

Gordon's Talk (Precis)

Topic One

In part of my talk (I'm not sure whether it will come first or second), I will elaborate a bit on a suggestion I made in my paper in the Imitation volumes. In discussing the recognition that one's conspecifics are intentional or goal-directed agents like oneself, I said:

For the kind of recognition I have in mind, what is necessary and sufficient is just this: that I interpret their behavior under the same scheme that makes my own behavior, along with the intentions, motor plans, and gut feelings that underlie it, intelligible to me: namely, the "intentional" scheme of *reasons*, *purposes*, and *object-directedness*.

For this purpose, mirroring systems, and mirror neurons in particular, appear to be crucial. I wrote:

The brain treats the exogenous replicas of another's motor plans and visceral responses in the same way it treats their like-coded endogenous counterparts. It seeks to make them unsurprising, to make sense of them, by fitting them to the "intentional" scheme of reasons, purposes, and object-directedness.

What I want to suggest, among other things, is that MN's take us from a task of explaining the movements of bodily parts in terms of causes to that of explaining intentional actions in terms of an agent's reasons and purposes. In doing this, they make a crucial contribution, not just to mindreading, but to our very capacity to conceive certain bodies as having minds to be read.

Topic Two

In their recent critique of the motor theory of cognition,ⁱ Jacob and Jeannerod present us with a surgeon with two personalities: as Dr Jekyll, he performs appendectomies on anesthetized patients, and as Mr Hyde, he performs exactly the same hand movements, but on non-anesthetized victims, with sadistic intent. Because his hands are seen moving the same way in the two conditions, the observer's mirror neurons won't pick up the difference in social intentions: in one, to improve the patient's medical condition, and in the other, to derive pleasure from the victim's agony. They can only represent the agent's motor intentions, which are intentions to execute basic actions. Jacob and Jeannerod use this example to support their conclusion that "there is a gap between full-blown human mindreading and the psychological understanding of perceived actions afforded by MNs."

Their conclusion is surely right: MNs can't be the whole story. The Jekyll-Hyde example nicely illustrates this. What I will do, however, is to use the example, with some embellishment, to make two points. *First*, there is evidence that MNs are not restricted to motor intentions. *Second*, if MNs represent intentions of *any* sort, then they take over part of the territory that formerly was thought to be the province of our "theory of mind." They convert perceived raw motor behavior into perceived intentional actions, and thereby chip away at the "black box" that is supposed to reside between situation and behavior.

ⁱ Trends in Cognitive Sciences Vol.9 No.1 January 2005.