# The Factors Influencing the phoneme duration in Korean Spontaneous Speech

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#### 1. Introduction

The goal of this paper is to investigate phonetic characteristics of Korean spontaneous speech. Especially, it focuses on the duration of phoneme and the influence of surrounding environments upon the phoneme duration. This experiment aims to investigate natural speech which is a difference in methodology with former experiments which concentrated on reciting prepared list of items.

## 2. Materials and informants

The materials analyzed here were recorded from live talk TV programs. The informants who participated in this experiment are 10 males.

### 3. Methods

In this experiment speech of each of the informants was transcribed and the duration of every phoneme was measured. The changes of the inherent duration caused by the surrounding sounds and changes attributed to a speaker were investigated and the average duration was presented.

#### 4. Results

Among the factors influencing the duration there are the speech tempo, the preceding sounds, the speaker's individual features and the focus. In this experiment the preceding sounds proved to be the most important of all. The preceding sounds affect the duration much more than the speech tempo or the personal features of the speaker. Moreover, the focus structure, as well as the phonetic structure of natural speech and prosodic characteristics are important factors but those elements should be dealt with within the information structure of natural speech.

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