On Pluralizing Event: Plural Marking Event Pluralizer *tul* in Korean

Arum Kang  
The University of Chicago  
arum@uchicago.edu

In contrast to what Chierchia (1998) argues, there are plurals on nominals in Korean by using plural marker *tul* corresponding to *-s/-es* in English as in (1).

(1)  
a. **Haksayng-tul-i** cemsim-ul ppalli mek-ess-ta  
students-Nom lunch-Acc fast eat-Past-Dc  
‘The students ate lunch fast.’

b. *Mwul-tul-i* cwucenca-eyse nemchi-ess-ta  
water-TUL-Nom pot-Loc overflow-Past-Dc  
‘Water overflowed from the pot.’

We see in (1b) that *tul* is incompatible with a mass noun, as expected by a plural. Surprisingly, however, *tul* can also appear outside a nominal domain as shown in (2), by affixing to non-nominals: to adverbs in (2a), to verbs in (2b), and to postpositions (case markers) in (2c). We assume, following the literature, that two *tuls* in (1) and (2) are distinct, calling the former intrinsic (IPM-*tul*) and the latter extrinsic (EPM-*tul*) (Yim 2003; Kim 2004; Joh 2005 and among others). In this paper, we focus on EPM-*tul*.

(2)  
a. **Haksayng-tul-i** cemsim-ul **ppalli-tul** mek-ess-ta  
students-Nom lunch-Acc fast-TUL eat-Past-Dc  
‘Three students each ate lunch fast.’

b. **Haksayng-tul-i** ceomsim-ul ppalli **mek-ko-tul** i-ss-ta  
students-Nom lunch-Acc fast eat-conj-TUL be-ing-Dc  
‘Three students each are eating lunch fast.’

c. **Haksayng-tul-i** pumonim-**eykey-tul** sacin-ul poyecwu-ess-ta  
students-Nom parents-Dat-TUL picture-Acc show-Past-Dc  
‘Three students each showed a/the picture to their parents.’

The semantic functions of EPM-*tul* and IPM-*tul* are differentiated in two ways: i) in terms of what they pluralize and ii) in terms of the scope they take. IPM-*tul* pluralizes the atomic individuals to which it attaches, whereas EPM-*tul* does not. IPM-*tul* applies the domain of NP, whereas EPM-*tul* applies the domain of VP. In this paper, I am going to ask the following questions:

**Puzzles**

A. What licenses EPM-*tul*?

B. Why does EPM-*tul* show the restrictions on the elements it combines with?

C. How can we explain the spatiotemporal ambiguity that EPM-*tul* shows?

(A) EPM-*tul* appears to be **licensed**: it can only appear in a sentence that meets certain conditions. Normally, it is considered that a local plural subject is responsible for licensing EPM-*tul* as in (3a). In some cases, however, EPM-*tul* can be licensed by the local plural object as in (3b).

(3)  
I-Nom [those students-Nom pretty-Conj] yesterday-TUL said-Past-Dc  
‘I said that those students are pretty yesterday.’
b. Sensayngnim-\text{-}i ai-tul-ul cip-ulo-\text{tul} pona-ss-ta
teacher-Nom children-Acc house-to-TUL send-Past-Dc
‘A/the teacher sent all the children to (their own) house each.’

(B) Adjectives cannot combine with EPM-\text{tul} in (4), whereas mass nouns can (as in (5)).

(4) *Wuri pan-e-nun \text{apun-tul} yehaksayng-\text{-}tul-\text{-}i man-ta
our class-Loc-Top ill-TUL female students-Nom many-Dc
‘There are many ill female students in our class.’

(5) haksayng-\text{-}tul-\text{-}i \text{mwul-tul-} ul masi-\text{ess-ta}
students-Nom water-TUL-Acc drink-Past-Dc
‘The students each drank water.’

(C) EPM-\text{tul} is spatiotemporally ambiguous in (6).

