Korean Double Relative Clauses: An Experimental Reinterpretation Eun Hee Kim (<u>kimeunhe@msu.edu</u>), Chae Eun Lee (<u>chaeeun4@illinois.edu</u>), Sea Hee Choi (<u>liebesay@gmail.com</u>), James Yoon (jyoon@illinois.edu)

In a well-known account Han and Kim (H&K, 2004) argued that Double Relative Clauses (DRC, see (1)) do not show that RC dependencies in Korean can violate locality constraints/islands, because felicitous DRCs are derived from Double Nominative Constructions (DNCs) where relativization does not violate locality (see (2)). Subsequent research challenging H&K pointed out the existence of well-formed DRCs that cannot be derived from DNCs, with processing factors proffered as an alternative explanation (cf. Yoon, 2011, 2016). However, while invoking processing, these were not experimental studies. Given the context-dependent nature of key judgments, it is imperative to conduct a properly constructed study.

We tested 119 native speakers' judgments of various DRCs using a 5-point Likert scale acceptability judgment task. The DRCs in Experiment (Exp) 1 and 2 modified the subject and the island-violating gap was either a subject or an object gap. Those in Exp 3 and 4 were object-modifying DRCs with either a subject or an object gap (see (3)). The target items in Exp 1 and 2 could be derived from felicitous DNCs while those in Exp 3 and 4 cannot. The factor of gap vs. overt/resumptive pronoun (pronoun or *caki* 'self', for all but Exp 4) was included. We also added complex fillers with multiple dependencies to gauge the effect of intersecting filler-gap dependencies on acceptability judgments (see (4)).

H&K's analysis predicts that the DRCs in Exp 1, 2 should be acceptable since relativization can take place from a DNC, while those in Exp 3,4 should be ill-formed. H&K also predict that when a locality-observing derivation of DRCs is possible from a well-formed DNC (Exp 1, 2), replacing the gap with an overt resumptive element will be marginal, while when such a source is lacking (Exp 3,4), resumption should lead to an improvement over gaps in terms of acceptability since the gap is within an island.

We found that speakers of Korean accepted subject-modifying DRCs (DRCs in Exp 1 and 2) better than object-modifying DRCs (DRCs in Exp 3 and 4) (see Figure 1), which seems to support H&K's first prediction. However, the second prediction of H&K that resumption should work better than gaps in Exp 3,4 but not in Exp1,2 was not supported. Now this result could be taken to imply that resumption fails to amnesty island violations in Korean, but the result is also compatible with an interpretation where the RC dependency in Korean is base-generated, with either a gap or pronoun bound by an operator, which is the interpretation we prefer.

If RC dependencies are base-generated, why then is there a difference in acceptability between Exp1,2 and Exp3,4? Filler items that involve a dependency intersecting another dependency where neither dependency violates locality (cf. (4), with local and long-distance scrambling from embedded clause) were rated similarly to the DRCs in Exp3,4 (M = 2.55, SD = 1.23). We attribute the lowered rating of DRCs in Exp3,4 to processing difficulties associated with such dependency configurations, and not as reflecting their ungrammaticality. This interpretation implies that what H&K hypothesized about DRCs with DNC sources must be valid as well. If there is no DNC-based derivation of the DRCs in Exp1,2, there is no way to avoid intersecting dependencies in the parse (cf. 1). However, under the DNC-based derivation (cf. 2,3), the dependency paths do not intersect. Thus, our conclusion is that H&K is correct that some DRCs have a DNC source, but that, processing factors aside, there are well-formed DRCs that are not based on DNCs. We also disagree with H&K in viewing the RC dependency in Korean to involve a base-generated dependency.

(1) DRC (movement across RC2 violates locality/CN)
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[RC1 [RC2 <b>e</b> i	$e_{j}$	cohaha-nun]	kangaci-ka <sub>j</sub>	cwuk-un]	(ku)	$\mathbf{ai_i}$
		like-rel	dog-nom	die-rel	(that)	$kid_i$
'(that) kid who the dog that [he] liked died' (Han and Kim 2004: 316)						

### (2) Analysis of (1) in Han & Kim (2004:327)

a.  $[\mathbf{e_i} \ [_{RC} \ pro_i \ e_j \ cohaha-nun] \ kangaci-ka_j \ cwuk-un]$  (ku)  $\mathbf{ai_i}$  DNC source

b. (Ku) ai-ka<sub>i</sub> [RC pro<sub>i</sub> e<sub>j</sub> cohaha-nun] kangaci-ka<sub>j</sub> cwuk-ess-ta (that) kid-nom<sub>i</sub> like-rel dog-nom<sub>i</sub> die-pst-decl

## (3) **Exp1**. Subj-modifying Subj-gap; DNC-source (similar to example 1)

# Exp 2. Subj-modifying Obj-gap; DNC-source

'the son-in-law who feels uneasy about the father-in-law who treats [him] strictly is nervous.' DNC-based relativization:

 $[\mathbf{e}_{i} \mid_{RC} \mathbf{e}_{k} \quad \text{pro}_{i} \text{ emhakey tayha-nun}] \text{ cangin-elun-i}_{k} \text{ elyew-un}]$  sawi-ka<sub>i</sub>....

# Exp 3. Obj-modifying Subj-gap; No DNC-source

[kamtok-i	[RC e/ku/caki-k	$\mathbf{a_i}  \mathbf{e_j}$	teypwicak-eyse	phyelchi-n]	yenki-lul <sub>j</sub>
director-nom			debut piece-in	did-rel	act-acc
kukchanha-n]	<b>paywu-</b> ka <sub>i</sub>	sininsang-ul	pat-ass-ta.		
rave-rel	actor-nom	prize-acc	award-pst-decl		

'the actor who the director raved about the act that [he] did in his debut piece was awarded a prize.'

## Exp 4. (Ind) Obj-modifying Obj-gap; No DNC-source

[sensayngnim-i	$[_{RC} e_i  \epsilon$	e/kukes-ul <sub>j</sub>	ceychwulha-n]	haksayı	ngtul-eykey <sub>i</sub>	motwu
teacher-nom			submit-rel	student	s-to	all
mancem-ul	cwu-n]	swukce	e <b>y-</b> ka <sub>j</sub>	maywu	swiw-ess-ta.	
full credit-acc	give-rel	homew	ork-nom	very	easy-pst-decl	
the home extraple that	the toods	am aarra fiill ama	dit to all the atria	lanta rrib	a automitted [it]	*********

'the homework that the teacher gave full credit to all the students who submitted [it] was very easy.'

#### (4) Complex fillers

Tongswu-eykey<sub>i</sub> na-nun Yenghi-lul<sub>k</sub> [Kim-sangmwu-ka e<sub>i</sub> e<sub>k</sub> thimwen-ulo sokayhayssta-ko] tulessta T-to I-top Y-acc K-manager-nom member-as introduced-comp heard 'I heard Manager Kim introduced Yenghi to Tongswu as a new team member.'

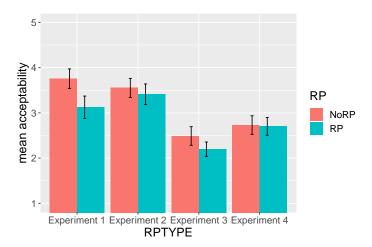


Figure 1. Acceptability Judgment Task results for Exp 1-4 (1: not acceptable)