

# Body part vocabularies across languages

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# Agenda

- I      Introduction
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- III   Materials & Methods
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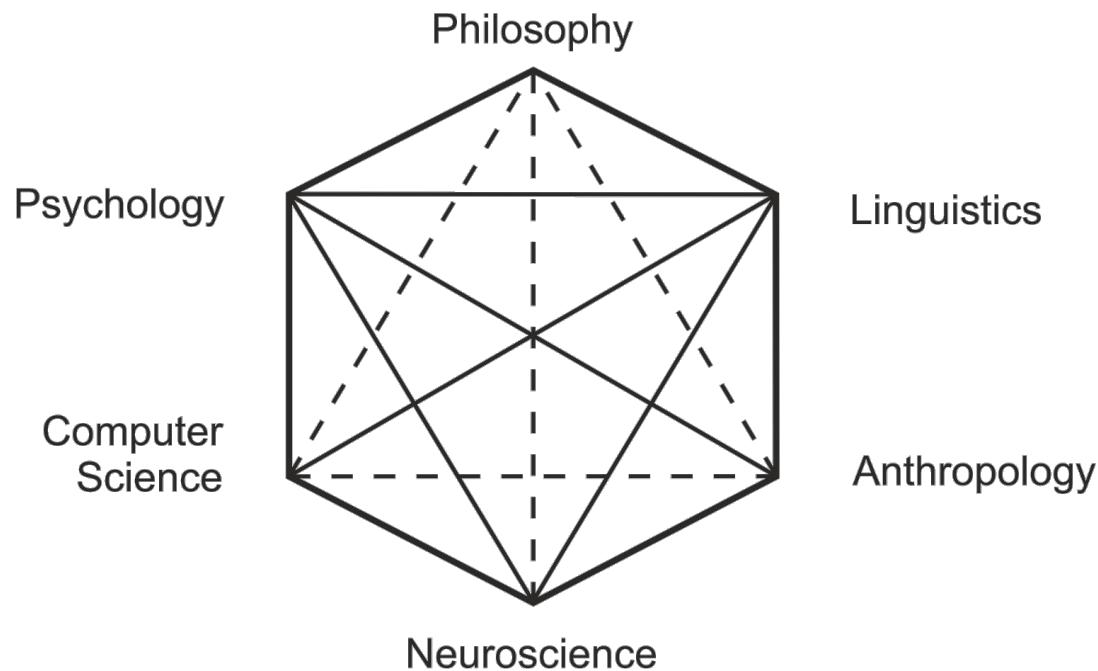
BA and MA in linguistics from  
Humboldt-Universität zu Berlin

