

Body part vocabularies across languages

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Agenda

- I Introduction
- II Aim
- III Materials & Methods
- IV Results
- V Conclusions
- VI Your Questions



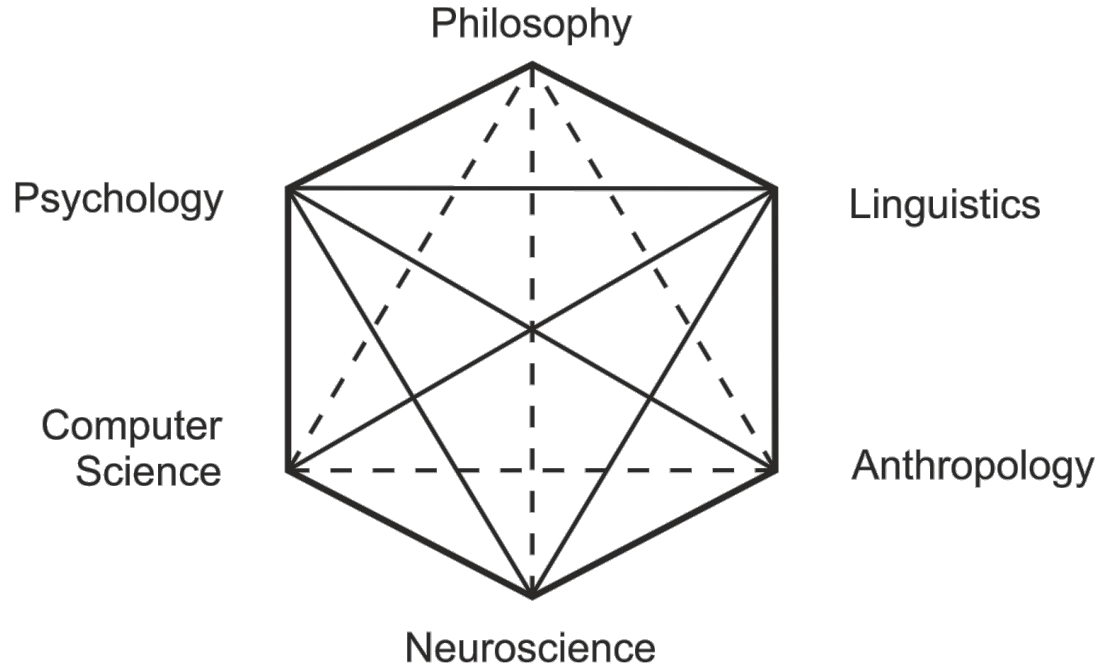
BA and MA in linguistics from
Humboldt-Universität zu Berlin

PhD in linguistics from
Friedrich-Schiller-Universität Jena

My main goal is to answer questions about
linguistic diversity with a focus on language
variation in word meanings.

Fun fact: I worked in advertising before
starting my academic career.

Cognitive Science



Background

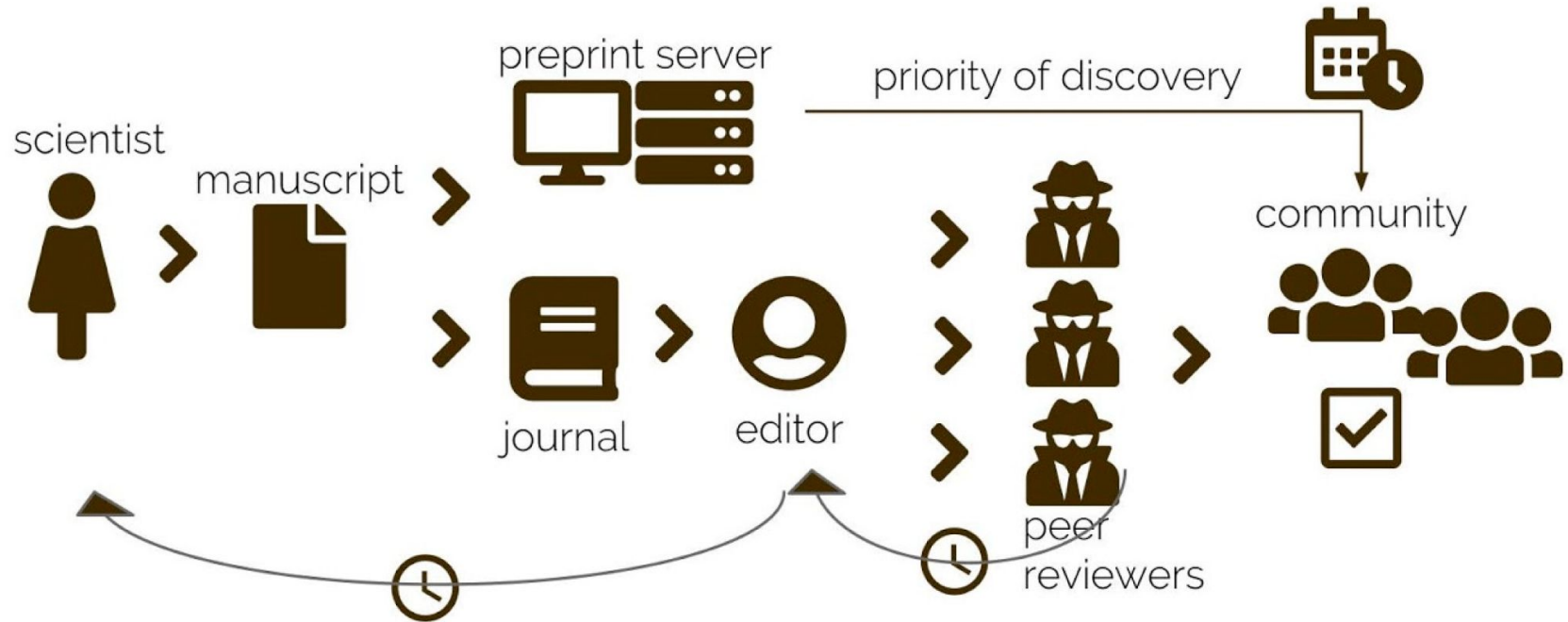
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The article is part of my PhD thesis.

