

How do we develop two systems for mindreading?

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Experimental evidence, and reflection on everyday examples suggest that adults' mindreading is both flexible and sophisticated (as when judging someone's guilt in a court of law) and fast and efficient (as when taking part in a competitive sport). However, conceptual analysis, and evidence from analogous cognitive domains, suggests that a single cognitive process for "theory of mind" is unlikely to be able to meet these diverse demands. This leads to the proposition that adults have "two systems" for mindreading that make different processing trade-offs between flexibility and efficiency (Apperly & Butterfill, 2009).

How are adults' two systems related to the mindreading abilities observed in infants? One possibility is that the infant system grows up: although simple and cognitively efficient at the outset the infant system becomes increasingly sophisticated as children gain conceptual, linguistic and executive resources. On this view, the cognitively efficient abilities of adults must have some other origin, perhaps in automatising of abilities that were previously effortful. A second possibility is that the infant system persists: the system that explains efficient mindreading in infants also explains efficient mindreading in adults. On this view the flexible and sophisticated abilities of adults must have some other origin, perhaps in the protracted developments charted in traditional studies of children's "theory of mind". We will draw inspiration from Susan Carey's work on "signature limits" in other aspects of core cognition to identify evidence that might distinguish between these accounts.