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

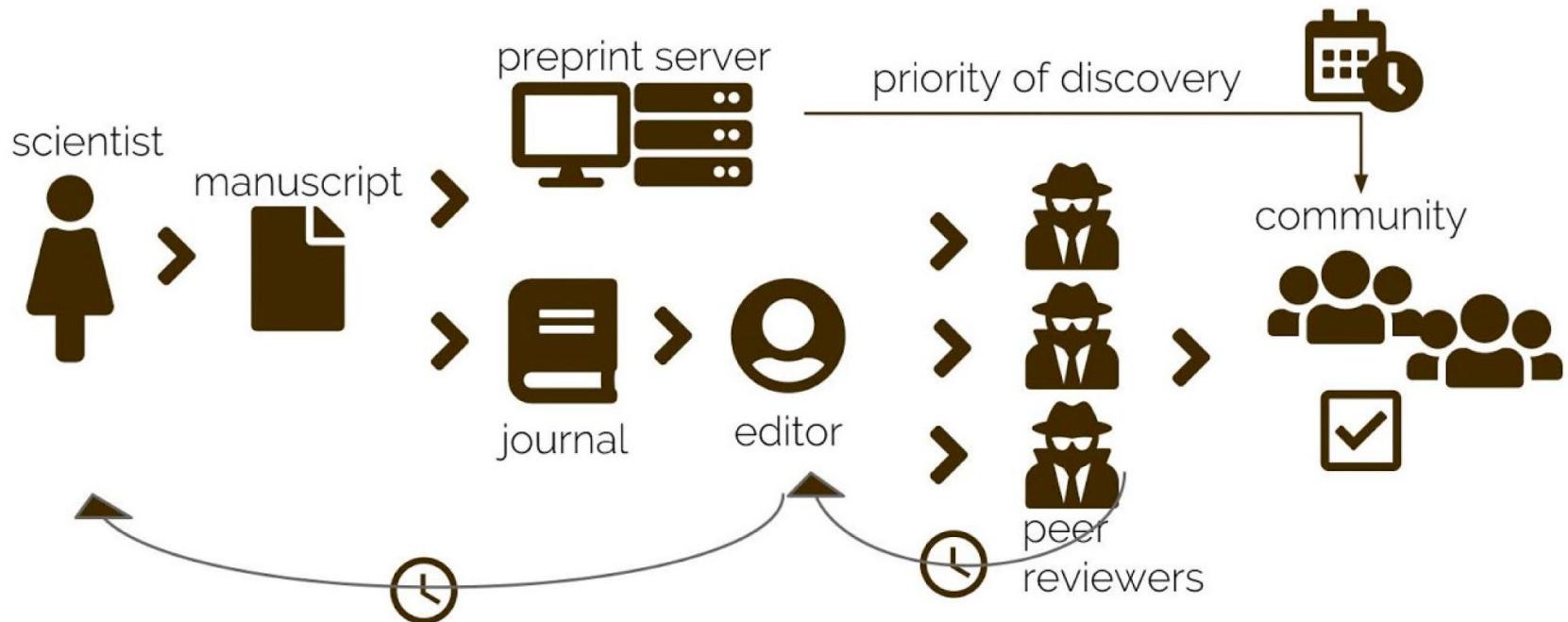


The article is part of my PhD thesis.

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



How many languages are spoken across the world?

# Introduction



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

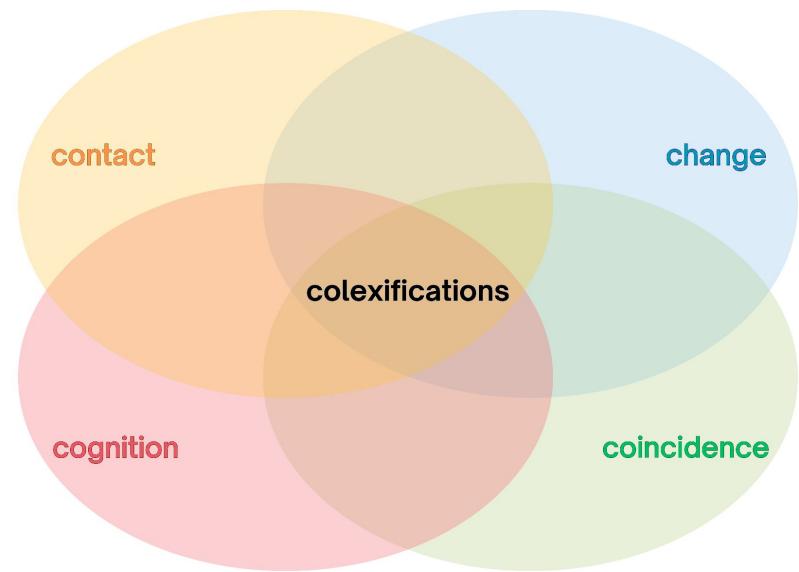


Finding regularities in word meanings  
and causes for language variation.

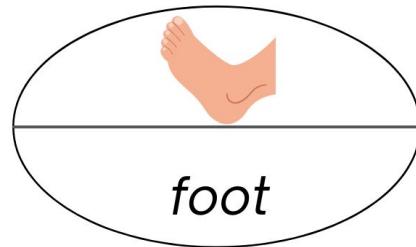
# Colexifications

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

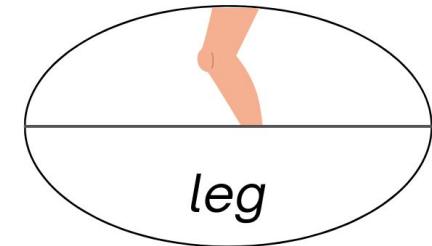
The analysis is based on cross-linguistic data.



