A PERCEPTION TEST OF PROSODIC FEATURES IN STANDARD SERBO-CROATIAN

Jadranka Gvozdanović, Slavisch Seminarium, Universiteit van Amsterdam,

Amsterdam, Holland

The paper discusses the possibility that in some cases more than one hypothesis can be formed concerning a grammatical description, and that none of these hypotheses are rejected.

A perception test of prosodic features in Standard Serbo-Croatian is described. Serbo-Croatian is a South Slavic language, in which the basic unit of prosody is the so-called prosodic word. Prosodic word boundaries are indicated by means of a non-rising pitch which is followed by a high pitch. Within a prosodic word, only rising pitch is followed by a high pitch. The end of each prosodic word is characterised by a non-rising pitch. One non-final syllable nucleus in a prosodic word has a distinctive rising vs. falling pitch, which coincides with the place of the accent. Acoustically, the [+rising] pitch equals a rising fundamental frequency which is followed by a high fundamental frequency in the next following syllable, whereas the [-rising] pitch equals a non-rising non-falling fundamental frequency which is followed by a low fundamental frequency. The syllables following the one with the distinctive pitch are acoustically falling, and those preceding it, non-rising non-falling. (This is valid for prosodic words spoken in isolation. Under the influence of sentence intonation, regular modifications occur.)

I did a perception test with native speakers of Standard Serbo-Croatian in order to establish phonetic correlates of the place of the accent in a prosodic word. The parameters of fundamental frequency contour (expressed as a percentage of the duration of the syllable nucleus prior to the occurrence of the peak), maximal value of the fundamental frequency (expressed in Herz, transformed in a logarithmic measure), and duration of the syllable nuclei (expressed in milliseconds), were correlated with perception data. There are two hypotheses which are not rejected by the test: 1) the syllable with the rising fundamental frequency, or in its absence the first syllable in a prosodic word, which has a non-rising non-falling fundamental frequency, is accented, or 2) the last syllable in a prosodic word which is characterised by a non-falling fundamental frequency is accented.

The possibility that the second hypothesis cannot be rejected can be seen as a source of language innovation. In the Standard Serbo-Croatian prosodic system, the [-rising] pitch could originally be accented only in the initial syllable of a prosodic word, whereas the [+rising] pitch could be accented in any non-final syllable. In new compounds, however, a [-rising] pitch can be perceived as accented even when occurring in a non-initial syllable.