

# Analyzing the sublexical structure of LSQ neologisms

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As languages evolve, linguistic changes such as lexicalization and grammaticalization can occur to build their lexicon and grammar (Janzen 2012). To be lexicalized, a new lexical item – or construction – goes through the process of entrenchment and conventionalization. The construction can thus acquire the role of a unit, a regular form strongly associated with meaning, by the automation of cognitive routines and then be disseminated and used in a linguistic community (e.g. Langacker 2005; Schmid 2015). Some linguistic contexts enable us to study the life of new lexical items and their survival chance. This is the case, for instance, for the lexicon of emerging languages (Coppola 2020; Horton 2020) and for neologisms where the form of signs can be considered still unfixed or evolving, in the process of entrenchment, conventionalization, and acceptance (e.g. Langacker 2005; Schmid 2015).

Our study focusses on a corpus of neologisms in an established sign language, LSQ (Quebec Sign Language), and more specifically on the link between phonology and semantics in their sublexical structure. As the visuospatial modality offers a stronger iconic potential than audiovocal modality (e.g. Taub 2012), we posit that the semantic domain for which they were created, in this case astronomy, influenced the formation of the three major structural components of signs (place of articulation (POA), movement and handshape). For 49 astronomical concepts from the International Astronomical Union list, 99 neologisms were created by a team of LSQ signers.

The shape features of the neologisms' components were described and, like Pietrandrea (2002), we indicated whether each feature is non-meaningful (phonological) or semantically motivated. Within a corpus driven approach, we used an exploratory statistical method of factor analysis, the multiple correspondence analysis (MCA) (Sourial et al. 2010), and a chi-square analysis in order to verify if the difference between the counts of different variables is significant or not.

Results show that although all signs are semantically motivated, iconicity is not evenly distributed across phonological components and features. In this corpus, the semantic domain influenced the shape features of handshapes, this component thus acts as an iconic structural component, mainly by the [curved] feature of the selected fingers position. As for movement and place of articulation, their use in the creation of these neologisms is less prominent. The movement allows, in half of the cases, to iconically represent the shape of the referent or its spatial motion, whereas POA is mainly realized in the neutral space and does not participate in the representation of the referent. This suggests that sublexical components cannot per se be interpreted as bearing (or as being exempt of) iconicity. Findings from our analysis echo what has been proposed by van der Hulst & van der Kooij (2021), namely that a feature can be semantically motivated and that “semantic/iconic factors play an overriding role in the emergence of the phonological form of signs” (p. 22). To have a full picture of the potential entrenchment and conventionalization of these neologisms, future work will be conducted to survey LSQ signers about the neologisms' acceptability.

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