Unaccusativity in Korean

Sang-Ki Lee*†
University of Hawai'i at Mānoa

Sang-Ki Lee. 2007. Unaccusativity in Korean. Language and Information 11.2, 49–65. Since Perlmutter (1978) proposed the Unaccusativity Hypothesis, the past two decades have seen a flourish of studies investigating the potential validity of unaccusativity in Korean. The central contentious issues have been whether unaccusativity can also be assumed in Korean, and, if so, what criteria could be proposed to discern the unaccusativity among various predicates. In this paper, several suggestions made theoretically and experimentally to address the semantic and/or syntactic distinction of the two types of Korean intransitive predicates are critically reviewed and evaluated from the standpoint that there is a close correlation between syntax and lexical semantics of intransitives. It is proposed, then, that the Korean unaccusativity can be reliably differentiated through the combined semantic criteria of [±agentive] and [±active]. In addition, case alternations in long form negation constructions are shown to be the most reliable and valid syntactic criteria for testing Korean unaccusatives. (University of Hawai'i at Mānoa)

Key words: unaccusatives, ergatives, unergatives, types of intransitive predicates, Unaccusativity Hypothesis

1. Introduction

The Unaccusativity Hypothesis, broadly defined, states that intransitive verbs may comprise of two subtypes: unaccusatives (or ergatives) and unergatives (Burzio, 1986; Perlmutter, 1978). According to the analysis in Government and Binding Theory, the two subtypes of intransitives differ from each other in that: (1) unaccusative verbs have an internal argument, which moves to the specifier position of IP via object-to-subject raising (e.g., appear, fall, happen); and (2) unergative verbs have an external argument, which originally occupies the subject position without any derivation (e.g., walk, talk, sing). That is, the Unaccusative Hypothesis assumes that the unaccusative-unergative distinction in English could be made in terms of their subcategorizations in the D-structures as follows:

^{*} Dept. of Second Language Studies, 1890 East-West Rd., University of Hawai'i at Mānoa, Honolulu, HI 96822. E-mail: sangki@hawaii.edu

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(1) a. Unaccusatives: [# [VP NP]]

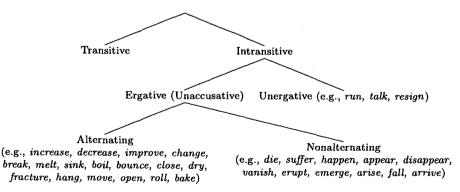
b. Unergatives: [NP [VP]]

c. Transitives: [NP [VP NP]]

Semantically speaking, whereas the subjects of unergative verbs take an AGENT role, those of unaccusative verbs take a THEME or PATIENT role, which is similar to the direct objects of transitive verbs. Unergative verbs are predicates describing willed or volitional acts (e.g., work, play, whisper) and certain involuntary bodily processes (e.g., cough, sneeze, blush). Unaccusative verbs are predicates whose subjects are semantically PATIENT (e.g., burn, fall, drop, sink, slide, drown) and predicates of existing and happening (e.g., exist, happen, occur).¹

The past two decades have seen a flourish of studies investigating the potential validity of unaccusativity in Korean. The central contentious issues have been whether unaccusativity can also be assumed in Korean, and, if so, what criteria could be proposed to discern the unaccusativity among various predicates (Cho, 1999; Kang, 1997; Kim, 1989; Kim, 2004; Kim, 1990; Kuno and Takami, 2004; Lee, 1993; Shin, 2001; Yang, 1991; Yang, 1996; Yu, 1998). The general aims of the previous literature have been twofold. The first has been to provide syntactic evidence for differentiating a group of unaccusative predicates, and the second to describe which semantic properties those unaccusative predicates have in common. As Lee (1993, p. 16) put it, however, studies thus far have not dealt with Korean unaccusativity as their foremost research focus. Yet, issues on unaccusativity have been largely discussed in conjunction with other syntactic structures. What is more important is that previous discussions appear to have been circular in nature. That is to say, based on a set of predicates assumed to show unaccusativity in Korean, many studies have tried to set up either or both of syntactic and semantic criteria, which in turn have been used for determining whether a certain predicate is unaccusative or unergative. Indeed, previous literature lacks objective evaluations regarding the issue of unaccusativity in Korean. In the following, several suggestions made theoretically and experimentally to distinguish unaccusatives and unergatives in the Korean language will be critically reviewed. The primary aim of this

¹ Some alternating unaccusatives such as *change* and *break* may have argument structures of not only (1a), but (1c) as well, whereas nonalternating unaccusatives may not. The unaccusatives in English can thus be summed up as follows:



paper is therefore to propose a more reliable set of criteria for the unaccusativity in Korean.

