How to know what's necessary: Using computational modeling to specify Universal Grammar

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One explicit motivation for Universal Grammar (UG) is that it's what allows children to acquire language as effectively and as rapidly as they do. Proposals for the contents of UG typically come from characterizing a learning problem precisely and identifying a potential solution to that problem. One benefit of computational modeling is to see if that solution works when it's embedded in a learning strategy used during the acquisition process. This includes specifying (i) what the child knows already, (ii) what data the child is learning from, (iii) how long the child has to learn, and (iv) what the child needs to learn along the way.

When we identify successful learning strategies this way, we can then examine their components to see if any are necessarily both innate and domain-specific (and so part of UG). I have previously used this approach to propose new UG components (and remove the necessity of others) for learning both syntactic islands and English anaphoric *one*. In this talk, I investigate what's been called the Linking Problem, which concerns where event participants appear syntactically. I'll discuss some initial findings about when prior (and likely UG) knowledge, such as the Uniformity of Theta Assignment Hypothesis (UTAH), is helpful for learning useful information about the Linking Problem.