

# THE PROSODIC TYPOLOGY OF KYUNGSANG KOREAN

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**ABSTRACT** - The typological characteristics of stress languages, tone languages, pitch-accent languages, and stress-pitch languages are investigated. Based on the discussion of prosodic typology, the prosodic type of Kyungsang Korean is examined. It is argued that Kyungsang Korean can be treated both as a tone language with tone neutralization and tone modulation processes and as a pitch-accent language with two marked tones.

## INTRODUCTION

The discussion concerning the prosodic type of Kyungsang Korean<sup>1)</sup> has been controversial. Some scholars treated this dialect as a tone language (Huh 1954, Gim 1988/1993, etc.) and others as a pitch-accent language like Japanese (Ramsey 1978, S.O.Lee 1990, etc.).

In this paper, I will discuss the typological characteristics of stress languages, tone languages, pitch-accent languages, and stress-pitch languages. Based on this discussion, I will investigate the prosodic type of Kyungsang Korean.<sup>2)</sup>

## PROSODIC TYPOLOGY

### Stress Languages

The stress language is a type of language which has linguistically significant stress. In stress languages, (primary) stress is assigned to only one syllable of a word on the phonological level. The function of this type is called 'culminative function'.

Stress languages are classified into free stress languages and fixed stress languages. In free stress languages, stress has a distinctive function and stress placement is lexically determined. In fixed stress languages, on the contrary, stress does not have a distinctive function and stress placement is predictable by rule.

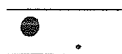
In stress languages, stress functions to attract the hearer's attention to the focused element(s) of a sentence (accentual function). Stress also functions as a rhythmic beat (rhythmic function). And stress is essential for the rule formulation and explanation of certain phonological processes.

In stress languages, pitch of individual syllables of a sentence is determined by intonation and thus the pitch relationship between adjacent syllables is easily changed. The change in pitch relationship causes the difference in intonational meaning, but not in lexical meaning.

In English, for example, the second syllable of the word 'city' is pronounced lower than the first syllable when this word is said in isolation. But when this word is uttered as an echo question, the second syllable is pronounced higher than the first syllable. Whether the second syllable is pronounced lower or higher than the first syllable, the lexical meaning of the word 'city' does not change.

(1) city

a. in isolation



b. as an echo question



### Tone Languages

The tone language is a type of language in which pitch has a distinctive function and tone, distinctive pitch, is assigned to each syllable of a word on the phonological level. Since intonation is largely determined by underlying tones, the pitch shape of individual tones is maintained in intonation contours and the pitch relationship between adjacent syllables cannot be easily reversed on the phonetic level.

In Chinese, for example, the intonation of the sentence “Wǒ xing Wáng. (My name is Wang.)” ends in a rising contour whereas that of the sentence “Wǒ xing Lù. (My name is Lu.)” in a falling contour (Shen 1990: 69). This intonational difference is caused by the different tones assigned to the final words.

- (2) a. Wǒ xing Wáng.    ↘    ↓    ↗  
b. Wǒ xing Lù.        ↘    ↓    ↓

### Pitch-Accent Languages

The pitch-accent language is a type of language which has distinctive pitch accent. The pitch of individual syllables (moras) is determined by rule on the phonological level. Since intonation is constrained by the underlying pitches, the pitch relationship between adjacent syllables (moras) cannot be easily reversed by intonation as in tone languages.

Typologically, the pitch-accent language is closer to the stress language in that pitch accent falls on only one syllable of a word. But the pitch-accent language is much closer to the tone language in that intonation is constrained by the underlying pitches imposed on individual syllables on the phonological level.

In Japanese, a typical pitch-accent language, the accented mora and the preceding mora(s) attract the high tone and those following the accented mora receive the low tone. In words with no accented mora, the high tone is assigned to all the moras. And the high tone of the first mora is changed to the low tone if this mora does not attract pitch accent (McCawley 1968).

- (3) a. máinichi (everyday): HLLL  
b. kamíkaze (god wind): LHLL  
c. tamanégi (onion): LHHL  
d. ototó (younger brother): LHHH  
e. tomodachi (friend): LHHH

In Japanese, the word /kami/ conveys the meaning ‘god’ if the first mora receives pitch accent whereas this word delivers the meaning ‘paper’ if the second mora receives pitch accent.

(4) /kami/

a. 'god'



b. 'paper'



When the word for 'god' is uttered as an echo question, the second mora may be pronounced with a slightly rising pitch. But the second mora is never pronounced higher than the first one.

#### Stress-Pitch Languages

The stress-pitch language is a type of language which has a distinctive stress as well as distinctive tones. In stress-pitch languages, stress falls on one syllable of a word and a distinctive tone is assigned to the stressed syllable on the phonological level.

The stress-pitch language is typologically closest to the stress language in that the pitch of individual syllables of the word is determined by intonation and the pitch relationship between adjacent syllables may be changed by intonation. But the pitch shape of the underlying tone assigned to the stressed syllable is maintained no matter what intonation pattern is imposed on the sentence.

In Swedish, a stress-pitch language, the falling tone can be placed only on the first syllable while the rising tone can be assigned to non-initial syllables. Hence the falling tone and the rising tone are contrastive in the first syllable.

- (5) a. égen (own), idé (idea), analys (analysis)  
b. ànde (spirit), pojke (boy), flicka (girl)  
c. ánden (the duck) : ànden (the spirit)  
d. búren (the cage) : buren (carried)

When any of these tones occurs in the focused part of a sentence, the pitch shape of this tone is maintained in the intonation contour. Even when any of these tones appears in a non-focal position, the pitch shape of this tone is reflected on the intonation contour with slight modification (Cruttenden 1986: 11).