2. Semantic evidence for unaccusativity in Korean

Paralleling the earlier suggestions made by Perlmutter (1978) and Burzio (1986), Kim (1990) defines Korean unaccusative predicates as "predicates which originally lack an external argument in their argument structure representation" (p. 52). She recently elaborates the definition by stating, "Unaccusativity in Korean is manifested as a predicate's lack of accusative-case-assigning ability, whereas [equivalent] transitive verbs typically assign accusative case to their internal argument" (Kim, Kim, and Song, 2003, p. 362). Consider the following examples (Kim, Kim, and Song, 2003, p. 347):²

- (2) a. Nay-ka(/eykey) umak-i coh-ta
 I-NOM(/DAT) music-NOM be.likable-DEC
 'I am fond of music.'
 cf. *Nay-ka(/eykey) umak-ul coh-ta
 - ci. way-ka(/eykey) umak-ui con-ta
 - b. Nay-ka(/eykey) holangi-ka mwusep-ta I-NOM(/DAT) tiger-NOM be.scary-DEC 'I am afraid of tigers.'
 - cf. *Nay-ka(/eykey) holangi-lul mwusep-ta

The above constructions employing the bare psychological predicates, *cho-* and *mwusep-*, seem to support the existence of the unaccusativity in Korean, because (2a) and (2b) may have the following equivalent constructions with psych-verbs:

- (3) a. Nay-ka umak-ul coh-a-ha-n ta
 I-NOM music-ACC be.likable-do-PRES-DEC
 'I like music.'
 - b. Nay-ka holangi-lul mwusep-e-ha-n-ta
 I-NOM tiger-ACC be.scary-do-PRES-DEC
 'I fear tigers.'

It appears that the two-place predicates in both constructions (e.g., coh-ta and coh-a-ha-ta) do not differ from each other semantically, while only the psych-verbs in (3) allow accusative cases for the second NPs. Conversely, the bare form psych-predicates in (2) lack the ability to assign accusative cases to the second NPs, which are morphologically marked as nominative cases. It is noteworthy that the object NPs of transitive verbs are relatively consistently marked as accusatives. The second NPs in (2) are reasonably viewed as internal arguments of the predicates (as in the case of the second NPs in (3)), taking a THEME theta role. The bare form psych-predicates, such as coh-ta and mwusep-ta, then, could be regarded as typical examples showing unaccusativity in Korean.

² Yale system is adopted for Korean romanization in this paper.

Similar case-marking patterns are also observed with other two-place predicates that contain semantic meanings of process, possession, and existence. Consider the following examples adapted from Kim, Kim, and Song (2003, pp. 347–348):

- (4) a. Inho-ka ttam/nwunmul/phi-lul hul-li-n-ta NOM sweat/tear/blood-ACC flow-CAUS-PRES-DEC
 - b. Inho-ka ttam/nwunmul/phi-ka/*lul hulu-n-ta NOM sweat/tear/blood-NOM/*ACC flow-PRES-DEC 'Inho is sweating/weeping/bleeding.'
- (5) a. Ku-ka kol/seng/hwa-lul na-y-ss-ta he-NOM anger-ACC occur-CAUS-PST-DEC
 - b. Ku-ka kol/seng/hwa-ka/*lul na-ss-ta he-NOM anger-NOM/*ACC occur-PST-DEC 'He got angry.'
- (6) a. Nay-ka ku mwuncey-lul ihay-ha-n-ta I-NOM that problem-ACC understanding-do-PRES-DEC
 - b. Nay-ka(/eykey) ku mwuncey-ka/*lul I-NOM(/DAT) that problem-NOM/*ACC ihay-toy-n-ta understanding-become-PRES-DEC 'I understand that problem.'
- (7) a. Yumi-ka ton-ul nam-ki-ess-ta NOM money-ACC remain-CAUS-PST-DEC

Again, the second sentences of each pair in (4)-(7) lack the ability of assigning accusative cases to the second NPs, which take a THEME theta role. Such predicates as *hulu*-, *na*-, *ihay-toy*-, *nam*-, are judged to show unaccusativity, having transitive counterparts (i.e., they may thus be examples of alternating unaccusatives; see note 1).

