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Pinker Stage 1: Best Explanation

Chapter 1

Any reasonable theory of language must explain how young humans are able to learn the rules of a language and predict timelines consistent with experimental evidence. The cultural artifact view posits that language is a part of culture, which means that 1) it is not tied to any one person, 2) it is consistent throughout a society, 3) humans are not born with any notion of language, and 4) language spreads through imitation. The two quotes provided cannot be explained by these axioms. If language is consistent throughout society, then it must be definable with a set of logical rules, of which (the current evolution of AI excepted) no such comprehensive rule set has been devised and utilized. Similarly, if language is only learned through imitation, then only words and rules that have been seen as patterns throughout one's life can be reused in conversation. A preschooler's ability to extend such rules far beyond their initially observed use is tantamount to a contradiction with the cultural artifact view. The language instinct view explains these by defining some fundamental aspects of language and language learning as "hard-coded" into our genes. This can explain why preschoolers are able to extend one rule so much – because some

genetic code explains how rules imply the existence of some other rules (at a high level; the real mechanisms for how this happens are likely far more complex). This also explains the complexity of grammar: if some aspects of grammar are encoded into our genes, instead of entirely a part of culture, it would be much harder to extract anything of substance regarding grammatical rules, and thus the deadlocked state of natural language generation (at least, up until the transformer architecture).

Chapter 2

A pidgin is sort of a proto language, borrowing words from the mother languages of its constituent speakers and with little structure. A pidgin itself is not particularly interesting; however, Pinker examines the case when a group of children is “exposed to the pidgin at the age when they acquire their mother tongue” (21). He observes that the children collectively develop a systematic grammar for the language, effectively transforming the pidgin into a full-fledged language, known as a creole. This process is separated into two distinct changes; 1) the languages of adults intermingling into an incomplete pidgin, and then 2) a group of young children shaping the pidgin into a grammatical creole. The difference between the children's and adults' treatment of the situation shows, Pinker argues, that children are instinctively inclined to develop (or use an existing) systematic means of communication. This is the chief concept of Pinker's “language instinct” theory.