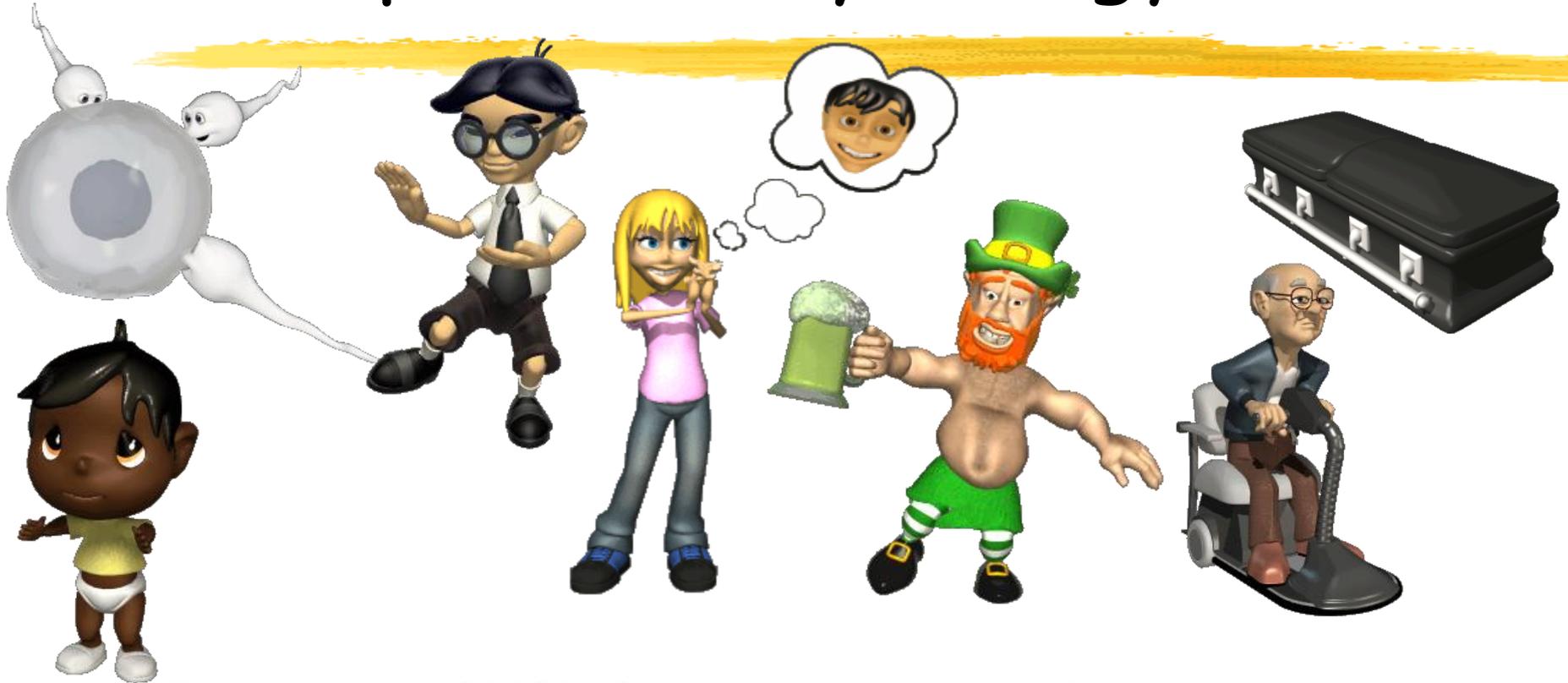


Journal 3/6



Describe the “Nature vs. Nurture” argument in your own words. Use examples to illustrate your explanation if necessary.

Developmental Psychology



The study of YOU from womb to tomb.

We are going to study how we change physically, socially, cognitively and morally over our lifetimes.

COGNITIVE AND SOCIAL DEVELOPMENT

Cognitive Development



- z It was thought that kids were just stupid versions of adults.
- z Then came along **Jean Piaget**
- z Kids learn differently than adults
- z Four stages: Sensorimotor, Preoperational, Concrete Operational, Formal Operational

Sensorimotor Stage

- z 0-2 years old
- z Experience the world through our senses.
- z At 6 months, develops object permanence: knowing an object continues to exist even when it's hidden
- z Experiences stranger anxiety around 8 months.
- z Baby Mathematics



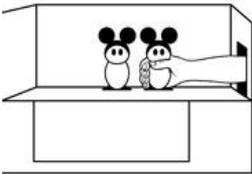
[Click to see a baby with no object permanence.](#)

