

Jumping between creativity and recurrence

A pilot study of depictions of motion events in LSFB
(French Belgian Sign Language)

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Research background

Depicting signs are iconic and some are strongly conventionalised (Johnston 2012, Wilcox & Xavier 2013). Yet, they exhibit a potential for depiction such that tokens of the same type may vary significantly in their form and meaning. This variability has been notably discussed in terms of 'delexicalisation' (Cormier et al. 2012).

Similarities between this behaviour and depictive foregrounding of spoken language ideophones have also been highlighted (Ferrara & Halvorsen 2017, Vandenitte, under review). Yet, there has been no attempt to systematically analyse which formal aspects of depicting signs can be modified and for what meaning purposes.

Data

51 tokens referring to jumping events produced in a hobby description task of the LSFB Corpus (Meurant 2015).

Annotation

Meaning: Shiny app for annotating categories from the motion semantic grid designed for ideophones (Ibarretxe-Antuñano 2019).

Form: Ad hoc categories for annotating handshape, location, movement and orientation as well as mouth actions, eyebrow movements, and eye aperture + counting the number of movement iterations in ELAN (Crasborn & Sloetjes 2008).



JUMP in LSFB

DomH_handshape [73]	2-spread
DomH_loc [56]	other hand
DomH_orient [96]	toward signer
DomH_move [56]	back-and-forth
NDomH_handshape [53]	5-spread
NDomH_loc [54]	neutral space
NDomH_orient [54]	palm oblique
NDomH_move [54]	back-and-forth
movement_iter [51]	3
eyebrows [55]	lowered
eye aperture [52]	neutral
mouth actions [73]	mouthings_onomatopoeia

Taxonomy

☒ Figure

☒ Quanta

☒ one

☐ two

☐ plural

☐ mass

☐ Animacy

☐ Physical characteristics

☐ Ground

☐ Path

☒ Motion

☒ movement

☒ stationary

☐ Manner

☐ Cause

☐ Event extension

Recurrence

	DomH	NDomH
handshape	2-spread	5-spread
location	other hand	neutral space
movement	back-and-forth	stationary
orientation	towards signer	palm-up

