Incrementality in the processing of adverbial order variations

Research on the processing of word order variations in sentences has shown that deviations from the canonical complement order induce processing difficulties (e.g. Rösler et al., 1998) which is interpreted as evidence for serial syntax-first parsing models (Frazier, 1987) and for the high degree of incrementality in complement processing. However, few studies have been concerned with parsing of adjunct order. Since German is a language with relative flexible word order, it provides a suitable testing ground for the processing of adjuncts.

Based on theoretical (Frey & Pittner, 1998) and psycholinguistic (Stolterfoht, Gauza, & Störzer, 2019) evidence for syntactic base positions for adverbials in German, we conducted a self-paced reading and an acceptability judgment study in which we manipulated the order of different types of adverbials. First, we found further evidence for the postulated base positions of adverbials. Second, we attested that deviations from the canonical order lead to increased processing times. In contrast to the cost for moved complements, the increase in processing time is delayed and also reflected in sentence wrap-up effects. We conclude that syntactic position does influence adverbial processing but it does not guide initial parsing decisions. The attested delay corroborates the Construal theory of adjunct processing (Frazier & Clifton, 1997) according to which adjuncts are only loosely associated to their processing domain and that structural and interpretative principles are used to specify the syntactic structure. Furthermore, it indicates that adjuncts and complements vary in the degree of incrementality.

Literature

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