Today's objectives:

- **Analyzing alternating morphemes**
- **Comparing UR hypotheses**

Background preparation:

- PPs: Lamba, Cree

0. Today's objectives

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

- Explain how morphology and phonology are related in our model of the mental grammar: what is each responsible for? what is their relative order?
- Segment words into morphemes insightfully
- Identify alternating morphemes in a data set, identify the possible hypotheses for their analysis, and make an argument in favor of the best approach

1. Warm-up: Morphology and phonology

Discussion

- Some key points to understand about working with **morphologically complex words**

  Concepts from the handout - "Morphology and phonology"

  - What is a **morpheme**?
  - How do we **identify** morphemes in a data set?
  - What part of the grammar **adds** morphemes to form complex words?
  - What kind of phonological representation does the **lexical entry** of a morpheme contain?

1. Warm-up: Morphology and phonology

- A morpheme with **multiple surface forms** (determined by their environment) is known as a morpheme that _____

1. Warm-up: Morphology and phonology

- A morpheme with **multiple surface forms** (determined by their environment) is known as a morpheme that **alternates**

2. Alternating morphemes

Data set – Lamba

- **Prep question:** Which roots alternate?
  - What do we have to figure out about this data set **before** we can even answer that question?

2. Alternating morphemes

Discussion

- How do we **model** the grammar of a language with an alternating morpheme?
  - Do speakers memorize which form of the morpheme appears with which base?
  - What's the alternative?
  - What kinds of **evidence** might support one of these approaches over the other?

2. Alternating morphemes

- How do we **model** the grammar of a language with an alternating morpheme? Our proposal:
  - There is a **single underlying representation (UR)** for the morpheme
  - The **phonological grammar changes its features** in some context

- Evidence for this approach: **productivity**
  - Does the feature adjustment apply in "new" situations? (wug tests, loanwords, etc.)

2. Alternating morphemes

- To implement our proposal, we specify that the grammar goes through the following steps:
  - *Morphology:* Select the **UR** of each morpheme in the word and **assemble** them
  - *Phonology:* Any **phonological process** whose conditions are met will then apply

- **Phonological process**?
  - We will return to the question of how to **represent** a phonological process in our grammar model
  - For now: Use **words** and **features** to state what the grammar **has to do** (change what features? where?)

2. Alternating morphemes

Data set: Lamba | Focus on the alternating **suffixes**

- Since two different suffixes show the same pattern of alternation, this is a good case for proposing a **phonological process** that affects both suffixes
- What does our analysis of this phonological process look like?
  - *Hypothesis 1:* Suffix UR contains /-e…/, and then…
  - *Hypothesis 2:* Suffix UR contains /-i…/, and then…

How can we decide between these hypotheses?

2. Alternating morphemes

Data set: Lamba | Focus on the alternating **suffixes**

- What does our analysis look like?
  - *Hypothesis 1:* Suffix UR contains /-e.../, and then...
  - *Hypothesis 2:* Suffix UR contains /-i.../, and then...

- To decide between these hypotheses
  - Take each hypothesis in turn and consider what phonological process(es) would be needed **under that hypothesis**
  - Compare: Is one of the options for the phonological process(es) **preferable**?

2. Alternating morphemes

Data set: Lamba | Focus on the alternating **suffixes**

- Which hypothesis is preferable?
  - *Hypothesis 1:* Suffix UR contains /-e…/, and then…
    - What would the phonological process be?
  - *Hypothesis 2:* Suffix UR contains /-i…/, and then…
    - What would the phonological process be?

- Things to consider when comparing two hypotheses
  2. Can the environment needed for a process be stated **insightfully** in our model?
  1. *[There is another criterion — next class]*

3. Alternating morphemes in Cree

Group discussion

Data set – Cree (PP)

- How can we divide these words into **morphemes**?
- How many alternating morphemes are there?
  - *Remember:* What do we have to figure out first?
- What are the competing hypotheses to consider for our analysis?

4. For next time

- Read the handout "Morpheme alternations"
  - This summarizes points from today's discussion and puts them together in context
  - Make sure you are solid on these concepts!
- Work through the Dutch data set | leave enough time!
  - Find the alternating morphemes
  - Choose the best analysis for the alternation(s)
  - Prep questions 02.11 check in on your approach
    - Remember that an **analysis of the data set** is your primary goal; the PQs are a check-in