

Vogt, P., & Lieven, E. (2010). Verifying Theories of Language Acquisition Using

Computer Models of Language Evolution. *International Society for Adaptive Behavior, 18*(1), 21-35.

This article points out that one of the basic principles, if not the basic principle, of what it means to be human is language. It states that it is still debatable as to whether acquiring language was due to one or multiple evolutionary events. Authors Paul Vogt and Elena Lieven believe that by studying how children acquire language, we can better understand how we (humans) evolved.

The authors point out challenges of studying language acquisition as being hard to observe, as well as experiment with, due to language being a complex process. Vogt and Lieven mention that language theories are largely descriptive, as opposed to rooted in quantitative data, making producing data that is applicable to generating predictions about languages cross-culturally difficult.

The author's methods for studying language acquisition in children involved identifying multiword utterances in their sample corpus and comparing that with a separate, computer-generated corpus. Note that this in-depth type of comparison was possible due to a computer program called Autotracer. Using this software, it was determined that at two years of age, most utterances spoken by children are direct repeats of something they have heard or said before. The study found that children who speak English replace nouns with specific names or descriptions before verbs and adjectives.

The authors conclude that their study is limited. Though Autotracer allowed for a large sample, the study only examined utterances that are a few words long. Though reader's may consider the newness of this type of research a weakness, by using this as a model, the author's argue that it is possible to compare computer-generated data with real world data to arrive at relevant conclusions about language acquisition.