Factors Influencing Subjecthood in Korean

Ji-Hye Kim* and Yong-hun Lee**
Korea National University of Education
Chungnam National University

**Corresponding author: ylee@cnu.ac.kr

ABSTRACT

The present study aims to investigate what are crucial factors that influence Subjecthood in Korean when the NPs with different GRs are in a different position (possible Subject position vs. non-Subject position), especially concerning two selected Subject properties - honorification and copying of plural morpheme. An experimental investigation using Magnitude Estimation (ME), composed of sentences representing three factors (agreement with Subject vs. non-Subject, word order, GRs of NP) in two Subjecthood diagnostics, was conducted with Korean native speakers. Overall results demonstrated the following: i) The sentences with Subject NP controller (i.e., when the Subject has [+hon] or [+pl] feature) got higher acceptability compared to non-Subject NP controllers; ii) Different GRs of NP had less than half of the strength compared to the factor related to Subject vs. non-Subject in determining acceptability of sentences; iii) Scrambling of the NP controller to a different position had little effect on the acceptability; iv) Among the 3 factors, agreement (i.e., whether Subject or non-Subject controls the relevant feature [+hon] and [+pl]) played the most crucial role in determining acceptability of sentences.

Keywords: subjecthood in Korean, honorific agreement, plural copying, random forest analysis, magnitude estimation (ME)

1. Introduction: Subject Properties in Korean

The present study aims to investigate what are crucial factors that influence Subjecthood in Korean represented in two of the selected Subject properties: Honorific Agreement (HA) and copying of plural morpheme on adverbs - Plural Copying (PC). The study especially focused on the case when the NPs represent different GRs (Subject, Possessor of Subject, Direct Object, Indirect Object, Adjunct) and when NPs are located in different position (potential Subject position vs. non-Subject position). The behaviors of NPs in different conditions with respect to the relevant Subject properties - HA and PC - are shown in (1). In (1a) and (1b), honorific morpheme ‘-si’ and plural morpheme ‘-tul’ is in agreement with

*This work was supported by the 2016 New Professor Research Grant funded by Korea National University of Education.
Subject which has [+hon] and [+pl] feature, respectively. On the other hand, when ‘-si’ and ‘-tul’ is controlled by non-Subject (cf. 1a', 1b', respectively), the sentence becomes ungrammatical.

(1) a. **Halapeci-ka** elin soncwu-lul cohaha-si-ess-ta.
   Grandfather-NOM young grandson-ACC like-HON- PST-DECL
   ‘Grandfather likes his young grandson.’

   a'. *Elin** soncwu-ka halapeci-lul cohaha-si-ess-ta.
   Young grandson-NOM grandfather-ACC like-HON- PST-DECL
   ‘The young grandson liked his grandfather.’

   b. **Cheli-wa Yenghi-ka** elin atul-lul himtulkey-tul chac-ass-ta.
   C- and Y-NOM young son-ACC hard- PL search- PST-DECL
   ‘Cheli and Yenghi had difficulties in searching for their young son.’

   Young son-NOM C- and Y- ACC hard- PL search- PST-DECL
   ‘Their young son had difficulties in searching for Cheli and Yenghi.’

Previous experimental research (Kim, Kim and Yoon 2016, Kim, Lee and Kim 2017) subsequently tested Honorific Agreement and Plural Copying among the list of various Subjecthood diagnostics in different constructions of Korean sentences. For example, Kim, Kim and Yoon (2016) and Kim, Lee and Kim (2017) conducted experimental investigation comparing Single Subject Construction (SSCs) and Multiple Subject Constructions (MSCs) in Korean, with respect to the two Subject properties. One of the limitations of their experiments is that their test sentence types contrasted only two different GRs - Subject and Possessor of Subject. This was indeed a natural contrast since the Major Subject (MS) regularly alternates with the Possessor of a sentence with a single Subject; however, it called for a follow-up study in order to fill the gap with various GRs of non-Subject. Later, Kim, Lee and Yoon (2017) started to focus on Single Subject Construction (SSC) to test the effect of different GRs of non-Subject. The current study is based on Kim, Lee and Yoon (2017) and attempted to investigate several different factors which are deemed to contribute to acceptability of the sentences related to the two Subject properties - HA and PC.

