A speaker of a language has observed a certain limited set of utterances in his language. On the basis of this finite linguistic experience he can produce an indefinite number of new utterances which are immediately acceptable to other members of his speech community. He can also distinguish a certain set of ‘grammatical’ utterances, among utterances that he has never heard and would never produce. Can we reconstruct this ability in a general way? I.e., can we construct a formal model, a definition of ‘grammatical sentence’ in terms of ‘observed sentence’, thus, in one sense, providing an explanation for this ability? Can we show that there are deep underlying regularities in observed utterances that lead to these results?

We are antecedently interested in developing a theory that will shed some light on such facts as the following: