

Prosody of Discontinuous Noun Phrases in Finnish

– with an Outlook on Estonian

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Introduction

Discontinuous noun phrases (DNPs) occur in many languages, e.g. German *Probleme gab es keine* ('There were no problems'). They can be classified into two syntactic and two prosodic types, respectively.

Syntactic classification of DNPs

Simple DNP: The relative order of the parts is the same as in the corresponding continuous NP.

Inverted DNP: The order of the parts is inverted in comparison to the continuous NP. (cf. Fanselow & Čavar 2002)

Prosodic classification of DNPs

Cohesive DNP: The parts of the DNP are within one prosodic phrase.

Non-cohesive DNP: The parts of the DNP are phrased separately.

Féry, Paslawska & Fanselow (2007) find that both classifications correlate in Ukrainian: simple DNPs are usually realised cohesively and inverted ones are realised non-cohesively (also cf. Fanselow & Féry, in prep., for other languages).

Hypotheses

Given the correlation between syntax and prosody of DNPs in Ukrainian, this phrasing is expected in Finnish:

(1) Cohesive simple DNP

[NeljäMajja osti melo-j-a]_p
Four M. bought paddle-PL-PART

(2) Non-cohesive inverted DNP

[Melo-j-a]_p [Majja osti neljä]_p
Paddle-PL-PART M. bought four

H1 The difference in phrasing between (1) and (2) should be visible as different F0 contour types.
→ phonological analysis

H2 Also, the first part of an inverted DNP (2)...

a. ... should be followed by a pause more often

b. ... should have a higher F0 than the first part of a simple DNP (1).
→ phonetic analysis

Material and Analysis

•Four speakers (2 female, 2 male) from the central Finnish dialect area, aged 24–33.

•Sentences with discontinuous object NPs embedded in contexts: First part of the DNP = contrastive topic, second part = focussed.

•Thirty (5 lexical items x 2 conditions x 3 repetitions) sentences were recorded per speaker.

•One missing repetition in 3 cases → 117 sentences altogether.

•Phonological analysis: Acoustic and visual inspection of the sentences and classification into different contour types.

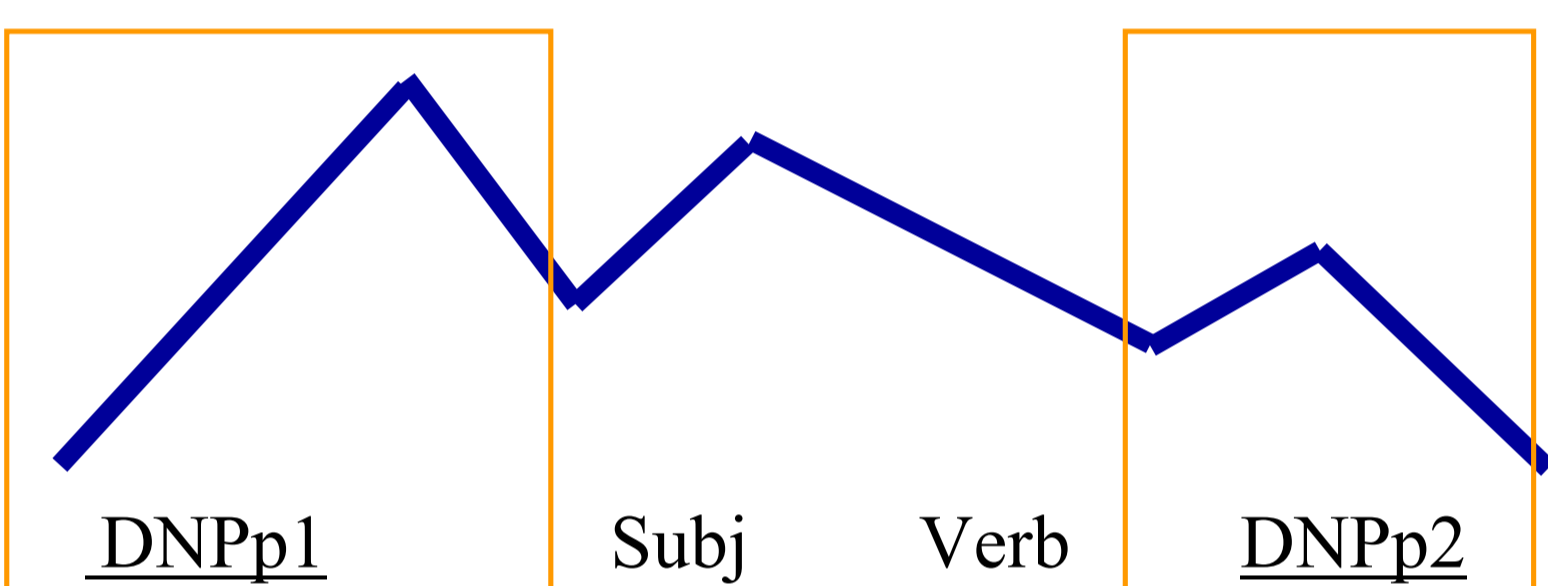
•Phonetic analysis: For each word, F0 and time of the accent peak and the two pitch minima left and right of it were measured.

