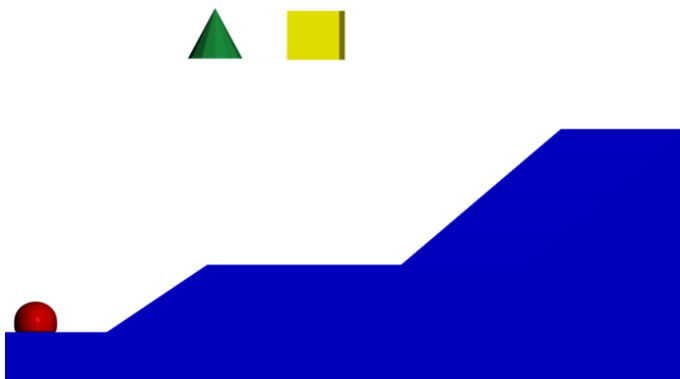


## Lecture 8 Early Social Cognition

### Discovering Others and Their Minds

- Intentional agents
  - goals
- Egocentrism
  - perspective taking
- Theory of mind
  - false beliefs
- Self
  - identity
- How we treat others
  - morality



Infants look longer when objects changes "behaviour"  
12-month-olds prefer to play with the "good" shape

### Intentionality



14-month-old infants watched as an experimenter activated a light switch with her head when a) hands were bound or b) hands were free.

Only imitated with head in b) indicating they understood goal.  
(Gergely et al., 2002)

### Egocentrism

By 2 years, children increasingly use "I, me, my, mine."  
Preschool children can be very egocentric.

#### Conversations

'I have a tricycle'  
'So what, I am going to grow up to become a policeman'  
'It is blue'  
'I want to be just like my dad.'

Between 4 and 7 years, there is a significant shift away from egocentric speech and increasing perspective taking.

(Yule, 1997)

### Egocentrism



Figure 8.4 The three mountains task. The child walks around the display and is then asked to choose from photographs to show what the scene would look like from different perspectives. Before age 6 or 7, most children select the photograph showing the scene from their own point of view.

# Theory of Mind

Attributing a false belief means that you can understand the mental content of another mind.



Smarties Task (Gopnik & Astington, 1988)

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David Engler  
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## Sally- Anne False Belief Task



(a)



(b)



(c)



(d)

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## Sally-Anne Task (3-Year-old)



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## Sally-Anne Task (4-Year-old)

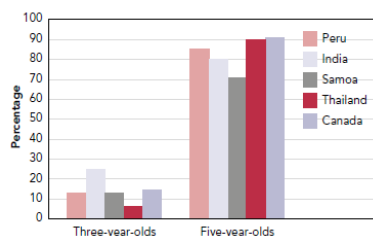


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## Theory of Mind

- Theory of mind
  - children passing false belief test at ages 3 and 5
- Deaf children



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## Theory of Mind & Autism

Baron-Cohen (1995)

Bruno: 'We would like to ask you something.' (Bruno shows Jerome a box of Danish cookies.)  
 'What do you think is in this box?'  
 Jerome: 'Cookies.'  
 Bruno then opened the box to reveal a set of colored pencils instead of the expected cookies.  
 Bruno: 'What do you think she would think the box contains?' (His research assistant enters the room.)  
 Jerome: 'Colored pencils.'

Jerome is a 23 year-old student studying for a Ph.D. in theoretical physics  
 From "The Empathic Brain" by Christian Keysers (2011)

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## Self-Recognition

- As children age, they begin to acquire a sense of self
- Begins with noticing their own bodily movements (look longer at videos of their own limb movements filmed from strange angle – Rochat & Striano, 2002).

- Mirror Self-Recognition (rouge test Gallup, 1972)

Self-recognition or self-consciousness? (Rochat)



Other social animals (dolphins, elephants etc) pass rouge test

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## Self-Esteem

- Emergence of self related to self-esteem (Harter, 1999).
- Initially preschoolers only consider physical & problem solving.
- By adolescence, five dimensions
  - scholastic achievement
  - social acceptance
  - behavioural conduct
  - athletic competence
  - physical appearance
- From age 8, children are more realistic about where they are on these dimensions & where they would like to be.
- Those with high self-esteem come from supportive families.

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## Self-Control

- Maccoby (1980) identifies need to inhibit own behaviours
  - Inhibition of movement
  - Inhibition of emotion
  - Inhibition of conclusion
  - Inhibition of choice
- Children with strict parents tend to show **LESS** self-control!

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## Delay of Gratification

In the 1960's, Walter Mischel gave 4 years old the choice of receiving immediate gratification for a small reward (1 marshmallow) or the chance to delay for a better reward (2 marshmallows).

At 14 years, children capable of delaying, scored higher on IQ, were more socially competent and better adjusted to control temper.

Less addictive behaviours at 27 years.

Why do you think that might be so?



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## Gender Development

[sex differences refer to biological only]

- Gender socialisation
  - adults' interaction with child dependent on perceived sex (play, praise, describe)
- Gender differences
  - cognitive differences are much less
  - Baron-Cohen claims brains are different
- Not just human gender differences
  - chimps differentially play with dolls & sticks

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## Erikson: Finding Myself

- Who am I?  
– who should I be?
- Erikson's stages of life and tasks that must be confronted
- Adolescence marks a shift in emphasis from family relations to peer relations when defining self (you don't choose your parents but you can choose your friends)
- Self is largely constructed by those around us

TABLE 12.1 Erikson's stages of human development

Stage	Ages	Crisis	Key event	Positive Resolution
1 Oral-sensory	Birth to 12–18 months	Trust vs. mistrust	Feeding	Child develops a belief that the environment can be counted on to meet their basic physiological and social needs
2 Muscular-anal	18 months to 3 years	Autonomy vs. shame/doubt	Toilet training	Child learns what they can control and develops a sense of free will and corresponding sense of regret and sorrow for inappropriate use of self-control
3 Locomotor	3–6 years	Initiative vs. guilt	Independence	Child learns to begin action, to explore, to imagine, and to feel remorse for actions
4 Latency	6–12 years	Industry vs. inferiority	School	Child learns to do things well or correctly in comparison to a standard or to others
5 Adolescence	12–18 years	Identity vs. role confusion	Peer relationships	Adolescent develops a sense of self in relationship to others and to own internal thoughts and desires
6 Young adulthood	19–40 years	Intimacy vs. isolation	Love relationships	Person develops the ability to give and receive love; begins to make long-term commitment to relationships
7 Middle adulthood	40–65 years	Generativity vs. stagnation	Parenting	Person develops interest in guiding the development of the next generation
8 Maturity	65 to death	Ego integrity vs. despair	Reflection on and acceptance of one's life	Person develops a sense of acceptance of life as it was lived and the importance of the people and relationships that individual developed over the life span

## Moral Development

- How do children learn to decide what is right and wrong?
- Prosocial Behaviour  
– altruism
- Social learning theory  
– Observational learning  
– Vicarious punishment

## Moral Development: Piaget

- Piaget—children's thinking changes in three important ways:  
– from realism to relativism  
– from prescriptions to principles  
– from consequences to intentions
- Moral reasoning is a skill

## Kohlberg's Stage Theory

- Preconventional stage  
– What will happen to me?
- Conventional stage  
– What do others normally do?
- Postconventional stage  
– How does it fit with my values?

## Moral Intuition: The Trolley Problem

