## Korean Honorific Agreement *too* Guides Null Argument Resolution: Evidence from an Offline Study

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Though there has emerged a number of studies that have dealt with (null) pronoun resolution in various languages, such as English, Finnish, Italian, Spanish, and Russian (Kazanina et al., 2007; Sorace & Filiaci, 2006; Kaiser, 2003), relatively little attention has been paid to pronoun resolution in Korean-type null subject languages, in which pronouns whose referents are easily accessible in the context are often omitted. Subjects in *pro* drop languages, such as Italian and Spanish, can be omitted when there is overt agreement. However, null subjects in "topic-drop" languages (Huang, 1984), such as Korean, Japanese, and Chinese, are not licensed by strong agreement features, but by strong contextual or discourse features. Though verb agreement for person, number, and gender is not syntactically overt in Korean, other agreement features are evident, such as the honorific agreement and subject-mood agreement. While the honorific agreement in Korean indicates sentence well-formedness, Cho (1994) argues that honorific markers are not rich enough to identify null subjects. However, this has never been tested empirically.

The present study examines whether Korean honorific agreement has a significant effect on the identification of a null subject. 48 native speakers of Korean recruited in Korea participated in an offline referent acceptability rating task. Participants were asked to rate the extent to which the given referent for a null subject is appropriate on a five-point scale. Target items were complex sentences in which the embedded clause preceded the main clause. The embedded clauses included three different subordinate conjunctions: *while*, *after*, and *before*.

Three independent variables were manipulated in the study: (i) Honorification using the affix -si- on the embedded verb (±HON), (ii) Honorable individual in the main clause (i.e., either the subject or the object), (iii) Referent provided (i.e., either the subject or the object of the main clause). These variables yield eight conditions (2x2x2). Eight sentences were included in each conjunction type, comprising a total of 24 targets. 42 additional sentences of four different kinds were included as fillers. Eight blocks were presented in a Latin Square design, so that each item was shown in all eight different conditions to different participants.

One-way Independent ANOVA and a post-hoc test revealed that there was a significant effect of the condition, F(7, 1104) = 61.645, p < .000. When the embedded verb has the honorific marker si, the honorable subject of the main clause was most preferred as the subject of the embedded clause (Condition 1, Mean Rating (MR) =4.20; refer to Table 1 on page 2), and the non-honorable object was least preferred (C2, MR=1.81). The difference in the Mean Ratings between C3 (MR=2.36) and C4 (MR=3.42) was significant. This indicates that when the embedded verb has the honorific marker, the honorable object was preferred over the subject of the main clause, demonstrating a significant role of the honorific agreement in null argument resolution. The Mean Rating of C5 was significantly lower than that of C1. This implies that when the embedded verb does not have the honorific marker, both the object and the subject of the main clause are plausible referents for the null subject in the embedded clause. The MR of C6 was significantly lower than that of C5, showing an overall subject preference (i.e., the subject of the main clause to be the subject of the embedded clause as well). The overall results of the study challenge the widely-accepted understanding that null arguments in "topic drop" languages, such as Korean, are identified mainly by context. Instead, it suggests that the honorific agreement plays an important role in identifying the referent of a null argument. This contradicts Cho's (1994) claim that honorificity in Korean is not sufficiently rich to identify a null subject.

- (1) Korean verbal honorific affix –si
- a. *haksayng-i o-ass-ta* student-NOM come-PST-DECL 'A/the student came.'

- b. \*haksayng-i o-si-ess-ta
- c. sensayng-nim-i o-si-ess-ta teacher-HON-NOM come-HON-PST-DECL 'The teacher came.'
- d. #sensayng-nim-i o-ass-ta

(2) Sample target item

[[(**null**) mul-ul tu-si-nun dongan] [moksa-nim-i k<sup>h</sup>oma-lul panki-si-n-ta]] water-ACC eat-HON-PRST while pastor-HON-NOM child-ACC greet-HON-PRST-DECL 'While (null) drinking-HON water, the pastor greets-HON the child.'

(3) Sample target trial translated into English

While (null) cooking-HON, the younger brother blames the older brother.

Question: Who is cooking?

Answer: The younger brother

Definitely NO •----- Definitely YES

(4) Table 1. Conditions, Predictions, and Results of the Offline Referent Acceptability Rating Task (1=definitely NO, 5=definitely YES)

C	Verbal	Honorific	Referent	Predicted Rating	Mean Rating
	Honorific	Entity	Given		(MR)
1	+HON	HSUB	SUB	5	4.20
2	+HON	HSUB	OBJ	1	1.81
3	+HON	HOBJ	SUB	1, higher than C2 due to Subject	2.36
				Preference (SP)	
4	+HON	HOBJ	OBJ	5, lower than C1 due to SP	3.42
5	-HON	HSUB	SUB	3, closer to 5 due to SP	3.56
6	-HON	HSUB	OBJ	3, closer to 1 due to SP	2.44
7	-HON	HOBJ	SUB	3, closer to 5 due to SP	3.35
8	-HON	HOBJ	OBJ	3, closer to 1 due to SP	2.09

Note: C stands for Condition.

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