•Normalisation of the F0 values relative to the speaker's pitch range (cf. Truckenbrodt, 2004).

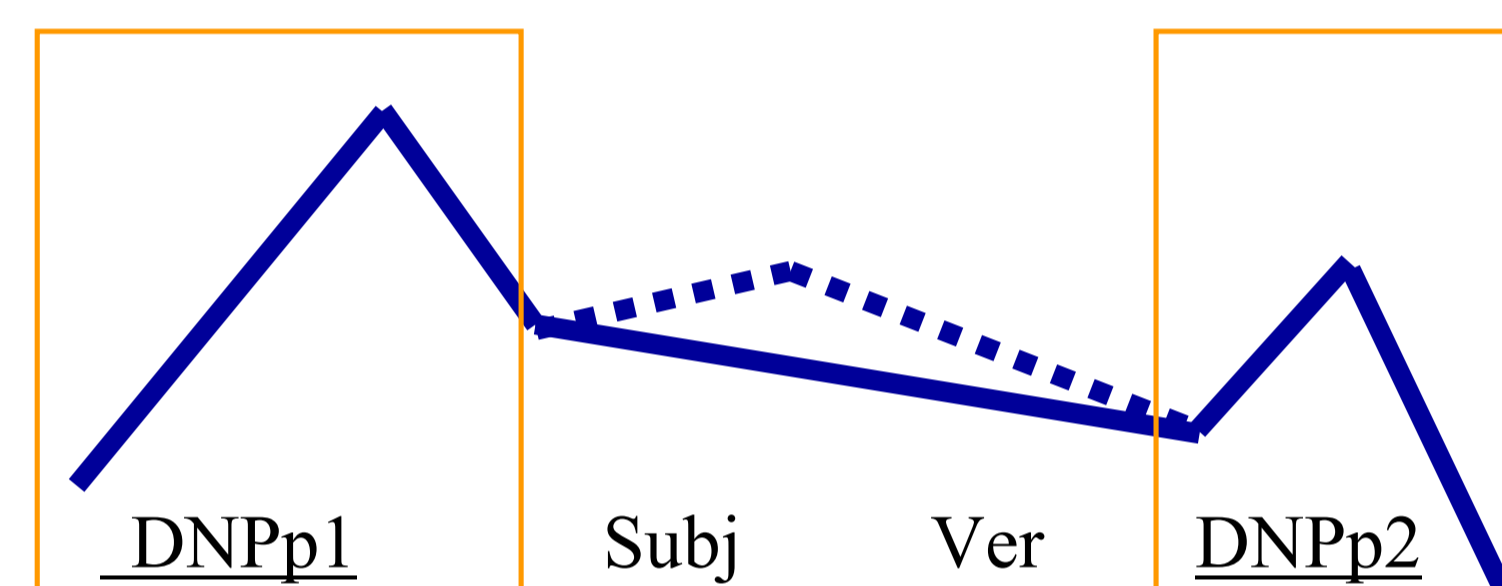
•Statistical analysis (paired t-test in SPSS) on averages from the 3 (or 2) repetitions.

