Today's objectives:

- Course overview
- What is phonology?

0. Today's plan

- Course information

- Introduction to phonology
  - Phonology vs. phonetics
  - Evidence for a mental grammar of speech sounds
  - Some goals of this course

1. Course information (part I)

This is **LING 200, Phonology**

Welcome!

- I am **Jen Smith** [my web site]
  - You may call me Jen or use a title, as you prefer
  - If you use a title: please use Dr. Smith or Prof. Smith

2. What is phonology?

Group discussion

- Introduce yourselves in your group!
- Try to reach a group consensus on these questions:
  - What is **phonology**?
  - How is it different from **phonetics**?

2. What is phonology?

Phonetics vs. phonology

- **Phonetics** is about the **physical** aspect of speech sounds (universally, or in one particular language)

  Phonetics is concerned with questions such as:

  - How are speech sounds **articulated**?
  - What are the **acoustic** effects?

2. What is phonology?

Phonetics vs. phonology

- **Phonology** is about the **mental** or **cognitive** aspect of speech sounds — **mental grammar**!

  Phonology is concerned with questions such as:

  - How are speech sounds mentally **represented**?
  - What mental **principles** or **patterns** govern the ways sounds are combined into larger units?

(In current research, the phonetics/phonology distinction is not absolute)

3. Activity: Tongue twisters

Group activity

- Think of a few tongue twisters (in any language)
  - Can you find one that is hard to say even slowly?

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  - What happens if you try to say a hard one in your head, **without moving** any articulators?

3. Activity: Tongue twisters

Group activity

- Think of a few tongue twisters (in any language)
  - Can you find one that is hard to say even slowly?
  - What happens if you try to say a hard one in your head, **without moving** any articulators?
    - It's still hard!

    → Evidence for a **mental** aspect to language sounds

3. Activity: Tongue twisters

Group activity

- Each group:
  - Write down a different “hard” tongue twister
  - Work together to transcribe it in IPA
    - *Don’t look things up* — try to remember!
    - If you aren’t sure of the right IPA symbols, use a “?”or make a guess

3. Activity: Tongue twisters

Group activity

- Each group:
  - Which parts of your tongue twister (sounds or sound combinations) make it so hard to say?

3. Activity: Tongue twisters

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- Each group:
  - Which parts of your tongue twister (sounds or sound combinations) make it so hard to say?
  - Use your knowledge of sounds and sound properties to **state a hypothesis** about what factor(s) make a tongue twister hard

3. Activity: Tongue twisters

Group activity

- Each group:
  - Use your knowledge of sounds and sound properties to **state a hypothesis** about what factor(s) make a tongue twister hard
- Class discussion:
  - How well do the different hypotheses do at accounting for each group's tongue twister?
  - Can we combine or refine hypotheses?

3. Activity: Tongue twisters

Debriefing

- What makes tongue twisters hard?

  One key factor:

  - **Similar sounds** (near each other, or in an alternating or quasi-alternating pattern)

    → But what makes two speech sounds “similar”?

4. A mental grammar for speech sounds

- The tongue-twister activity shows us that:
  - There is a **mental** aspect to speech sound patterns (tongue twisters can be "brain twisters")

    → A role for **mental grammar**

  - We need to look at the **properties** of individual speech sounds to understand their patterns

    → The mental grammar is **sensitive** to not just speech sounds, but their **properties**

4. A mental grammar for speech sounds

- Other evidence for the role of mental grammar in sound patterns:
  - **Foreign accents**
    - What kinds of phenomena make up a “foreign accent”? Where do they come from?

4. A mental grammar for speech sounds

- Other evidence for the role of mental grammar in sound patterns:
  - **Child language acquisition**
    - Do children ever **systematically replace** one sound category with another?
    - Is this something they have directly acquired from the language in their **environment**?

4. A mental grammar for speech sounds

- Other evidence for the role of mental grammar in sound patterns:
  - **Language disorders**
    - What components of the **linguistic system** can be affected when someone has a speech disorder?

      (Is it all about moving the **articulators**?)

4. A mental grammar for speech sounds

- All these different phenomena show us that:
  - Humans have a **mental grammar** which includes a **phonological component**

- Your **phonological grammar** affects how you…
  - acquire your native language
  - make speech errors
  - develop a speech disorder
  - label sounds as “similar” or “different”
  - learn to read and write
  - learn a foreign language (foreign accent!)

4. A mental grammar for speech sounds

- Now, consider **language typology**
  - Languages are very **diverse** in many ways
  - But, they have **core similarities** too — such as:
    - All languages distinguish vowels vs. consonants
    - All languages prefer certain syllable types
    - Some types of phonological patterns recur in language after language

4. A mental grammar for speech sounds

- The phonologist's ultimate goal: To develop a **model** of the mental grammar that allows us to
  - **describe**
  - **predict**
  - **explain**

  these various patterns and facts

5. Preview of the course

- LING 101 phonology was focused on:

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- LING 101 phonology was focused on:
  - Determining allophones for phonemes
  - Writing basic phonological rules
  - (- Syllable structure, in some sections?)

- This course will examine human-language phonology in more depth

5. Preview of the course

- **Four research questions** that organize this course:
  1. How are **segments** mentally **represented**?
  2. How are **morpheme** sound shapes mentally **represented**?
  3. Is there evidence that speech sounds are mentally organized into **syllables**?
  4. How does the mental grammar **enforce patterns and changes** in speech sound structure?

5. Preview of the course

- An overarching question for research in phonology:
  - How can we build a **model** of the phonological grammar that is both **general** and **restrictive**?
    - *model:* (we will look at this next week)
    - *general:* is able to account for the range of phenomena seen across languages
    - *restrictive:* avoids predicting phenomena that are unattested in any human language

5. Preview of the course

- *Our first research question:*
  How are **segments** (single speech sounds; consonants and vowels) **represented** in the mental grammar?
  - Can our proposed representation make the right **predictions** about how sounds behave in the world's languages?
- To get started, we need to know what the **phonetic** (physical) characteristics of segments are
  - **Phonetics review** next class
  - **Phonetics quiz** on Tu Aug 27

6. Course information (part II)

- **Course web site**: https://users.castle.unc.edu/~jlsmith/ling200.html
  - Linked from Canvas "Pages"
- Check the "**Daily syllabus**" page after every class to find out about new readings and assignments
  - Today's entry has the "Course info and policies" handout — ***download and keep in a safe place***

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

6. Course information (part II)

Some key course policies

- See the "Course info and policies" handout
  - Grading information
  - How to prepare for class
  - What to expect for assignments and exams

  ...and more