Using Conceptual Spaces to Model, Actions, Events and the Semantics of Verbs

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Actions and events are central for a semantics of natural language. I present a cognitively based model of these notions. After giving a general presentation of the theory of conceptual spaces, I suggest how the analysis of perceptual concepts can be extended to actions and events. Firstly, I argue that action space can be analyzed in the same way as e.g. color space or shape space. The hypothesis is that our categorization of actions to a large extent depends on our perception of forces. In line with this, an action will be described as a pattern of forces. An action category will be identified as a convex region of action space. I review some indirect evidence for this representation. Secondly, an event is represented as an interaction between an agent space and a patient space. The agent performs an action, i.e. exerts a force, that will change the properties of the patient, i.e. its location in patient space. This model of events will be suitable for an analysis of the semantics of verbs. I also compare the model of events to other attempts from cognitive semantics.