Turn timing is stable across signed and spoken languages

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Prior work has shown that conversation is remarkably rapid across typologically diverse spoken languages with most turns timed ~200ms after the prior (Stivers et al. 2005). When looking at the strokes – i.e. the lexically-specified movements of signs, turn-timing in Sign Language of the Netherlands (NGT) looks remarkably similar to turn-timing in spoken languages (de Vos, Torreira & Levinson 2015). The study reported here has investigated since 2016 whether turn-timing is indeed a constant feature of conversation across both language modalities, and if so, to what extent might this might lead to convergent evolution across unrelated sign languages? To do so, I compare spontaneous dialogues in NGT and Kata Kolok (KK).

KK is an emergent signing variety that has been used by six subsequent generations of native signers in a village community of Bali. Because KK emerged in isolation of any other sign language, it constitutes a unique sample in cross-linguistic comparisons. Data stem from the Kata Kolok Corpus, which covers generations III-IV of adult signers (de Vos 2016), and the NGT Interactive Corpus (van Zuilen, de Vos, Crasborn & Levinson). To allow for systematic comparisons across large samples of spontaneous data I have compared question-answer sequences – e.g. content and polar questions, and repair sequences, i.e. three-turn sequences with a problem sources turn, a repair initiation (huh?), and a solution. Each sequence was transcribed for gesture movement phases (preparation, stroke, hold, retraction) as well as prosodic cues marking questionhood and phrase boundaries (e.g. raised eyebrows, nods).

Mixed effects modelling indicates that NGT and KK question-answer sequences and repair sequences may be strikingly similar in terms of turn-timing. In addition, comparisons of the different generations of KK signers to age-matched NGT signers reveal no intergenerational differences that could indicate that KK is still evolving in terms of turn-timing. These findings support the hypothesis that turn-timing varies minimally across a diverse set of spoken and sign languages supports strong linguistic universals in turn-timing across modalities.

References