Infancy and Childhood: Cognitive Development

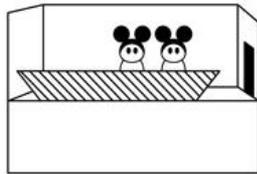
■ Baby Mathematics

- Shown a numerically impossible outcome, infants stare longer (Wynn, 1992)

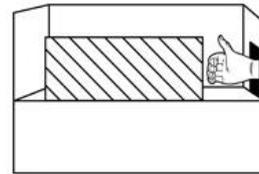
1. Objects placed in case



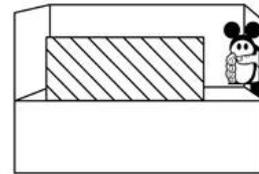
2. Screen comes up



3. Empty hand enters

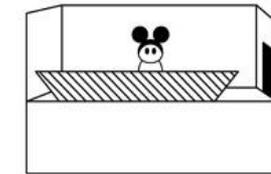


4. One object removed

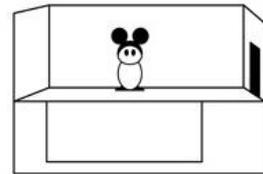


Then either: possible outcome

5. Screen drops...

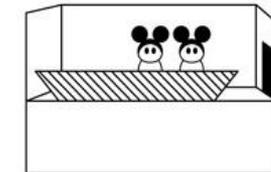


revealing 1 object

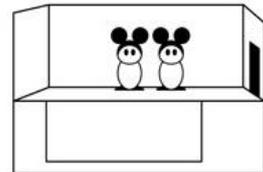


or: impossible outcome

5. Screen drops...



revealing 2 objects

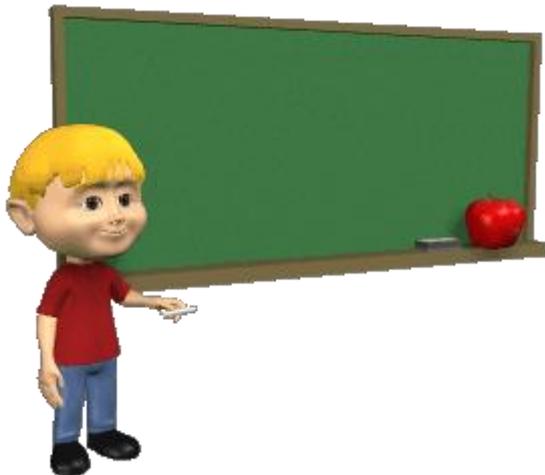


Preoperational Stage



Click the boy
to see kids
with
egocentrism.

- z Ages: 2-7
- z Begin to use language to represent objects and ideas
- z Egocentric: cannot look at the world through anyone's eyes but their own.
- z Like to engage in pretend play

