

Individual knowledge structures matter. A usage-based individual-focused investigation of linguistic relativity effects.

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Inter-individual differences in usage-preferences and, consequently, in patterns of linguistic knowledge, have recently become a focus of interest in usage-based cognitive linguistics (cf., e.g., Barlow 2013; Dąbrowska 2012). In contrast to this, this dimension of variation has received only very little attention in linguistic relativity research (cf., e.g., Kay 1996; Vorweg and Rickheit 2000).

The research we present in this paper addresses this issue. It investigates whether variation between individual speakers' entrenched patterns of linguistic knowledge has an impact on the (non-)occurrence of relativity effects.

The linguistic structures tested are quasi-synonymous constructional variants of German complex spatial language constructions of the type illustrated in EXAMPLES (1) and (2):

- (1) Die Flasche ist in der vorderen rechten Ecke (auf dem Tisch).
'the bottle is in the front right-hand corner (on the table)'
- (2) Die Flasche ist vorne rechts (auf dem Tisch).
'the bottle is front_{ADV} right_{ADV} (on the table)'

These constructions can be claimed to realize either a more *object-focused* (EXAMPLE (1)) or a more *space-focused construal* (EXAMPLE (2)) of their referent scenes (cf. Carroll 1993; Günther 2014; Verhagen 2007). Accordingly, we hypothesized that the (current and/or habitual) use of different types of constructions (1, 2) should be associated with differences in focused attention as well as memory performance.

We tested this hypothesis by recording speakers' eye-movements when performing a non-linguistic and a linguistic task while viewing potential referent scenes to these constructions (cf., e.g., Altmann and Kamide 2004; Hartsuiker et al. 2011), and by probing their recognition memory for the observed scenes (cf., e.g., Papafragou, Hulbert and Trueswell 2008; Flecken, von Stutterheim, Carroll 2014). To determine whether the predicted attentional and memory effects are sensitive to variation in speakers' patterns of entrenched linguistic knowledge, we tested three different speaker-types: speakers who displayed a strong preference for using *space-focused* constructions (*CONSISTENT SPF-SPEAKERS*), speakers who strongly preferred using *object-focused* constructions (*CONSISTENT OBJF-SPEAKERS*), and speakers who did not display a preference for any of the two construction types (*VARIABLE SPEAKERS*).

We find that the predicted construction-use associated effects only occurred *within VARIABLE SPEAKERS*, while performances did not differ between *CONSISTENT SPF-SPEAKERS* and *CONSISTENT OBJF-SPEAKERS*.

We take these results to mean that individual speakers' knowledge patterns indeed constitute a central determinant of the (non-)occurrence of relativity effects, and that such effects therefore require to be (re-)defined as a *speaker-specific* rather than speech-community general or cross-linguistic phenomenon. We will discuss this interpretation with respect to its theoretical and methodological implications not only for future linguistic relativity research, but also for our understanding of the relation between language and cognition more generally.

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