

## Cyclic Linearization and Anti-locality in Korean *toy* ‘become’ and Location Subject Constructions

Jina Song (University of Southern California)

This paper argues that the scrambling patterns and restrictions of *toy* ‘become’ construction (henceforth, *toy* construction) and location–subject construction in Korean are regulated by the interplay of two independent syntactic principles: Cyclic Linearization (CL) (Fox & Pesetsky, 2005) and anti-locality (Pesetsky & Torrego, 2001; Abels, 2003).

The scrambling patterns of the *toy* and location–subject constructions given in (1) to (3) show that scrambling is possible only when the canonical word order is preserved (i.e., the subject DP < the predicate DP < the verb); otherwise, scrambling is impossible. As in (1), the predicate DP of the two constructions (i.e., ‘ice’ and ‘bees’) cannot scramble over the subject DP (i.e., ‘water’ and ‘honey jar’) and thus result in either a change of meaning (i.e., from ‘freeze’ to ‘melt’ in the *toy* construction) or ungrammaticality. The same scrambling restriction of the rigid ordering is applied when the multiple subject elements exist (i.e., the initial subject DP < the following subject DP < the predicate DP < the verb). As in (2) and (3), neither the predicate DP nor the following subject (i.e., the numeral classifier) can scramble over the preceding element, resulting in a linear order that is contrary to the canonical one. Notably, the fact that all the *toy* and location–subject constructions’ elements can occur before *vP*-external adverbs—such as *pwunmyenghi* ‘evidently’ in (2a) and (3a)—indicates that all elements in these constructions can move out of the *vP*. This provides evidence that scrambling occurs but is possible only when the canonical word order is preserved.

In regards to these scrambling issues, I argue, first, that scrambling patterns result from the interaction between CL (which argues that the linear order of syntactic units is permanently fixed after every cyclic Spell-out) and anti-locality (which prevents a complement of a head X from moving to a Spec of X). Anti-locality regulates linear ordering within the Spell-out domain, while CL regulates the scrambling out of the Spell-out domains by only allowing scrambling if it results in a linear order that conforms to the initial ordering. Second, I propose that the verbs of the *toy* and location–subject constructions form a defective *vP* that takes a small clause (SC) complement, based on evidence from the honorific agreement (4), relativization (5), and cleft formation (6), which supports the claim that the constructions’ two DPs form a single SC; the preceding DP functions as a subject and the following DP functions as a predicate. In addition, I adopt Den Dikken (2006) and Ko’s (2015) analysis that the SC forms an asymmetric structure—a Relator Phrase (RP) in which the head Relator (R) mediates the subject/predicate relationship. Finally, following Ko (2015), I argue that the SC is a Spell-out domain in Korean and that every RP undergoes cyclic Spell-out and linearization.

This proposal successfully explains the scrambling restrictions of the *toy* and location–subject constructions, which share the SC structure. Anti-locality freezes the linear ordering within RP, with the predicate DP following the subject DP of the SC (i.e., the subject of SC < the predicate of SC) by blocking the “too short” movement. As CL only allows movement out of the RP if the established linear order is preserved, the resultant scrambling in the fronting of the predicate DP—as in (1a’), (1b’), (2c), and (3c)—is ruled out. Moreover, regarding the structure of multiple subjects, I assume that the two subject DPs (i.e., the numeral classifier/host) form a single constituent that is externally merged in the Spec of the RP (Ko, 2005). Because the following subject DP is not in the search domain of the probe R, it cannot move within the RP. Therefore, the ordering within the RP is limited to one in which the initial subject precedes the following subject and scrambling that contradicts this ordering, as in (2b) and (3b), is ruled out.

