Multiple adjectival modification in child spontaneous speech and in the adult input

Not all languages allow adjective stacking. In German and English, multiple adjectives in prenominal position such as (1) are possible, although they are not very frequent in adult spontaneous speech (Wulff 2003).

(1) Der große grüne Ball the big green ball

Languages like Italian show postnominal adjective stacking, and some languages including Thai, Nung, and Indonesian are reported to only allow adjectives in a conjunction relation or in a relative clause (Simpson 2005). Previous acquisition research indicates that single prenominal adjectives are already acquired by age of 2 in German (Clahsen 1994, Weicker 2019), and first evidence from English suggests that AAN utterances are produced as early as age 2 (Bar-Sever 2019). It is open at what age children acquire multiple adjectival modification in German, which allows multiple prenominal adjectives and has a richer inflectional system than English. Second, it is unclear how children discover that adjective stacking is possible in German, given that it is so infrequent in the ambient language.

My study looked at spontaneous child speech (n= 30, age range: 1;00 to 7;11) and the adult input (CHILDES). The first part addresses (Q1): How and when do children discover that double prenominal adjectives are productive in German? In a first step all adult AAN utterances were extracted (n= 418). Applying the Tolerance Principle (TP, Yang 2016) to this data I will show that the productivity of AAN in German can be acquired based on evidence in the child's input. In a second step, all child AAN utterances were extracted (n= 158). AAN were attested for 13 children (all high density corpora), 5 of these children produced them already by age 2;05.

The second part of the study focuses on adjective ordering preferences, which are typically explained via ordering hierarchies of notion-based adjective classes (e.g., Scott 2002, Cinque 2010). Taking Scott's hierarchy as a starting point (see (2)), this part addresses (Q2): Do children show evidence of adjective ordering preferences?

(2) SUBJECTIVE COMMENT > ?EVIDENTIAL > SIZE > LENGTH > HEIGHT > SPEED > ?DEPTH > WIDTH > WEIGHT > TEMPERATURE > ?WETNESS > AGE > SHAPE > COLOR > NATIONALITY/ORIGIN > MATERIAL > COMPOUND ELEMENT > NP

Out of the 158 AAN child utterances, 58 contained adjectives that were part of the hierarchy and could be further analyzed. Adjective pairs in line with the hierarchy (n=41) occurred significantly more often than those violating the hierarchy (n=17), $X^2(1) = 9.93$, p < .01. Notably, the majority of AAN utterances could not be evaluated regarding the hierarchy in (2): 76 AANs contained one or two adjectives that were not classifiable; 24 AANs contained adjectives that both belong to the same adjective class.

The results of the study show that AAN are productively acquired at an early age in German. Moreover, the study suggests that adjective ordering preferences are already present in child speech.

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