

The Acquisition of Relative Clauses by Heritage and Non-Heritage Learners of Korean as a Second Language: A Comparative Study

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1. Introduction

A defining feature of Korean language programs throughout North America is the presence of so-called 'heritage learners'—students who receive significant exposure to Korean at home while growing up and therefore have a considerable 'head start' compared to other students, especially in their ability to understand Korean. The precise extent of this advantage is unclear, however, particularly when it comes to the intricate morphology and syntax of Korean. Indeed, as the following example helps illustrate, many sentences can be comprehended solely on the basis of word meaning, without regard for the details of morphology and syntax. (Hon = honorific; SE = sentence ender)

- (1) Halapeci-ka ku chayk-ul ecey ilk-usi-ess-eyo.
grandfather-Nom that book-Ac yesterday read-Hon-Pst-SE
'Grandfather read that book yesterday.'

Given that books do not read grandfathers and that yesterday is in the past, the meaning of this sentence can be inferred just from the meaning of the words halapeci, chayk, ecey and ilk-ta, without regard for word order, case, or verbal morphology, including tense, honorification, and register marking

The purpose of this paper is to investigate and compare the ability of heritage and non-heritage learners to deal with the morphosyntactic clues needed to comprehend Korean relative clause structures. Our work, which we see as no more than a first step in the study of this complex issue, focuses on the two relative clause patterns illustrated in (2).

(2)a. Subject relative clause:

[_ namca-lul cohaha-nun] yeca
 man-Acc like-Prs woman
 ‘the woman who likes the man’

b. Direct object relative clause:

[namca-ka _ cohaha-nun] yeca
 man-Nom like-Prs woman
 ‘the woman who the man likes’

Both patterns are constructed by placing a relative clause (demarcated here by square brackets) to the left of the noun that it modifies—the so-called HEAD (yeca ‘woman’, in our examples). The patterns differ in terms of their internal structure: in the first pattern the subject has been relativized (giving the interpretation ‘the woman who likes the man’) whereas the direct object has undergone this process in the second pattern (hence the interpretation ‘the woman who the man likes’).

The particular interest of relative clauses lies in the fact that their interpretation requires considerable attention to quite subtle morphosyntactic features. In addition to noting to the adnominal suffix on the verb (-nun in our examples), speakers and listeners must be sensitive to case markers. In order to grasp the contrast between (2a) and (2b), for instance, it is necessary to attend the choice of case marker (ka vs. lul) on the noun namca ‘man’—a morphosyntactic clue that can be disregarded in many patterns (see our discussion of (1) above, for instance).

By assessing the ability of heritage learners to use and understand structures such as these under conditions where the effects of pragmatics and context have been neutralized and by comparing their performance with that of nonheritage learners and native speakers, it should be possible to arrive at a preliminary estimate of the true extent

of their morphosyntactic skills. The next section of our paper discusses an experimental study designed to explore this matter.

2. A comprehension experiment

Our investigation into the acquisition of relative clauses by heritage learners of Korean consisted of a comprehension experiment focusing on the contrast illustrated in (2) above. The test materials included five tokens of each sentence type as well as five ‘distracter’ sentences and four tokens of a sentence type not relevant for the current study—for a total of nineteen sentences in all.

Comprehension of the test sentences was assessed with the help of a picture selection task. Participants in the experiment were given a booklet that begin with the following instructions (in English).

Each page of this booklet contains a series of three pictures. As you go to each page, you will hear a tape-recorded voice describing a person or animal in one of the three pictures. Your job is simply to put a circle around the person or animal described in the sentence. (Do NOT put the circle around the entire box.)

Figure 1 depicts a sample page from the booklet.

