Title: Why quantifiers float: A response to Kim (2013)

Abstract

The aim of this discussion article is twofold. First, we critically review Jong-Bok Kim's (2013) proposal [Floated numeral classifiers in Korean: A non-derivational, functional account. *Lingua* 133, 189–212], articulating the strengths and weaknesses of his approach. Second, after identifying some crucial weaknesses of Kim's proposal, we offer an alternative analysis of floated quantifiers (FQs), while maintaining the same goal set by Kim (2013). In doing so, we point out several challenges Kim's analysis faces, primarily the adoption of the theme-rheme partition. We demonstrate that the theme-rheme division is orthogonal to the focus property FQs exhibit. Ultimately, we show that our criticism strengthens Kim's analysis, as opposed to contradicting it.

Keywords: activation cost, focus of attention, floated quantifiers (FQs), theme-rheme partition, unaccusative/unergative asymmetry

1. Introduction

Jong-Bok Kim's article "Floated numeral classifiers in Korean: A non-derivational, functional account" was published in this journal in 2013 (hereafter Kim 2013). Kim's analysis provides robust treatment of floated quantifiers (FQs) of Korean, adopting Halliday's theme-rheme partition. Considering that the majority of research on this issue takes on a generative linguistics assumption, Kim (2013) is a notable achievement. While we assess this piece as one of the finest-grained works to date, it has not drawn much attention from researchers. Perhaps, the lack of interest in his work can be attributed to the theoretical assumptions Kim makes; he approaches the issues with FQs from a functionalistic viewpoint, which is not popular among Korean linguists. This is unfortunate because Kim (2013) is full of insight and valuable sets of data that are not taken into account in other published works on Korean FQs. The aim of this discussion article is twofold. First, we critically review Kim's (2013) proposal, articulating the strengths and weaknesses of his approach. Second, after pointing out some crucial weaknesses of Kim's proposal, we offer an alternative analysis of FQs, while maintaining the same goal set by Kim (2013). Ultimately, just like Kim (2013), we attempt to answer the question of why quantifiers float. As important as this question may be, it has not been coherently discussed in the literature, let alone satisfactorily answered.

Let us first briefly discuss some challenges Kim (2013) faces. Kim's proposal predicts (1) as a fully acceptable sentence, but (1) seems to be unacceptable or at best marginally acceptable without additional prosodic or grammatical information. The double stroke (||) denotes the theme-rheme boundary, which we discuss in detail in Section 3. This example is a non-trivial counterexample to Kim (2013); and, for his claims to work, he needs to account for it or revise

his claims. Given his assumptions, the awkwardness of (1) would remain inexplicable.[1] A more detailed discussion of (1) is provided in Section 3.2.

(1) ??/* haksayng-tul-i i chayk-ul || sey-myeng ilk-ess-ta.
student-PL-NOM this book-ACC three-CL read-PST-DCL
Intended: 'Three students read this book.'

But the issue of Kim's theme-rheme-based proposal runs deeper than different judgments of the data under investigation. A more serious challenge concerns the validity of the adoption of theme-rheme for the analysis of FQs as focal entities. While we agree with Kim that FQs acquire a focus status, we doubt that the theme-rheme division is an appropriate tool for the analysis of a focus phenomenon. Note that the theme-rheme division is a speaker-oriented concept, whereas a focus is a new piece of information to the addressee. Mixing these two notions would cause unnecessary confusion or lead to undesirable analyses.

Kim assumes that syntax alone is not enough to explain the phenomenon of FQs. Under the same assumption, we hope to strengthen Kim's proposal. More specifically, we argue that Shimojo's cognitive approach provides a more systematic treatment of FQs. We further demonstrate that the theme-rheme partition is orthogonal to the phenomenon of FQs.

2. The phenomenon

[1] The abbreviations used in the glosses are as follows. ACC: Accusative; ADVZ: Adverbializer; CL: Classifier; CONN: Connective; DCL: Declarative; GEN: Genitive; HON: Honorific; LOC: Locative; NOM: Nominative; NEG: Negation; PL: Plural; PROG: Progressive; PST: Past; TOP: Topic.

Quantifiers may be severed from their hosts in Korean, as illustrated in (2a–c). The quantifier affixed with the person-denoting classifier, *sey-myeng*, appears on the right side of its host. When the predicate is intransitive, the FQ is associated with the subject because it is the only eligible candidate, as shown in (2a). With a transitive predicate, the quantifier strongly prefers the object as its host, as indicated in (2b). The quantifier may be associated either with the subject or the object since the person-denoting classifier itself is not sensitive to the host's grammatical function. The interpretation of *sey-myeng* with *sensayng-nim* 'teacher-HON' as its host, as in (2c), is not desirable unless the FQ is accompanied by an additional grammatical encoding, such as a case and/or focus particle.

(2) a. haksayng-tul-i sey-myeng wa-ss-ta.
student-PL-NOM three-CL come-PST-DCL
'Three students came.'

b. sensayng-nim-tul-i haksayng$_i$-tul-ul sey$_i$-myeng manna-ss-ta.
teacher-HON-PL-NOM student-PL-ACC three-CL meet-PST-DCL
'Teachers met with three students.'

c. * sensayng$_i$-nim-tul-i haksayng-tul-ul sey$_i$-myeng manna-ss-ta
teacher-HON-PL-NOM student-PL-ACC three-CL meet-PST-DCL
Intended: 'Three teachers met with students.'

