Two dimensions of prominence relations: prosodic focus marking in habitual and loud speech

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Prosodic prominence is a relational property [1]. When we consider the prosodic prominence of an entity (e.g., a syllable), we always do this with reference to the prominence of another entity. In this talk, I will be looking at prosodic prominence relations from two dimensions or axes. On the "horizontal/syntagmatic" axis, we consider the prominence balance of multiple successive entities in one phrase or utterance. This axis hence takes prominence relations within a phrase or utterance into account. On the "vertical/paradigmatic" axis, we consider the prominence of entities occurring in the same phrasal position. This axis hence takes prominence relations across phrases or multiple renditions of a phrase into account.

The first part of the talk concentrates on the vertical axis. Focus has been shown to elicit different prosodic prominence degrees on the same syllable in the same position within the phrase, e.g., [2], [3]. Crucially, this is even the case when the nuclear accent remains in a constant position (namely on that syllable). For example, the nuclear-accented syllable in a corrective focus statement is characterized by longer durations, larger F0 excursions, higher intensities, and larger articulatory movements compared to the same syllable in a broad focus (all-new) utterance. Speaking loudly and prosodic prominence target similar phonetic dimensions (intensity, duration, F0 excursion, etc.). In this part of the talk, I will ask whether the (vertical) prominence relations between broad and corrective focus found in habitual speech are maintained in loud speech.

The second part of the talk looks at the horizontal axis. It has been shown (for F0) in perception that focus structure may affect multiple prominences in one phrase [4]. I will provide preliminary production data supporting the idea that information structure is distributed across a phrase and encoded in the prominence relations of multiple elements. These prominence relations seem to manifest in F0, but also duration and lip kinematics.

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