Relative Clause Comprehension in School-age Children with SLI

Relative clauses may be used as a window to the syntactic competence of children with SLI (Specific Language Impairment), and particularly to their ability to process complex sentences. Relative clauses, like passives and Wh-questions, are derived by movement of a constituent that leaves a trace behind (Chomsky, 1995). The interpretation of relative clauses crucially depends on the ability to link the moved Noun Phrase and its trace (see examples 1 and 2).

1) Subject relative: This is the man that (the man) is kissing the boy.
   A trace appears after the complementizer “that” which refers to the man.
2) Object relative: This is the man that the boy is kissing (the man).
   Here, the trace appears after the verb, and refers to the man.

Children with SLI show a significant deficit in language (Dromi & Leonard, 1993; Leonard, 1995). Only few studies explored empirically syntactic aspects of sentence comprehension in this population (especially when compared to production). Recent studies suggest that children with syntactic SLI are impaired in comprehension of sentences that are derived by movement (Stavrakaki, in press; Van der Lely & Harris, 1990; Van der Lely, 1996). Since relative clause sentences are more common and natural in Hebrew than other movement derived structures (like passives for example), we chose them to study comprehension of movement-derived sentences in SLI. Relative clause comprehension in SLI children was never studied in Hebrew. Such a study is important both from a theoretical and from a clinical point of view, as it may lead to better understanding of the underlying syntactic deficit in SLI as well as to construct specific treatment programs for this deficit (Roth, 1984; Schwartz et al., 1994).

In the current study, 8-10 year-old SLI children were examined as well as two groups with normal language development (ages 4-5 and 6). SLI children were diagnosed prior to the study using standard clinical tests. Three types of Hebrew sentences were used: simple sentences (“the man is kissing the boy”), subject relatives (1) and object relatives (2). The task used was binary sentence-picture matching; Every child heard 60 sentences, 20 of each type; Each sentence was presented with two pictures, one matching the sentence, the other shows reversed roles (the boy is kissing the man), and the child had to point to the matching picture.

The results showed main effect of sentence type, and interaction between group and sentence type. The 6 year-old children performed well on all three types of sentences. In contrast, in the groups of younger children and the SLI children a significant difference was found between simple sentences and subject relative clauses on the one hand, and object relatives on the other. The younger children and the SLI children performed well on the simple sentences and on the subject relatives, but failed in object relatives, performing at a chance level (randomly choosing one of the pictures).

These results have implication for the characterization of the syntactic deficit in SLI children and their ability to understand discourse, due to their difficulties to understand sentences that derived from movement.
References:


