL			
	'Hana wanted apples [to eat them].'								

In (12a), *sakwa* 'apple' is the ACC object of *mek-ko* 'eat', the complement of *siph-ess-ta* 'wanted', meaning 'what Hana wanted was to eat apples'. In (12b), *sakwa* is the NOM object of *siph-ess-ta*, with *mek-ko* functioning as a modifying purpose clause of *siph-ess-ta*, meaning 'what Hana wanted was apples, in order to eat them.' The simplified sentence structures in (12a') and (12b') below show how *sakwa* can get the ACC Case or NOM Case, respectively.

(12a') Hana-ka [[sakwa-lul mek-ko] siph-ess-ta]. (12b') Hana-ka [sakwa<sub>1</sub>-ka [[*pro*<sub>1</sub> mek-ko] siph-ess-ta]].

In (12a'), a transitive lower verb *mek* 'eat' assigns ACC Case to its NP complement *sakwa* 'apple', and in (12b'), a psych verb *siph* 'want' assigns NOM Case directly to its NP complement *sakwa* (with *sakwa* being coindexed with a null *pro* object of *mek-ko*).<sup>4</sup>

<sup>4</sup> We find out more evidence that abnormal Case assignments in Korean are properly explained by the existence of null pronoun *pro*. According to Kim (2019) and Kim et al. (2020), Case-mismatches in Korean

In (13a) and (13b), below, the objects *sakwa* 'apple' and *pam* 'snake' to have ACC Case, in a manner similar to (11), with *coh-a-ha-ko* 'to act fond of' and *mwusew-e-ha-ko* 'to act fearful of' functioning as the complements of *siphessta* 'wanted'. In contrast to (12b), though, the sentences in (14) are both ungrammatical. This is because neither *coh-a-ha-ko* 'to act fond of' nor *mwusew-e-ha-ko* 'to act fearful of' make any sense as a modifier of *siphessta*.

- (13) a. Hana-ka [sakwa-lul coh-a-ha-ko] siph-ess-ta. Hana-NOM apple-ACC fond-CONN-act-CONN want-PST-DECL 'Hana wanted [to act fond of apples].'
  - b. nay-ka [pam-ul mwusew-e-ha-ko] siph-ess-ta. I-NOM snake-ACC fear-CONN-act-CONN want-PST-DECL 'I wanted [to act fearful of snakes].'
- (14) a.\*Hana-ka sakwa<sub>1</sub>-ka  $[pro_1]$ coh-a-ha-ko] siph-ess-ta. Hana-NOM apple-NOM them fond-CONN-act-CONN want-PST-DECL (#Hana wanted apples [to act fond of them].) b.\*nay-ka pam1-i  $[pro_1]$ mwusew-e-ha-ko] siph-ess-ta. I-NOM snake-NOM them fear-CONN-act-CONN want-PST-DECL
  - (#I wanted snakes [to act fearful of them].)

The simplified sentence structures in (13a') and (14a') below show how *sakwa* 'apple' can get the ACC Case or NOM Case, respectively.

(13a') Hana	a-ka [[sakw	va-lul	coh-a-ha-ko]	siph-ess-ta].
(14a') *Hana	a-ka [sakv	va <sub>1</sub> -ka [[pro <sub>1</sub>	coh-a-ha-ko]	siph-ess-ta]].

Left-Node-Raising constructions are acceptable in (i) below. However, as shown in (ii), the Case-mismatch is not allowed if the first trace is not properly licensed by the moved element. See Kim et al. (2020) for more discussion.

- (i) Chelswu-eykey<sub>1</sub> [chinkwu-ka t<sub>1</sub> swul-ul sass-ko], [pwumonim-i pro<sub>1</sub> wilohayssta].
   Chelswu-DAT friend-NOM alcohol-ACC bought-and parents-NOM comforted '[Chelswu]DAT, a friend bought a drink, and parents comforted.'
- (ii) \*Chelswu-eykey<sub>1</sub> [pwumonim-i  $t_1$  wilohayss-ko], [chinkwu-ka  $pro_1$  swul-ul sassta]. Chelswu-DAT parents-NOM comforted-and friend-NOM alcohol-ACC bought '[Chelswu]DAT, parents comforted, and a friend bought a drink.'

In (13a'), a transitive lower verb *mek* 'eat' assigns ACC Case to *sakwa* 'apple', and in (14a'), a psych verb *siph* 'want' assigns NOM Case to *sakwa*, but the sentence is unacceptable because *cohahako* 'to act fearful of' fails to function as a modifier of *siph* 'want'.