#### THE PROSODIC TYPE OF KYUNGSANG KOREAN

Kyungsang Korean has three contrastive tones — high, mid and low. Hence three different meanings of the word /mal/ is distinguished by these tones.

- (6) a. /màl/ (low tone): 'language'  
b. /mäl/ (mid tone): 'Korean unit of volume'  
c. /mál/ (high tone): 'horse'

The high and mid tones are not clearly distinguished in the citation form of monosyllabic words. These tones become perceptually distinct when the subject marker 'i', which bears the mid tone, follows.

- (7) a. māl + i      b. māl + i      c. mál + i
- 

In Kyungsang Korean, tone is assigned to each syllable of a word on the phonological level. Since intonation is governed by underlying tones, the pitch relationship between adjacent syllables cannot be easily reversed on the phonetic level. Hence Kyungsang Korean is basically a tone language.

For example, the word 'hakk̃jo (school)' attracts the high tone on the first syllable and the mid tone on the second syllable. Whether this word is uttered in the citation form or as an echo question, the second syllable is never pronounced higher than the first syllable because of the underlying tones.

- (8) /hakk̃jo/
- a. in the citation form      b. as an echo question
- 

In Kyungsang Korean, the first low or mid tone of a rhythm unit functions to neutralize the following tone(s) to the mid tone. This phenomenon is called 'tone neutralization'.

- (9) a. /hobakk̃ot/ (pumpkin flower): /LMH/ → [LMM]  
 /dwitt̃ari/ (hind leg): /LHH/ → [LMM]  
 b. /bess̃aram/ (seaman): /MLM/ → [MMM] → ([HHM])  
 /benamu/ (pear tree): /MHH/ → [MMM] → ([HHM])  
 c. /dzagait̃ol/ (pebble): /HHL/ → [HHM] → ([MHM])  
 /hañllara/ (heaven): /HMHM/ → [HMMM]

When a word begins with more than one mid tone, the first two mid tones are changed to the high tone. And when a word begins with more than one high tone, the first high tone is relegated to the mid tone. This phenomenon is called 'tone modulation'.

- (10) a. /muldzannan/ (dabbling in water): /MMM/ → [HHM]  
 /galmegi/ (seagull): /MMM/ → [HHM]  
 b. /noml/ (evening glow): /HH/ → [MH]  
 /sadari/ (ladder): /HHH/ → [MHH]  
 /k̃ot̃p̃at̃es̃/ (at a flower garden): /HHMM/ → [MHMM]

Kyungsang Korean, therefore, is a tone language with tone neutralization and tone modulation processes.<sup>3)</sup> Because of these processes, the surface tonal patterns of Kyungsang Korean look similar to those of Japanese.

The low and mid tones in Kyungsang Korean can be regarded as 'marked' tones in that these tones function to neutralize the following tone(s). Since there appears only one marked tone within a word, these two marked tones can be regarded as pitch accents. The pitch of the rest of the syllables can be predicted by rule, which is similar to the above-mentioned Japanese accent rule. The syllables following the accented syllable attract the mid tone and those preceding the accented syllable the high tone. And the high tone of the unaccented first

syllable is changed to the mid tone. Hence Kyungsang Korean can also be treated as a pitch-accent language with two marked tones.

## CONCLUSION

So far, I have discussed the typological characteristics of stress languages, tone languages, pitch-accent languages, and stress-pitch languages. The brief summary of this discussion is as follows:

**Stress Languages:** Pitch of individual syllables of a sentence is determined by intonation on the phonetic level and thus the pitch relationship between adjacent syllables is easily changed. There is linguistically significant stress.

**Tone Languages:** There are distinctive tones. Tone is assigned to individual syllables of a word. Intonation is governed by underlying tones and therefore the pitch relationship between adjacent syllables is not easily reversed.

**Pitch-Accent Languages:** Distinctive pitch accent is assigned to only one syllable (mora) of a word. The pitch of individual syllables (moras) is determined by rule on the phonological level. Intonation is constrained by underlying pitches and thus the pitch relationship between adjacent syllables (moras) cannot be easily reversed.

**Stress-Pitch Languages:** There is a distinctive stress as well as distinctive tones. Stress falls on one syllable of a word and a distinctive tone is assigned to the stressed syllable on the phonological level. The pitch of individual syllables except the stressed syllable is determined by intonation and the pitch shape of the underlying tone assigned to the stressed syllable is maintained no matter what intonation pattern is imposed on the sentence.

Based on the discussion of prosodic typology, the prosodic type of Kyungsang Korean is examined.

It is argued that Kyungsang Korean is obviously a tone language because this dialect has three contrastive tones and tone is assigned to individual syllables of a word. It is noted that intonation is governed by underlying tones and the pitch relationship between adjacent syllables is not easily reversed. Tone neutralization and tone modulation processes occurring in Kyungsang Korean are also discussed.

It is also argued that Kyungsang Korean can also be regarded as a pitch-accent language with two marked tones — the low and mid tones. It is argued that there appears only one marked tone in a word and thus the marked tone can be treated as pitch accent. It is noted that pitch of individual syllables of a word is determined by rule which is similar to Japanese accent rule and intonation is constrained by underlying pitches.

## NOTES

- (1) Kyungsang Korean is a dialect of southeast Korea. In this paper, Kyungsang Korean refers to the dialect spoken in Pusan city, located in the southeastern coast of Korea.
- (2) The Content of this paper is based on H.Y.Lee (1990, 1993).
- (3) See Gim (1988, 1993) for detailed discussion of these processes.

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