Dr. Barbara Kaup

The role of sensorimotor processes in language comprehension

According to the embodied-cognition framework of language comprehension, sensorimotor processes play an important role for meaning composition: During language processing, comprehenders are assumed to mentally simulate the objects, situations and events referred to in the linguistic input. More specifically, it is usually assumed that words automatically activate experiential traces in the brain that stem from the comprehenders’ interactions with the referents of these words. When words appear in larger phrases or sentences, the activated experiential traces are presumably combined to yield an experiential simulation consistent with the meaning of the larger phrase or sentence. Abstract concepts are assumed to be captured in these simulations by being metaphorically mapped onto more concrete experiential dimensions, and linguistic operators such as negation or disjunction are typically considered to function as cues controlling specific integration processes.

In my talk, I will give an overview of experimental work conducted in my lab investigating these assumptions. In addition, I will present some preliminary results from experiments investigating developmental aspects, which shed further light on the embodied-cognition framework.