

# Signs and symptoms: exploring the lexicalisation of health vocabulary in Australian Sign Language (Auslan)

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## Abstract

This study examines the signs and strategies used to express health-related concepts in Auslan. Data comes from two filmed elicitations: first, two groups of five native Auslan users converse informally about health-related topics; secondly, five focus groups of four to six native and non-native Auslan users talk about the signs they use for twenty common medical concepts. The data was annotated in ELAN and all health-related signs were identified and tagged according to sign types of varying degrees of lexicalisation (cf. Johnston & Schembri, 2010). Sign types range from English borrowings (e.g. fingerspelling and loan translations), fully-lexicalised signs (conventionalised signs), partly-lexical signs (e.g. depicting signs and indicating verbs) and purely non-lexicalised signs (such as pointing and gesturing). Preliminary findings show that deaf Australians construct health-related discourse using signs from all along the lexicalisation spectrum. Of particular interest is the frequent use of partly and non-lexicalised signs by the participants; coupled with issues relating to health literacy in the community, this explains the large degree of sign variation present in this domain.



## Methodology

- 24 native and non-native deaf Australians living in Brisbane, Melbourne, and Sydney participated.
- Data consists of naturalistic, semi-structured discussions and focus groups which elicited signs for common medical concepts.
- 2.25 hours of video-recordings were annotated for:
  - Id-glosses (following the guidelines for the Auslan Corpus, cf. Johnston, 2010).
  - "Health-related signs," broadly defined as containing a core semantic structure related to physical or mental health.
  - This set was further tagged according to the following sign types:

*lexical sign, depicting sign, indicating sign, gesture, pointing, fingerspelling, or loan translation.*

- As Auslan has virtually no fully-lexicalised technical health vocabulary (Johnston & Napier, 2010), many of the signs tagged as health-related can only be described as 'lay terms'. Many signs simply designate physical and mental processes, e.g. *grief* and *see*. Identifying and tagging signs according to such broad criteria allows a more inclusive examination of how health-related meaning is constructed across Auslan discourse.
- Of the 7,367 annotations of ID-glosses in the discussion group data, 1,276 were tagged as health-related. The quantitative percentage distribution of these health-related signs is represented in the chart to your right, along with their corresponding qualitative degree of lexicalisation.
- 35 different signs were elicited from the focus group discussions about twenty common health concepts; the degree of lexicalisation and sign type of each was investigated



## Findings

### Conversation data

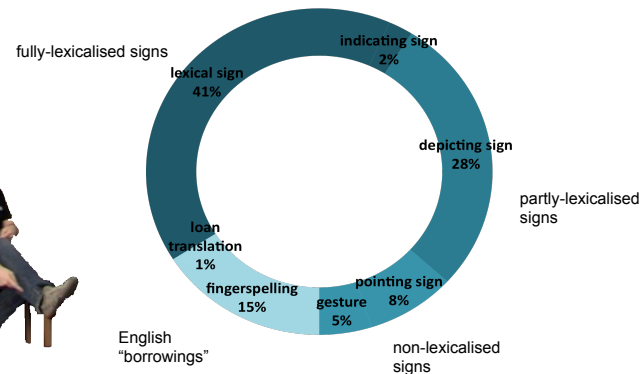
- Fully-lexicalised signs account for 43% of the data; most of these have origins as fingerspellings or depicting signs. Frequent fully-lexical signs include DOCTOR2\* (a *doctor*), FS:C-C and FS:CANCER (*cancer*), BORN2 (to *be born/birth*), LOOK (to *see*), PILL (medication), and ULTRASOUND-SCAN (an *ultrasound/to do an ultrasound*).
- However, 57% of all health-related signs in this data set are partly- or non-lexicalised. Depicting signs (28%) and fingerspelling (15%) account for the most frequent types (see chart below). Pointing and gesture are less frequent (13%); loan translations are rare (1%).
- There are strong patterns in the use of partly and non-lexicalised sign types; they are not randomly distributed. Almost all pointing signs designate body parts (e.g., *back of neck, sinuses, femur*); many of the depicting signs designate medical procedures or conditions (e.g., *laser eye surgery, CT scan, an eye drooping*); fingerspellings are commonly used to borrow the names of illnesses and technical medical terms from English (e.g., *Hirschsprung's disease, Bell's palsy, laparoscopy, biops*).

### Focus group data

- Of the 35 signs for twenty common health concepts elicited from the focus groups, 17 had depicting origins (48%), 10 were fingerspellings (29%), and 8 were others such as loan translations, non-depicting signs, phrases (23%).

\* Glosses for Auslan signs are those assigned by the ID-glossing system used for the Auslan Corpus.

### Distribution and Lexicalisation of Health-Related Sign Types



## Discussion

The distribution of fully-lexicalised, partly-lexicalised, and non-lexicalised signs suggests the way people talk about health in Auslan is not as conventionalised as other domains. In this particular data set, variation of health-related signs is due to context and familiarity. It appears signers use different signs of varying degrees of lexicalisation to talk about health; fully-lexical and non fully-lexical strategies are used fairly equally. The numerous sign types occur in different instances and contexts, for example, 'ovary' may be referenced by fingerspelling or by pointing towards the abdomen. The chosen method depends, to some extent, on the level of health literacy and exposure of each individual, and their community. As one participant said, "Really, we don't especially talk about health much. We rarely talk about it." A signer's degree of familiarity with a medical concept undoubtedly influences how s/he chooses to sign it, and also how it is understood by their interactants. Deaf Australians have only recently started using Auslan in health settings; it is unsurprising there is frequent use of non-lexical strategies, or that sign types differ greatly from context to context and from individual to individual.

It is also clear that signers use certain sign types to express certain types of health-related concepts. Form is related to function; signers exploit partly- and non-lexical strategies to reference specific health-related concepts. For example, a signer's ability to point towards elements (like one's own body) in the signing space makes it an efficient strategy for expressing body parts. Similarly, signers can easily depict medical procedures or physical conditions by using their body and the space around them in real-space blends (Liddell 1995, 2003). Signers also use fingerspelling to express the English names of illnesses and other technical medical terms. This correlates with the general use and function of fingerspelling to express English nouns or words that have no direct translation equivalent (Johnston & Schembri, 2007).

The next stage of this research will be to investigate the exact function of each sign type as it appears in context, starting with depicting signs. For example, what is the roles of depicting signs within a clause, i.e. are they used as core predicates or do they perform a more descriptive function? What are the relationships between depicting signs and other sign types, like fingerspelling?



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