

On the acquisition of Korean *wh*-constructions with Negative Polarity Items

This study explores the acquisition of *wh*-constructions with Negative Polarity Items (NPIs) in Korean. Although Korean is a *wh-in-situ* language, scrambling *wh*-phrases is generally optional. However, in the context of NPIs, scrambling *wh*-phrases in *wh*-questions becomes obligatory (see (1)). The impossibility of the *wh*-question reading in (1a) exemplifies an "Intervention Effect" (Beck & Kim 1997).

- (1) a. * Amwuto **mwues-ul** sa-ci anh-ass-ni? SOV (Non-scrambled)
 Anyone **what-ACC** buy-ci NEG-PAST-Q
 (cannot mean 'What did no one buy?')
- b. **Mwues-ul** amwuto sa-ci anh-ass-ni? OSV (Scrambled)
What-ACC anyone buy-ci NEG-PAST-Q
 'What did no one buy?'

This Intervention Effect constitutes a poverty-of-the-stimulus problem, since this knowledge cannot be induced from Korean input (Song 2007). Moreover, (1a) does have a *yes/no*-question reading, as shown in (2) (Choi 2007), which makes this learnability problem all the more severe.

- (2) Amwuto **mwues-ul** sa-ci anh-ass-ni? SOV (Non-scrambled)
 Anyone **something-ACC** buy-ci NEG-PAST-Q
 'Did no one buy something?'

These facts have received much attention in the literature, with analyses formulated from various syntactic, semantic and/or pragmatic perspectives (e.g. Beck 1996; Beck & Kim 1997; Choi 2007; Kim 2002; Pesetsky 2000; Sells 2001; Tanaka 2003; Tomioka 2007). Yet, there has been no research on the acquisition of Korean *wh*-constructions with NPIs. This study therefore set out to investigate how children ($n=23$, aged 5–7) acquire the two main properties of Korean *wh*-constructions with NPIs: (a) that in negative *wh*-questions with NPIs, object *wh*-phrases must scramble across subject NPIs to obviate the Intervention Effect, and (b) that the two different interpretations are a function of whether the *wh*-phrase is scrambled (*wh*-question reading, see (1b)) or is not scrambled (*yes/no*-question reading, see (2)).

Three experiments tested children divided into 3 age groups (7-year-olds ($n=9$), 6-year-olds ($n=6$), and 5-year-olds ($n=8$)) and adult native controls ($n=15$) on two separate days. In the **elicited-production task** (see a sample protocol in (3)), the participants used 4 word/phrase cards to ask questions after listening to picture-based stories in 4 experimental conditions (and 4 filler conditions), consisting of 4 tokens each: positive *wh*-object questions ($\sqrt{\text{OSV}}/\sqrt{\text{SOV}}$), negative non-NPI-context *wh*-object questions ($\sqrt{\text{OSV}}/\sqrt{\text{SOV}}$), negative NPI-context *wh*-object questions ($\sqrt{\text{OSV}}/*\text{SOV}$), and negative NPI-context *yes/no*-questions ($\sqrt{\text{SOV}}/*\text{OSV}$). In the **acceptability judgment task**, scrambled and non-scrambled variants of these same question types in the 4 experimental (and 4 filler) conditions ($k=4$ each) were judged. Finally, the (im)possibility of the 2 interpretations of *wh*-phrases in negative NPI-context questions was elicited in 2 experimental (OSV vs. SOV) conditions (and 2 filler conditions), with 4 tokens each, in the **interpretation-verification task**.

The results show, first, that the adult native controls perform as expected, on all tasks; in particular, in negative NPI-context questions, they reserved OSV order for the *wh*-question reading and SOV order for the *yes/no*-question reading. As for the children, their patterns are differentiated by age group:

- (i) The 7-year-olds, like adult natives, almost always produce (88.9%) and accept (88.9%) only OSV order in (1b)-type contexts and almost never produce (2.8%) or accept (16.7%) OSV in (2)-type contexts (see Figures 1-3); as for interpreting negative NPI-context questions, they again perform like adult natives, virtually always assigning OSV the *wh*-question reading and SOV the *yes/no*-question reading (see Figures 4-5). Thus, it is by age 7 that Korean-acquiring children fully (overcome the poverty-of-the-stimulus problems and) know both properties of Korean *wh*-constructions with NPIs.
- (ii) The 6-year-olds show weaker tendencies than the 7-year-olds, most notably incorrectly accepting OSV in (2)-type contexts (37.5%) and SOV in (1b)-type contexts (41.7%) (see Figures 2-3) and correctly interpreting negative NPI-context SOV questions at rates of around only 65% (see Figure 5).
- (iii) The 5-year-olds have not yet acquired either property of *wh*-constructions with NPIs (see Figures 1-5).