Results Phonological analysis

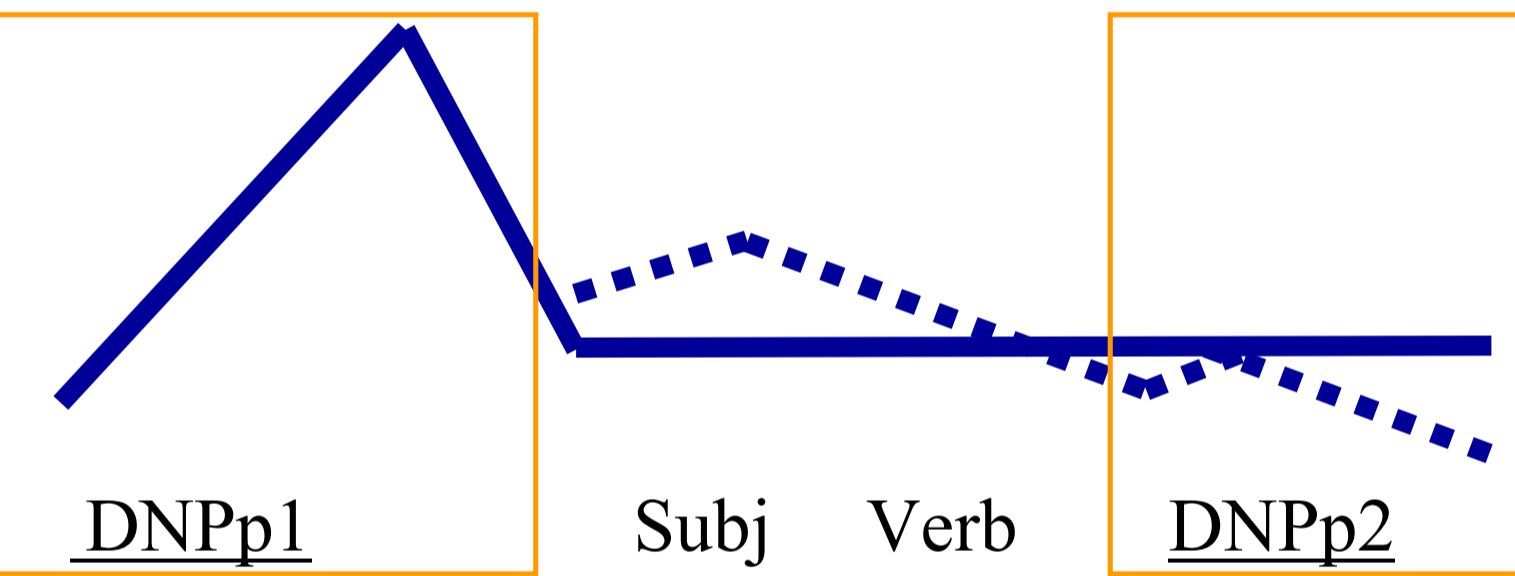
a. Downstep



b. Two accents



c. First accent only



d. Hat pattern

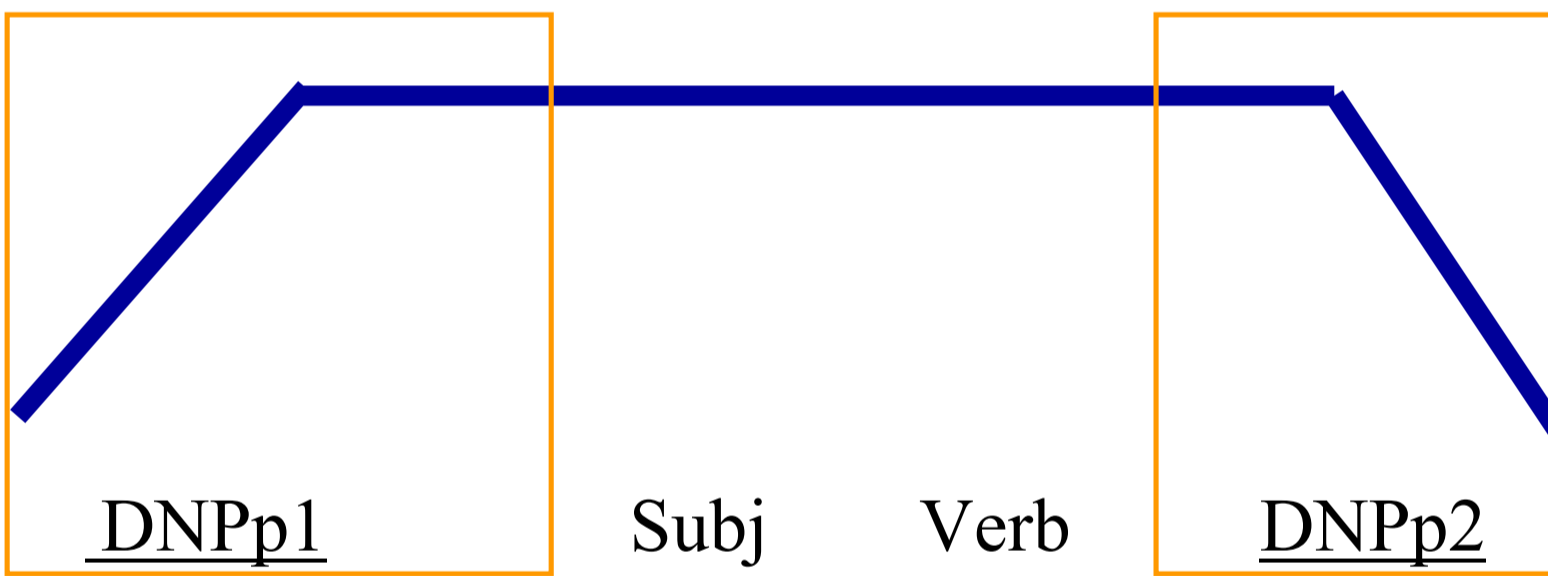


Figure 1. Default downstep pattern and types of F0 contours occurring on sentences with DNPs.

