## **Raising over an Experiencer in English L2 Acquisition**

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The present study investigates whether Korean-speaking L2 learners of English comprehend English raising constructions over an experiencer (e.g., *John seems to Mary to be happy*), and finds that such a typologically marked structure poses a great challenge to L2ers.

The outline of the paper is as follows. Section 1 introduces raising constructions in English and in Korean. Section 2 presents a review of previous studies on the acquisition of raising constructions. Section 3 describes the experiment with L2ers' comprehension of raising sentences. Lastly, section 4 discusses the findings and concludes the paper.

#### 1. Background 1.1. Raising in English

English raising verbs like the verb '*seem*' typically display an alternation between an unraised variant (1a) and a raising variant (1b):

- (1) a. It seems [that John is happy].
  - b. John seems [\_ to be happy].

In (1b), the NP *John* is semantically linked to the VP *to be happy* in the embedded clause but is syntactically realized as the subject of the matrix clause. Raising structures are said to involve an A-movement which raises the subject of the embedded non-finite clause to the subject position of the matrix clause.

From a cross-linguistic perspective, English is a language that exhibits a high degree of typological markedness in terms of the types and the frequency of raising structures (Givón, 2001). In particular, patterns like (2), where raising takes place across the experiencer (*to Mary*), are cross-linguistically rare. In some languages, such as Icelandic, Italian, and Spanish, raising across an experiencer NP is simply forbidden (e.g. Boeckx, 1999, 2008).

(2) John seems to Mary [\_ to be happy].

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Note that with or without the experiencer, the thematic relation between *John* and the embedded clause *to be happy* remains the same. Thus, in (2), *Mary* is the experiencer, and it is *John* who looks happy to her.

#### 1.2. Raising in Korean

Just as in English, subject-to-subject raising can take place in Korean, as evidenced by the subject-verb honorific agreement in (4), in which *halapeci* 'grandfather' agrees with the honorific marker *-usi-* on the matrix verb (Um, 2010), but there is no overt change in word order.

- (3) Unraised: [[halapeci-kkeyse cip-ey ka-si-n] kes] grandfather-Hon.nom home-to go-Hon-Rel.pst kes kath-ta. seem-Decl 'It seems that grandfather went home.' (kes: nominalizer) (4) Raised: halapeci-kkeyse [[\_ cip-ey ka-si-n] kes] grandfather-Hon home-to go-Hon-Rel.pst kes
  - grandfather-**Hon** home-to go-Hon-Rel.pst *ke.* kath-**usi**-ta. seem-**Hon**-Decl '**Grandfather** seems to have gone home.'

However, Korean does not allow raising over an experiencer:

(5) \*halapeci-kkeyse naykey [[\_ cip-ey ka-si-n] kes] grandfather-Hon I-Dat home-to go-Hon-Rel.pst kes kath-usi-ta. seem-Hon-Decl
'Grandfather seems to me to have gone home.'

# 2. Previous Acquisition Studies

Various studies (Hirsch, 2011; Hirsch, Orfitelli & Wexler, 2007; Hirsch & Wexler, 2007) report that while L1 English-speaking children comprehend unraised patterns, as in (6a), they have difficulty comprehending their raised counterparts, as in (6b).

- (6) a. Unraised: It seems to Mary that John is happy.
  - b. Raised: John seems to Mary \_ to be happy.

Turning to L2 studies, only a few studies have been conducted concerning how L2 learners acquire raising sentences. Callies (2008) found that German and Polish learners of English have problems with the target-like use of raising constructions in written discourse in terms of information structuring and thematic progression. More recently, Campos-Dintrans, Pires & Rothman (2012) used a grammaticality acceptability task to test English learners of Spanish on the properties of Spanish subject-to-subject raising with and without an experiencer. Their results showed that advanced L1 English/L2 Spanish speakers performed just like native Spanish speakers by correctly rejecting subject-to-subject raising across experiencers in L2 Spanish.

Yet, to the best of our knowledge, no study has investigated L2ers' *comprehension* of raising structures. Due to its typological markedness, it was predicted that English raising over experiencers would be problematic for Korean-speaking L2 learners, as the given structure is banned in Korean.

