

In sentence processing different cues can be used in order to structure information. Prosody is one of the cues that can help to assign thematic roles (i.e. “possible semantic roles that may be played by the subcategorised complements (or arguments) of the verb”, Tanenhaus, Carlson & Trueswell, 1989, p. 212). Using eye tracking, Weber et al. (2006) showed that prosody rapidly influences young adult’s thematic role assignment in locally structurally ambiguous German subject-verb-object (SVO) and object-verb-subject (OVS) sentences. Five-year-old children are also able to assign thematic roles with the help of prosody (Grühnloh et al., 2011). However, whether they are able to use prosody as *rapidly* as the adults is unclear since Grühnloh used a video-pointing task instead of eye tracking. Moreover, one cue (prosody) was not enough to eliminate children’s strong bias towards the SVO order, and other means of conveying focus (e.g., cleft structures), are not rapidly used by 5-year-olds (Voss et al., 2015).

The present study thus aims at examining whether just like adults, 5-year-olds can rapidly recruit prosodic cues for incremental thematic role assignment. Examining this issue will provide insight into how and when children use information structure for thematic role assignment. More precisely, we manipulate prosody for SVO and OVS sentences. The typical prosody for these two sentence types is either present (Weber et al., 2006: SVO: L*+H accent on the subject, H* accent on the verb; OVS: L+H* accent on the subject) or sentence intonation is even. Each stimulus picture (N=24) contains three animal characters that are role fillers for the sentential noun phrases. Two characters are depicted as performing the same action (e.g. for the verb ‘water’, *begießen*, the two characters are depicted with a watering pot in their hands). In a first experiment, the sentence-initial noun phrase is assigned male gender. In the second experiment, the first noun phrase of the sentence will be assigned female gender, rendering the OVS sentences locally structurally ambiguous (in German nominative and accusative case marking is identical for female nouns). 24 monolingual five-year old German children take part in each experiment.

From offline data (Dittmar et al., 2008), we know that children at the age of five generally interpret the first noun phrase of a sentence as the subject and the agent according to the more common sentence structure SVO; however, eye-tracking data have revealed rapid use of unambiguous case marking for predicting thematic roles (Özge et al., 2015). If children are able to use prosody for rapid thematic role prediction, then in SVO sentences, we should see an increased proportion of anticipatory looks to the character who fills the patient role after the verb in the accented condition compared to the de-accented condition. In the case of OVS sentences more anticipatory looks to the agent should be seen shortly after the verb in the accented condition as opposed to the de-accented condition. We will report preliminary results regarding children’s reliance on prosody for thematic role assignment as well as a summary of the results from further collaborations of FoTeRo (Özge et al., 2015; Voss et al., 2015).

References:

- Dittmar, M., Abbott-Smith, K., Lieven, E. & Tomasello, M. (2008). Young German Children's Early Syntactic Competence: A Preferential Looking Study. *Developmental Science*, 2008, 11, 4, 575.
- Grünloh, T., Lieven, E., & Tomasello, M. (2011). German children use prosody to identify participant roles in transitive sentences. *Cognitive Linguistics*, 22(2), 393-419.
- Özge, D. Kornfilt, J., Münster, K., Knoeferle, P., Küntay, A., & Snedeker, J. (2015). "Comprehension of case in German children: Evidence against a maturational hypothesis," in 28th Annual CUNY Conference on Human Sentence Processing, 20-Mar-2015.
- Tanenhaus, M. K., Carlson G. N., & Trueswell, J. C. (1989). The Role of Thematic Structures in Interpretation and Parsing. *Language and Cognitive Processes*, 4, 211-234.
- Weber, A., Grice, M., & Crocker, M. W. (2006). The role of prosody in the interpretation of structural ambiguities: A study of anticipatory eye movements. *Cognition*, 99, B63-B72.
- Voss, F., Vulchanova, M., Knoeferle, P., & Eshuis, H. (2015). Depicted actions and information structure affect pronoun resolution in German children. *Talk* to be presented at the Child Language Symposium 2015, Warwick, UK.