Constructions similar to, but more complex than, example (12) have been considered in the literature. Example (15) shows ACC Case or NOM Case alternation on the object of *mek* 'eat' when it is framed by two additional predicates, *po* 'try' and *siph* 'want'. In (15a), *sakwa* 'apple' gets ACC Case as the object of *mek* 'eat', and in (15b) it gets NOM Case as the object of *siph* 'want'. We note that (15b) is deemed less acceptable than (15a), but that its acceptability is improved if there is an intonational break between Hana and *sakwa* or between *sakwa* and *mek*.<sup>5</sup>,<sup>6</sup>

(15) a. Hana-ka [sakwa-ul po-ko mek-e] siph-ess-ta. Hana-NOM apple-ACC eat-CONN try-CONN want-PST-DECL 'Hana wanted to try to eat an apple.' b.?Hana-ka sakwa<sub>1</sub>-ka [[*pro*<sub>1</sub>] po-ko] mek-e siph-ess-ta. Hana-NOM apple-NOM them eat-CONN try-CONN want-PST-DECL 'Hana wanted apples [to try to eat them].'

In prior analyses, such as found in Yoo (2002) and its antecedents, it has been proposed that the Case marking alternations in (15) are connected with the percolation of +Agent features from lower predicates onto higher ones, and the circumstances under which such percolation is blocked. However, given our evidence above in examples (10) through (14) and the interpretations associated with these Case alternations, it seems far simpler to correlate them with (i) which verb is directly selecting the object *sakwa* 'apple'

<sup>6</sup> An (2020) proposes that *po-da* 'to try' auxiliary verb does not affect the argument structure of the target sentence. In this regard, the case alternation in (15) depends on whether the argument *sakwa* 'apple' is licensed by *mek* 'eat' or not.

(i)	Toto-ka	talli-e	po-ass-ta.				
	Toto-NOM	run-conn try-pst-decl					
	'Toto tried i						
(ii)	*Toto-ka	ku key-ul	talli-e	po-ass-ta.			
	Toto-NOM	the thing-AC	C run-CONN	try-PST-DECL			
	'Toto tried running it.'						

<sup>5</sup> The lower acceptability of (15b), and the requirement that a pause precede *sakwa* 'apple' was pointed out to us by an anonymous reviewer of this paper.

and (ii) the availability of a purpose clause interpretation for the extra predicate. When the verbal complex preceding *siph* 'want' cannot figure as a purpose clause modifier that verb and can only be the complement of *siph*, then the nominal object must be located within the complement verb complex and get ACC Case, as in (13a) and (13b). When the preceding verbal complex can modify *siph*, then *siph* is free to take its own NOM Case marked object, as in (12b) and (15b). The fact that (15b) requires additional intonational information to mark *sakwa* as lying outside the scope of *mek-e-po-ko* 'to try to eat' further supports our analysis.

Additional data suggesting that this perspective is the correct one is found in the distribution and interpretation of temporal modifiers in these constructions. Consider example (16) from Kim and Maling (1998: 141) and example (17) from Yoo (2002: 1016).

- (16) a. Na-nun pamsay swul-ul masi-ko siph-ess-ta. I-TOP all.night liquor-ACC drink-CONN want-PST-DECL 'To drink all night was my desire.' or 'All night long, I had a desire to drink.' b. Na-nun pamsay swul<sub>1</sub>-i  $[pro_1]$ masi-ko] siph-ess-ta. I-TOP all.night liquor-NOM it drink-CONN want-PST-DECL 'All night long, I had a desire to drink.' Not available: 'To drink all night was my desire.' (17) Na-nun swul<sub>1</sub>-i pamsay masi-ko siph-ess-ta.  $pro_1$
- I-TOP liquor-NOM all.night it drink-CONN want-PST-DECL 'To drink all night was my desire.' or 'All night long, I had a desire to drink.'

In (16a), the phrase *pamsay* 'all night' precedes the ACC object *swul* 'liquor' and can be interpreted as modifying either *swul-ul masiko* 'drink liquor' or *siphesssta* 'wanted'. In (16b), with *swul* 'liquor' taking NOM case, it can only modify *siphessta* 'wanted', since *swul* itself lies (according to our account) outside of the phrase projected by *masiko* 'drink'. In (17), on the other hand, when *pamsay* follows *swul*, it can be interpreted ambiguously, since it is in this position on the left edge of the phrase projected by *masiko* and the phrase projected by *siphessta*.

