

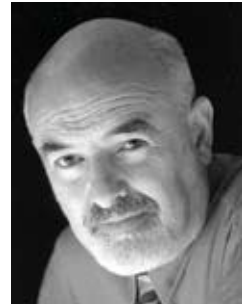
THE SOCIAL BRAIN: SUMMING UP AND LOOKING AHEAD

CHRIS FRITH

Presentation Wednesday 13.30

In the last 20 years we have learned much about the social brain. This knowledge has derived from brain imaging and the study of psychiatric and neurological patients. Many of the pioneers of these studies have presented their latest results at this meeting and two major processing systems stand out in terms of the amount of interest they received. One of these is the brain system that allows us to mentalise (have a "Theory of mind"); the other is the brain's mirror system or rather, systems. Until recently we thought that mentalising was a high level executive skill that required mental effort. However, new data shows that there is also an implicit and largely automatic component of mentalising and therefore, exploring the relationship between implicit and explicit mentalising is an important topic for the future. The relationship between the mentalising system and the brain's mirror systems remains a controversial topic. In order to resolve this controversy we need to develop a computational account of the mentalising process.

One idea is that the mirror system can be used to make predictions about an observed person's next movement. This generates a prediction error, which the mentalising system can use to update representations of intentions and other mental states. However, I suggest that we need to explore the idea that there is a fundamental conflict between mirror and mentalising systems. Through a form of contagion, mirror systems optimise interactions when the people involved have common knowledge, goals and intentions. In contrast, the mentalising system monitors the differences between the knowledge and intentions of the self and the knowledge and intentions of others. For optimum functioning of this process, social contagion must be suppressed.



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Chris Frith is now an Emeritus professor. With over 400 publications, he is one of the most cited authors in neuroscience. He has been a leading force in social cognitive neuroscience since its beginning. He has supervised work of a number of the most prominent second generation researchers in this field. He is also Niels Bohr Professor at CFIN, University of Aarhus, where he is leading the project on "Interacting minds - a biological basis". His primary interest is in the applications of functional brain imaging to the study of higher cognitive functions in humans, in particular social cognition. He is also well known for his earlier seminal work characterising the cognitive basis of schizophrenia. Chris Frith will give the final lecture of the conference, including a summing up of the field and the conference, and his perspective of the future of the study of the "social brain".