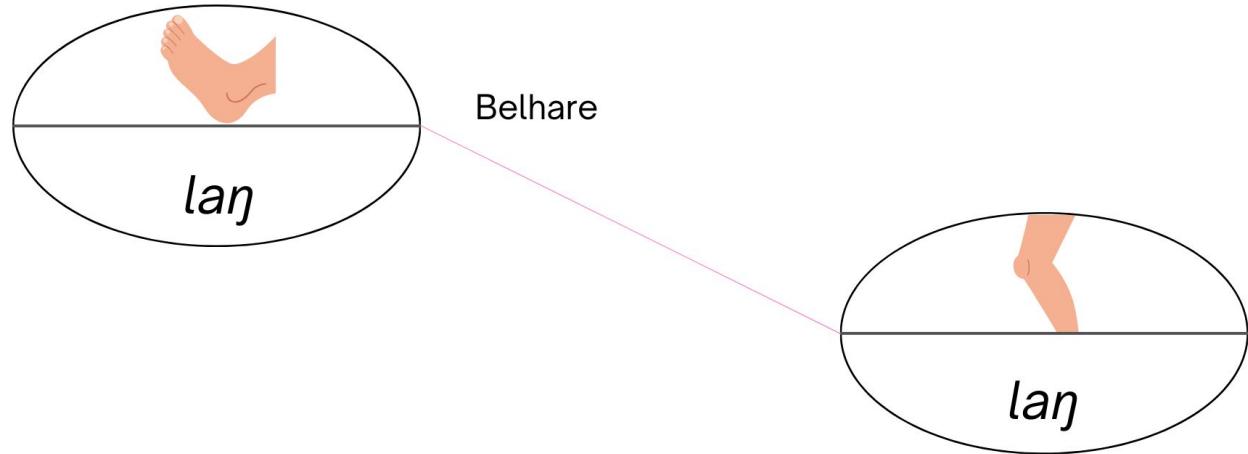
# Colexifications



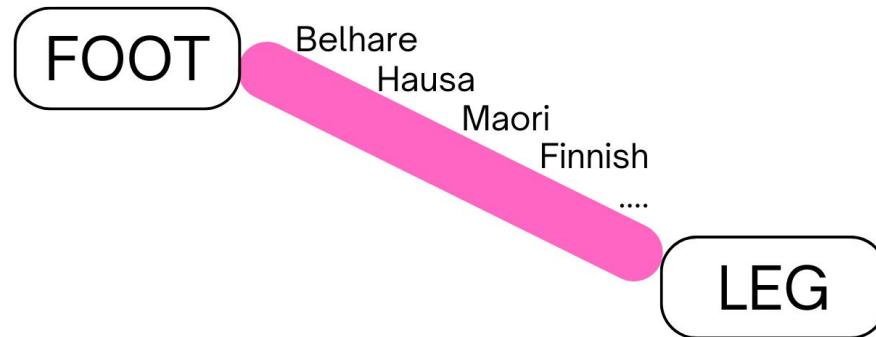
English



# Colexifications



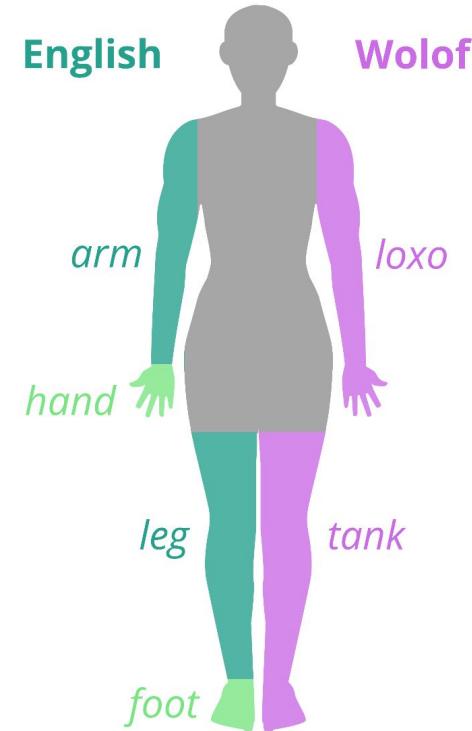
# Colexifications



# Body part vocabularies

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

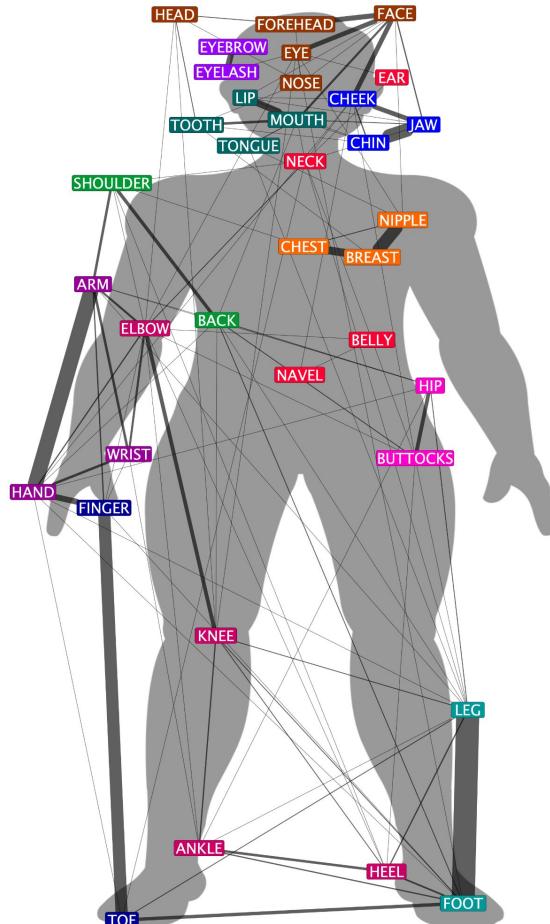
Comparison of semantic domains:  
colour, emotion