In seeking an explanation for the Case assignment paradigms shown above, it is

useful to consider a refinement of the notion "agentivity", and to associate the trigger for this feature with Dowty's (1991) Proto-agent roles. In Dowty (1991), entailments cited in (18) which lead to a subject's being marked as an agent include: +sentient (of the subject), +volitional (of the subject), +change-of-state (of the object), and +affected (of the object). Furthermore, example sentences in (19) show how each Proto-Agent entailment separately contributes to the subjecthood of the agentive NP (we have boldfaced those entailments which figure prominently in the analysis presented here).

- (18) Contributing properties for the Agent Proto-Role (Dowty 1991: 572, (27)):
  - a. Volitional involvement in the event or state
  - b. Sentience (and/or perception)
  - c. Causing an event or change of state in another participant
  - d. Movement (relative to the position of another participant)
  - e. (Exists independently of the event named by the verb)
- (19) Examples illustrating independence of Proto-Agent entailments in subject NPs (Dowty 1991: 572, (29)):
  - a. Volition alone: What he did was not eat [anything] for two days.
  - b. Sentience/perception alone: John sees/fears Mary.
  - c. Causation alone: His loneliness causes his unhappiness.
  - d. Movement alone: The rolling tumbleweed passed the rock.
  - e. Independent existence: John needs a new car.

In addition, as it is well established that a verb can assign a theta role to its subject position if and only if it can assign an accusative Case to its object (Burzio 1986), we might suppose that predicates with a +Agent feature entail ACC Case assigned to the complement. Thus, ACC Case will be assigned necessarily if a predicate has sufficient proto-agent entailments to trigger a +Agent feature.

Reviewing the data thus far, the predicates *coh* 'fond of' and *mwusep* 'fear' in (10) do not assign ACC Case to their complements, which might be expected based on their having insufficient proto-agent entailments. While the subjects of *coh* and *mwusew* are +sentient, the state of being 'fond of' or 'in fear of' are –volitional (of the subject), – change-of-state (of the object), and –affected (of the object). However, when *coh* or *mwusep* form a compound with the verb *ha* 'act' in (11), as in *coh-a-ha* 'act fond of' and *mwusew-e-ha* 'act afraid of', they must assign ACC Case to the same complements.

We might attribute this difference to the entailments associated the subject of the verb ha 'do', which ordinarily is both +sentient and +volitional, leading to this compound predicate having a +Agent feature to assign.

#### 5. Case assignment in negative constructions

This section first reviews the two classes of sentential negation in Korean, Short-Form negation (SFN) and Long-Form negation (LFN), then examines the general phenomenon of Case assignment to nominalized predicates, and finally takes up the specific distribution of Case on nominalized predicates in LFN constructions.

# 5.1 Two types of negation in Korean

Before turning to the class of constructions that form the focus of this paper (that is, LFN constructions), we should first briefly review the general structure of the two distinct forms for sentential negation in Korean: Short-Form negation (SFN) and Long-Form negation (LFN). These are illustrated in (20b) and (20c), respectively.

(20) a.	Hana-ka	sakwa-lul	mek-ess	ta.	
	Hana-NOM	apple-ACC	eat-PST-	DECL	
	'Hana ate ap	oples.'			
b.	Hana-ka	sakwa-lul	an	mek-ess-ta.	(SFN)
	Hana-NOM	apple-ACC	NEG	eat-PST-DECL	
	'Hana didn't	eat apples.'			
c.	Hana-ka	sakwa-lul	mek-ci	anh-ass-ta.	(LFN)
	Hana-NOM	apple-ACC	eat-NM	Z NEG.do-PST-DECL	
	'Hana didn't	eat apples.'			

In (20b), the SFN negator *an* 'not' is directly attached before the main verb *mek* 'eat' and is argued to be an adverbial clitic that might not project NegP (Kim 2000; Hagstrom 2000; Han et al. 2007). Because *an* 'not' is directly attached to the main verb, no constituent can be inserted between them. This includes adverbs like *cal* 'well' or *ppalli* 'quickly', which must appear before the *an* + VERB constituent. It is generally assumed

that the the SFN negator an 'not' is low and inside VP.

