A Labeling-based Approach to Floating Numeral Classifiers in Korean and Japanese

Myung-Kwan Park  
_Dongguk University_  

Nobu Goto  
_Toyo University_

This paper aims to support the labeling theory proposed in Chomsky (2013, 2015), and further developed in Saito (2014, 2016), Epstein, Kitahara, and Seely (EKS) (2014, 2015) and Goto (2016) by providing a new explanation for the well-known subject-object asymmetry in the floating numeral classifier (FNC) constructions in Korean and Japanese, as in (1) and (2).

The sentences in (1a) and (2a), where the objects intervene between the subjects and their associated FNCs, are unacceptable, whereas the sentences in (1b) and (2b), where the subjects intervene between the objects and their associated FNCs, are acceptable. The puzzle is why unlike objects, subjects cannot be separated from their related FNCs.

Chomsky (2013, 2015) propose that an H-XP structure is labeled as H by minimal search, but an XP-YP structure cannot be done so owing to an ambiguous minimal search, inducing a CI interpretive problem at the interface. Saito (2014, 2016) extends this theory to Japanese, arguing that an XP-YP structure is labeled as Y if X has an overt Case particle. To support the view, EKS (2014, 2015) provide a reason why a phrase XP headed by a Case particle is invisible to labeling. According to EKS, labeling is required at the CI-interface; hence a phrase headed by a purely phonological head like Case particles (that plays no role at CI) cannot serve as a label-identifier at CI. As a consequence of this labeling theory in (3), Goto (2016) proposes the generalization in (4), arguing that extractability correlates with labelability.

Building on Borer’s (2005) insight, Park (2009) proposes the structure (CIP) in (5) as an internal structure of FNCs. Thus, when the subjects and their associated FNCs are merged in (1a) and (2a), an unlabelable {CIP, v*P} structure is formed in the base position, as in (6a). On the other hand, when the objects and their associated FNCs are merged in (1b) and (2b), a labelable {V, CIP} structure is formed in the base position, as in (6b). Given this, the subject-object asymmetry is explained under (4): (1a) and (2a) are unacceptable because the subject DPs are extracted from the unlabelable {CIP, v*P} structure, as in (6a’), whereas (1b) and (2b) are acceptable because the object DPs are extracted from the labelable {V, CIP} structure, as in (6b’). This analysis predicts that (1a) and (2a) become acceptable if the CIPs are Case-marked. This is because, if the CIPs are Case-marked, as in (7a), the base structure of {CIP-Case, v*P} is labeled as v*P, so that extraction from there is predicted to be possible, as in (7a’). This prediction is borne out by (8), where the CIPs are Nominative Case-marked and extraction is allowed.

As a consequence of this analysis of the FNC constructions, the cross-linguistic variation in Subject Island effects is accounted for in the same way: English (9) is bad because the *wh*-phrase is extracted from an unlabelable {DP, v*P} structure, whereas Korean (10) and Japanese (11) are good because the *wh*-phrases are extracted from a labelable {DP-Nom, v*P} structure.
(1) a. *[{ku} sonnim-i]\[i\] ku wain-ul many-tw p\[w\]un masiessta. [Korean]
   the guest-Nom the wine-Acc two Cl(assifier) drink-Pst-Dcl
   ‘Two of the guests drank the wine.’
   b. *[{ku} sakwa-lu]\[i\] Cheli-ka many-tw kay mekessta.
      the apple-Acc Cheli-Nom two Cl eat-Pst-Dcl
      ‘Cheli ate two of the apples.’
(2) a. *[{sono} shōtai-kyaku-ga]\[i\] sono wain-o many-tw tari nonda. [Japanese]
      the guest-Nom the wine-Acc two Cl drink-Pst-Dcl
      ‘Two of the guests drank the wine.’
   b. *[{sono} ringo-o]\[i\] Taroo-ga many-tw tatsu tabeta.
      the apple-Acc Taroo-Nom two Cl eat-Pst-Dcl
      ‘Taroo ate two of the apples.’
(3) a. \{H, XP\} = H
   b. \{XP, YP\} = unlabelable
   c. \{XP-Case, YP\} = Y
(4) Extraction out of the interior of an unlabelable XP-YP structure is impossible.
   *XP\[\#\] ... t\[i\] ... \[\alpha\] (\alpha = an unlabelable XP-YP structure)
(5) CIP
   DP \[\#\] Cl
   sonnim twu p\[w\]un Cf. (1a)
(6) a. \{CIP, v*P\} = unlabelable: (1a) and (2a) a’ \*DP\[\#\] ... t\[i\] ... \[\alpha\] (\alpha = unlabelable)
   b. \{V, CIP\} = VP: (1b) and (2b) b’ \*DP\[\#\] ... t\[i\] ... \[\alpha\] (\alpha = VP)
(7) a. \{CIP-Case, v*P\} = v*P: (8a) and (8b) a’ \*DP\[\#\] ... t\[i\] ... \[\alpha\] (\alpha = v*P)
(8) a. *(?)\{ku\} sonnim-i]\[i\] ku wain-ul many-tw p\[w\]un-i masiessta. [Korean]
      the guest-Nom the wine-Acc two Cl-Nom drink-Pst-Dcl
      ‘Two of the guests drank the wine.’
   b. *(?)\{sono\} shōtai-kyaku-ga]\[i\] sono wain-o many-tw tari-ga nonda. [Japanese]
      the guest-Nom the wine-Acc two Cl-Nom drink-Pst-Dcl
      ‘Two of the guests drank the wine.’
(9) *Who, do pictures of t\[i\] please you?
(10) *Mwues-ul, Con-i Meyli-ka many-tw san kes-i mwuncey-la-ko sayngkakha-ni?
      what-Acc John-Nom Mary-Nom bought-Comp-Nom problem-is-C think-Q
      ‘What is it that John thinks that the fact that Mary bought it is a problem?’
(11) *Nani-o, Mary-ga John-ga many-tw katta koto-ga mondai-da to omotteru no
      what-Acc Mary-Nom John-Nom bought fact-Nom problem-is C think Q
      ‘What is it that Mary thinks the fact that John bought it is a problem?’

Selected References