The Social Brain and its Failures

Chris Frith and Uta Frith

We explain the behaviour of ourselves and of others in terms of desires, intentions, feelings and beliefs. How does the brain achieve this? Brain imaging studies have consistently revealed activity in a circumscribed set of brain regions of the social brain, highlighting in particular medial prefrontal cortex and superior temporal sulcus. Parts of the superior temporal sulcus are concerned with extracting information about agents and intentions from movement cues, while medial prefrontal cortex is engaged when we have to reflect upon our own mental states and those of others. This enables us to represent what we think of ourselves, and what we would like others to think of us. This ability is at the basis of the healthy concern with reputation management that is so evident in our everyday social interactions. Lesions to specific regions of the social brain can lead to specific difficulties in reading the mental states of others and in monitoring one's own mental states. However, the most marked difficulties are associated with neuropsychiatric disorders, such as autism and schizophrenia. People with autism have specific difficulties with attributing mental states, although compensatory processes can help them overcome some of these difficulties. Patients with schizophrenia often show the opposite problem, i.e. too much attribution of mental states, as in the case of paranoid delusions. The study of these disorders gives valuable clues to the working of the social brain.