The eye/ear of the needle – Cross-linguistic differences in body part extensions

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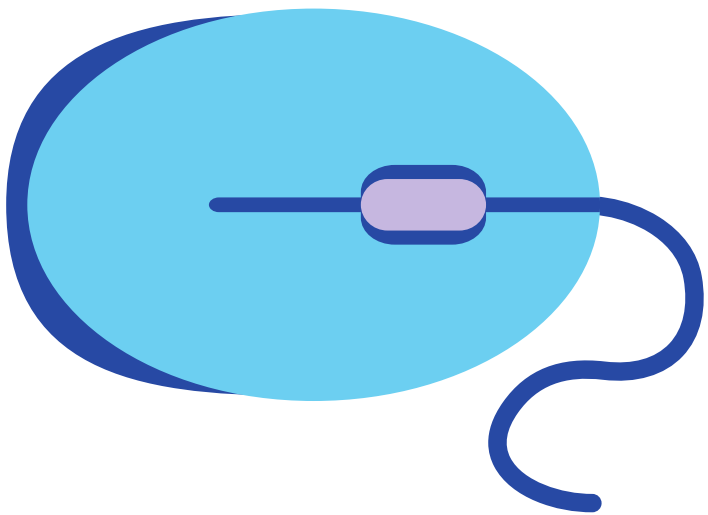
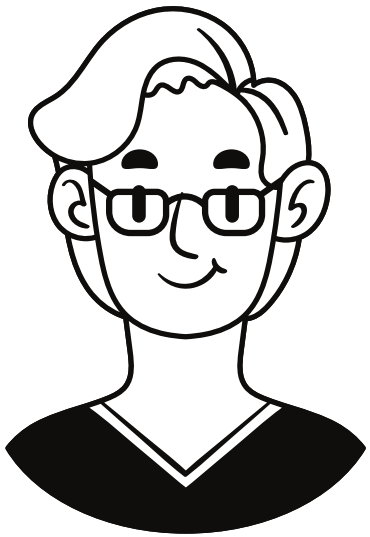
Polysemy

A polysemous word has multiple meanings:

