

## Slow mapping words as incremental meaning refinement

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### Abstract

Research in lexical acquisition has frequently focused on children's ability to make rapid, context-informed guesses about the meaning of newly encountered words, known as 'fast mapping'. However, there is a gap in research examining how children and adults revise and adjust these guesses about word meanings as they encounter words repeatedly applied to different referents. We propose, on computational grounds, that learners adjust word meanings incrementally to accommodate new evidence. To begin to test this proposal, we lay out a new research program probing how word meanings evolve. In a pilot experiment, adults learn the meaning of novel kinship terms and we probe their beliefs by repeatedly eliciting generalizations. We manipulate the order in which participants observe the same word used to refer to different members of a family tree. We find a mixed pattern of order effects but our inspection of individual trajectories suggestive of a syntax-level relationship between the current and previous hypothesis. This relationship was supported by a computational model based analysis of lexical meaning generation via a probabilistic language of thought.