Today's topic:

Pre-presentation discussion:
 Bilingualism and morphological awareness

Background:

 Kuo, Ramirez, de Marin, Kim, & Unal-Gezer (2017), "Bilingualism and morphological awareness..."

0. Course info and announcements

- Group 2 individual slides will be due Tu Oct 15 by 11:59pm (Canvas Assignments)
 - Reminder: See presentation assignment
 handout, linked from Daily syllabus or Links for assignments web page
 - Slide formatting does not have to be consistent across group members at this phase
 - You are encouraged to workshop your slides with group members share feedback!
- Any questions or comments?

0. Key points today

- Warm-up: Morphology and morphological awareness (RE #3 discussion)
- Background and key points from Kuo et al. (2017)
 - Morphological awareness
 - Typology, cognates, bilingual education programs
- Statistics and analysis

1. Warm-up

Group discussion

- What is morphological awareness?
- Can someone who doesn't read have morphological awareness? Why/why not?

1. Warm-up

Review: Some core subfields of linguistics

Phonetics	Physical production of speech sounds
Phonology	Cognitive representation and patterns of speech sounds
Morphology	Structure of words
Syntax	Structure of phrases and sentences
Semantics	Representation and structure of meaning

1. Warm-up

RE #3 — Follow-up discussion

RE #3 assignment handout and website

- How is morphological awareness different from phonological awareness?
- How does morphological awareness relate to decoding?
- What were the three affixes in the exercise?
 - What meanings can we propose for each?
 - How can we illustrate a proposed meaning?

- Kuo, Li-Jen, Gloria Ramirez, Sharon de Marin, Tae-Jin Kim, and Melike Unal-Gezer. 2017. Bilingualism and morphological awareness: A study with children from general education and Spanish-English dual language programs. Educational Psychology 37 (2): 94-111.
 - <u>Article link</u> (open link)

What is metalinguistic awareness?

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 - (conscious) awareness about the patterns and structure in language
- What two types of metalinguistic awareness have we mainly discussed so far in this course?

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 - (conscious) awareness about the patterns and structure in language
- What two types of metalinguistic awareness have we mainly discussed so far in this course?
 - phonological awareness
 - morphological awareness
- Do you think there can be such a thing as syntactic awareness? What might it involve?

- What does it mean to say that two languages are...?
 - typologically distant
 - typologically related

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 - typologically distant
 - typologically related
- Linguistic typology is the study of language "types" (as distinct from language "families")
 - What are (relevant) ways that languages differ?
 - Which languages fall into which categories for any of those properties?
 - What properties tend to occur together?
- See: World Atlas of Language Structures (<u>WALS</u>)

- What does it mean to say that two languages are...?
 - typologically distant \rightarrow differ (by multiple properties)
 - typologically related \rightarrow (unclear term!) (similar?)
- Linguistic typology is the study of language "types"
 - What are the (interesting) properties by which languages can differ?
 - Which languages fall into which categories for any of those properties?
 - What properties tend to occur together?
- See: World Atlas of Language Structures (<u>WALS</u>)

Kuo et al. (2017: 95)

"...structural sensitivity theory, which postulates that children with regular exposure to two languages may develop unique sensitivity to structural features of language and therefore become cognitively more flexible in processing linguistic input"

 What predictions does this make about reading, and why?

Kuo et al. (2017: 95)

"Morphemes are the smallest intra-word units that represent semantic information"

- intra-word?
- semantic?

 Why, according to Kuo et al. (2017), is morphological awareness an important aspect of metalinguistic awareness for literacy development?

Hints:

- MC words
- Better estimate of metalinguistic awareness than... because...

- Why, according to Kuo et al. (2017), is morphological awareness an important aspect of metalinguistic awareness for literacy development?
 - Helpful in understanding morphologically complex (MC) words = words with multiple morphemes (as we have discussed)
 - Measuring morphological awareness (they argue) provides a better estimate of metalinguistic awareness than measuring only phonological or syntactic awareness because morphemes involve **both** sound and structure

Why are MC words important for reading in education?

- Why are MC words important for reading in education?
 - MC vocabulary makes up 60–80% of the new words acquired by school-aged children
 - MA strongly predicts reading comprehension in monolingual children, especially starting in the mid-elementary grades
 - MA also contributes to reading comprehension in bilingual children even after other language/literacy skills are controlled for

• The MC words used in this study are "derivational words" (Kuo et al. 2017: 98) — what does this mean?

- The MC words used in this study are "derivational words" (Kuo et al. 2017: 98) what does this mean?
 - derivation = forming new words
 - inflection = adding grammar information (plural, tense, etc.)

• Why do Kuo et al. (2017) say that their study is justified/needed?

- Why do Kuo et al. (2017) say that their study is justified/needed?
 - There hasn't been much past work on comparing MA in monolingual and bilingual children
 - Also not known if any effects of bilingualism go beyond cross-language transfer
 - What does this mean?

- Frequency
 - What do we know about how word frequency affects processing time?
 - What aspects of frequency might affect MC words? (And what could this potentially tell us about how morphologically related words are organized in the mental lexicon?)

- Cognate awareness
 - What are cognates, according to the authors?
- Some clarification about this term
 - In historical linguistics = words in two related languages that are inherited from the same ancestor language
 - In **foreign-language teaching** = words that look/sound similar and have similar meanings
 - Could be historically cognate, or borrowed from one language to the other, or borrowed into both from a 3rd source

- Cognate awareness
 - In foreign-language teaching = words that look/sound similar and have similar meanings
 - Could be historically cognate, or borrowed from one language to the other, or borrowed into both from a 3rd source
- Which of these scenarios are the authors mostly thinking of when they discuss "cognates" between English academic words and Spanish conversational words?

Group discussion

- What are some cognates for English and Spanish?
- Which of the types of "cognates" do you think each of these would be?

Group discussion

- What are some cognates for English and Spanish?
- Which of the types of "cognates" do you think each of these would be?
 - Follow-up: Etymologies in the *Oxford English Dictionary* [OED]

Dual-language education

- What are the characteristics of the programs included in this study?
- For comparison: <u>Chapel Hill-Carrboro</u> <u>elementary-level Spanish/English dual language</u> <u>programs</u>
- Why did Kuo et al. (2017) develop their own tests for assessing morphological awareness?

3. Research questions

- Can you find the two research questions stated in the article? What are they?
 - Are these measurable? (→ Group 2)
- What would be some of the even broader bigpicture research questions that lie behind these questions stated by the authors?

3. Research questions

- Group 2: Remember to think about the conditions in the experiment and how they relate to the research questions!
 - Categories of stimuli in the assessments?
 - Groups of students participating in the study?

4. Statistics, etc.

- Statistical analysis
 - ANOVA
 - main effect:

interaction:

4. Data processing and statistical analysis

- Statistical analysis
 - ANOVA are means in groups with multiple crossed factors same/different?
 - main effect: this predictor matters when the categories of the other predictor are combined
 - **interaction:** the effect of one predictor differs based on the value of the other

(for more info, see <u>VassarStats</u> on ANOVA)

 Group 2: be sure to explain what the results tell us about the research questions

5. For next time

- Pre-presentation discussion for Group 3 article
 - Use the <u>pre-presentation discussion preparation</u> handout to focus on key points