

Today's topics:

- **Introduction: Language myths and linguistics**

Background preparation:

- *Kaplan (2016), Ch 1, "Introduction"*

0. Course information

- Any questions or problems with accessing course materials?
 - Remember to **refresh/reload** your browser to access the current version of a web page

- Who are we?
 - Introductions: Names, interesting facts...?

1. Of rodents and humans

- In Ch 1, Kaplan discusses a scientific publication and some popular media reports that discussed it.

The paper had the following title:

“Foxp2 mediates sex differences in ultrasonic vocalization by rat pups and directs order of maternal retrieval”

- **Discussion:**
 - (1) What, according to Kaplan’s summary, were the actual findings of this paper?

1. Of rodents and humans

- Findings of the paper according to Kaplan (2016:1):
 - Male pups made more vocalizations than females when separated from their mothers.
 - Male pups had higher levels of the *FOXP2* protein than females in some regions of their brains.
 - Inhibiting the *FOXP2* gene in the pups' brains eliminated the sex difference [...]
 - In a sample of brain tissue from 10 young human children, the girls had somewhat higher levels of the *FOXP2* protein than the boys.
- In the authors' own words:
[J Neuroscience 33\(8\): 3276-3283](#)

1. Of rodents and humans

- In Ch 1, Kaplan discusses a scientific publication and some popular media reports that discussed it.

The paper had the following title:

Foxp2 mediates sex differences in ultrasonic vocalization by rat pups and directs order of maternal retrieval

- **Discussion:**
 - (1) What claims were media reports making about this research result?
 - (2) What claims were media reports making about this research result?

1. Of rodents and humans

- What the media said...

Here is a collection of examples, including those that Kaplan gives and more:

- [“An invented statistic returns”](#) — Mark Liberman at Language Log on Feb 22, 2013

1. Of rodents and humans

- In Ch 1, Kaplan discusses a scientific publication and some popular media reports that discussed it.

The paper had the following title:

Foxp2 mediates sex differences in ultrasonic vocalization by rat pups and directs order of maternal retrieval

- For discussion:

(3) Why does logic fail to get us from point (1) to point (2)?

1. Of rodents and humans

- Where are we now?
 - (a) The rat pup article certainly doesn't prove that human women talk more than human men
 - (b) We've seen an example of a "zombie statistic" about language that has caught on and spread

1. Of rodents and humans

- What might be some ways to decide whether women actually do talk more than men?
 - Of course, this entire question ignores fluid and nonbinary gender
 - But let's explore it as an exercise in thinking about how to do a research study

2. Some things to know about language

- Hmm... Any comments?

(What “myths” or misconceptions do we see here?)



2. Some things to know about language

- People with previous linguistics coursework:
 - What are some of the areas (subfields) of linguistics? What kinds of phenomena do they study?

2. Some things to know about language

- Subfields of linguistics include
 - (1) The study of levels of language structure
 - phonetics*** —
 - phonology*** —
 - morphology*** —
 - syntax*** —
 - semantics*** —
 - discourse*** —

2. Some things to know about language

- Subfields of linguistics include

(1) The study of levels of language structure

phonetics — “physical” aspects of speech sounds (how speech sounds are articulated; their acoustics)

phonology — “mental”/cognitive aspects of speech sounds (how they are classified; how they can be assembled to make larger units)

morphology — word structure, word formation

syntax — sentence structure, including word order

semantics — the structure of word and sentence meaning

discourse — the structure of larger units / conversations

2. Some things to know about language

- Subfields of linguistics include

(2) Interfaces with other aspects of language use:

child language acquisition

second language acquisition

psycholinguistics — what actually happens, cognitively, when people speak, listen, read, etc.?

historical linguistics — how and why does language change over time?

sociolinguistics — how does language differ for different social groups and in different settings? how do speakers use language to perform identities?

2. Some things to know about language

Discussion:

- People who are new to linguistics:
 - Are there particular things about language or linguistics that especially interest you?
- People with previous linguistics coursework:
 - What have you learned in linguistics courses that has surprised you the most?