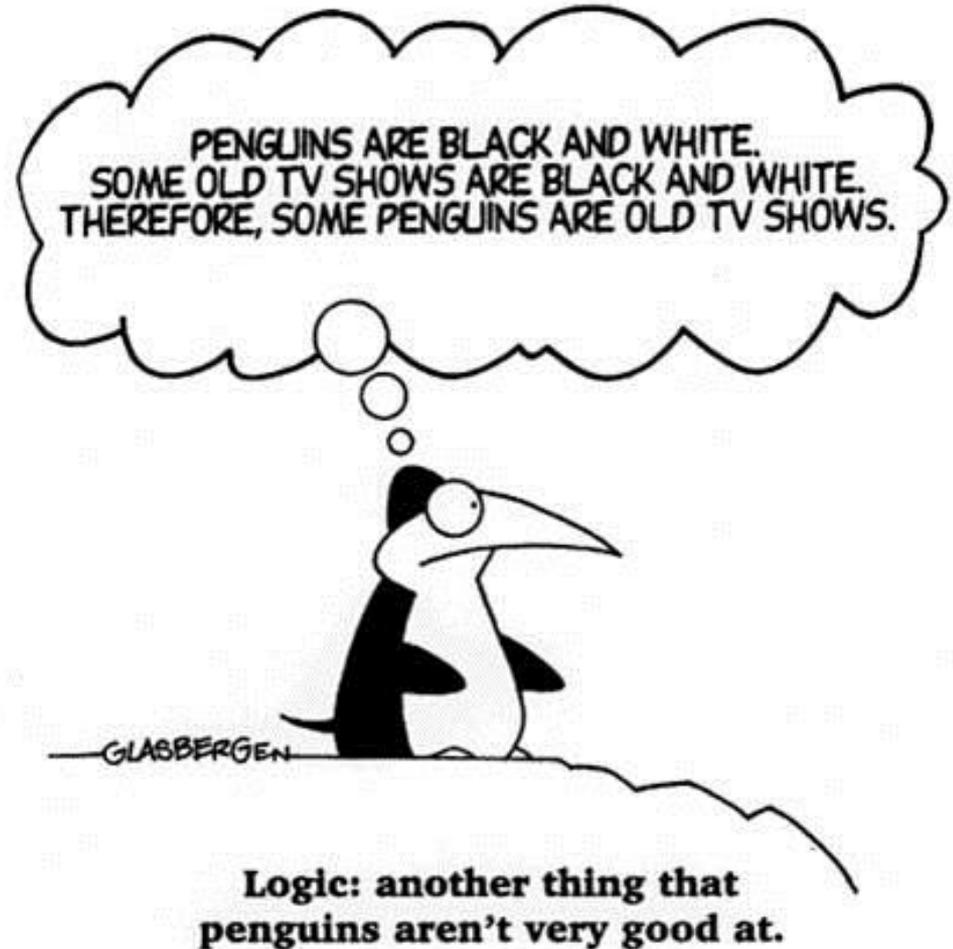


Infancy and Childhood: Cognitive Development

- **Egocentrism**
 - the inability of the preoperational child to take another's point of view
- **Example in Child's answers:**
 - Why does the sun shine? To keep me warm.
 - Why is there snow? For me to play in.
 - Why is the grass green? Its my favorite color.
 - Have a 4 year old close her eyes and ask her if you can still see her. Her answer?
 - How many siblings? vs. how many kids do your parents have?

Concrete Operational Stage (7-11)

- z Ages 7-11
- z Learn to think logically
- z Can demonstrate concept of conservation: the principle that properties such as mass, volume, and number remain the same despite changes in the forms of objects.
- z Can do mathematical transformations ($8+4=12$, $12-4=8$)



[Click the penguin to see kids try to grasp concrete logic.](#)

Conservation

z Conservation refers to the idea that a quantity remains the same despite changes in appearance and is part of logical thinking.



[Click the boy to see kids trying to grasp conservation.](#)

Formal Operational Stage

- z Ages 12 and up
- z Abstract reasoning
- z Potential for moral reasoning
- z **Metacognition**: thinking about your thinking
- z Not every adult gets to this stage



Piaget's Stages of Cognitive Development

Typical Age Range	Description of Stage	Developmental Phenomena
Birth to nearly 2 years	<i>Sensorimotor</i> Experiencing the world through senses and actions (looking, touching, mouthing)	<ul style="list-style-type: none">•Object permanence•Stranger anxiety
About 2 to 6 years	<i>Preoperational</i> Representing things with words and images but lacking logical reasoning	<ul style="list-style-type: none">•Pretend play•Egocentrism•Language development
About 7 to 11 years	<i>Concrete operational</i> Thinking logically about concrete events; grasping concrete analogies and performing arithmetical operations	<ul style="list-style-type: none">•Conservation•Mathematical transformations
About 12 through adulthood	<i>Formal operational</i> Abstract reasoning	<ul style="list-style-type: none">•Abstract logic•Potential for moral reasoning

Schemas

- z Schemas are ways we interpret the world around us.
- z Children view the world through schemas (as do adults for the most part).
- z It is basically what you picture in your head when you think of anything.



Right now in your head,
picture a model.



These 3
probably fit into
your concept
(schema) of a
model.

But does this
one?

If I teach my 3 year
that an animal with 4
legs and a tail is a
dog....

Assimilation

Z Incorporating new
experiences into
existing schemas.



What schema would you assimilate this
into?

What
would he
call this?



Or this?



Assimilation in High School



- z When you first meet somebody, you will assimilate them into a schema that you already have.

If you see two guys dressed like this, what schema would you assimilate them into?

- Would you always be right?

Accommodation

z Changing an existing schema to adopt to new information.



If I tell someone from the mid-west to picture their schema of the Bronx they may talk about the ghetto areas.



But if I showed them other areas of the Bronx, they would be forced to accommodate (change) their schema to incorporate their new information.

Assimilation and Accommodation Examples



- z Assimilation: adding air to an already inflated balloon
 - y Accommodation: changing the balloon into an animal shape
- z Assimilation: adding another Taylor Swift song to your "Taylor Swift" folder
 - y Accommodation: downloading an Avril Lavigne song and making a new folder for it



Two-year-old Gabriella has learned the schema for "cow" from her picture books.



