Phrase boundaries and pitch accents in Hungarian focus marking

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This study investigates the perception of prosodic focus marking in Hungarian complex noun phrases (NPs). Hungarian is a phrase accent language with the highest prosodic prominence on the leftmost element of a domain: word stress falls on the word-initial syllable ([1], [2]); main accents are aligned with the left edge of an intonation phrase (IP; [1]). In a 'neutral' sentence (broad focus/all new) all prosodic words bear equally strong pitch accents downstepped in relation to the preceding one ([3]). In a 'non-neutral' sentence, the (narrowly) focused element typically moves to the immediate pre-verbal syntactic focus position, usually the leftmost element of an IP ([4], [5]). In this position, the main sentence accent is assigned ([6]). Post-focal accents are reduced while pre-focal elements (typically topics) can keep their accents. ([1], [7], [8])

While syntax plays a major role in Hungarian focus marking, it may lead to ambiguities: when the syntactic focus position is filled with a complex NP, focus can either be on the whole NP (NP-focus) or only on parts of it (narrow Adj- or N-focus). [9] found that Hungarian speakers use additional prosodic prominence marking to disambiguate in these cases: the left edge of the NP (the adjective) still bears the main accent (being at the left IP boundary), but the accentuation on the noun varies depending on the focus domain: in NP-focus, the noun bears a downstepped accent; in N-focus its accent is 'boosted' ([10]), and in Adj-focus the noun is deaccented.

In this study, three experiments investigated the prosodic patterns found in [9] in perception. Each experiment tested one contrast: Adj- vs. N-focus (Exp 1); Adj- vs. NP-focus (Exp 2) or N- vs. NP-focus (Exp 3). The participants' (VPs) task was to listen to dialogues (question-answer pairs) taken from [9], and to rate whether the answer matches the question by clicking 'yes' or 'no'. The contexts (spoken by a female Hungarian native speaker) elicited the different focus domains. The answers where taken from one female VP of [9]s data, whose answers were closest to the mean measurements of the found pitch patterns. Each answer was combined with the question it was the answer to in [9]s production experiment (congruent condition) and with the other question of the contrasted focus pair (incongruent condition). In total, each VP rated 100 dialogues (5 sentences x 2 foci (per experiment) x 2 conditions x 5 repetitions).

Preliminary results (12 VPs - 4 per exp.; 7 female, mean age: 33,2; data collection ongoing) are shown in figure 1. In experiments 1 and 3, there is a significant difference between dialogues depending not on the congruency conditions, but on the focus-type in the question: if the question elicits Adj- (Exp1) or NP-focus (Exp3), all dialogues were rated significantly higher than with N-focus questions. The only significant difference based on congruency is found with N-focus questions in Exp1: the congruent dialogues were rated higher than the incongruent ones. The unclear pattern in experiment 2 will be excluded because of space limitation for now.

Based on the preliminary results, we may conclude that the accent on the left boundary of the focus domain in Adj- and NP-focus (the adjective) is more important than the presence or absence of a following accent (on the noun). This could be analyzed as a type of focus projection: the focus domain is marked at its left edge. The accent on the noun only plays a role in narrow N-focus: sentences lacking an accent on the noun are rated as being incongruent. However, even congruent dialogues in N-focus were rated as congruent only at chance level, maybe due to the accent on the adjective interfering with a narrow interpretation on the noun. To conclude, besides structural prominence marking, prosodic prominence still contributes to the perception of focus.

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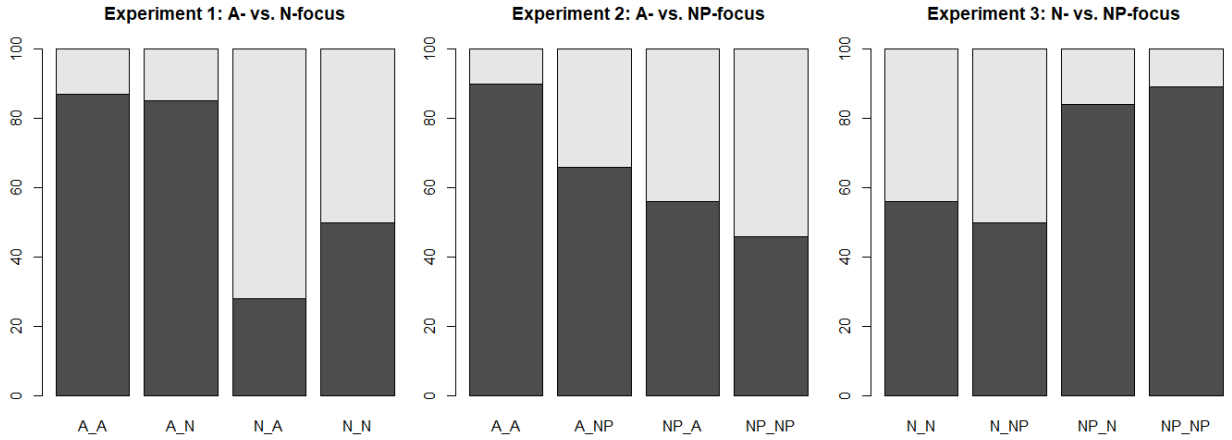

Figure 1: Results of the three perception experiments: percentage of dialogues rated as congruent (black) and incongruent (gray) per dialogue type (Question-Focus_Answer-Focus)

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