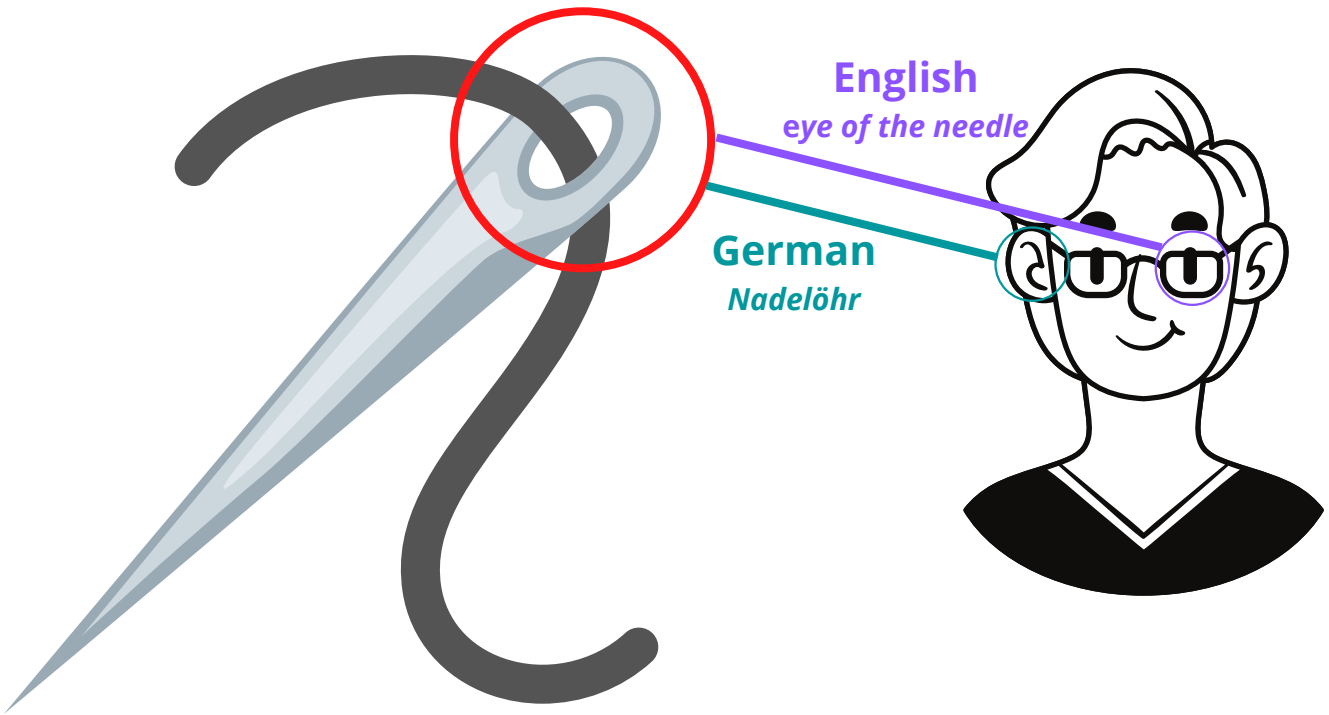
mouse



Polysemy across languages



Polysemy across languages



An English-centric perspective

- "idiosyncratic metaphorical expressions such as *leg of the table* and *foot of the mountain* are not used systematically in our language or thought" (Lakoff and Johnson, 1980, 54)
- "Since metaphor is based on the perception of similarities, [...] when an analogy is obvious, it should give rise to the same metaphor in various languages; hence the wide currency of expressions like the 'foot of a hill' or the 'leg of a table."'

  (Ullmann 1963)

Hypothesis

Polysemy is based on a perceived similarity between concepts. Languages can choose to highlight different dimensions of similarity.

A cross-linguistic study of object and landscape terms

Aim and scope (Tjuka 2019):

- systematic typological study to investigate body part extensions
- elicitation with pictures for 92 body part extensions
- 13 speakers of different languages: Czech, Marathi, Persian, Greek, Vietnamese, Wolof, Mandarin Chinese, Khoekhoe, Hungarian, Japanese, Hebrew, Turkish, and Indonesian

