
This paper examines the extent to which the existence of lexical/phonological contrasts affects variation in the acoustic properties that cue the contrast in Serbian, a language with a relatively small inventory of five vowel qualities, a phonemic vowel length and a lexical contrast between 'rising' and 'falling' accents with 'late' and 'early' F0 peak alignment, respectively. Three native speakers of Serbian (one male, two females) produced the same target words in sentence-initial position with either broad or narrow/contrastive focus. Vowel duration, vowel formant frequencies and F0 peak alignment with respect to the end of the accented vowel were measured. The results show that in order to achieve distinctiveness in conveying contrastive information, speakers enhance some but not all phonological distinctions. The vowel length contrast is exaggerated in narrow focus through an asymmetrical lengthening of long and short vowels (short vowels are lengthened less than long vowels). Similarly, asymmetric patterns of F0 peak retraction serve to enhance the lexical pitch accent contrast (the amount of retraction for the 'falling' accents is larger than for the 'rising' accents). Finally, the vowel space is expanded only marginally in narrow focus presumably due to the small number of contrastive categories (unlike in English with a large vowel inventory). These results suggest that speaker's choice of which acoustic cues are enhanced is guided by a language's phonological properties as well as the minimization of effort to achieve the distinctiveness. The implications of these results for the Theory of Adaptive Dispersion are discussed (Lindblom 1986, 1990).