It took about 2.5 years before the study was ready to be submitted to a journal.

The article received positive feedback in the first round of reviews from Scientific Reports.

Background



Question

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How many languages are spoken across the world?

Introduction

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About 6,500 languages are spoken worldwide.

Languages vary in how they divide the world into words.

Comparing vocabularies across languages reveals insights into human cognition and cultural variation.

Aim

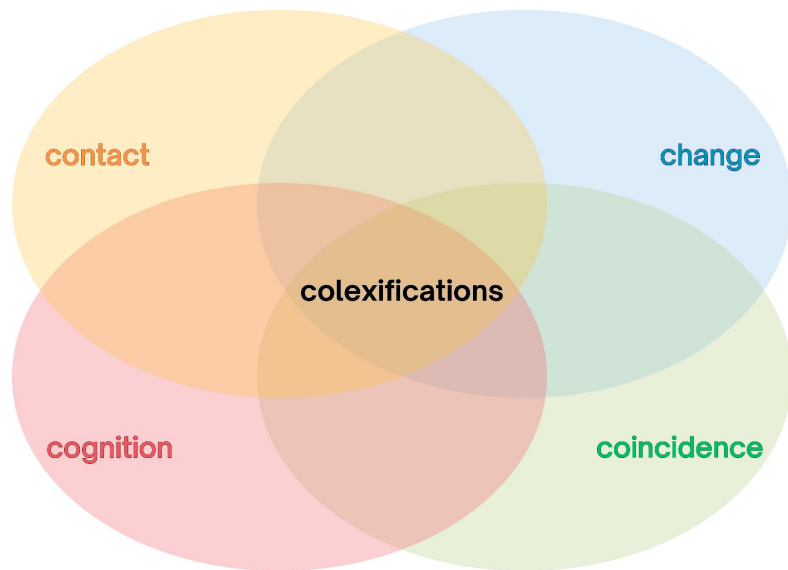


Finding regularities in word meanings
and causes for language variation.

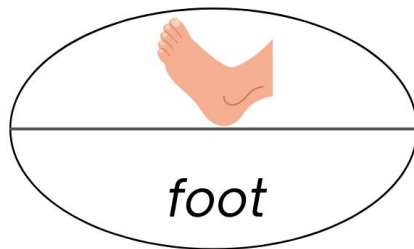
Colexifications

The same lexical form is used for two different concepts in at least two genealogically unrelated languages (François 2008).

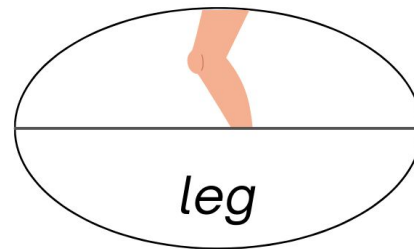
The analysis is based on cross-linguistic data.



