
Perception-action mechanisms as precursors to empathy

Alejandro Rosas*¹

¹Universidad Nacional de Colombia (UNAL) – Ciudad Universitaria, Bogota, Colombia, Colombia

Abstract

Evolutionary approaches to morality converge with those philosophical views that place empathy at the core of moral capacities, but we currently know little about empathy as a mechanism and even less about its evolutionary descent. Preston and de Waal (2002) proposed a perception-action model (PAM) that grounds empathy in perception-action mechanisms. In order to prosper, this hypothesis must cope with some self-imposed challenges. Neurological evidence for perception-action mechanisms surfaced when a research group in Parma discovered mirror neurons in monkeys, i.e., neurons that fire both when the subject does a goal-directed action and when it observes another individual (object) doing the same action. This gives initial neurological substance to the PAM, or at least to its precursor, but at the cost of making its evolutionary function irrelevant to helping behavior: the mechanism evolves, presumably, to facilitate automatic individual responses to environmental contingencies with the same action that is perceived in others (Preston and de Waal 2002). This accounts for simple forms of imitation that lack 1) a representation of the internal state of others; and 2) a motivation to help. Though imitation is plausibly connected to empathy and the shortfalls of simple forms of imitation are congruent with the label "precursor", a precursor needs a plausible trajectory to the derived trait. In a sketchy and inevitably speculative attempt, I search for clues of such trajectory in the selective pressures behind the complexities of primate social life: the need for a self other distinction, for predicting behavior and for communication.

*Speaker