Quantifier floating occurs uni-directionally; the host appears on the left side of the FQ (Shi 2000; Ko 2007). When the host appears on the right side, as in (3), the result is awkward.

(3) * sey$_i$-myeng sensayng-nim-tul-i haksayng$_i$-tul-ul manna-ss-ta.
three-CL teacher-HON-PL-NOM student-PL-ACC meet-PST-DCL
Intended: 'Teachers met with three students.'

It is worth noting that (4a) is acceptable, though the host of the quantifier appears on the right side. However, it is difficult to determine whether *sey-myeng* in (4a) is a FQ or the outcome of a case ellipsis from (4b). Case ellipsis is commonly observed in Korean; case markers may be dropped in casual speech or news headlines. In particular, the so-called grammatical case markers—nominative, accusative, genitive—tend to undergo ellipsis more easily than locative/dative markers. For this reason, we exclude examples like (4a) from the FQ construction.

(4) a. sey-myeg haksayng-tul-i wa-ss-ta.
three-CL student-PL-NOM come-PST-DCL
'Three students came.'
b. sey-myeng-uy haksayng-tul-i wa-ss-ta.
three-CL-GEN student-PL-NOM come-PST-DCL
'Three students came.'

The host of a FQ may undergo scrambling, thereby establishing a long-distance relationship between the host and the FQ, as in (5a).[2] While subjects are more restricted, they can scramble as well, as in (5b).[3]

(5) a. haksayng$_i$-tul-ul sensayng-nim-tul-i sey$_i$-myeng manna-ss-ta.
student-PL-ACC teacher-HON-PL-NOM three-CL meet-PST-DCL

[2] Kim notes that the long-distance relationship becomes infelicitous if the subject and the object refer to the same type of individuals, as in (i). Unlike (5), neither the subject nor the object is honorified; hence *sey-myeng* may be associated with either the subject or the object. In this situation, the object NP is preferably associated with the FQ, indicating that discourse structure plays an important role in the FQ phenomenon.

(i) ?? nam.haksayng$_i$-tul-ul yehaksayng-tul-i sey$_i$-myeng manna-ess-ta.
male.student-PL-ACC female.student-PL-NOM three-CL meet-PST-DCL
Intended: 'The female students met the three male students.'

[3] Traditionally, the adverb *ecey* 'yesterday' is categorized as a high adverb; it is generated at a *v*P-external position, which is higher than the original subject position.

'The three students, teachers met with.'

b. sensayng$_i$-nim-tul-i ecey sey$_i$-myeng haksayng-tul-ul
teacher-HON-PL-NOM yesterday three-CL student-PL-ACC
manna-ss-ta.
meet-PST-DCL
'Three teachers met with (the) students yesterday.'

One noticeable difference between Korean and Japanese is the availability of case marking on FQs in Korean, which is illustrated in (6a–b).

(6) a. haksayng-tul-i sey-myeng-i wa-ss-ta.
student-PL-NOM three-CL-NOM come-PST-DCL
'Three students came.'

b. sensayng-nim-tul-i haksayng$_i$-tul-ul sey$_i$-myeng-ul manna-ss-ta.
teacher-HON-PL-NOM student-PL-ACC three-CL-ACC meet-PST-DCL
'Teachers met with three students.'

When a FQ is affixed with a case particle, the quantifier may be associated with the subject. Consider (7), which is a modified version of (2c) with the nominative marker on the FQ. Unlike (2c), (7) is fully acceptable.

(7) sensayng$_i$-nim-tul-i haksayng-tul-ul sey$_i$-myeng-i manna-ss-ta.
teacher-HON-PL-NOM student-PL-ACC three-CL-NOM meet-PST-DCL
'Three teachers met with students.'

FQs may be affixed with focus particles, such as *-man* 'only' and *-pakkey* 'only,' as shown in (8a–b). Note that *sey-myeng-pakkey* is a negative polarity item (NPI), and it needs a NEG clause-mate, as indicated in (8b).

(8) a. haksayng-tul-i sey-myeng-man wa-ss-ta.
student-PL-NOM three-CL-only come-PST-DCL
'Only three students came.'
b. haksayng-tul-i sey-myeng-pakkey an wa-ss-ta.
student-PL-NOM three-CL-only NEG come-PST-DCL
'Only three students came.'

The focus-marked quantifier in (8a) may be further marked with a case particle, as shown in (9).

(9) haksayng-tul-i sey-myeng-man-i wa-ss-ta.
student-PL-NOM three-CL-only-NOM come-PST-DCL
'Only three students came.'

Ko (2007) and Kim (2013) state that quantifier floating is sensitive to the types of intransitive predicates. This is known as unaccusative/unergative asymmetry (Ko 2007), and examples are provided in (10). According to Ko (2007) and Kim (2013), the FQ is acceptable with the unaccusative verb, *cwuk-* 'die' in (10a), whereas *twu-myeng* 'two-CL' is not compatible with the unergative verb, *cenhwa-ha-* 'phone.' Unlike these scholars, we cast doubt on the validity of this property, which we discuss in Section 3.2.