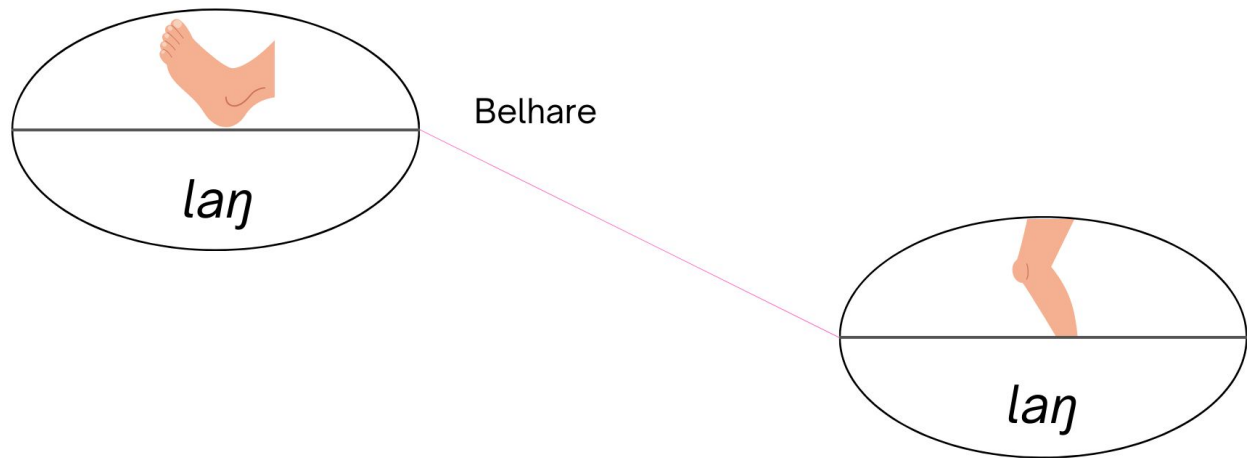
Colexifications



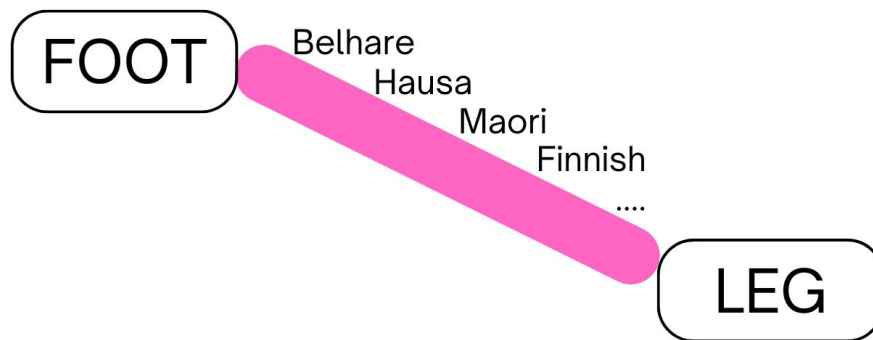
English



Colexifications



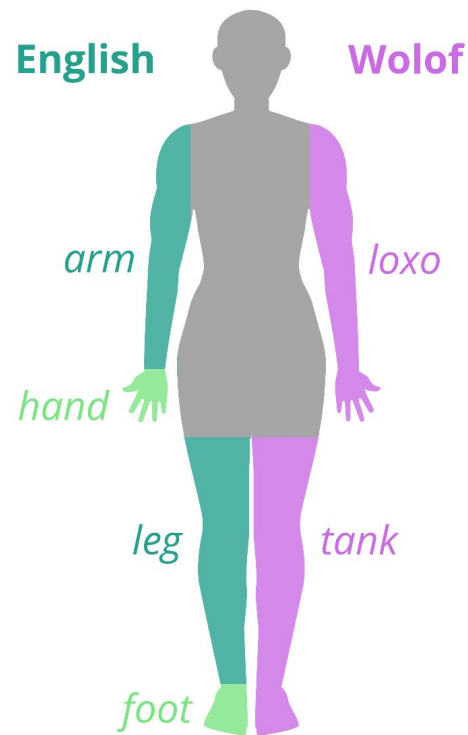
Colexifications



Body part vocabularies

**Analysis of perceptual features:
contiguity, function, shape**

Comparison of semantic domains:
colour, emotion

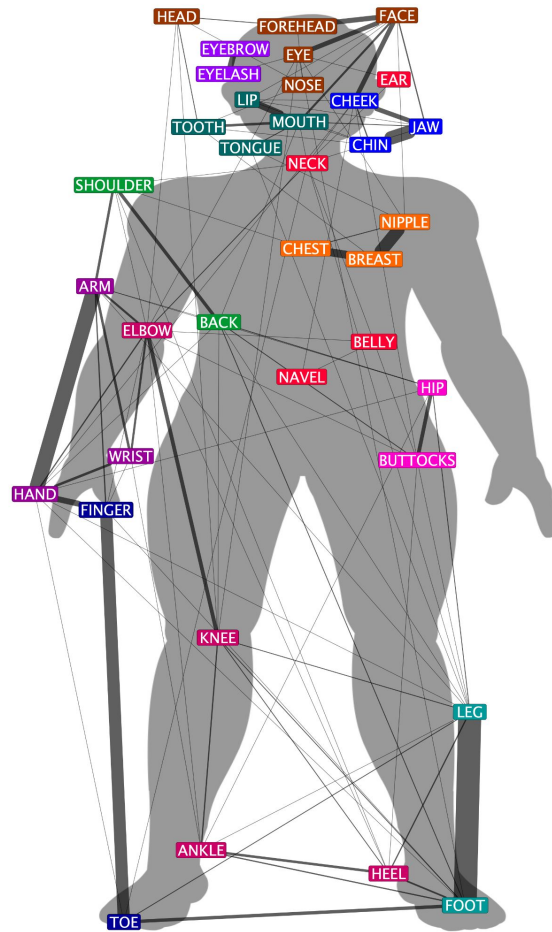


Tjuka et al. (in revision): *Scientific Reports*

Materials & Methods

- 51 data sets from Lexibank (List et al. 2022) including phonetic transcriptions