In contrast with (20b), the LFN construction in (20c) is rather more complex. In LFN constructions, the main verb is nominalized with the affix -ci, and the auxiliary verb *ha* 'do' is inserted with a negating an prefix. The negative auxiliary complex *anh-ass-ta* is composed of *an* 'not', *ha* 'do', and other tense and discourse suffixes (e.g. past tense *-ass-* and declarative *-ta*). In the literature, there is some question as to whether the complement of *anh-ass-ta* is or is not an embedded clause.<sup>7</sup> Hagstrom (2002) claims that LFN involves a complex embedded clause, with *-ci* as a nominalizing affix attached to that clause. However, both Han et al. (2007) and Kim (2016) disagree, claiming that the nominalizer *-ci* attaches directly to the verb. As evidence in support of this, Han et al. (2007) appeal to the distribution of embedded Negative Polarity Items (NPIs) in the scope of main clause negation. They show that NPI objects of *-ci* inflected verbs in LFN constructions are licensed by the *anh-ass-ta*, compare (21a) and (21b) below.

Hana-ka	amwukes-to	mek-ci	anh-ass-ta.
Hana-NOM	anything-also	eat-NMIZ	NEG.do-PST-DECL
'Hana didn't	eat anything.'		
amwu-to	sakwa-lul	mek-ci	anh-ass-ta.
anyone-also	apple-ACC	eat-NMIZ	NEG.do-PST-DECL
'Nobody ate a	apples.'		
	Hana-ka Hana-NOM 'Hana didn't d amwu-to anyone-also 'Nobody ate a	Hana-kaamwukes-toHana-NOManything-also'Hana didn'teat anything.'amwu-tosakwa-lulanyone-alsoapple-ACC'Nobody ateapples.'	Hana-kaamwukes-tomek-ciHana-NOManything-alsoeat-NMIZ'Hana didn'teat anything.'eatamwu-tosakwa-lulmek-cianyone-alsoapple-ACCeat-NMIZ'Nobody ateapples.'eat

In (21a), the grammaticality of the NPI *annwukes* 'anything' would be unexpected if the *-ci* phrase were an embedded clause. This view of the structure of LFN is supported by similar NPI facts in English, as shown here in (22).

(22) a. John doesn't like [<sub>IP</sub> Sarah to speak with anyone].
b. John doesn't like [<sub>NP</sub> Sarah's [<sub>VP</sub> speaking with anyone]].
c.\*John doesn't like [<sub>NP</sub> the tendency [<sub>CP</sub> for [<sub>IP</sub> Sara to speak with anyone]]].

In (22a), we see that an IP complement of *like* can contain an NPI licensed by negation in the higher clause. Similarly, the nominalized VP complement of *like* in (22b) can also

<sup>7</sup> We thank a reviewer of this manuscript for bringing our attention to the centrality of this issue to the proposal that we make in regard to semantic feature percolation.

contain a licensed NPI. However, in (22c) we see that a complex NP (i.e. an NP with a clausal CP complement) is opaque for the purpose of licensing a CP-internal NPI by a main clause negator. We might thus conclude that the structure of (21a) is analogous to that of (22b), and that LFN involves a nominalized VP complement of *anh-ass-ta*, shown here in (23).

(23) Hana-ka [NP [VP amwukes-to mek]-ci] anh-ass-ta.

We will claim in Section 5.2 that the +Agent feature of *mek* 'eat' can percolate up to the main clause verb as in (21), because the complement of *anh-ass-ta* is not a subordinate CP clause, which would render it an opaque domain.

Before examining the Case that is assigned to the nominalized verb itself, we review here the assignment of Case to the complements of the nominalized verbs. In (24), we see that the object of each embedded nominalized verb is directly Case marked by the nominalized verb. Thus, if the nominalized verb has a +Agent feature, its object will get ACC Case. The contribution of +Agent to Case assignment is also maintained when more complex predicates are nominalized.

- (24) a. nay-ka pam-i/\*ul mwusep-key toy-ci anh-ass-ta. I-NOM snake-NOM/ACC afraid-CONN become-NMIZ NEG.do-PST-DECL 'I didn't become to be afraid of snakes.'
  - b. nay-ka pam-ul/\*i mwusew-e ha-ci anh-ass-ta. I-NOM snake-ACC/NOM afraid-CONN act.like-NMIZ NEG.do-PST-DECL 'I didn't act afraid of snakes.'
  - c. nay-ka sakwa-ul/\*ka mek-e po-ci anh-ass-ta . I-NOM apple-ACC/NOM eat-CONN try-NMIZ NEG.do-PST-DECL 'I didn't try to eat an apple.'

