Abstract

It has been established that listeners perceive intonation only in certain parts of the fundamental frequency (F0) contour. Descriptions of melodic patterns are often based on F0 values in vowels. However, pitch can be controlled also in sonorants (nasals, approximants), which can be part of syllabic codas in Czech. The aim of this thesis was to compare syllables with a sonorous coda and without a coda, and to examine whether the F0 contours are more similar in the domain of the syllabic nucleus or rather in the domain of the syllabic rime. The material consisted of a two-hour collection of audiobook samples recorded by sixteen professional actors. The analysis used multiple methods – representing F0 contours by selected discrete points, modelling the whole F0 contour with Legendre polynomials, and functional principal component analysis (FPCA).

The results indicated that the syllabic rime represents the domain relevant for the production of functional melodic patterns (melodemes) in Czech. F0 contours in syllabic rimes showed more similar values of span (across both types of syllables) than F0 contours measured in syllabic nuclei. Their shapes were also more comparable when syllabic rimes were considered. In syllables with a sonorous coda, the relationship between the slope of the F0 contour in the syllabic nucleus and in the following sonorous coda was found to be quite variable. In most cases, the slope remained relatively uniform for both phones, but distinct changes in the direction of the F0 contour were also common. These findings should be followed with perception experiments that would test listeners' sensitivity to F0 variations in sonorous codas and thus provide further insight into the question of the domain of melodic patterns in Czech.

Keywords: fundamental frequency, nuclear pitch accent, melodic pattern, syllabic coda, melodic compression, melodic truncation