READING NOTES

LATIF ET AL. 2018 28 APRIL 2020

WHAT IS THE FUNCTION of VISUAL vs. AUDITORY INFORMATION IN PREDICTING UPCOMING TURN STRUCTURE (IN MULTIMODAL CONVERSATION)?

NOTE: 2 TYPES of VISUAL CUES from MULTIMODAL SPEECH
① linguistic (e.g. lip movement)
② non-linguistic (e.g. gesture)

VISUAL INFO IS USED IN TURN-STRUCTURE PREDICTION: (automated) (Vollenbroek & Torreira 2015)
- helps accurate classification of ends vs. continuations (Latif et al. 2017)
- helps identify turn-ends w/ human steps

THEIR INTEREST: Gesture as a channel of information (vs. individuation by phenomenon)

EXP 1 button press for turn-end & turn continuation stims (COMPLEX RESPONSE) derived from 24 dyadic same-gender conversations ⇒ NOT question-answer, no backchannels

AO = audio only
VO = visual only
AV = both modalities

TURN ENDS RESPONDED TO MORE OFTEN IN ALL 3 MODALITIES; BEST IN AV vs AO & VO

RESPONSES TIMED ACCURATELY IN ALL 3 MODALITIES; CLOSER TO Ø IN AV & AO vs. VO

→ AUDITORY & VISUAL CUES CONTRIBUTE TO TURN-STRUCTURE PREDICTION IN (PARTLY) COMPLEMENTARY WAYS

NOTE: Nice work cited on why responses to vis stims might be earlier & more variable on p. 33

EXP 2 same stimuli, but gated at 0, -200, -400, -600 ms from response/continuation
Respond as Y/N button ~ has the current speaker finished their turn?
(if it's cut in the middle "anticipate whether you think the talker will finish their turn once their sentence is complete" (p. 36)

Sort of:
Is this the last TCU of a turn?

TURN ENDS
AV: above-chance performance @ -600 ms onward
AO/VO: -200 ms onward

TURN CONTINUATIONS
AO/VO/AV: greater than chance at all gates

} processed differently?
overall turn-end prediction was more accurate than turn-continuation

→ AV advantage, specifically for turn ends in early recognition → priming (b/c comes 1st) and/or redundancy w/ speech

⇒ COMPLEMENTARY ROLES for VISUAL & AUDITORY INFO IN TURN-STRUCTURE PREDICTION?
→ VISUAL: an early and clear signal of impending turn end allowing for more efficient auditory processing thereafter (NB: limited advtage; only WITH audio)