

## Using the hands to read the mind: Co-speech gesture as evidence for the embodied nature of human cognition

The nature of human mental representations continues to be a topic of active debate within cognitive science. That is, cognitive scientists continue to wonder whether the knowledge a person has about an object or event is represented symbolically or in a modality-specific way, or whether both kinds of representations might be available for use. Recently, evidence has been accumulating that some kinds of representations, namely those used when we are producing or understanding language, are *embodied*. According to such theories, during language use we are simulating (or partially reconstructing) what is being talked about. For example, in understanding a sentence like *Mary opened the drawer*, we might generate a mental image of the event and activate a motor program having to do with motion towards the body. Psycholinguistic experiments have suggested that such simulations are indeed taking place (e.g., Glenberg & Kaschak, 2002; Kaschak & Glenberg, 2000). Thus far, however, researchers promoting embodied cognition have ignored the fact that when we are using language, we are frequently *physically* simulating what we are talking about through gestures produced along with speech. Specifically, speakers often literally embody what they are talking about, by using their hands and bodies as though they were participants taking part in the event. This behavior has been described as *character viewpoint* gesture. This talk presents a set of experiments assessing the circumstances that elicit character viewpoint gesture. I argue that character viewpoint gestures are triggered by two factors: discourse novelty (whether information being communicated is discourse old or new) and properties of the stimulus itself (e.g., animacy). Implications for theories of embodied cognition are discussed.