

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

- **Article presentation** on *Tu* Mar 26
(after Group 3 presentation)
 - Check-in with **Group 4** members
 - Reminder: See presentation **assignment handout**, linked from [Daily syllabus](#) or [Links for assignments](#) web page

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?

2. Background and key concepts

- 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.
 - [Article link](#) (UNC Libraries)

2. Background and key concepts

- What is **metalinguistic awareness**?

2. Background and key concepts

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

2. Background and key concepts

- What is **metalinguistic awareness**?
 - (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?

2. Background and key concepts

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

2. Background and key concepts

- What does it mean to say that two languages are...?
 - typologically related
 - typologically distinct
- **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 ([WALS](#))

2. Background and key concepts

- 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?

2. Background and key concepts

- Kuo et al. (2017: 95)
 - “Morphemes are the smallest intra-word units that represent semantic information”
 - intra-word?
 - semantic?

2. Background and key concepts

- 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...

2. Background and key concepts

- 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

2. Background and key concepts

- Why are MC words important for reading in education?

2. Background and key concepts

- 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

2. Background and key concepts

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

2. Background and key concepts

- 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.)

2. Background and key concepts

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

2. Background and key concepts

- 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?

2. Background and key concepts

- 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?)

2. Background and key concepts

- **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

2. Background and key concepts

- **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?

2. Background and key concepts

Group discussion

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

2. Background and key concepts

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](#)]

2. Background and key concepts

- **Dual-language education**
 - What are the characteristics of the programs included in this study?
 - For comparison: [Chapel Hill-Carrboro elementary-level Spanish/English dual language programs](#)
- 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 4)
- What would be some of the even broader big-picture research questions that lie behind these questions stated by the authors?

3. Research questions

- Group 4: 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 [VassarStats](#) on ANOVA)
- Group 4: be sure to explain what the results tell us about the research questions

5. For next time

- **Group 3:** Article presentation
 - Use the previous discussion to help you with the stage-setting parts of your presentation
- Everyone else:
 - Support your classmates by coming prepared for the discussion they will lead!
 - Do your best to **read** and **understand** :
 - Measurable RQs
 - Experiment design
 - Results and discussion