

## THE SELECTION OF PHONETIC TARGETS

Eric Keller, Département de Linguistique,  
Université du Québec à Montréal, CP 8888, Montréal, Qué., Canada

Much recent discussion in phonetics has centered on the problem of co-articulation. This has given rise to a number of theoretical proposals concerning the mechanism which is responsible for anticipatory and perseveratory effects in phonetic production. To expand on these proposals, we have examined anticipatory and perseveratory phonetic effects occurring in aphasic speech, and have evaluated CVC interaction with respect to tongue height by means of large samples of ultra-sound-measured articulations.

From these considerations, the following hypothesis has emerged. The phonetic production mechanism consists of a phonetic target selector and a space coordinate system (cf. MacNeilage, 1970). This production mechanism can perform the selection and implementation of articulations relatively independently of the formulation of the intended utterance, but is constrained by assimilation rules, language-specific segment constraints, co-occurrence rules, and syllabic information. This operation probably occurs in a different time frame from the formulation of the intended utterance. There is therefore a need for a matching operation between the two time frames, which permits correct co-articulatory behaviour in normal speech and provokes anticipatory and perseveratory effects in aphasia.

References

- MacNeilage, P.F. (1970): "Motor control of serial ordering of speech", Psychological Review 77, 3, 182-196.