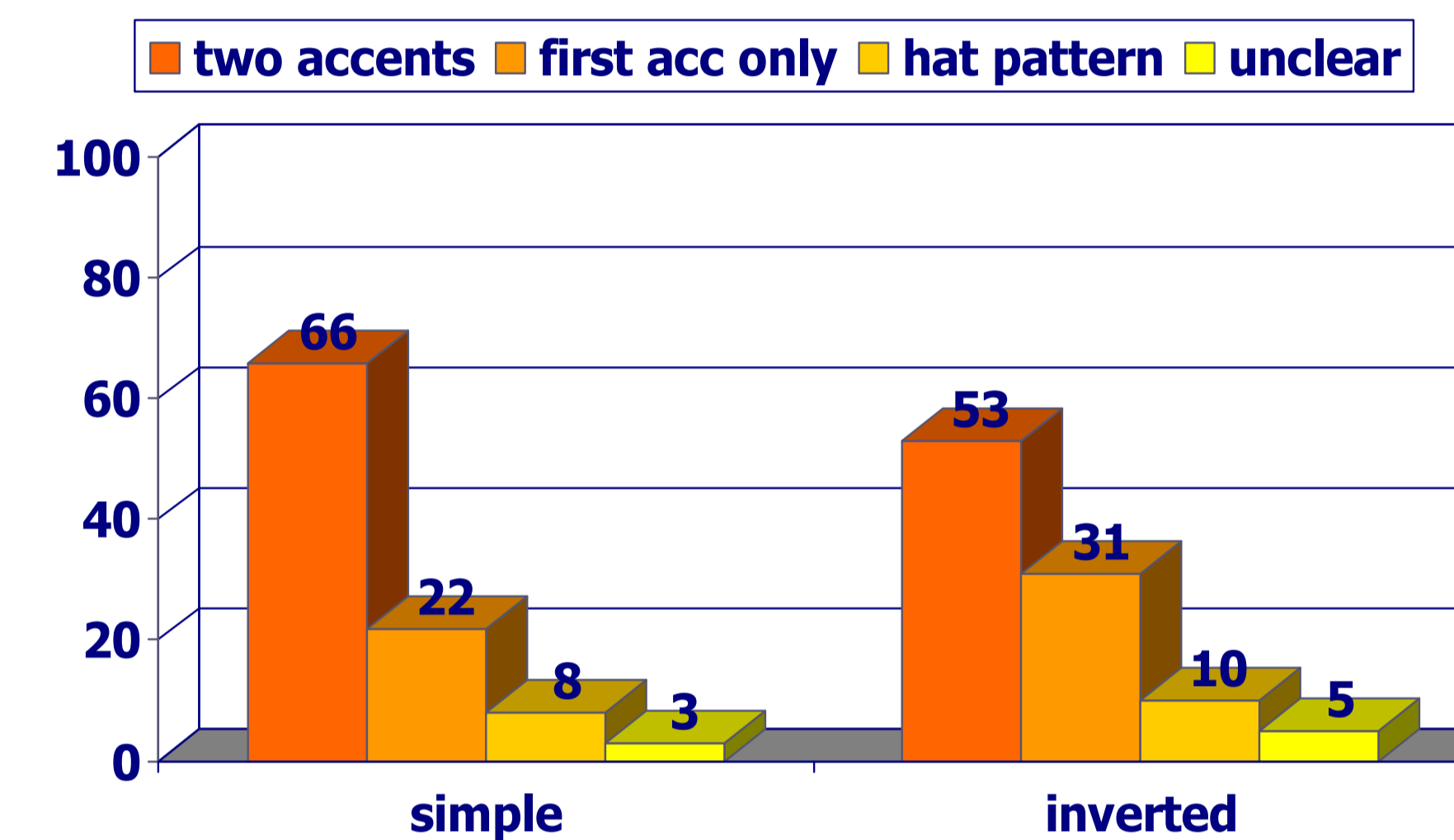


Figure 2. Occurrence of F0 contour types (in %) on simple and inverted DNP

•The informants did not use the Finnish default contour with regular downstep (Figure 1, a., cf. Iivonen 1998, Välimaa-Blum 1993).

•Three different kinds of contours occur.

•A contour with only two main accents on the parts of the DNP is used most often for both simple and inverted DNPs.

•A hat pattern is only used by one speaker. This could be treated as a variant of the two-accents-pattern.

Results Phonetic analysis

•Only 2 pauses all in all: one after the first part of a simple DNP and one after the first part of an inverted DNP.

•The average F0 peak on the first DNP-part is higher for inverted than for simple DNPs, but not significantly ($t_1(3)=1.46, p>.10; t_2<1$).

•The pitch peak on the second part is higher in simple DNPs than in inverted DNPs ($t_1(3)=2.41, p<.10; t_2(4)=5.87, p<.01$). This also holds for the subject and the verb. However, the statistical results are not as clear here.

Figure 3 shows schematised average F0 contours for sentences with inverted and simple DNPs. F0 values are given relative to the speaker's average minimum (=0) and maximum (=1).