# 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*

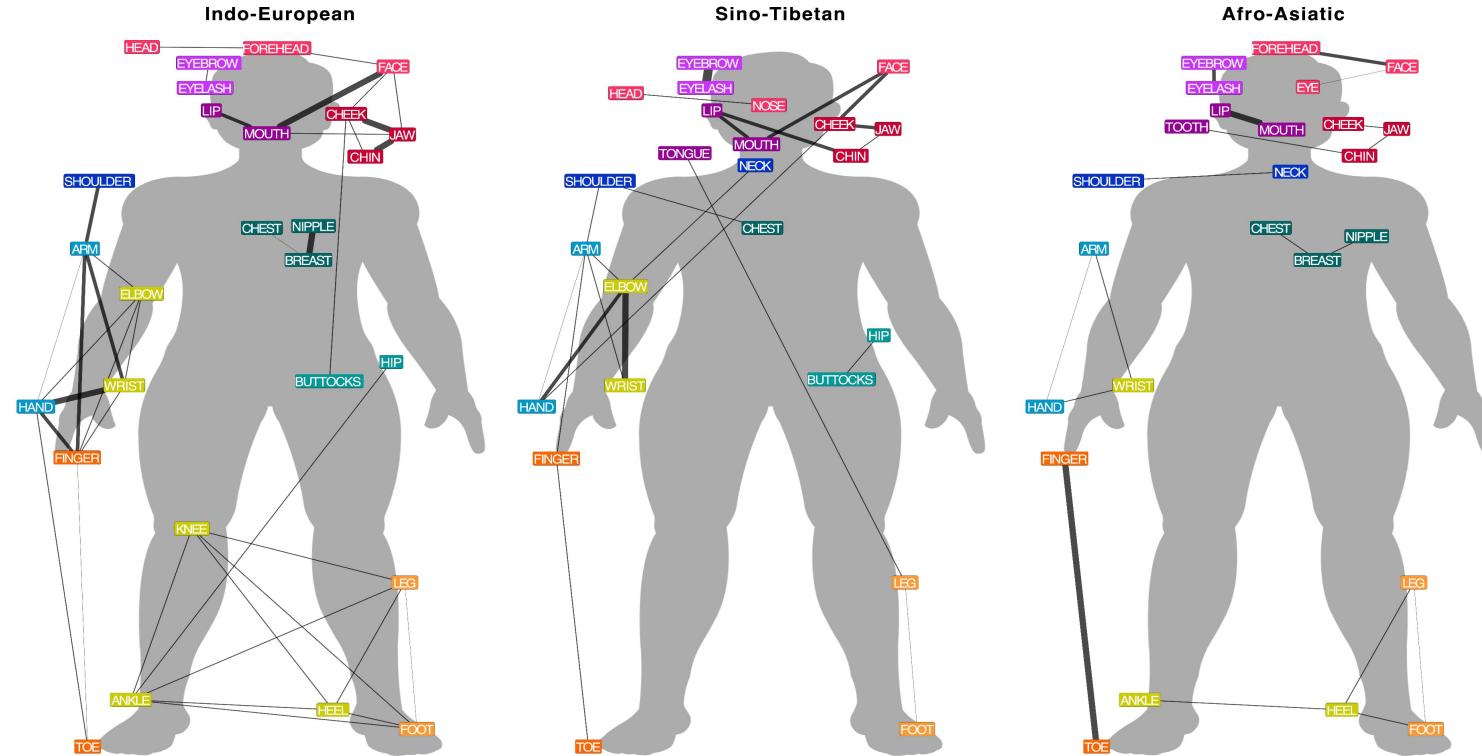


# Body Part Network

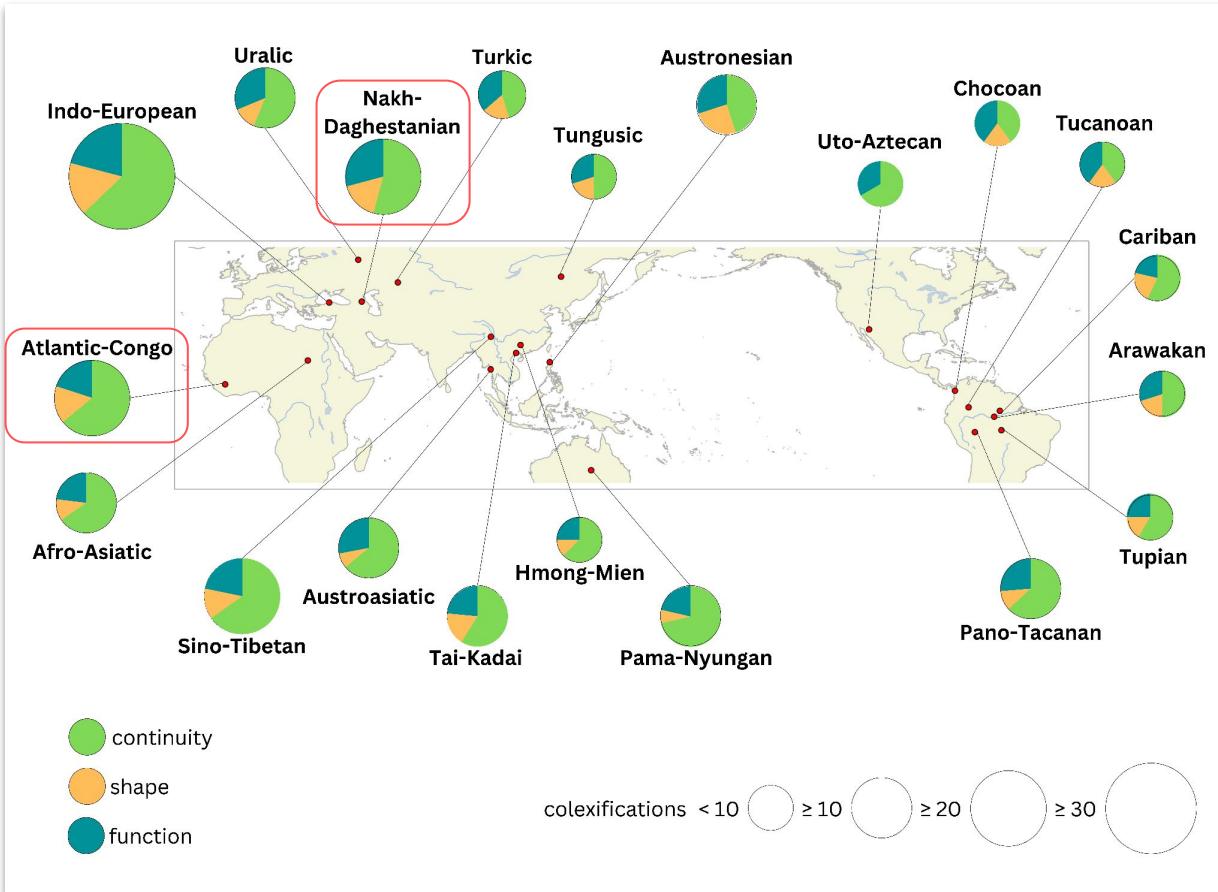
Few widespread,  
many language-specific colexifications.

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

# Family Networks



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



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

# Conclusions



Contiguity drives most colexifications between body parts.

Preferences for perceptual features differ across languages.

Thank you