
Reference production in context: how discourse goals and relevance shape modifier choice

Kelly Cheuk, Hannah Rohde & Chris Cummins

University of Edinburgh

k.a.cheuk@sms.ed.ac.uk, hannah.rohde@ed.ac.uk,
ccummins@exseed.ed.ac.uk

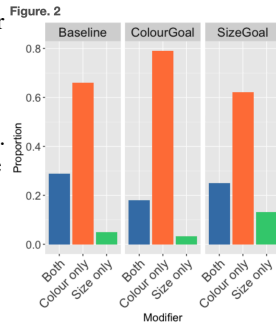
Speakers' use of adjectives to achieve unambiguous reference is a focus of extensive research, with important implications for debates about communication efficiency in the light of perceptual biases. The preference for overspecifying colour over size has been attributed to colour being an absolute and visually salient attribute, while size is relative (Belke & Meyer, 2002). Also, the mention of colour is often customary, especially in categories such as clothing, where colour serves as a core property (Rubio-Fernandez, 2019). Our study builds upon previous research by reviewing what makes speakers produce particular adjectives when establishing reference, exploring how this choice is connected with predicating contextually relevant properties outlined by the discourse goals.

Previous studies primarily used context-independent tasks, such as clicking on or describing specific objects in lab settings. In two web-based studies, we placed referential tasks in a more plausible context where participants answered questions with responses that naturally involved achieving successful reference as part of the utterance. (See Fig. 1). We compared the use of modifier types across conditions, with discourse goals relevant to colour or size or none.



Friend: Which mug will you use
to create a Christmas vibe? (Colour-goal)
to serve espresso? (Size-goal)
You:

Experiment 1 examined situations where both colour and size were fully distinguishing. The highest proportion of responses using colour or size only was observed in the condition where the respective attribute aligned with the discourse goal (See Fig. 2). Experiment 2 (in progress) explores scenarios where only one attribute, either colour or size, is fully distinguishing. We expect to observe increased use of fully-distinguishing modifiers that align with the discourse goals and more redundant use of partially-distinguishing goal-relevant modifiers.



References: • Belke, E., & Meyer, A. S. (2002). Tracking (...) decisions. *European Journal of Cognitive Psychology*, 14(2), 237–266. • Rubio-Fernandez, P. (2019). Overinformative (...) Quantity. *Cognitive Science*, 43(11), e12797.