Linguistic Phonetics

Today's topics:

- Course overview
- What is linguistics?What is phonetics?

This is LING/ANTH 520, Linguistic Phonetics

0. Today's objectives

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

- Describe the goals, structure, and requirements of this course
 - And know where to go to find the details
- Give a basic definition of the terms linguistics and phonetics
- Give a basic explanation of the kinds of research questions that are relevant for linguistic phonetics

Welcome!

- I am Jen Smith [my web site]
 - Please call me Jen or Dr. Smith or Prof. Smith ("Ms. Smith" is not my professional title)

- Required for first-year MA students in linguistics
 - Prerequisite for Phonological Theory I (LING 523)
 - Useful for: phonetics, phonology, historical linguistics, sociolinguistics, documentation
- Fulfills a "core course" for BA LING majors
 - *Relates to:* phonology, experimental linguistics, sociolinguistics, speech & hearing science
- Fulfills Data Science BA major/minor electives
 - *Useful for:* experiment design, data analysis and interpretation, quantitative language science

- This is an upper-level course but with no prerequisites
 - → What does that mean?
- There is **no** required background knowledge
 - Exception: High-school algebra (solve for x)
 - Useful background (for undergrads):
 LING 101, SPHS 530 or 540, or a "Structure of ..."
 language course

- Why is this an upper-level course?
 - Assigned readings are short, but dense—you'll probably want to go over them a couple of times (The preparation questions will also help!)
 - There is a **research project**

Textbooks:

- V&C: P. Ladefoged & S. Disner, Vowels & Consonants, 3rd edition
- AAP: K. Johnson, Acoustic & Auditory Phonetics,
 3rd edition

Also available through Course Reserves on Canvas

- Course web site:
 - https://users.castle.unc.edu/~jlsmith/ling520.html
- Check the "<u>Daily syllabus</u>" page after every class to find out about new readings and assignments
 - Today's entry has the "<u>Course info and policies</u>"
 handout *download and keep in a safe place*

Remember to REFRESH your web browser to get the latest version of a web page

Some key course policies

- See the "Course info and policies" handout
 - Grading information
 - Exam dates

...and more

Group discussion

Please introduce yourselves in your groups!

• **Linguistics** is...

- Linguistics is...
 - the systematic study of human language
 - Mental grammar:

Linguistics is...

the systematic study of human language

- Mental grammar: the unconscious, but systematic, rules and principles governing how humans produce and understand language
- How do you pronounce the plural of...

cat

dog

flea

Linguistics is...

the systematic study of human language

 Mental grammar: the unconscious, but systematic, rules and principles governing how humans produce and understand language

- How do you pronounce the plural of...

cat[s]

dog[z]

Mental "rules" governing this choice

flea[z]

Linguistics is...

the systematic study of human language

- Mental grammar: the unconscious, but systematic, rules and principles governing how humans produce and understand language
- The mental grammar includes:

Linguistics is...

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- Mental grammar: the unconscious, but systematic, rules and principles governing how humans produce and understand language
- The mental grammar includes:

semantics syntax morphology phonology

phonetics

Linguistics is...

the systematic study of human language

- Mental grammar: the unconscious, but systematic, rules and principles governing how humans produce and understand language
- The mental grammar includes:

semantics meaning structure

syntax phrase and sentence structure

morphology word structure

phonology the mental organization of sounds

phonetics speech articulation, acoustics, perception

- Are all patterns involving the sounds of language caused by articulation/acoustics/perception?
 - How do you pronounce the plural of...

cat[**s**]

Would cat[z] or flea[s] be hard to say?

dog[z]

flea[z]

- Are all patterns involving the sounds of language caused by articulation/acoustics/perception?
 - How do you pronounce the plural of...

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cat[s] • cat[z] — disallowed in Englishdog[z] [tz] very rare across languages
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• flea[s] — sounds like fleece! [is] common across languages

- Are all patterns involving the sounds of language caused by articulation/acoustics/perception?
 - cat[s] vs. cat[z] phonetic factors involved
 - flea[z] vs. flea[s] arbitrary choice of sounds in the English lexicon (mental "word" list)

- Are all patterns involving the sounds of language caused by articulation/acoustics/perception?
 - Try saying a "hard" tongue twister <u>silently</u>

- Are all patterns involving the sounds of language caused by articulation/acoustics/perception?
 - Try saying a "hard" tongue twister <u>silently</u>
 - It's still hard! → Not just physical (articulation)
 - mental sound organization = phonology
- The phonetics/phonology interface is complex (and very interesting!)
 - We will focus on articulation, acoustics, and a little perception in this course = *phonetics*
 - For more about phonology, try LING 200 or 523

- Linguistics is...
 the systematic study of human language
- Phonetics is...
 the study of speech articulation, acoustics, and perception

Linguistic phonetics is...
 the study of speech articulation, acoustics, and perception as applied to understanding why languages are the way they are

 What kinds of research questions would linguistic phonetics be interested in?

One example:

Languages with and without front rounded vowels

- What is a front rounded vowel?
- Do you know any languages that have them?

One example:

Languages with and without front rounded vowels (from the World Atlas of Language Structures Online)

- Some questions to consider:
 - Are FRVs relatively common, or uncommon?
 Why?
 - This map plots *high* and *mid* FRV why are *low* ones extremely rare?
- Does understanding the articulation and acoustics of FRVs help answer these questions? (Stay tuned...)

3. For next time

- On Wednesday, we will talk about
 - The International Phonetic Alphabet (IPA)
 - The speech sounds of American English
- What should you do to be prepared for class?
 - Check the "<u>Daily Syllabus</u>" page to see!