Tonal and Phrasal Structures in French Intonation

Different melodies can cause the same sentence to receive different interpretations. Descriptions of French intonation do not agree on the distinct forms the melodies can take. That is, it is unclear how the direction and the location of the melodic changes are verified to produce distinct intonation contours.

This study aims to resolve this controversy by investigating (1) where melodic changes occur in French, and (2) which forms they take. A production experiment shows that the location at which contours change direction is determined by two factors: (a) the distance between accented syllables and (b) the grouping of words into Phonological Phrases. These findings are accounted for in the framework of Optimality Theory. A corpus study addresses the second issue by comparing realisations of intonation contours across speakers and contexts. In this way, it could be established which differences are contrastive. These findings are accounted for in the Autosegmental-Metrical framework. To support the Autosegmental-Metrical analysis, which predicts which differences are phonological in nature and which are the result of variable phonetic implementation, two further experiments were carried out.

The result is a systematic description of the tonal structure of French intonation and its association with the “text”. The stressed syllables and boundaries in the utterances determine at which location melodic changes can occur, and the tonal structure specifies how the melody can be varied at those points. In this way, the description makes strong predictions about the nature of the difference between any intonation contours (i.e. is it distinctive?), and it can be experimentally verified.

This study is of interest to phonologists and phoneticians, as well as researchers in the field of French linguistics.