

Towards a revised typology of mouth actions

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Being sign language isolates, rural signing varieties contribute uniquely to the field of sign language typology (de Vos & Pfau 2015). They often exhibit typologically rare features and, therefore, they have the potential to significantly extend our knowledge of the true linguistic diversity of the visual modality. Kata Kolok is a rural signing variety that has emerged in response to a sudden rise in the incidence of deafness in a village community of Bali. The language has been in close cross-modal contact with the spoken language of the wider hearing community since its

incipience, but there is limited evidence of contact-induced features such as initialisation of signs, or the use of mouthings reflecting Balinese (de Vos 2012). While speech-related mouthings thus appear to be uncommon in Kata Kolok, the mouth is a crucial articulator that plays a role at various levels of language structure. Based on corpus analyses of Kata Kolok mouth movements, this paper argues that the current typologies of mouth movements may need significant adaptations to reflect the systematicities attested in this rural sign language (cf. Boyes-Braem & Sutton-Spence 2001; Crasborn et al. 2008).

Data Kata Kolok (KK) has been used by five subsequent generations of deaf individuals and features in all aspects of village life: social interaction, politics, farming activities, liturgy, and deaf education. There are at present 46 deaf individuals of all age groups, who use this indigenous signing variety with their hearing relatives, colleagues and friends. These hearing signers make up the vast majority of sign language users and use the sign language with varying degrees of proficiency (Marsaja 2008). This paper discusses the distributional properties of KK mouth movements based on the analysis of 4.5 hours of transcribed video data of spontaneous interactions among deaf KK signers from the third and fourth generations. The data set is part of a larger corpus that was collected during fieldwork activities between 2007 and 2015.

Analysis First, I discuss the grammatical use of a lip smack (pah) for completive aspect and the use of a protruded tongue for the negative completive. The completive can also occur with pointing signs, thus treating them on a par with other predicates (de Vos 2015). Second, I describe the use of a pursed lip marker for the expression of intensification, and how its meaning arises from an interaction with the manual



Figure 1. FINISH#pah

component to which it is attached. Finally, I touch upon the use of the stiffened upper lip that functions as an epistemic marker in specific conversational contexts, that is to say, when there is a clear epistemic asymmetry between signer and addressee (Heritage 2012).

Methodological implications These descriptions make clear the benefits of corpus analyses of mouth movements across a larger collection of conversational data in the following ways. First of all, similar mouth movements designating similar functions have been attested in other sign languages, e.g. FINISH#pah in KK and PAH! in American Sign Language (cf. Anderson & Reilly

1998). This paper shows that while unrelated sign languages may sometimes draw on similar sources of iconicity, distributional differences allow us to assess which word class these mouth movements belong to. Secondly, analyses have thus far indicated that the incomplete marker also appears to be used as a negation marker by some but not all signers. Subsequent corpus analyses across multiple generations of sign language users may thus increase our understanding of how mouth movements grammaticalise over time. Finally, using conversational data allows us to capture systematicity at the level of language in use, e.g. in the case of KK's stiffened upper lip. Given that the forms of grammatical non-manuals are often affected by pragmatic functions (Baker-Shenk 1986; van der Kooij, Crasborn & Emmerik 2006; de Vos, Crasborn & van der Kooij 2009), this paper not only contributes to our understanding of non-manuals at the pragmatic level, but, conversely, may also inform the ways in which grammatical non-manuals are instantiated in a conversational context.

Theoretical implications Crucially, the mouth movements described above do not fit the existing typologies of mouth actions (cf. Boyes-Braem & Sutton-Spence 2001; Crasborn et al. 2008). That is to say, they are not just mouthings, adverbials, forms of echo phonology, part of enactments or parts of holistic facial expressions. The complete and negative complete are best analysed as bound morphemes designating grammatical aspect, Beeh! functions as an interjection and the stiffened upper lip may best be analysed as a pragmatic particle. Like adverbials these mouth actions have morphological meanings and designated word classes that can be identified based on their distributional properties. Here, the term ***mouth signs*** is coined to describe the larger group of morphemised mouth movements, including previously attested adverbial markers. This paper proposes a revised typology for mouth movements that takes into account the word classes of mouth signs. In doing so, this paper demonstrates how the linguistic structures attested in rural signing varieties may critically inform our understanding of the typological variation among sign languages as well as the social dynamics that may shape it.

Anderson, D. & J. Reilly (1998) PAH! The acquisition of adverbials in ASL. *Sign Language & Linguistics* 1. 117–142.

Baker-Shenk, C. (1986). Factors affecting the form of question signals in American Sign Language. In D. Sankoff (Ed.), *Diversity and diachrony* (pp.407–414). Amsterdam Philadelphia, PA: Benjamins.

Boyes-Braem, P. & Sutton-Spence, R. (2001). *The hands are the head of the mouth: the mouth as articulator in sign languages*. Hamburg: Signum Press.

- Crasborn, O., E. van der Kooij, D. Waters, B. Woll, & J. Mesch. 2008. Frequency distribution and spreading behavior of different types of mouth actions in three sign languages. *Sign Language & Linguistics*, 11, 45–67.
- De Vos, C., van der Kooij, E., & Crasborn, O. (2009). Mixed signals: Combining linguistic and affective functions of eyebrows in questions in Sign Language of the Netherlands. *Language & Speech*, 52(2/3), 315-339.
- De Vos, C. (2012). Sign-spatiality in Kata Kolok: How a village sign language in Bali inscribes its signing space. PhD Thesis, Radboud University Nijmegen, Nijmegen.
- De Vos, C. (2015). The Kata Kolok pointing system: Morphemization and syntactic integration. *Topics in Cognitive Science*, 7(1), 150-168. doi:10.1111/tops.12124.
- Heritage, J. (2012). Epistemics in Action: Action Formation and Territories of Knowledge. *Research on Language and Social Interaction*, 45 (1), 1-29.
- Marsaja, I. G. (2008). *Desa Kolok - A deaf village and its sign language in Bali, Indonesia*. Nijmegen: Ishara Press.
- van der Kooij, E., Crasborn, O. & Emmerik, W. (2006). Explaining prosodic body leans in Sign Language of the Netherlands: Pragmatics required, *Journal of Pragmatics*, 38 (10), 1598-1614.