#### 3. Method 3.1. Participants

Thirty native speakers of Korean who learned English as a second language were recruited from Sogang University in Korea (age 19-30, mean = 21.6). In addition, thirty-five native English speakers from the University of Hawai'i participated in the experiment as a control group.

### **3.2. Procedure**

The present study employed a Truth-Value Judgment task (Crain & McKee, 1985; Crain & Thornton, 1998). Participants were shown illustrated stories via a laptop computer. At the end of each story, a teddy bear puppet appeared on the screen and made a one-sentence statement about what he thought happened in the story. (Participants were told that the study was originally designed to test children, and thus it involved child-friendly characters such as the teddy bear.) Participants were asked to determine whether the statement was true or false and to provide justifications for their choice. After the experiment session, the L2 group was asked to complete a background questionnaire and the C-test which examined the L2ers' English proficiency.

#### **3.3.** Materials

Each participant was presented with ten stories in total: two warm-ups, two control items, four critical items, and two fillers. We used three types of sentence structures, each tested with two items (match and mismatch): (1) control test items including finite clauses with the verb *think*, (2) *unraised* sentences with an experiencer-phrase, (3) *raised* sentences with an experiencer-phrase. These sentences were counterbalanced across six lists to minimize item effects. The complete script of a sample story and the corresponding pictures are shown below in Figure 1, and a sample set of test items are presented in Table 1.

This is a story about three friends: Donald, Daisy, and Mickey. One day, Donald and Daisy are playing outside, digging a big hole. Just then Mickey appears and comes close to Donald and Daisy. Mickey sees Donald who is inside the hole and thinks that Donald is very short. Mickey says, "Hey, Donald, I thought you and I are the same height, but I was wrong." Without looking at Mickey, Donald says, "What do you mean? We are the same height." Then, Mickey says, "No, you are so short!" Daisy, who is standing next to Donald, says "No, that's because you are looking at him from up there. Donald is not short." But Mickey says, "What do you mean? Donald is so short." Still without looking at Mickey, Donald says, "Well, if I'm short, then you are short, too." Mickey says "Yeah? Turn around and look then." Donald turns around to look at Mickey, and Donald says, "Uh-oh, you are not short. I was wrong." Mickey says, "See? We are not the same height, after all. You are so short, haha"



Figure 1. A sample story and pictures

### Table 1. A sample set of test items in each condition

	Match items
Control	At the end of the story, Mickey still thinks Donald is short.
Unraised	At the end of the story, it still seems to Mickey that Donald is short.
Raised	At the end of the story, Donald still seems to Mickey to be short.

	Mismatch items
Control	At the end of the story, Donald still thinks Mickey is short.
Unraised	At the end of the story, it still seems to Donald that Mickey is short.
Raised	At the end of the story, Mickey still seems to Donald to be short.

## 3.4. Results

Participants' performance is presented in Figure 2 in the form of the mean correct percentage for each condition. All participants correctly responded to all filler items in the test. L2ers performed well on the *think* (81.7%) and *unraised* (83.3%) condition, scoring significantly above chance level (one sample *t*-test: *think*: t(29) = 6.24; p < .001, *unraised*: t(29) = 6.02; p < .001). However, L2ers' performance on the *raised* condition was at a chance level (41.7%), revealing their difficulty in comprehending raising structures over an experiencer.



Figure 2. Mean Accuracy by Condition

For additional data analysis, L2ers were divided into three sub-groups based on their proficiency. The high-level group comprised learners with a score higher than 29 (N = 11); the intermediate group included those whose scores were between 20 and 29 (N = 10); and the low-level group was made up of those whose scores were below 20 (N = 9). These three groups showed a significant difference in their scores on the C-test as revealed by a one-way ANOVA (F(2,27) = 91.07, p < .001), with post-hoc Turkey tests confirming that each group differed significantly from the other two (p < .001).

As illustrated in Figure 3, the results on the *raised* condition show that highlevel learners have better comprehension of raising sentences than low- and intermediate-level learners, although their score (59.1%) is still significantly lower than that of the native group (80%).



