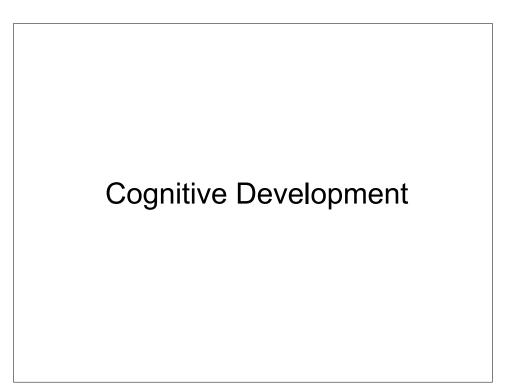


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#### Who is my TF? (corrected)

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## **Big Questions**

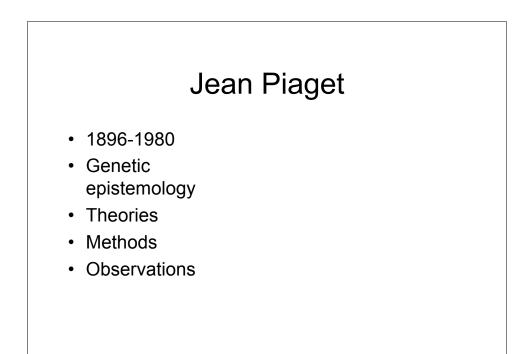
- 1. Morality
- 2. Continuity



### **Big Questions**

3. Knowledge

Empiricism v. Nativism v. Constructivism



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## Piaget's Theory of Cognitive Development

- Piaget believed that "children are active thinkers, constantly trying to construct more advanced understandings of the world"
- · Little scientists
- These "understandings" are in the form of structures he called *schemas*

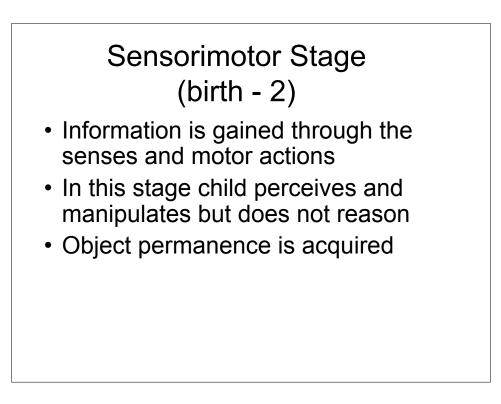
# Development of Schemas Schemas are frameworks that develop to help organize knowledge Assimilation - process of taking new information or a new experience and fitting it into an already existing schema

 Accommodation - process by which existing schemas are changed or new schemas are created in order to fit new information

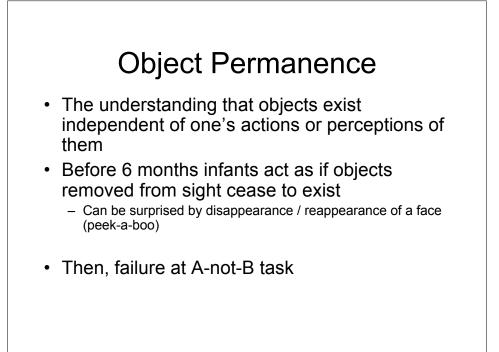


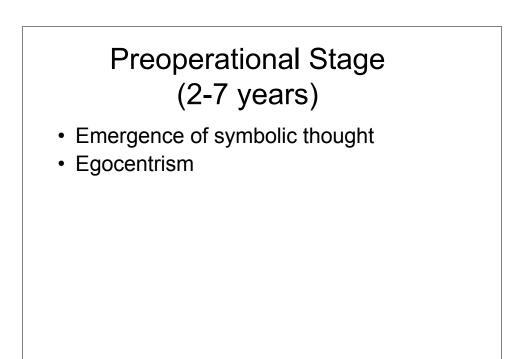
#### Piaget's approach

- Primary method was to ask children to solve problems and to question them about the reasoning behind their solutions
- Discovered that children think in radically different ways than adults
- Proposed that development occurs as a series of 'stages' differing in how the world is understood