Other than various GRs of non-Subject NPs, the position of non-Subject NP in a sentence as well may contribute to the acceptability of the sentences. Miyagawa (2001) analyzes A-scrambling as movement of a non-Subject constituent to SpTP (i.e., high Subject position), with the thematic Subject staying in SpvP (i.e., low Subject position). In Miyagawa's analysis, the A-scrambled object occupies a position typical of Subjects and is predicted to behave like a Subject, given that SpTP is the canonical derived/high Subject position in many languages (McCloskey, 1997). A-scrambled objects do indeed control certain properties typical of Subjects (such as binding of anaphors in the base

---

Subject position and having wide scope over the Subject). However, other Subject properties such as Honorific Agreement and Plural Copying are deemed to be the properties that are different from binding of anaphor and wide scope. Yoon (2008, 2009) argued that among the Subject diagnostics proposed for Korean (Yoon, 1986; Youn, 1990; Hong, 1991, etc.)\(^2\), some are low/PA Subject properties while others are high/Pivot Subject properties. The division of the Subject properties were based on Falk (2006), who posits a split between Pivot vs. Prominent Argument (PA) Subject properties. This type of analysis explains the distribution of different subject properties by decomposing subjecthood into more elementary notions: pivot and the most prominent (core) argument (Dixon, 1994; Falk, 2006). Yoon (2008, 2009) explained that in single subject constructions in Korean, the subject NP is considered to be both pivot and the most prominent argument, while in Multiple Subject Constructions (MSCs), the two notions are split into the higher subject (Major Subject, MS) as pivot and the lower subject (Grammatical Subject, GS) as the prominent-argument\(^3\). Specifically, Yoon (2008, 2009) argued that HA and PC are PA/lower, Subject properties, which are not controlled by high/Pivot Subject, but only by the lower Subject. To test whether a non-Subject (object) fronted by A-scrambling works or fails to act as the controller of these properties, we need to contrast the sentences in (1) with their scrambled counterparts in (2) below respectively, in terms of the position of non-Subject NPs as below.

   Young grandson-ACC grandfather-NOM like-HON- PST-DECL
   ‘Grandfather likes his young grandson.’

   Grandfather-ACC young grandson-NOM like-HON- PST-DECL
   ‘The young grandson liked his grandfather.’

   Young son-ACC C- and Y-NOM hard-PL search- PST-DECL
   ‘Cheli and Yenghi had difficulties in searching for their young son.’

   C- and Y- ACC young son-NOM hard-PL search- PST-DECL
   ‘Their young son had difficulties in searching for Cheli and Yenghi.’

\(^2\) The Subject diagnostics in Korean proposed so far (Yoon, 1986; Youn, 1990; Hong, 1991) that are selected for Yoon (2008, 2009) include the following:
   a. Controller of optional plural-marking (i.e., Plural Copying)
   b. Controller of Subject honorification (i.e., Honorific Agreement)
   c. Controller of PRO in complement (obligatory) control
   d. Antecedent of (Subject-oriented) anaphors
   e. Controller of PRO in adjunct control
   f. Controller of null coordinate Subjects

\(^3\) See Keenan (1976) and Guilfoyle, Hung and Travis (1992) as well for more division of Subject properties and Yoon (2008, 2009) for its application in Korean MSCs.
Finally, while previous studies have provided some answers to questions such as whether and how different factors - such as GRs of non-Subject NPs and word order of the test sentences - contribute to acceptability of sentences, we are not certain as to which factor contributes the most to the acceptability of the sentences related to the two Subject properties - HA and PC. Therefore, the current study attempts to seek for the answer to the last question after all.

The remainder of the paper is organized as follows: In the next section, we will explain the research questions as well as the methodology we used for the current experimental study. The following two sections will be dedicated to presentation of the experimental results as well as the discussion of the result patterns. The final section will summarize the study and draw a tentative conclusion with a future direction of the study.

2. Research Methods

2.1 Research Questions and Hypotheses

The research questions of the current study are the following:

**Research Questions:**
1) Can a scrambled non-Subject control Subject properties when the Subject lacks them?
2) Do various non-Subject GRs that have Subject-like properties behave differently in distinct positions in a sentence?
3) Which property of NPs - among the tested factors - contributes the most in determining acceptability of the sentences representing HA and PC, respectively?

Our specific hypotheses and predictions are the following:

1) Non-Subject that is scrambled to a potential Subject position will not be able to function as controller of HA and PC, since these are properties controlled by the lower (PA) Subject (Yoon, 2008, 2009).
2) Various GRs in the scrambled non-Subject NPs will differ from one another with respect to acceptability of the sentences they constitute, because GRs such as Possessor of Subject and non-argument (adjunct) as controller of the relevant property (i.e., [ + hon ] and [ + pl ]) may behave differently in its relation to Subject in a sentence.
3) The factor testing whether Subject or non-Subject has the controlling feature (i.e., [ + hon ] or [ + pl ]) should play the most crucial role in determining the acceptability of the sentences, since HA and PC are lower Subject properties controlled only by Subjects.

