NIH Award from the Eunice Kennedy Shriver National Institute of Child Health and Human Development

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- **Project:** Linking Early Linguistic and Conceptual Development
- **Start Date:** September 30, 2009
- **Total Award Amount:** $154,115

**How the results of this project will benefit society:**
This research addresses fundamental issues of early conceptual development, language development, and the relation between them. Infants live in an enormously rich environment. Each day, they encounter new objects and witness new events. This richness would be overwhelming if each object or event was treated as unique. Therefore, an essential developmental task is to form concepts to capture commonalities among their experiences and to learn words to express these. The results of this research should have implications for theories of acquisition and may serve as a springboard for research on bilingualism and specific language impairments in young children.

**The problem the project is trying to solve:**
Recent research reveals powerful and implicit links between conceptual and linguistic organization, across development and across languages. Infants begin the task of word-learning with a broad initial expectation linking novel words to a broad range of commonalities. More specific expectations, linking particular kinds of words (e.g., noun, adjective, verb) to particular kinds of relations (e.g., category-, property-, and motion-based commonalities) emerge several months later, and are shaped by the structure of the native language. The current proposal deepens the insights gained in the previous period and brings us closer to understanding the origin, evolution, and universality of these links between conceptual and linguistic organization. The studies in Section I trace the origin and evolution of infants’ expectations at several strategic developmental points. The section includes new methods to identify the mechanisms underlying infants’ ability to distinguish among different kinds of words (nouns, adjectives, verbs) and map them appropriately to their associated meaning.

The studies in Section II sharpen the evidence for these links in infants and children acquiring languages other than English (French, Mandarin).

**How the project will work:**
By combining developmental and cross-linguistic approaches, the proposed project 1) broadens the empirical and theoretical foundations of existing research, 2) provides a window through which to view more clearly the origins and evolution of links between conceptual and linguistic development, and 3) underscores the vital interaction between the expectations inherent in the child and the shaping role of the environment.

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