A cross-linguistic study of object and landscape terms

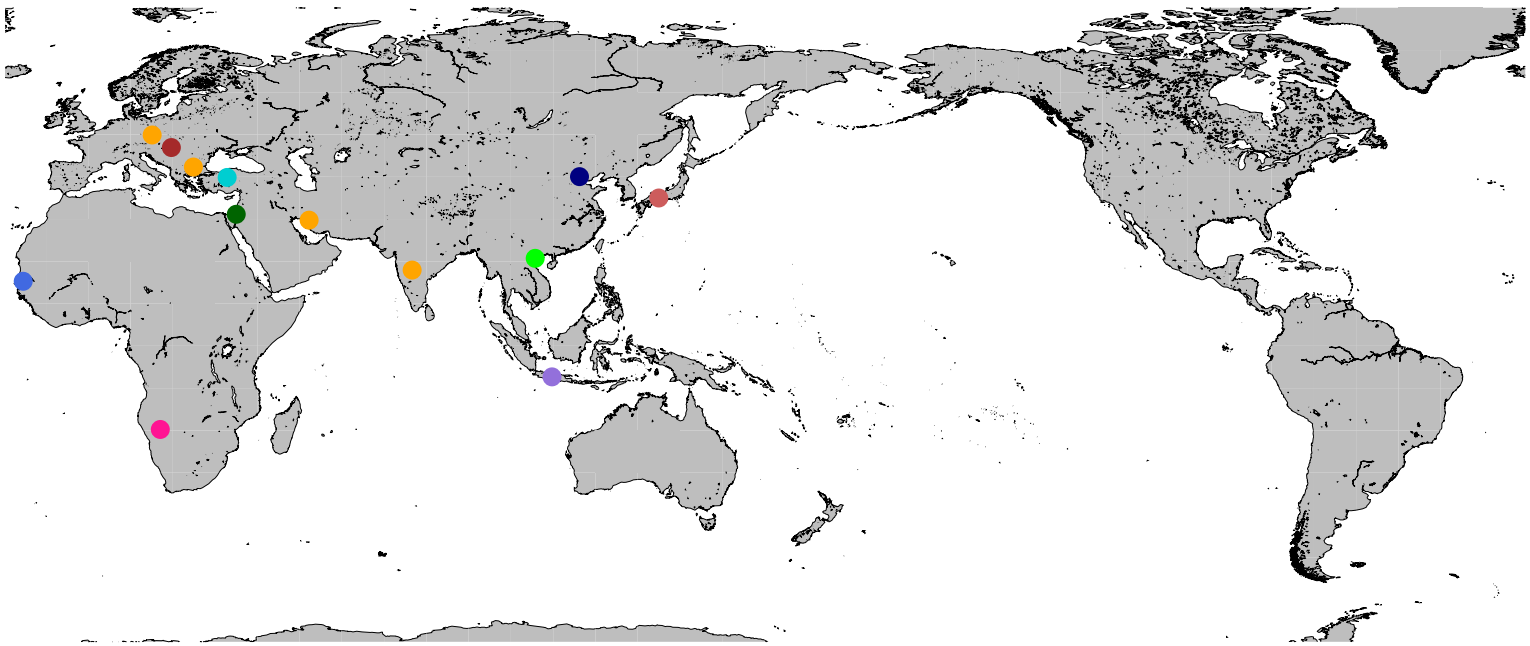


Figure 1: Overview of language families included in Tjuka (2019).

A cross-linguistic study of object and landscape terms

Result:

- the expressions *leg of the chair/table/bed* occur in the entire language sample
- body part extensions are based on perceptual similarities (shape, spatial alignment, function)
- languages can differ in terms of which body part the choose for a certain object feature (e.g., *head*, *nose*, and *mouth* were used for *tip of an arrow*)

Language variation in body part extensions

- more data is needed to find patterns of language variation
- the CLICS database offers colexifications of 2,906 concepts across 2,940 languages
- colexification refers to the same lexeme having different meanings (polysemy and homonymy) (François 2008)

