



中国科学院心理研究所 学术报告

Theory of mind: The developing story of belief-desire reasoning



Educated at Edinburgh and Oxford Universities, Alan Leslie was for a number of years a Senior Scientist at the UK Medical Research Council's Cognitive Development Unit at the University of London. There he was a member of the team that discovered the "theory of mind" impairment in autism, which forms the neuro-cognitive basis of their severe social difficulties, and was a pioneer of the emerging field of theory of mind (ToM).

He directs the Rutgers Cognitive Development Laboratory which studies the capacity of the early neurocognitive system to learn rapidly about the physical and social worlds, to track multiple physical objects and identify social agents, to reason about the internal states of social agents (ToM), and to form moral judgments about their actions.

In 2005 he was the inaugural recipient of the Ann L. Brown Award for Excellence in Developmental Research in 2006, and was elected a Fellow of the Association for Psychological Science and American Academy of Arts and Sciences in 2008. He is currently President of the Society for Philosophy and Psychology.

Speaker: Prof. Alan M. Leslie

Director, Center for Cognitive Science

Distinguish Professor of Psychology

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Time: 10:00 am – 11:30am

Date: Jun 25 (Tue), 2013

Venue: Room 201, East Building

Abstract

From a new and obscure topic 25 years ago, "theory of mind" has become a major topic across a number of fields of research and the term has even entered every day speech (well, almost). Although "theory of mind" is much broader than thinking about beliefs and desires, belief-desire reasoning plays a central role in our ability to interpret and predict the behavior of other people. The Sally and Anne false belief task has been and remains a fruitful tool with which to probe the underlying cognitive mechanisms of "theory of mind" and their disorders. Recent non-verbal versions of the Sally and Anne task are underscoring that the well-known 'three to four years shift' from failing to passing is only one of a number of developmental changes between infancy and adulthood. These new findings provide strong support for a very early appearing competence and new impetus to investigate the existence and nature of a Theory of Mind Mechanism (ToMM) in the brain. ToMM grows, probably epigenetically, into the young brain becoming functional during the first two or three years of life. This process rolls out the M-representation and associated principles of operation. These can be thought of as forming the basics of propositional-attitude reasoning in the form of rational priors. One of these principles, the 'True Belief default', creates performance demands that in some circumstances are not satisfied, even in adults. I propose that ToMM forms the motivating neural force behind our uniquely human, overriding interest in the otherwise invisible inner lives of other people.