

Interaction of Language Use Experience and Attraction Effects in Processing Subject-Verb Honourific Agreement in Korean

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Attraction effects arise when the processing of agreement realisation is hampered by an intervening distractor which is not relevant for the agreement relation^{[1][2][3][4]}. In Korean, greater processing difficulties are observed in the agreement relation between an honourifiable subject and a predicate when an intervening distractor carries a non-honourific feature than when it has an honourific status^[5]. So far, such robust effects of attraction have been observed dominantly across a clausal boundary, leaving gaps regarding whether attraction effects hold for a non-clausal boundary. Moreover, despite the well-attested contribution of language experience to language processing^{[6][7]}, few studies have investigated an interacting role of language use experience in the degree of attraction effects. Based on these gaps, we explored attraction effects whilst native speakers of Korean with different language use experience processed subject-verb honourific agreement involving Korean possessive constructions where a potential distractor precedes the subject rather than intervenes between the subject and the predicate.

Method. We recruited two groups of native speakers of Korean with different language use experience. One group was flight attendants and ground staff in an airline company (AIR, $n=22$) who had consistent opportunities to use honourification through intensive training and repetitive on-site customer service. The other group was university students (STD, $n=20$) who had not worked in any service industry, having relatively limited opportunities to use honourification in daily communication. Participants completed two tasks: an acceptability judgment task (AJT) on a 4-point Likert scale to check their explicit knowledge of subject-verb honourific agreement, and a self-paced reading task (SPR) to investigate their online processing of honourific agreement. A total of 12 test items were created by manipulating an agreement condition between a non-honourifiable subject and a predicate, creating two conditions with (+HON) or without an honourific suffix (-HON) in the predicate (Table). Sentences with +HON are ungrammatical because the subject (e.g., professor's *chair*) does not require honourification, but the possessor (e.g., *professor*) encodes information of an honourific status, potentially giving rise to an attraction effect in the honourific agreement between the subject and the predicate.

Prediction. We predicted that both groups have stable grammatical knowledge of subject-verb honourific agreement, thus accepting sentences in the -HON condition but rejecting those in the +HON condition in the AJT. However, a significant group difference is predicted in their processing patterns in the SPR. Specifically, the STD group is expected to be more susceptible to attraction effects, exhibiting slower reading times in the -HON condition than in the +HON condition. The AIR group, in contrast, will be less likely affected by attraction effects due to their accumulated language experience of using honourifics in their workplace, showing little reading time difference between the two conditions.

Results and Discussion. Data from the AJT (Z-transformed) and the SPR (log-transformed and residualised) were analysed using linear mixed-effects models. Results from the AJT (Fig 1) showed that both groups accepted the -HON condition significantly more than the +HON condition, confirming their stable knowledge of subject-verb honourific agreement in Korean. However, results from the SPR (Fig 2 and 3) showed significant interactions of group and honourific conditions in regions 4 and 6 such that only the STD group, not the AIR group, spent longer time in the -HON than +HON condition. Those findings confirm our prediction that the AIR group will suffer less from attraction effects than the STD group during online processing because of their extensive experience of using honourifics in daily communication. Taken together, our results suggest that attraction effects involving honourification in Korean do happen in a non-clausal boundary, and that experience of language in use modulate the degree to which language users experience attraction effects in real-time sentence processing.

Table. Sample items for the AJT and the SPR

Honourification	Sentence (R1-R4 for AJT, R1-R6 for SPR)						Acceptability
	R1	R2	R3	R4	R5	R6	
-HON	professor	chair-NOM	recently	changed	Sumi	said	natural
+HON	-POSS			changed-HON	-NOM		less natural
Meaning	'Sumi said that the professor's chair has been replaced recently.'						

Note. POSS = Possessive, NOM = Nominative, HON = Honourific suffix

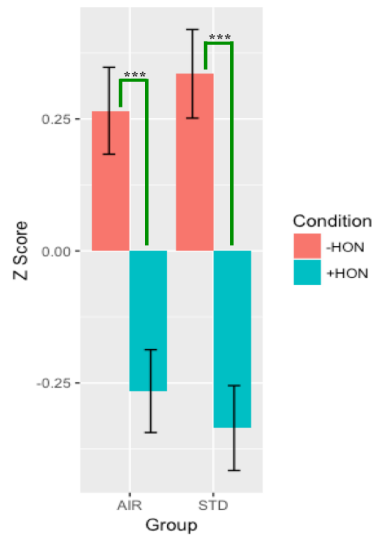


Figure 1. Results from AJT

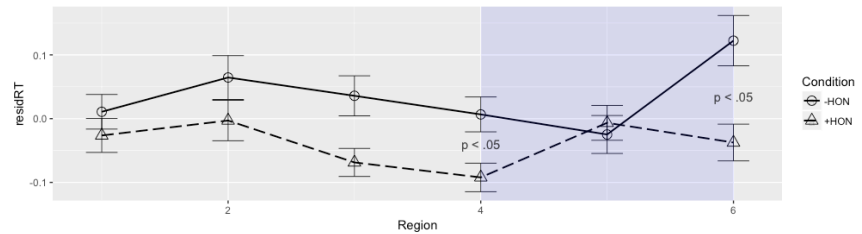


Figure 2. Results from SPR: STD

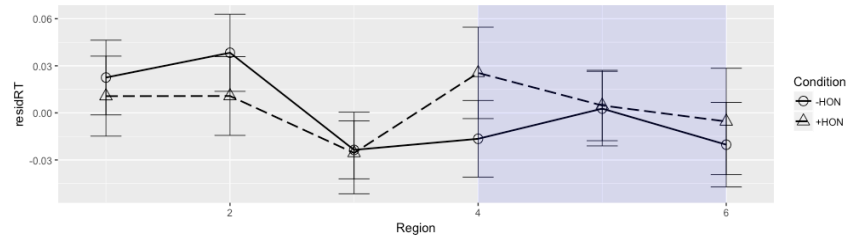


Figure 3. Results from SPR: AIR

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