Language learners acquire the majority of their vocabulary in written and spoken contexts that provide minimal direct instruction regarding word meanings. This ability to learn novel word meanings from context requires the successful coordination of a variety of cognitive skills, including an ability to rapidly activate and recruit related world knowledge about similar events and lexical items. In this talk, I will focus on a series of recent findings from eye-tracking studies of individual and developmental differences in how children and adults use their world knowledge to guide real-time comprehension and language acquisition during real-time sentence comprehension. I will use the findings of this work to argue that an ability to flexibly activate and modify world knowledge has important consequences for language comprehension and acquisition, and, time permitting, will discuss future directions that aim to track down how and why individual differences in predictive processing skills and real-time activation of semantic knowledge relate to long-term outcomes in language acquisition.