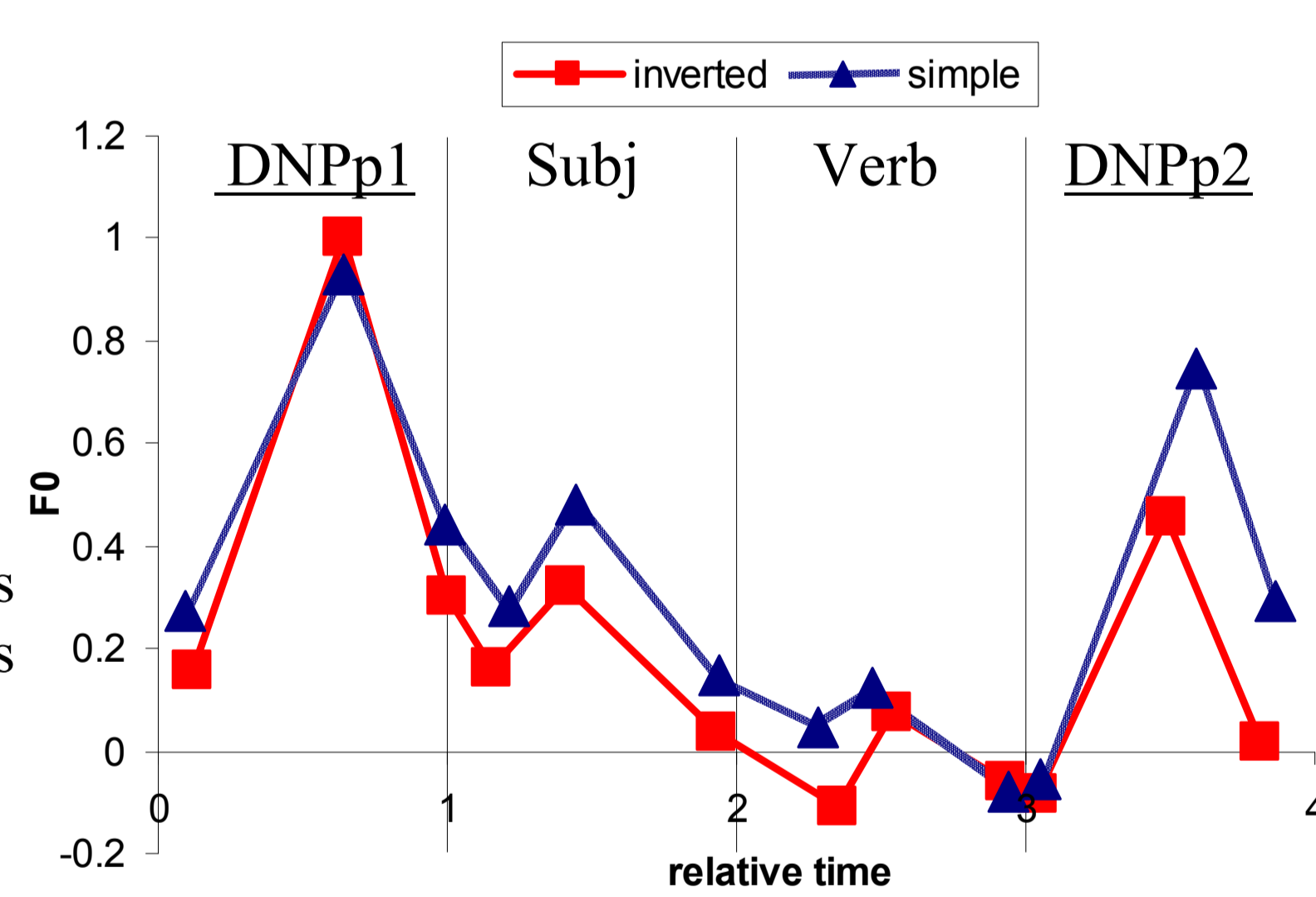


Figure 3. Schematised average F0 contours.

Conclusion

•Neither H1 nor H2 are confirmed. The same contours appear on simple and inverted DNPs. Neither accent height nor pauses hint towards a different phrasing of simple and inverted DNPs.

•No correlation between syntactic and prosodic type of DNP is found for Finnish (≠ Ukrainian, cf. Féry, Paslawska & Fanselow 2007).

