

Modeling Acquisition of Number Morphology in Spanish
Amaresh R. Joshi

The grammar competition theory of language acquisition (Yang 2000) states that a learner entertains multiple versions of a grammar during the acquisition process. As the child encounters positive or negative evidence for a grammar, that grammar's probability of being true increases or decreases. After a certain time a winning grammar is selected categorically. In standard dialects of Spanish word final /s/ is a marker for plural number on lexical items in the DP. However in Chilean Spanish there is a phonological process of lenition of word final /s/. Due to this probabilistic process Chilean children receive variable input with regards to number marking for plural DPs. This results in a difference in the way they interpret plural DPs compared to children learning dialects where the plural marking is regular, such as Mexico City. This paper tries to model the acquisition process of number morphology for groups of adults and children from Chile and Mexico City. The final grammar and the rate at which it is selected by a group should depend on the variability in the linguistic input they receive. The goal is to determine a model where the selected grammar for each group matches that group's comprehension as measured using act out tasks.