SMITH & YU (2008) COGNITION

29 DEC 20

Early word learning usually focuses on one-shot learning/fast mapping but:

① word learning scenes may be much more cluttered than test scenes

② children younger than 2 aren't particularly good @ fast mapping but still accumulate lots of lexical knowledge

IDEA: word-referent pairings can be acquired w/ accumulated evidence over ambiguous scenes → involves tracking/learning multiple labels at once

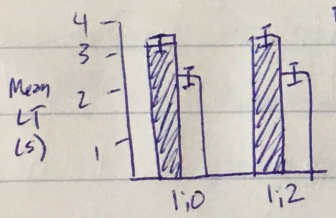
PARTICIPANTS: 28 1;0 & 27 1;2 (+ an additional two who didn't finish the task)

STIMULI: 6 novel, colorful shapes + 6 labels (non-word) ⟹ displayed in pairs on a large screen → 30 pairs shown w/ a label of one object (random order & placement)

PROCEDURE: Sesame Street character image interspersed to hold attention during training. Video of kid's face to see when/where they were looking (hand coded)

TEST: 12 trials: each w/ 1 label repeated 4 times w/ an object pair

RESULTS:



- Both age groups looked more @ target
- 1;2 kids showed a bigger effect
- Some correspondences learned better than others
- For both groups, reliable learning of 4/6 words
  - ↳ learning a <u>system</u> of words

DISCUSSION:

- "Making use of complexity" ~> complexity can be helpful (adults learn a set of 18 better than a set of 9)
- Consistent w/ other SL abilities but mechanism is unclear:
  ① hypotheses updated after each trial
  ② accumulated associative learning

This is far from true messy, real life scenes — the authors' point ① from the intro still holds — how much evidence is needed? what is the role of attention? Also, younger kids were slightly worse — what are the implications?