Figure 3. Mean Accuracy on Raised by Proficiency

### 4. Discussion

The present study explored whether adult L2 speakers of English (L1 Korean) comprehend English constructions that involve raising over an experiencer phrase (e.g., *John seems to Mary to be happy*). Such constructions are typologically marked (i.e., cross-linguistically rare), and they are illicit in Korean. Thus, it was predicted that they would pose a great challenge to L2 learners. As expected, the results of the experiment indicated that Korean L2ers of English have difficulty comprehending structures that involve raising over an experiencer, as in child L1 acquisition, and (2) that more advanced L2 learners exhibit higher levels of competence.

These findings are consistent with and predicted by the Markedness Differential Hypothesis (Eckman, 1977, 2004), which invokes the notion of typological markedness to explain developmental stage in L2 acquisition. They hypothesis predicts that forms/structures in the target language that are different from forms in the native language and that are more marked than these forms will be difficult to acquire. Furthermore, as Korean bans raising over an experiencer, the results are also consistent with the Full Transfer/Full Access theory (Schwartz & Sprouse, 1996), which states that the initial state of L2 acquisition is the final state of L1 acquisition. However, as the given task in the experiment tested only comprehension of the raising construction, further investigation is necessary to know whether the L2ers found raising sentences ungrammatical or simply had difficulty interpreting the sentences.

As for the general shortcomings of the current study, I acknowledge that there were too few critical items per condition as the study was originally designed to test L1 child participants, and the stories involving the verb *seem* were inevitably long and complex. While there were enough L2 learners participating in the experiment to overcome this weakness, it would be beneficial in future studies to have more number of critical items as well as to test L2 learners with a wider range of proficiency in L2 English.

### References

- Boeckx, C. (1999). Conflicting c-command requirements. *Studia Linguistica*, 53, 227–250.
- Boeckx, C. (2008). Raising across experiencers cross-linguistically. In Aspects of the syntax of agreement (pp. 150–161). London: Routledge.
- Callies, M. (2008). Easy-to-understand but difficult to use? Raising constructions and information packaging in the advanced learner variety. In G. Gilquin, M. B. Diez Bedmar and S. Papp (Eds.), *Linking Contrastive and Learner Corpus Research (Language and Computers, Vol. 66)* 201-226. Amsterdam: Rodopi.
- Campos-Dintrans, G., Pires, A., & Rothman, J. (2012). Subject-to-subject raising and the syntax of tense in L2 Spanish: A Full Access approach. *Bilingualism: Language and Cognition* 17(1), 38-55.

- Crain, S., & McKee, C. (1985). The acquisition of structural restrictions on anaphora. In *Proceedings of NELS* 15, 94-110. GLSA, University of Massachusetts, Amherst.
- Crain, S., & Thornton, R. (1998). Investigations in Universal Grammar: A Guide to Experiments in the Acquisition of Syntax and Semantics. The MIT Press: Cambridge, MA.
- Eckman, F. (1977). Markedness and the contrast analysis hypothesis. *Language Learning* 27, 315-330.
- Eckman, F. (2004). Universals, innateness and explanation in second language acquisition. *Studies in Language* 28, 682-703.
- Givón, T. (2001). Syntax. An Introduction. Vol. 2. Amsterdam: John Benjamins Publishing Company.
- Hirsch, C. (2011). The acquisition of raising. Cambridge, MA: MIT dissertation.
- Hirsch, C., Orfitelli, R., & Wexler, K.(2007). When seem means think: The role of the experiencer-phrase in children's comprehension of raising. In A. Belikova, L. Meroni, and M. Umeda (eds.) Galana 2 - Proceedings of the Conference on Generative Approaches to Language Acquisition North America 2. Somerville, MA: Cascadilla Press.
- Hirsch, C., & Wexler, K. (2007). The late acquisition of raising: What children seem to think about seem. In S. Dubinsky, & B. Davies (Eds.), *New horizons in the analysis of control and raising* (pp. 35-70). New York, NY: Springer.
- Schwartz, B. D., & Sprouse, R. A. (1996). L2 cognitive states and the Full Transfer/Full Access model. *Second Language Research* 12, 40-72.
- Um, H-J. (2010). A-Movement and pro in Korean. *Studies in Modern Grammar* 59, 67-88.