What prevents a *wh*-island effect in Korean?

Background: It has been claimed that *wh*-in situ languages such as Korean and Japanese obey *wh*-island constraint at LF (Nishigauchi 1990, 1999, Watanabe 1992, H.S. Han 1992, and H.S. Choe 1995). According to them, the semantic scope of *nwukwu* 'who' in the embedded clause in (1) cannot extend to the matrix clause; (1) is only interpreted as the embedded scope reading (1a).

(1) John-un [Mary-ka nwukwu-lul mannassnun-ci] mwuless-eo?
John-Top [Mary-Nom who-Acc met-Comp] asked?
a. 'Did John ask who Mary met t?'
b. * 'Who did John ask whether Mary met t?'

However, the comprehension tests conducted by H.K. Hwang (2011) show that the matrix scope reading (1b) is also acceptable when the proper intonation (e.g. F0 compression between the *wh*-phrase and the matrix complementizer) is given, which allows for the violation of the *wh*-island constraint.

Research Question: In addition to intonation, sentence-final particles for questions can also indicate different *wh*-scope in some dialects of Korean and Japanese. Unlike the neutral sentence-final particle -*eo* in (1), -*na* or -*no* in Kyeongsang Korean decides the *wh*-scope as in (2).

(2) a. …[…*wh*…]…-*na*: an embedded scope reading (yes/no question)
b. …[…*wh*…]…-*no*: a matrix scope reading (wh question)

Then, when a sentence-final particle identifies the scope of a *wh*-phrase as an embedded clause, can a matrix reading intonation still override *wh*-island effect? We also pay attention to the fact that a *wh*-phrase in an embedded clause can be moved into the matrix clause through long-distance scrambling in Korean. Would the surface syntactic position of the *wh*-phrase affect the processing of its semantic scope? How do these factors interact each other on the scope of a *wh*-phrase?

Experiment: In order to investigate the influence of intonation, sentence-final particles, and the surface syntactic position of the *wh*-phrase on *wh*-scope, we conducted a perception test which consisted of a forced choice task and an acceptability judgment task. Four sets of fully crossed stimuli (2x2x2=8 types) were recorded by a native Kyeongsang Korean speaker. 108 Kyeongsang Korean speakers participated in this experiment through online.

Results & Discussion: The data provided by 108 participants were analyzed with multiple linear regression. In the forced choice task, the majority of the responses (marked by shading in (3)) for each type of stimuli were in accordance with the sentence-final particle. This suggests that among three factors it is the sentence-final particle that plays a decisive role on a *wh*-scope in most cases ($t = 11.556$, $p < 2e\text{-}16$). However, when both intonation and the syntactic position indicate a matrix scope reading, the role of the sentence-final particle is not decisive (Type 7 and Type 8). In other words, the interaction between the matrix scope intonation and the *wh*-phrase's syntactic position (a matrix clause) significantly affect processing a matrix scope reading ($t = 5.224$, $p = 2.71e\text{-}06$). We conjecture that for the stimuli of Type 7 people have a strong expectation of a matrix scope reading during processing because of the relevant cues (i.e. the syntactic position and *wh*-intonation) given at the beginning of the sentence and continued through the end of the sentence. Thus, the strong expectation of a matrix reading would allow the violation of wh-island constraint by overriding the sentence final particle's strong effect.

(3)

	Wh-position	Intonation	Final particle	Forced Choice (%)		Acceptability Judgement (Scale:0-6)
				WhQ response (Matrix)	YNQ response (Embedded)	
Type1	E	E	E	14.8	85.2	3.7
Type2	E	E	M	71.3	28.7	2.5
Type3	E	M	E	22.8	77.8	2.9
Type4	E	M	M	87	13	2.7
Type5	M	E	E	24.1	75.9	2.1
Type6	M	E	M	89.8	10.2	2.3
Type7	M	M	E	67.6	33.4	2.0
Type8	M	M	M	84.2	15.8	2.5

E: embedded, M: Matrix

In the acceptability judgement task, the acceptability of sentences with long-distance *wh*-scrambling (Type 5 ~ Type 8) was relatively low. This shows that long-distance scrambling of *wh*-phrases is not preferred. Among them, Type 7 shows the lowest acceptability. This can be explained in the same vein with the result of the forced choice task. In conclusion, this study confirms the influence of intonation and morphology on the matrix scope of a *wh*-phrase and newly discovers the influence of its syntactic position.

References

Choe, H.S. 1995. Focus and Topic Movement in Korean and Licensing. *Discourse Configurational Languages*, K.E. Kiss (ed.), 269-334. New York: Oxford University Press. Han, H.S. 1992. Notes on Reflexive Movement. *Journal of East Asian Linguistics* 1, 215-218.Hwang, H.K. 2011. *Scope, Prosody, and Pitch Accent: the Prosodic Marking of Wh-scope in Two Varieties of Japanese and South Kyeongsang Korean*. Doctoral dissertation, Cornell University. Nishigauchi, T. 1999. Quantification and wh-constructions. N, Tsujimura (ed.), A Handbook of Japanese Linguistics. New York: Blackwell, 268-296.Nishigauchi, T. 1990. *Quantification in the theory of grammar.* Kluwer. Watanabe, A. 1992. *Wh-in-situ, Subjacency, and Chain Formation*, MIT Occasional Papers in Linguistics 2, MITWPL, Cambridge.