

# Force Verbs

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There is a growing recognition of the role of forces in verb meanings, starting with the seminal work of Leonard Talmy. In one line of research these forces are analyzed in terms of vectors, with a magnitude and spatial direction and interactions describable in vector-algebraic ways. This has been fruitfully applied by Phillip Wolff in the analysis of causative verbs like ‘enable’ and ‘prevent’ and by Pross & Roßdeutscher in the analysis of the verb ‘ziehen’ (pull). We want to contribute to that line by studying a larger set of verbs (in German) exhibiting some degree of force exertion, including ‘schlagen’ (hit) and ‘drücken’ (press, push), in order to find out what role force vectors play, not only in their lexical semantics, but also in their compositional semantics, particularly in the modifiability by the force adverbs ‘hart’ and ‘leicht’ and in the combination with prepositions (e.g. ‘ziehen an’ (pull at) vs. ‘drücken auf’ (push on)). We offer a semantics of such verbs in which events, forces, and paths are brought together in a coherent way. We want to explore (also on the basis of questionnaire data) how this can help us understand why the specification of a result can sometimes make the force vector inaccessible for modification (‘hart schlagen’ (hit hard) versus ? ‘hart einschlagen’ (break hard)).