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Vowel insertion in child speech

Abstract

The importance of word syllable structure acquisition by children can hardly be doubted. In 3-year-olds speech, there are specific patterns that, from the viewpoint of adult standards, are considered misnomers: examples of syllable elision, consonant elision and vowel insertion. It is believed that vowel insertion in adult native speakers of Russian occurs due to physiological reasons. However, according to the hypothesis, in child's speech it is a vowel phoneme that occurs between consonants and it leads to a change in the word syllable structure. The results of an acoustic study of vowel insertion in two-syllable words produced by three 3-year-old subjects showed well-expressed F-structure that was similar to the surrounding vowel phonemes. 2 types of vowel insertions were discovered: with [a]-like F-structure and [i]-like F-structure. It was also found that vowel insertion mean duration was no different from the one of a "legitimate" vowel phoneme with similar acoustic pattern. 20 Russian native speakers performing a discrimination task during a perceptual study were unanimous in perceiving the number of syllables increase as a result of vowel insertion being interpreted as a "legitimate" phoneme presence. The participants were also unanimous in the phoneme affiliation of the vowel insertions that closely correlated with their F-structure.

Keywords: vowel insertion, syllable, consonant, child speech, acoustic analysis, perceptual experiment.