

Equilibrium Selection in Persuasion Games with Binary Actions *

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Abstract

This paper discusses equilibrium selection in persuasion games where the receiver's actions are binary. In general, there exist multiple equilibria in this environment even if the sender's private information is fully certifiable, and the convention of focusing on the most informative equilibrium is followed. However, we show that the existing selection criteria in the literature on strategic communication hardly justifies such a convention; in particular, these criteria might select the least informative equilibrium. We then suggest the notion of *certifiable dominance*, and show that the most informative equilibrium is uniquely selected by a perfect Bayesian equilibrium constructed using certifiably undominated strategies. This criterion could also uniquely select the most informative equilibrium when the sender's private information is partially certifiable.

Journal of Economic Literature Classification Numbers: C72, D82.

Key Words: persuasion games with binary actions; equilibrium selection; neologism proofness; announcement proofness; certifiable dominance; most informative equilibrium; Δ -rationalizability

*The full paper is available from the following URL: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2435466. This paper is previously circulated as "Certifiable Dominance: Unique Equilibrium Outcome in Persuasion Games with Binary Actions". I am grateful to Makoto Hanazono, Takashi Kunimoto, Nozomu Muto, Yasuhiro Shirata, Takuro Yamashita, and all participants at the 2015 Contract Theory Workshop Summer Camp. All remaining errors are my own.

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