•The prosodic realisation of sentences with DNPs differs from the Finnish default contour: Prominent accents on the DNP-parts (a contrastive topic and a focus), the other accents are reduced.

•One speaker uses a hat pattern. The production of this contour has not previously been described for Finnish.

Estonian

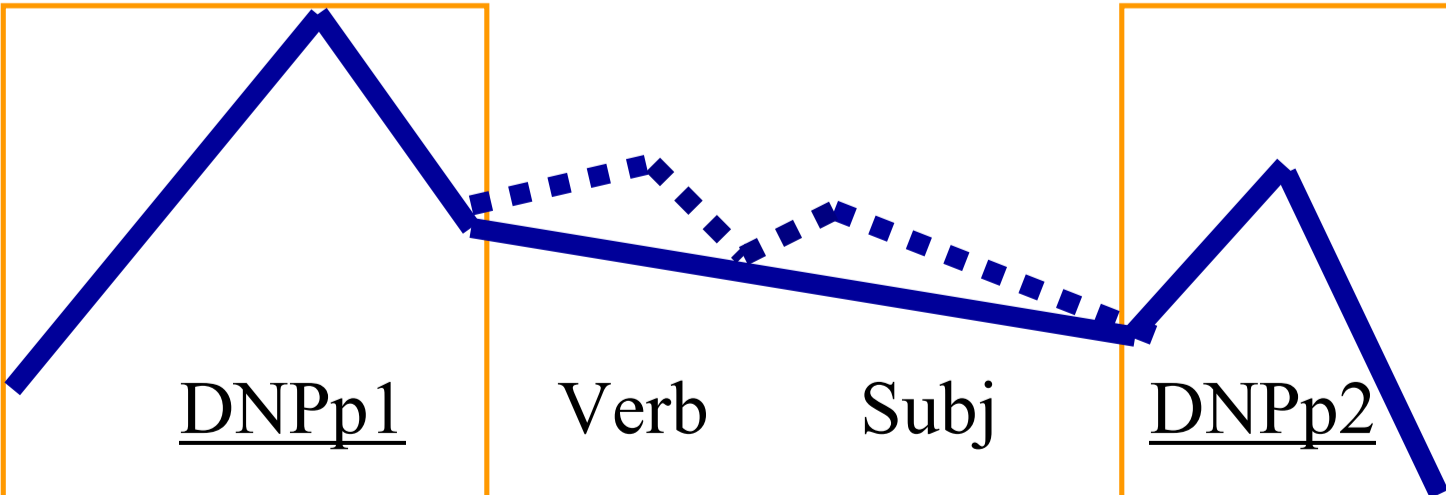
•Qualitative interviews on DNPs with five members of staff of the institute of Estonian and General Linguistics, University of Tartu, Estonia.

