Wh-island effects in Korean scrambling constructions
Juyeon Cho
(Seoul National University)

This paper aims to investigate wh-island effect in scrambling structures in Korean. Since the scrambling of a wh-phrase is allowed in wh-in-situ languages including Korean, such languages are not considered to exhibit wh-island effect. However, when it comes to the interpretation of the sentences in (1), it is controversial whether the extracted wh-phrase can have the wide-scope reading above the entire sentence or not, implying that wh-phrase can be an island at LF level. Note that the concepts of wh-island in above two cases are different, I separate the wh-island effect based on where it occurs. The island effect which is caused by the overt movement out of wh-phrase (or scrambling) is called wh-PF-island effect, whereas the effect which bans the wide-scope reading for a wh-phrase over the sentence is called wh-LF-island effect. Given that two wh-island effects can be observed at different level respectively, this paper provides empirical evidence toward existence of each wh-island effect in Korean. It proceeds with two research questions: first, does Korean show wh-PF-island effect? and second, does Korean show wh-LF-island effect?

To examine the wh-island effects in Korean, the factorial definition with two factors, the structure and the presence of wh-island, was adopted with some modifications of the definition in [1]. Also, the felicity of question-answer pairs was measured, considering that the interpretation of wh-phrase varies by the type of answers referring to [2]. Therefore, the current experiment was conducted under a 2 x 2 x 2 factorial design, with three factors: Structure (non-island / island), Wh-position (non-scrambling / scrambling) and Answer type (yes/no-answer / wh-answer). Thirty-two sets of experimental sentences (four tokens for each of the eight conditions) were used for the acceptability judgment task with a 7-point Likert scale task on twenty Korean native speakers. The example materials are represented in (2) for questions and (3) for answers.

The basic descriptive results of the judgment task (see Figure 1) shows the differences between Structures (island/non-island). As for Wh-position, scrambled questions were rated slightly lower than non-scrambled questions, which means that scrambling might affect the acceptability of sentences. With the z-score transformed ratings, an interaction between Structure and Wh-position was calculated using differences-in-differences (DD) scores for each participant: DD score = D1 (non-island/non-scrambling – island/non-scrambling) – D2 (non-island/scrambling – island/ scrambling). The DD scores which is almost 0 (DD = 0.02) indicates a sub-additive (non-island) interaction for wh-PF-island effect, regardless of answer types (a p-value of .21 and a DD score of −.24 for y/n answer; a p-value of .18 and a DD score of −.27 for wh-answer; see Figure 2). Following this, we can observe that whether the sentence has wh-island or not, the differences in acceptability come from the location of wh-phrase.

Among sentences with wh-island, the two-way ANOVA for Answer type (y/n-answer/wh-answer) and Wh-position showed a significant interaction between two factors (p < .0001) with the positive DD score of .84 (see Figure 3). The non-scrambled island condition exhibits a preference to the embedded scope reading, which is suggestive for existence of wh-LF-island effect in Korean. However, the opposite results were observed among other conditions, indicating that speakers considered the question as a direct wh-question, as opposed to the generalization proposed in the literature such as [3]. Since there is no wh-PF-island effect in Korean, the scrambled wh-phrase is allowed and it is compatible with matrix scope just as sentences without wh-islands. Although the scrambled wh-word prefers to be located in the moved position, it can still be undone following [4]. Overall, this study argues that Korean does not show sensitivity to wh-PF-island but does show to wh-LF-island.
Data

   What-Acc J-Top Mary-Nom eat-Past-Q know-Past-Q
   ‘What did John know whether Mary ate ___?’ or ‘Did John know what Mary ate ___?’

(2) a. Non-island | non-scrambling
   Ne-nun [Yeji-ka nwuku-ul manna-ss-ta-ko] tul-ess-ni?
   You-Top Y-Nom who-Acc meet-Past-Decl hear-Past-Q

b. Non-island | scrambling
   Nwuku-ul ne-nun [Yeji-ka ___ manna-ss-ta-ko] tul-ess-ni?
   Who-Acc you-Top Y-Nom meet-Past-Decl hear-Past-Q

c. Island | non-scrambling
   Ne-nun [Yeji-ka nwuku-ul manna-ss-nunci] tul-ess-ni?
   You-Top Y-Nom who-Acc meet-Past-Q hear-Past-Q

d. Island | scrambling
   Nwuku-ul ne-nun [Yeji-ka ___ manna-ss-nunci] tul-ess-ni?
   Who-Acc you-Top Y-Nom meet-Past-Q hear-Past-Q

(3) a. Yes/no answer
   Ung, tul-ess-e.
   Yes, hear-Past-Decl

b. Wh-answer
   Minsu(-ul manna-ss-ta-ko/nunci tul-ess-e).
   M-Acc
   meet-Past-Decl/-Q hear-Past-Decl

Figure 1. Ratings of acceptability judgment task

Figure 2. Interaction plots for wh-LF-island with DD scores

Figure 3. Interaction plot for wh-LF-island with DD scores

References