

Today's topics:

- **Introduction: Language myths and linguistics**

Background preparation:

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

0. Today's objectives

After today's class, you should be able to:

- Explain the criticisms that Kaplan raises in Ch 1 about how the results from a study of rat pups were reported in the popular media
- Identify the two main goals Kaplan has for her book
- Give examples of some of the issues that come up in turning a question into a scientific study
- Name at least three subfields of linguistics, and briefly explain what they study

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
- Office hours info

0. Introductions

- 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”

1. Of rodents and humans

Group discussion

- Which claims are consistent with Kaplan's discussion?
 - 1 Several journalists writing in the popular press drew unsupported conclusions about the study results.
 - 2 The researchers in the FOXP2 study measured FOXP2 levels in rat pups and in human brain tissue.
 - 3 There is scientific evidence from zombie statistics that women utter 13,000 more words per day than men.
 - 4 When rat pups were separated from their mothers, female pups made more vocalizations than male pups.

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 paper's authors' own words:
[J Neuroscience 33\(8\): 3276-3283](#)

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

- **Discussion**

- Where do these media reports go *beyond* what was reported in the research paper?
- What does Kaplan mean by “zombie statistic”?

1. Of rodents and humans

- Important ideas from Kaplan (2016), Ch 1
 - The rat pup article doesn't prove that human women talk more than human men
 - We've seen an example of a "zombie statistic" about language that has caught on and spread

2. Language “myths”

Group discussion

- Which of these does Kaplan say in Ch 1 are the two **main** ideas addressed in her book?
 - 1 How to master a foreign language
 - 2 Whether women or men actually talk more
 - 3 How to do research on language from a linguistic perspective
 - 4 Popular beliefs about language, and whether they are supported by evidence from social-science research
 - 5 Whether growing older makes it harder to learn a second language

2. Language “myths”

Debriefing

- Which of these does Kaplan say in Ch 1 are the two **main** ideas addressed in her book?
 - ~~1 How to master a foreign language~~
 - ~~2 Whether women or men actually talk more~~
 - 3 How to do research on language from a linguistic perspective**
 - 4 Popular beliefs about language, and whether they are supported by evidence from social-science research**
 - ~~5 Whether growing older makes it harder to learn a second language~~

2. Language “myths”

- Bonus link: The Linguistic Society of America’s annual [Linguistics Journalism Award](#)

“The award is based on a single news story or body of work that promotes language and/or linguistics, is accurate and timely, and is appealing and accessible to non-specialist audiences.”

2. Language “myths”

- 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

3. Some fundamental ideas in linguistics

- Hmm... Any comments?

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



3. Some fundamental ideas in linguistics

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

3. Some fundamental ideas in linguistics

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

3. Some fundamental ideas in linguistics

- 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

3. Some fundamental ideas in linguistics

- 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?

3. Some fundamental ideas in linguistics

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?

4. Upcoming

- Kaplan Ch 2 myth: “A dialect is a collection of mistakes”
 - F Aug 22: Discussion of the background sections of the chapter
 - M Aug 25: Discussion of the case studies (research paper results) that Kaplan presents
 - W Aug 27: How to find case-study research papers for assessing claims about language