•The same F0 contours occur as in Finnish. Sometimes a low nuclear accent is added (H+L*, cf. Asu & Nolan 2007).

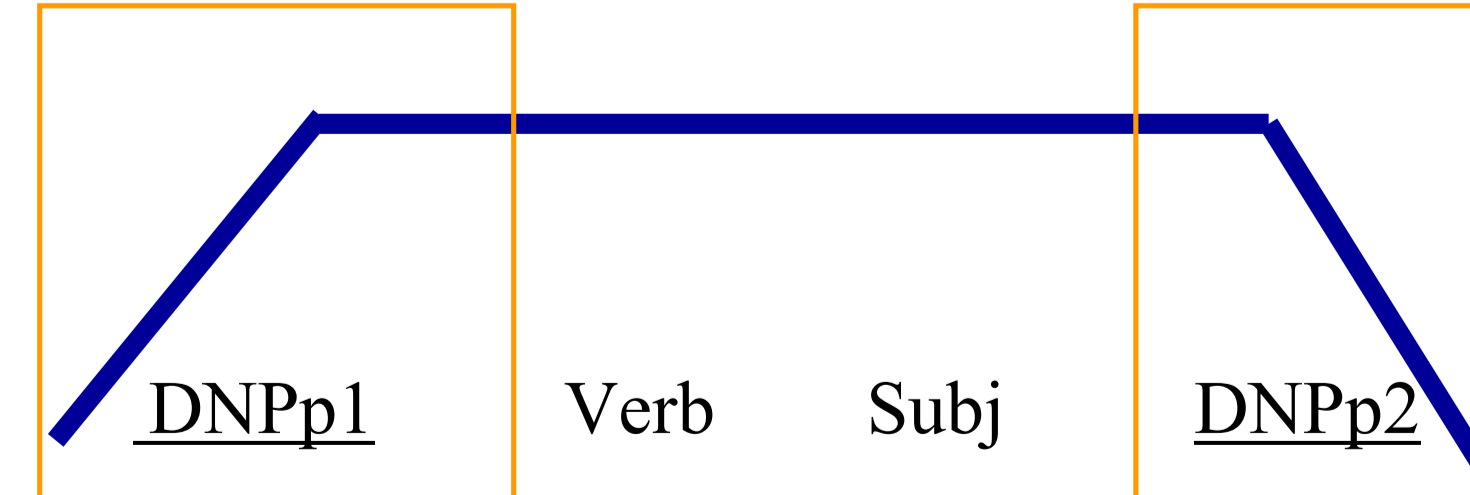
•The information structure 'contrastive topic – focus', which was investigated for Finnish, was so far only realised for inverted DNPs in Estonian.

•Only the two-accents-pattern and the hat pattern occur, optionally combined with a low nucleus.