Kim (1990) argues that [±stative] and [±agentive], as semantic criteria, can be utilized in differentiating each sentence pair discussed above (i.e., distinctions between unaccusatives and transitive verbs). Examples in (2) and (3) can or cannot be used with the progressive marker, -ko issta '-and exist', as follows:

- (8) a. *Nay-ka(/eykey) umak-i coh-ko issta I-NOM(/DAT) music-NOM be.likable-and exist
 - b. *Nay-ka(/eykey) holangi-ka mwusep-ko issta I-NOM(/DAT) tiger-NOM be.scary-and exist

- c. Nay-ka umak-ul coh-a-ha-ko issta I-NOM music-ACC be.likable-do-and exist
- d. Nay-ka holangi-lul mwusep-e-ha-ko issta I-NOM tiger-ACC be.scary-do-and exist

As shown from the ungrammaticality of (8a) and (8b), the bare form psych-predicates, which are unaccusative predicates, can be determined as [+stative], whereas the psych-verbs in grammatical sentences of (8c) and (8d) can be determined as [-stative]. Conversely, another group of unaccusatives, namely the predicates of process, possession, and existence, are [-stative], because they generate grammatical sentences with the progressive marker '-ko issta', as in (9):

- (9) a. Inho-ka ttam/nwunmul/phi-ka hulu-ko issta NOM sweat/tear/blood-NOM flow-and exist
 - b. ?Yumi-ka(/eykey) ton-i nam-ko issta NOM(/DAT) money-NOM remain-and exist

[±agentive] can be tested through the compatibility with imperative and propositive constructions. Consider the following examples:

- (10) a. Umak-ul coh-a-ha-la! music-ACC be.likable-do-IMP
 - b. *Umak-i coh-a-la! music-NOM be.likable-IMP 'Like music!'
- (11) a. Ku mwuncey-lul ihay-ha-ca! that problem-ACC understanding-do-PROP
 - b. *Ku mwuncey-ka ihay-toy-ca! that problem-NOM understanding-become-PROP 'Let's understand that problem!'

It can be decided that unaccusatives are [-agentive], since (10b) and (11b) are not generally acceptable for Korean native users. Likewise, the [-agentive] property of unaccusatives do not allow the following constructions, either:

- (12) a. *Nay-ka ku mwuncey-ka ihay-toy-ma

 NOM that problem-NOM understanding-become-PROMISE
 'I promise that I will understand that problem.'
 - b. *Nay-ka kouylo ku mwuncey-ka NOM on.purpose that problem-NOM ihay-toy-n-ta understanding-become-PRES-DEC 'I understand that problem on purpose.'

c. *Nay-ka ku mwuncey-ka ihay-toy-lyeko NOM that problem-NOM understanding-become-COMP nolyek-ha-n-ta endeavor-do-PRES-DEC 'I try to understand that problem.'

Based on the observation that the bare form psych-predicates and the predicates of process, possession, and existence have the [-agentive] feature in common but show different properties in terms of [\pm stative], Kim (1990) argues that [\pm agentive] plays a more important role in the unaccusative-unergative distinction in Korean. Therefore, to her, unaccusatives are predicates having the [-agentive] feature, whereas unergatives are predicates with the [+agentive] feature.

However, Kim's (1990) analysis faces several problems (Cho, 1999; Lee, 1993; Yang, 1996; Yu, 1998). First, let's observe the following sentences:

- (13) a. Solcikhay-la! (Imperative) be.honest-IMP 'Be honest!'
 - b. Solcikha-ca! (Propositive)be.honest-PROP'Let's be honest!'
 - c. Solcikha-ma! (Promise)be.honest-PROMISE'I promise that I will be honest!'
 - d. ?(Ku-ka) Kouylo solcikha-yess-ta
 -NOM on.purpose be.honest-PST-DEC
 'He was honest on purpose.'
 - e. (Ku-ka) Solcikha-lyeko nolyek-ha-n-ta
 -NOM be.honest-COMP endeavor-do-PRES-DEC
 'He tries to be honest.'

Not only solccikha-, but other predicates, such as cengcikha- 'be.honest', kyem-sonha- 'be.humble', chimchakha- 'be.calm', and kenkangha- 'be.healthy', also show very similar, although not exactly the same, patterns as in (13), indicating the [+agentive] feature of these predicates. The semantic criterion discussed above would classify these predicates as unergatives. However, a problem arises when we consider that those predicates have been commonly treated as unaccusatives in the literature.

