Abstract and Key Words

The aim of this thesis is to investigate segmental duration as an acoustic correlate of word stress in connected spontaneous speech in English. To lay the groundwork for this investigation, the theoretical part provides wide description of different aspects of the following three associated topics – speech rhythm, word stress and segmental duration. The practical study then aspires to reexamine the notion that stressed vowels are longer in duration than unstressed vowels which has been previously concluded from the analysis of controlled material and attest to whether the longer duration of stressed vowels in comparison to unstressed vowels is relevant for connected spontaneous speech. The analysed material is compiled from the recordings of connected speech of 8 British and 8 American speakers engaging in political debates. The analysis consists of the extraction of temporal information of stressed and unstressed vowels that is subsequently analysed in comparison between the two varieties of English and in terms of other aspects shown to affect segmental duration such as phonological vowel length or the nature of the following segment. The results of the study indicate that stressed vowels can be said to be longer in duration than unstressed vowels in connected speech of both examined varieties of English. The results further attest to inherent phonological length as a factor affecting segmental duration and suggest that the previously established notion of pre-fortis shortening proves to be more pertinent in monosyllabic words.

Key words: speech rhythm, words stress, acoustic correlates, vowel duration, connected speech