In (24a), *pam* 'snake' only gets NOM Case because *mwusep-key toy* 'become afraid' is not a +Agent predicate. In (24b), the compound verb *mwusew-e ha* 'act afraid' is a +Agent predicate, and the object gets ACC Case. And the same is true for (24c), where *mek-e po* 'to try to eat' is a +Agent verbal complex and the object *sakwa* gets ACC Case.

## 5.2 Case assignment to nominalized verbs

Given the patterns seen thus far, we have ascertained that assignment of NOM or ACC Case to non-subject nominals is determined on the basis of whether the selecting predicate is agentive or not. Given this background, the question of Case assignment to the nominalized verb itself in LFN constructions is seen to be somewhat problematic.

In Section 2 and 3, we saw that the Case marking of nominals is dependent on their syntactic positions and/or their semantic roles. Now, since the main verb in LFN constructions is nominalized, we should not be surprised that it too can be Case marked. However, the distribution of NOM or ACC Case on these nominalized VPs does not correlate precisely with what we might expect, given the meanings of the negated LFN verbs. Examples (25)-(27) illustrate this.

(25)	Hana-ka	sakwa-lul/*ka	mek-ci-lul/*ka	anh-ass-ta.
	Hana-NOM	apple-ACC/NOM	eat-NMIZ-ACC/NOM	NEG.do-PST-DECL
	'Hana didn't	eat apples.'		
(26)	Hana-ka	paykophu-ci-lul	/ka anh-ass-ta.	
	Hana-NOM	hungry-NMIZ-AG	CC/NOM NEG.do-PST-D	DECL
	'Hana wasn'	hungry.'		
(27)	Hana-ka	kay-ka/*lul	mwusep-ci-lul/ka	anh-ass-ta.
	Hana-NOM	dog-NOM/ACC	be.scared-NMIZ-ACC/NO	M NEG.do-PST-DECL

'Hana wasn't scared of dogs.'

In (25), both the nominalized verb *mek-ci* 'eat-NMIZ' and its object *sakwa* 'apple' can be marked with ACC Case, but not NOM Case. In (26), the nominalized predicate *paykophu-ci* 'hungry-NMIZ' has no object, and it can be marked with either NOM or ACC Case. Finally, in (27), the nominalized predicate *mwusep-ci* 'be.scared-NMIZ' can also be marked with NOM or ACC Case, but its complement *kay* 'dog' can only have NOM Case. The questions that arise from this data paradigm are: (i) Why does *mek-ci* 'eat-NMIZ' in (25) only take ACC Case? (ii) Why does *paykophu-ci* 'hungry-NMIZ' in (26) get either NOM or ACC Case, when its complement *kay* 'dog' can only have NOM or ACC Case, when its complement *kay* 'dog' can only have NOM Case?

Having proposed that Case assignment to complements within a nominalized -ci

phrase is local and determined by the agentivity of the verb complex, we want to understand what it is that conditions Case assignment back onto the -ci form itself. Here we would propose two determinants of Case assignment to a -ci phrase:

- (28) a. The negative auxiliary verb anh is a Case assigner and can assign both NOM and ACC Case when no semantic features are present to condition that Case assignment.
  - b. When a +Agent feature is percolated from the nominalized verb, *anh* can only assign ACC Case.

First, regarding (28a), we propose that *ha* 'do' (or its negation *anh* 'don't') can optionally assign ACC Case to its *-ci* complement in its +Agent guise as a lexical 'do'-verb or assign NOM Case to the *-ci* complement in its guise as a pure grammatical auxiliary. In our view, the negative verb *anh* can function ambiguously as either a lexical or an auxiliary verb, analogous to the English lexical/auxiliary verbs do or have.<sup>8</sup> Second, regarding (28b), there is one exception to this optionality, and that is when the *-ci* verb complex is itself +Agent. While nominalized verbs cannot themselves move outside of the *-ci* projection, their thematic features can percolate up to the main auxiliary verb. Thus, if and only if the *-ci* verb complex is +Agent, then *anh* will get that feature from the lower head and will then only be able to assign ACC Case to its *-ci* complement. We saw this previously in (25), where the nominalized +Agent verb *mek-ci* 'eat-NMIZ' can itself only get ACC Case from *anh*. In (26), *paykophu-ci* 'hungry-NMIZ' has no object complement and no +Agent feature to give. In this case, *anh* behaves as a pure auxiliary verb per (28a) and can assign either NOM or ACC Case back onto it. In (27), *mwusep-ci* 'fear-NMIZ'

(i) Did Mary do everything she could to make Sam comfortable?

