

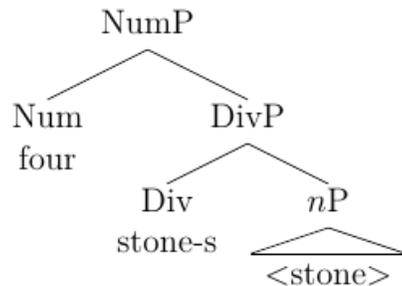
PLURALIZER AS A *nP* MODIFIER: EVIDENCE FROM KOREAN *-TUL**

Kyumin Kim and Paul B. Melchin
Cheongju University and University of Ottawa

1. Introduction

Numeral classifiers (CL) and plural morphemes (PL) have been claimed to be in complementary distribution, either between or within languages, by Chierchia (1998), Borer (2005), and others. The theoretical reasons for their mutual exclusion vary depending on the theoretical proposal. Borer (2005) claims that nouns enter the derivation with the denotation of an undivided mass, which is incompatible with counting. She proposes that, in order to be counted, the mass must be “divided” into countable units. This function is performed by the syntactic category Div(ision), which immediately dominates *nP* in the nominal spine as illustrated in (1); Borer argues that this is the role and category of PL in languages like English, since nouns require a plural marker in order to be counted.¹

(1)



In a CL language, nouns do not need PL in order to be counted; however, there must be some CL present. Therefore, Borer analyzes classifiers as instances of Div, and thus the equivalent of PL in languages like English. In this way, Borer derives the supposed complementary distribution of CL and PL, as there can only be one Div head in a single nominal projection. In a language such as Korean which has both PL and CL, it is predicted that PL and CL should not co-occur in a single nominal phrase. However, the prediction is *not* borne out in Korean as shown in (2):

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¹ DPs with a Div head are count expressions (1) and those without Div are mass. For singular count nouns in English, the indefinite article *a(n)* or the numeral *one* perform both the role of Div and Num, through head movement.

- (2) salam(-tul) ney myeng
 human-PL four CL
 ‘four people’

If either PL or CL can instantiate Div head as Borer suggests, the data in (2) suggests that it cannot be the case that PL and CL are both instances of Div in Korean. The question arises, then, as to the syntactic status of these morphemes. More specifically, which one plays the role of division?

We propose that the Korean plural marker *-tul* is not Div, and therefore is not a canonical, “grammatical” plural marker, but we argue that it is instead a modifier of the *nP* projection.² It has been claimed by various authors (e.g., Wiltschko 2008; Kramer 2009, 2015) that plural markers can have different syntactic realizations across languages. Wiltschko (2008) proposes that, in addition to the familiar head plurals, there are plurals that enter the derivation as adjuncts to different projections in the nominal spine in different languages, and that the properties of PL in a given language vary depending on its realization in that language. Kramer (2009, 2015) provides an analysis of plurality in Amharic which involves two different plurals, one in *nP* and one in NumP, with different characteristics. We show that the Korean PL *-tul* fits Wiltschko’s criteria for a modifying plural, and Kramer’s properties of a *nP* plural. Building on this empirical result, we claim that *-tul* is a modifier of *nP*, and that it does not play a role of Div. The paper proceeds as follows: in Section 2 we argue first that *-tul* is a modifier, and second that it is situated in *nP*. In Section 3 we discuss some of the consequences of this proposal, including the resulting structure for a Korean nominal phrase such as (2). Section 4 concludes.

2. *-Tul* as a modifying *nP* plural

In this section we show that the Korean pluralizer *-tul* is a modifying *nP* plural. We demonstrate that it is a modifier, rather than a head, in the sense of Wiltschko (2008), and that the projection that it modifies is *nP*, rather than the root or DP.

