

# **Intonational Characteristics of Korean Focus Realization by American Learners of Korean**

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## **1. Introduction**

The information structure is closely related to the contextual meaning of utterances. Thus, it is very important to understand the information structure of sentences in order to promote the mutual understandings in verbal communicational situation. In many languages, including Korean, the information structure is conveyed by prosodic cues. In other words, the informative or important entities in utterances are focused and the focused items are usually accompanied by changes in intonational characteristics. This study aims to examine such intonational characteristics of marking focus of Korean language produced by English learners of Korean based on K-ToBI(Korean Tones and Break Indices) labeling system(Jun, 1993). The phonological and phonetic characteristics of marking focus by English learners of Korean are compared to those by Korean native speakers.

## **2. Experiment**

The production tests consist of two experiments. The experimental sentences of each experiment are designed to have same surface structure. In this case, the prosodic differences are primary cues to convey the meaning differences in the sentences with the same word order. The two experiments are designed to show each subject group's competence of understanding focus structure of Korean and producing the sentences with proper prosodic structure.

The subject pool consists of 8 English learners of Korean and 5 Korean native speakers. The English learners are divided into two groups according to their fluency in Korean language, and the differences of focus realization between each group are observed.

### **2.1 Experiment 1**

First, in <Experiment 1>, each material set is given with various focal contexts. That is, one set of material sentences are identical, but the only difference is the focus position in the sentences. The different focus positions are led by the various wh-

questions like who, what, when, where, why, or how. Experimental material consists of 14 sets of experimental sentences. Material set which has same surface structure given with 4 different focus context is as follows.

nuga goyaQiege gwazarIR mEGyEyo?	누가 고양이에게 과자를 먹여요?
minaga goyaQiege gwazarIR mEGyEyo	<b>미나가</b> 고양이에게 과자를 먹여요.
minaga muEDege gwazarIR mEGyEyo?	미나가 무엇에게 과자를 먹여요?
minaga goyaQiege gwazarIR mEGyEyo	미나가 <b>고양이에게</b> 과자를 먹여요
minaga goyaQiege mwER mEGyEyo?	미나가 고양이에게 뭘 먹여요?
minaga goyaQiege gwazarIR mEGyEyo	미나가 고양이에게 <b>과자를</b> 먹여요
minaga goyaQiege gwazarIR PADnayo?	미나가 고양이에게 과자를 뺏나요?
minaga goyaQiege gwazarIR mEGyEyo	미나가 고양이에게 과자를 <b>먹여요</b>

In Experiment 1, Several differences of intonational patterns between Korean and American speakers are found

### 1) Dephrasing

When a word is focused, the focused word and its subsequent word are dephrased. In other words, AP boundary between the two words disappears. Koreans tend to dephrase post-focus words more often than Americans. Characteristically, Koreans frequently dephrase the post-focus word In three specific phrases; a) pronoun + noun - 83%, b) object + verb -87%, c) adverb + verb - 81%. Even in such specific phrases, dephrasing is rarely observed in Americans utterances; a) 5%, b) 12%, c) 8%

Additionally, some of the pitch contour of American's utterances resembles 'deaccentuation' phenomena of English. Deaccentuation is the most important characteristics of English focused sentences. Deaccentuation means the phenomenon that the pitch accent on the particular element disappears and loses the property of intonational prominence and undergoes significant F0 drop. In 49% of the Americans' utterances, negative transfer from their mother tongue (deaccentuation) is found

### 2) AP-initial H tone

While Koreans never put H tone on the first syllable of AP(0%) even though the AP contains focus, Americans often produce AP-initial H tone as focus marker(67%). Koreans usually put H tone on the second syllable of AP as a focus marker, but, Americans put H tone not on the second syllable but on the first syllable