2.2 Participants

Sixty Korean native speakers (age ranged from 22 to 38; \( m=23.05, sd=3.314 \)) residing in and near Seoul, South Korea,
who are either current university undergraduate and graduate students or university graduates, participated in the experiment.

2.3 Tasks, Materials and Procedures

The main task was an acceptability judgment using online Magnitude Estimation (ME). The stimuli were composed of 170 Korean sentences - 80 target items and 90 fillers - testing Honorific Agreement (HA) and Plural Copying on adverbs (PC), which was constructed based on $2 \times 2$ factorial design (2 word orders\(^4\): Canonical vs. Scrambled; 2 agreement type: Subject vs. non-Subject). In addition, non-Subject NPs varied in 4 different GRs: Direct Object, Indirect Object, Possessor of Subject, Adjunct. As shown in (3) below, the sentence varied as to whether the diagnostic property agrees with NP1 - Subject (cf. 3a) or NP2 - non-Subject (cf. 3a' for Direct Object) - with respect to HA. In addition, the style contrast was also made with the other GRs shown in (3b-3d). The sentences with PC were constructed in the same manner.

(3) Sentence Types with different GRs

a. **Halapeci-ka** elin soncwu-lul cohaha-si-ess-ta.
   Grandfather- NOM young grandson-ACC like-HON- PST-DECL
   ‘Grandfather likes his young grandson.’

a’. Elin soncwu -ka **halapeci-lul** cohaha-si-ess-ta.
   Young-grandson-NOM grandfather-ACC like-HON- PST-DECL
   ‘The young grandson likes his grandfather.’ [Subject vs. Direct Object]

b. **Chongcangnim-i** haksayng tayphyo-eykey phyenci-lul ponay-si-ess-ta.
   Chancellor -NOM student hairman-DAT letter-ACC send-HON- PST-DECL
   ‘The chancellor sent a letter to the student chairman.’

b’. Haksayng tayphyo-ka **chongcangnim-eykey** phyenci-lul ponay-si-ess-ta.
   Student hairman-NOM chancellor -DAT letter-ACC send-HON- PST-DECL
   ‘The student chairman sent a letter to the chancellor.’ [Subject vs. Indirect Object]

c. **Ku sacangnim-i** elin atul-ul cohaha-si-ess-ta.
   That president-NOM young son-ACC like-HON-PST-DECL
   ‘The president liked his young son.’

   That president-GEN young son-NOM secretary-ACC like-HON-PST-DECL
   ‘The young son of the president liked the secretary.’ [Subject vs. Possessor of Subject]

\(^4\) The sentence types with different word order are exemplified in terms of HA and PC diagnostics as shown in (2) earlier.
d. **Pwumonim-i** atul-ttaymwuney *wu-si-ess-ta.*  
Parents-NOM son-because weep-HON-PST-DECL  
‘The parents wept because of their son.’

Young son-NOM parents -because weep-HON-PST-DECL  
‘The young son wept because of his parents.’ [Subject vs. Adjunct]

### 2.4 Statistical Analysis

All the scores were extracted for the target sentences and were encoded with four linguistic factors as shown in Table 1 below: DIAGTYPE represents the proposed Subject properties between HA and PC, whereas WORDORDER represents canonical vs. scrambled order. AGREEMENT is divided into NP1 (Subject) and NP2 (non-Subject), while AGREETYPE stands for 4 different non-Subject GRs. Finally, SCORE represents acceptability scores of the sentences containing relevant factors. The scores were converted into the z-scores⁵ using mean and standard deviation, following Gries (2013) and Lee (2016).

<table>
<thead>
<tr>
<th>Factor</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIAGTYPE</td>
<td>HA, PC</td>
</tr>
<tr>
<td>WORDORDER</td>
<td>Canonical, Scrambled</td>
</tr>
<tr>
<td>AGREEMENT</td>
<td>NP1(Subect), NP2(non-Subject)</td>
</tr>
<tr>
<td>AGREETYPE</td>
<td>Possess of Subject, Direct Object, Indirect Object, Adjunct</td>
</tr>
<tr>
<td>SCORE</td>
<td>Acceptability scores</td>
</tr>
</tbody>
</table>

For the analysis of results, a Wilcoxon test (the non-parametric version of paired t-test)⁶ and a random forest analysis were conducted. A random forest analysis or a random decision forest analysis is both a statistical method and a machine learning method, which can be utilized for classification, regression, and other types of statistical tasks. This analysis usually operates by constructing a multitude of decision trees at training time and outputting the class that is the mode of the classes (classification) or mean prediction (regression) of the individual trees (Breiman, 2001; Hastie et al., 2008). In the current study, the analysis was used to investigate the effect of different experimental factors mentioned in Table 1.