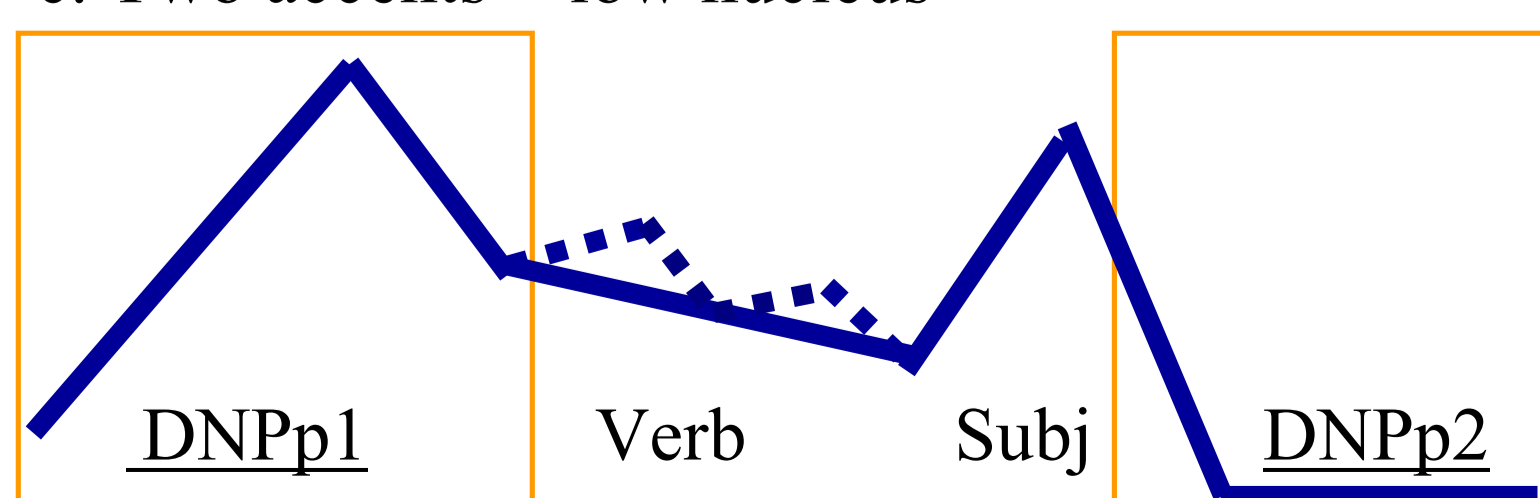
a. Two accents



b. Hat pattern



c. Two accents + low nucleus



d. Hat pattern + low nucleus

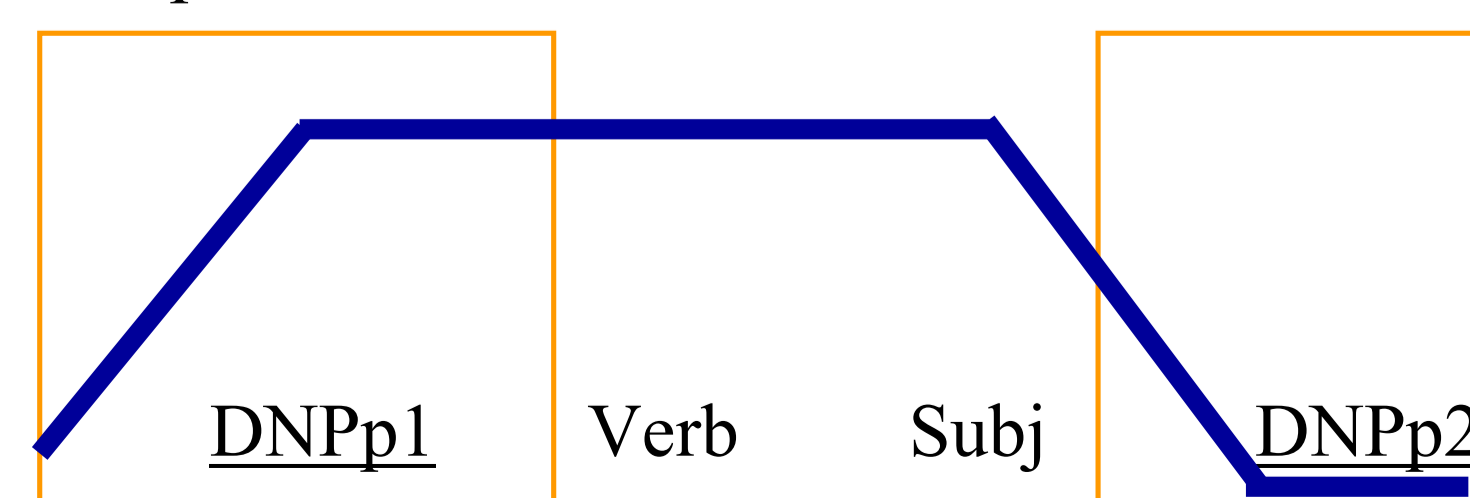


Figure 4. Types of F0 contours occurring on sentences with Estonian DNPs (contrastive topic – focus).

References

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Acknowledgements

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