Discussion of these results will focus on what explains this developmental route (and, if time permits, how and why this route differs from the L2 Korean route of adults and children whose L1 is English).

References

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(3) A sample protocol for the NNQ-WH condition (i.e. (1b)-type context) in the elicited-production task



Context: The family wanted to have lunch when they arrived after bug hunting. Mother brought sausage, a hamburger, chicken, bread, and something else.

Experimenter <in Korean and SOV order>:
 Father ate sausage, mother ate a hamburger, Cheolsoo ate bread, and Younghee ate chicken. Nobody ate this.
 BBUNG BBUNG (puppet) knows what it is. Ask him about it. You can use these cards to ask him.

Participant:

mwues-ul what-Acc	onul today	amwuto anyone	mek-ci anh-ass-ni? eat-ci Neg-Past-Q
amwuto anyone	onul today	mwues-ul what-Acc	mek-ci anh-ass-ni? eat-ci Neg-Past-Q

→ OSV (targetlike)

→ SOV (non-targetlike)

'What did no one eat today?'

Key

- PQ:** Positive *wh*-object question
- NQ:** Negative non-NPI-context *wh*-object question
- NNQ-WH:** Negative NPI-context *wh*-object question
- NNQ-Y/N:** Negative NPI-context *yes/no*-question

- A:** Adults
- C-7:** Children – Age 7
- C-6:** Children – Age 6
- C-5:** Children – Age 5

Figure 1. OSV in the Elicited-Production Task

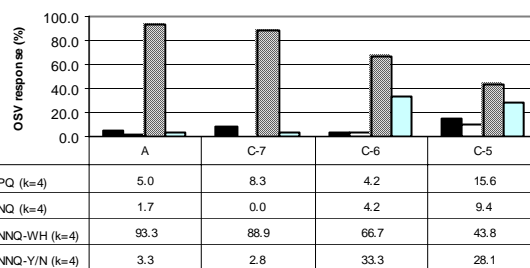


Figure 2. Acceptability-Judgment Task: OSV

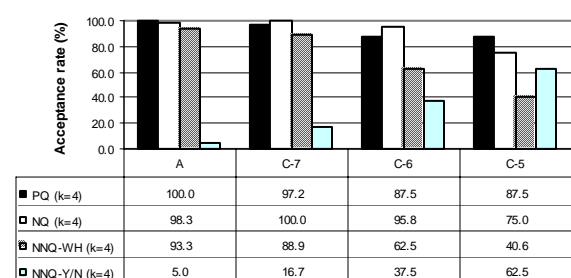


Figure 3. Acceptability-Judgment Task: SOV

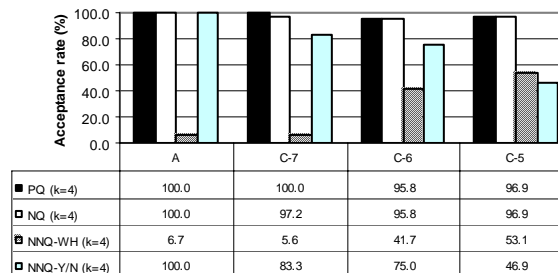


Figure 4. Interpretation-Verification Task: OSV

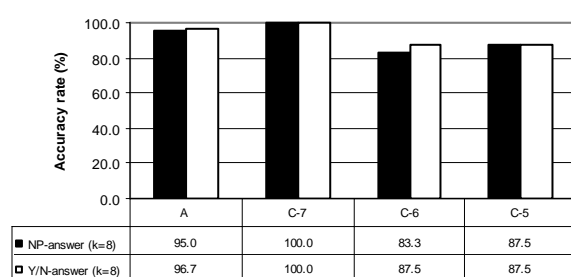


Figure 5. Interpretation-Verification Task: SOV

