Semantic salience as iconic motivation of signs in artificial and natural sign languages

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The choice of the image for sign creation is claimed to be arbitrary (Occhino et al. 2017), but recent studies show that iconic signs vary less than expected if iconic representations are arbitrary: unrelated sign languages share about 20% of their core lexicons (Guerra Currie et al. 2002). Patterns within languages also suggest a lack of arbitrariness: signs belonging to the same semantic category share the same kind of iconic representation (Padden et al. 2013). And novel signs coined by sign-naïve gesturers belonging to broad conceptual categories (e.g., animates) share iconic sources that motivate their form (Tkachman & Hudson Kam 2016). This suggests that iconicity is constrained, at least at the level of kinds or categories. But what about individual referents? Will specific meanings look similar cross-linguistically? Will sign-naïve gesturers converge on the same underlying concepts as deaf signers? We compared 20 signs for animates created by 50 sign-naïve people, and signs for the same meanings from 33 natural sign languages (spreadthesign.org). We coded each sign (novel and real) for the underlying concept represented in it (e.g., whiskers for 'cat'), counted the number of concepts per sign, and compared the specific concepts, the number of concepts, and the degree of preference for concepts for the invented vs. real signs. We find that the sign-naïve people are more diverse in the choice of underlying concept (9.8 per referent vs. 6.3 in sign languages), but most tokens belong to the same types as most sign tokens. Though there is a range of possible concepts for encoding, some are more likely than others, and what is likely is determined not by language but something more conceptual. We call this phenomenon semantic salience: the semantic feature of the referent that is most conceptually salient is being used to label the referent.

References: • Guerra Currie, A. M., R. Meier, K. Walters, K. Cormier & D. Quinto-Pozos. 2002. A cross-linguistic examination of the lexicons of four signed languages. In R. Meier, K. Cormier, & D. Quinto-Pozos (eds.), Modality and structure in signed and spoken languages. Cambridge: CUP. • Occhino, C., B. Anible, E. Wilkinson & J. P. Morford. 2017. Iconicity is in the eye of the beholder. *Gesture* 16(1). 100–126.
• Padden, C. A., I. Meir, S. O. Hwang, R. Lepic, S. Seegers & T. Sampson. 2013. Patterned iconicity in sign language lexicons. *Gesture* 13(3). 287–308. • Tkachman, O. & C. L. Hudson Karn. 2016. Arbitrariness of iconicity: The sources (and forces) of (dis)similarities in iconic representations. In S. G. Roberts et al. (eds.), *The evolution of language: Proceedings of EVOLANG11.*