- (1) a. Mwul-i elum-i toy-ess-ta water-Nom ice-Nom become-Pst-Dec  
'Water became ice.' (**freeze**)  
a'. \* elum-i mwul-i toy-ess-ta ice-Nom water-Nom become-Pst-Dec  
'Ice became water.' (**melt**)
- b. kkwultanci-ka beltul-lo wukulkeli-n-ta Honey.jar-Nom bees-Pred swarm-Pres-Dec  
'The honey jar swarms with bees.'  
b'. \* beltul-lo kkwultanci-ka wukulkeli-n-ta bees-Pred honey.jar-Nom swarm-Pres-Dec  
'The honey jar swarms with bees.'
- (2) a. (pwunmyenghi) mwul-i (pwunmyenghi) sey-kulus-i (pwunmyenghi) elum-i (pwunmyenghi) toyess-ta  
(evidently) water-Nom 3-Cl-Nom ice-Nom became-Dec  
b. \*(pwunmyenghi) sey-kulus-i (pwunmyenghi) mwul-i (pwunmyenghi) elum-i (pwunmyenghi) toyess-ta  
(evidently) 3-Cl-Nom water-Nom ice-Nom became-Dec  
c. \*(pwunmyenghi) elum-i (pwunmyenghi) sey-kulus-i (pwunmyenghi) mwul-i (pwunmyenghi) toyess-ta  
(evidently) ice-Nom 3-Cl-Nom water-Nom became-Dec  
'Water(evidently)became ice.'
- (3) a. (pwunmyenghi) kkwultanci-ka (pwunmyenghi) sey-tong-i (pwunmyenghi) beltul-lo (pwunmyenghi) wukulkelinta  
(evidently) honey.jar-Nom 3-Cl-Nom bees-Pred swarm  
b. \*(pwunmyenghi) sey-tong-i (pwunmyenghi) kkwultanci-ka (pwunmyenghi) beltul-lo (pwunmyenghi) wukulkelinta  
(evidently) 3-Cl-Nom honey.jar-Nom bees-Pred swarm  
c. \*(pwunmyenghi) beltul-lo (pwunmyenghi) sey-tong-i (pwunmyenghi) kkwultanci-ka (pwunmyenghi) wukulkelinta  
(evidently) bees-Pred 3-Cl-Nom honey.jar-Nom swarm  
'The honey jar (evidently) swarms with bees.'
- (4) a. Halapeci-**kkeyse** aki-ka toy-**si**-ess-ta Grandpa-Nom(**Hon**)baby-Nom become-**Hon**-Pst-Dec  
'A grandfather became a baby.'  
a'. \* aki-ka Halapeci-**kkeyse** toy-**si**-ess-ta baby-Nom grandpa-Nom(**Hon**) become-**Hon**-Pst-Dec  
'A grandfather became a baby.'
- b. Halapeci-**kkeyse** pwunno-lo tulkkulhu-**si**-ess-ta Grandpa-Nom(**Hon**) anger-Pred boil.up-**Hon**-past-Dec  
'A grandfather was boiled up with anger.'  
b'. \* wuntongcang-i halapecitul-(**kkeyse**)-lo tulkkulhu-**si**-ess-ta field-Nom grandpas-(**Hon**)-Pred swarm-**Hon**-past-Dec  
'A field swarmed with grandfathers.'
- (5) a. # [mwul-i toy-n] elum (from **Ia**) water-Nom become-Adn ice  
'Ice that became water.' (**melt**)  
a'. [elum-i toy-n] mwul (from **Ia**) ice-Nom become-Adn water  
'Water that became ice.' (**freeze**)  
b. [peltul-lo wukulkeli-n] kkwultanci (from **Ib**) bees-Pred swarm-Adn honey.jar  
'The honey jar that swarms with bees'  
b'. \* [kkwultanci-ka wukulkeli-n] peltul (from **Ib**) honey.jar-Nom swarm-Adn bees  
'The bees that the honey jar swarms with.'
- (6) a. # [mwul-i toy-n kes-un] elum-i-ta (from **Ia**) water-Nom become-Adn thing-Top ice-Cop-Dec  
'It is water that became ice.' (**melt**)  
a'. [elum-i toy-n kes-un] mwul-i-ta (from **Ia**) ice-Nom become-Adn thing-Top water-Cop-Dec  
'It is ice that became water' (**freeze**)  
b. \* [kkwultanci-ka wukulkelin-n kes-un] peltul-i-ta honey.jar-Nom swarm-Adn thing-Top bees-Cop-Dec  
'It is the bees that the honey jar swarms with.' (from **Ib**)  
b'. [peltul-lo wukulkelin-n kes-un] kkwultanci-i-ta bees-Pred swarm-Adn thing-Top honey.jar-Cop-Dec  
'It is the honey jar that swarms with bees' (from **Ib**)

### Selected references

- Abels, Klaus (2003). *Successive Cyclicity, Anti-locality, and Adposition Stranding*, Ph.D. thesis, University of Connecticut, Storrs, Conn.
- Dikken, Marcel Den (2006). *Relators and Linkers: The Syntax of Predication, Predicate Inversion, and Copulas*. Linguistic Inquiry Monograph 47. Cambridge, Mass.: MIT Press.
- Fox, Danny, and Pesetsky, David (2005). Cyclic Linearization of Syntactic Structure, in Katalin É. Kiss (ed.), Object Shift in Scandinavian, special issue, *Theoretical Linguistics* 31: 1-45.
- Ko, Heejeong (2015). On the Typology of Small Clauses. *Studies in Generative Grammar*, 25(2), 347-375.
- Pesetsky, David, and Torrego, Esther (2001). *T-to-C Movement: Causes and Consequences*, in Michael Kenstowicz (ed.), *Ken Hale: A Life in Language*. Cambridge, Mass.: MIT Press, 355-426.