Language variation in body part extensions

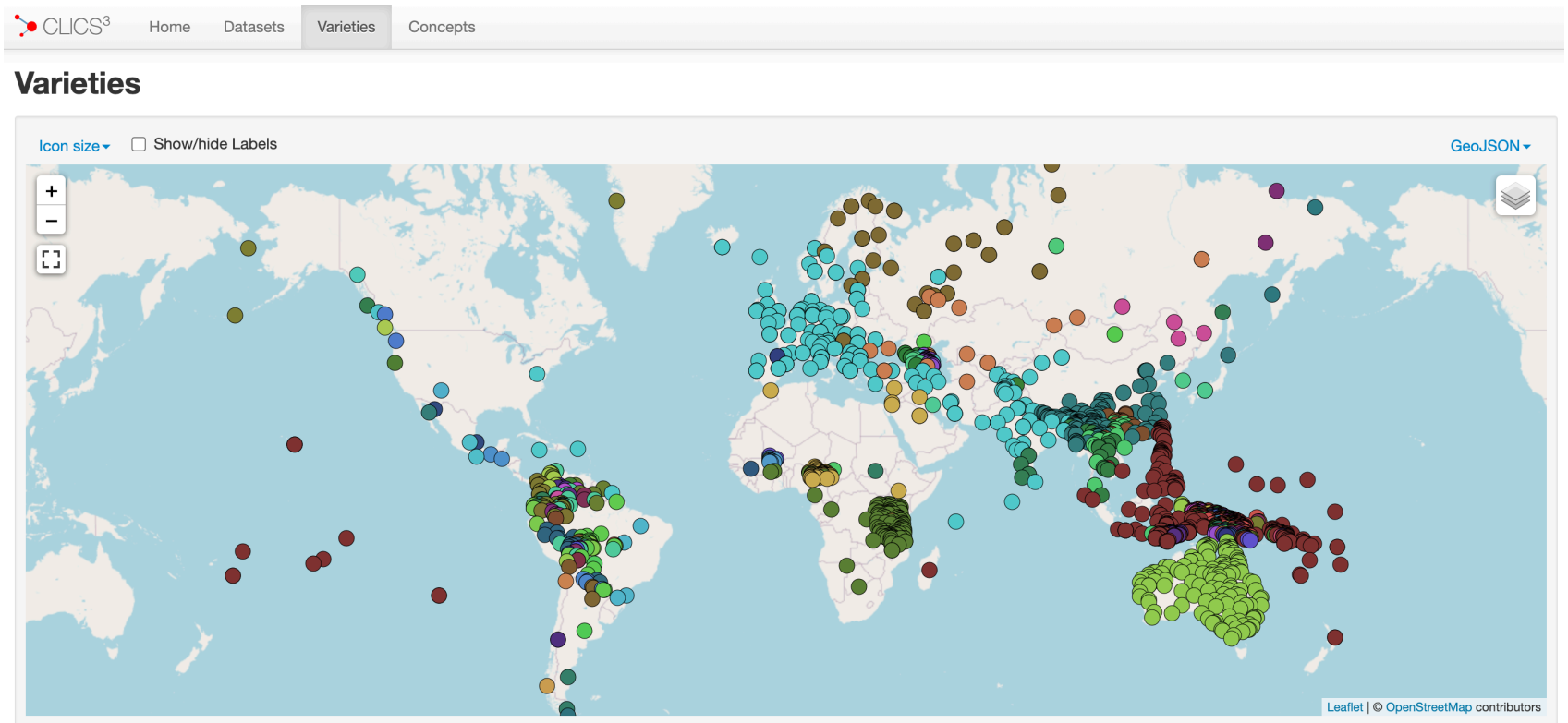


Figure 2: Language varieties in the CLICS database (Rzymski et al. 2020).

Language variation in body part extensions

Research questions:

1. How many colexifications of body parts and objects are listed in CLICS?
2. What variation can be found in different languages concerning which body part is chosen for the same object?

Language variation in body part extensions

Data:

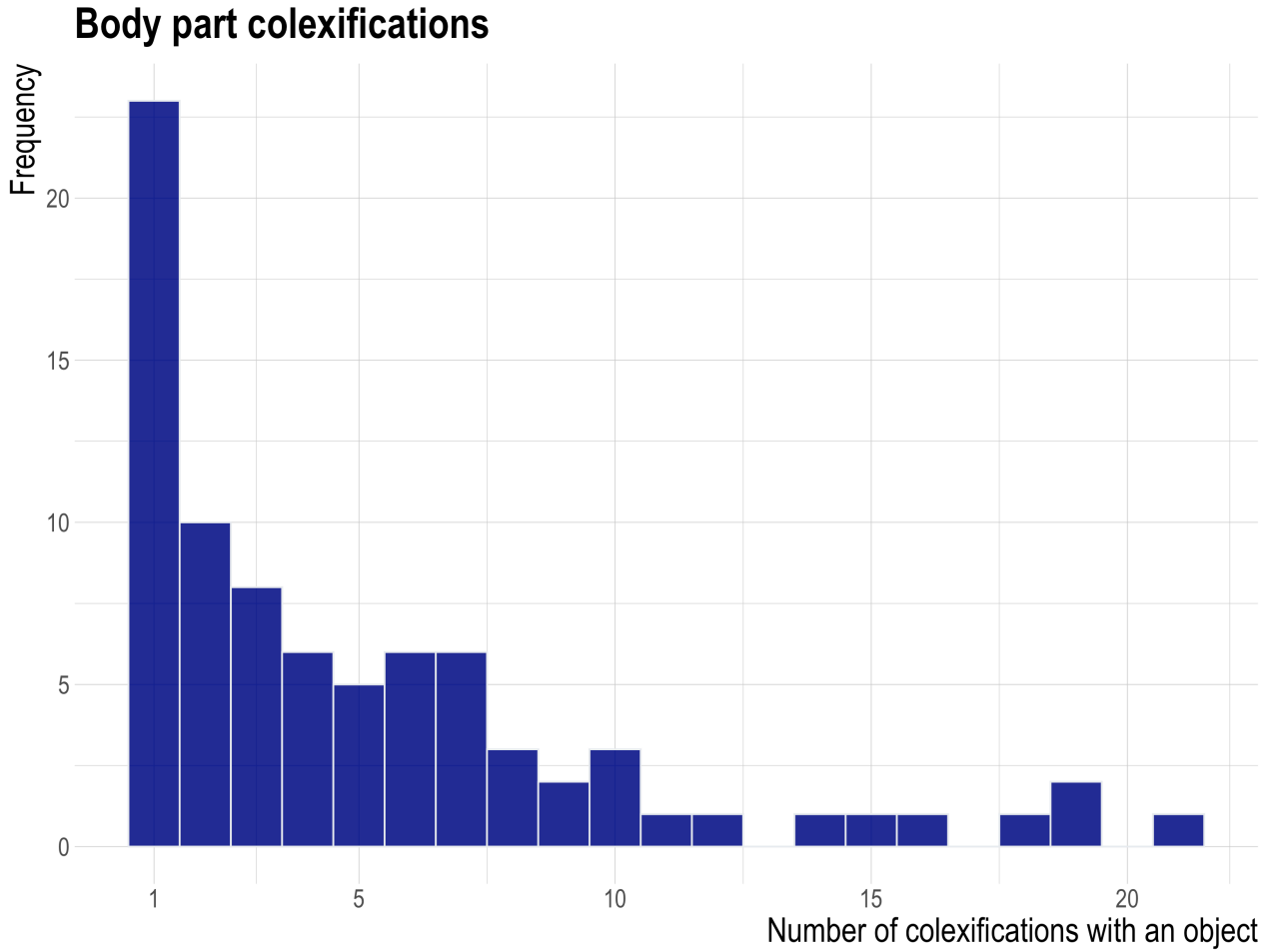
- 81 body part concepts and 163 object concepts
- the object concepts are comprised of items from different categories, i.e., tool, food, landscape, plants, and furniture.