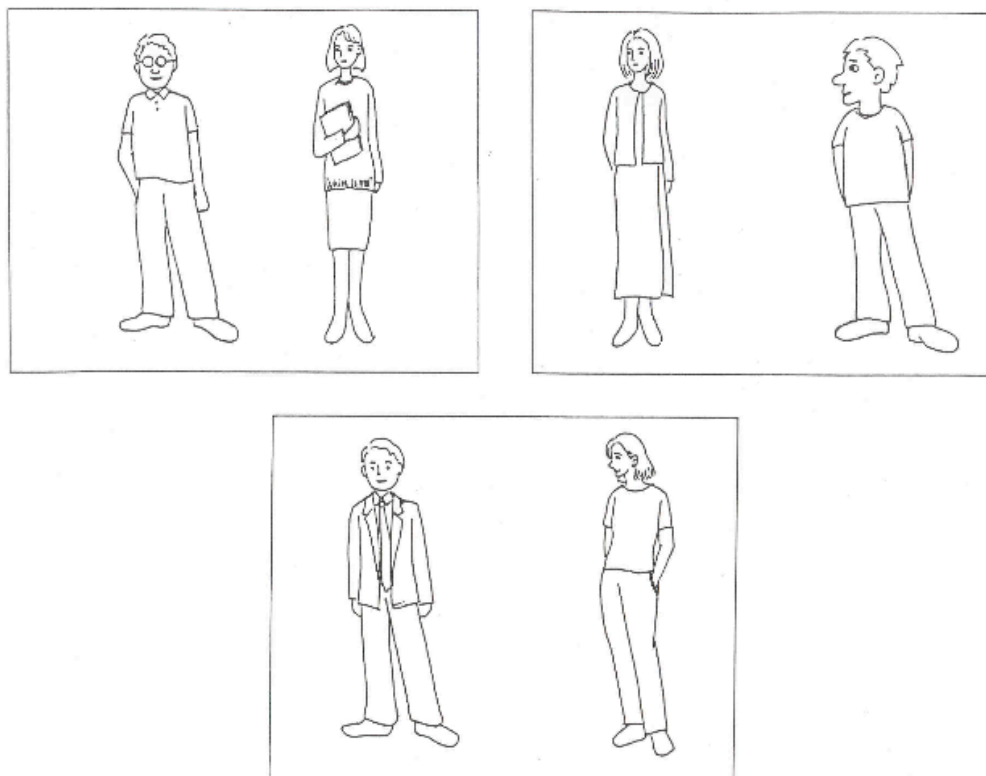


Figure 1: Sample item from the test booklet

Learners who correctly understand relative clauses will circle the righthand figure in the third picture in response to a subject relative clause such as (2a) and the lefthand figure in the second picture in response to a direct object relative such as (2b).

Three groups of subjects participated in our experiment—sixteen heritage learners enrolled in an accelerated second-semester course¹ in Korean at the University of Texas at Austin and forty-five non-heritage learners enrolled in second-semester and fourth-semester courses at the same institution. The experiment was administered to both

¹Assignment to the accelerated course was based on a placement test and interview.

groups by the same experimenter, using the same booklet of pictures and tape of test sentences.

Tables 1 to 3 summarize our findings. (We use the term ‘reversal’ to describe an error in which a subject relative is interpreted as a direct object relative, or vice versa. We discuss the precise nature of this error in more detail below.)

Table 1 Comprehension scores for second-semester non-heritage students (N = 25)

	Correct	Reversals	Other
Subject relatives	95 (76%)	8 (6.4%)	22 (17.6%)
Dir. Obj. relatives	22 (17.6%)	48 (38.4%)	65 (52%)

Table 2 Comprehension scores for fourth-semester non-heritage students (N = 20)

	Correct	Reversals	Other
Subject relatives	70 (70%)	14 (14%)	16 (16%)
Dir. Obj. relatives	46 (46%)	31 (31%)	23 (23%)

Table 3 Comprehension scores for second-semester heritage students (N = 16)

	Correct	Reversals	Other
Subject relatives	52 (65%)	11 (13.75%)	17 (21.25%)
Dir. Obj. relatives	33 (41.3%)	19 (23.75%)	28 (35%)

There are two key findings here. First, the performance of the heritage learners was not significantly different from that of the non-heritage learners ($F 1.57, p = .216$).

