Abstract: I discuss how insights from computational linguistics and machine learning can be used to build models of human judgment and decision making with realistic knowledge representations about the world. In addition to specifying the cognitive mechanisms people use to form beliefs and preferences, these models also represent the information on which cognitive mechanisms operate. Subsequently, they are able to deliberate over and respond to naturalistic prompts, and moreover, mimic human responses to these prompts. My models shed light on the processes at play in everyday cognition, and illustrate a novel approach to studying naturalistic behavior.