

The beginning of cross-sentence structural comparison by 9-month-olds  
L. Gerken and P. W. Jusczyk

One method by which linguists analyze the structure of sentences is to compare sentences containing different arrangements of the same words. Similarly, adults exposed to an artificial grammar are best able to learn aspects of the language when exposed to the same set of words participating in different sentence structures (Morgan, Meier and Newport 1989). Are infants also able to glean something about the linguistic structure of sentences by comparing sentences with the same words in different arrangements? A study initially designed to answer a different question revealed data suggesting that the answer is “yes.” In that study (reported in Jusczyk and Kemler Nelson 1996), 9-month-olds were trained on sentences exhibiting either alternating structures (Subject-Verb-Noun Phrase and Subject-Verb-Subordinate Clause) or the same structure (all S-V-NP or S-V-S). Infants were then tested on sentences with the same structure(s) they had heard during training and containing either the same words or different words than in training. Looking times to the condition with alternating structures with the same words heard in training were longest. Thus, it appears that infants prefer to listen to sentences in which the same set of words participate in different sentence structures. The current study is a follow-up, this time, without an initial training phase. Forty-eight 9-month-olds were tested on two types of stimuli. Alternating Structure stimuli comprised pairs of sentences that contained the same subject NP but exhibited different structures (S-V-NP and S-V-S). Same Structure stimuli comprised pairs of sentences that contained the same subject NP and exhibited the same sentence structure (either S-V-NP or S-V-S). The results showed that infants preferred Alternating over Same Structure stimuli, but this preference was only significant when the Same Structure stimuli were S-V-S. These data are consistent with the results of the first study and suggest that infants prefer to listen to sentences with the same words in different structural arrangement. Their interest in such sentence pairs may aid in their eventual analysis of the syntactic structure of their language.