* Nonmanuals were "neutral" in the generated typical form



Figure > Quanta > one; Animacy > human

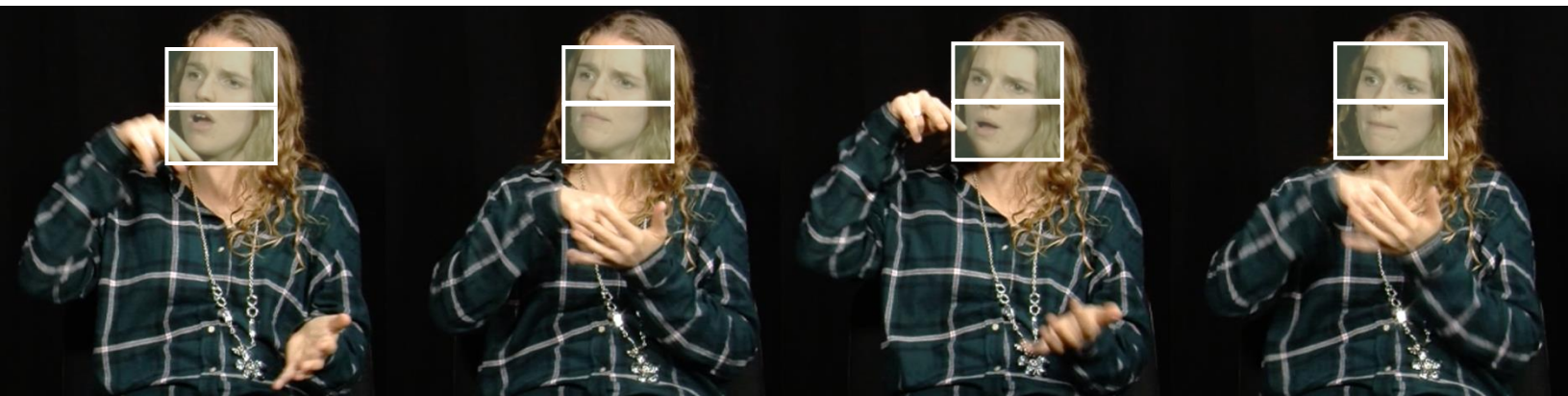
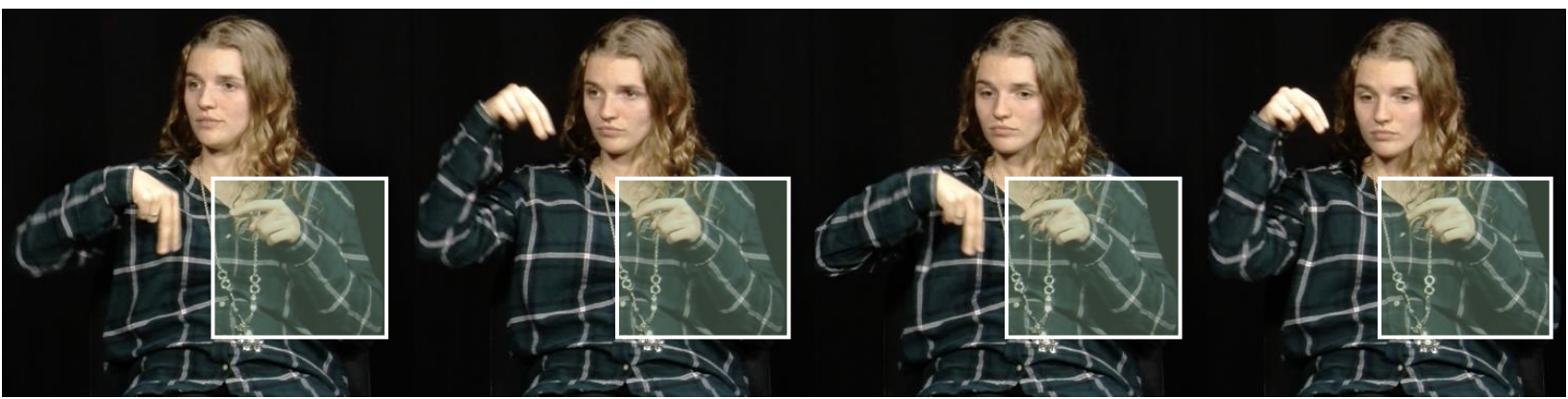