Another problem with the $[\pm agentive]$ criterion emerges from (14). Notably, each ttayli- in the below does not have the $[\pm agentive]$ feature because no voluntary actions are involved in all example sentences. Given that predicates with the $[\pm agentive]$ feature would be treated as unaccusatives and therefore should lack the accusative-case-assigning ability, we need to explain why the predicate ttayli-requires NP-lul in all instances in (14).

- (14) a. Soo-nun cakito molukey ku namca-uy ppyam-ul -NOM even.self unaware that man-POSS cheek-ACC hard ttayli-ess-ta hit-PST-DEC 'Soo hit the man in the cheek in spite of herself.'
 - b. Soo-uy pimyeng soli-ka ku-uv twithongswu-lul -POSS scream sound-NOM he-POSS back.head-ACC ttayli-ess-ta hit-PST-DEC 'Soo's scream hit on the back of his head.'
 - c. Mwuntuk pwulkilhan yeykam-i twithongswu-lul suddenly ominous presentiment-NOM back.head-ACC ttayli-ess-ta hit-PST-DEC

'(I) had an ominous feeling.'

(adapted from Yu (1998, p. 340))

In response to the problems raised above, Yang (1996) and Yu (1998) suggest that [±active] should be an alternative criterion for the distinction of unaccusatives and unergatives in Korean. According to Yang (1996), [±active] defines whether a predicate denotes actions (i.e., [+active]) or states, achievement, and accomplishment (i.e., [-active]). He further argues that only the [-active] predicates are unaccusatives, whereas the [+active] predicates should be treated as unergatives. Yet, the generalization involved with the [±active] criterion appears arbitrary and to run counter to native Korean users' judgments. For example, he classifies all predicates used in (15) as unaccusatives, maintaining that they indicate the [-active] feature. This seems only speculative, and hardly acceptable. Consider the following, where the predicates in (15), such as nemeci-, cwuk-, wumciki-, and tteleci-, are normally judged to indicate some movements or certain actions of the sentential subjects.

- (15) a. Ku-ka nemeci-n-ta -NOM fall-PRES-DEC 'He falls.'
 - b. Kaykwuli-ka cwuk-nun-ta frog-NOM die-PRES-DEC 'The frog dies.'
 - c. Cha-ka wumciki-n-ta car-NOM move-PRES-DEC 'The car moves.'
 - d. Chencang-eyse mwul-i tteleci-n-ta ceiling-SOURCE water-NOM fall-PRES-DEC 'Water drips from the ceiling.'

The progressive marker, -ko issta '-and exist', is commonly employed as the test for the [+active] property of predicates. The following (16) illustrates that each example sentence in (15) can be used with -ko issta, showing that such predicates as nemeci-, cwuk-, wumciki-, and tteleci- have the [+active] feature.

- (16) a. Ku-ka nemeci-ko issta -NOM fall-and exist
 - Kaykwuli-ka cwuk-ko issta frog-NOM die-and exist
 - c. Cha-ka wumciki-ko issta car-NOM move-and exist
 - d. Chencang-eyse mwul-i tteleci-ko issta ceiling-SOURCE water-NOM fall-and exist

In contrast to the previous proposals reviewed so far, it is argued in this paper that [±agentive] and [±active] should be considered concurrently in order to fully capture the unaccusative-unergative distinction in Korean. Four types of predicates can be identified from the combinations of the two semantic features and are illustrated in (17). Of the four types of predicates, it is claimed that Type A predicates are unergatives and Types B, C, and D are all unaccusatives. That is, Korean unaccusatives may include predicates which lack agentivity (Type B and Type D) and those which show agentivity but lack activity (Type C).

(17)		[+Agentive]	[-Agentive]
	[+Active]	Type A (unergatives)	Type B (unaccusatives)
		ket- 'walk', ttwi- 'run', wul-	hulu- 'flow', na- 'occur', etc.
		'cry', ka- 'go', anc- 'sit',	
		tochakha- 'arrive', etc.	
	[-Active]	Type C (unaccusatives)	Type D (unaccusatives)
		solccikha- 'be.honest',	huy- 'be.white', kem-
		cengcikha- 'be.honest',	'be.black', mwusep-
		kyemsonha- 'be.humble',	'be.scary', iss- 'exist', eps-
		chimchakha- 'be.calm',	'not exist', kil- 'long', coh-
		kenkangha- 'be.healthy', etc.	'be.likable', silh-
			'be.dislikable', cichi-
			'be.tired', po-i- 'be.visible',
			etc.