Gabriella sees a moose and calls it a "cow." She is trying to assimilate this new animal into an existing schema. Her mother tells her, "No, it's a moose."



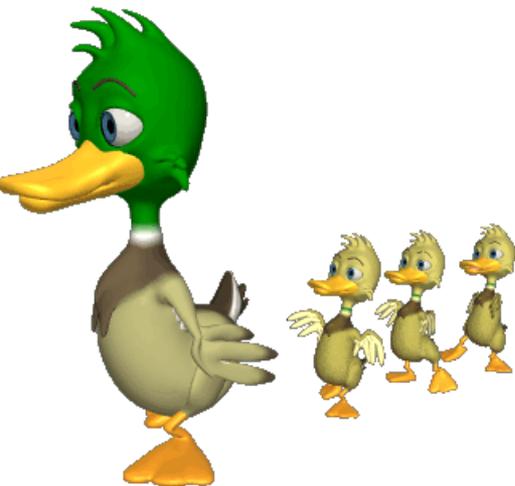
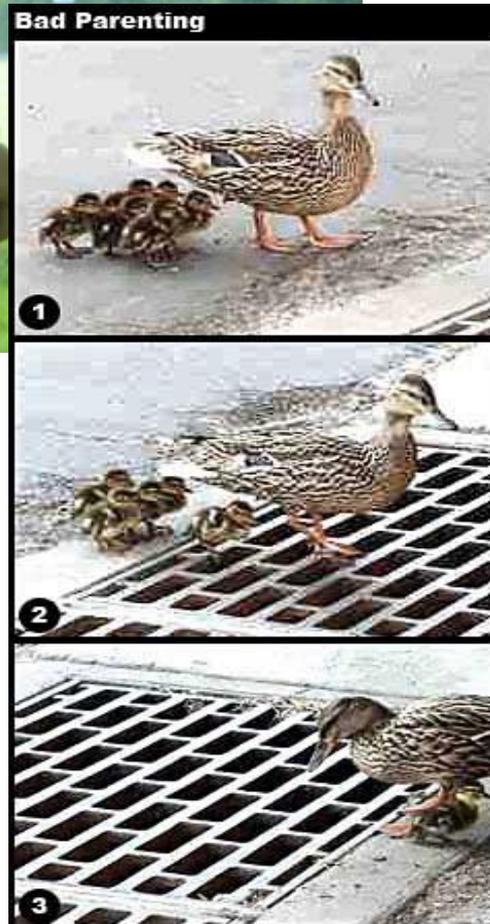
Gabriella accommodates her schema for large, shaggy animals and continues to modify that schema to include "mommy moose," "baby moose," and so forth.

Social Development

- z At the beginning of life, infants do not mind strange people (maybe because everyone is strange to them).
- z At about eight months, infants develop stranger anxiety.
- z Why do you think it starts at around 8 months?