---

⁵ The z-transformed acceptability scores ranged from the lowest -2.938 to the highest 3.585.

⁶ A Wilcoxon test was conducted (since the data in both groups did not show a normal distribution) in order to examine the statistical significance of the difference between the acceptability scores of the sentences.
3. Results

3.1 HA + Subject Controller

Overall results with HA with Subject controller (NP1) demonstrated the following:

i) The sentences where Subject has [+hon] got $z$-scores higher than 0, which means that the sentences with Subject controller are considered to be better than the modulus sentence.

ii) There was a significant difference in terms of acceptability between the sentences in canonical order and those when the non-Subject NP is scrambled to the Subject position. While the sentences in canonical order got significantly higher acceptability scores than those with scrambled non-Subject NP in case of Possessor of Subject ($V=11694$, $p=0.015^*$) and Direct object ($V=7827$, $p=0.037^*$), the case with Indirect object showed reverse pattern representing significantly higher acceptability with scrambled order: $V=8905$, $p=0.040^*$). Finally, the case with Adjunct showed no statistical difference in terms of its position ($V=11124$, $p=0.768$, n.s.) as shown in Figure 1.

![Fig. 1. HA + Subject](image)

3.2 HA + Non-Subject Controller

Overall results with HA when -si is in agreement with non-Subject NP (NP2) are the following:

i) The sentences where non-Subject NP controls [+hon] got acceptability scores lower than 0. In comparison to the case with Subject controller representing $z$-scores all above 0 (i.e., Figure 1), the sentences with non-Subject controller got significantly lower acceptability as shown in Figure 2 below.

ii) With respect to the position of non-Subject GRs, the sentences with scrambled order got numerically higher acceptability scores overall compared to the ones with canonical order; however, the difference between the sentences in canonical order and those in scrambled order was overall not significant, except the case with Adjunct (Possessor of Subject: $V=11231$, $p=0.949$, n.s., Direct object: $V=8646$, $p=0.087$, n.s., Indirect Object: $V=10548$, $p=0.896$, n.s., Adjunct: $V=7934.5$, $p=0.001^{**}$). This means that scrambling of non-Subject NPs with different GRs to a potential...
Subject position does not make the sentence better in terms of acceptability in most cases, when the non-Subject has [+hon] feature and the Subject lacks it.

3.3 PC + Subject Controller

Overall results with PC with Subject controller showed a bit different pattern:

i) The sentences when Subject is in agreement with -tul (i.e., when Subject controls [+pl]) got z-scores mostly higher than 0, except the case of Possessor of Subject in its canonical order (i.e., when the Subject controls ‘-tul’ and possessor is in its canonical order, which is left to the head noun). Though the acceptability of the case with Possessor of Subject was lower than the z-score 0, the score was indeed not significantly different from the case where the NP containing the Possessor in scrambled order ($V=9541, p=0.232$, n.s.).

ii) The difference between the sentences where the non-Subject NP is in its canonical position or scrambled to the
Subject position was significant in case of Direct object \( (V=11456, p=0.011\ast) \) and Adjunct \( (V=8051, p=0.011\ast) \). The case of Indirect object as non-Subject GR was not significantly different regardless of the position \( (V=9579, p=0.356, \text{n.s.}) \) similar to the case of Possessor of Subject.

### 3.4 PC+ Non-Subject Controller

Finally, the results with PC when non-Subject has \([\text{+pl}]\) showed reverse pattern compared to the case with Subject controller shown earlier in Figure 3:

i) As shown in Figure 4 below, while the acceptability scores with non-Subject controller of PC got \( z \)-scores mostly lower than 0, the sentences with Possessor of Subject as non-Subject controller reported \( z \)-scores higher than 0, which is the reverse pattern compared to Figure 3. However, this case again reported no statistically significant difference between the case where Possessor was located in its canonical position or scrambled \( (V=13328, p<0.001, \text{n.s.}) \).

ii) On the other hand, the difference between the case of the sentences in canonical order and those in scrambled order was significant with the cases of Direct object \( (V=6874.5, p<0.001\ast\ast) \) and Indirect object \( (V=7836.5, p=0.017\ast) \) as non-Subject GRs. The case of Adjunct as non-Subject GR did not report statistical significance in terms of position difference \( (V=15140, p<0.001, \text{n.s.}) \).

