

Behavioral and electro-physiological evidence for early rhyme sensitivity

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Rhyming songs are ubiquitous in early childhood. Yet it is unknown, whether infants already recognize the rhyme at phrase endings in songs. Here we report evidence for infants' sensitivity to rhyme in songs from two experiments. In both studies, Dutch infants listened to rhyming and non-rhyming songs. The songs resembled typical western child songs in their melody and contained Dutch nonsense words as lyrics. First, we will present data from a head-turn-preference study where 9-month old Dutch infants (n=35) preferred to listen to non-rhyming over rhyming songs (Hahn et al. 2018). Secondly, we will present results from an EEG study with 10.5 months old Dutch infants. Preliminary results (n=8) so far confirm our behavioral data: infants are indeed able to recognize the rhyme words at phrase endings in songs. For the workshop, we will present the full EEG dataset and will compare our results with recent findings for rhyming single words in 3-year old children (Andersson et al. 2018). Furthermore, we will explore individual differences in rhyme sensitivity by correlating ERPs with vocabulary questionnaires. Potentially, child songs are not only a means of infant mood regulation, but are also a source of linguistic learning for young children.

References: • Hahn, L. E., T. Benders, T. M. Snijders & P. Fikkert. 2018. Infants' sensitivity to rhyme in songs. *Infant Behavior and Development* 52, 130–139. • Andersson, A., L. D. Sanders, D. Coch, C. M. Karns & H. J. Neville. 2018. Anterior and posterior erp rhyming effects in 3- to 5-year-old children. *Developmental Cognitive Neuroscience* 30, 178–190.