- (ii) a. The students have many books.
  - b. The students have read the books.
  - c. %Have the students many books? (= Do the students have many books? in American English)

<sup>8</sup> Our analysis involves the recognition of *ha* 'do' as both a lexical and an auxiliary predicate. This is analogous to the behavior of some auxiliary verbs in English, which can also have two roles. Consider (i), in which the verb do appears twice, once as an auxiliary and once as a lexical verb.

Furthermore, we find that auxiliary/lexical verbs can be somewhat schizophrenic. The verb have, for example, can be a lexical verb as in (ii-a), an auxiliary verb as in (ii-b), and both at the same time in British English as in (ii-c).

has an object complement but is not a +Agent predicate, and so can assign only NOM Case to object complement *kay* 'dog'. Perhaps counterintuitively, the nominalized verb *mwusep-ci* can in this instance get either NOM or ACC Case from *anh*, even though the object of *mwusep-ci* can only have NOM Case. This is due, according to (28), to the fact that no +Agent feature percolates up to the negated auxiliary *anh*, leaving it to freely assign either NOM or ACC Case.<sup>9</sup>

Given our proposed conditions on Case assignment to nominalized verbs in (28), we can now examine how these are applied to more complex -ci marked predicates here below.

(29) a.	nay-ka	pam-i/*ul	mwusep-key	toy-ci-ka/lul		
	I-NOM	snake-NOM/ACC	afraid-CONN	become-NMIZ-NOM/ACC		
	anh-ass-ta.					
	NEG.do-PS	T-DECL				
	'I didn't	become to be afra	aid of snakes			
b.	nay-ka	pam-ul/*i	mwusew-e	ha-ci-lul/*ka		
	I-NOM	snake-ACC/NOM	afraid-CONN	act.like-NMIZ-ACC/NOM		
	anh-ass-ta	•				
	NEG.do-PST-DECL					
	'I didn't	act afraid of snak	es.'			
c.	nay-ka	sakwa-ul/*ka	mek-e	po-ci-lul/*ka		
	I-NOM	apple-ACC/NOM	eat-CONN	try-NMIZ-ACC/NOM		
	anh-ass-ta	•				
	NEG.do-PST-DECL					
	'I didn't	try to eat an appl	le.'			

As expected, if the complement of the nominalized verb gets NOM Case as in (29a), in other words, if there is no +Agent feature to percolate, the nominalized verb itself can naturally get either NOM or ACC Case from *anh*. In contrast, in (29b) and (29c), we see that whenever the complements of the embedded verb obligatorily get ACC Case due to an +Agent feature, the nominalized *-ci* verbs can only get ACC Case from *anh*.

Further confirming this approach, we can see what happens when a +Agentive verb

<sup>9</sup> Yoo (2002: 1027-1028) makes a similar proposal, attributing the case marking properties of auxiliary verbs to the inherited semantic features of their verbal (and sometimes nominalized verbal) complements.

*mek* 'eat' is either a complement or a modifier of a non-agentive verb such as *siph* 'want' as in (30).

(30) a. Hana-ka [sakwa-ul mek-ko] siph-ci-lul/ka anh-ass-ta. Hana-NOM apple-ACC eat-CONN want-NMIZ-ACC/NOM NEG.do-PST-DECL 'Hana didn't want [to eat an apple].' b. Hana-ka sakwa<sub>1</sub>-ka [*pro*<sub>1</sub> mek-ko] siph-ci-lul/ka Hana-NOM apple-NOM them eat-CONN want-NMIZ-ACC/NOM anh-ass-ta. NEG.do-PST-DECL 'Hana didn't want an apple [to eat].'

Here, in (30), *siph* 'want' is the single main predicate in both cases, with *mek-ko* 'to eat' functioning either as its complement, as in (30a) 'want [to eat an apple]', or as its modifier, as in (30b) 'want an apple [to eat]'. Since *siph* 'want' is not agentive and the agentive verb *mek* 'eat' is embedded as a complement or adjunct, there is no +Agent feature to give to the negative auxiliary *anh* and it Case marks its *-ci* complement as either NOM or ACC. For the NP complement *sakwa*, as we observed earlier in (12) and (15), its Case alternation depends on whether it functions as the complement of *mek* or the complement of *siph*. We will now see how this approach has broader application in Section 5.3, where we consider the Case marking of unaccusative, passive, and unergative *-ci* nominalizations.

