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A Reading of
Robert M. Gordon's
Folk Psychology as Simulation

Robert Gordon's paper, when read in light of later papers, such as Gopnik (1992) or Nichols, Stich et al (1996), does not seem to offer much in terms of persuasion. It holds the classic formulation of "Simulation Theory" (ST), laying out the argument as follows:

Human agents have a remarkable ability to predict their own actions. This ability seems to be based not on a theoretical analysis of all the elements that influence our actions, but rather on a simulation we run in our minds, a simulation of the hypothetical situation that is about to happen to us. This predictive ability works just as well for nonfactual reasoning and for distant time prediction.

Similarly, we predict behavior of others. This can also be explained through a "simulation" approach. Gordon supports this "Simulation Theory" by testimonies of chess players, bridge players and literary figures, as well as by intuitive appeal.

(It should be noted as early as this, that regardless of the viability of this theory, I find it somewhat flawed to generalize from phenomena of professionals to the general public. In particular, I do not think that examples from specifically trained mindful actions can easily transfer to everyday psychological mechanisms.)

Further on, Gordon uses a hypothetical situation to demonstrate ST, as well as evidence from autistic children's inability to predict other's behavior coupled with their inability to perform pretense play. The author even goes as far as claiming that the sentence "Smith believes the Dewey won the election" is merely a rephrasing of a simulation-based uttering.

As stated in my reading of Nichols, Stich et al (1996), I believe that most of the empirical evidence points towards a theory-theoretical view and not a ST one. Simulation can serve merely as an attractive alternative used to approach task-specific problems without trying to generalize to a theory of mind.

Gordon's paper does not shed any new positive light on this conclusion, and the fact that he falls back on using some form of internal-belief theory in many of his explanations, as well as the fact that he does not provide solid evidence for the power of ST to explain phenomena that TT cannot, does not make ST more appealing.

Simulation might well be in place when we consciously make an effort to switch perspectives, such as in professional chess or bridge or when a particular problem calls for it, but it hardly replaces the everyday notion of theory of mind, namely how we perceive that other agents navigate their beliefs and desires towards actions.

I would also assume that modeling a simulation-based approach for ToM in artificial agents would prove to be more time-consuming, complex and error-prone than a direct belief-based theory of mind.