### 3) IP-initiation

Koreans initiate a new IP with a focused word more often(38%) than with a neutral word(3%). Just before producing focused word, Koreans sometimes make slight pauses (IP boundaries) in order to give prominence on the next word, starting a new IP. Americans also initiate new IP(59%), but IP initiation does not seem to be related with focus marking. Frequent IP initiations are also found in neutral sentences(62%). It can be inferred that American's frequent IP initiation is due to their disfluency in Korean speech. It means that, for Americans, boundary tones are not used as a focus marker

## 2.2 Experiment 2

Next, in <Experiment 2>, each material set contains wh-questions and indefinite questions. In Korean language, wh-questions and indefinite questions are identical in their surface structure, but the requested answer to each question is totally different. Wh-questions require specific responses to the very wh-words and thus the relevant answers are always focused. The indefinite questions also contain wh-word forms but they specify nothing, thus the answer appears as either yes or no. One example of the material set is as follows.

a) Indefinite question

<b>nunaga Edie gaDda waDnayo?</b>	누나가 어디에 갔다 왔나요 ?
Aniyo, nAnA ziBe iDEDEyo	아니요, 내내 집에 있었어요.

b) Wh-question

<b>nunaga Edie gaDda waDnayo?</b>	누나가 어디에 갔다 왔나요?
nunaga zezudoe gaDdawaDEyo.	누나가 제주도에 갔다 왔어요

In Experiment 2, Several differences of intonational patterns between Korean and American speakers are found

### 1) Dephrasing

Koreans never dephrase(0%) the word following indefinites but they tend to dephrase(68%) the word following interrogatives. Otherwise, Americans do not make clear intonational distinction between sentence (a) with indefinites and sentence (b) with interrogatives

### 2) Tonal shape of IP boundary

In indefinite questions, Koreans most frequently use H boundaries (87%) and never use L boundaries, while Americans produce H, LH and L boundaries as similar rates. In wh-question, Koreans frequently use HL boundaries(54%) and also use LH boundaries(39%) often. However, Americans do not produce HL boundaries at all, and only a few utterances are produced with LH boundaries.

Characteristically, Americans (advanced level) produce L boundaries often(45%) in wh-questions. It seems that this tendency is due to the interference from their mother

tongue. In English, wh-question is usually produced with L boundary tones. It seems that the L boundary tones of English wh-question bring on the negative transfer to their production of Korean interrogative question.

### 3) Pitch range of boundaries

Pitch range of boundaries means the value of the gap measured between H and L on the utterance final position. In Korean, F0 range of boundaries in indefinite question is much wider than those in wh-question. Otherwise, Americans show almost same F0 range between indefinite questions and wh-questions

### 4) Pitch range of indefinites or interrogatives

Pitch range of indefinites or interrogatives means the value of the gap measured between H and L on indefinite words and interrogative itself. Korean people show a significant gap of F0 range between indefinite words and interrogatives. The pitch range of interrogative is much wider than that of indefinite words. On the other hand, Americans do not show the gap of F0 range between indefinite words and interrogatives. It seems that Americans do not distinguish the two different kinds of questions with proper prosodic cues

## 3. Discussion and Conclusion

In every material used in experiment 1 & 2, intonation could be a primary cue to manifest different focus structures. Americans (especially the intermediate levels) tend to produce the utterances regardless of the contextual meaning of sentences. If the sentences are produced with inappropriate intonation, it is hard to convey the exact focus structure and their accurate contextual meaning. In order to enhance communicative competence, the trial to teach appropriate intonation which is suitable for the contextual situation is needed.

Most of all, more specific and concrete intonational education system for foreigners should be prepared. Among the Americans' utterances, We have observed some negative transfers from their mother tongue. In order to avoid such negative transfer, scientific and systematic understanding of the differences of intonational system between the two languages should be preceded. And then, phonological and phonetic characteristics of tonal implementation of Korean focus which is different from that of English focus should be provided for foreigners.

Again, Intonation should not be taught in isolated situation. In order to avoid misunderstandings in communicative circumstances, it is important to teach appropriate intonation to the context. It should be noticed that sentences with same surface structure can be produced with various tonal patterns according to their focus structure and contextual situation.

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