

STIVERS ET AL. 2009

6 APRIL 2020

MEASUREMENTS:

Independent variables (question)

- ③ Questioner is gazing at recipient?
- ④ Req. for info vs. other request/repair.

- ① Response is answer?
- ② Answer is confirming?
- ④ Response has visible component?

independent variables (response)

- ① RESPONSE OFFSET (in 10 ms increments, rounded to nearest 100 ms)
- ↳ Dependent variable

DATA: POLAR QUESTIONS (ONLY)

are polar Qs really representative?
would we predict that?

- Spontaneous informal conversation from 10 typologically diverse languages: 2-6 participants.
- 350 consecutive questions from 5-17 interactions (101 conversations in total)
- Beginning of response = start of vocal or gestural response

Contrasting hypotheses

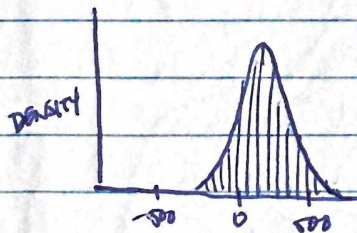
UNIVERSAL:

Based on predictions from CA (& Psych), interactional need for fluent temporal co-ordination forms a basis for similar timing and mechanisms for marking & dealing w/ delay

CULTURAL VARIABILITY:

Based on predictions derived from ethnographic work - conversational timing varies radically across cultures such that long silences or overlaps may be the norm, with variable mechanisms for marking & dealing with delay.

RESULTS



Something like this distribution was found in all languages
"no-gap, no-overlap" - like pattern

Variation in means: J_p (shortest): 7.29 ms - D_a (longest): 468.88

... medians: 0-300

mean of means 208

... of medians 100

but rounded data make this hard to take as precise

| | | |
|------------------|----------------|-------------------------------------|
| Non-answers | ← SLOWER (132) | significant in <u>all</u> languages |
| Confirmations | ← FASTER (207) | |
| Visible response | ← FASTER (187) | |
| Questioner gaze | ← FASTER (64) | |
| Info request | ← SLOWER (130) | |
| | | sig. in 7/10 languages |
| | | sig. in 7/10 languages |
| | | sig. in 5/10 languages |
| | | (only given in overall model) |

not clustered by grammatical features of polar questions, nor by cultural relatedness.

» Subjectively "on time" responses were much longer in some languages, but only by a difference of ~150 ms; subjectively notable delays are, in absolute terms, different across languages, suggesting a kind of "calibration" for timing.

correlation w/ speaking rate?

is the most common case of issue, or what happens at the fringes?

"ROBUST UNIVERSALS"

CONCLUSIONS:

Overall support for the universal system hypothesis, but evidence for culture-specific calibration in (A) what feels "normally" timed and what feels delayed and (B) the features of Qs and Rs that lead to shorter and longer offsets within language; gaze by the questioner appeared particularly variable in the dataset.

LOADED POINTS @ END:

- Interactional universals are more robust and easier to find than grammatical ones.
- Interactional system is stable & separable from the languages & cultures in which they are expressed
- (Primal) interaction preceded language in human evolution, and formed the context for its development (ie, shaped the formation)

without
evidence?
what more
would we
like to see?