

The Coevolution of Words and Meanings

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Are the features that make up our lexical concepts determined by the perceptible structure of the world, or by the language we acquire? Simulated and experimental models of language evolution have generally avoided this question, providing word meanings as a structured set of features on a number of domains (e.g. shape, colour, and movement, Kirby et al., 2008). For real-world meanings, however, factors in the context of word use cause differences in domain relevance (Gärdenfors, 2000). That is, not all perceptible features of a referent need be included in its lexically conceptualised sense. I present results from an artificial language learning experiment that used a combination of task and context in learning and testing to cue the learner that one feature domain was not relevant. Over generations of iterated learning, perceptible and conceptualised features in the meaning space diverged. The domain cued as irrelevant in the experiment was considered less integral to lexical concepts over time, and the language that emerged made fewer distinctions between features on this domain. Neither of these outcomes clearly preceded the other, suggesting that meaning change does not straightforwardly follow language change, or vice versa: it may be more of a coevolutionary process.

References

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