MAYE, WERKER, & GERKEN (2002) COGNITION

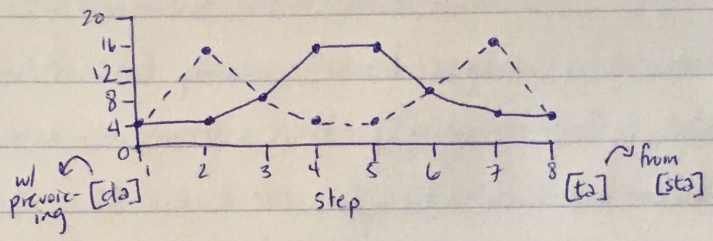
29 DEC 2020

RQ: What accounts for perceptual narrowing?

→ Word learning? Maybe later on, but doesn't explain early effects

→ Distributional properties of language? [CURRENT STUDY]

STIMULI:



- resynthesis based on natural spch
- filler syllables [nɑ] & [lɑ] (×4 each)
- 96 target instances during training from the shown distribution

PRESENTATION: 6 blocks, each: 24 sylls < 16 from continuum / 8 fillers — randomized w/ 500ms ISI

↓ (2.3 min)

PARTICIPANTS: 24 6,0 & 24 8,0 (+ an additional 12 who were excluded)

↳ N=12 / condition * age

TEST: 8 trials < 4 alternating / 4 non-alternating — each w/ 8 syllables w/ 1 sec ISI

↳ ABAB... order (counterbalanced)

↳ 4 of steps 1 & 8; ↳ 2 of step 3 & 2 of step 6 } NOTE steps 1, 3, 6, & 8 occur w/ the same freq across conds

Central fixation looking time

RESULTS:

BIMODAL ~

6 & 8 mo look more to non-alternating (novelty)

↳ Sensitivity to distributional info crosses period in which perceptual narrowing is known to occur

↳ Why does phonological learning take so much longer than this then? → messy, real-world speech?

UNIMODAL ~ (induced? shown elsewhere to discriminate these sounds)

6 & 8 mo show no preference

? 6 & 8 mo makes sense – they expect younger infants to perform similarly, but what about older ones? How flexible is this sort of learning (& how short-lived / constrained)?