Prominence marking depends on expectations

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In many languages speakers employ prosody to highlight new information, making it more prominent. They also use prosody to attenuate given information, making this information less prominent. Thus, a listener should be able to interpret the level of prominence of a word as indicative of the information status that the speaker is intending to convey. However, both the speaker's marking and the listener's perception of prominence can also be affected by expectations evoked by the context.

For West Germanic languages it has been shown that information status (i.e. newness/givenness in discourse) is marked not only by accent *placement* but also by the level of prominence expressed by different pitch accent *types*. Studies on German ([1], [2], [3], [4]) suggest an inverse relation between discourse givenness and prosodic prominence, i.e. the more accessible a concept in the listener's mind, the lower its prosodic prominence. Results reveal that the pitch movement leading towards the target on the accented syllable ('onglide' [5]) is the most important tonal cue for prominence (rising onglides being perceptually more prominent than falling ones [6]).

This study aims to find out how different types of expectation influence a speaker's choice of prosodic cues. Two discrete pre-contexts for each test sentence (60 items) were designed to trigger expectations about appropriate upcoming information. For example, the pre-context in (1a) builds up an expectation for new (unpredictable) information, whereas the pre-context in (2a) establishes that nothing new is going to follow (predictable). We hypothesise that a prominent accent is appropriate on the noun in (1b), whereas a less prominent accent should be appropriate on the noun in (2b).

Preliminary results generally confirm our hypothesis (Fig.1). In 80% of all test sentences, subjects (10f, 4m) realize the nuclear accent on the noun. After context (1a) they use accents with a rising onglide 91.8% of the time, rarely using ones with a falling onglide (only 8.2%). After context (2a), there is a reduced percentage of accents with a rising onglide (65%), and an increase of accents with a falling onglide (35%). Thus, accent types are distributed differently, depending on the prior context.

Whilst an ERP study [7] has already shown that information status cued by pitch accent type is processed in real-time, the effect of context has not yet been explored. The production results will serve as a basis for a follow-up ERP study to disentangle expectation-based vs. signal-driven aspects of perceptual prominence in neurocognitive information processing.

(1) (a) *Rate mal, was uns heute passiert ist!*
         'Guess what happened to us today!

      (b) *Wir haben Milena getroffen.*
          We met Milena.'

(2) (a) *Heute ist nichts Besonderes passiert.*
         'Today, nothing special happened.

      (b) *Wir haben Milena getroffen.*
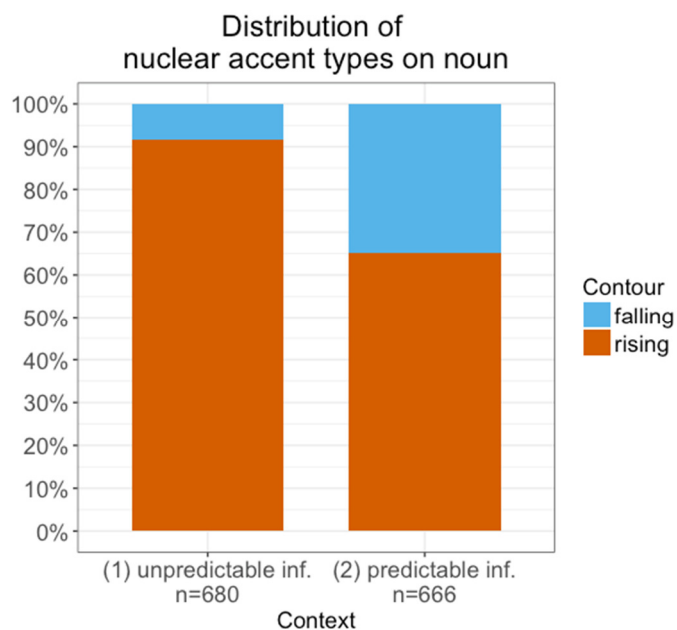   We met Milena.'

Figure 1: *Relative distribution of nuclear accent types on the nouns in the test sentences plotted against their respective pre-context.*

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