(10) a. koyangi-ka pyeng-ulo sey-mali cwuk-ess-ta.
cat-NOM illness-by three-CL die-PST-DCL
Three cats died of illness.'
(Ko 2007: 68)
b. */?? haksayng-tul-i caki-uy ton-ulo twu-myeng
student-PL-NOM self-GEN money-by two-CL
cenhwa-hay-ss-ta.
phone-do-PST-DCL
Intended: 'Two students made a phone call with their own money.'
(Ko 2007: 68)

Thus far, we introduced all quantifiers with classifiers, but quantifiers may be used without a classifier, as in (11).

(11) haksayng-tul-i yenphil-ul seys cip-ess-ta.
student-PL-NOM pencil-ACC three pick.up-PST-DCL
'Students picked up three pencils.'

Typically, the object may not intervene between a quantifier and its host, but when the host is animate and the quantifier is marked with a person-denoting classifier, the preference is noticeably diminished. That is, examples like (12a) are acceptable, though the object appears between the quantifier and its subject host. Example (12b) exhibits a similar pattern, where the classifier can only refer to an animal, not a person. In addition, our world knowledge provides the information that *a dog chasing a person* is more natural than the other way around.

(12) a. haksayng-tul-i pipimpap-ul sey-myeng mek-ess-ta.
student-PL-NOM bibimbap-ACC three-CL eat-PST-DCL
'Three students ate bibimbap.'
b. kay-tul-i salam-ul twu-mali ccochaka-ko iss-ta.
dog-PL-NOM person-ACC two-CL chase-COMP PROG-DCL
'Two dogs are chasing a person (or people).'

While we gloss all classifiers as CL throughout this article, there are a number of classifiers with distinct meanings in Korean. As indicated in the examples in (12), the types of classifiers and world knowledge may help us defy the subject/object asymmetry. In other words, we need to carefully examine the types of classifiers when we judge the acceptability of examples with FQs.

3. A summary of Kim (2013) and challenges

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143 3.1 Summary

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145 Kim (2013) observes that numerical classifiers in Korean occur in at least three different

146 environments, as described in (13).

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(13) a. Genitive-Case (GC) Type

Chelswu-ka	[sey-kwen-uy	chayk-ul]	ilk-ess-ta.
C-NOM	three-CL-GEN	book-ACC	read-PST-DCL

b. Noun Initial (NI) Type

Chelswu-ka	[chayk	sey-kwen-ul]	ilk-ess-ta.
C-NOM	book	three-CL-ACC	read-PST-DCL

c. Floated Quantifier (FQ) Type

Chelswu-ka	[chayk-ul]	[sey-kwen]	ilk-ess-ta.
C-NOM	book-ACC	three-CL	read-PST-DCL

For all three examples: 'Chelswu read three books."

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150 The FQ type in which we are interested has been richly examined from a variety of theoretical

151 perspectives. Broadly speaking, scholars are divided into two camps. The first view, often

152 dubbed the stranding view, attempts to capture the similarities among the three types by deriving

153 the FQ type from either the NI or the GC type. This view is supported by Miyagawa (1989), Park

154 & Sohn (1993), Choi (2001), Kim (2005), Ko (2007), and Miyagawa & Arikawa (2007), among

155 others. The second view, known as the VP-modifier view, does not assume this type of

156 movement. Rather, the numeral classifier directly combines with a verbal predicate in syntax in

157 the form of a head-modifier structure and semantically modifies the event structure of the

158 predicate. This view is supported by Gunji & Hasida (1989), Fukushima (1991), Kang (2002),

159 and Kim & Yang (2007), among others. Though the evaluation of each approach is beyond the

scope of this article, we would like to briefly discuss some weaknesses of the existing proposals, citing Kim (2013). He provides an accurate assessment, as quoted below:

> However, when we consider more data, one thing is clear that syntax alone is not enough to capture wider distributional possibilities of the FQ as well as speakers' variations in the judgments of FQ data. The most serious challenge to both of these syntax-based views is the question of why the FQ "floats." (Kim 2013: 201)

To overcome this challenge, Kim (2013) puts forward a third type of approach, which has a pragmatic orientation with an emphasis on information structure. He argues that the FQ functions as a focus marker and signals the partitioning of the thematic structure of the given sentence into theme and rheme. Kim (2013) uses the terms—theme and rheme—in the sense of Halliday & Matthiessen (2004): the theme is the starting point of the message chosen by the speaker/writer, while the rheme is the remaining part that develops the theme, a participant, the circumstance, or a process. Note that the theme-rheme division does not always go hand-in-hand with the topic-comment division, though there are some overarching similarities. The crucial component of Kim's proposal is given in (14), which can be paraphrased as: quantifiers float to set off the rheme in the thematic structure.

(14) Thematic constraint for the FQ in Korean:
A floated numeric classifier in Korean introduces new information and, as a default, sets off rheme in the thematic structure. (Kim 2013: 205)

In Kim's (2013) analysis, both (15) and (16) are accounted for by the theme-rheme division. The rheme portion of (15) starts with the quantifier, which conforms to the thematic constraint.[4] By contrast, (16) is not felicitous because the rheme portion starts with an indefinite. As such, the unacceptability of (16) has nothing to do with the quantifier itself; it is the consequence of the different types of theme-rheme partitions.

