From the last handout: Recall that all kids learn language in about the same way.

Stages:

I. Pre-linguistics (googoo etc)
   Try out the phonemes
   Learning word boundaries

II. One-word stage (12-18 mo)
   Try out morphemes
   one word stands for a whole idea

III. Two-word (telegraphic speech) (2 yrs)
   Try out elementary syntax
   e.g. Word order starts to count

IV. More than two words
   Enter "closed class" words – what are they?
   And what are they for?

What is the child learning as he/she learns language?

The “East Coast” view - Instances and rules.


How do you make the past tense in English?

Around age 3 you start to get overgeneralization errors. (What are they?)

The “West Coast” view – Instances in a powerful network


Why is this important?

Let’s go back to naive nativist and naive empiricist theories.

Radical nativist: Language is hard-wired and emerges, like a molar, when it is ready.

No one believes it (except those naively nativist children)

Counter-example: Japanese kids learn Japanese, etc.
   And a Japanese kid raised in an Egyptian family will learn Arabic
Less naive version: There is a primal, innate language, our languages are variants.

Herodotus and the exp of King Psammetichus of Egypt, 2500 years ago.

Wolf children, etc (not Wolfe!)

What is a critical period in development?

The Radical empiricist view
St. Augustine (4th cent)

The Behaviorist account
Remember Thorndike's Law of Effect?

Remember shaping

Skinner's: Verbal Behavior

The great counter argument is in


and all of this is discussed very well in


What is wrong with the Behaviorist account

One example: Patterns of reinforcement

There is A LOT to learn in language learning

Grammar: an innate property or something that emerges from a network?

Word meaning: Children learn 5-10 new words every day from 15 months to 6 years.

Part Two: What linguistic abilities do animals have?

They have SIGNALS

What does that mean? Animals can communicate

Let’s distinguish between natural animal communication
And
Efforts to teach human communication to animals

What happens if you try to teach a chimp to speak? Hayes (1933)

What happens if you try to teach a chimp to sign?
ASL= American Sign Language
Animal signals have **meaning**

A unit of meaning in human lang is a **morpheme**

Meaning in natural animal language.

What about trained (human) animal language?

Do chimps have morphemes or words?

The famous apes (Wahsoe, Koko, et al)

Irene Pepperberg's parrot, "Alex"

Problems with the data

But let’s give them morphemes

Do animals have **grammar (syntax)**

Consider: "Colorless green ideas sleep furiously"

Data: Koko may mean one thing by "tickle me" and another by "me tickle". (not perfect but not random)

Two types of problems with the data

Data quality:

Interpretation

2004: The newest evidence

Where does the ape hit the wall?

SO....maybe there is a little bit of evidence for Grammar

Is animal communication **productive** (Does it show generativity)?

Is this the unbridgable gap?

Why does this matter?