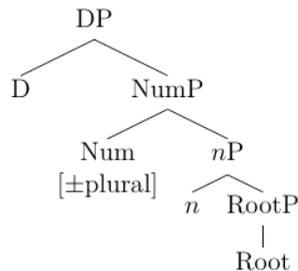
2.1 *-Tul* as a modifier

Wiltschko (2008) claims that not all pluralizing morphemes are Num heads. Instead, they can enter the derivation in two ways: either as a modifying plural or a head plural. These two types of plurals vary in certain properties. The first kind of plurals, head plurals, are heads of category Num. Num is the locus of grammatical number, and is thus associated with the bivalent number feature [\pm plural], as illustrated in (3a). The presence of a head plural results in a [+plural] reading, while its absence is interpreted as [-plural]. Modifying plurals, on the other hand, are not associated with this head, and are claimed to merge as an adjunct modifying some projection in the nominal spine, namely Root(P), *n*(P), or D(P). To illustrate, consider a root-modifying plural as in (3b), as proposed by Wiltschko (2008) for Halkomelem. The presence of such a modifier gives a plural reading, but its absence does not necessarily lead to a singular reading; unlike a head plural, a modifying plural is proposed to have a monovalent feature value, [plural]. Thus,

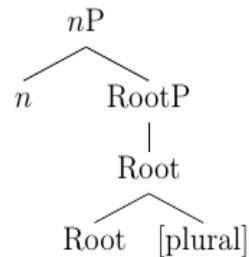
² We assume that CL plays a role of Div (Kim and Melchin 2015).

in a (root-)modifying plural language such as Halkomelem, the absence of PL yields a number neutral reading (see (8) below).

(3) a.



b.



We illustrate the contrast between head plurals and modifying plurals using Wiltschko's (2008) example of a modifying plural in Halkomelem, as compared to English, and show that Korean *-tul* shows properties of a modifying plural.

The Halkomelem plural marker is argued to be a root modifier. This means that it is not a grammatical category, which results in certain properties distinguishing it from a head plural. For instance, the Halkomelem plural marker is used only when there is some actual plurality present; in other words, the form always matches the meaning, and plural-marked nouns are never used with a singular referent. In contrast, with a head plural of category Num, as with other grammatical categories, one may expect to find form-meaning mismatches. One kind of form-meaning mismatch in the category of number is the case of *pluralia tantum*, that is, nouns which appear with plural marking, even when they refer to a singular entity, as in English *pants* and *scissors*. Halkomelem has no *pluralia tantum* (Wiltschko 2008), suggesting it does not have a head plural. Another argument for the same conclusion is that the absence of a modifying plural does not necessarily lead to a singular reading; this is seen in Halkomelem in (4), contrasted with the obligatory head plural in English (5):

- (4) te lhíxw swíweles/swóweles
 DET three boy/boy.PL
 'the three boys' (Wiltschko 2008:642)

(5) The three *boy/boys

The Halkomelem plural is also non-inflectional, in the sense that it does not trigger obligatory number agreement (6), unlike that in English (7):

- (6) t'ílém te/ye s-í:wí:qe
 sing DET/DET.PL man.PL
 'The men are singing.' (Wiltschko 2008:643)

(7) These/*this men are singing.

If obligatory number agreement, as in English (7), is the result of the syntactic operation AGREE, as assumed by Wiltschko (2008), following Chomsky (2000, 2001), then it requires the presence of a valued phi-feature on a functional head such as Num in (3a); if plurality is not realized on a Num head, then, there can be no AGREE operation targeting this feature, and so no obligatory number agreement, as in Halkomelem (6).

Nouns in Halkomelem that lack plural marking receive a number neutral interpretation, rather than a singular reading as in languages like English, as shown in (8):

- (8) a. swóweles b. swíweles
 boy.PL boy
 ‘boys’ ‘a boy or boys’ (Wiltschko 2008:462)

This suggests that the Halkomelem plural has the monovalent feature value [plural], as expected with a modifying plural. In the presence of this feature as in (8a), only a plural reading results. In contrast, in the absence of the feature as in (8b), a number neutral reading is observed. The set of data (4)-(8) and the absence of *pluralia tantum* suggest that the Halkomelem plural is a modifier, while the English plural is a Num head.