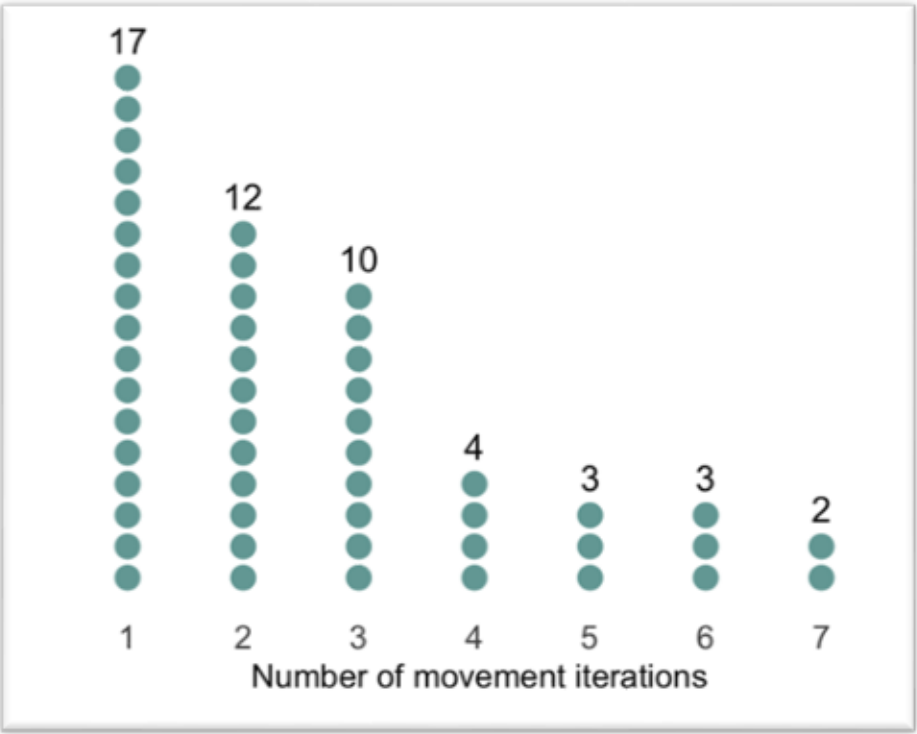
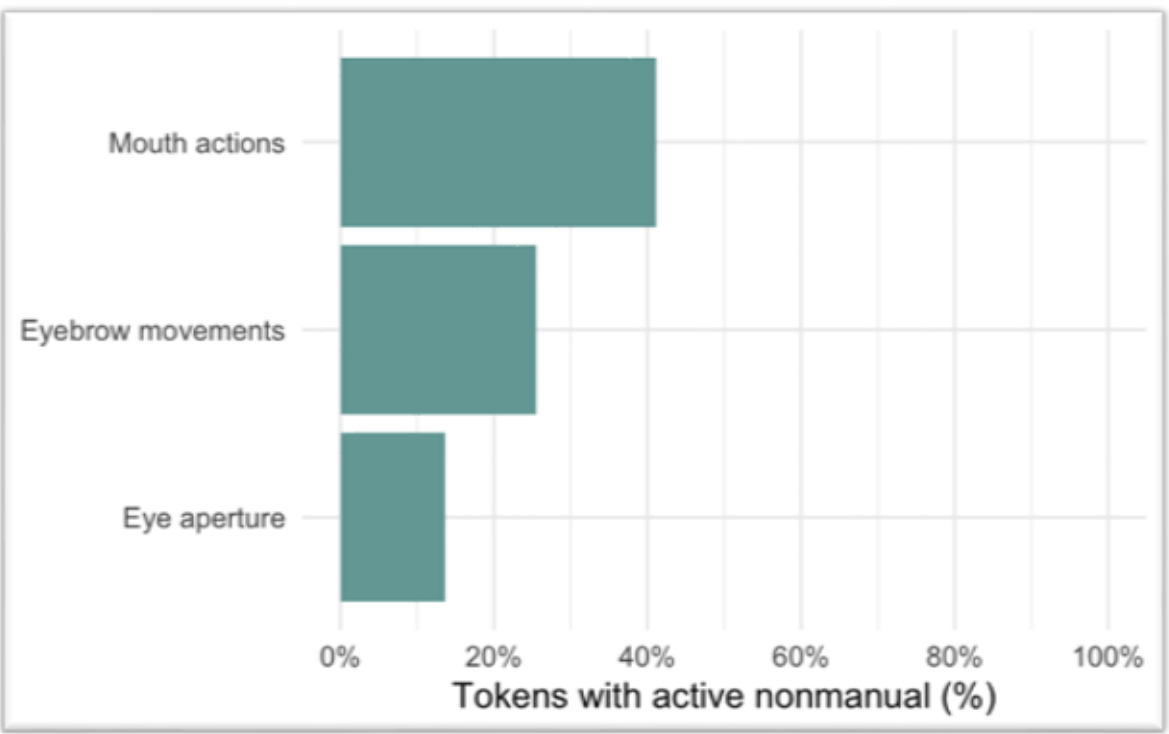
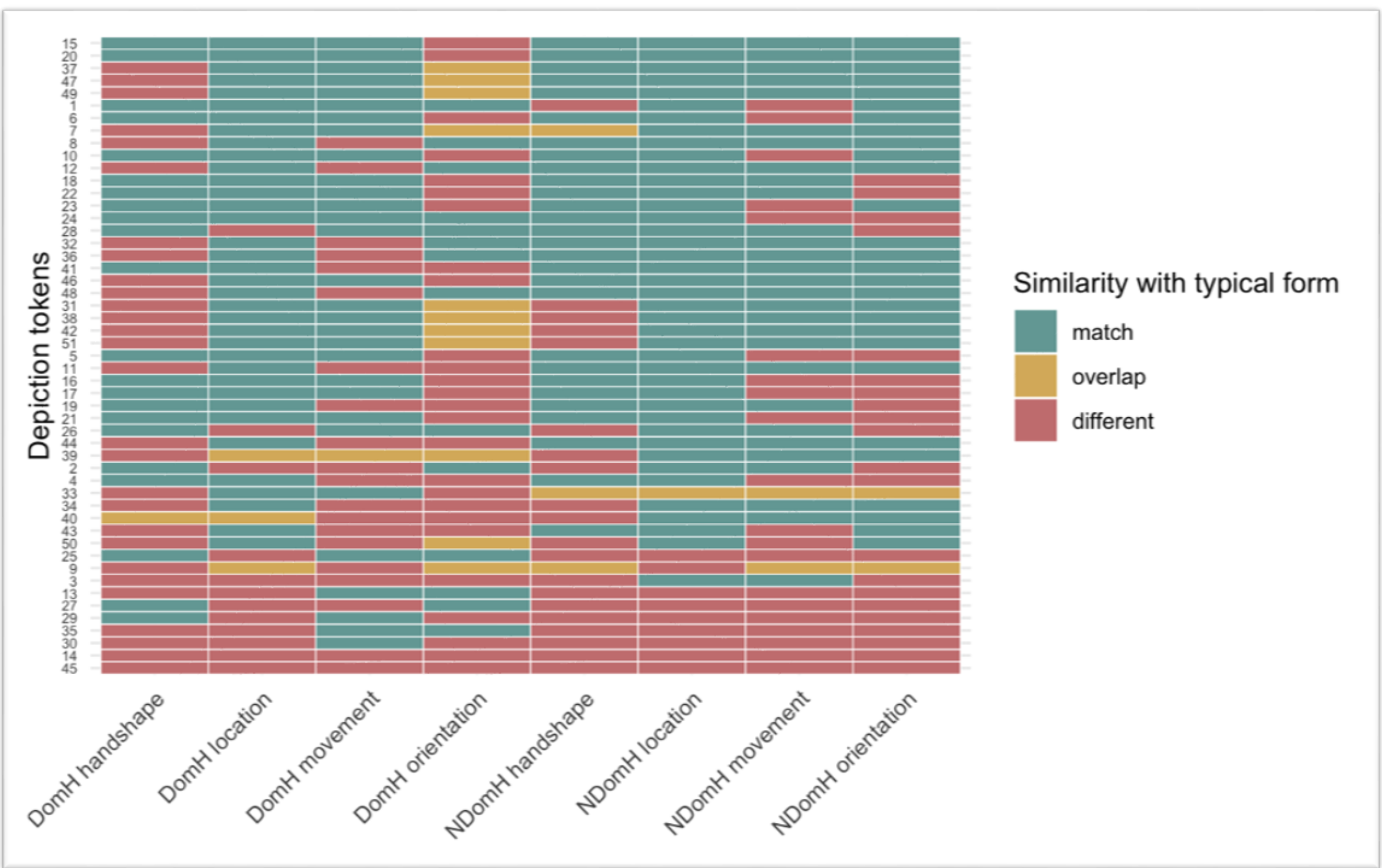
Manner > Motor pattern > jump

