Acquisition of English Voiced Stop in Word Initial Position: Correlation with Vowel Height

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Abstract

Korean stops are 3 system: aspirated, fortis, lenis, whereas English stops are 2 system: voiced, voiceless. Because in Korean, lenis stop is realized by slight aspirated voiceless stop, it is likely to produce English word initial voiced stop as voiceless stop. We divide subjects into three group-native, experienced, unexperienced- and investigate differences between group. VOT of experienced group is same as native group, but VOt of unexperienced group is longer than native group. VOT of unexperienced group is 1.8 times than native group.

We survey whether the height of following vowel influences VOT of initial stop. As a result, for all group, VOT followed by low vowel is shorter than VOT followed by high vowel. But this tendency is more salient in unexperienced group. For high vowel, VOT of unexperienced group is 2.05 times than native group, whereas for low vowel, it is just 1.55 times. The unexperienced pronounce well English word initial voiced stop followed by low vowel than high vowel.

Samples are divided into two group according to type of coda consonant- nasal and voiceless stop. But average of VOT is similar and there is no significant difference between two groups. There is no influence by type of coda consonant.

The average of phrases is compared to the average of isolated words. In the case of natives and experienced, there is no significant differences between phrases and words, but in the case of unexperienced, VOT of phrases becomes shorter than words. But VOT of unexperienced is still longer than native group.