

Conventionalization of Pointing & Gestural Motion Descriptors in a Chatino Speech Ecology

Lynn Y-S Hou and Kate Mesh¹

A topic of this workshop is conventionalization in the structure of emerging sign languages. We approach this topic by first looking to convention in the pointing forms of (co-speech and speech-delinked) gestures used in the larger language ecology of San Juan Quiahije (SJQ), an indigenous Mesoamerican (Chatino) village in Oaxaca, Mexico. The practice of “absolute” pointing, or pointing to the real-world locations of referents and places, motivated by one’s intimate knowledge of the local topography, is widely conventionalized and shared by both hearing and deaf community members, while only signers (11 deaf people and their associates) elaborate these forms for the purposes of exclusively manual-visual communication in Chatino Sign Language (CSL).

We begin with an analysis of deictic pointing and motion descriptions produced by Chatino speakers in semi-structured interviews about locations and routes (following Kita 2001). We show that such formational parameters as handshape, palm orientation, and elbow height of pointing gestures correlate to the perceived distance of the referent, as has been claimed about co-speech gesture (Eco, 1976; Kendon, 1988; Cochet & Vauclair 2013) and also has been extensively documented for an older rural sign language, Kata Kolok (de Vos, 2014, 2012). For motion event descriptions, we show that a single gestural form produced with the lexical affiliates *kijan* and *tsan* (roughly equivalent to *come* and *go* in spoken Chatino) is modified to represent the path of the moving referent.

Next, we consider deictic pointing and route-motion descriptions produced by some deaf and hearing signers, with a focus on a family with two generations of signers, in a growing corpus of naturally-occurring data and a word order elicitation task. We argue that signers share the absolute pointing system with gesturers, and they do not typically project human referents on the “neutral” signing space, as traditionally analyzed for many older urban sign languages (Perniss, 2012). Absolute pointing has been documented in other signed languages: Al-Sayyid Bedouin SL (Padden *et al.*, 2010), Inuit SL (Schuit, 2013), Kata Kolok (de Vos, 2014), Providence Island SL (Washabaugh, 1986), and Yolngu SL (Bauer, 2013). Rather, CSL signers pattern like gesturers with respect to deictic pointing and route-motion descriptions, suggesting for a preference for the use of topographic space based on a shared geocentric conceptualization of the space. But they also have spatial verbs for *come* and *go*, and a limited repertoire of directional (also commonly known as ‘agreement’ or ‘indicating’) verbs for events of concrete and abstract transfer.

We show that signers produce spatially modified forms of directional verbs, especially for *give*, but tend not to incorporate the geographical locations of absent human referents in such verbs. They also do not project the referents in the signing space for arbitrary referent-location associations. Based on these findings, we argue that CSL signers have co-opted the absolute pointing system from their larger language ecology and built on it by incorporating directionality for describing events of transfer. However, CSL does not have a full-fledged, true “verb agreement” system, because the preferred use of topographic space, which is already conventionalized, appears to preclude the development of arbitrary referent-location associations, apart from the very young age of the CSL and the lack of nativization of the language.

¹ The order of the authors is strictly alphabetical.

References

- Bauer, A. (2014). *The use of signing space in a shared sign language of Australia*. Published doctoral dissertation. Berlin & Nijmegen: De Gruyter Mouton & Ishara Press.
- Cochet, H., & Vauclair, J. (2013). Deictic gestures and symbolic gestures produced by adults in an experimental context: Hand shapes and hand preferences. *Laterality: Asymmetries of Body, Brain and Cognition*, 1–24.
- de Vos, C. (2012). *Spatiality in Kata Kolok: How a village sign language inscribes its signing space*. Published doctoral dissertation. Nijmegen: Max Planck Institute for Psycholinguistics.
- de Vos, C. (2014). The Kata Kolok Pointing System: Morphemization and Syntactic Integration. *Topics in Cognitive Science*: 1–19.
- Eco, U. (1979). *A theory of semiotics* (Vol. 217). Indiana University Press.
- Kendon, A. (1988). Parallels and divergencies between Warlpiri sign language and spoken Warlpiri: analyses of signed and spoken discourses. *Oceania*, 58: 239–254.
- Kita, Sotaro. (2001). Locally-anchored spatial gestures, version 2: historical description of the local environment as a gesture elicitation task. In S. C. Levinson & N.J. Enfield (eds.), *Manual for the field season 2001*, 132–125. Nijmegen: Max Planck Institute for Psycholinguistics.
- Padden, C, Meir, I., Aronoff, M., & Sandler, W. (2010). The grammar of space in two new sign languages. In D. Brentari (Ed.), *Sign Languages*, pp. 570–592. Cambridge: Cambridge University Press.
- Perniss, P. (2012). Use of sign space. In R. Pfau, M. Steinbach & B. Woll (eds.), *Sign language: An international handbook* (Handbooks of Linguistics and Communication Science), 412–431. Berlin: Mouton de Gruyter.
- Schuit, J. (2013). *Signs of the Arctic: Typological aspects of Inuit Sign Language*. Doctoral dissertation. University of Amsterdam. Amsterdam, the Netherlands.
- Washabaugh, W. (1986). *Five fingers for survival*. Ann Arbor, MI: Karoma Publishers.