The Role of Simulations in Interpreting Language

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In this talk I examine recent work in cognitive science and linguistics arguing that language interpretation involves the creation of a simulation of the utterance. Some of those developing such a view include Barselou (1999), Feldman and Narayanan (2003), Evans (2008), and Bergen (2013). Experimental evidence from psycholinguistic studies increasingly support such a view, and some linguists are working to accommodate these findings theoretically, e.g., Evans (2008). Here, I will generally agree with this program of research. Still missing from these accounts, however, is a formal or computational characterization of what a simulation is, and how it is constructed. This is important if the theory is to be tested and evaluated against the same linguistic data and phenomena as other linguistic theories. I outline what such a model of simulation generation should look like, and how it compares to formal theories of semantics for natural language.