SOME EFFECTS OF TEMPO CHANGE ON TIMING IN FRENCH

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ABSTRACT

A number of factors influence the temporal organization of connected speech. One such factor, tempo change, is an important variable whose effects on segment and pause duration may highlight important language specific and language universal features of speech timing. Change in overall pause time has traditionally been considered the most obvious manifestation of tempo variation in English and French, for example. However, a recent study of German showed that modification in articulation rate may play a more important role than previously thought. In the present study, French speakers were recorded whilst reading a passage at three tempi; slow, normal, and fast. Subsequent acoustic analysis of the recordings showed that pause behaviour was modified as predicted in previous investigations of this nature. However, complex changes at the level of the articulated sequences were also evident. Articulation rate was modified substantially. More significantly, changes in the temporal patterning of consonant and vowel segments appeared to reflect the use of different strategies by French speakers to increase tempo, from those used by German or English speakers. This may reflect among other things, the different rhythmic timing structure of French compared to both English and German.