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A Reading of
Andrew Whiten's
When Does Smart Behavior-Reading Become Mind-Reading

Whiten's paper attempts to refine the focus around the question of how we know whether pre-verbal humans and non-verbal primates have a concept of others' minds or whether they are simply acting on behaviorist terms. It is not clear whether an answer to this dilemma even exists, and if it exists, what it really means to have answered this question, or what practical insight it would afford us. So, while I agree with Whiten's general conclusion (i.e. that of seeing the mind as an "intervening variable"), I doubt that he has actually progressed in answering the higher-level question he has posed, possibly because its formulation is counterproductive.

In his analysis, Whiten often arrives at just that conclusion, asking: "What makes the mental and non-mental alternatives really different in practice?". Throughout the paper, he progresses through various examples for increasing levels of "mind-reading", from behaviorist "implicit" mind-reading ("where is my prey going to run next?"), through the intricate task of deception recognition, and repeatedly comes to the same conclusion: At every level, *some* behaviorist explanation can replace the mentalist one. In simple matters, these behaviorist approaches are usually called "economical" since they don't need to assume a theory of mind that mediates between the perceptual signals and the behavioral outputs.

But, as the level of alleged mentalism increases, Whiten reaches the conclusion that a mentalist analysis would actually be more economical than a behaviorist (S-R) one. In particular seeing mental states in a way similar to "intervening variables" could provide for a more efficient representation of complex stimulus-response networks.

Again, it makes sense that in analyzing behavior we use intermediate states which we might, or might not call "mind". Whiten's role-reversal experiment also strongly suggests that. I found, however, another point of interest in his description of primate mind reading particularly inspiring for our collaborative machine endeavor: the express "reading" of the partner's mind's change of state, especially noted in pointing examples ("alternating her gaze between his eyes and the latch") seems to be important in creating a deep-structured mutuality in collaboration. So, not only feedback testing on part of the artificial creature, but creating visual feedback expressing the very act of feedback-testing is crucial in creating socially "correct" models of interaction between two mindful agents.