The influence of sentence-final intonation and phonological phrasing on the interpretation of *wh*-indeterminates

Introduction: Is has long been noticed that in many languages wh-words are ambiguous between interrogatives 'who/what/...' and indefinites 'someone/something/...' (cf. Kuroda 1965). In recent years, there has been a surge of interest in the role of prosody in disambiguating those indeterminate wh-words (e.g. Fu 2002; Dong 2009 for Chinese, Ishihara 2002; Sugahara 2003 for Japanese, Jun & Oh 1996; Yun 2012 for Korean, among others). While the majority of the studies confirm the importance of phonological phrasing, i.e. wh-questions create a single prosodic domain which starts with the wh-phrase and ends with the complementizer (cf. Richards 2010), it has received relatively less attention whether the sentence-final tone has influence on the interpretation of the sentences containing wh-indeterminates. In Korean, sentence-final intonation has been known to signal different types of sentences: declarative sentences and wh-questions show final falling intonation, while yes/no-questions have rising intonation (Martin 1951, K.-M. Lee et al. 1984, C.-S. Suh 1989, Heo 1991, I.-S. Lee & Ramsey 2000, Kwon 2002). Although the sentence-final tone does not distinguish different readings of wh-words, one might expect that it can provide at least a partial clue. Moreover, Hwang (2007) argues that when a declarative reading is excluded by context, the sentence-final tone plays a decisive role in disambiguating the meaning of whwords. In this paper, however, I present a perception experiment suggesting that the interference of the sentence-final tone is overridden by a phrasing effect in Korean, thus not as strong as argued in Hwang (2007).

Procedure: A perception experiment was conducted to compare the effect of the sentence-final tone and phonological phrasing. As a theoretical assumption for phonological phrasing, this paper adopts the argument by Jun (1993) that in *wh*-questions, a *wh*-word and the following word must be in the same AP (Accentual Phrase) in Korean. According to Jun (1993), certain phonological processes such as intersonorant *h*-deletion can only occur within an AP. Thus the target sentences were designed to contain a *wh*-phrase ending with a vowel, followed by a word starting with /*h*/ to test different phrasing effects. All sentences ended with a neutral intimate ending that can be used for either assertion or question. As a result, three different readings were available for each sentence: i) declarative, ii) yes/no-question, iii) *wh*-question.

(1) Example of Stimuli

næ il mwə halkəja tomorrow what do

i) 'I'm going to do something tomorrow.' (DECL)

ii) 'Are you going to do something tomorrow? (YN-Q)

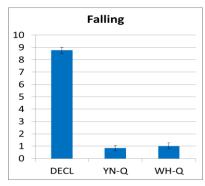
iii) 'What are you going to do tomorrow?' (WH-O)

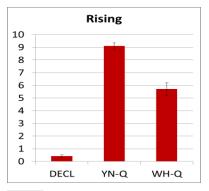
Each sentence was read by a Seoul Korean speaker with four different types of prosody, as two factors varied in each repetition: i.e. whether the sentence-final tone was falling or rising, and whether the post-wh h-sound was maintained or deleted. In total, 24 stimuli (2 sentences \times 4 prosody types \times 3 context types) mixed with fillers were presented to 24 Seoul Korean speakers. For each sentence, the participants read a written scenario that facilitated one of the three different readings as illustrated in (1), listened to the target sentence recorded in one of the four prosody types, and rated the acceptability of the sentence in the given context.

Results: There was a sharp contrast between the results with and without h-deletion. When h-deletion did not occur, there was a clear association of the sentence-final tones with sentence types: a falling tone created a strong bias toward a declarative reading, while a rising tone did toward a yes/no-question reading as in (2). On the other hand, if h-deletion occurred, the sentence-final tone did not help

distinguish the meaning of the sentence: a *wh*-question reading was strongly preferred regardless of the sentence-final tone as in (3).

(2) Acceptance rates without *h*-deletion

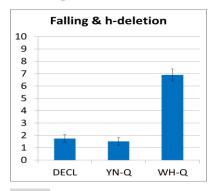


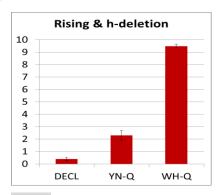


DECL>YN-Q=WH-Q (**)

YN-Q>WH-Q>DECL (**)

(3) Acceptance rates with *h*-deletion





WH-Q>DECL=YN-Q (**)

WH-Q>YN-Q>DECL (**)

Conclusion: The results of the experiment in this study demonstrate that the effect of phonological phrasing overrides the influence of the sentence-final tone in deciding the meaning of the sentence containing *wh*-words. Thus this study reinforces the findings in the previous studies (Jun & Oh 1996 and Yun 2012) that phonological phrasing is a primary prosodic factor to decide the meaning of *wh*-words in Korean. It further supports the argument that creating a single prosodic domain is cross-linguistically a crucial factor in forming *wh*-questions (Richards 2010).

Selected References

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