

The role of semantic complexity for the acquisition of adjectives

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Abstract

This thesis investigates the acquisition of compositional and lexical semantic properties of adjectives in German-speaking children between the age of two and five years.

According to formal semantic approaches, there are intersective and non-intersective adjectives, subjective and non-subjective adjectives as well as gradable and non-gradable adjectives. These properties concern the compositional mechanisms involved in nominal modification, i.e., the combination of adjectives and nouns. In addition, adjectives differ regarding lexical semantic properties that contribute to the adjectives' meaning. Differences in the adjectives' scale structure have led to the theoretical assumption that gradable adjectives should be distinguished into relative and absolute gradable adjectives. In addition, meaning components such as multidimensionality or subjectivity have led to the distinction between dimensional and evaluative gradable adjectives. These properties have been mostly investigated independently of each other in both theory and acquisition research. I suggest a classification system for adjectives that combines different semantic properties. This system results in six adjective classes constituting a *Semantic Complexity Hierarchy*. Assuming that these adjective classes differ in semantic complexity, I propose an operationalization of semantic complexity that takes into account the adjectives' length of description, their type complexity, and lexical properties that contribute to the adjectives' meaning.

Regarding the question of how monolingual German-speaking children acquire the semantics of adjectives, I hypothesize that the order of acquisition of adjectives is determined by their semantic complexity. This hypothesis is tested in a spontaneous speech study and a comprehension experiment. The spontaneous speech study is a longitudinal investigation of the production of adjectives from 2;00 to 2;11 years based on transcripts from a dense data corpus. The results provide evidence that the mean age of acquisition for the adjective classes in the *Semantic Complexity Hierarchy* follows the order predicted by semantic complexity. The same order was observed for the age at which the number of types for each class increased most. A preliminary analysis of the input indicates that the frequency of parental adjective use is related to the order of acquisition, but it is unlikely that frequency determines the order completely.

The comprehension experiment focuses on two specific adjective classes. I examine children's and adults' interpretation of relative (*big, small*) and absolute (*clean, dirty*) gradable dimensional adjectives with a picture-choice task. These two classes are of the same semantic complexity because they are both gradable, but they have different scale structures. As a result, they must be interpreted differently due to lexical semantic properties. I investigate whether children calculate different standards of comparison for relative and absolute gradable adjectives and whether they distinguish between relative and absolute gradable adjectives regarding the relevance of the explicit comparison class. The results indicate that as of age 3, children distinguish between relative and absolute gradable adjectives with regard to the standard of comparison. However, with respect to the relevance of the comparison class, for 3-year-old children, unlike for 4- and 5-year-olds, changes in the noun, i.e., in the explicit comparison class, led to non-adult-like responses regarding both relative and absolute gradable adjectives.

On the basis of the empirical findings, I propose an acquisition path stating that children enter the acquisition process with inherent linguistic knowledge, the *Semantic Complexity Hierarchy*, and cognitive abilities to categorize their environment. I suggest that initially, children apply the least complex interpretation available in the *Semantic Complexity Hierarchy* to all adjectives: all adjectives are interpreted as properties of individuals that are not gradable. To access other levels of the *Semantic Complexity Hierarchy* and to establish more complex adjective classes, positive evidence from the input and conceptual properties of adjectives, e.g., COLOR, MENTAL STATE, PHYSICAL PROPERTY etc., can operate as triggers.