(6) John-kwa-Mary-\text{-}ka ii khukhi-lul cal-\text{tul} me-\text{ess-ta-ko} \text{ha-ess-ta}
John-and-Mary-Nom this cookie-Acc well-TUL eat-Past-Dc-Conj say-Past-Dc
‘People said that John and Mary enjoyed this cookie.’
\rightarrow a. John and Mary each enjoyed this cookie at the same place at the same time.
\rightarrow b. John and Mary each enjoyed this cookie at the different place and time.

In this paper, I am going to argue the following:

\textbf{Proposals}

A. EPM-\text{tul} as an event pluralizer induces maximality and distributivity, and its function is to
pluralize the events performed by plural agents.

B. When EPM-\text{tul} attaches to mass noun, the scope of EPM-\text{tul} should be the whole VP-domain,
thus it can add the event argument to the main verb.

C. EPM-\text{tul} also functions as a pluracional marker carrying distributivity.

In this paper, I argue that EPM-\text{tul} functions both: as a \textit{event pluralizer} and as a \textit{pluracional marker}.

(A) In the sense that EPM-\text{tul} is licensed by plural agents and induces maximality and distributivity, its
semantic function corresponds to the one that \textit{all} has in English as in (7) and (8).

(7) \[
[[\text{EPM-tul}]] = \lambda P \lambda x \lambda y \exists e \left[ y \subseteq x \land y \in [[\text{Cov}]] \right] \quad \text{good-fitting} \Rightarrow P(e')(y) \land \text{Cul}(e) = e' \land e'<e
\]

(8) a. \textit{Haksayng-\text{-}tul-i ppalli-\text{-}tul meknunta} ‘the students eat fast’
\rightarrow a. \exists e\forall y\exists e'[y \subseteq [[\text{the.students}']] \land y \in [[\text{Cov}]] \text{good-fitting} \Rightarrow \text{fast}'(e') \land \text{eat}'(e') \land \text{Ag}(e', y) \land \\
\text{Cul}(e) = e' \land e'<e]

(B) Based on the assumption that EPM-\text{tul} is an event pluralizer, we can extend its function to add event
argument when EPM-\text{tul} combines with mass noun. Thus, the semantic analysis of EPM-\text{tul} regarding
mass noun in (9) can be shown as follows: i) adding event argument + inducing distributivity/maximality;
ii) abstract individial unit of event: ‘drinking water’; iii) formula of pluralizing event: individualized
event of \textit{drinking water} + \text{tul}.

(9) a. \textit{Haksayng-\text{-}tul-i mwul-\text{-}tul-ul masessta} ‘The students each drank water.’
\rightarrow a. \exists e\forall y\exists e'[y \subseteq [[\text{the.students}']] \land y \in [[\text{Cov}]] \text{good-fitting} \Rightarrow \lambda e'' \exists e'''[\text{drink}'(e''') \land \text{Th}(e''', \text{water}) \land \\
\text{c'}' \Pi e''''] \land \text{drink}'(e') \land \text{Ag}(e', y) \land \text{Th}(e', \text{water}) \land \text{Cul}(e) = e' \land e'''<e'' \land e''<e' \land e'<e]
Following Larsersohn (1995)'s non-overlapping condition and Yu (2003)'s E-PET (Extended Pluralized Event Theory), we assume that pluractionality is the pluralization of the event argument of a predicate. And following Wood (2007) who distinguishes event-internal pluractionals and event-external pluractionals, calling the former predicates of groups, and the latter predicates of true plural events that allow repetitions to be distributed over participants, I capture the spacio-temporal ambiguity by treating EPM-*tul* as the marker of the event-external plurational in (10).

(10) a. *Haksayng-*tul-i mwul-ul cal-*tul* masiessta ‘The students each drank water well.’
b. [[tul]](chal’) = λe [*drink(e) & well(e) & ∀ e’, e’’ ⊂ e [¬K(e’) ∪ K(e’’)]]

In conclusion, Korean EPM *tul* is a pluractional event pluralizer that makes use of what appears to be a plural morphology. This in effect allows for a unification of the nominal and EPM *tul*: the former pluralizes the noun whereas the latter pluralizes the VP. It will be interesting to see whether this “recycling” of the plural strategy is common across languages.