The modifying plural in Halkomelem is argued to modify the Root. As a root modifier, it is expected to occur closer to the root than to any other affixes, including categorizing morphology. In Halkomelem, this is borne out: PL does occur inside of derivational morphology (9), unlike in English (10):

- (9) a. s-t’ilem b. s-t’elt’ílém
 NOM-sing NOM-sing.PL
 ‘song’ ‘songs’ (Wiltschko 2008:645)

- (10) *brother-s-hood, *tattoo-s-ist

Since nominal categorizing morphology is assumed to be of category *n*, the Halkomelem plural must modify a category lower than *nP*, leaving only the Root. A similar expectation applies for compounds. Compound nouns are generally analyzed as the combination of two roots (Wiltschko 2008)³: consequently, pluralization within compounds should be possible only if the plural marker occurs in RootP. This is the case in Halkomelem (11), but not in English (12):

- (11) s-xexp’-í:tseł
 NOM-stripe.PL-back
 ‘chipmunk’ (Wiltschko 2008:644)

- (12) *rats-infested, *teethbrush

The data (9)-(12) supports that the Halkomelem plural marker is a modifier at the Root level (see (3b)).

³ Wiltschko (2008) notes that compound nouns may involve either the combination of two RootPs, or two *nPs*. In the latter case, the possibility of pluralization inside compounds may be taken as evidence for plurals in either *nP* or RootP.

Turning to Korean, we demonstrate that the Korean plural marker *-tul* should be classified as a modifying plural, not head plural. Evidence comes from the fact that it is optional for a plural interpretation, as shown in (13):

- (13) ku salam(-tul)
 that human(-PL)
 ‘those people’

Another piece of evidence is that it does not trigger plural agreement, as exemplified in (14); in fact, plural agreement is prohibited in Korean:

- (14) ku(*-tul) salam-tul
 that-PL person-PL
 ‘those people’

The plural marker *-tul* also shows properties of a monovalent [plural] feature in that its absence (15b), in contrast to its presence (15a), results in a number-neutral interpretation, rather than a singular interpretation, [-plural]:

- (15) a. salam-tul b. salam
 man-PL man
 ‘men’ ‘a man or men’

Korean, like Halkomelem, has no examples of *pluralia tantum*, providing further support to our proposal that *-tul* is a modifying plural. For example, in Korean, English *pluralia tantum* nouns are all marked as singular, unlike in English and many related languages, as shown in (16). All nouns in (16) are singular, that is, lacking the PL marker.

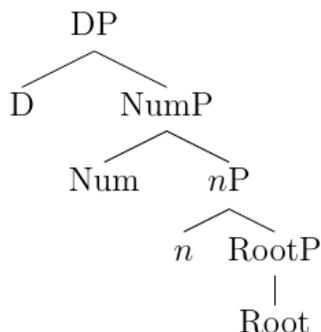
- (16) a. paci ‘pants’ b. kawui ‘scissors’ c. sangpum ‘goods’

Marking these nouns with *-tul* results in an interpretation of plurality; for example, for the noun in (a), *paci-tul* ‘pants-PL’ means multiple pairs of pants, suggesting that *-tul*, like the Halkomelem plural, indicates literal plurality, rather than a grammatical plural feature, and so never leads to this kind of form-meaning mismatch. The discussed data in this section indicates that the Korean plural marker *-tul*, like that in Halkomelem, shows the properties of a modifying plural, rather than a head plural. In what follows, we show that *-tul* modifies *nP*, rather than the RootP as in Halkomelem.

2.2 *-Tul* in *nP*

We have established that the Korean plural marker *-tul* is a modifying plural, rather than a head plural that instantiates Num head. The next question is, what category in the nominal spine does it modify? For instance, consider a nominal spine as in (17).

(17)



We claim that it is a *nP* modifier, showing properties of *n* as recognized in the literature (Marantz 2001, Acquaviva 2008, Lowenstamm 2008, and Kramer 2009, 2015). We show evidence that *-tul* does not modify *RootP* or *DP*, and demonstrate that *-tul* shows the properties of a *nP* plural.