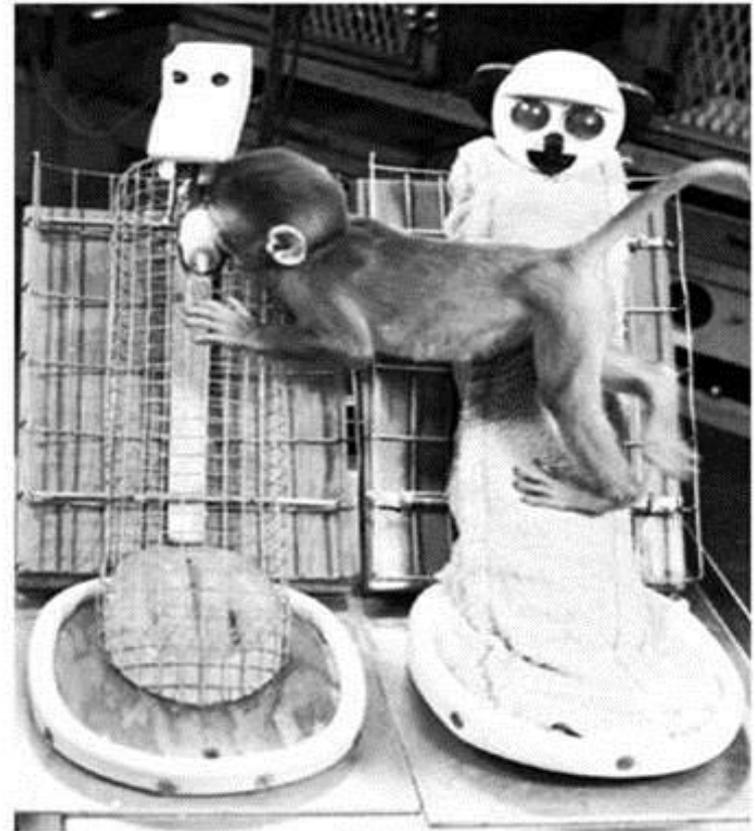
Attachment



- z Attachment: an emotional tie with another person
- z The most important social construct an infant must develop is attachment (a bond with a caregiver).
- z Lorenz discovered that some animals form attachment through imprinting: automatic attachments formed very early in life

- z Harry Harlow and his monkeys.
- Harlow's Surrogate Mother Experiments
 - Monkeys preferred contact with the comfortable cloth mother, even while feeding from the nourishing wire mother
- z Harry showed that monkeys needed touch to form attachment.

Attachment



Attachment

- z **Critical Periods:** the optimal period when an organism's exposure to certain stimuli or experiences produce proper development.
- z Those who are deprived of touch have trouble forming attachment when they are older.

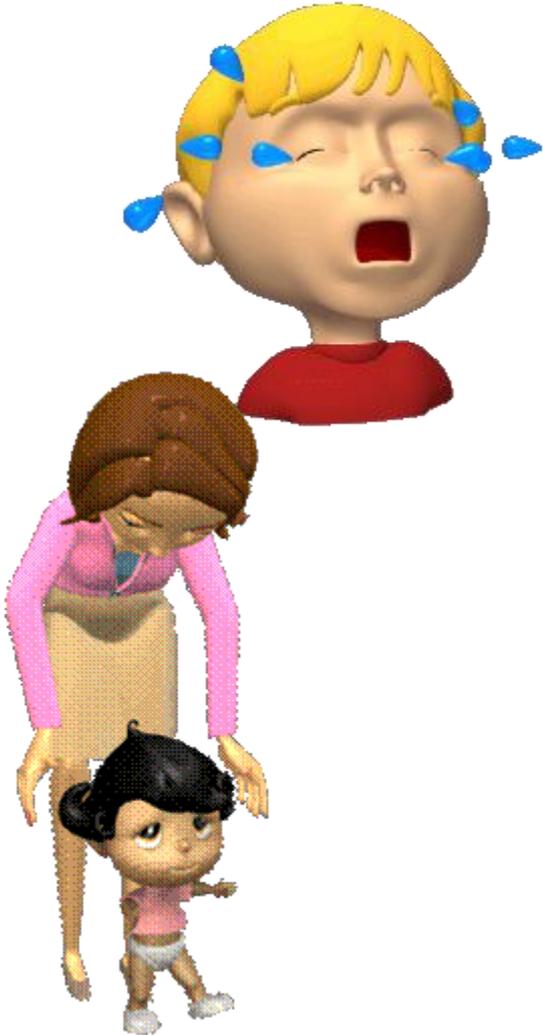


[Click on the monkey to see what a baby monkey does when he HAS attachment and imagine what it is like when he does not \(like above\).](#)

Social Development: Temperament

- **Temperament** – An individual's characteristic manner of behavior or reaction
 - Assumed to have a strong genetic basis.
- 10-15% babies "born shy", 10-15% "born bold"
- Nature / Nurture connection – which temperaments encourage interaction?

Types of Attachment



- z Mary Ainsworth's **Strange Situation**.
- z Three types of attachment:
 1. **Secure** - Children show some distress when parent leaves, seek contact at the reunion, explore when parent gone, play and greet when parent present.
 2. **Avoidant**
 3. **Anxious/ambivalent**

[Click picture to see clip of Ainsworth's experiment.](#)

Social Development

- **Stranger Anxiety**
 - fear of strangers that infants commonly display
 - beginning by about 8 months of age
- **Separation Anxiety**
 - Distress the infant shows when object of attachment leaves
 - Peaks between 14 and 18 months



Parenting Styles

■ Authoritarian

- parents impose rules and expect obedience
- “Don’t interrupt.” “Why? Because I said so.”
- Those with authoritarian parents tend to have less social skill and self-esteem



2x as likely to binge drink in HS

■ Permissive

- submit to children’s desires, make few demands, use little punishment
- Those with permissive parents tend to be more aggressive and immature



3x as likely to binge drink in HS

■ Authoritative

- both demanding and responsive
- set rules, but explain reasons and encourage open discussion