![Fig. 4. PC + Non-Subject](image_url)

### 3.5 Random Forest for Variable Importance

So far the results shown from 3.1.–3.4. could report overall pattern of how non-Subject with different GRs behave in distinct conditions separately - in terms of the controlling diagnostic feature (i.e., \([\text{+hon}]\) for HA and \([\text{+pl}]\) for PC), in terms of controller (i.e., whether Subject or non-Subject is in agreement with the relevant feature), and in terms of word order (i.e., whether the non-Subject NP is in its canonical or scrambled position). However, we cannot tell which factor among them plays the most important role in determining acceptability of the sentences. Therefore, in order to measure the strength among the three tested factors (i.e., AGREEMENT: Subject (NP1) vs. non-Subject (NP2), AGREE TYPE:
4 non-Subject GRs, and WORD ORDER: canonical vs. scrambled), a random forest analysis was conducted. The factor AGREEMENT was used as baseline (100) for its comparison to the other two factors in each diagnostics.

As shown in Figure 5 below, while AGREE TYPE showed 43.13 in HA for their relative strength compared to AGREEMENT, WORD ORDER represented only 0.25, which showed that the factor had relatively little strength in comparison to the other two factors.

From the result patterns shown in Figure 5, we can conclude that whether the controller of [+hon] is Subject or non-Subject has the most crucial influence in determining the acceptability of the sentences; and then comes the type of the GRs of the controller NP as secondary determining power. It seems that the location of non-Subject NP does not matter significantly in determining acceptability of the sentences representing HA, which means that the scrambling of non-Subject NP does not seem to make the sentence significantly more grammatical.

The case of PC shown in Figure 6 below revealed similar results with the case of HA (Figure 5). AGREE TYPE showed 46.17 and WORD ORDER represented only 0.26 with respect to AGREEMENT as 100. This again shows that the AGREE TYPE has less than the half of the strength that AGREEMENT has; WORD ORDER has relatively little
strength. This again implies that the most important factor in determining acceptability of the sentences representing PC is whether [+pl] is in agreement with Subject or non-Subject. The type of the GRs of the controller NP has a secondary impact on the acceptability, while scrambling of the controller NP shows almost no effect compared to the other factors.

4. Discussion

The specific hypotheses and predictions we provided for the study were the following:

1) Non-Subject that is scrambled to a potential Subject position will not be able to function as controller of HA and PC, since these are properties controlled by the lower (PA) Subject (Yoon, 2008, 2009).

2) Various GRs in the scrambled non-Subject NPs will differ from one another with respect to acceptability of the sentences they constitute, because GRs such as Possessor of Subject and non-argument (adjunct) as controller of the relevant property (i.e., [+hon] and [+pl]) may behave differently in its relation to Subject in a sentence.

3) The factor testing whether Subject has the controlling feature or non-Subject has it should play the most crucial role in determining the acceptability of the sentences, since HA and PC are lower Subject properties controlled only by Subjects.

The first hypothesis is supported overall with HA, since the results of our experiment with scrambled non-Subject controller (i.e., represented in white bars in Figure 2 for HA/Figure 4 for PC) did not show statistical difference in its comparison to the case of canonical order in HA. In case of PC, the result was a bit more inconsistent because the difference in terms of the position of non-Subject NPs was significant in some cases (i.e., Direct object and Indirect Object) but not with the other cases (i.e., Possessor of Subject and Adjunct). However, the results from random forest analysis, which provides us with bigger picture with respect to variable importance, revealed that word order represent only little power in determining acceptability of the sentences, compared to the other two factors (i.e., AGREEMENT: Subject or non-Subject controller, AGREETYPE: 4 different GRs of non-Subject NPs), leaning forward to supporting our first hypothesis.

