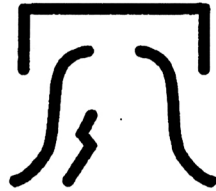


Proceedings

October 3-6, 1996
Wyndham Franklin Plaza Hotel
Philadelphia, PA, USA

ICSLP 96



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University of Delaware
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Fourth International Conference on Spoken Language Processing

THE PROSODIC ANALYSIS OF KOREAN DIALOGUE SPEECH - THROUGH A COMPARATIVE STUDY WITH READ SPEECH -

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ABSTRACT

This paper describes the prosodic features of Korean dialogue speech. With 25 sentences for scheduling, one speaker uttered in two manners, viz. 'read' and 'dialogue'. The main discriminating features would be some aspects in speech rate and boundary signal. We discriminated each prosodic phrase in a sentence to investigate pre-boundary, boundary, and post-boundary features. The durational aspect in dialogue speech shows much more drastic characteristics than that in read. We can see that the boundary syllables of dialogue seem to be 2.3 times longer than that in preboundary syllable. The final syllables are about 1.7 times longer than prefinal syllables.

Pitch analysis shows that dialogues are pronounced 14.3 % higher than read. Emotional factor of dialogue seems to raise the average pitch. It was interesting that the minimum pitch values are about 72 % of sentential mean for both similarly. In dialogue, there was great difference between the pitch of prefinal and that of final syllable, i.e., the final syllables are almost 15 % higher.

The results confirms our general ideas that 1) the duration is more dynamic in dialogue than in read speech, 2) pitch contour fluctuation is larger in dialogue than in read speech, 3) dialogue is usually uttered in higher tone, 4) and sentential final part may play an decisive role in speech style determination.

1. INTRODUCTION

This study aims to describe the prosodic features of Korean Dialogue Speech in the viewpoint of various acoustic phonetic parameters. Dialogue speech is told that it is strongly related to the spontaneous circumstance among speakers involved in communication and also tends to be uttered in rather irregular speech rate.

Accordingly, there can be no denying that the prosodic features of dialogue must be coupled with the general characteristics of its proper speech style. As everyone expects easily, dialogue speech seems to show more various speech rate, higher F_0 fluctuation, and variety of accent placement in a sentence, which may be

concerned with both emotional aspect of speaker and direct conversational situation. These characteristics may control the prosodic features of dialogue speech with primary importance. Our efforts was focused on duration and F_0 among the main acoustic parameters.

The general characteristics of dialogue speech can be summarized as follows.

- * Insertion of various interjections
- * Omission
- * Simplified expression
- * Self-correction
- * Hesitation
- * Unintentional or Intentional repeating
- * Expressions presenting turning point
- * Floor-holding vocalization
- Disfluencies
- * Filled pauses
- * Dynamic variation of prosody
- * Weak grammar
- * Too much coarticulation
- * Careless speech
- * Uncontrolled speech rate - Bursts of faster & slower section
- * Much greater variation in F_0
- * To have many different communicative purposes
- * Topicalization - narrowly focusing
- * Insertion of useless expressions

2. EXPERIMENT

2.1. Material

25 scheduling sentences, which were selected from the ETRI(Electronics and Telecommunications Research Institute) spontaneous speech corpus, were used. Each sentence does not exceed one line, more precisely, is composed of 9 - 26 syllables.

2.2. Subject

The subject is male in his early 30s. And he is not only well educated in Seoul area but also has a prominent talent in