Second, all three groups of subjects did far better on subject relative clauses than on their direct object counterparts ($F 30.48, p = .0001$), with scores on the former

structure in the 65 to 76% range compared to less than 50% correct for the latter structure. Further evidence for the difficulty of direct object relatives comes from a consideration of reversal errors—that is, the number of times that a subject relative clause was misinterpreted as a direct object relative or vice versa. As can be seen by examining the second column of the tables above, direct object relatives were frequently misunderstood as subject relatives by both the heritage learners (23.75% of the time) and the non-heritage learners (38.4% of the time for the second-semester students and 31% of the time for the fourth-semester students).

(3) Reversal error involving a direct object relative clause

<i>Test sentence</i>	<i>Reversed interpretation</i>
[namca-ka _ cohaha-nun] yeca	[_ namca-lul cohaha-nun] yeca
man-Nom like-Prs woman	man-Acc like-Prs woman
‘the woman who the man likes’	‘the woman who likethe man ’

In contrast, misanalysis of subject relatives as direct objects relatives was far less frequent for both groups. (We discuss the very sizable ‘other’ category of errors in the next section.)

3. Discussion

In sum, it seems clear that heritage and nonheritage learners of Korean are fundamentally alike in finding subject relative clauses easier to comprehend than direct object relative clauses. Indeed, the two groups exhibit strong similarities both in their scores on the patterns in our study and in the particular types of errors that they made. In this respect, they are like children learning Korean as a first language (Cho 1999), children learning English as a first language (O’Grady 1997:179), and adults learning English as a second language (Gass 1979, 1980, 1982; Wolfe-Quintero 1992; Eckman et

al. 1988; and Doughty 1991)—all of whom find subject relative clauses easier than direct object relatives.

However, there is at least one respect in which the performance of second language learners of Korean departs from that of other groups of learners. As can be seen by reconsidering tables 1 – 3 above, a large proportion of the responses by both heritage and non-heritage learners fell into the ‘other category’, involving neither a correct answer nor a reversal (in which a subject relative was interpreted as a direct object relative or vice versa). Upon further investigation, we discovered that the vast majority of these responses (77.2%) involved a very peculiar error. In response to a sentence such as the following, for instance, subjects select the man in the second panel in figure 1.

- (4) [Namca-ka _ cohaha-nun] yeca
 man-Nom like -Prs woman
 ‘the woman who the man likes’

This is clearly not the correct response (the woman in the second panel is). Nor is it a reversal—with the direct object gap reinterpreted as a subject gap, so that the sentence means ‘the woman who likes the man’ rather than ‘the woman who the man likes’). Rather, the error here involves picking the first noun in the utterance as head of the relative clause. Thus, (4) receives the interpretation ‘the man who likes the woman’, in which the utterance-initial namca ‘man’ rather than utterance-final yeca ‘woman’ is interpreted as the head and the rest of the phrase as the relative clause.

- | | |
|------------------------------------|--|
| (5) Correct interpretation: | Erroneous interpretation: |
| <i>relative clause</i> <i>head</i> | <i>head</i> <i>relative clause</i> |
| [namca-ka _ cohaha-nun] yeca | namca [_ cohaha-nun yeca] |
| man-Nom like -Prs woman | man like-Prs woman |
| ‘the woman who the man likes’ | the man who likes the woman’ |

As far as we know, comparable errors have not been reported in the acquisition of English as a second language by speakers of Korean (e.g. Gass 1979). This suggests that it is somehow easier for Korean speakers to learn the head-initial relative clauses of English than it is for English speakers to learn the head-final relative clauses of Korean. As explained in O'Grady, Lee & Choo (2000), this is not as implausible as it might initially seem.

From a semantic standpoint, an NP containing a relative clause identifies a referent (or set of referents) by first denoting a larger class of entities and then restricting its range to a subset of those entities (e.g., Comrie & Horie 1995:75n). Languages such as English that employ postnominal relative clauses have an NP structure that allow speakers to first identify the set of entities to which the restrictive operation associated with the relative clause is to apply. In a phrase such as teachers that students like, for instance, the first word identifies a set of potential referents for the entire NP, which the relative clause then narrows down to just those cars that students buy.

- (6) [NP teachers [that students like]]
- | | |
|---------------------|-------------------------|
| ↑ | ↑ |
| head identifies | relative clause narrows |
| the set of | down the set |
| potential referents | |

In the case of the equivalent structure in a head-final language such as Korean, in contrast, the restrictor is presented first, before any indication of the set of entities to which it is to apply.

