GESTURE SIGN AND BEYOND NEGATION ACROSS THREE GENERATIONS OF SIGNERS

Hannah Lutzenberger^{*1,2}

*Corresponding Author: h.lutzenberger@let.ru.nl ¹Center of Language Studies, Radboud University, Nijmegen, The Netherlands ² International Max Planck Research School, Nijmegen, The Netherlands

Unlike spoken languages for which written records date back several millennia, village sign languages emerge from scratch over the timespan of only a few decades even in the 20th century. These languages newly arise in remote areas where there is an exceptionally high incidence of hereditary deafness (Zeshan & de Vos, 2012). Kata Kolok (KK) is a young sign language used by hearing and deaf members of a single Balinese village community (Marsaja, 2008). The present study investigates negation in KK.

Negation is a core feature of all human languages, both spoken and signed (Dahl, 2010; Miestamo, 2005). Across a large range of unrelated signed languages, negation is expressed by both manual and non-manual elements: a lexical sign with a repeated side-to-side movement and a headshake (Zeshan, 2004). Often shared with the wider hearing community, the manual and the non-manual marker seem to have derived from co-speech gestures (Wilcox, 2009). In sign languages, these gestures have grammaticalized into linguistic negation markers that vary alongside two parameters: 1) only one of the two markers (manual or non-manual) is obligatory, and 2) spreading of the headshake i.e. the headshake is co-articulated only with the manual negator or extends to neighboring signs.

I study negation in spontaneous conversations from six KK signers of the generations III through V (KK Corpus; de Vos, 2016). Transcription of 1.73 hours of data reveals two main findings: (i) Across all three generations, KK signers rely on formally identical negation markers that originate in conversational and cultural gestures (Marsaja, 2008): a lexicalized handwave (manual negator), a negative headshake, and tongue protrusion. Whilst the latter occurs in specialized contexts of negative evaluation and negative existence, the

This paper is distributed under a Creative Commons CC-BY-ND license. DOI:10.12775/3991-1.063 data did not unambiguously identify a single obligatory negation marker. The manual negator **and** the headshake are highly frequent in all signers, both combined and independent. This makes KK negation typologically unusual. (ii) Inter-generational differences in the degree of headshake spreading indicate language change across three generations: a linear mixed-effects model reveals that the headshake extends to neighboring signs in the youngest generation of signers, but signers from older generations almost always co-produce the headshake only with the manual negator (Fig. 1).

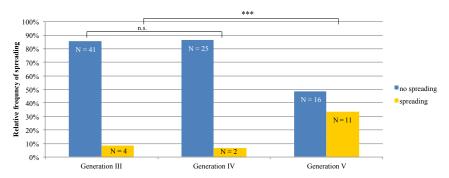


Figure 1. Significant intergenerational difference in headshake spreading.

Headshake spreading is thought to lead to more efficient language use since using the non-manual headshake as mandatory negation marker frees the hands for other signs (Pfau, 2015). Sign languages that opt for this multi-channelled pattern have a higher compressibility than sign languages that require the manual negator to negate. This non-manual system is attested in most sign languages studied that are considerably older than KK (Zeshan, 2004). Headshake spreading in KK, however, does not occur alongside a decrease in the manual negator. Thus, the hand is actually not available for other signs. It is possible that KK exploits two obligatory negation markers - a pattern that has not yet been described. An alternative explanation might be sought in the time depth of the language: the youngest generation of signers might represent a transitional state of the developing negation system. In other words, the patterns of negation found in KK may not yet have been attested in another language because of its exceptional emergence scenario.

The results from this study show that even within a relatively short timeframe, emergent sign languages like KK may evolve to have unique and previously unattested linguistic features and thus provide a window to the study of the beginnings of modern human languages (de Vos & Pfau, 2015).

References

- Dahl, Ö. (2010). Typology of negation. In L. R. Horn (Ed.), *The expression of negation*. (pp. 9-38). Berlin: Mouton de Gruyter.
- de Vos, C. (2016). Sampling shared sign languages. Sign Language Studies 16(2), 204-226.
- De Vos, C., & Pfau, R. (2015). Sign Language Typology: The contribution of rural sign languages. Annual Review of Linguistics, 1, 265-288.
- Marsaja, G. I. (2008). Desa kolok: A deaf village and its sign language in Bali, Indonesia. Nijmegen: Ishara Press.
- Miestamo, M. (2005). *Standard negation. The negation of declarative verbal main clauses in a typological perspective.* Berlin: Mouton de Gruyter.
- Pfau, R. (2015). The grammaticalization of headshakes: From head movement to negative head. In A. D. M. Smith, G. Trousdale & R. Waltereit (Eds.), *New directions in grammaticalization research* (pp. 9-50). Amsterdam: John Benjamins.
- Wilcox, S. (2009). Symbol and symptom: Routes from gesture to signed language. *Annual Review of Cognitive Linguistics* 7, 89-110.
- Zeshan, U. (2004). Hand, head and face Negative constructions in sign languages. *Linguistic Typology* 8 (1), 1-58.
- Zeshan, U., & de Vos, C. (Eds.) (2012). Sign languages in village communities: Anthropological and linguistic insights. Berlin: De Gruyter Mouton & Nijmegen: Ishara Press.