Language variation in body part extensions

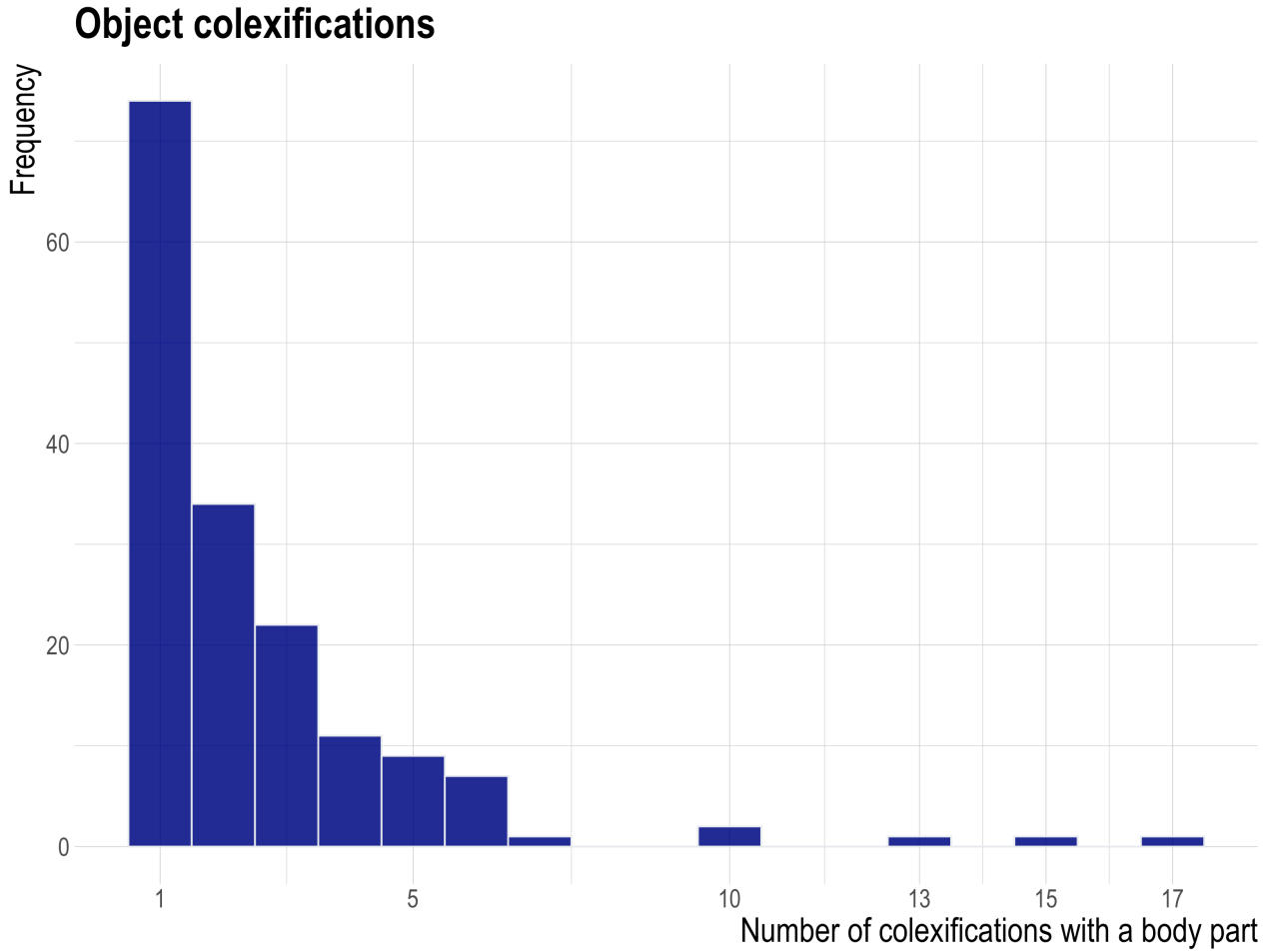
Results:

