

Ideal observers in social cognition

Dr. Noah Goodman

MIT, Department of Brain and Cognitive Sciences

After a great deal of research, and significant insights, many foundational questions remain about social cognition (aka, "theory of mind"). Why does social cognition have such a striking developmental trajectory? How do adults solve the "inverse problem" to recover beliefs and desires from actions? Perhaps most puzzling, why do we ascribe unobservable mental states to others in the first place? Ideal observer models, which are approximately optimal solutions to a given task, have proven a valuable tool to understand perception and learning. They have been used to successfully explain counterintuitive effects, illusions, and everyday leaps of reason. I will argue that an ideal observer analysis can also help us to understand social cognition, and I will illustrate this approach with several "ideal social observer" models and corresponding experimental tests.