Segmentation and Representation of Function Words in Preverbal French-Learning Infants

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Abstract

This study examines French-learning infants’ segmentation and phonetic encoding of function words. In Experiment 1 six-month-olds were familiarized with a functor, either des or la, and tested with phrases containing des versus phrases containing la. Infants looked significantly longer while listening to phrases containing the familiarized target, suggesting that they succeeded in segmenting the target. When familiarization targets were phonetically similar la or ta (Experiment 2), six-month-olds showed no difference in listening time for phrases containing the target versus the non-target. In a separate dishabituation task (Experiment 3), however, six-month-olds did discriminate la and ta, suggesting that their non-differential response in Experiment 2 was at the level of word-form encoding. In Experiment 4 eight-month-olds were tested on the segmentation of la and ta (as in Experiment 2). Unlike six-month-olds, older infants showed a preference for phrases containing the familiarized target when they were familiarized with la, but showed no difference when familiarized with ta. The superior performance for la may be due to its higher frequency of occurrence in the input compared to ta. Taken together, these findings demonstrate that segmentation of function words begins to emerge at six months of age, and that infants’ phonetic encoding of functors progresses from being underspecified to being fully specified within the first year of life. Frequency appears to be a determining factor in this process. The ability to extract function words from continuous speech and to encode their specific forms may play a crucial role in infants’ subsequent lexical and syntactic acquisition.