

## The influence of prosody on thematic role assignment in Hungarian adults.

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Thematic-role assignment in locally ambiguous sentences is influenced by the prosodic structure of the utterance: a NP-V-NP (Noun Phrase - Verb - Noun Phrase) clause with stress on the sentence-initial noun phrase is more likely to be interpreted as an object (OVS) rather than a subject (SVO) initial sentence (Grünloh et al. 2011, MacWhinney, Bates, Kliegl 1984, Weber et al. 2006; studies on German, English and Italian). The aforementioned prosodic structure that introduces the OVS-bias involves an initial nuclear stress in the above studies, however the baseline differs in each ranging from synthesized flat intonation to stress on the verb. Initial foci in NP-V-NP sentences are likely to be deemed subjects in Hungarian (MacWhinney, Pleh, & Bates, 1985). Hungarian assigns focus by moving the focus element into the leftmost position of the predicate phrase (Kiss, 1998, Szendrői, 2003). This movement is accompanied by verb movement in case a verbal particle is being present. (1a) *Az elefánt-NP(nom) EL#TOLJA-V most-ADV a bikát-NP(acc)* vs. (1b) *Az ELEFÁNT-NP(nom) tolja#el-V most-ADV a bikát-NP(acc)* – words with capital letters carry intonational nucleus. In (1b) the movement of the pre-verbal element triggers the particle to occupy the immediate post-verbal position. This verb movement is associated with identificational focus which is said to express exhaustive features (Kiss, 2010).

In Féry et al. (2009) it is argued that the choice of the referent in their sentence completion study was dependent on the prosodic variation of the utterance: rising tone at the verb guided attentions to a discourse-new referent but, a receding tone at the verb elicited more looks toward a discourse-old element. Findings suggest that beyond syntactic information, parsers rapidly and efficiently take prosodic cues into account to resolve structural ambiguities in the sentence. Hungarian uses prosody to mark information structure i.e. focus tends to be encoded with a higher intensity, longer duration compared to categories like topic. The aforementioned study will be crucial to understand how our participants process Hungarian SVO & OVS, both unambiguous and ambiguous sentences in real time, and whether there is an impact of the information structure (topic and focus) on anticipatory eye-movements.

The present study observes how Hungarian adults (n=48) use case & prosodic cues to disambiguate thematic roles in unambiguous (Experiment 1) and ambiguous (Experiment 2) transitive NP-V-NP sentences. Using a visual-world eye-tracking method (tracking eye gaze in scenes as people listen to related audio stimuli), we assess to what extent the preference for thematic role assignment is motivated by prosodic factors. The prosodic manipulation was instantiated as either verb stress (SVO & OVS baseline) or stress on the initial NP (SVO & OVS marked). The stimuli display a contour declining from left to right, i.e., the contour targets an L% tonal target at the right edge of the utterance. Preliminary analyses suggest that the results are in line with previous findings. In Experiment 1, the rich system of Hungarian case marking disambiguates grammatical roles of the NPs. We expect a main effect of case but neither a main effect of stress nor an interaction of the two factors (sentence structure and prosody). Experiment 2, case marking is ambiguous, resulting in structural ambiguity; here we expect a main effect of sentence structure: After the first NP with overt case marking we predict anticipatory looks toward the agent. At the initial NP with no available case marking, we also expect anticipatory looks toward the agent due to the strong SVO bias in the language. No case\*stress is anticipated.

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