

# The Realisation of Intonational Plateaux: Effects of Foot Structure\*

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There is a general acknowledgement in the intonation literature that tones are often not realised as single turning points in the fundamental frequency contour, frequently occurring more as flat plateaux. House *et al.*'s (1999) study of a single-speaker database demonstrates that the realisation of these plateaux co-varies with linguistic structure. The present study extends House *et al.*'s analysis of the realisation of the plateau to five additional speakers. The earlier results are largely replicated and extended to cover an additional prosodic structure and to take account of additional measurements. Results indicate that differences found for proportional duration of the plateau are largely due to the effects of foot structure on syllable duration rather than on the absolute duration of the plateau. In addition it is suggested that plateau alignment may mark linguistic structure, specifically the difference between mono- and polysyllabic feet.

## 1 INTRODUCTION

Many theories of intonational phonology, especially those in the autosegmental-metrical tradition popularised by Pierrehumbert (1980), represent the intonation contour as a string of high (H) and low (L) targets. These targets are considered to be the linguistically important points of the contour whilst the transitions between them are seen as linguistically unimportant interpolations. In recent years much work has focussed on

microprosodic perturbations in the contour. For example, turning points may be obscured by microprosodic perturbations in the contour. Even when the contour is sustained forming plateaux rather than sharp peaks, the turning points may still be hard to locate. This phenomenon is very common (e.g. Silverman and Pierrehumbert 1999).