- 411 colexifications between human body part concepts and objects in CLICS

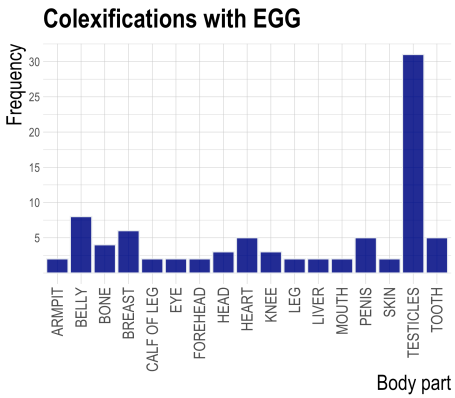
Language variation in body part extensions

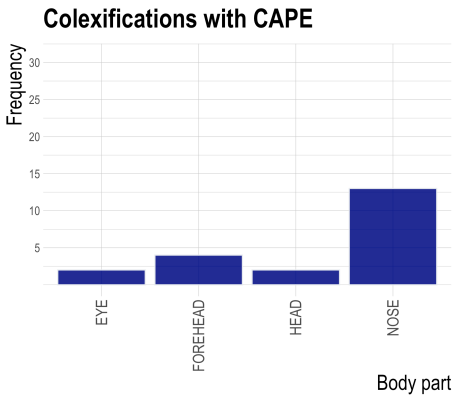


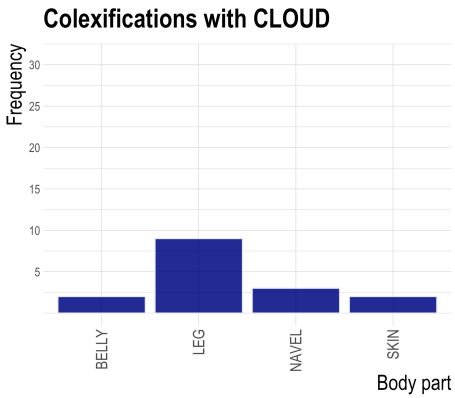
Language variation in body part extensions

