

Yang Xu – Abstract

Evolution of Polysemous Senses from Metaphorical Mappings

What forces have shaped the evolution of the lexicon? Languages evolve under the pressure of having to communicate an unbounded set of ideas using a finite set of linguistic structures. This suggests why the transmission of ideas should be compressed such that one word will develop multiple senses. Previous theory also suggests how a word might develop new senses: Abstract concepts may be construed in terms of more concrete concepts. Here, we bring these two perspectives together to examine metaphorical extensions of English word meanings over the past millennium, analyzing how senses from a source domain are extended to new ones in a target domain. Using empirical and computational methods, we found that metaphorical mappings are highly systematic and can be explained in terms of a compact set of variables. Our work shows how metaphor can provide a cognitive device for compressing emerging ideas into an existing lexicon.