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# Different case marking does not dampen attraction effect in comprehension: Evidence from an eye-tracking study of subject-verb honorific agreement in Korean

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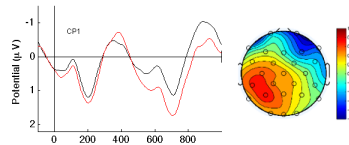
## Background & Research questions

➤ **Memory retrieval is content addressable** (Lewis & Vasishth, 2005; Lewis et al., 2006; McElree et al., 2003; Van Dyke & McElree, 2006)  
 → Potential targets in memory are activated in parallel in response to retrieval cues.

- Facilitatory intrusion : Reading time penalty for a mismatching dependency could be reduced due to the presence of a partially matching distractor (Wagers et al. 2009; Vasishth et al. 2008; Xiang et al. 2009)
  - Similarity based interference : Processing difficulty that occurs when the intended dependency target completely matches the retrieval cues, but where there is also a partial match with the distractor (Badecker & Straub, 2002; cf. Chow et al., 2014; Dillon et al., 2013)
- (a) The musician who the reviewer **praise** won the prize.  
 (b) The musicians who the reviewer **praise** won the prize.
- reading times at praise: (b) < (shorter) than (a)
- (a) John thought that Bill owed **him** another chance.  
 (b) John thought that Beth owed **him** another chance.
- reading times at him: (a) > (longer) than (b)

### ➤ Korean

- SOV word order with case marking & impoverished verbal agreement except for subject honorific agreement
  - Subject honorific suffix **-si-** is optional and can be omitted (a) but when used, should agree with the subject in honorific feature (b)
  - cannot be used with a subject of low social status (c)
- a) Grandpa-nom TV-acc watch-decl (optional)  
 b) Grandpa-nom TV-acc watch-**si-**decl  
 c) \*Kid-nom TV-acc watch-**si-**decl
- Subject honorific violation in Korean elicits a P600 (Kwon & Sturt, 2015).



➤ **Goal of study: To investigate whether a distinct case marker from a licit antecedent would dampen attraction effects** (cf. Nicol et al. 2016)

## Experiment & Results (4 conditions: ± honorific features x subject/object; Emb. Verb-honorific)

### ➤ Experimental conditions

Main subj	Emb subj	W1	W2	W3	W4	W5	W6	W7	W8	
H	H	Teacher <sub>i</sub> -nom	editor <sub>k</sub> -dat	PRO <sub>i</sub>	demo	cd-acc	listen- <b>si</b> -comp	calm	voice-in	said
NH	H	Minji <sub>i</sub> -nom	editor <sub>k</sub> -dat	PRO <sub>i</sub>	demo	cd-acc	listen- <b>si</b> -comp	calm	voice-in	said
H	NH	Teacher <sub>i</sub> -nom	Tayho <sub>k</sub> -dat	PRO <sub>i</sub>	demo	cd-acc	listen- <b>si</b> -comp	calm	voice-in	said
NH	NH	Minji <sub>i</sub> -nom	Tayho <sub>k</sub> -dat	PRO <sub>i</sub>	demo	cd-acc	listen- <b>si</b> -comp	calm	voice-in	said

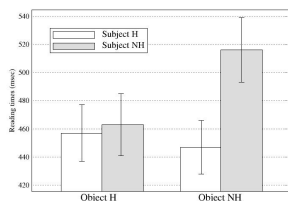
'The teacher/Minji<sub>i</sub> told the editor<sub>k</sub>/Tayho<sub>k</sub> in a calm voice that she<sub>i</sub> would listen to a demo cd.'

### ➤ Methods

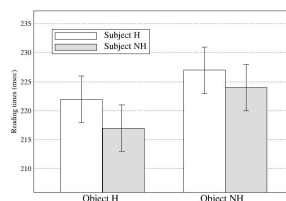
- Participants: 40 native Korean speakers
- Procedures: calibrated for every stimuli
- Materials: 40 sets of experimental sentences
- Eyelink 1000 Plus

### ➤ Results

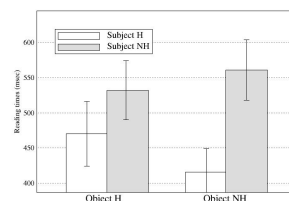
• At the critical verb (W5)  
 : go-past durations (Interaction  $t = 2.06$ )



• At W6 (spill-over)  
 : first fixation durations (main object  $t = -1.93$ )



• At W6 (spill-over)  
 : go-past durations (main subject  $t = 3.12$ )



- The attraction effect did not differ from an analogous parallel study that employed the same case markers for licit and illicit antecedents (interaction with experiment  $t < 1.2$ )

## Discussion & Conclusions

- These results suggest in agreement comprehension distinct overt case marking of a distractor (here, dative case) from that of the licit antecedent (here, nominative case) did not weaken attraction.
- The strong attraction effect in this experiment could be due to proximity of a distractor to the critical verb as it linearly intervenes with the subject-verb agreement.
- This suggests that attraction effect (or retrieval of potential antecedents) is more strongly modulated by proximity rather than morpho-syntactic cues such as case marking in comprehension.

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