Recall Wiltschko's (2008) evidence that the Halkomelem plural modifies *RootP*: it can occur inside derivational morphology, and inside of compounds, as demonstrated above in (9) and (11). Neither of these is allowed in Korean. It cannot attach closer to the root than a categorizing head. For example, (18) illustrates a derivation of a noun 'brotherhood' consisting of a root *hyungcey* 'brother' and a nominalizer *-ey* 'love'. As in (b), *-tul* cannot appear between the root and the nominalizer *-ey*:

- (18) a. *hyungcey-ey*
brother-love
'brotherhood'
- b. **hyungcey-tul-ey*
brother-PL-love

-Tul also cannot appear inside of a compound noun such as *namwu-kkun* 'lumberjack' in (19). In (19a), the compound noun consists of a noun *namwu* 'tree' and another noun *kkun* 'specialist'. As shown in (19b), *-tul* cannot appear between the two words in the compound noun:

- (19) a. *namwu-kkun*
tree-specialist
'lumberjack'
- b. **namwu-tul-kkun*
tree-PL-specialist
(intended) 'lumberjacks' or 'lumpers-jack'

We conclude that *-tul* is not a modifier of *RootP*, unlike the Halkomelem plural.

-Tul is also not a modifier of *DP*. As *DP* is the domain of definiteness (Lyons 1999), it is predicted that a plural that modifies *DP* would trigger a definite interpretation (Ghomeshi 2003, Wiltschko 2008, Butler 2011). However, this is not the case in Korean. As shown in (20), a noun in Korean can be construed as either definite or indefinite, regardless of the presence or absence of *-tul* (Lee 2000):

- (20) a. *salam*
person
'a/the person'
- b. *salam-tul*
person-PL
'(the/some) people'

The discussion thus far suggests that *-tul* is neither a root nor DP modifier, which leaves *nP* as the only category for *-tul* to modify. We show that this is indeed its position. *nP* plural is the locus of idiosyncratic properties (Lowenstamm 2008, Acquaviva 2008; see also similar intuition in Corbett 2000), unlike a head plural, which is regular (Kramer 2009, 2015) For instance, Amharic has plurality split into two types: a NumP plural and a *nP* plural (Kramer 2009, 2015). The NumP plural is the language's regular plural marker: it can attach to any noun, receives a bivalent feature interpretation (presence of plural instantiates [+plural] feature on Num, absence of plural instantiates [-plural] on Num), and does not vary with the gender of the noun. The idiosyncratic *nP* plural, on the other hand, is in irregular plural. It occurs with only a few nouns in the language, showing lexical gaps. It may give either a [plural] interpretation or an idiosyncratic group reading; for example, the irregularly-pluralized *ahzab* 'nation.PL' in Amharic has two readings, either the predictable 'nations' or the idiosyncratic 'barbarians'. The irregular plural is also idiosyncratic in that their forms are different with different genders. Thus, while the NumP plural behaves as a regular grammatical plural marker, the *nP* plural shows various kinds of idiosyncrasy.

Korean *-tul* shows similar idiosyncratic properties to those of irregular *nP* plurals in Amharic, specifically in terms of gaps in its distribution. Corbett (2000) notes the cross-linguistic generalization that the distribution of plural marking in a language depends on the animacy of the noun. A simplified version of the animacy hierarchy is shown in (21):

- (21) Animacy hierarchy:
 human > non-human animate > inanimate

Corbett claims that, if a noun at some point in the hierarchy can be pluralized, than all nouns above that point can also be pluralized; thus, if a language allows plural marking on non-human animate nouns, then it will also allow pluralization of human-denoting nouns, but not necessarily on inanimate nouns. However, Korean does not fit this generalization. The plural *-tul* can attach to almost any human noun (22a), and also to many inanimate nouns (22b), but almost never with animals (23):

- (22) a. salam-tul 'person-PL'
 b. chayk-tul 'book-PL'
- (23) ??kilin-tul 'giraffe-PL'

In fact, Kang (2007, as cited in Lee 2014) did a study of the 100 nouns that most frequently occur with *-tul*, and found that 77 of them denote humans, 22 denote inanimate things, and only one denotes an animal (non-human animate). Thus, there is no clear correlation between the animacy of a noun and the availability of pluralization with *-tul*, contrary to Corbett's prediction. This idiosyncrasy in distribution is expected if *-tul* attaches in *nP*.