(15) haksayng$_i$-tul-i Chomsky-uy chayk-ul || sey$_i$-myeng ilk-ess-ta.
student-PL-NOM C-GEN book-ACC three-CL read-PST-DCL
'Three students read the book by Chomsky.'
(Kim 2013: 206)

(16) * haksayng$_i$-tul-i || etten chayk-ul sey$_i$-myeng ilk-ess-ta.
student-PL-NOM some book-ACC three-CL read-PST-DCL
Intended: 'Three students read (some) books.'
(Kim 2013: 207)

Kim identifies four puzzling observations about FQs and calls them the "Four Puzzles." Kim's Puzzle 1 concerns an intervention effect that FQs induce. FQs behave similarly to a *wh*-expression that leads to an answer focus. Example (17a) illustrates that the *wh*-expression cannot appear between the NPI, *Mimi-pakkey*, and the licensor, *anh-ass-ni*. When the *wh*-expression appears before the NPI, the result becomes felicitous, as in (17b).

(17) a. * Mimi-pakkey mwues-ul mek-ci anh-ass-ni?
M-only what-ACC eat-CONN NEG-PST-Q
Intended: 'What did only Mimi eat?'
(Kim 2013: 203)

b. mwues Mimi-pakkey mek-ci anh-ass-ni?
what-ACC M-only eat-CONN NEG-PST-Q
'What did only Mimi eat?'

[4] Unlike Kim (2013), we believe (15) is marginally acceptable without additional information—prosodic or grammatical—on the quantifier.

(Kim 2013: 203)

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198 We observe a similar behavior with FQs in (18a–b).

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(18) a. * haksayng-tul-i ku chayk-pakkey sey-myeng ilk-ci
student-PL-NOM that book-only three-CL read-CONN
anh-ass-ta.
NEG-PST-DCL
Intended: 'Only three students read the book.'
(Kim 2013: 203)

b (?) haksayng-tul-i sey-myeng ku chayk-pakkey ilk-ci
student-PL-NOM three-CL that book-only read-CONN
anh-ass-ta.
NEG-PST-DCL
Intended: 'Three students read only the book.'
(Kim 2013: 203)

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201 Puzzle 2 concerns the different behaviors of manner vs. locative adverbs. While a locative
202 adverb may precede a FQ, a manner adverb is not permitted to do so, as shown in (19a–b). Note
203 that when *ai-tul* is construed as definite, (19b) may give rise to the conservative reading with
204 contrastiveness: (among five kids) three kids laughed loudly (but the other two didn't).[5] In this
205 context, (19b) becomes fully acceptable.

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(19) a. haksayng-tul-i swuep-cwung-ey sey-myeng pwunmyenghi
student-PL-NOM class-during-at three-CL evidently
wus-ess-ta.
laugh-PST-DCL
'Three students evidently laughed during class.'
(Kim 2013: 203)

b. ??/* ai-tul-i khu-key sey-myeng wus-ess-ta.
kid-PL-NOM loud-ADVZ three-CL laugh-PST-DCL
Intended: 'Three students laughed loudly.'
(Kim 2013: 203)

[5] For detailed discussions on (non-)conservative readings of FQs, please refer to Ahn & Sauerland (2017) and Ahn & Ko (2022).

Puzzle 3 concerns the disappearance of the subject/object asymmetry in a certain situation. When a FQ is case- or delimiter-marked, the asymmetry tends to disappear, as illustrated in (20a–b).

(20) a. haksayng-tul-i ku kes-ul sey-myeng-i/man/kkaci ilk-ess-ta.
student-PL-NOM tha thing-ACC three-CL-NOM/only/even read-PST-DCL
'(Even/only) Three students read that thing.'
(Kim 2013: 204)

b. ? ai-tul-i phyenci-lul sensayng-nim-eykey yel-myeng-ina
kid-PL-NOM letter-ACC teacher-HON-to ten-CL-even
ponay-ess-ta.
send-PST-DCL
'Even ten children sent a letter to the teacher.'
(Kim 2013: 204)

Puzzle 4 concerns the disappearance of the unergative/unaccusative asymmetry in a particular situation. After stating that unergative predicates are generally not compatible with FQs, Kim observes that (21a) can be rescued with a slight revision, as shown in (21b).

(21) a. ??/* haksayng-tul caki-uy ton-ulo twu-myeng
student-PL-NOM self-GEN money-with two-CL
cenhwa-ha-ess-ta.
phone-do-PST-DCL
Intended: 'Two students made a phone call with their own money.'
(Kim 2013: 204)

b haksayng-tul-i caki ton-ulo cikcep Seoul-ey
student-PL-NOM self money-with without.help Seoul-to
twu-myeng cenhwa-ha-ess-ta.
two-CL phone-do-PST-DCL
'Two students made a phone call to Seoul with their own money without any help.'
(Kim 2013: 204)

After laying out the properties of the observations, Kim (2013) argues that his thematic constraint proposed in (14) can account for all of them without the need for unmotivated mechanisms. Kim's solution boils down to the question of how to partition theme and rheme. If the speaker can create a partition in which the FQ appears at the beginning of the rheme portion, then we expect a felicitous result. We evaluate Kim's claims in the next subsection.

3.2 Challenges

As attractive as Kim's functional approach may be, it faces three challenges, as summarized in (22).

