Cross-modal metaphor understanding: Implications for L2 signer comprehension

This research examines whether non-signers attribute abstract meaning to American Sign Language (ASL) signs from prior knowledge of common conceptual metaphors. Metaphors help to discuss complex ideas by making connections between abstract and concrete concepts.[1] In ASL and gesture, abstract concepts can be iconically represented using manual forms.[2] Deaf and hearing people have shared cultural experiences and ways of representing some concepts through iconic signs and gestures.[3] Having no exposure to the language-internal motivations of iconic forms, non-signers may rely on gestural knowledge and existing L1 metaphors when guessing the meanings of unfamiliar signs.

Non-signing participants (n=149) guessed the meanings of 10 ASL signs randomly selected from a set of 30 metaphorical signs.[4] Guesses (n=1,360) were coded for conceptual domain (e.g., body-action, emotion), and reflected varied construals across multiple aspects of signs (e.g., handshape, location). Many guesses exhibited metaphorical mapping of THE LOCUS OF EMOTION IS THE CHEST and THE LOCUS OF THOUGHT IS THE HEAD.[2] Signs near the chest mostly elicited body action (20%), emotion (19%), and body part (14%) guesses; 75% of emotion-related guesses were attributed to signs directed toward or contacting the chest. Signs near the head elicited 41% cognition-related guesses, some up to 68% (e.g., BRAINSTORM, INFORM).

Although non-signers recognize iconic devices used in ASL (e.g., location, movement), they tend to guess more concrete meanings (e.g., body parts, actions). In spite of experience in gesture and L1 metaphor, more explicit ASL knowledge may be required for iconic-metaphorical mapping. Further inquiry at multiple stages of L2 ASL acquisition could illuminate how and when L2 signers develop the ability to recognize metaphorical mapping in sign. This research contributes to our understanding of how language experience influences perception of iconically-represented concepts across L2 sign acquisition trajectories.

300 words

References

1. Lakoff, G. & Johnson, M. (1980). Metaphors We Live By, Chicago: The University of Chicago Press.
2. Taub, S. (2001). Language from the Body: Iconicity and Metaphor in American Sign Language. Cambridge: Cambridge University Press.
3. Ortega, G., Schiefner, A., & Özyürek, A. (2019). Hearing non-signers use their gestures to predict iconic form-meaning mappings at first exposure to signs. Cognition, 191, 103996.
4. Hochgesang, J. A., Crasborn, O., & Lillo-Martin, D. (2017-2021). ASL Signbank [Data set]. https://aslsignbank.haskins.yale.edu/