Alignment mouth demonstration with classifiers (for presentation, not poster)

Donna Jo Napoli – Swarthmore College
Ronice Müller de Quadros – Universidade Federal de Santa Catarina
Christian Rathmann – Humboldt Universität zu Berlin

In Napoli et al. (2022) we examined instances in Brazilian Sign Language (Libras), German Sign Language (DGS) and American Sign Language (ASL) in which mouth articulations coordinate with manual articulations to deliver redundant information in the same narrative in all three languages. We call these articulations alignment mouth demonstrations (AMDs), building on the study of demonstrations in Davidson (2015) and Quadros et al. (2020) and the remarks about mouth gestures in Sandler (2009). Figure 1, for example, exemplifies the AMD "forward mouth", which can occur when both hands are classifiers that move along the sagittal axis, one behind the other. The mouth moves forward, either via lip protrusion (in 1a, bottom lip in Libras; in 1b, both lips in ASL; in 1c, both lips in DGS) or via air pressure trapped inside the lips making both lips move forward (in 1d, in ASL). Each of these four examples is at a point in a narrative in which the two hands depict characters moving forward along the sagittal axis: this is the crucial manual spatial information. The two corners of the lips repeat that spatial information by moving forward throughout the manual articulation, aligning spatial and temporal information. Indeed, the signer's eyes follow the classifier hands, but the gaze drifts away as the movement of the classifiers stops and the configuration of the lips relaxes.

We identified four distinct AMDs ("forward mouth" and three others). In these, the corners of the lips align with classifier handshapes, moving in a systematic way with respect to the movement of the classifiers and to the spatial/temporal relationships between the two classifiers. AMDs, then, are not gestural, nor are they enactments (where the mouth mimics the sense of a sign), nor are they echoes (in the sense of Woll 2009). Rather, they are a meaningful and gradient feature of sign language narrative (some signers use them more often than others) and, as such, are part of the grammar. AMDs are an example of overspecification that reduces error in reception of complex information; identifying a single referent within a discourse is highly complex (Epstein 2002), so the task of identifying two referents interacting with each other is enormously complex. It is no surprise, then, that all our examples come from narratives for children, where they are particularly useful in driving home the complex spatial and temporal information delivered by the classifiers.

Besides the matter of clarity of information, emotion matters in narratives for children (Rathmann et al. 2007); emotional behaviors in narratives are better recalled than nonemotional behaviors for children of all ages (Davidson et al. 2010, a study of hearing children). Our present work, then, tests the hypothesis that the appearance of AMDs is sensitive to emotional information in the narrative. We reanalyze our original data and include additional data from Libras Corpus (Quadros et al. 2014), with signers producing the same narrative.

Additionally, because AMDs are linked to classifier predicates, their presence might be used as a diagnostic for whether a lexical sign originated as a classifier – only in a positive way, that is, if we have AMDs in a lexical sign, it originated as a classifier; but if we don't, perhaps AMDs were lost along the way. Further, if AMDs are sensitive to emotional information, we might expect them with lexical signs whose sense might well be emotional (such as CHASE), but not with lexical signs whose sense is purely locational (such as FOLLOW).

Figure 1: forward mouth

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