Processes of Believing - A Neurophysiological Perspective

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The reductionist perception-action model falls short of explaining human control of behaviour. Recently, the valuating perspective on the complex world has been advocated as a further processing domain guiding human behaviour. For example, humans make probabilistic inferences about the affect of a person from her/his bodily movements (face expressions of emotions, emblematic gestures and whole body movements) as well as tentative predictions about the person's intention. Such interpretations have been labeled theory of mind and empathy but essentially reflect personal beliefs. Neuroimaging investigations have shown that the medial frontal cortex is critical for theory of mind and empathy as well as the control of action. It is suggested that believing is a fundamental human brain function affecting one person's perceptions and behaviour.