Today's topic:

- **Presentation and discussion: Bilingual early readers and PA**

Background:

- O'Brien, Mohamed, Yussof, & Ng (2019), "The phonological awareness relation to early reading in English for three groups of simultaneous bilingual children"

0. Course info and announcements

- **Group 4:** Remember to fill out the **self and peer evaluation form** by **11:59pm** on **W Nov 6**
  (GDoc form; see link via Canvas “Assignments”)

0. Key points today

- Group 4 presentation
- Follow-up discussion on the article
- Follow-up discussion on presentations in general

1. Article presentation

- **Group 4 article presentation**

  O'Brien, Beth A., Malikka Begum Habib Mohamed, Nurul Taqiah Yussof, & Siew Chin Ng. 2019. The phonological awareness relation to early reading in English for three groups of simultaneous bilingual children. *Reading and Writing* 32 (4): 909-937. [https://doi-org.libproxy.lib.unc.edu/10.1007/s11145-018-9890-1]

  - Article link (via UNC Libraries)

2. Discussion: O’Brien et al. (2019)

- Any additional comments or questions?

2. Discussion: O'Brien et al. (2019)

- Psycholinguistic grain-size theory (PGST)

  From past research on how different kinds of alphabetic writing systems and different languages have different effects on phonological awareness at different grain sizes

  - *Availability* — about the **oral language**: which grain size(s) are reinforced by the oral language's structure?
  - *Granularity / consistency* — about the **mapping from graphemes to phonological units** in a given language: what is the *grain size* of the most accessible* unit that can be *consistently* represented in the orthography?

    * Unclear: What do authors mean by "most accessible"?

2. Discussion: O'Brien et al. (2019)

- Lots of statistical analysis here!
  - More discussion about the regression analyses?

2. Discussion: O'Brien et al. (2019)

- What are some of the *really* big-picture questions motivating this study?
- Can we think of any implications from this study for teaching reading to monolingual English-speaking students in the US?

3. Meta-discussion: On article presentations

- Any comments or suggestions…
  - about Group 4’s presentation?
  - about any/all the presentations?
  - about this assignment?

4. Model-building in scientific research

(postponed from last class)

- In scientific investigation, what is a **model**?
  - Can you think of any examples of models from various areas of science?

4. Model-building in scientific research

- A model is an **abstract explanatory device** designed to **account for data**
  - ‘Abstract’ = exists in the minds of the explainers
  - Data = facts that we observe about the world

- What does having a model allow us to do?

4. Model-building in scientific research

- A model is an **abstract explanatory device** designed to **account for data**
- What does having a model allow us to do?
  - **Describe** what we observe
  - **Predict** what else should happen
  - (Attempt to) **explain** why phenomena occur
- If we can get our model to be a **good match** with how the world works, we conclude that properties of the world are like properties of our model
  - We check this by **testing hypotheses**

4. Model-building in scientific research

- When we propose a model, what are some of the characteristics we have to give it?
  - We propose **entities** that exist in the model
  - We propose ways in which those entities **behave** or **interact**
  - We **carefully define** those elements or entities and their relations, so that it is clear what the model allows, or requires, them to do

4. Model-building in scientific research

- What is an example of a model from any of the articles that have been presented?
  - Some articles test models from past work
  - Some articles propose or modify models based on their findings
- How does the structure or nature of the model affect the design of the experiments in the paper?

4. Model-building in scientific research

- Testing the **“self-teaching” model** of orthographic learning against two groups of poor readers
  - The model:
    - Phono. decoding → orthographic learning
    - Role of “orthographic processing?
  - Types of poor readers:
    - **Surface** group (normal performance in phonological decoding)
    - **Phonological** group (below-normal performance in phonological decoding)

4. Model-building in scientific research

- What was the Coltheart et al. (1993, 2001) Dual-Route Model originally proposed in order to describe/predict/explain?
- How do Wang et al. (2014) test further predictions of this model?
- Do Wang et al.'s (2014) results help to…
  - confirm vs. find problems for the model?
  - describe/predict/explain additional phenomena?

4. Model-building in scientific research

- Do the components of the Dual-Route Model of reading aloud predict:
  a) different skill profiles for phonological vs. surface dyslexics?
  b) orthographic learning?

- letter analysis
- phonemic buffer
- semantics
- letter-sound conversion
- orthographic lexicon
- phonological lexicon

5. For next time

- We are going to consider the implications of different language varieties for reading education
  - Prep questions: Take the NYT dialect survey and answer some follow-up questions