What you're cooking up!

Theory of Mind

In 1978, David Premack and Guy Woodruff wrote a paper "Does the Chimpanzee have a Theory of Mind?" in which they tested whether chimpanzees understood an experimenter's goals (to obtain an inaccessible food item). They found that chimpanzees did. Since then Theory of Mind (ToM) has been used as a term to denote an agent's "theory" about others' mental states: goals, desires, beliefs, knowledge, perspectives. It is a theory because we can't observe these constructs – only behavior. But the question Does X have a Theory of Mind is not a yes/no question. Rather we must determine what kind of theory X has.

1. Consider a recent everyday experience from your life in which you inferred someone else's psychological states.
   a. What did you infer?
   b. How did that help you accomplish some task (looking for something, having a conversation, deceiving someone)?
   c. Could you have accomplished this task without inferring these states?
   d. What enabled you to infer these states? A theory of how behaviors relate to such states? Contextual cues? Ostensive clues, e.g., they told you?
2. How might children develop a theory of mind?
3. How would you experimentally show that a child can infer a psychological state?
   a. What kind of psychological state, e.g. false beliefs?
   b. What are the details of the task, e.g. a puppet moving a naive puppet's possession from one box to another?
   c. How would you measure whether they can indeed infer a psychological state, e.g., ask the child, in which basket the naive puppet will look for their possession?

Uh-ohs of Language Learning

As Professor Creel mentioned, children make many kinds of speech errors. In English, a common speech error is the overregularization of past-tense verbs, e.g., one

Through observational studies, researchers have found that, in English and some other languages, the rate of correct verb inflection is "U" shaped. Initially, when children talk about the past, they tend not to overregularize irregular verbs. Ironically, as they learn more about language and grammar, the rate of these errors increases. Finally, as children come to master verb morphology (adding prefixes and suffixes to words) and grammar, these errors vanish.

1. Write down some examples of irregular English verbs. How would you put these in the past-tense? What would overregularization sound like?
2. Can you think of how children might be learning language that could explain this pattern of errors? When might memorization explain the pattern? When might generalization (inductive inference) explain the pattern?
3. Does this pattern of errors rule out some possible theories about language acquisition? If children simply memorized language patterns, would we expect to find this "U" shaped pattern? Is it compatible with a theory that proposes children memorize every verb inflection, word by word?