Prosodic expression of focus in Estonian, Finnish and Hungarian complex noun phrases

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This comparative study investigates the prosodic marking of focus in complex noun phrases (NPs) in Estonian, Finnish and Hungarian. Sharing word-prosodic properties like stress and quantity [1], these languages differ in their phrase-level prosody, including prosodic focus marking. While in Estonian and Finnish, f0 is raised on the focused word [2-3], in Hungarian, the highest f0-peak typically occurs at the left edge of the pre-verbal focused constituent [4-5]. This study investigates whether sentence-level prosodic focus marking is mirrored at the level of the NP (on Estonian and Finnish NPs, see [6-8]).

In a production study, comparable target sentences across the languages were constructed (1). A sentence-initial target subject NP was elicited (e.g., 'cheerful famous knights') with focus either on the first adjective (A1), on the second one (A2), or on the noun (N). Target words were disyllabic and controlled for vowel quantity in the initial syllable. 20 speakers per language read aloud ten different target sentences embedded into three different contexts eliciting the different focus conditions (20 x 10 x 3 = 600 sentences per language). Participants were recorded in Helsinki, Tartu and Budapest. After manual correction of f0 to avoid microprosodic influences in Praat [9], for each word in the NP (A1, A2, N), f0-max and f0-slopes were fitted with Linear Mixed Models with focus condition as predictor, and by-participant random intercepts.

Results show similarities in the phrasal prosody of the three languages (Fig. 1). For all focus conditions, the highest f0 peak occurred on the NP-initial word (except in A2 in Hungarian). After the initial f0-peak, every word in the NP had a lowered f0. Focus on A2 or N raised f0 compared to the lowered post-focal f0 in A1 focus, but did not reach the height of an initial f0-peak. Concerning f0-slopes, the focused word showed significantly steeper slopes than in identical non-focused words in all three languages (Fig. 2).

Importantly, this phrase-prosodic pattern differs from NP-internal focus marking in Germanic (focal f0-raising and deaccenting post-focal words), and Romance languages (accentuation of all words within an NP) [10]. When considered alongside earlier findings on sentential prosody in Finno-Ugric languages [2-5], this study underscores a strategy of prosodic highlighting of focus in NPs that differs from focus highlighting in entire utterances. The results imply the necessity of revising and expanding a focus typology (e.g., see [11]), and at the same time call for further studies of lesser-studied Finno-Ugric languages.

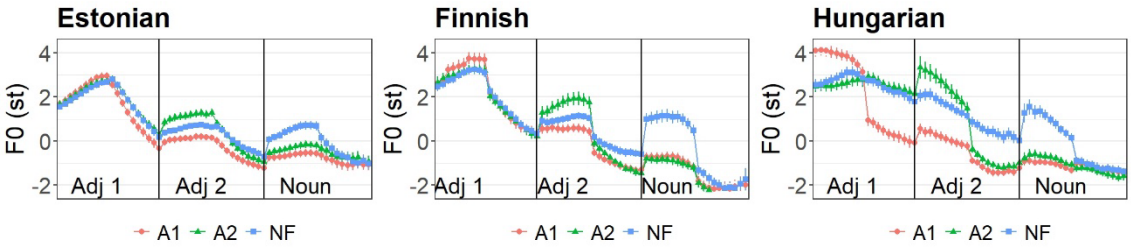

Fig. 1. Time normalized f0-contours displayed as ten equidistant f0-points per vowel in each disyllabic target word across focus conditions (red = A1, green = A2, blue = N focus).

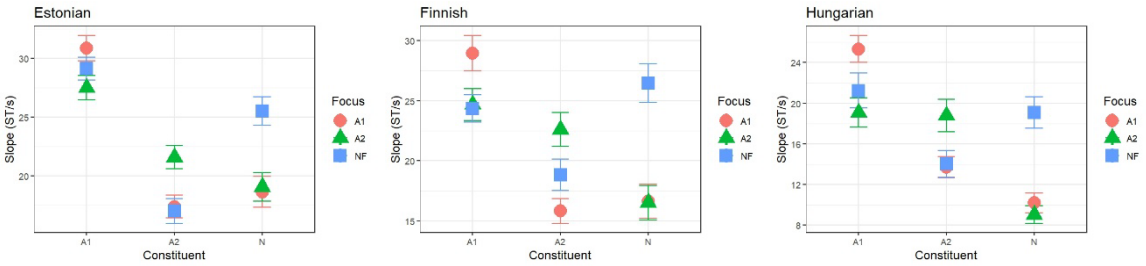

Fig. 2. f0-slopes on A1, A2, and N split by focus condition.

(1) Target sentences of similar structure across the three languages

a. Finnish: nolo ruma lelu vaivasi teiniä
embarrassing ugly toy bothered teenager
'The embarrassing ugly toy bothered the teenager.'

b. Estonian: need rõõmsad kuulsad rüütlid jahtisid karusid
these cheerful famous knights chased bears
'These cheerful famous knights chased bears.'

c. Hungarian: a gazdag önző ügyfél vet-te meg a könyv-et
the rich selfish customer buy-PST VPRT DEF book-ACC
'The rich, selfish costumer bought the book.'

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