

DURATION DIFFERENCES AS A CUE FOR CONSONANT GRADATION IN LAPPISH

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Introduction

In Lappish as in e.g. Finnish there is a systematic change of the stem consonant in words which belong to the same inflection category. This change is found throughout the vocabulary. It functions as a marker of case for nouns and as a marker of person and number for verbs.

The aim of the present investigation has been to detect the possible role of duration differences as a cue for consonant gradation within a limited area of Lappish, viz. the Jukkasjärvi dialect spoken in the Kiruna district in Swedish Lappland.

Material and method

Recordings were made of 10 adult male speakers who read a word list of 28 words. The words were of the type $(C_1)V_1C_2V_2$, where C_2 is a dental/alveolar stop or fricative. All the words were said in the same frame sentence. Sonagrams were made, and the duration of the segments V_1 , C_2 , and V_2 was measured.

Results

The results show that there is a close and regular relation between the duration of the stem consonant/parts of the stem consonant of the strong and the weak grade.

Phonetically, the results may be regarded as making up two groups. In one group the duration of C_2 is significantly longer in the strong grade than in the weak grade. The other group may be divided into two sub-groups: (1) the pre-aspiration part of the consonant in relation to the closure part of the consonant is longer in the strong grade than in the weak grade, and (2) the voiced part of the closure in relation to the unvoiced part of the closure is longer in the strong grade than in the weak grade. The results from a listening test seem to confirm these results.

Phonemically, the results of the material investigated seem to suggest the induction of the following tentative generative rule in Lappish: There is an element in the stem consonant whose duration in relation to the rest of the consonant is a predominant factor both productively and to some extent perceptively. This part of the stem consonant is of vital importance to divide the strong grade from the weak grade.