It should be noted that Type A predicates can also be used as unaccusatives in contexts where their subjects do not carry the semantic meanings of agentivity or activity. For example, the predicates in the second pairs of (18) lack both agentivity and activity and get unaccusativized (i.e., they are Type D predicates).³

³ One anonymous reviewer aptly pointed out that the predicates in the second pairs of (18) can be used in progressive form (e.g., Yenlak-i ka-ko issta, Yocum cipkaps-i manhi ttwi-ko issta). In light of this observation, they would be better categorized as Type B predicates.

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(18) a. Soo-ka ka-ss-ta (Type A ka-)
          -NOM go-PST-DEC
        'Soo went.'
        Yenlak-i
                   ka-ss-ta (Type D ka-)
        news-NOM go-PST-DEC
        'The news was delivered.'
     b. Soo-ka
               uyca-ey
                           anc-ass-ta (Type A anc-)
          -NOM chair-LOC sit-PST-DEC
        'Soo sat on the chair.'
        Menci-ka uyca-ey
                             anc-ass-ta (Type D anc-)
        dust-NOM chair-LOC sit-PST-DEC
        'The dust lay on the chair.'
     c. Soo-ka
                tochakha-yess-ta (Type A tochakha-)
          -NOM arrive-PST-DEC
        'Soo arrived.'
        Sosik-i
                   tochakha-yess-ta (Type D tochakha-)
        news-NOM arrive-PST-DEC
        'The news arrived.'
     d. Soo-ka
               ttwi-ess-ta (Type A ttwi-)
          -NOM run-PST-DEC
       'Soo ran.'
       Cipkaps-i
                           ttwi-ess-ta (Type D ttwi-)
       housing prices-NOM run-PST-DEC
       'Housing prices increased.'
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3. Syntactic evidence for unaccusativity in Korean

Another line of endeavor to date has been to discover the necessary syntactic conditions needed for the unaccusative-unergative distinction in the Korean language. Several criteria have been proposed in the literature, unfortunately most of them being unsatisfactory. Let's review some of the proposals.

Ahn (1991), among others, proposes that VP Focus Fronting can be evidence for unaccusativity in Korean. That is, he suggests that VP Focus Fronting is permissible with unergatives only, not with unaccusatives. This can be observed in the following examples:

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(19) a. Chelswu-ka (ppalli) ttwi-ki-nun ha-yess-ciman . . .
-NOM (fast) run-KI-TOP do-PST-although 'Although Chelswu did run (fast), . . . '
b. [(Ppali) ttwi-ki-nun]<sub>j</sub> Chelswu-ka t<sub>j</sub> ha-yess-ciman . . . (fast) run-KI-TOP -NOM do-PST-although 'Run (fast), although Chelswu did . . . '
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- (20) a. Pi-ka (manhi) o-ki-nun ha-yess-ciman ... rain-NOM (a lot) come-KI-TOP do-PST-although 'Although it did rain (a lot), ...'
 - b. $*[(Manhi) o-ki-nun]_j$ pi-ka t_j ha-yess-ciman ... (a lot) come-KI-TOP rain-NOM do-PST-although 'Rain a lot although it did, ...'

The difference in grammaticality between (19b) and (20b) is claimed to be accounted for by the different characteristics of the predicates used in each sentence. In other words, Type A predicate, ttwi-, is an unergative predicate in Korean, which allows the VP to be moved to the sentence-initial position. In contrast, VP Focus Fronting generates an unacceptable sentence when the Type B unaccusative predicate, o-, is used, as in (20b). However, Kuno and Takami (2004) explain the acceptability and unacceptability of these two contrasting sentences from a semantic perspective. According to them, there is no event other than falling that rain can be involved with. Focusing the VP containing the predictable event, therefore, produces a sentence that sounds awkward to most of the native Korean users. Kuno and Takami (2004, p. 289) also offer several counterexamples to Ahn's (1991) suggestion as follows:⁴

- (21) a. Elumphan-ey nemeci-ki-to ku noin-i ha-yess-ta ice.floor-LOC slip.fall-KI-even that old.man-NOM do-PST-DEC 'Even slip on ice and fall down that old man did.'
 - b. Kokay-lul ttelkwu-ki-cocha ku kkoch-i ha-ci ani nod-ACC nod-KI-even that flower-NOM do-COMP NEG ha-yess-ta do-PST-DEC 'Even droop that flower didn't.'
 - c. Han kyewul-ey phi-ki-cocha ku kkoch-un ha-yess-ta deep winter-in blossom-KI-even that flower-TOP do-PST-DEC 'Even blossom in the middle of winter that flower did.'

