

## **Linguistic and neural consequences of iconicity in American Sign Language**

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Iconicity (a resemblance between form and meaning) in sign languages appears to be much more pervasive and structured compared to spoken languages. Currently, however, we know very little about how iconicity might impact the structure of the lexicon or whether iconic signs are processed differently in the brain. My colleagues and I have been exploring the nature of the distribution of iconic forms in the American Sign Language (ASL) lexicon, what drives the iconic depiction of semantic features, and whether iconic signs are perceived and processed differently than non-iconic signs. We have used Event-Related Potentials (ERPs) to examine whether iconic signs exhibit a distinct “neural signature” for deaf fluent signers or for hearing new learners and whether effects of iconicity are task-dependent. Thus far, this work indicates a) iconic signs have a unique lexical distribution that differs from that of iconic spoken words, b) salient/distinctive semantic features are more likely to be iconically depicted in signs, c) there appears to be no neural signature that tracks with the strength of iconicity during sign recognition for fluent signers, d) the effects of sign iconicity are task-dependent, facilitating picture-naming but not word-to-sign translation, and e) neural effects of iconicity diminish with learning. Overall, the results reveal linguistic consequences for grounding language in the body that shape the structure of the lexicon, but neural effects of iconicity may only occur under certain circumstances.