Korean *-tul* also shows idiosyncrasy in the kind of plurality that it marks. While *-tul* is generally interpreted as an ordinary (additive) plural, it also shows properties of associative plurality when combining with certain pronouns (Kim and Madigan 2010). Specifically, it can receive an associative reading with the third-person pronoun *ku* as in (24a), but not with other persons as in (24b) and (24c):

- (24) a. ku-tul
3-PL
'that man/girl and his/her associates (who are male or female or a mixture of both)'
b. *ney-tul
2-PL
c. *na-tul
1-PL
- (Kim and Madigan 2010)

It has been claimed (e.g., Benveniste 1971, Iljic 1994, Cheng and Sybesma 1999) that many or perhaps all “plurals” of pronouns are, in fact, associative plurals. Iljic (1994:97) claims that “[t]he so-called “plural” of personal pronouns is not an addition or a multiplication of elements, but a grouping of entities into one whole according to their position relative to the origin. *We* does not amount to several *I*'s nor even to two or more *I*'s expressing themselves simultaneously, but to the group in the name of which *I* speaks.” However, Benveniste (1971) notes that, while this seems to be the case for first- and second-person pronouns, the plural of the third person pronoun seems to be an “ordinary” plural, denoting multiple third-person entities. This would predict that *-tul* receives an associative reading with all persons *except* third, contrary to fact; thus, the facts in (24) do show an example of semantic idiosyncrasy with *-tul*, which supports the claim that it is adjoined at the *nP* level, as proposed in this paper. The discussion in this section suggests that *-tul* is a modifier of *nP*, with the structure in (25):

(25)

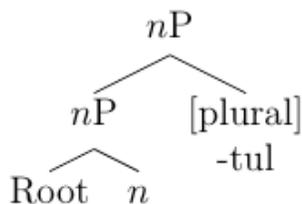


Table 1 summarizes our discussion on *-tul* as a modifying plural:

Table 1: Properties of the Korean plural *-tul*

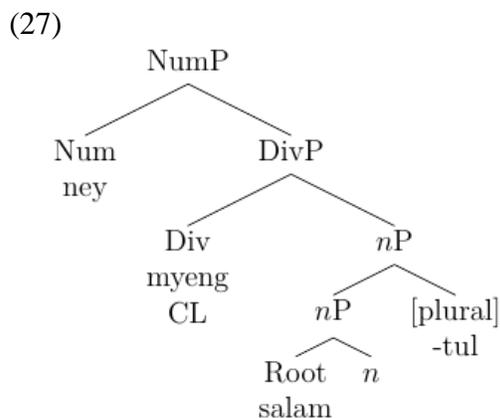
	Modifying plural	Head plural	Korean plural
(i) Status	Optional	Obligatory	Optional → No agreement
(ii) Interpretation	[plural] vs. number neutral	[+ plural] vs. [- plural]	[plural] vs. number neutral; idiosyncratic in some cases
(iii) Feature value	Monovalent	Bivalent	[plural]
(iv) Where?	RootP, <i>nP</i> , etc.	Num	<i>nP</i>

3. Consequences for Korean nominal structures

Recall the problem from Borer (2005) that motivated this study: Borer analyzes PL and CL both as elements of category Div. In Borer’s model, nouns (or *nPs*) are not themselves specified as count or mass; instead, they are generated with an “undivided”, or mass-like, interpretation. In order to be countable, an element of category Div(ision) is required to “divide” the mass into countable chunks; only in the presence of Div can a noun be counted by means of a numeral. In languages like English, this is argued to be the role of PL; in a classifier language, it is also the role played by CL. Thus, in a language where both PL and CL are present, they should never co-occur in a single nominal projection. Examples like (26), repeated from above, show that this is not the case, as PL can optionally co-occur with CL:

- (26) salam(-tul) ney myeng
 human(-PL) four CL
 ‘four people’

The fact shown in (26) suggests that PL and CL cannot be both of category Div. Pursuing this consequence further, we argued that PL in Korean is not a Div head, or any other head in the nominal spine; instead, it is a modifier of the *nP* projection, as shown above in (25). Thus, if CL is Div as Borer (2005) claims (and as argued for Korean in Kim and Melchin 2015), then co-occurrence of PL and CL is unproblematic, and perhaps expected. The structure of (26) is therefore as in (27):⁴



In this analysis, the PL and CL occupy different sites in the projection, and perform different roles in the interpretation, so Borer’s prediction does not apply.