Motion > Movement

Path > Contour > straight; Direction > up, down

= one human moves by jumping up and down along a straight path

Creativity



Future perspectives

- Refining and testing annotation categories with more signs, together with a co-annotator
- Refining distance measurement: weight distribution (handedness, handshape, within-token variability etc.), distance computation
- Using complementary methods, e.g., pose estimation and dynamic time warping (Akamine et al. 2026)
- Tackle analysis of systematic form-meaning associations

Akamine, S., Dingemanse, M., & Özyürek, A. (2026). Validating dynamic time warping as a measure of gesture form similarity. *Behavior Research Methods*, 58(4), 110. <https://doi.org/10.3758/s13428-026-02975-5> • Cormier, K., Quinto-Pozos, D., Sevcikova, Z., & Schembri, A. (2012). Lexicalisation and de-lexicalisation processes in sign languages: Comparing depicting constructions and viewpoint gestures. *Language & Communication*, 32(4), 329-348. <https://doi.org/10.1016/j.langcom.2012.09.004> • Crasborn, O., & Sloetjes, H. (2008). Enhanced ELAN functionality for sign language corpora. In O. Crasborn, T. Hanke, E. Efthimiou, I. Zwitserlood, & E. Thoutenhooft (Eds.), *Proceedings of 3rd Workshop on the Representation and Processing of Sign Languages*. European Language Resources Association (ELRA). • Ferrara, L. & R.P. Halvorsen. (2017). Depicting and describing meanings with iconic signs in Norwegian Sign Language. *Gesture*, 16(3), 371-395. <https://doi.org/10.1075/gest.00001.fer> • Ibarretxe-Antuñano, I. (2019). Towards a semantic typological classification of motion ideophones: The motion semantic grid. In K. Akita & P. Pardeshi (Eds.), *Iconicity in Language and Literature* (Vol. 16, pp. 137-166). John Benjamins Publishing Company. <https://doi.org/10.1075/ill.16.07iba> • Johnston, T. (2012). Lexical Frequency in Sign Languages. *Journal of Deaf Studies and Deaf Education*, 17(2), 163-193. <https://doi.org/10.1093/deafed/enr036> • Meurant, L. (2015). Corpus LSFB. First digital open access corpus of movies and annotations of French Belgian Sign Language (LSFB). LSFB-Lab, University of Namur. Corpus LSFB. <http://www.corpus-lsfb.be> • Vandenitte, S. (under review). Ideophony in signed languages? Mapping entity-depicting signs onto the comparative concept of ideophone. • Wilcox, S., & Xavier, A. N. (2013). A framework for unifying spoken language, signed language, and gesture. *Revista Todas as Letras*, 15(1), 88-110.