Vagueness in referring expressions of quantity: audience effects.

Matt Green and Kees van Deemter

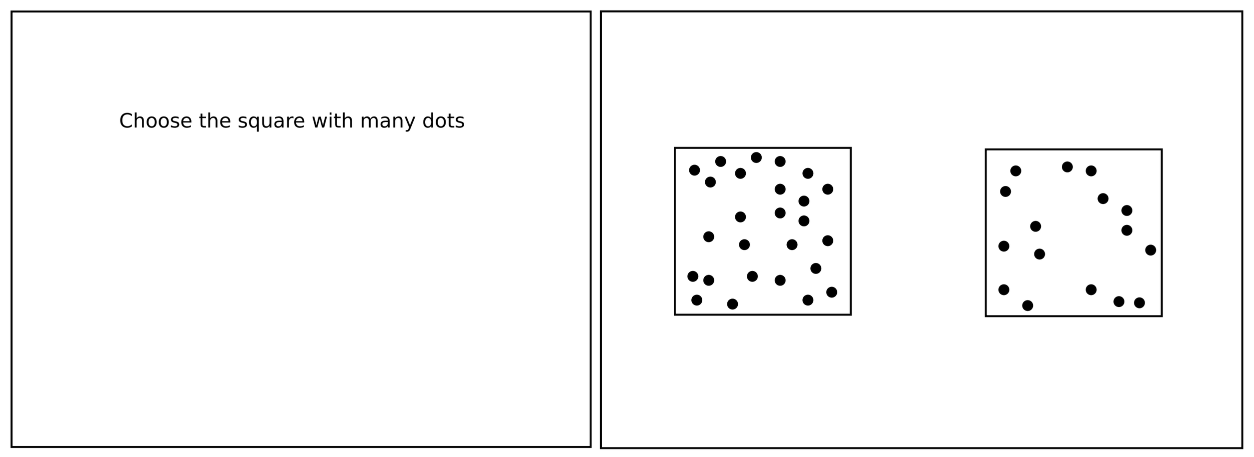
NLG group, University of Aberdeen

Introduction

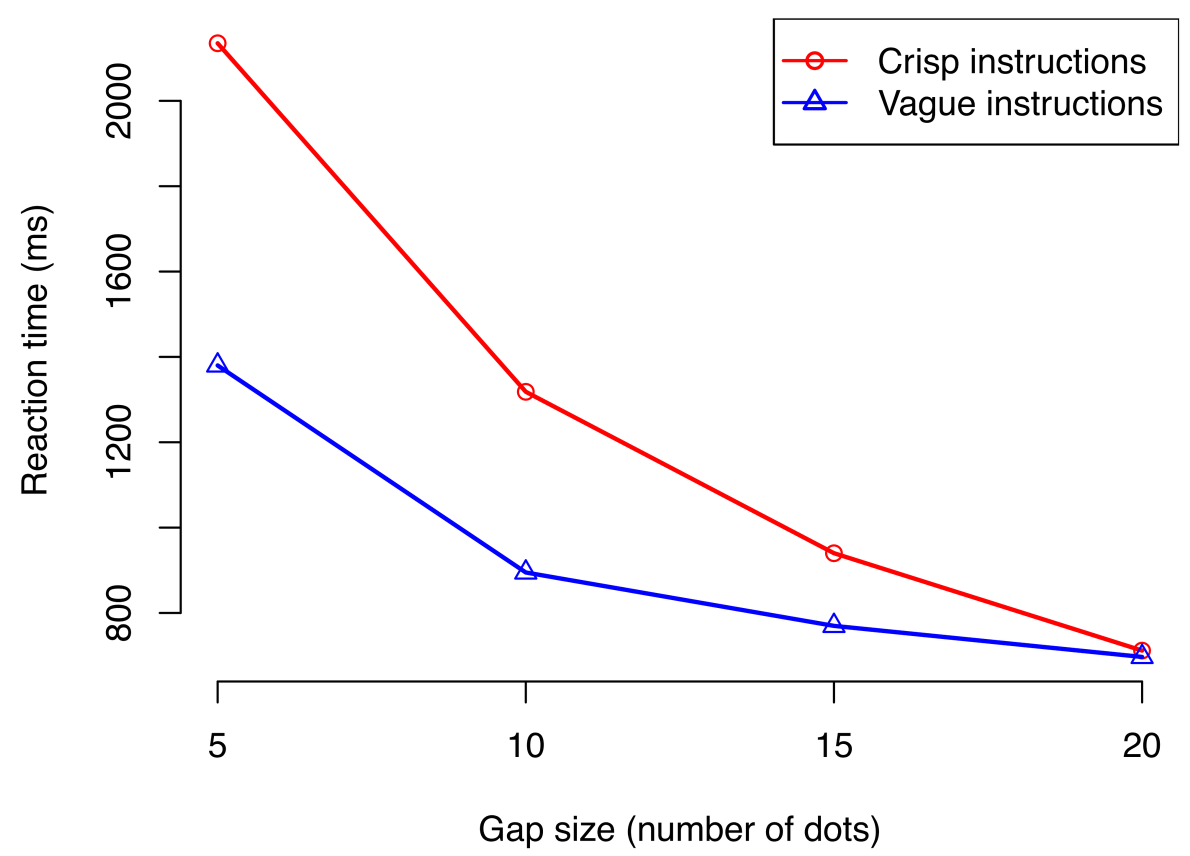
Vagueness is very common in everyday language: however, standard game-theoretical accounts of the utility of vagueness (e.g., Keefe & Smith, 1996) fail to account for this prevalence, predicting instead that crisp alternatives have greater utility, under the assumption that the goals of speaker and hearer are aligned. Among others, the economist Lipman (2011) suggests that crisp presentations might require more effort to analyse than vague presentations. This proposal could explain the prevalence of vagueness without departing from a game-theoretic framework. In the experiments presented here, we put this *cost reduction* hypothesis to the test, with the aim providing an empirical basis for adjudicating between the standard game-theoretic account and the cost reduction hypothesis. The results across 2 experiments support the view that the presence / absence of a numeral in the presentation of the information overwhelms the contribution of vagueness / crispness, in the restricted domain of referring expressions of quantity, and when reaction time is the critical dimension of the audience response.

