



## **Item-based patterns, child language learning, and the brain**

by

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### *Abstract*

Young children build up sentences by combining words into clusters. Unification grammars such as HPSG, LFG, or Minimalism recognize the importance of such clusters, but rely on combinations of part of speech categories whose development is never explained. An alternative approach to clustering emphasizes the role of item-based patterns in early child language acquisition. These patterns are initially specific to individual lexical operators such as "more", "my" or "want". Children then induce higher-level feature-based patterns through feature pruning, much as in the theory of Hierarchical Bayesian Models. A left-associative processor can use patterns on these various levels to generate the required sentence patterns of the target language.

My talk will examine these three issues:

1. I will review developmental evidence for the shift from item-based to feature-based patterns.
2. I will explain how this shift provides a solution to the Logical Problem of Language Acquisition.
3. I will examine recent work in computational modeling of language learning and show why it needs to pay more attention to the shift from item-based to feature-based patterns.
4. I will link the theory of item-based patterns to core facts about language processing in the brain.

Date: Tuesday, July 5, 2011  
Time: 4:15 pm sharp until 5:45 pm  
Place: University of Erfurt Campus,  
Nordhäuser Str. 63, Erfurt,  
Building I, Room HS4

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