

EXAMPLES OF SOME SYNTHESIZED HUNGARIAN SENTENCES

Antti Sovijärvi, Department of Phonetics, University of Helsinki, Vironkatu 1 B, 00170 Helsinki 17, Finland

As the basis for my speech synthesis investigation of Hungarian I have made use of the spectrographic material which accrued during the course of my analysis of the intervocalic alveolo-palatals /c, ʃ, ɲ/ (Sovijärvi, 1975a, 1976). In my first sentence synthesis tests I used unmodified parameter values for the subordinate phases of the realisations of the sounds in accordance with this data. I concluded that although it was unnecessary to use five subordinate phases for any phoneme occurring - this holds true for both geminates and single consonants as well as for long and short vowels - taking only two phases into consideration would have been insufficient. After numerous experiments I arrived at the compromise that for model synthesis of each sound realisation utilization of four subordinate phases is a methodologically practicable strategy at this stage.

The program used to control the OVE IIIb synthesizer from the HP2000 computer was written by Marita and Göte Nyman (1978), according to specifications based on our discussions.

In conjunction with my presentation I shall offer for scrutiny examples of variant renditions of six of the sentences synthesized. On the basis of the matrix for one example sentence Atyámat gyászolom ['ʰa:ta:maʃ 'q̣ja:solom], some important matters of principle will be brought up which were encountered during the calculation of the parametric values of the sound phases.

Mr. Reijo Aulanko has assisted me in these experiments both as operator and as research assistant.

References

- Sovijärvi, A.A.I. (1975a): "Results of the Spectrographic Analysis of Alveolo-Palatals in Hungarian", paper read at the Eighth International Congress of Phonetic Sciences (Leeds 1975).
- Sovijärvi, A.A.I. (1976): "Unkarin kielen liudentuneiden dentaalien spektrografisen analyysin tuloksia", in Fonetiikan paperit - Helsinki 1975, Publications of the Institute of Phonetics - University of Helsinki, 27: 89-114.
- Nyman, Marita and Göte Nyman (1978): "OVE IIIb - syntetisaattorin ohjausohjelman käyttöopas" (= Guide book for using the feeding program for the OVE IIIb synthesizer), Mimeographed Series of the Department of Phonetics - University of Helsinki, Teaching Material 1.