Psychology of Language

17 Language & thought

Fall 2023 Tues/Thur 5:00-6:15pm

Emma Wing
Drop-in hours:
Wednesdays 3-4pm
& by appointment
Webex link

Road map

Unit 3: Language, Brain, & Diversity
 17 Language & thought

Learning objectives

- Listen to podcast clips and consider questions about language and thought
 - Each podcast clip has its own slide with the link, times to listen, and questions to consider.
 - The times indicate when you can start and stop listening, so if it says 1:00-22:34 means you can start at 1 minute in, and stop at 22:34 minutes in.
 - It's about 70 minutes of listening time total.

#1 From no words to words

http://www.radiolab.org/story/91728-words-that-change-the-world/

Time: 1:00-22:43

- Figuring out that there are words: Susan Schaller believes that the best idea she ever had in her life had to do with an isolated young man she met one day at a community college. He was 27-years-old at the time, and though he had been born deaf, no one had ever taught him to sign. He had lived his entire life without language--until Susan found a way to reach out to him.
- Can words help to connect features/ideas? Charles Fernyhough doesn't think that very young children think—at least not in a way he'd recognize as thinking. Charles explains what he means by walking us through an experiment in a white room. And Elizabeth Spelke weighs in with research from her baby lab--which suggests a child's brain begins as a series of islands, until it can find the right words and phrases to bridge the gaps.

- 1. Why does Elizabeth Spelke think that words help us think about the concept "left of the blue wall"? In other words, what does she think language can do for colors, spatial locations and objects?
- 2. Do you think thought is fundamentally different with and without language? Try to explain to yourself why based on your intuitions and/or what you heard in the podcast.

#2 From words to no words

http://www.radiolab.org/story/91729-a-world-without-words/

Time: 0:35-11:00

 One morning, neurologist Jill Bolte Taylor woke up with a headache. A blood vessel then burst inside her left hemisphere, and silenced all the brain chatter in her head. She was left with no language. No memories. Just sensory intake, and an allencompassing feeling of joy.

- 1. Why does Jill Bolte Taylor think that she couldn't figure out what "President of the United States of America" meant as she recovered from her stroke? How does this relate to how kids (and rats and adults doing a shadowing task) have difficulty understanding "left of the blue wall"?
- 2. What do you think your thinking and your life would be like without language (?

#3 From words to no words

http://www.radiolab.org/story/91730-new-words-new-world/

0:50-12:55

Words can help us think about thinking (i.e., focus attention on others' thought): In the late 1970s, a new language was born. And Ann Senghas, Professor of Psychology at Barnard, has spent the last 30 years helping to decode it. In 1978, 50 deaf children entered a newly formed school—a school in which the teachers (who didn't sign) taught in Spanish. No one knows exactly how it happened, but in the next few years—on school buses and in the playground--these kids invented a set of common words and grammar that opened up a whole new way of communicating, and even thinking.

- 1. Why does Ann Senghas think words might help us figure out what other people know?
- 2. Do you think language evolved to help us think about thinking?

#4 Linguistic relativity

http://www.radiolab.org/story/211213-sky-isnt-blue/

Time: 0:35-18:25

• What is the color of honey, and "faces pale with fear"? If you're Homer—one of the most influential poets in human history—that color is green. And the sea is "wine-dark," just like oxen...though sheep are violet. Which all sounds...well, really off. Producer Tim Howard introduces us to linguist Guy Deutscher, and the story of William Gladstone, who conducted an exhaustive study of every color reference in The Odyssey and The Iliad. He found something startling: No blue! A book of German philosophy from the late 19th Century helps reveal a pattern: across all cultures, words for colors appear in stages. And blue always comes last. Jules Davidoff, professor of neuropsychology at the University of London, helps us make sense of the way different people see different colors in the same place. Then Guy Deutscher tells us how he experimented on his daughter Alma when she was just starting to learn the colors of the world around, and above, her.

- 1. Does language influence color perception? If so, how?
- 2. Does language affect how we think? If so, to what extent?

#5 Linguistic diversity

http://www.radiolab.org/story/110193-birds-eye-view/

Time: 12:05-16:50

• Words can focus attention on spatial relationships: Dr. Lera Boroditsky tells us about a language in Australia in which a pigeon-like ability to orient yourself is so crucial...you can't even say hello without knowing exactly which direction you're facing.

- 1. Do you think that describing directions in different ways across languages means that its speakers have fundamentally different ways of thinking?
 - Consider other languages you know and how they express things differently. What does this mean for the ways speakers of different languages think?
- 2. Think about how this segment broadly relates to the prior segments—do you think young kids who speak the language that Lera Boroditsky studied in Australia would be able to easily solve the "connect locations to colors" problem that Elizabeth Spelke described in the first segment? Why (not)?