

From birds to words:

Metaphor, metonymy, and iconicity in sensory language

Abstract

Sensory words connect perception and language, allowing us to express what we see, hear, feel, taste and smell with words such as “blue”, “loud”, or “sweet”. Yet, not all sensory experiences are equally easy to express. For example, while English and other languages teem with adjectives for vision (e.g., “purple”, “bright”, “shiny”, “blurred”), they often offer far fewer words for smell (e.g., “musky”, “fragrant”). This asymmetry in lexical differentiation raises a fundamental question: how do we communicate sensations for which our language lacks dedicated vocabulary? How do we overcome the ineffable?

In this plenary talk, I will present results from two large-scale studies. The first looks at synesthetic metaphors: when a particular sensory modality is lacking in dedicated sensory words, adjectives associated with other modalities can be co-opted in expressions like “smooth melody” or “rough taste”. By combining 38 published datasets from 14 different languages, we show that the century-old idea of a “hierarchy of the senses” (vision/sound > touch > taste > smell) is not actually borne out by the data. The dominant cross-linguistic pattern is that across languages, the auditory domain recruits touch words (e.g., “rough/smooth/hard/soft sound”). Besides helping us learn about sensory metaphor, this study also shows the utility of conducting meta-analyses in research on figurative language.

I will then discuss a new corpus study of 6,000 descriptions of bird vocalizations from 18 English-speaking field guides. The English language has not evolved conventionalized vocabulary for the description of bird song, which forces field guide authors to become creative with figurative devices. Descriptions are teeming with metaphor, metonymy, comparisons, and onomatopoeia, as when the Goldfinch’s song is described as “A delightful liquid twittering *teewit, tewit, tititititi*”, or the Anhinga’s song is described as sounding “like a treadle-operated sewing machine or a croaking frog with a sore throat”. I will quantify the different figurative strategies that are used to make the otherwise inexpressible qualities of bird song expressible. This analysis suggests a division-of-labor, where onomatopoeia communicates the overall contour and structure of a sound, and metaphorical/metonymical adjectives, especially from the domain of touch, communicate timbre.

Together, these studies illustrate that sensory language needs to be studied using a framework that looks across different semiotic strategies and figurative devices. Together, different aspects of figurative language and onomatopoeia render the otherwise ineffable effable. When it comes to communicating the detailed qualities of sensory experience, metaphor and metonymy are inevitable.

Keywords: perception; sensory language; synesthesia; metaphor; metonymy