The second hypothesis, which can be also tested through the results with non-Subject controller in scrambled position (i.e., represented in white bars in Figure 2 for HA/Figure 4 for PC), was supported overall. In case of HA (i.e., Figure 2), the distinct GRs represented in scrambled non-Subject NPs showed different behaviors to some extents, in that Possessor of Subject got the highest z-scores ($z\text{-score} = -0.137$), then comes Direct object ($z\text{-score} = -0.117$), while Indirect object ($z\text{-score} = -0.142$) and Adjunct ($z\text{-score} = -0.235$) as controller of [+hon] showed lower scores compared to the others. The case with PC showed similar pattern with scrambled non-Subject GRs, since Possessor of Subject got the highest z-scores ($z\text{-score} = -0.051$), then comes Direct object ($z\text{-score} = -0.107$), while Indirect object ($z\text{-score} = -0.119$) and Adjunct ($z\text{-score} = -0.168$) as controller of [+pl] showed lower scores compared to the others. Furthermore, the result of random forest analysis showed that AGREETYPE (i.e., 5 GRs of non-Subject controller) reported variable strength less than AGREEMENT, but more than WORDORDER in both HA and PC, which seems to imply that
different GRs of non-Subjects play a role to some extent in determining acceptability of sentences, which supports our second hypothesis.

Finally, testing the variable importance through Random Forest analysis strongly supports our third hypothesis, in that with both diagnostics, the factor AGREEMENT, which tests whether the Subject or the non-Subject has the controlling feature (i.e., [+hon] and [+pl], respectively), represented the highest degree of strength in determining acceptability of the sentences representing HA and PC.

What remains to be explained is different behaviors of non-Subject with distinct GRs. First of all, as for Possessor of Subject which got the highest \( z \)-scores among other GRs (HA-Possessor: \( z \)-score = -0.137; PC-Possessor: \( z \)-score = -0.051), it has sometimes been argued to have prominence over the Subject, such as being able to have a scope or bind out of the Subject in certain circumstances in certain languages (Kayne 1994). The experimental studies by Kim, Kim & Yoon (2016) and Kim, Lee and Kim (2017) also demonstrated that in some cases of their experiments with Korean Multiple Subject Constructions, Possessor of Subject gained acceptability scores higher than the original Subject.\(^7\) On the other hand, it is natural that Adjunct represented the lowest acceptability scores in both cases (HA-Adjunct: \( z \)-score = -0.235; PC-Adjunct: \( z \)-score = -0.168) because the features ([+hon] and [+pl]) are most naturally controlled by Subject - usually the most prominent argument in a sentence. Therefore, controlling of the Subject-like feature by a non-argument (adjunct) would be considered less acceptable.

5. Conclusion

The current experimental study investigated what are crucial factors that influence Subjecthood in Korean, especially when the non-Subject NPs represent different GRs and they are located in different positions (scrambled to Subject position vs. canonical non-Subject position) - focusing on two Subject properties - HA and PC. The results with our experimental investigation using Magnitude Estimation (ME) showed that the sentences with Subject NP controller (i.e., when the Subject has [+hon] or [+pl] feature) are accepted significantly more compared to the sentences with non-Subject NP controllers; and whether the controller is Subject or non-Subject played the most crucial role in determining acceptability of the sentences. While different GRs of non-Subject NP controller played the secondary role, scrambling of non-Subject controller to a potential Subject position did not have meaningful effect on the acceptability.

Though current experimental study revealed relatively clear pattern in deciding variable importance among the above three factors (i.e., Subject vs. non-Subject as AGREEMENT, 4 non-Subject GRs as AGREETYPE and canonical vs. scrambled as WORDORDER), with respect to Honorific Agreement and Plural Copying as proposed Subjecthood diagnostics in Korean, we need further investigation with other Subject properties in Korean. Especially, what has been argued to be high Subject properties such as reflexive binding and wide scope (McCloskey 1997, Yoon 2008, 2009) should also be tested with appropriate sentence constructions, since scrambling of non-Subject controller to a high Subject position (SpTP) may not yield the same results as the current study testing what is considered low Subject properties (HA and PC, Yoon 2008, 2009).

\(^7\) It has been argued that Possessor of Subject can control HA, especially when the head noun can be interpreted as metonym of the Possessor (cf. C. Park, 2011, K-S Hong, 1994); however, the current study controlled the sentences so that metonymic relation between the possessor and the head noun cannot be construed.
References

Kim, Ji-Hye
250 Taeseongtapyeon-ro, Gangnae-myeon, Heungdeok-gu, Cheongju, Chungbuk, 28173, Republic of Korea
Department of English Education, Korea National University of Education
E-mail: jkim@knue.ac.kr

Lee, Yong-hun
99 Daehak-ro, Yuseong-gu, Daejeon, 34134, Republic of Korea
Department of English Literature and Language, Chungnam National University
E-mail: ylee@cnu.ac.kr