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## Processing shapes grammar. But whose processing are we talking about?

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Processing shapes grammatical organisation, including asymmetric coding with a marked vs. unmarked alternance (Hawkins 2004), but it is unclear whether the processing considerations at issue are those of speakers or of addressees. Hawkins's model is framed as benefiting the addressee, though he remarks that it equally benefits the speaker (2004: 24-25). Glossing over parsing and production is legitimate as long as speakers' and addressees' motivations are aligned, but this is not always the case. The idea that language has to seek an optimal balance between the often opposite demands of both speech act participants is old, harking back at least to Georg von der Gabelentz in the 19th century. So eventually, we will have to decide which of the two speech act participants has the upper hand in the processing-driven organisation of grammar.

On the one hand, there is evidence for an addressee-oriented view: Hawkins's 'Minimize Domains' principle, stating that the syntactic structure should be recognisable in as short a span as possible, benefits the addressee, as the speaker is never unsure about the syntactic structure. Likewise, Rohdenburg's (1996) Complexity Principle stating that in complex structures more explicit encoding is used is only beneficial to the addressee. If the structure is already complex, adding extra grammatical encoding arguably burdens the speaker's performance even more. On the other hand, it is not self-evident that speakers should be concerned with their addressees' needs forfeiting their own. Speaker's altruism is evolutionarily implausible (Kirby 1999). Levinson (2000) also stresses the speaker's needs in his neo-Gricean approach. As Levinson points out, the bottleneck in human communication is at the production side: decoding is much faster and more effortless than encoding (Levinson 2000: 28), so that taking inferential short-cuts to add layers of meaning on top of what is truth-conditionally encoded is especially helpful for the speaker. Adding extra material in the overtly coded variant in an alternance (e.g. zero- vs. that-complementation in English) goes against the rationale to

AG5

prioritize production efficiency over parsing speed. Hawkins's principle 'Minimize Forms' also seems first and foremost serve the speaker's comfort. True, reducing forms also adds to the parsing effort, as the form-function pair of the extra encoding has to be stored in the hearer's brain, but given the ease with which inferencing is accomplished (Levinson 2000), and given the vast storage capacities of the human mind (Dąbrowska 2014: 626), the extra speaker's efforts outweigh the extra addressees' efforts.

In our paper, we will adduce quantitative data from a close-up case study that can shed light in the debate over speaker vs. addressee processing. The case study deals with the direct object vs. prepositional object alternance in Dutch verbs, like *zoeken (naar)* 'search (for)'. A corpus study reveal that the prepositional variant is used more often when the object is syntactically complex. This can be explained in two ways: first, the preposition can function as a signpost to help the addressee decode the message. This would be in line with Rohdenburg's Complexity Principle, and would point to a hearer-driven processing account. Second, the use of a preposition allows the object to be extraposed (or 'exbraciated'). This would be beneficial to the speaker, who can postpone the expression of the complex object at the end of the clause, when all other issues have been resolved, avoiding centre-embedding. On the basis of corpus investigation, we will tease apart both explanations. Of special interest are cases such as (1), where the head noun of the object is not extraposed (to the right of *gezocht* 'search-PST.PTCP'), but the submodifying complement clause is. If the use of the prepositional variant is especially favoured in this context, this would be an argument for the first explanation. Here, the processing difficulty of the discontinuous object may be alleviated for the hearer by adding the extra signpost.

- (1) De meesten van ons hebben **(naar) manieren** gezocht **om de dilemma's van de conflicten in hun relaties en hun jeugd dilemma's te boven te komen.**  
*The most of us have (to) ways searched for the dilemmas of the conflicts in their relations and their youth dilemmas to above to come*  
 'Most of us have searched (for) ways to overcome the dilemmas of the conflicts in their relations and their youth.' (SoNaR, Oostdijk et al. 2013)

**References:** • Dąbrowska, E. (2014): Recycling utterances: a speaker's guide to sentence processing. In: *Cognitive Linguistics* 25(4): 617-653. • Hawkins, J. (2004): *Efficiency and complexity in grammars*. Cambridge: Cambridge University Press. • Kirby, S. (1999): *Function, selection and innateness. The emergence of language universals*. Oxford: Oxford University Press. • Levinson, S. (2000): *Presumptive meanings: the theory of generalized conversational implicatures*. Cambridge, MA: MIT Press. • Oostdijk,

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