

# Ambiguity in child language

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## **Ambiguity in child language: the problem of interobserver reliability in ambiguous observation data\***

PAUL VAN GEERT  
MARIJN VAN DIJK  
*University of Groningen*

### ABSTRACT

In language acquisition, inter-transcriber agreement over linguistic categories assigned to recorded utterances is conceived as a measure of observer reliability. We argue that disagreement is not merely a reflection of observer errors or noisy data, but can be a reflection of the genuine ambiguity of early speech. Disagreement arises from the fact that the child is still building linguistic categories, and therefore, from the fact that the language is truly ambiguous. This ambiguity can be quantified by applying concepts from fuzzy logic, which we demonstrate in a case study. After presenting an index of agreement and a Monte-Carlo procedure for calculating the probability of chance agreement, we introduce an index of ambiguity, based on the fuzzy logic notion of degree-of-membership.

### KEYWORDS

Ambiguity; Cohen's kappa; dynamic systems theory; fuzzy logic;