Hi Shawn,

I really enjoyed the lecture you gave on (12/5). I have a follow-up question I'd like to ask you:

Earlier research has suggested that a listener’s adaptation to s/sh production is talker specific. In your 2022 paper that you coauthored with Dr. Theodore, you found this to hold true for when the two talkers were different genders but saw cross-contamination when the talkers were the same gender: when both talkers were female (Shelia and Joanne in Exp. 4), there was “no strong evidence of learning.” I am curious what you would make of this result in the context of the papers you shared in class: Kraljic, Brennan, & Samuel (2008); Kraljic & Samuel (2011); Lui & Jaeger, (2018), and the project you are currently working on with Florian.

Kraljic, Brennan, & Samuel (2008) proposed that the brain discards experiences that are causally ambiguous, while Kraljic & Samuel (2011) revised this claim to theorize that episodic memory with pen is stored as a separate episode than those without the pen. If I am remembering correctly, the results of Lui & Jaeger, (2018) then suggested that causally ambiguous information is **stored separately**, though for how long after exposure is still unknown.

Comparing this theory of experiences being grouped as equivalents, how do you feel these fits with your findings on the influence of perceived gender on adaptation to s/sh productions? What kind of criteria might the basis for these categorizations, and do you think this might vary depending on the listener’s context, task, attentional biases, etc.? What do you think causes the brain to create more specific expectations for a given talker (i.e., what convinces a listener that a talker’s speech production needs a more personalized/specific group, and what might be the implication of time and contexts\* on this?).

Thanks in advance!

-Rachel

P.S. Ignore that Florian is CC'ed: It’s Not A Trap; I have to send an email to an author of a paper we discussed at some point in class, and I wanted to follow up with you about this anyways. I hope you don’t mind the email rather than over Slack :)

\*I’m not sure if you heard about Maryann’s results when that study Iva and I were working on last semester was moved to Prolific, but we found that adaptation to the extreme condition (+40ms shift in VOT for d/t) was just as rapid as in the less extreme conditions (+10ms & +20ms). However, participants also appear to hit a threshold in how malleable their categories were, not adapting any more after the first block or two of trials in the 40ms category. I wonder if maybe this multiple separate “encounters” (change in contexts) with the +40ms talker would increase a listeners adaptation to that talker because they are a) less likely to possibly attribute the extreme shift to some manipulating factor in the experiment/the recording, or b) that it is more likely they must understand this talker in the future and will therefore relax their categorization boundary for this talker or group the experiences with this talker separately. Or maybe both. Or neither of these.