(22) Challenges for Kim (2013)
   a. Theme/rheme-related challenge
   b. Judgment-related challenge
   c. Asymmetry-related challenge

Let us first consider the core assumption of Kim's analysis: the thematic constraint introduced in (14). Halliday and Matthiessen (2004) clarify that theme-rheme division is different from topic-comment as described below:

> The label 'Topic' usually refers to only one particular kind of theme, the 'topical Theme'; and it tends to be used as a cover term for two concepts that are functionally distinct, one being that of Theme and the other being that of Given." (Halliday & Matthiessen 2004: 65 footnote)

In other words, theme and rheme are broad concepts that concern the organization of the speaker's message by having a distinct status assigned to one part of a clause. In addition, given-

new and theme-rheme are not the same notions. Halliday and Matthiessen (2004) make a clear distinction between the two concepts:

> The Theme is what I, the speaker, choose to take as my point of departure. The Given is what you, the listener, already know about or have accessible to you. Theme + Rheme is speaker-oriented, whereas Given + New is listener-oriented. (Halliday & Matthiessen 2004: 93)

The essential claim Kim makes concerns the treatment of FQs as focus markers. Kim's claim comes from the observation that FQs are not favored as old information. Put differently, the main function of FQs is to introduce new information. We fully agree with Kim concerning this statement. However, Kim is confusing the two distinctive notions: theme-rheme and given-new. What Kim attempts to do is to offer an analysis of a listener-oriented phenomenon (given-new) with the speaker-oriented notion (the theme-rheme partition). This misuse of theoretical concepts not only leads to over- or under-analyses of the data but also makes false predictions.

Consider (23), which we introduced in the Introduction as (1). Korean has a three-way distinction in demonstratives (Sohn 1999): *i* 'this', *ce* 'that', and *ku* 'it/that'. While *i* is a proximal demonstrative used to pick out entities close to the speaker, *ce* is used to pick out entities far from both the speaker and the listener. The third type, *ku*, requires the addressee to be familiar with the intended referent (see Cho 2016; Ahn 2017). Since *i* reflects the speaker's viewpoint, *haksayng-tul-i i chayk-ul* serves as the point of departure of the message in (23); therefore, this portion functions as the theme of the sentence. The theme-rheme partition posited in (23) also conforms to Kim's thematic constraint in (14). Therefore, (23) is predicted to be fully acceptable in Kim's analysis.

(23) ??/* haksayng-tul-i i chayk-ul || sey-myeng ilk-ess-ta.
student-PL-NOM this book-ACC three-CL read-PST-DCL
Intended: 'Three students read this book.'

Kim is clear that (23) is acceptable in the given theme-rheme division, where the FQ provides new information. A reviewer points out that the acceptability improves when *sey-myeng* exhibits prosodic prominence. However, that point does not strengthen Kim's analysis. That is because we need to doubly mark the focal information on *sey-myeng*: one by the thematic constraint, again by the prosodic prominence. Korean does not require prosodic prominence on a focused entity. Example (23) is predicted to be fully acceptable by the theme-rheme division in Kim's analysis because *sey-myeng* obtained a focus status by setting off the rheme portion. If we require additional prosodic prominence coupled with the theme-rheme division, Kim's system becomes redundant. Simply put, it would mean re-marking already-marked, clearly identified new information to convey the same information. If the context makes it clear that the FQ is a focus, then prosodic prominence must be fully optional.

Let us now consider (24a), which may be partitioned either as (24b) or (24c), depending on which portion the speaker chooses as the point of departure for her message. If we identify (24b) as a desirable partition, (24b) must be fully acceptable, which is different from our judgment. Instead, if we choose (24c) as a desirable partition, we can predict its awkwardness; the rheme portion does not start with the FQ. Though the awkwardness of (24c) may be accounted for under this partition, Kim still needs to explain why the definite nominal, *ku chayk-ul*, is not partitioned into the theme portion in this case. This issue arises because Kim automatically

partitions definite nominals as part of the theme portion. In other words, all the examples presented in (23) and (24) pose a challenge to Kim in one way or another.[6]

(24) a. ??/* haksayng-tul-i ku chayk-ul sey-myeng ilk-ess-ta.
student-PL-NOM that book-ACC three-CL read-PST-DCL
Intended: 'Three students read that book.'

b. ??/* haksayng-tul-i ku chayk-ul || sey-myeng ilk-ess-ta.
student-PL-NOM that book-ACC three-CL read-PST-DCL
Intended: 'Three students read that book.'

c. ??/* haksayng-tul-i || ku chayk-ul sey-myeng ilk-ess-ta.
student-PL-NOM that book-ACC three-CL read-PST-DCL
Intended: 'Three students read that book.'

Now, let us consider the judgment issue. Some researchers might treat the disagreement on judgment lightly because judgment is bound to vary. However, the examples we present here are used as crucial pieces of evidence for Kim's analysis; therefore, different judgment would provide a non-trivial challenge to Kim (2013). Kim argues (25) is not acceptable because the indefinite nominal, *etten chayk-ul*, intervenes between the subject and the FQ. As such, the indefinite object nominal signals the starting point of rheme, as opposed to the FQ.

(25) * haksayng-tul-i || etten chayk-ul sey-myeng ilk-ess-ta
student-PL-NOM some book-ACC three-CL read-PST-DCL
Intended: 'Three students read (some) books.'
(Kim 2013: 207)

[6] (24b) is rescued by placing prosodic prominence on the FQ, which is also the claim made by Kim. However, as discussed above, it will make Kim's analysis redundant. In his analysis, we need to answer the question of why additional prosodic prominence is required even if the FQ is already identified as a focus by the theme-rheme division.

