

On colexification and shared foundations of lexical creativity

Yang Xu

University of Toronto, yangxu@cs.toronto.edu

Keywords: word meaning, colexification, lexical creativity, crosslinguistic regularity, computational analysis

Colexification refers to the creative use of a single lexical item to express multiple meanings. Some meanings are more commonly colexified than others across the world's languages, but the source of this variation is non-arbitrary. We present recent work suggesting that cross-linguistic variation in colexification frequency is predictable and reflects a general principle of cognitive economy: More commonly colexified meanings across languages are those that require less cognitive effort to relate (Xu et al., 2020). To evaluate this proposal, we examine patterns of colexification of varying attested frequencies from approximately 250 languages. We predict these colexification data based on independent measures of conceptual relatedness drawn from large-scale psychological and linguistic resources including English word association and semantic similarities derived from word embeddings.

Our results show that meanings that are more frequently colexified across these languages tend to be more strongly associated by speakers of English, suggesting that conceptual associativity provides an important constraint on the development of the lexicons across languages. Although languages vary in how they package meanings into word forms, this variation nevertheless reflects a general tendency to reduce cognitive effort in the colexification of meaning.

This work should ultimately be considered within a broader context. In particular, work in child language development has documented different strategies children might use to creatively extend their vocabularies to novel situations. Similarly, work in historical semantics has also documented a diverse set of word meaning extensions and changes over history. We discuss steps toward a unified view of lexical creativity that explores its shared knowledge foundations ranging from language development in children to the evolution of word meanings across languages and over history.

References

Xu, Yang, Khang Duong, Barbara C Malt, Serena Jiang & Mahesh Srinivasan. 2020. Conceptual relations predict colexification across languages. *Cognition* 201. 104280.