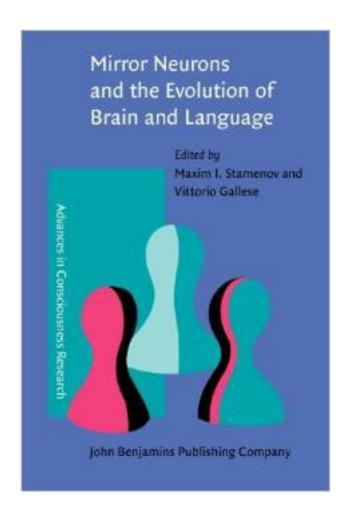
Mirror Neurons and the Evolution of Brain and Language



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The emergence of language, social intelligence, and tool development are what made homo sapiens sapiens differentiate itself from all other biological species in the world.

The use of language and the management of social and instrumental skills imply an awareness of intention and the consideration that one faces another individual with an attitude analogical to that of one's own. The metaphor of 'mirror' aptly comes to mind. Recent investigations have shown that the human ability to 'mirror' other's actions originates in the brain at a much deeper level than phenomenal awareness. A new class of neurons has been discovered in the premotor area of the monkey brain: 'mirror neurons'. Quite remarkably, they are tuned to fire to the enaction as well as observation of specific classes of behavior: fine manual actions and actions performed by mouth. They become activated independent of the agent, be it the self or a third person whose action is observed. The activation in mirror neurons is automatic and binds the observation and enaction of some behavior by the self or by the observed other. The peculiar first-to-third-person 'intersubjectivity' of the performance of mirror neurons and their surprising complementarity to the functioning of strategic communicative face-to-face (first-to-second person) interaction may shed new light on the functional architecture of conscious vs. unconscious mental processes and the relationship between behavioral and communicative action in monkeys, primates, and humans. The present volume discusses the nature of mirror neurons as presented by the research team of Prof. Giacomo Rizzolatti (University of Parma), who originally discovered them, and the implications to our understanding of the evolution of brain, mind and communicative interaction in non-human primates and man. (Series B)

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标签

评论

这段时间遇到的让我浑身发抖的几个事情,一是吴飞老师对清代的丧服学的西方思想史达通的尝试,从礼理生生形而上和伦理实际到民国的立宪改革以及结合实际的这个脉络的打通对我太重要,另外就是在神经科学方面的一些研究扎扎实实的身体推进到了一个能够让哲学体系有一个身体的可能的地方

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书评

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