This analysis appears to account for the distribution of *-tul* noted in literature. First, it provides support and explanation for the claim by Kang (1994) that count nouns in Korean are number neutral. That is, in Korean, the denotation of a count noun includes both singletons and pluralities; on the other hand, in a language like English, a non-plural-marked count noun’s denotation includes only singletons (see Link 1983). In Kang’s terms, the semantic contribution of *-tul* is to remove the singleton set from the

⁴ The proper word order may be achieved by movement of *nP* to the left edge of a nominal small clause, similar to that argued for in Watanabe (2006) for Japanese and Simpson (2005) for Thai.

denotation of a noun. This is compatible with the analysis of *-tul* as a *nP* modifier; it modifies the denotation of a noun by reducing the range of entities it can refer to. This also explains why *N-tul* is compatible with numerals (greater than 1) and classifiers, since these require a non-singular interpretation. The proposed account also provides an explanation for the observation by Suh (2005) that *-tul* cannot attach to a classifier, as shown in (28) (Suh 2005:777):

- (28) a. kay twu mali-(*tul)
 dog two CL-PL
 'two dogs'
- b. kulus twu key-(*tul)
 bowl two CL-PL
 'two bowls'

This distribution is expected if *-tul* is a modifier of *nP*: If classifiers are heads of category *Div* that merge above *nP* (Kim and Melchin 2015), then they merge higher than *nP* projection where the plural *-tul* appears. Consequently, there is no site for the adjunction of *-tul*.

4. Concluding remarks

In this paper we claimed that the Korean PL *-tul* is a modifying plural in the sense of Wiltschko (2008), which adjoins to the *nP* projection. This explains the co-occurrence of PL and CL in a single nominal phrase in Korean; CL is an instance of *Div* (Borer 2005; Kim and Melchin 2015), so the two morphemes appear at different points in the nominal extended projection. We argued for the modifying status of *-tul* by showing that it matches the properties of modifying plurals laid out by Wiltschko (2008); we argued for its adjunction to *nP* by showing that it matches Kramer's (2009, 2015) proposed properties of *nP* plurals. We then demonstrated that this syntactic analysis accounts for certain syntactic and semantic properties of nouns, PL and CL in Korean. In this way, both the co-occurrence of PL *-tul* and CL, and the puzzling properties of *-tul*, are explained.

One of the consequences of this paper is contrary to the very common assumption in Korean literature that *-tul* instantiates a head plural, a *Num* head. However, the properties that we demonstrated in Section 2 constitute strong evidence against such a claim. Moreover, our claim that PL is a modifying plural in a classifier language such as Korean is in parallel to other PLs in classifier languages such as Mandarin (*-men*) or Japanese (*-tachi*). For both languages, the plural marker is shown to exhibit ranges of properties exceptional to a usual plural marker (Li 1999 for Mandarin, Nakanishi and Tomioka 2004 for Japanese). Thus, the present paper contributes to the ongoing discussion of the role of pluralizers in classifier languages. In a broader perspective, it also contributes to the current research question of how the count-mass distinction should be syntactically configured.

