

Intonational scaling and the linearisation of syntactic constituents in Zurich German

The syntax prosody interface is a topic that has received considerable attention in the phonological literature (Nespor and Vogel 1986; Selkirk 1984; Bennet and Elfner 2019). The relation between syntactic constituency and the intonational prosodic constituency for sentence-level phonological and phonetic phenomena is an aspect that has sparked particular interest (Beckman and Pierrehumbert 1986, Truckenbrodt 2002, Selkirk 2011). Recent acoustic phonetic studies examining fundamental frequency (f₀) tonal targets in relation to defined syntactic constituents find a structural correspondence thought to reflect the intonational phonological structure of the languages under investigation (D'Imperio and Michelas 2014; Defina, Torres and Stoakes 2019; Torres, Fletcher and Wigglesworth 2022). However, these studies tend to focus on an invariable syntactic constituent with limited variation in relation to its length. This leaves the question open as to how syntactic constituents and their phonetic-phonological realisations are realised if we considered a language with variable word order and speech material with varying length. This study investigates the correspondence between intonational phonology and linearised syntactic constituency in Zurich German, a language that allows for variable word order of complex verb clusters. A production experiment was conducted to collect the speech of twenty Zurich German speakers. The investigation of f₀ scaling contrasts three different word orders using the same content words. In addition, I consider non-syntactic effects arising from clause length in syllables and speech tempo. The statistical results confirm a relationship between the scaling of f₀ tonal targets and the linearised syntactic structure which is further modulated by the non-syntactic factor clause length.