



Voice Onset Time of Plosives in L2 English of Turkish Speakers

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Abstract

Voicing is one of the primary segmental features of consonants in all natural languages. Voice Onset Time (VOT) has been determined to be the most prominent indicator of the voicing property of consonants. However, it can only be measured for plosives, since there is a clear time interval between the burst of the plosive and the closure of the vocal folds. Research has proved that voiced plosives have negative VOT, whereas voiceless plosives have positive VOT in most languages. This basically means that vocal folds start to vibrate before the burst of voiced plosives, while they have delayed vibration for voiceless plosives. VOT, which has also been suggested to be a factor in determining non-native accent, has been measured for a number of languages. We can assume that VOT values of plosives in a second language of learners bear similarities to those of the first language rather than to those of the second language. Therefore, this study aims to analyze the VOT values in English spoken by Turkish speakers of English. The study serves to distinguish Turkish-accented English with digital means. The participants were proficient and fluent speakers of English. They read some carrier words containing syllabi starting with the six plosives (/p/, /b/, /t/, /d/, /k/, /g/) in English, and they were recorded with the help of a PC and an omni-directional microphone in a sound-treated environment. VOT values were measured using Praat version 5.3.63. Obtained VOT values from the recordings were compared with existing, standard VOT values previously identified for both English and Turkish. Our findings demonstrated that proficient Turkish speakers of English articulate plosives in a rather dissimilar fashion to that of native speakers of English.