According to Kim, (26) contrasts with (25) in that the host of the FQ is the object, which is interpreted as a definite nominal. To Kim, whether the subject or the object is the host of a FQ is less important than which element sets off the rheme portion. As a definite nominal, *chayk-ul* is included in the theme portion, and (26) conforms to the thematic constraint in (14).

(26) haksayng-tul-i chayk-ul || sey-kwen ilk-ess-ta.
student-PL-NOM book-ACC three-CL read-PST-DCL
'Students read the three books.'
(Kim 2013: 207)

If this is the case, Kim's analysis predicts (27) as unacceptable because the rheme portion starts with the indefinite object nominal, *etten chayk-ul*. Conversely, the object nominal cannot be grouped in the theme because it is indefinite. Nonetheless, (27) is fully acceptable to us.

(27) haksayng-tul-i || etten chayk-ul sey-kwen ilk-ess-ta.
student-PL-NOM some book-ACC three-CL read-PST-DCL
'Students read three books.'

The last challenge concerns the two asymmetries Kim observes: subject-object and unaccusative-unergative. Kim's Puzzle 3 states that the subject/object asymmetry can disappear when the FQ is case- or delimiter-marked. This statement needs to be carefully assessed because it may cause a misunderstanding of the FQ phenomenon. More accurately, the asymmetry does not disappear even with the help of a delimiter. While (28) may be ambiguous, the primary meaning is to associate the FQ with the object; the asymmetry still exists.

(28) ai-tul-i cangnankam-ul twul-man cip-ess-ta.
kid-PL-NOM toy-ACC two-only pick.up-PST-DCL
'Kids picked up only two toys.'
'Only two kids picked up toys.'

A case-marked FQ tells a different story. When the FQ is marked nominative in (29), there is no choice but to associate it with the nominative-marked subject nominal. Due to the clash of the case markings, it can never be associated with the accusative-marked object nominal. In other words, case- or delimiter-markings do not erase the asymmetry; rather, they introduce a possibility for different interpretations.

(29) ai-tul-i cangnankam-ul twul-i cip-ess-ta.
kid-PL-NOM toy-ACC two-NOM pick.up-PST-DCL
'Two kids picked up toys.'

We encounter a more vexing issue when we deal with the unaccusative/unergative asymmetry, which Kim borrows from Ko (2007). We are not sure if this asymmetry is real or posited by linguists for the sake of convenience. Both Kim (2013) and Ko (2007) predict (30) as an unacceptable sentence because the predicate in (30) is unergative, and the grammatical structure is parallel to (10b).

(30) ipen wuntonghoy 100-mite talliki-eyse, ai-tul-i hwilcheye-lo
this.time field.day 100-meter running-at kid-PL-NOM wheelchair-with
twu-myeng wancwu-hay-ss-ta.
two-CL finish-do-PST-DCL
'Two kids finished in the 100-meter race with wheelchairs on this year's field day.'

We believe (30) is acceptable for most native speakers of Korean. If so, the unaccusative/unergative asymmetry needs to be more carefully examined in relation to the FQ phenomenon. We also need to account for the different degrees of acceptability of (10b) and (30), which is beyond the scope of our discussion for this article.

4. An alternative approach: A cognitive and pragmatic take

In this section, we propose an alternative analysis to Kim (2013). Like Kim (2013), we reject the assumption that the FQ phenomena are syntactically driven. However, unlike Kim, we explore the relationship between the notion of focus and the givenness-related concepts, such as "in-focus" and "activation." We demonstrate that we can reach the same goal as Kim without recourse to the superfluous concepts of theme-rheme for the analysis of Korean FQs. After introducing the cognitive-pragmatic proposal of Japanese FQs by Shimojo (2004) in Section 4.1, we then discuss how Shimojo's principles can be applied to Korean and overridden by other factors in Korean in Section 4.2.

4.1. Shimojo (2004)

Downing (1993, 1996) observes that FQs are typically used to introduce new referents into discourse in Japanese. She then argues that the pragmatic function of FQs correlates with the discourse role of absolutive arguments representing rhematic information. Downing states that "[f]loat is, in fact, best characterized as an 'absolutive' construction, since it is used almost

exclusively when the quantified argument serves as the direct object of a transitive verb or the subject of an intransitive verb" (Downing 1993: 65).

To illustrate Downing's claim, let us consider the Japanese examples in (31a–b). In (31a), the FQ, *san* 'three,' is associated with the direct object, *biiru* 'beer.' When we try to associate the quantifier with the subject in (31b), the result is not acceptable, even with the person-denoting classifier, *-nin*.

(31) a. gakusee-ga biiru$_i$-o san$_i$-bon nonda.
student-NOM beer-ACC three-CL drank
'A student had three (bottles of) beer.'
(Shimojo 2004: 382)

b. * gakusee$_i$-ga biiru-o san$_i$-nin nonda.
student-NOM beer-ACC three-CL drank
Intended: 'Three students had beer.'
(Shimojo 2004: 382)

Numerous research proposals have been put forward regarding examples like (31). Among these, most germane to our analysis is Shimojo's (2004) proposal. Shimojo proposes two principles concerning FQs in Japanese, as summarized in (32a–b).