The sentences in (21) show that VPs containing Type B unaccusative predicates can be moved to the sentence-initial position. Kuno and Takami (2004) notes, "the fronted VPs in these sentences represent actions that can be compared and contrasted with some other actions that the referents of the subject NPs might have taken. For example, kokay-lul ttelkwu-ki-cocha 'even drop'... can be compared and contrasted with 'fall to the ground' and 'wither'" (p. 289). In fact, a free word order of the Korean language relatively freely allows any VPs, whether VPs with unaccusatives or unergatives, to be fronted, even though the fronting might accompany a particular pause after the fronted VPs. Accordingly, VP Focus Fronting alone as

⁴ The counterexample sentences in (21) may sound less than acceptable for some Korean native speakers. One reviewer pointed out the issue of native speakers' variation in judgment regarding the grammaticality of these sentences.

evidence does not seem substantive enough to support unaccusativity in Korean, but it should be viewed as a specific construction intending to give a special emphasis to the context-unique meaning of the fronted VPs.

Cho (1999) proposes an adverbial test with *panccum* 'halfway' for the distinction between unaccusatives and unergatives in Korean. Consider his examples below:

- (22) a. Kaykwuli-ka panccum cwuk-ess-ta frog-NOM halfway die-PST-DEC 'The frog nearly died.'
 - b. Namwusiph-i panccum tteleci-ess-ta leaves-NOM halfway fall-PST-DEC 'Leaves fell halfway.'
 - c. Kim-i panccum nemeci-ess-ta
 -NOM halfway fall-PST-DEC
 'Kim fell halfway.'
- (23) a. *Soo-ka panccum ttwi-ess-ta
 -NOM halfway run-PST-DEC
 'Soo ran halfway.'
 - b. *Soo-ka panccum kel-ess-ta
 -NOM halfway walk-PST-DEC
 'Soo walked halfway.'

Based on his judgments on the grammaticality of sentences in (22) and (23), Cho (1999) claims that the adverb panccum can be used only with unaccusatives (as in sentences in (22)), not with unergatives (as in sentences in (23)), in Korean. This claim is hardly convincing however. Most of all, both sentences in (23) are generally judged acceptable by Korean native speakers, which runs contrary to Cho's claims. That is, replacing proposed unaccusative predicates in (22) with unergative predicates, as in (23), does not deteriorate the grammaticality of the given sentences.⁵ In addition, as shown in (24) below, some more counterexamples do exist, where such unergatives as ilese- 'stand.up' and wul- 'cry' are used, but the resulting halfway constructions are acceptable. Then it follows that the halfway construction cannot be a valid criterion for the unaccusative-unergative distinction in Korean.

- (24) a. Soo-ka panccum ilese-ss-ta
 -NOM halfway stand.up-PST-DEC
 'Soo rose halfway.'
 - b. Soo-ka panccum wul-ess-ta
 -NOM halfway cry-PST-DEC
 'Soo cried halfway.'

⁵ Some Korean native users may consider the sentences in (23) still unacceptable, indicating the judgmental variation of native speakers.

We have reviewed a couple of proposals suggested for the distinction between unaccusatives and unergatives in Korean, all of which are not satisfactory overall. Alternatively, in line with Lee (1993) and Yu (1998), it is proposed in the following that accusative-nominative case alternations will be the most reliable and valid criteria for the issue of unaccusativity in Korean. This will be made clear when considering the examples that follow:

- (25) a. Soo-ka chayk-ul twupen-ul ilk-ess-ta
 -NOM book-ACC two.times-ACC read-PST-DEC
 - b. *Soo-ka chayk-ul twupen-i ilk-ess-ta
 -NOM book-ACC two.times-NOM read-PST-DEC
 'Soo read the book two times.'
- (26) a. Soo-ka twu sikan tongan-ul ttwi-ess-ta
 -NOM two hour during-ACC run-PST-DEC
 - b. *Soo-ka twu sikan tongan-i ttwi-ess-ta
 -NOM two hour during-NOM run-PST-DEC
 'Soo ran for two hours.'

The above (25) and (26) illustrate that adverbs indicating frequency and duration of an event can be marked only as accusatives. Both (25b) and (26b), which are marked as nominatives, are not grammatical. The predicate *ilk*- is a typical example of transitive verbs, while *ttwi*- in (26) has been regarded as an unergative predicate (i.e., Type A predicate).