- 36 human body part concepts from Concepticon v2.5
- Automated identification of full colexifications
- New, transparent workflow including cognate detection
- 110 body part colexifications across 1,028 **language varieties**

Tjuka (2021b; 2022b): Concept list description in
Computer-Assisted Language Comparison in Practice



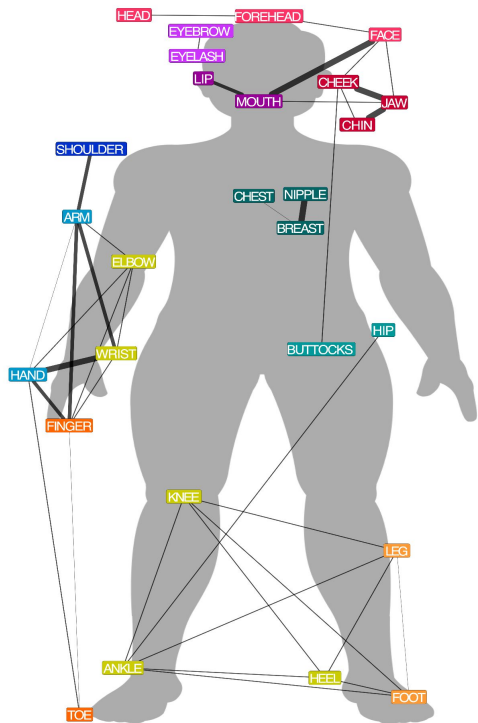
Body Part Network

Few widespread,
many language-specific colexifications.

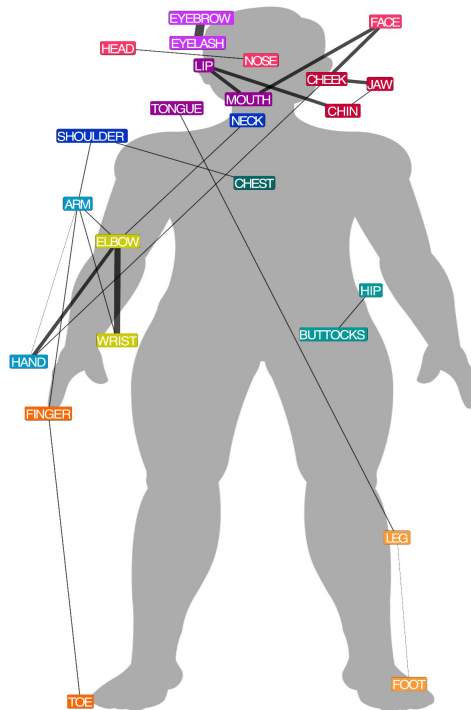
Tjuka et al. (in revision): *Scientific Reports*

