

The relationship between English words rated as 'iconic' and (iconic) gesture.

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Despite the long-held assumption that language is arbitrary, recent research has shown that iconicity, the resemblance between word forms and their meanings, is a core feature of both signed and spoken languages (Perniss, Thompson & Vigliocco, 2010; Dingemanse et al., 2015). Iconicity can often be found in ideophones, a class of words that use depiction to convey sensory meaning, which exist in many languages (Kita, 1997; Voeltz & Kilian-Hatz, 2001; Dingemanse, 2012). Research has established an association between ideophones and gesture in various languages (Diffloth, 1972; Kita, 1997; Dingemanse, 2013). Although it has been argued that English lacks a distinct lexical class of ideophones (Diffloth, 1972; Liberman, 1975; Nuckolls, 2004), iconicity rating studies have shown that it nonetheless contains a substantial number of words that native speakers rate as 'iconic', i.e. as "sounding like what it means" (Winter et al., 2022).

The current study is an expansion of a pilot study using approximately 1,370 video clips from the TV News Archive, a captioned video database of news broadcasts, where speakers used words rated highly in iconicity. The results of the pilot study suggested that such English iconic words are, like ideophones, associated with high gesture rates. The present study compares the gesture rate of verbs and adjectives rated as highly iconic (e.g. swoosh, puffy, crispy), and minimally iconic (e.g. ordain, rejoice, grateful) from Winter et al. (2022). Clips of these words from the TV News Archive are being coded for whether a gesture co-occurred with the word, and whether the gesture itself could be interpreted as iconic, using Kendon's (2004) categories of representational gestures: depiction, modelling, and enactment. For example, when using the iconic word squish, some speakers also produce an iconic gesture by enacting squishing something between two open hands by moving their palms towards each other. Coding of non-iconic words is ongoing, but the aim is to produce a final dataset of approximately 4,000 words.

Like the pilot study, the present results for iconic words show they have a high overall gesture rate at 71%, 30% of which are iconic. Preliminary results for non-iconic words suggest that they have a lower gesture rate, and that fewer of the gestures which co-occur with non-iconic words are iconic. Participant modality ratings from Lynott et al. (2020) allow for comparison across the senses, to determine whether some are more highly associated with gesture. For iconic words, touch attracts the most gesture (80% gesture rate, 51% of which are iconic), followed by sight (75% gesture rate, 23% of which are iconic), and sound (64% gesture rate, 40% of which are iconic). I will also consider what the results mean for the assertion that English does not have ideophones, particularly in reference to Dingemanse's (2019) typology of ideophones, arguing that these highly iconic English words have a similar association with gesture.

References

- Diffloth, Gerard. 1972. Notes on expressive meaning. In Paul M. Peranteau, Judith N. Levi & Gloria C. Phares (eds.), *Chicago Linguistic Society (CLS)* 8. 440–447.
- Dingemanse, Mark. 2012. Advances in the cross-linguistic study of ideophones. *Language and Linguistics Compass* 6(10). 654–672. <https://doi.org/10.1002/lnc3.361>.
- Dingemanse, Mark. 2013. Ideophones and gesture in everyday speech. *Gesture* 13(2). 143–165. <https://doi.org/10.1075/gest.13.2.02din>.
- Dingemanse, Mark. 2019. 'Ideophone' as a comparative concept. In Kimi Akita & Prashant Pardeshi (eds.), *Ideophones, mimetics and expressives* (Iconicity in Language and Literature 16), 13–33. Amsterdam: John Benjamins Publishing Company. <https://doi.org/10.1075/ill.16.02din>.
- Dingemanse, Mark, Damián E. Blasi, Gary Lupyan, Morten H. Christiansen & Padraic Monaghan. 2015. Arbitrariness, iconicity, and systematicity in language. *Trends in Cognitive Sciences* 19(10). 603–615. <https://doi.org/10.1016/j.tics.2015.07.013>.
- Kendon, Adam. 2004. *Gesture: Visible action as utterance*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511807572>.
- Kita, Sotaro. 1997. Two-dimensional semantic analysis of Japanese mimetics. *Linguistics* 35(2). 379–415. <https://doi.org/10.1515/ling.1997.35.2.379>.
- Liberman, Mark. 1975. *The intonational system of English*. Massachusetts: Massachusetts Institute of Technology.

- Lynott, Dermot, Louise Connell, Marc Brysbaert, James Brand & James Carney. 2020. The Lancaster sensorimotor norms: multidimensional measures of perceptual and action strength for 40,000 English words. *Behavior Research Methods* 52(3). 1271–1291. <https://doi.org/10.3758/s13428-019-01316-z>.
- Nuckolls, Janis B. 2004. To be or not to be ideophonically impoverished. In Wai Fong Chiang, Elaine Chun, Laura Mahalingappa & Siri Mehus (eds.), *Language and Society*, 131–142. Austin: University of Texas.
- Perniss, Pamela, Robin L. Thompson & Gabriella Vigliocco. 2010. Iconicity as a general property of language: Evidence from spoken and signed languages. *Frontiers in Psychology* 1. 227. <https://doi.org/10.3389/fpsyg.2010.00227>.
- Voeltz, Erhard Friedrich Karl & Christa Kilian-Hatz. 2001. *Ideophones*. Amsterdam: John Benjamins Publishing Company.
- Winter, Bodo, Marcus Perlman, Lynn K. Perry, Gary Lupyan & Mark Dingemans. 2022. Iconicity ratings for 14,000+ English words. (submitted). <https://osf.io/y3wtx>.