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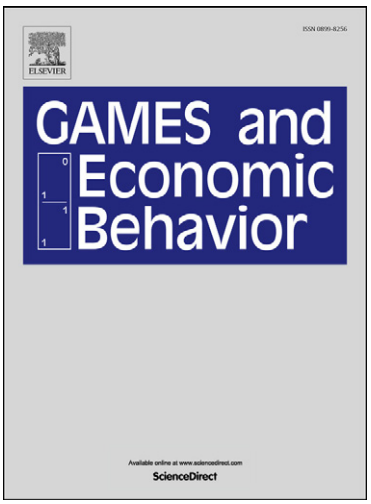

Ambiguous language and common priors

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PII: S0899-8256(15)00034-2
DOI: http://dx.doi.org/10.1016/j.geb.2015.01.007
Reference: YGAME 2402

To appear in: *Games and Economic Behavior*

Received date: 28 October 2013

Please cite this article in press as: Halpern, J.Y., Kets, W. Ambiguous language and common priors. *Games Econ. Behav.* (2015), http://dx.doi.org/10.1016/j.geb.2015.01.007

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Ambiguous Language and Common Priors*

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February 19, 2015

Abstract

Standard economic models cannot capture the fact that information is often *ambiguous*, and is interpreted in multiple ways. Using a framework that distinguishes between the language in which statements are made and the interpretation of statements, we demonstrate that, unlike in the case where there is no ambiguity, players may come to have different beliefs starting from a common prior, even if they have received exactly the same information, unless the information is common knowledge.

1 Introduction

Natural language is often ambiguous; the same message can be interpreted in different ways by different people.[1] Ambiguous language can lead to misunderstandings, and strategic actors may try to exploit ambiguity to their advantage, for example, when writing contracts (Scott and Triantis, 2006) or communicating policy intentions (Blinder et al., 2008).

Such ambiguity is hard to model using standard models, which do not separate meaning from message. We therefore develop a framework that distinguishes between the language that

*A preliminary version of this work appeared as "Ambiguous language and differences in beliefs" in the *Principles of Knowledge Representation and Reasoning: Proceedings of the Thirteenth International Conference*, 2012, pp. 329–338. We thank Moshe Vardi, two anonymous referees, and the Associate Editor for helpful comments. Halpern's work was supported in part by NSF grants IIS-0534064, IIS-0812045, IIS-0911036, and CCF-1214844, by AFOSR grants FA9550-08-1-0438, FA9550-12-1-0040, and FA9550-09-1-0266, and by ARO grant W911NF-09-1-0281. The work of Kets was supported in part by AFOSR grant FA9550-08-1-0389.

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[1]We thus use the term ambiguity in a different sense than the decision-theory literature, where ambiguous events are events that the decision-maker cannot assign a precise probability to.

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