- (27) a. Cha-ka twupen-ul memchwu-ess-ta car-NOM two.times-ACC stop-PST-DEC
 - b. Cha-ka twupen-i memchwu-ess-ta car-NOM two.times-NOM stop-PST-DEC 'The car stopped two times.'
- (28) a. Cha-ka han sikan kalyang-ul wumciki-ess-ta
 -NOM one hour about-ACC move-PST-DEC
 - b. ?Cha-ka han sikan kalyang-i wumciki-ess-ta
 -NOM one hour about-NOM move-PST-DEC
 'The car moved for about one hour.'

Both in (27) and (28), Type B unaccusative predicates, memchwu-'stop' and wumciki-'move', are used. As shown in (27b) and (28b), however, the grammaticality of sentences with the adverbs of duration and frequency are not substantially deteriorated even when such adverbs are marked as nominatives. This demonstrates that the accusative-nominative case alternations in adverbs of duration and frequency may be permissible with the unaccusative predicates in Korean (cf. Lee 1993; Yu 1998).

It should be noted that if the inanimate subjects in (27) and (28) are replaced with animate subjects, the adverbs marked as nominatives become unacceptable as in (25) and (26) where transitive verbs and unergatives are used.

- (29) a. Soo-ka twupen-ul/*i memchwu-ess-ta
 -NOM two.times-ACC/*NOM stop-PST-DEC
 'Soo stopped two times.'
 - b. Soo-ka han sikan kalyang-ul/*i wumciki-ess-ta
 -NOM one hour kalyang-ACC/*NOM move-PST-DEC
 'Soo moved for about one hour.'

The unacceptability of nominative cases in (29) could be accounted for by the [+agentive] feature that the predicates are involved with. That is, since the subjects in (29) become to have the [+agentive] feature, memchwu- and wumciki- are not Type B predicates any longer, but they are examples of Type A predicates.

The proposed evidence with the accusative-nominative case alternations for Korean unaccusativity may not be unbeatable. An important question remains, though, regarding how the adverbs of duration and frequency can be assigned an accusative case. This seems contradictory when we adopt the definition of unaccusatives as predicates which lack the accusative-case-assigning ability and when we accept such predicates as memchwu- and wumciki- as unaccusatives in Korean.⁶

Accusative-nominative case alternations are also observed in long form negation constructions. There are two types of negation in Korean; long form negation and short form negation. Consider the following:

- (30) a. Soo-ka an o-ass-ta
 -NOM NEG come-PST-DEC
 'Soo did not come.'
 - b. Soo-ka umsik-ul mos mek-ess-ta
 -NOM food-ACC NEG eat-PST-DEC
 'Soo could not eat food.'
- (31) a. Soo-ka o-ci anh-ass-ta
 -NOM come-COMP NEG-PST-DEC
 'Soo did not come.'
 - b. Soo-ka umsik-ul mek-ci anh-ass-ta
 -NOM food-ACC eat-COMP NEG-PST-DEC
 'Soo did not eat food.'

Sentences in (30) are examples of short form negation, where either an or mos comes before verbs. In long form negations, as in the examples of (31), ci

⁶ As one anonymous reviewer pointed out, a syntactic explanation as to how accusative is allowed on frequency/duration adverbs should be provided in future studies. In spite of shortcomings, however, the case alternations exemplified here are very important in that they can be evidence supporting the unaccusativity in Korean (Lee, 1993, p. 33).

anh- follows verbs. Notably, in the case of the long form negations, either of two case markers, -ka (nominative) or -lul (accusative), can be optionally added to ci. What is important for the present discussion is that they also show the accusative-nominative case alternations as in (32):

(32) Soo-ka cengcikha-ci-lul/ka anh-ta
-NOM be.honest-COMP-ACC/NOM NEG-DEC
'Soo is not honest.'

More important is that the two types of cases, -ka and -lul, are selectively added to ci-, depending on the predicate types. Observe the following examples:

