Spatial Meaning Shifts in German Particle Verbs with "auf" and "an"

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German particle verbs (PVs; e.g., *anschieben* 'push something forward') are highly productive and ambiguous complex structures that combine a particle such as *an* with a base verb (BV; *schieben* 'push something'). They often trigger (regular) meaning shifts of the BVs (Lechler & Roßdeutscher, 2009; Springorum et al., 2013). For example, while *anschieben* emphasizes the horizontal direction of the pushing event *schieben*, the PV *aufschieben* ('postpone') expresses a metaphorical meaning.

Similarly to embodied models of cognition (Gärdenfors, 2004; Lakoff, 1987), we understand the basic meanings of prepositional particles as spatially grounded mental structures. In the vein of perceptual frameworks of motion cognition (Bergen et al., 2007; Kaschak et al., 2005), our work investigates the directional concepts of the particles *auf* and *an*. We hypothesize that *auf* is primarily associated with a vertical directionality, and *an* is primarily associated with a horizontal directionality. Thus, *an* combining with BVs incorporating a horizontal direction (such as *schieben*) results in a literal PV reading, while *auf* combining with horizontal BVs results in a meaning-shifted PV reading. Vice versa for the remaining conditions.

In a priming experiment, we study the effect of combining these two particles (as primes) with BVs intrinsically describing a horizontal vs. vertical movement (as targets). Preliminary results show a processing facilitation (in terms of shorter reaction times in a lexical decision task) when the direction of the particle and the BV match (e.g., *anschieben*). On the other hand, a mismatch in directionality causes processing interference as reflected in longer reaction times (e.g., *aufschieben*).

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