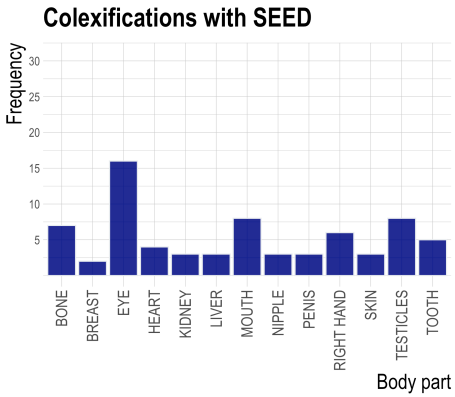


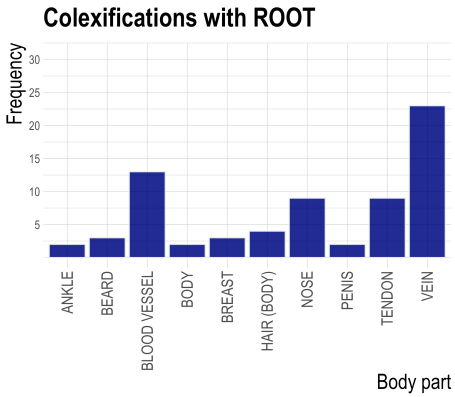
Language variation in body part extensions

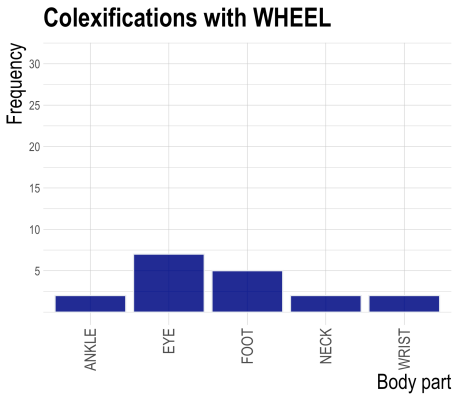












Colexification networks

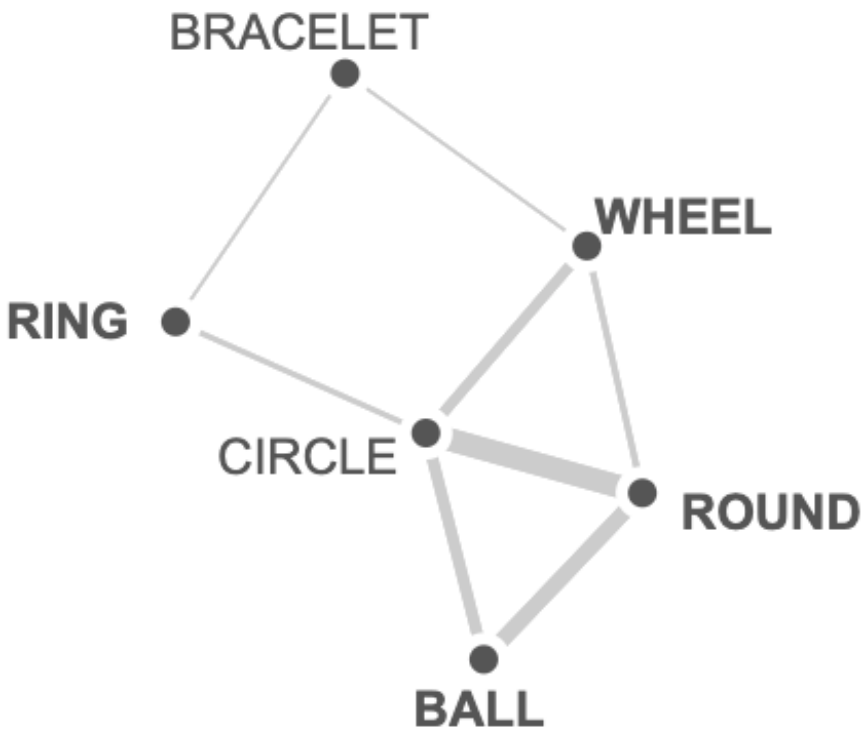


Figure 3: Infomap of the colexification network of the concept CIRCLE.

Implications

- diverse languages seem to have different colexifications networks (e.g., for emotion concepts see Jackson et al. 2019)
- languages might have preferences to highlight a certain dimension of perceptual similarity in body part extensions

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