"Not that, *that*": Coordinating joint attention through featural modulation in ASL demonstratives

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Keywords: demonstratives, joint attention, American Sign Language, non-manual markers

Demonstratives, deictic words such as this or that used for nominal reference, appear to be one of the only grammatical categories that are universal across languages (Diessel & Coventry, 2020), serving to coordinate interlocutors' joint attentional focus (Diessel, 2006), with some languages requiring different demonstrative forms depending on whether the referents are the focus of shared attention (Levinson, 2018). By contrast, when shared attention to the referent is not encoded by different demonstrative forms, Piwek et al. (2008) have shown that the proximal demonstrative can be used to draw attention to a referent through intense indicating, while the distal demonstrative is used in more neutral indicating contexts.

Most languages have two or more demonstratives used contrastively for proximal and distal spaces, but American Sign Language (ASL) seems to have a one-demonstrative system, using a form of index pointing for the majority of nominal demonstratives, with some features optionally (and not categorically) being modulated relative to proximity (Morford et al., 2019). Therefore, ASL cannot extend the proximal/distal contrast to intense vs. neutral indicating. How then do signers increase the deictic force of demonstratives to achieve joint attention during cases of intersubjective misalignment?

In the present study, we investigated whether non-manual markers and manual prosodic features produced with a demonstrative point can increase deictic force. Data from 10 adult ASL signers were collected using an interactive puzzle completion task. We coded 458 pointing gestures produced by participants in order to establish reference or redirect attention at a particular object. Of these 458 points, only 33 (7%) were modified with a preceding THAT sign, confirming claims that ASL has a one-demonstrative system. The experimenter elicited demonstratives by asking, for example, "Which piece has the green dinosaur's eye?" Following some responses, the experimenter intentionally chose an incorrect piece, prompting the participant to correct the experimenter and redirect focus towards the correct target. For each demonstrative, we coded the following non-manuals markers and manual prosodic features: (a) Eyebrow position; (b) Mouth shape; (c) Body lean; (d) Head tilt; (e) Facial scrunch (a composite of eyebrow lowering, eye squinting, nose wrinkle, head tilt; see Figure 1 below); (f) Tense hold; and (g) Repetition.

Somewhat contrary to our predictions, such features were not solely used to increase deictic force; rather, they were also used to increase the specificity of reference, and to negotiate joint attention. Participants modulated their use of these features based on their communicative goals. To increase specificity, as in trials with multiple possible targets, head tilt often accompanied the point, creating a visual cue that guided the interlocutor towards the intended piece. To achieve intense indicating, as was common following a misunderstanding where re-establishing joint attention was required, a constellation of features often appeared, including tense hold, scrunch, and forward body lean. To renegotiate intersubjectivity, inviting the experimenter to bring their attention back to a target piece, participants often signaled polite disagreement via a mouth morpheme such as clenched teeth or pursed lips, while maintaining a hold at the target piece, sometimes with a bounce. We interpret these results through an embodied phonology framework, highlighting the close relationship between motivated forms and their intended meanings (Occhino, 2017).

Fig. 1: Example of facial scrunch as used for intense indicating.

References

Diessel, Holger. 2006. Demonstratives, joint attention, and the emergence of grammar. *Cognitive Linguistics* 17. doi:10.1515/COG.2006.015.

Diessel, Holger & Kenny Coventry. 2020. Demonstratives in spatial language and social interaction: An interdisciplinary review. *Frontiers in Psychology* 11. doi:10.3389/fpsyg.2020.555265.

Levinson, Stephen C. 2018. *Introduction: Demonstratives: Patterns in diversity* 1–42. Language Culture and Cognition Cambridge University Press. doi:10.1017/9781108333818.002.

Morford, Jill P., Barbara A. Shaffer, Naomi L. Shin, Paul Twitchell & Bettie T. Petersen. 2019. An exploratory study of ASL demonstratives. *Languages* 4. 80. doi:10.3390/languages4040080.

Occhino, Corrine. 2017. An introduction to embodied cognitive phonology: Claw-5 hand-shape distribution in ASL and Libras. *Complutense Journal of English Studies* 25(00). 69–103. doi:10.5209/CJES.57198. `http://revistas.ucm.es/index.php/CJES/article/view/57198`.

Piwek, Paul, Robbert Jan Beun & Anita Cremers. 2008. 'proximal' and 'distal' in language and cognition: Evidence from deictic demonstratives in Dutch. *Journal of Pragmatics* 40. 694–718. doi:10.1016/j.pragma.2007.05.001.