Family Networks

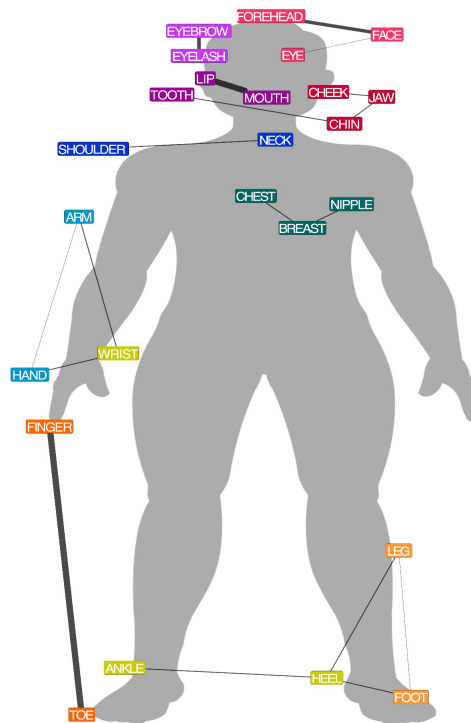
Indo-European



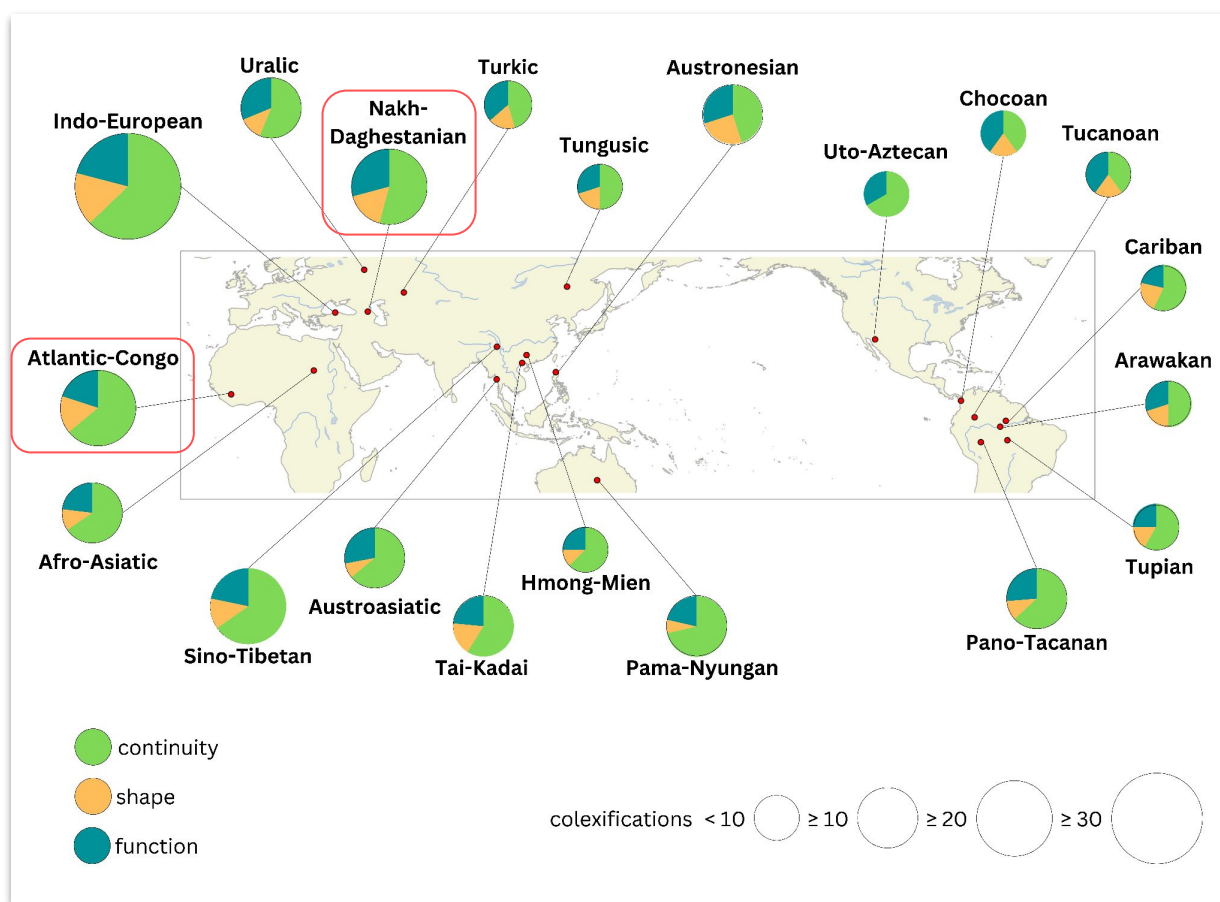
Sino-Tibetan



Afro-Asiatic



Tjuka et al. (in revision); *Scientific Reports*



Tjuka et al. (in revision): *Scientific Reports*

Conclusions

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Contiguity drives most colexifications between body parts.

Preferences for perceptual features differ across languages.

Thank you