- (33) Soo-ka chayk-ul ilk-ci-lul/*ka anh-nun-ta
 -NOM book-ACC read-COMP-ACC/*NOM NEG-PRES-DEC
 'Soo does not read books.'
- (34) a. Holangi-ka mwusep-ci-lul/ka anh-ta tiger-NOM be.scary-COMP-ACC/NOM NEG-DEC 'I am not afraid of tigers.'
 - b. Inho-ka ttam/nwunmul/phi-lul hul-li-ci-lul/?ka
 -NOM sweat/tear/blood-ACC flow-CAUS-COMP-ACC/?NOM
 anh-nun-ta
 NEG-PROG-DEC
 'Inho is not sweating/weeing/bleeding.'
 - c. Pi-ka (manhi) o-ci-lul/ka anh-nun-ta rain-NOM (a lot) come-COMP-ACC/NOM NEG-PROP-DEC 'It does not rain (much).'
 - d. Cha-ka twupen-ul/i memchwu-ci-lul/ka car-NOM two.times-ACC/NOM stop-COMP-ACC/NOM anh-nun-ta NEG-PROP-DEC 'The car did not stop two times.'
- (35) Chelswu-ka (ppalli) ttwi-ci-lul/*ka anh-nun-ta
 -NOM (fast) run-COMP-ACC/*NOM NEG-PROP-DEC
 'Chelswu does not run (fast).'
- (33) is the example, where the transitive verb ilk- is used. This shows that only the accusative case can be added in the long form negation construction with transitive verbs. Predicates used in the example sentences in (34) have all been treated as unaccusatives throughout this paper (Type B and Type D). As shown in (34), unaccusative predicates may allow both -lul and -ka in the long form negation construction. By contrast, it should be noted that the Type A unergative predicate,

⁷ Many native users of Korean would feel more comfortable with -lul, which is more frequent than -ka in long form negations.

ttwi- in (35), does not allow a nominative case to be added like transitive verbs in (33). Therefore, it could be concluded that the accusative-nominative case alternations in long form negations in Korean are permissible with only unaccusative predicates.

It was noted in the preceding section that Korean unergatives can be used as unaccusatives when the subjects of the predicates have the [-agentive] feature (cf. examples in (18)). The unaccusativity of the predicates in (18) can also be reliably determined through the test with the case alternations as in (36)-(39):

- (36) a. Soo-ka ka-ci-lul/*ka anh-ass-ta
 -NOM go-COMP-ACC/*NOM NEG-PST-DEC
 'Soo did not go.'
 - b. Yenlak-i ka-ci-lul/ka anh-ass-ta news-NOM go-COMP-ACC/NOM NEG-PST-DEC 'The news was not delivered.'
- (37) a. Soo-ka uyca-ey anc-ci-lul/*ka anh-ass-ta
 -NOM chair-LOC sit-COMP-ACC/*NOM NEG-PST-DEC
 'Soo did not sit on the chair.'
 - b. Menci-ka uyca-ey anc-ci-lul/ka anh-ass-ta dust-NOM chair-LOC sit-COMP-ACC/NOM NEG-PST-DEC 'The dust did not lie on the chair.'
- (38) a. Soo-ka tochakha-ci-lul/*ka anh-ass-ta
 -NOM arrive-COMP-ACC/*NOM NEG-PST-DEC
 'Soo did not arrive.'
 - b. Sosik-i tochakha-ci-lul/ka anh-ass-ta news-NOM arrive-COMP-ACC/NOM NEG-PST-DEC 'The news did not arrive.'
- (39) a. Soo-ka ttwi-ci-lul/*ka anh-ass-ta
 -NOM run-COMP-ACC/*NOM NEG-PST-DEC
 'Soo did not run.'
 - b. Cipkaps-i ttwi-ci-lul/ka anh-ass-ta housing prices-NOM run-COMP-ACC/NOM NEG-PST-DEC 'Housing prices did not increase.'

The acceptability of both accusative and nominative case markers in long form negation constructions in the second pairs of (36)-(39) above would enable us to correctly differentiate unaccusative predicates used in each sentence. Therefore, case alternations in long form negation constructions may offer reliable evidence to the issue of unaccusativity in the Korean language.

4. Summary of the proposals

Several proposals addressing the distinction between the two types of Korean intransitive predicates have been reviewed and critically evaluated. It was purported in this paper that the Korean unaccusativity could be reliably differentiated via both semantic and syntactic criteria, from the standpoint that there is a close correlation between syntax and lexical semantics of intransitives. Specifically, the combined semantic criteria of [±agentive] and [±active] were proposed, where predicates with [+agentive, +active] (Type A) should be judged unergatives, whereas predicates with [-agentive, +active] (Type B), [+agentive, -active] (Type C), and [-agentive, -active] (Type D) would all be deemed unaccusatives. It was also demonstrated that the unaccusativity in Korean could be syntactically tested through the accusative-nominative case alternations. Case alternations in long form negation constructions, in particular, were shown to be the most reliable and valid syntactic criteria for testing Korean unaccusatives.

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