(32) a. The quantifier host to be matched with the floated quantifiers must be in the focus of attention upon the processing of the predicates. (Shimojo 2004: 388)
b. The quantifier host should require a greater activation cost than the other potential quantifier host, if any. (Shimojo 2004: 388)

Shimojo uses "focus of attention" and "activation" in terms of Gundel et al. (1993), Tomlin (1995), and Dryer (1996). A referent is "in focus" (or a focus of attention) when it is not only in

379 short-term memory but also at the current center of attention. According to Gundel et al. (1993),
380 subjects and objects of matrix sentences are highly likely to bring a referent into focus, and a
381 referent is "activated" when it is represented in current short-term memory. In B's response in
382 (33), the pronominal requires the referent to be activated.
383

(33) A: Have you seen the neighbor's dog?
B: Yes, and that dog kept me awake all night.
(Gundel et al. 1993: 279)

384
385

386 Now, we can see how Shimojo's principles in (32) account for the asymmetry between (31a) and
387 (31b). In both examples, it is likely that the subject and the object are in focus, and they are
388 activated. Since the subject generally represents information that has been activated in the
389 preceding context, its activation cost tends to be less than that of the object. Therefore, the object
390 becomes a more desirable host of the quantifier.[7]
391 A noticeable difference between Japanese and Korean is the fact that FQs can be marked
392 with case or other delimiter particles in Korean. As illustrated in (34), B's response is acceptable
393 when the FQ is marked nominative. This example is particularly interesting in that *cekkwun*
394 'enemy' gives rise to a topic and *akwun* 'our.troops' to a focus. As a focus, *akwun* requires a
395 greater activation cost than that of *cekkwun.* Given this limitation, Shimojo's principles do not
396 correctly predict examples like B's response in (34).
397

(34) A: cekkwun-i mwues-ul kongkyek-ha-ess-e?
enemy-NOM what-ACC attack-do-PST-Q
'What did the enemy attack?'
B: cekkwun-i akwun-ul sey-satan-i

[7] Shimojo further argues that his principle, (32b), predicts the ergative distribution of FQs. But we will not provide a detailed discussion on that issue here.

enemy-NOM our.troops-ACC three-CL(division)-NOM
kongkyek-hay-ss-supnita.
attack-do-PST-POL.DCL
'The three divisions of the enemy attacked our troops.'

While we believe Shimojo's principles capture various types of phenomena related to FQs, they cannot be directly applied to Korean examples. In the next subsection, we focus on how Shimojo's principles are contextually overridden in Korean.

4.2 Floated quantifiers in Korean

Let us now answer the question of why quantifiers float. We argue that quantifiers float to elevate an element currently not in focus to the in-focus state. In (35a), for example, the number of yellow cards Son received is less relevant, and two possible interpretations are available: 'Son has never received a yellow card before when he played at home,' or 'Son has never gotten one twice before, though he received one once.' When the quantifier floats, then, the number itself becomes salient and is put in focus. Given this, the primary interpretation of (35b) is concerned with the information that Son received a yellow card twice for the first time. This is because the genitive-marked quantifier, *twu-pen* 'two-CL', itself is not in focus in (35a), while the spotlight moves to the quantifier in (35b).

(35) a. Son Heung-min-i cheumulo hom kyengki-eyse twu-pen-uy
Son-NOM for.the.first.time home game-at two-CL-GEN
kyengko-lul pat-ass-ta.
warning-ACC receive-PST-DCL
'Son received a yellow card twice for the first time playing at home.'
Intended 1: 'Son never received a yellow card before, playing at home.'

Intended 2: ‘Son never received a yellow card twice before, playing at home.’

b. Son Heung-min-i cheumulo hom kyengki-eyse kyengko-lul
Son-NOM for.the.first.time home game-at warning-ACC
twu-pen pat-ass-ta.
two-CL receive-PST-DCL
‘Son received a yellow card twice for the first time playing at home.’

By severing the quantifier from its host, the quantifier is put in focus in two ways. First, it appears in a typical focus position. Second, it is associated with a typical focus element—the object. Similarly, B’s response in (36) is much more natural, where *ku swu* ‘that number’ refers to the number of books, as opposed to the number of students. If so, it is naturally predicted that a FQ is more frequently associated with an object because objects tend to give rise to foci more frequently in Korean.

(36) A: myechmyech haksayng-tul-i chayk-ul yel-kwen ilk-ess-ta.
several student-PL-NOM book-ACC ten-CL read-PST-DCL
‘Several students read ten books.’
B: ku swu-ka sayngkak-pota manh-ass-ta.
that number-NOM thought-than many-PST-DCL
Intended: ‘The number (of the books the students read) is higher than expected.’

Be that as it may, it is well-known that FQs may have subjects as their hosts, as in (37).

(37) haksayng$_i$-tul-i seys_i maykcwu-lul masi-ess-ta.
student-PL-NOM three beer-ACC drink-PST-DCL
‘Three students drank beer.’

Shimojo (2004) accounts for the acceptability of (37) with (38), which is a paraphrased version of (32), as quoted below.

(38) Scrambling of floated quantifiers is unacceptable if the intervening element is eligible as quantifier host [as defined by (32a)] AND the intervening element is a preferred host over the intended host [as defined by (32b)]. (Shimojo 2004: 395)

According to Shimojo, the quantifier *seys* 'three' in (37) can be scrambled only in the pre-object position. If it floats to the post-object position, the intervening element—the object—becomes not only an eligible host but also the preferred one.

