

Word stress or a foot-phrasal prominence interaction in Estonian?

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Standard Estonian is famous for its ternary quantity contrast, a rare phonological feature. While a lot of research is devoted to the quantity, there is still no established theory of the Estonian stress system. Existing descriptions do not distinguish clearly between (1) the rhythmic and the lexicalized stress, (2) the foot- and the word-level stress, (3) the lexical and the postlexical prosody. Formal stress accounts (Hint 1973, Viitso 1979) are outdated and do not take real phonetic facts in due consideration, while modern phonetically-oriented studies (Pajusalu et al. 2005, Lippus et al. 2014) tend to refrain from clear phonological judgements. My aim is to synthesize existing data on the phonetics and phonology of Estonian stress and to outline a way towards a consistent phonetically-informed structural phonological analysis.

I suggest a two-level model of Estonian prominence (cf. structural descriptions of Danish in Grønnum 1998, Norwegian and Swedish in Riad 2018). In Estonian, the two levels are the foot and the accentual phrase (AP), rather than the word and the AP. Quantity patterns manifest the foot-level stress. On top of the foot rhythm, there is a pitch-based “macro-rhythm” (Jun 2014) of APs. Feet falling at the peaks of APs receive the most durational and tonal prominence, which can give an impression of the primary lexical stress. The feet at the falls of APs are phonetically flattened, up to the point of loss of differences between stressed and unstressed syllables in a foot. Both rhythms are highly correlated with the morphological word, while showing a certain degree of independence. Crucially, both foot and AP boundaries may violate word boundaries, so neither type of prominence can be called “word-level stress”. Feet statistically tend to be equal or smaller than the morphological word, while APs larger. However, this is not a strict rule: a word can also be a part of the foot or contain several APs.

Such a model allows to account for a number of phonetic facts which remain problematic for a phonological interpretation, e.g. a so-called “low accentuation” of APs (Asu, Nolan 2007) or an exceptional prosodic variability of Estonian compounds (Asu and Lippus 2019).

References

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