## 5.3 External arguments and Case assignment in LFN constructions

Going further, we might expect, based on the account thus far, to find NOM/ACC Case alternation in other LFN structures where the nominalized verb has no external arguments, and indeed we do. However, the availability of the higher non-subject position seems conditioned thematically. Consider here examples (31)-(34).

(31) Hana-ka	talli-ci-lul/*ka	anh-ass-ta.
Hana-NOM	run-NMIZ-ACC/NOM	NEG.do-PST-DECL
'Hana did ne		

(32)	sopho-ka	acik	toc	hakha-ci-lul/ka		anh-ass-ta.
	package-NOM	yet	arri	ve-NMIZ-ACC/NO	М	NEG.do-PST-DECL
	'The package	has not	arri	ved yet.'		
(33)	Hana-ka	mwun-u	1	yel-ci-lul/*ka		anh-ass-ta.
	Hana-NOM	door-AC	С	open-NMIZ-ACC	/NOM	NEG.do-PST-DECL
	'Hana did no	ot open tl	ne d	oor.'		
(34)	mwun-i	yel-li-ci-l	ul/ka	1	anh-a	ss-ta.
	door-NOM	open-PAS	S-NM	IIZ-ACC/NOM	NEG.C	lo-PST-DECL
	'The door wa	as not op	enec	1.'		

In these examples, the nominalized verbs tochakha-ci 'arrive-NMIZ' in (32) and yel-li-ci 'open-PASS-NMIZ' in (34) can get either NOM or ACC Case, but *talli-ci* 'run-NMIZ' in (31) and yel-ci 'open-NMIZ' in (33) can only get ACC Case. In (31), the nominalized verb talli 'run' is most certainly a +Agent predicate as a consequence of the entailments of +sentient and +volitional, and it is the percolation of this +Agent feature to anh which forces anh to assign ACC Case only back onto it. In (32), the nominalized verb tochakha 'arrive' is unaccusative and does not have proto-agent entailments sufficient to trigger a +Agent feature, leaving anh free to assign either NOM or ACC Case to tochakha-ci. In (33), the nominalized transitive +Agent verb yel 'open' is certainly a +Agent predicate, and it is the percolation of this +Agent feature to anh which forces anh to assign ACC Case only back onto it, analogous to example (31). In (34), the verb yel 'open' is still a transitive +Agent predicate, but it is passivized and the +Agent feature is not available to be passed up to anh. Accordingly, anh is free to assign either NOM or ACC Case to back to yel-li-ci. With these four additional examples, we can ascertain again that our proposal adequately explains the means by which Case is assigned to nominalized VP phrases in LFN constructions.10

<sup>10</sup> A reviewer of this manuscript asks whether the case alternations observed in (32) and (34) might in fact be the consequence of structural considerations, analogous to ECM Case marking. One might imagine a situation in which the nominalized *-ci* verb receives NOM Case in some lower structural position and gets ACC Case when "raised". It is unclear, however, given the fact that LFN does not involve any sort of bi-clausal structure (as made clear in Section 5.1), what these positions might be and what might be the base and target movement positions. We therefore think that our proposed percolation of thematic features, in which +Agent and only +Agent can license (or trigger) ACC Case assignment, is the simpler and more reasonable proposal.

Another concern involves the question of whether +Agent is the triggering and necessary feature for the assignment of ACC Case, or whether some other semantic feature might be involved. In Wechsler and Lee

#### 6. Operationalizing Case assignment to nominalized expressions

A reasonable question begged by the data in (31)-(34) would be: "How is it that the +Agent feature of the unergative verb *talli* 'run' can percolate up to the negated auxiliary verb *anh* in (31), but the same +Agent feature on the passivized transitive verb *yel* 'open' cannot in (34)?"

To answer this question, we propose that the thematic accumulation of proto-agent entailments, triggering the +Agent feature, is realized syntactically as an agentive light vP projection immediately above the relevant verb. Representations in (35) below illustrate this showing that the lack of the agentive vP is a crucial element for allowing free Case alternation to the nominalized *-ci* phrase. The unergative verb *talli* 'run' and the transitive verb *yel* 'open' will project this vP, as shown in (35a) and (35c), but the unaccusative verb *tochakha* 'arrive' and the passivized verb *yel-li* 'be opened' will not, as shown in (35b) and (35d).

