

## High vowel tensing in innovative RP: phonetics & phonology

This paper is concerned with the ongoing change involving the neutralisation of tenseness contrasts in word-final (*happy*) and pre-vocalic (*piano*) positions in unstressed syllables in innovative RP. The process, also known as 'Happy-tensing' when it is final, was first documented by Wells (1982) and has been progressively adopted in the proposed transcriptions of pronunciation dictionaries from the 1990s on (*cf.* Jones, 2006 and Wells, 2008). Recent phonetic studies include Harrington (2006) and Fabricius (2002).

Emerging allophonic processes, like weak-vowel tensing in high vowels in innovative RP, are extremely helpful for our understanding of how languages work. The trigger of the process gives us evidence about the dynamics of systems while the actual phonetic changes debunk mysteries of the correct featural characterization of segments. Accordingly, this paper focusses on two aspects: i. consequences for the phonological analysis of innovative RP vowel system(s) and ii. results of acoustic measures for tenseness and length by comparing [i:] vs. [i] vs. [ɪ] in an RP-related spoken language corpus Aix-Marsec (Auran et al. 2004). This multi-layered database contains 5 hours of naturally occurring speech in various discourse situations.

As far as the trigger of the process is concerned, we have established that the modelling of prominence relations in English words is much more complicated than a simple stressed / unstressed dichotomy. Unstressed word-final (\_#) and prevocalic (\_V) positions seem to copy distributional properties of these same positions under stress in that they require vowels to be tense. The tendency indicates the emergence of a new semi-weak or semi-strong position in the prosodic hierarchy of words in English, a language where the licensing of segmental (featural) content depends on prosodic strength (Harris 1994) and vice versa.

By measuring length and tenseness for [i:], [ɪ] and [i] we hoped to find phonetic cues as to the correct featural characterisation of these sounds and thus contributing to the modelling of the vocalic system of RP. Our results show that length is not necessary for the characterisation of the three high front vowels and it cannot discriminate them since it is rather context than phoneme dependent. Tenseness is also context dependent but much less than length and it allows us to discriminate between high vowels. Prevocalic and final unstressed [i] are definitely more tense than [ɪ] although they are less peripheral than [i:]: our average values indicate that the allophone is situated half way between the two phonemes [ɪ] and [i:]. Thus the tense contrast is not fully neutralised.

Our results also show that the ongoing changes affecting the phonetics and the phonology of RP high vowels result in a much simpler system.