

## **The organisation, grammaticalization, and modulation of entity classifiers**

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Almost all sign languages studied to date make use of classifier constructions to encode spatial information for motion event descriptions (Zwitserslood, 2012). For entity classifier constructions, signers' hand is used to represent a whole entity by capturing some visual characteristics of the referent. This structure is highly productive and morphologically complexed, with a general consensus that handshapes for basic entity representations (i.e., classifiers) are categorical and language-specific, while hand locations and movements are more gesturally motivated (Emmorey & Herzig, 2003; Goldin-Meadow & Brentari, 2017; Schembri et al., 2005). However, less is known about the existence of classifiers that potentially represent a wider range of entities from various semantic classes (e.g., land animal vs. marine life vs. insect) and their representations of manners of location (e.g., an animal in sitting, standing, and stretching posture). Further, the grammaticalization pathway(s) of entity classifiers has rarely been discussed in literature, with limited empirical evidence available (see Pfau & Steinbach, 2006, 2011). This study aims to address these gaps by investigating classifier predicates denoting static entities with altered manners of location in Hong Kong Sign Language (HKSL). The guiding research questions are the following: (1) How are entity classifiers organised? (2) What are the sources of these handshapes and how are they grammaticalized into the language system? (3) To what extent do signers exploit the iconic potential and modify classifiers to encode meaning?

The data was collected through a controlled picture elicitation task with eight Deaf HKSL signers (4 females, mean age = 38.4, SD = 7.0). The stimuli consisted of realistic pictures of 56 entities belonging to five semantic classes in various manners of location. Signers were asked to use their hand(s) to represent how they were presented in the picture. The analysis is based on a total of 1370 tokens of entity classifiers produced by all participants. Findings reveal an emerging distinction between ‘basic’ and ‘subcategory’ of one-handed entity classifiers in HKSL, even for entities belonging to the same semantic class (Fig. 1). For example, the flat-B hand (🖐️) seems to be an underspecified, basic handshape for land vehicles, but the more iconic and phonologically marked k-hand (👉) can be used to specify the type of two-wheeled vehicles. In addition, we observed multiple instances in which some classifiers handshapes are grammaticalized from the frozen, lexicalised form, especially when it takes a hand-as-entity iconic strategy (e.g., ROCKET, FROG, SUBMARINE). Finally, although to a varying degree of frequency, all signers in the study manipulated hand features such as finger configurations to iconically depict a given scenario (about 9.6% of all classifier handshapes, Fig. 2 as an example). The study provides clear empirical support for the theoretical accounts of classifier being grammaticalized. Crucially, the iconic flexibility of classifiers highlights the modality-specific interplay between linguistic and gestural units within the same construction to convey and enrich meaning.

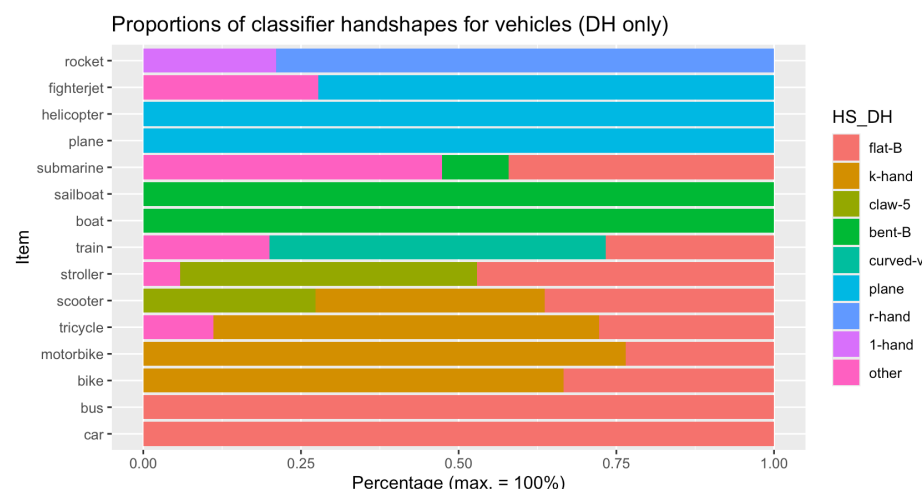
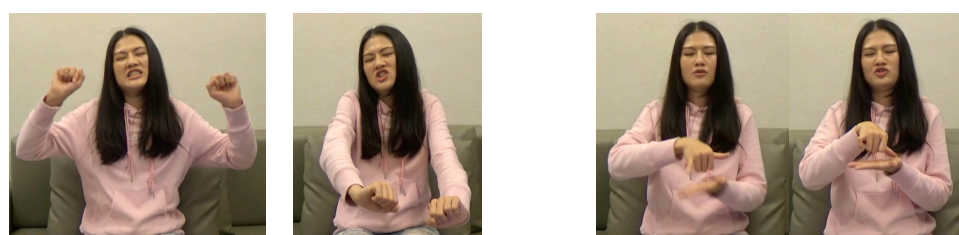


Fig.1 Proportion of one-handed entity classifier for vehicles used by HKSL signers.



[FOX] STRETCH RS:stretch\_forearms CL(mod.y-hand):fox\_stretch

Fig.2 A signed description of ‘A fox is stretching with its forearms extended.’ by one signer, in which her dominant hand representing the fox is iconically modulated in the last scene. The curved pinky depicts the stretching posture of the fox.

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