Influences on the agreement in German hybrid nouns – distance and syntactic domain

Due to a conflict between grammatical and conceptual gender, agreement mismatches arise. Since hybrid nouns (cf. Corbett 1991) like German Mädchen ‘girl’ are morphologically neuter but denote a female person, pronouns can exhibit either neuter agreement or feminine agreement (1). The formal neuter agreement is called syntactic agreement, the feminine form is semantic agreement. For a theoretical discussion of hybrid nouns see Wurmbrand (2017) a.o.

(1) Das Mädchen liest ein Buch. Danach geht es/sie spazieren.  
‘The girl is reading a book. Afterwards she goes for a walk.’

Previous research (e.g. Corbett 1991; Thurmair 2006) identified several factors that influence the agreement pattern, such as the linear distance between pronoun and antecedent and the syntactic domain. As for linear distance, the main claim is that the likelihood of semantic agreement increases as the element is further away from the hybrid noun. The same applies for the occurrence in a different syntactic domain, e.g. in a new sentence compared to a subordinate clause. This is in line with processing theories that assume a loss of syntactic information after a sentence boundary (Sachs 1967, Jarvella 1971).

Two acceptability judgement tasks (Likert Scale 1-7) and one production experiment investigate the two factors isolated from each other. The nouns used in the studies are all grammatically neuter and can be separated in two categories: the semantic gender of the referent is either part of the lexical semantics (Mädchen ‘girl’, Au-pair-Mädchen ‘au-pair-girl’, It-Girl ‘it-girl’) or the gender of the denoted person is not lexically fixed (Opfer ‘victim’, Kind ‘child’).

Experiment 1 investigates the effect of the linear distance on the acceptability of the agreement pattern of relative pronouns. Therefore, semantic and syntactic agreement varied, as well the position of the relative clause (adjacent or extraposed). The results are in line with the former observations: generally, semantic agreement was rated worse than syntactic agreement, but the semantic alternative became significantly more acceptable with increasing distance.

In Experiment 2, the syntactic domain relative to that of the hybrid noun was manipulated: a personal pronoun occurred either in a subordinate or in a coordinate clause. There was no significant effect of the syntactic domain on the acceptability judgements. Semantic agreement is more acceptable with personal pronouns than with relative pronouns (concordant with the “agreement hierarchy” cf. Corbett 1979). Furthermore, there was an effect of the noun group mentioned above on the agreement pattern in Experiment 2: semantic agreement was less acceptable, when it was not lexically fixed.

Experiment 3, a picture description task, was conducted in order to investigate if the syntactic domain has an influence when a choice for either syntactic or semantic agreement is necessary. The production of personal pronouns co-refering to a hybrid noun was elicited using a picture sequence. The pictures were combined with a text that included the noun and allowed to manipulate the occurrence of the pronoun in a subordinate or in a new clause, keeping the distance constant. Again, the results show no effect of syntactic domain and correspond to the acceptability judgements in Experiment 2. The distribution of semantic and syntactic agreement with personal pronouns also reflects the acceptability data. Again, an effect of the noun was also observed.

The results indicate that the influence of syntactic information decreases with distance, but not necessarily with a sentence boundary. A possible explanation is that the gender feature in German is essential for referent tracking over sentence boundaries (cf. Schweppe et al. 2009). Hence, even when the syntactic feature could easily be replaced by a semantic one, the existence of a sentence boundary does not lead to a loss of this kind of syntactic information. Furthermore, the effect of the different nouns could be explained by differences in the access to semantic gender information, i.e. the connection of the semantic feature to the lexical semantics.