Temporal Marking of Accents and Boundaries

This thesis reports on a series of experiments on two temporal effects in speech which signal some aspect of (prosodic) structure: final lengthening marks the right edge of certain constituents, and accentual lengthening marks the head of a phrase (in combination with a pitch accent).

One goal of this thesis is to provide a specification of the domains of final and accentual lengthening in Dutch, i.e., to specify the size of the unit that is durationally affected under the influence of boundaries and accentuation. To this end, controlled materials were collected in the laboratory. The results show that the domain of final lengthening is generally the final syllable, but may include the penultimate syllable in some cases (depending on the amount of lengthening required, and the expandability of the final segments). The domain of accentual lengthening seems to be the (syntactic) word.

A second goal of this thesis is to compare the lengthening effects in Dutch with those in English, particularly where differences between these two languages have been observed. The material for studying the domain of accentual lengthening in Dutch was constructed specifically to allow cross-linguistic comparison with material already available on English. The prior claim that Dutch and English have different domains of accentual lengthening is refuted: when experimental conditions are the same, Dutch and English show very similar durational patterns. However, evidence is provided for a cross-linguistic difference of another type: the interaction between final and accentual lengthening in Dutch is shown to be much stronger than in English.

This study is of interest to prosodic phonologists and experimental phoneticians, and to researchers working in the field of temporal effects in speech in particular.