(7) [NP [haksayng-tul-i cohaha-nun] kyoswu]

student-PI-Nom like -Prs teachers

↑

↑

relative clause narrows

head identifies the set

down the set

of potential referents

From a processing perspective, there may be an advantage to first identifying the set of entities and then narrowing it down to something smaller rather than beginning with the restriction and only later identifying the types of entities to which it applies. (Certainly it has been suggested that listeners attempt to determine an expression's possible referents as quickly as possible in the course of processing—e.g., Reinhart 1986:140.) In any case, from the point of view of our investigation, it is certainly revealing to see that even heritage learners in accelerated language classes are prone to make this very fundamental error.

4. Conclusion

As noted in the introduction, we set out to determine whether the well known advantage enjoyed by heritage learners over their nonheritage counterparts extends to their grasp of the morphology and syntax of the language. As explained earlier, this matter can only be investigated under conditions where pragmatic and contextual clues are neutralized so that learners must attend to the sentence's structure if they are to interpret it correctly. Based on the experiment reported here, it seems clear that, at least with respect to relative clause, heritage learners of Korean are no significantly different from nonheritage learners in terms of their ability to make use of morphosyntactic clues for the interpretation of complex sentences. Indeed the two most obvious trends in our data are manifested to a very similar degree in both groups of learners—both performed better on subject relative clauses compared to direct object relatives in comprehension,

and both exhibited a significant number of errors in identifying the head of the relative clause.

These results are of theoretical and practical interest. On the theoretical side, they point to important parallels in the development of relative clauses in various groups of learners, including children acquiring a first language and adults learning a second language—be it English or Korean. In all cases, learners prefer subject relative clauses over their direct object counterparts. This in turn suggests a fundamental similarity in the language acquisition process across ages and situations.

On the practical side, our results suggest that there may be limits to the advantage that heritage learners of Koreans have over their fellow students. Although they appear to enjoy a considerable head start in the areas of vocabulary, comprehension, and pronunciation, this advantage seems not to extend to the morphosyntax of the language. This in turn suggests obvious directions for curriculum design and instruction that might be particularly beneficial for this large group of students in Korean language programs in North America and elsewhere. At the very least, our results point to the need for further investigation of this particular aspect of second language learning and teaching.

References

- Cho, S. 1999. The acquisition of relative clauses: Experimental studies on Korean. Ph.D. dissertation, Department of Linguistics, University of Hawaii.
- Comrie, B. & K. Horie. 1995. Complement clauses versus relative clauses: some Khmer evidence. In W. Abraham, T. Givón, & S. Thompson (eds.), Papers in honor of John W. M. Verhaar, 65-75. Amsterdam: John Benjamins.
- Doughty, C. 1991. Second language instruction does make a difference. Studies in Second Language Acquisition 13: 431-69.

- Eckman, F., L. Bell, & D. Nelson. 1988. On the generalization of relative clause instruction in the acquisition of English as a second language. Applied Linguistics 9: 1-13.
- Gass, S. 1979. Language transfer and universal grammatical relations. Language Learning 29: 327-44.
- Gass, S. 1980. An investigation of syntactic transfer in adult second language learners. In R. Scarcella & S. Krashen (eds.), Research in second language acquisition, 132-41. Rowley, MA: Newbury House.
- Gass, S. 1982. From theory to practice. In M. Hines & W. Rutherford (eds.), On TESOL '81, 129-39. Washington, DC: TESOL.
- O'Grady, W. 1997. Syntactic development. Chicago: University of Chicago Press.
- O'Grady, W, M. Lee, & M. Choo. 2000. The acquisition of relative clauses in Korean as a second language. Department of Linguistics, University of Hawaii.
- Reinhart, T. 1986. Center and periphery in the grammar of anaphora. In B. Lust (ed.), Studies in the acquisition of anaphora. Vol. I: Defining the Constraints, 123-50. Boston: Reidel.
- Wolfe-Quintero, K. 1992. Learnability and the acquisition of extraction in relative clauses and wh questions. Studies in Second Language Acquisition 14: 39-70.