References

- Acquaviva, Paolo. 2008. *Lexical Plurals: A Morphosemantic Approach*. Oxford: Oxford University Press.
- Borer, Hagit. 2005. *Structuring Sense, Vol. I: In Name Only*. Oxford: Oxford University Press.
- Butler, Lindsay Kay. 2011. *The Morphosyntax and Processing of Number Marking in Yucatec Maya*. Ph.D. dissertation, University of Arizona.
- Chierchia, Gennaro. 1998. Reference to kinds across languages. *Natural Language Semantics* 6: 339-405.
- Chomsky, Noam. 2000. Minimalist inquiries: the framework. In R. Martin, D. Michaels, and J. Uriagereka (eds.), *Step by Step: Essays on minimalist Syntax in Honor of Howard Lasnik*, 89-155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In M. Kenstowicz (ed.), *Ken Hale: A Life in Language*, 1-52. Cambridge, MA: MIT Press.
- Cheng, Lisa Lai-Shen, and Rint Sybesma. 1999. Bare and not-so-bare nouns and the structure of NP. *Linguistic Inquiry* 30(4): 509-542.
- Corbett, Greville. 2000. *Number*. Cambridge: Cambridge University Press.
- Ghomeshi, Jila. 2003. Plural marking, indefiniteness, and the noun phrase. *Studia Linguistica* 57: 47-74.
- Ijic, Robert. 1994. Quantification in Mandarin Chinese: two markers of plurality. *Linguistics* 32: 91-116.
- Kang, Beom-Mo. 1994. Plurality and other semantic aspects of common nouns in Korean. *Journal of East Asian Linguistics* 3(1): 1-24.
- Kang, Beom-Mo. 2007. Plurality and plural marker 'deul'. *Eoneohak Eoneohak* 47: 3-31.
- Kim, Kyumin, and Sean Madigan. 2010. The nature of associative plurality in Korean: accounting for *ney* and *tul*. *Japanese/Korean Linguistics* 19.
- Kim, Kyumin and Paul B. Melchin. 2015. Two types of plurals in Korean: Modifying (-*tul*) and grammatical (CL) plurals. Paper presented at the 19th ICKL Conference, Chicago, IL, July 24-26, 2015.
- Kramer, Ruth. 2009. *Definite Markers, Phi-Features, and Agreement: A Morphosyntactic Investigation of the Amharic DP*. PhD thesis, University of California, Santa Cruz.
- Kramer, Ruth. 2015. A split analysis of plurality: Evidence from Amharic. In N. Arnett and R. Bennett (eds.) *Proceedings of the 30th West Coast Conference on Formal Linguistics*, 226-236. Somerville, MA: Cascadilla Proceedings Project.
- Lee, Chingmin. 2000. Numeral classifiers, (in-)definiteness and incremental theme in Korean. In C. Lee and J. Whitman (eds.) *Korean Syntax and Semantics: LSA Institute Workshop, Santa Cruz, '91*. Thaeaksa: Seoul.
- Lee, JeongEun. 2014. *Acquiring English Complex Compound Nouns: An L2 Study of Korean Learners*. MA thesis, University of Calgary.
- Li, Yen-Hui Audrey. 1999. Plurality in a classifier language. *Journal of East Asian Linguistics* 8: 75-99.
- Link, Godehard. 1983. The logical analysis of plurals and mass terms: a lattice-theoretical approach. In R. Bäuerle, C. Schwarze, and A. von Stechow (eds.), *Meaning, Use, and Interpretation of Language*, 302-323. Berlin: de Gruyter.
- Lowenstamm, Jean. 2008. On little n, $\sqrt{\quad}$, and types of nouns. In J. Hartmann, V. Hegedüs, and H. van Riemsdijk (eds.), *Sounds of silence: Empty elements in syntax and phonology*, 105-143. Amsterdam: Elsevier.
- Lyons, Christopher. 1999. *Definiteness*. Cambridge: Cambridge University Press.
- Marantz, Alec. 2001. Words. Ms., MIT.
- Mathieu, Éric. 2012. Flavors of division. *Linguistic Inquiry* 43(4): 650-679.
- Nakanishi, Kimiko and Satoshi Tomioka. 2004. Japanese plurals are exceptional. *Journal of East Asian Linguistics* 13: 113-140.
- Simpson, Andrew. 2005. Classifiers and DP structure in Southeast Asia. In G. Cinque and R. S. Kayne (eds.), *The Oxford Handbook of Comparative Syntax*, 806-383. Oxford: Oxford University Press.
- Watanabe, Akira. 2006. Functional projections of nominals in Japanese: syntax of classifiers. *Natural Language and Linguistic Theory* 24: 241-306.
- Wiltschko, Martina. 2008. The syntax of non-inflectional plural marking. *Natural Language and Linguistic Theory* 26: 639-694.