(35) a. [ <sub>ci-NP</sub>	[vP	[+AGENT]	[ <sub>VP</sub> talli]]-ci]- <b>lul</b> /*ka	anh-ass-ta	=(31)
b. [ci-NP			[vp tochakha]-ci]-lul/ka	anh-ass-ta	=(32)
c. [ci-NP	[vP	[+AGENT]	[vpyel]]-ci]-lul/*ka	anh-ass-ta	=(33)
d. [ci-NP			[vpyel-li]-ci]-lul/ka	anh-ass-ta	=(34)

This approach readily accounts for the fact that the negated auxiliary verb *anh* is only forced to assign ACC Case to the nominalized -ci verb complex when the highest verb projects a +Agent vP. Also, more puzzling Case assignment patterns as in (30) are simply

<sup>(1996),</sup> it is suggested (drawing on proposals made in Kang 1986) that ACC Case is licensed by the semantic feature –Stative. Since –Stative most often correlates with +Agentive, one might imagine that either feature could provide an adequate explanation of the Case marking facts we've observed. However, we find that *anh-ass-ta* can still mark a nominalized complement with NOM Case when the complement is a –Stative adjectival predicate, as we can see in example (i).

(i)	ku olayt	oyn khal-i	acik	noksul-ci-lul/ka	anh-ass-ta.
	the old	knife-NOM	yet	rust-NMIZ-ACC/NOM	NEG.do-PST-DECL
	'The old	l knife has not r	usted ye	t.'	

Here, the non-stative nominalized predicate *noksul-ci* 'rust' does not prevent *anh-ass-ta* from assigning NOM Case to the *-ci* phrase. If –Stative did block NOM Case, then *noksul-ci-ka anh-ass-ta* should be ungrammatical. We therefore maintain that (i) it is +Agent that triggers ACC Case and that (ii) in the absence of an ACC Case trigger, *anh-ass-ta* can freely assign either NOM or ACC Case.

accounted for by this approach. Compare the representations of the verbal projections for (25) and (30), shown here in (36).

(36) a.  $[_{ci-NP}$  [vP [+AGENT] [vP mek]] -ci]-lul/\*ka anh-ass-ta =(25) b.  $[_{ci-NP}$  [vP [+AGENT] [vP mek]] siph]-ci]-lul/ka anh-ass-ta =(30)

In (25), as we see in (36a), the +Agent vP is the highest verbal projection in the nominalization and passes this feature up to *anh*. Accordingly, *anh* is forced to assign ACC Case only back onto the nominalized *-ci* form *mek-ci*. In (30), however, this +Agent vP projection is a complement to or modifier of the non-agentive VP projected by *siph* 'want', as we see in (36b), and the +Agent feature is no longer visible to *anh*. Accordingly, *anh* is free to assign either NOM or ACC Case onto the nominalized verb *mek-ko-siph-ci*.

## 7. Conclusion

In the current study, we have seen that nominalized verbs in LFN constructions can get Case-marking like other canonical subject and object nominals. We have further ascertained that the nominalized verbs sometimes get only ACC Case and sometimes get either ACC or NOM Case allowing free Case alternation. To explain the mechanism of Case assignment in LFN constructions, we have proposed two distinct conditions; (i) the negated verb *anh*, when it functions as an auxiliary, can optionally assign ACC or NOM Case to its *-ci* complement; (ii) this optionality is invalid when the *-ci* verb complex is itself a +Agent predicate.

At first, we can see that each of the embedded complements takes the Case that would be directly assigned by the nominalized verb. However, the nominalizer *-ci* projects a nominalized noun phrase which does not allow the embedded object to be Case marked outside of the embedded VP. For the nominalized verbs themselves, Case is structurally assigned by the negative auxiliary verb, but this Case assignment falls under the influence of the semantic value of the complex verb construction. We conclude that +Agent feature percolated from the nominalized lexical verb deprives the Case assigner *anh* of its ability of assigning NOM Case, rather than forcing *anh* to assign ACC Case only. In more complex auxiliary verb constructions, we reconfirm that the percolation of

the +Agent feature could appropriately account for the complicated Case marking patterns.

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- 26 Keunhyung Park · Stanley Dubinsky
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## Keunhyung Park

PhD student Linguistics Program University of South Carolina 909 Welsh Humanities Building Columbia, SC 29208 USA E-mail: kp4@email.sc.edu

#### Stanley Dubinsky

Professor Linguistics Program University of South Carolina 218 Welsh Humanities Building Columbia, SC 29208 USA E-mail: dubinsky@sc.edu

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