Iconicity: The superpower of sign languages

*Iconic* signs look like what they mean (e.g., HAMMER, DRINK), and *iconicity* is very common across signed languages. In contrast, spoken words usually do not sound like what they mean. LLCN is investigating iconicity to understand whether this ASL "superpower" impacts language production or comprehension.

**Sign Production:** Signers produce iconic signs like CAT faster than non-iconic signs like LETTUCE when naming pictures. Signers’ brain responses suggest that the meanings of iconic signs are stored differently in memory than the meanings of non-iconic signs (indexed by an increased N400 ERP response for iconic signs).

**Sign Comprehension:** Hearing adults learn iconic ASL signs faster than non-iconic signs, and their brain responses indicate that iconic signs are easier to recognize than non-iconic signs (reduced N400 ERP response = more blue). **BUT** the brain responses of deaf signers are similar for iconic and non-iconic signs (in both a word-sign matching task and a semantic categorization task). Thus, for fluent deaf signers, iconicity does not affect how the brain recognizes signs.

**Perceiving iconicity:** We explored whether deaf signers and hearing non-signers have the same intuitions about iconicity by asking them to rate sign iconicity on a scale of 1 (low) – 7 (high). Overall, ratings were very similar ($r = .82$), but non-signers rated verbs as more iconic than signers did. Non-signers may assume that signs represent actions increasing their perception of iconicity for verbs.

**LLCN research papers on iconicity in ASL**


THANK YOU. None of these studies would be possible without the contributions of individuals like you. We would like to take the opportunity to thank those of you who have generously given your time. For more information, please visit our website at https://slhs.sdsu.edu/llcn/