Experiment 1

When we used 2 dot arrays, and the instructions were either vague or crisp (e.g., “Choose the square with <u>many</u> dots” versus “Choose the square with <u>25</u> dots”), we found that response times were faster for the vague instructions.

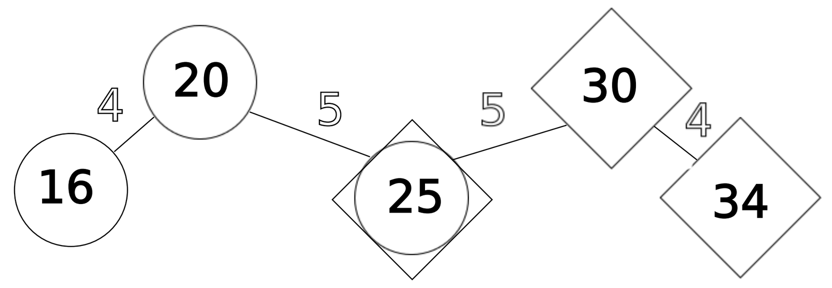


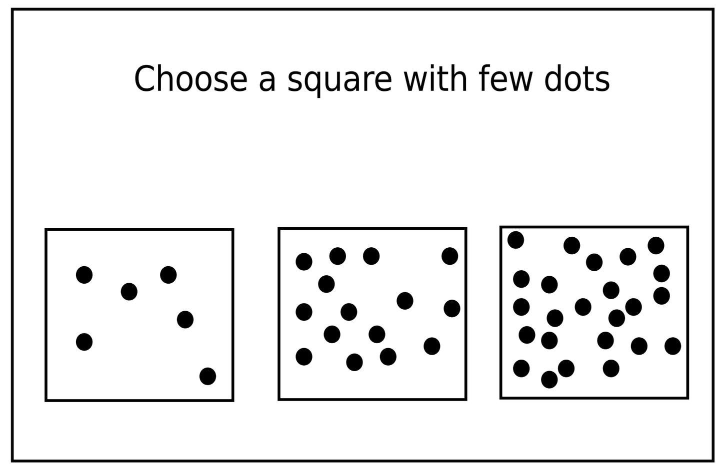
Faster response times for Vague instructions



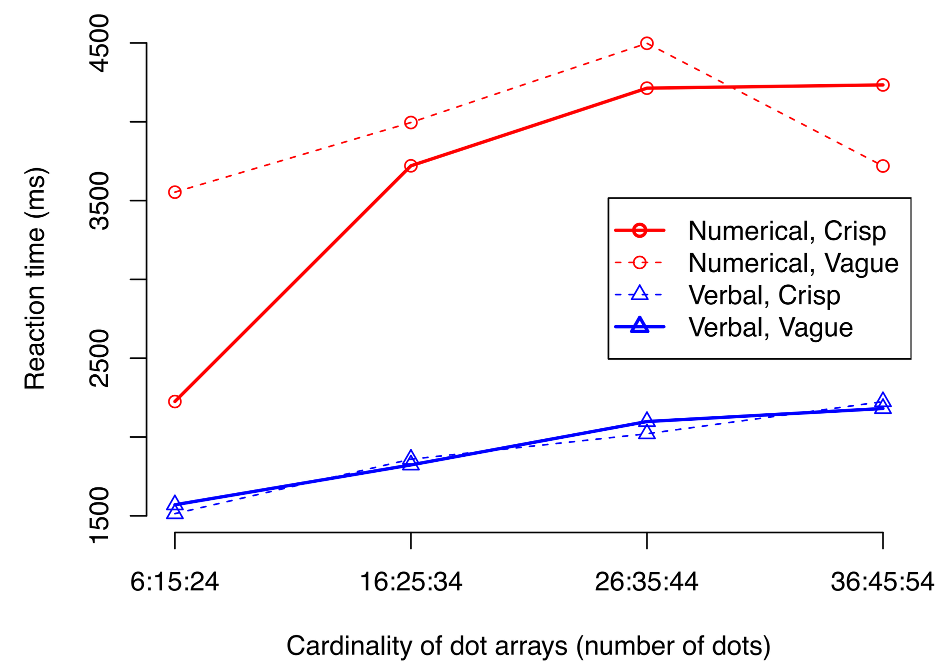
Experiment 2

To ensure the presence of borderline cases (thus true vagueness), we used 3 dot arrays. To check whether it was vagueness or number-avoidance that yielded the RT advantage in Experiment One, we fully crossed number-use with vagueness. We found that number-avoidance was a more plausible explanation for the RT patterns over the 4 crossed conditions.





Response times cluster by number–use, not by degree of vagueness



References

Keefe, R., & Smith, P. (1996). *Vagueness: a reader. A Bradford Book.* The MIT Press

Lipman (2011) Why is Language Vague? (working paper available online)

Acknowledgements

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