Shimojo's principles predict (39) will be unacceptable, and the prediction is indeed borne out.

(39) * haksayng$_i$-tul-i maykcwu-lul seys$_i$ masi-ess-ta.
student-PL-NOM beer-ACC three drink-PST-DCL
Intended: 'Three students drank beer.'

It is important to note that Shimojo's principles are applicable only to examples with bare FQs with neither a classifier nor a case marker. In (39), the quantifier is neutral with respect to animacy, and Shimojo's principles work flawlessly because they are not sensitive to the markers that FQs carry.

Now let us consider B's response in (40), which is a slightly revised version of (39) with the person-denoting classifier attached to the FQ with prosodic prominence. We believe the acceptability of B's response improves through the context provided in (40), although the acceptability might be marginal for some speakers. While both *haksayng* and *sey-myeng* are

brought into focus in B's response, they constitute previously inactive information. As new information, they require specific cognitive effort to bring them into an activated stage. That is, the activation cost of *haksayng* is greater than that of *maykcwu.* So, the natural choice for the host of the quantifier becomes the subject nominal. With the prosodic prominence given to the quantifier in conjunction with its pre-verbal placement, the quantifier gives rise to a primary focus in B's response in (40).

(40) A: nwu-ka maykcwu-ul ilehkey manhi masi-ess-e?
who-NOM beer-ACC this.way a.lot.of drink-PST-Q
kwunin-tul yel-myeng-i masi-ess-na?
soldier-PL ten-CL-NOM drink-PST-Q
'Who drank this much beer? Did ten soldiers do that?'
B: ? haksayng$_i$-tul-i maykcwu-lul [SEY$_i$-MYENG] masi-ess-ta
student-PL-NOM beer-ACC three-CL drink-PST-DCL
'It was THREE students who drank all the beer.'

With (40), we have demonstrated that B's response should not be judged out of context. In addition, we have shown that the types of classifiers may affect the judgment regarding FQs.

As pointed out earlier, FQs in Korean may carry case markers. Let us consider (41), which is slightly different from B's response in (40) in that the FQ is marked nominative. Example (41) is fully acceptable with little contextual information because the nominative-marker of the FQ strongly indicates its association with the subject nominal.

(41) haksayng$_i$-tul-i maykcwu-lul sey$_i$-myeng-i masi-ess-ta.
student-PL-NOM beer-ACC three-CL-NOM drink-PST-DCL
'It was THREE students who drank all the beer.'

As Kim's Puzzle 3 indicates, (42a–b) are fully acceptable.

(42) a. haksayng-tul-i maykcwu-lul sey-myeng-man masi-ess-ta.
student-PL-NOM beer-ACC three-CL-only drink-PST-DCL
'It is only three students who drank beer.'

b. haksayng-tul-i maykcwu-lul sey-myeng-pakkey masi-ci
student-PL-NOM beer-ACC three-CL-only drink-CONN
anh-ass-ta
NEG-PST-DCL
'It is no more than three students who drank beer.'

The (improved) acceptability of (42a) and (42b) naturally falls out in our analysis. The FQs in these examples are clearly marked with focus particles. As focus elements, they are previously inactive information, but they are explicitly brought into focus in these examples. With the help of the person-denoting classifier, the association between the quantifier and the subject nominal is established, where the subject nominal is an entity that exhibits a higher cost of activation.

Kim's Puzzle 2, as illustrated in (43a–b), is naturally accounted for as well. As seen in (43a), a locative adverb may intervene between a FQ and its host. While (43b) may be acceptable with a conservative reading discussed earlier, it is awkward with the intended meaning.

(43) a. haksayng-tul-i swuep.cwung-ey sey-myeng pwunmyenghi
students-PL-NOM class.during-at three-CL evidently
wus-ess-ta.
laugh-PST-DCL
'Three students evidently laughed during class.'
(Kim 2013: 203)

b. ??/* ai-tul-i khu-key sey-myeng wus-ess-ta.
kid-PL-NOM loud-ADVZ three-CL laugh-PST-DCL
Intended: 'Three children laughed loudly.'
(Kim 2013: 203)

Kuno and Takami (2003) provide a piece of supporting evidence for our proposal in reporting that manner adverbs are preferable as a focus. Since the manner adverb prefers to be a focus, it tends to have a higher cost of activation in our analysis; then, (43b) becomes undesirable.

5. Conclusion

Despite a large amount of research on FQs in Korean, most proposals have been put forward under syntactic assumptions. Kim's (2013) is a rare exception in that it provides distinct analyses and adopts a functionalist viewpoint. We emphasize that our starting point is identical to that of Kim's; we recognize the need to understand the workings of information structure to fully explicate the properties of FQs. As one of the few attempts that approach the issues with FQs from this perspective, there is no denying that Kim (2013) is an important contribution to the research on FQs. That being said, we pointed out several challenges with Kim. We demonstrated that the most crucial challenge comes from the adoption of the theme-rheme partition for the analysis of focus phenomena. We believe our criticism does not contradict Kim's analysis; rather, it strengthens it. Kim's analysis is undoubtfully valuable, and our criticisms should not be seen to detract from the value of his work. We hope our criticism coupled with the alternative proposal enhances researchers' understanding of the phenomenon and fosters productive dialogue among scholars, regardless of their theoretical persuasions.

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