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## Preoperational Stage (2-7 years)

- Emergence of symbolic thought
- Egocentrism
- · Lack the concept of conservation

## Concrete Operational Stage (7-12 years)

- Understanding of mental operations leading to increasingly logical thought
- Less egocentric
- But .. inability to reason abstractly or hypothetically

Formal Operational Stage (age 12 - adulthood)

Abstract and scientific reasoning

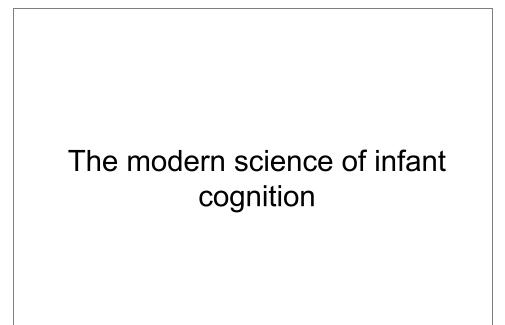
**Piaget: Scientific evaluation** 

Highly positive:

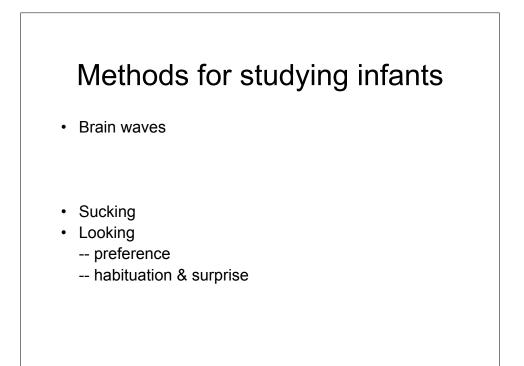
-- interesting & falsifiable claims
 -- rich theoretical framework
 -- striking findings

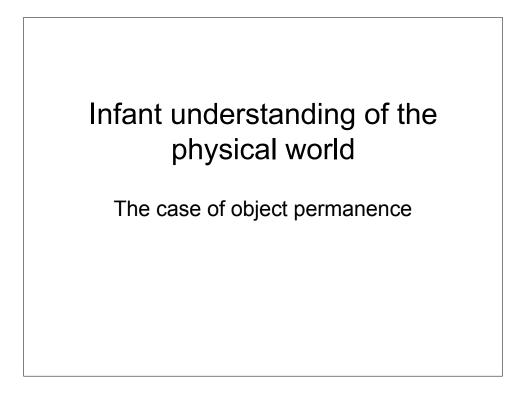
### Piaget: Scientific evaluation

Theoretical: Does he really explain development? Methodological: Limitations of Q&A Factual: What do infants and children really know?











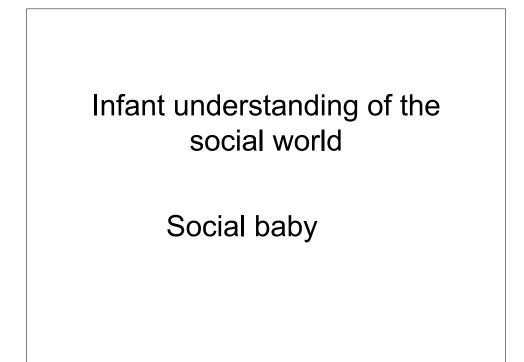
Much understanding of the physical world is there from the very start

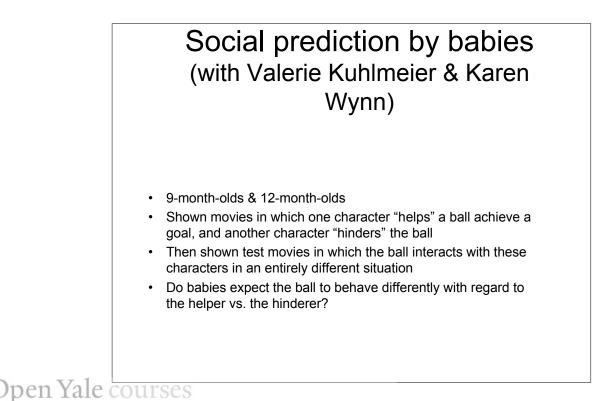
But not everything...

