

On the Intervention Effects of the NPI *amwuto* ‘anyone’ in L1 Korean vs. Heritage Korean

According to Benmamoun, Montrul & Polinsky (2010, 2013), heritage language speakers are bilinguals who have acquired a minority/Heritage Language (HL) from birth in the home context as well as a different majority/Dominant Language (DL) of the ambient society they grow up in. This paper aims to investigate to what extent Heritage Korean speakers’ knowledge of their HL is different/similar to that of Korean native speakers. In particular, this paper presents a novel experimental study of intervention effects for *wh-in-situ* argument questions, triggered by the negative polarity item (henceforth NPI) *amwuto* ‘anyone’ in L1 Korean vs. Heritage Korean (henceforth HK).

In Korean (a *wh-in-situ* language), *wh*-phrases can optionally be scrambled in both positive and negative questions. An example of negative questions is given in (1a-b).

- (1) a. Sue-ka mwues-ul sa-ci anh-ass-ni?
 Sue-NOM what-ACC buy-CI NEG-PAST-Q **SOV** (canonical)
- b. Mwues-ul Sue-ka sa-ci anh-ass-ni?
 What-ACC Sue-NOM buy-CI NEG-PAST-Q **OSV** (scrambling)
- ‘What didn’t Sue buy?’

Crucially, when an NPI such as *amwuto* ‘anyone’ appears in subject position, the object *wh*-phrase must obligatorily be scrambled over the NPI as shown in (2a-b).

- (2) a. ?***Amwuto** mwues-ul sa-ci anh-ass-ni?
 anyone what-ACC buy-CI NEG-PAST-Q **SOV** (canonical)
- Intended: ‘What did no one buy?’
(S. Kim 2002)
- b. Mwues-ul **amwuto** sa-ci anh-ass-ni?
 What-ACC anyone buy-CI NEG-PAST-Q **OSV** (scrambling)
- ‘What did no one buy?’

(2a) where the *wh*-phrase remains *in-situ* is unacceptable on a *wh*-interrogative reading since the NPI *amwuto* ‘anyone’ induces an intervention effect, i.e., it blocks the LF movement of the *in-situ* WH. (2a) is therefore acceptable only on a yes/no-question reading (‘*Did no one buy something?*’) (see Beck & Kim 1997; Kim 2002 among others for the details).

We designed a novel experimental task to examine (i) whether Korean children have the adult pattern of distribution for intervention effects (distinguish scrambled WH from *in-situ* WH); (ii) to what extent French-dominant Heritage speakers of Korean show different/similar pattern of behavior compared to Korean monolinguals. An original production task was conducted with 25 monolingual children (aged 5;1-7;11, MA=6;7), 10 French-dominant Heritage speakers (aged 13;5-16, MA=14;2) of Korean living in France and 24 adults as a control group. Four experimental conditions were constructed in a 2x2 design with word order (SOV vs. OSV) and negative question (henceforth NQ) type (NQs without NPI vs. NQs with NPI) as factors. Participants were asked to answer a negative question (with/without an NPI, with SOV/OSV order). Predictions for experimental conditions are illustrated in Table 1 below.

Table 1. Predictions for experimental conditions

		<i>Word order</i>	
		<i>in-situ</i> WH (SOV)	scrambled WH (OSV)
<i>NQ type</i>	NQs without an NPI	DP-answers (1a)	DP-answers (1b)
	NQs with an NPI	yes/no-answers (2a)	DP-answers (2b)

Crucially, contexts designed for NQs with an NPI licensed both *wh*-question/DP-answers ((e.g. *broccoli*)) and yes/no-question answers ((e.g. *No*)), as shown in (3).

- (3) Example of contexts designed for NQs with an NPI
- a. Context: *Minsu and Juno do not like to eat vegetables. But, today, mother said that they have to eat carrots and broccoli that she prepared for lunch. Minsu is amenable child,*

and he tried to eat the vegetables. He ate only carrots up, but he could not eat broccoli. However, Juno really hates vegetables, so he did not eat any vegetables.

b. Target sentences:

in-situ WH (SOV)

Amwuto siktak-eyse **mwuess-ul** mek-ci anh-ass-eyo?
 Anyone table-LOC what-ACC eat-CI NEG-PAST-Q
 ‘Did no one eat something at the table?’ / ?*‘What did no one eat?’
 (Expected answer: No, Juno ate carrots / *Broccoli)

scrambled WH (OSV)

Mwues-ul siktak-eyse **amwuto** mek-ci anh-ass-eyo?
 What-ACC table-at anyone eat-CI NEG-PAST-Q
 ‘What did no one eat at the table?’ (Expected answer: Broccoli)

Consider the results shown in Table 2 below.

Table 2. Experimental results (%)

	NQs without an NPI				NQs with an NPI			
	SOV (<i>in-situ</i> WH)		OSV (scrambled WH)		SOV (<i>in-situ</i> WH)		OSV (scrambled WH)	
	DP-answer	yes/no-answer	DP-answer	yes/no-answer	DP-answer	yes/no-answer	DP-answer	yes/no-answer
Adults (n=24)	100	0	99	0	45,83	54,17	98.96	1.04
Children (n=25)	100	0	100	0	42	58	95	5
HK speakers (n=10)	100	0	100	0	85	15	100	0

In NQs without an NPI, both children and HK speakers, just like adults, produced only DP-answers no matter what word order, correctly assigning both the *in-situ* WH and the scrambled WH a *wh*-question reading, as expected.

In NQs with an NPI, children and adults showed the expected behavior with respect to the scrambled WH (OSV), volunteering DP-answers 95% of the time for children and 98.96% for adults. As for the *in-situ* WH (SOV), they showed only slightly higher levels of production for yes/no-answers (54.17% adults and 58% children). The statistical analyses revealed that they significantly distinguished between the *in-situ* WH (SOV) and the scrambled WH (OSV) orders with respect to the production of DP-answers (adults: $t(23) = -5.858, p < .001$; children: $t(24) = -7.025, p < .001$), suggesting that they know the subject NPI triggers intervention effects for the object *wh*-phrase *in-situ*. Both adults and children, however, also volunteered DP-answers in NQs with an NPI in SOV. In sum, unacceptability of the NQ with an NPI on a *wh*-question reading was not as strong as one might expect.

HK speakers, like monolinguals, showed the expected behavior with respect to the scrambled WH (OSV), volunteering DP-answers 100% of the time in NQs with an NPI. As for the *in-situ* WH (SOV), they also showed high levels of production for DP-answers (85%), which was not expected. The statistical analysis revealed that HK speakers did not significantly distinguish between the scrambled WH (OSV) and the *in-situ* WH (SOV) with respect to the production of DP-answers ($t(9) = -1.500, p = .168$), suggesting that they do not know that the subject NPI triggers intervention effects for the object *wh*-phrase *in-situ*. We suggest two possible ways of interpreting the absence of intervention effects in HK: (i) (comparing to the results from a L2 experimental study in Song (2008)) Acquisition of a HL might be similar to L2 acquisition in that both HK speakers and L2 speakers fail to converge to the target property in Korean; (ii) HK speakers might be influenced by the Dominant Language which is French.