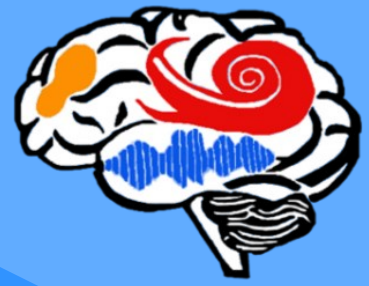


# LANGUAGE AND BRAIN LAB DIGEST



spring 2019



Before becoming an assistant professor and leader of the Aphasia Rehab Lab at the University of Connecticut, Dr. Mozeiko earned a B.A. in English Literature from UConn. She then worked at the Harvard School of Public Health, taught pre-school in Hong Kong, and helped to start an e-commerce company.

## **What do you like best about your job?**

I love that it changes all the time. My job is never the same from day to day and from semester to semester. I get to work with people with aphasia, with students, and with other researchers. I get to work alone sometimes, too, which I love. I get to write, to teach, to read, and to learn every single day.

## RESEARCHER SPOTLIGHT

### Dr. Jennifer Mozeiko

#### **Why did you choose to become a researcher and pursue a Ph.D. in Speech Language Hearing Sciences?**

I've always loved learning so when I moved back to Connecticut, I got a job here at the university so that I could take any class I wanted. It was a neuroscience class that hooked me—specifically learning about neuroplasticity. That led me to the MA/PhD in SLHS at UConn. Neuroplasticity is a fascinating topic unto itself but knowing I might use what I learn to help people with aphasia is what drives my research. The field of Aphasiology is not new but there remain so many questions as to what treatment parameters will be most effective for each individual. I wanted to help answer those questions.

#### **What are your methods with research and favorite parts about it?**

As a researcher, I'm not restricted by insurance limitations. For example, when I was a practicing SLP, I remember thinking that if I could just spend a few hours a day with a person, I could see real improvements. That was not realistic though—there were other patients to see and insurance didn't cover multiple hour sessions. As a researcher, I can use evidence from neurorehabilitation research to design exactly the treatment I think will be most effective and have been able to test highly intensive protocols.

#### **If you could have any superpower, what would you have and why?**

Healing power! Imagine being able to touch someone's head and the damage from stroke miraculously resolving? (or addiction problem obliterated, or dementia reversed, or brain tumor zapped....)

**Dr. Kathrin Rothermich** was a post-doctoral fellow in the LAB Lab, and is now an assistant professor at East Carolina University.

In the United States, there are roughly **13.5 million non-native English speakers**. Effective communication between native speakers and non-native speakers is hindered by ease of understanding. To compensate, native English speakers tend to make unconscious adjustments to their speech when talking with non-native listeners in a process called **foreign-directed speech**. Anecdotally, when some native speakers talk to someone that doesn't understand English well - they tend to shout to improve comprehension. Characteristics of foreign-directed speech include **lengthening specific vowels** (i.e. the "ah" sound in the word "barn") and **slowing the speech rate**. Foreign-directed speech bears remarkable similarity to infant-directed speech - which describes the speech pattern that adults tend to direct towards infants. Just like in foreign-directed speech, infant-directed speech contains stretched vowels and slower speech. Non-native English speakers and infants may use these unique speech patterns in order to learn English, though it is currently not known if they are more effective than non-modified speech. While foreign-directed speech may facilitate language learning, it **can be considered disrespectful**, as it is typically used when a speaker assumes a certain level of incompetence of the listener.

This study asked whether foreign-directed speech is perceived as condescending to non-native English listeners compared to average adult-directed casual and clear speech, as well as to infant-directed speech. Adult-directed casual speech is how an adult would talk to another adult that they know well - there is generally no special attention devoted to enunciation. This contrasts from adult-directed clear speech, which tends to be louder and carefully spoken - but is not targeted towards specific groups of people like in foreign-directed speech.

The non-native speakers that took part in the study were all deemed to be proficient in English, and all had learned English as their second language.

The task consisted listening to four talkers reading a

paragraph in one of the speech styles (foreign-directed, infant-directed, casual, or clear). Each participant then indicated on a **scale from 1-5** (1 being strongly disagree) with **how intelligible, friendly, and positive** they thought the speech was. This ensured that the participants heard all four speakers in all four speech styles.



The likelihood of participants rating each speech style as easily understandable (top) or friendly (bottom). No significant effects of speaking style were observed. Adapted from "Second Language Learners' Affective-Pragmatic Perception of Foreign-Directed Speech" by Bobb et al., 2019, *Journal of Speech, Language, and Hearing Research*.

Non-native English speakers ranked the **foreign-directed speech as being more intelligible and friendlier** than the adult-directed casual and clear speech. This finding is contrary to the initial hypothesis that foreign-directed speech would be perceived as condescending and negative. Taken together, adjustments to speech by native speakers for non-native English listeners seem to be positively received and may help to **facilitate understanding and learning**.