## How do we explain development?

- Neural maturation
- Problems with inhibition
   -- A-not-B
- The accumulation of knowledge







Some understanding of the social world may be there from the very start

But there are also some striking limitations ...



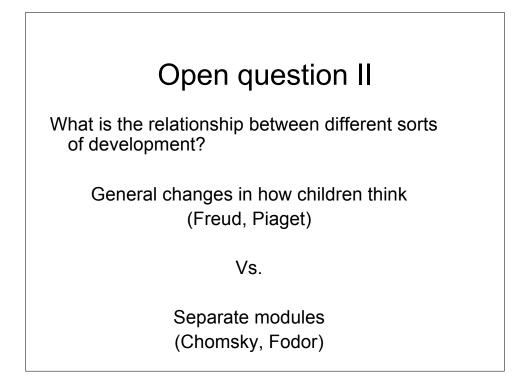
#### Open question I

Why do children do so poorly at these social tasks?

They need to learn more about minds

Vs.

They have the right knowledge but suffer from problems with inhibition and action



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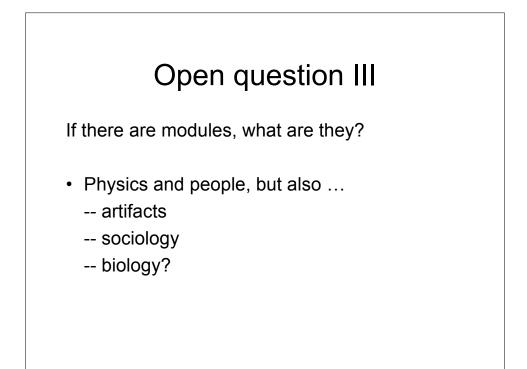
## A modular conception of development

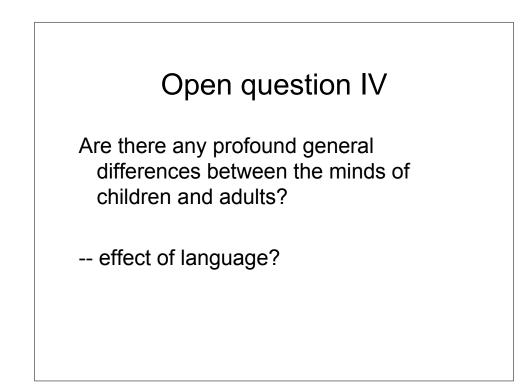
- Separate partially pre-wired systems for reasoning about the physical and social world
- Innate knowledge
- Constrained development



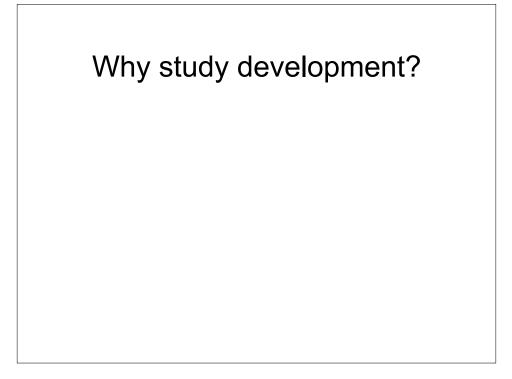
- About 1 in 1,000
- Mostly boys
- · Lack of social connectedness
- Language impairment
- Treat people "as objects"
- Mindblindness

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"Everything is the way it is because it got that way."

-- D'Arcy Thompson

